



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)
Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	MANAGEMENT AND ORGANIZATION BEHAVIOR				
Course Code	CMBC01				
Programme	MBA				
Semester	FIRST				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	--	--
Course Coordinator	Dr. K Jagannayaki, Professor				

I. COURSE OVERVIEW:

The course focuses on the organization study of management principles and practices with the study of human behaviour within organizations and focus will be upon translation of management and organizational behaviour theory to practices that result in organizational effectiveness, efficiency, and human resource development. This course will provide a good foundation to study how to create effective workgroups to be successful in life.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	Credits
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III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Management and Organization Behavior	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
0 %	Remember
50 %	Understand
16.67%	Apply
16.67 %	Analyze
0 %	Evaluate
16.67 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

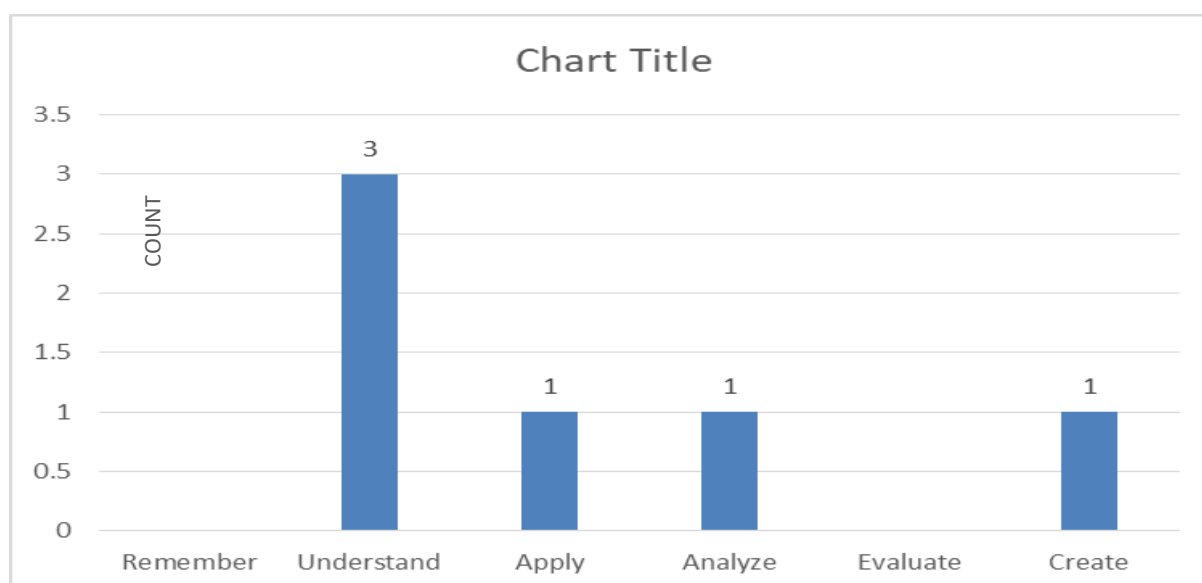
VII. COURSE OBJECTIVES:

The students will try to learn:	
I	The critical management theories, principles and philosophies and how to apply them in business landscape.
II	Utilization of human resources for different positions in the organization and also to monitor the resources.
III	The leadership traits and theorist anticipates the consequences of each leadership style.
IV	Individual and group behavior, and understand the implications of organizational behavior on the process of management.
V	Group behavior in organizations, including communication, leadership, power and politics, conflict, and negotiations.

VIII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Demonstrate the basic concepts and levels of management to make better organizational decisions.	Understand
CO 2	Make use of plans and the planning process that helps organization to gain competitive advantage.	Apply
CO 3	Use the knowledge of processes used in developing the various organizational designs.	Create
CO 4	Summarize the authority and power to influence people to get the work done through proper Communication channel.	Understand
CO 5	Illustrate the behaviour of individuals and groups in organizations that resolve conflicts in organization.	Understand
CO 6	Apply various types of motivational theories that help to achieve organizational goals.	Analyze

COURSE KNOWLEDGE COMPETENCY LEVEL



IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	1	Assignment
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	CIE/AAT
PO6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.	2	Seminar/ Conferences/ Research papers
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	3	CIE/AAT

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	-	-	-	-	-	-	-
CO 2	√	-	-	-	-	-	-	-
CO 3	-	-	√	-	-	-	-	-
CO 4	-	-	√	-	-	√	-	-
CO 5	-	-	√	-	-	-	√	-
CO 6	-	-	-	-	√	-	-	-

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of management system and to an extent appreciate the importance of Organization.	2
CO 2	PO 1	Describe (knowledge) the several management decisions by the management from the organization and new managerial developments in the context of managerial decisions.	2
	PO8	To develop effective plans to sustain in the competitive world	2
CO 3	PO 1	Comprehend and create awareness of business ethics in all aspects.	3
	PO 5	Ascertain (knowledge) the key competencies and team spirit useful to achieve organizational goals.	3
CO 4	PO 2	Identify (knowledge) the role of employee- employer relationship in managing the stable system.	3
	PO 3	Summarize the authority and power to influence people to get the work done through proper Communication channel.	3
CO 5	PO 4	Apply (knowledge) the managerial principles and characteristics of organization and its importance of managing the organization.	2
	PO 5	Focus on working of organizations in the formal with its communicational abilities.	3
CO 6	PO 5	Construct the managerial models of employees in communicating with management.	3

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	-	-	-	-	-	-	-
CO 2	2	-	-	-	-	-	-	2
CO 3	3	-	-	-	3	-	-	-
CO 4	-	3	3	-	-	-	-	-
CO 5	-	-	-	2	3	-	-	-
CO 6	-	-	-	-	3	-	-	-

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	-	-	-	-	-	-	-
CO 2	100.00	-	-	-	-	-	-	100.00
CO 3	100.00	-	-	-	60.00	-	-	-
CO 4	-	100.00	100.00	-	-	-	-	-
CO 5	-	-	-	66.67	60.00	-	-	-
CO 6	-	-	-	-	60.00	-	-	-

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	-	-	-	-	-	-	-
CO 2	3	-	-	-	-	-	-	3
CO 3	3	-	-	-	3	-	-	-
CO 4	-	3	3	-	-	-	-	-
CO 5	-	-	-	3	3	-	-	-
CO 6	-	-	-	-	3	-	-	-
TOTAL	9	3	3	3	9	-	-	3
AVERAGE	3	3	3	3	3	-	-	3

XV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1,PO2 PO6,PO7	SEE Exams	PO1,PO2, PO6, PO7	Assignments	PO1	Seminars	PO6
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	PO 1, PO 7						

XVI. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

UNIT-I	INTRODUCTION TO MANAGEMENT
Management- Definition, Nature, Purpose, Evolution of Management Thought-Scientific Management, Administrative Theory, Human Relations Approach, Hawthorne experiments, Behavioral Approach, Systems Theory. Managerial Roles, Managerial Levels, Managerial Skills, Functions of Management, Administration vs. Management, Contemporary Management Issues and Challenges.	
UNIT-II	PLANNING - ORGANIZING
Planning – Nature, Purpose, Process, Types of Plans, Management by Objectives (MBO). Decision Making – Types of Decisions, Decision Making Process, Decision Making under Certainty, Uncertainty and Risk. Organizing – Formal and Informal Organization, Process, Types of Organization structures, Line, Staff and Virtual concepts, Span of Management – Factors, Delegation of Authority, Decentralization.	
UNIT-III	LEADING AND CONTROLLING
Leadership - Leadership Behavior and Styles. Motivation- Early and Contemporary Theories of Motivation. Communication - Purpose, Process, Barriers in Communication, Overcoming barriers to communication. Controlling- Basic Control Process, Critical Control Points, Standards, and Benchmarking, Control as a Feedback System, Requirements for effective controls.	
UNIT- IV	ORGANIZATION BEHAVIOUR
Organization Behavior – Nature, Levels, Challenges. Individuals in Organizations - Personality and Ability. Big Five Model of Personality, Personality Traits, Ability - Cognitive Ability, Physical Ability, Emotional Intelligence, Group Dynamics and Teams- Types of Work Groups, Group Development, Characteristics of Work Groups, Effective Work Groups and Teams	
UNIT – V	CONFLICT AND NEGOTIATIONS
Nature of Power and Politics, Sources of Individual Power, Functional and Divisional Power. Organizational Politics - The use of Power. Organizational Conflict - Sources, Pondy’s Model of Organizational Conflict, Negotiation: Resolving Conflict - Individual level conflict, Group level conflict and promoting Compromise.	
Text books	
<ol style="list-style-type: none"> 1. John R Schermerhorn; Paul Davidson; Peter Woods; Aharon Factor, “Management”, Milton, QLD: John Wiley and Sons Australia, Ltd, 7th Edition, 2020. 2. Gerald A Cole and Phil Kelly, “Management Theory and Practice”, Cengage Learning EMEA, 9th Edition, 2020. 3. Chandan J S, “Management Theory and Practice”, Vikas Publishing House Pvt. Ltd, 1st Edition, 2018. 4. Dr C B Guptha, “Management – Theory and Practice”, Sultan Chand & Sons, 16th Edition, 2017. 	

5. Harold Koontz & Heinz Weihrich_ Essentials of Management _McGraw Hill Publication, 10th Edition, New Delhi, 2015.
6. AfsanehNahavandi, RobertB. Denhardt, JanetV. Denhardt, Maris P. Aristigueta, _Organizational Behavior _Sage Publications, 10th Edition, 2015.
7. P Subbarao, "Management Theory & Practice: Text & Cases", Himalaya Publishing House, 1st Edition, 2014.

References

1. Stephen P. Robbins, Timothy A.Judge, Neharika Vohra, "Organizational Behavior", Pearson, 16thEdition,2017.
2. Laurie J. Mullins, "Management, and Organizational Behavior", Pearson Publications, 9thEdition, 2012.
3. Dr. Vandana Jain, "Management Theory and Practice", IBH, 7thEdition, 2012.
4. Ramesh B. Rudani, "Management and Organizational Behavior", Tata McGraw hill, 8thEdition, 2011.
5. Rajeeesh Viswanathan, "Principles of Management Concepts and Cases", Himalaya Publishing House (HPH), 10thEdition, 2010.

Web References:

1. https://play.google.com/store/books/details/Knowledge_Flow_Principles_of_Management?id=PTIDAA_AQBAJ
2. https://play.google.com/store/books/details/M_GOVINDARAJAN_Principles_of_Management?id=novpI_SVa5agC
3. https://play.google.com/store/books/details/J_S_Chandan_Principles_of_Management_WBUT_2nd_Edit?id=ZmZDDAAAQBAJ
4. https://play.google.com/store/books/details/GUPTA_MEENAKSHI_Principles_of_MANAGEMENT?id=j_HmY2oclfulcC.

E-Text Books:

1. <https://www.amazon.in/Management-Theory-Practice-G-Cole/dp/1844800881>
2. <https://www.worldcat.org/title/autopoiesis-in-organization-theory-andpractice/oclc/794708761?referer=di&ht=Edition>
3. https://www.worldcat.org/title/work-postmodernism-and-organization-a-criticalintroduction/oclc/1058003392&referer=brief_results
4. https://www.researchgate.net/publication/349006226_MANAGEMENT_THEORY_AND_PRACTICE
5. <https://www.worldcat.org/title/management-theory-and-practice-extcases/oclc/896139825?referer=di&ht=Edition>

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Introduction to management	CO1	T-1, R-1
2	Management- Definition, Nature, Purpose.	CO1	T-1, R-1
3	Evolution of Management Thought-Introduction	CO1	T-1, R-1
4	Scientific Management	CO1	T-1, R-1
5	Administrative Theory	CO1	T-1, R-1
6	Human Relations Approach	CO1	T-1, R-1
7	Hawthorne experiments	CO1	T-1, R-1
8	Behavioural Approach	CO1	T-1, R-1
9	Systems Theory	CO1	T-1, R-1
10	Managerial Roles	CO1	T-1, R-1
11	Managerial Levels, Managerial Skills	CO1	T-1, R-1
12	Functions of Management	CO1	T-1, R-1
13	Administration vs. Management	CO1	T-1, R-1
14	Contemporary Management Issues and Challenges.	CO1	T-1, R-1
15	Planning – Nature, Purpose	CO2	T-2, R-2
16	Planning Process	CO2	T-2, R-2
17	Types of Plans	CO2	T-2, R-2
18	Management by Objectives (MBO)	CO2	T-2, R-2
19	Decision Making-Introduction	CO2	T-2, R-2
20	Types of Decisions	CO2	T-2, R-2
21	Decision Making Process	CO2	T-2, R-2
22	Decision Making under Certainty, Uncertainty and Risk	CO2	T-2, R-2
23	Organizing – Formal and Informal Organization	CO2	T-2, R-2
24	Organizing- Process	CO2	T-2, R-2

25	Types of Organization structures	CO2	T-2, R-2
26	Line, Staff and Virtual concepts	CO2	T-2, R-2
27	Functional and Committee form of Organizations	CO2	T-2, R-2
28	Span of Management – Factors	CO2	T-2, R-2
29	Delegation of Authority	CO2	T-2, R-2
30	Decentralization.	CO2	T-2, R-2
31	Leadership-Introduction	CO3	T-1, R-1
32	Generic Approaches to Leadership	CO3	T-1, R-1
33	Situational Approaches	CO3	T-1, R-1
34	Motivation- Early Theories of Motivation	CO3	T-1, R-1
35	Motivation- Contemporary Theories of Motivation	CO3	T-1, R-1
36	Communication – Purpose and Process	CO3	T-1, R-1
37	Barriers in Communication, Overcoming barriers to communication.	CO3	T-1, R-1
38	Controlling- Introduction	CO4	T-1, R-1
39	Basic Control Process	CO4	T-1, R-1
40	Critical Control Points	CO4	T-1, R-1
41	Standards, and Benchmarking	CO4	T-1, R-1
42	Control as a Feedback System	CO4	T-1, R-1
43	Requirements for effective controls.	CO4	T-1, R-1
44	Organization Behaviour-Introduction	CO5	T-2, R-1
45	Nature, Levels, Challenges, Individuals in Organizations	CO5	T-2, R-1
46	Personality - Big Five Model of Personality, Personality Traits	CO5	T-2, R-1
47	Ability - Cognitive Ability, Physical Ability, Emotional Intelligence	CO5	T-2, R-1
48	Group Dynamics and Teams- Types of Work Groups	CO5	T-2, R-1
49	Group Development, Characteristics of Work Groups	CO5	T-2, R-1
50	Effective Work Groups and Teams	CO5	T-2, R-1
51	Nature of Power and Politics, Sources of Individual Power	CO6	T-1, R-1
52	Functional and Divisional Power.	CO6	T-1, R-1
53	Organizational Politics - The use of Power	CO6	T-1, R-1
54	Organizational Conflict - Sources	CO6	T-1, R-1

55	Pondy's Model of Organizational Conflict	CO6	T-1, R-1
56	Negotiation: Introduction	CO6	T-1, R-1
57	Resolving Conflict	CO6	T-1, R-1
58	Individual level conflict	CO6	T-1, R-1
59	Group level conflict.	CO6	T-1, R-1
60	Promoting Compromise	CO6	T-1, R-1
QUESTION BANK DISCUSSION			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-1
63	Question Bank Discussions Unit 3	CO 3,4	T-1, R-1
64	Question Bank Discussions Unit 4	CO 5	T-1, R-1
65	Question Bank Discussions Unit 5	CO 6	T-1, R-1

Prepared by:
Dr. K Jagannayaki, Professor

HOD, MBA



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MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	ACCOUNTING FOR MANAGEMENT				
Course Code	CMBC02				
Program	MBA				
Semester	FIRST				
Course Type	CORE				
Regulation	IARE - R18				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	1	4	-	-
Course Coordinator	Dr. T Vara Lakshmi, Associate Professor				

I. COURSE OVERVIEW:

Financial statements are very useful to the business concerns to interpret and analyze the financial growth of different companies. The course focuses on the objectives and importance of financial accounting, accounting concepts, accounting conventions, method of recording transactions under double entry system, accounting process like journal, ledger, trial balance and final accounts that enable students to understand earning position and financial position of business concern. This course includes appreciate and use financial statements as means of business communication. This course uses the analytical techniques of inventory valuation, funds flow and cash flow statements.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
UG	-	-	Fundamentals of Financial Accounting

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Accounting for Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

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	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

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VI. COURSE OBJECTIVES:

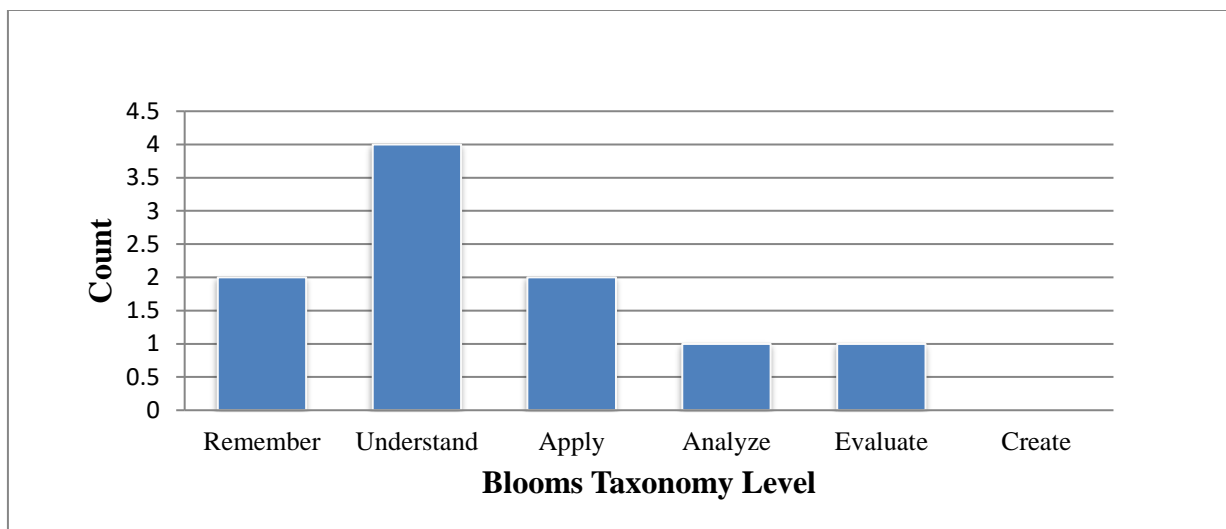
The students will try to learn:	
I	The principles of accounting and utilization of financial information for decision making and forward planning for future.
II	Financial statements for knowing earning capacity and financial position of the business concern with confidence
III	The inventory valuation of different companies and make analysis of financial accounts.
IV	The significance of financial statements as means of business communication.
V	Analytical techniques and conclusions from financial information for the purpose of decision making.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Discuss about objectives, types, and accounting concepts to prepare proper books of records as per GAAP.	Remember
CO 2	Illustrate the significance of pre and final accounts and causes of depreciation on fixed assets to measure its impact on business accounting.	Understand
CO 3	Summarize the objectives, significance and valuation methods of inventory for allocation of resources.	Apply
CO 4	Describe the features, significance and classification of shares and debentures to maintain records for issue of shares at par and discount.	Analyze
CO 5	Evaluate the cash flow and funds flow statements for excel analysis of funds from operations.	Apply

CO 6	Demonstrate the importance, limitations and types of ratios on financial statements to find the financial soundness of the firm.	Evaluate
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COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

	Program Outcomes	Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2.83	Guest Lectures
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO3	Ethics: Ability to develop value based Leadership ability	3	Seminars
PO4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	2	Assignments
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	2.25	Assignments

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	√	√	-	-	-	-
CO 2	√	-	-	√	-	-	√	-
CO 3	√	-	-	√	-	-	√	-
CO 4	-	√	-	-	-	-	√	-
CO 5	√	√	-	-	-	-	√	-

CO 6	√	√	√	√	-	-	-	-
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X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of accounting concepts and to an extent appreciate (understand) the importance of accounting system to promote the organized management system to solve the business problems.	2
	PO 2	Explain various types of accounts for foster analytical and critical thinking of transactional decisions.	2
	PO 3	Discuss the accounting principles to develop value based Leadership ability in maintaining the books of records.	2
	PO 4	Conclude the GAAP rules and regulations to understand the economic and legal aspects of business.	2
CO 2	PO 1	Identify (knowledge) the role of depreciation and its methods and techniques in managing the stable accounting system.	1
	PO 4	Comprehend and write effective reports on the various legal aspects of accounting system by developing good communicational aspects	2
	PO 7	Recognizing (knowledge) the contribution of accounts which affects financial stability of organization (application) by its functional strategic principles and methodology	2
CO 3	PO 1	Apply (knowledge) the managerial principles and characteristics of inventory and its importance of managing the stores conditions of the firm.	2
	PO 4	Focus on inventory management techniques in the formal accounting world with its resources allocation abilities.	1
	PO 7	Recognize the importance of inventory management in implementing strategies of the stores maintenance.	3
CO 4	PO 1	Identify (knowledge) the role of depreciation and its methods and techniques in managing the stable accounting system.	2
	PO 7	Memorize the strategies of depreciation valuation methods for better formulation of business environment.	2
CO 5	PO 1	Derive the existence possibility of working capital management in meeting the practical solutions of the organization.	2
	PO 2	Understanding the cash flow statements of the accounts to communicate the changing operational returns.	2
	PO 7	Outline the contribution of funds flow statements to meet the funding activities of the investments.	2
CO 6	PO 1	Examine the financial statements preparation processes while implementing the managerial decisions of financial businesses.	2
	PO 2	Compare various types of financial statements to be suitable for the vision and mission of organizations.	2
	PO 3	Prepare the transparent and effective financial statements to promote value based leadership styles in the organizations.	2
	PO 4	Extend the profitability and capital ratios with identified techniques in the financial statement analysis.	1

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	2	2	2	-	-	-	-
CO 2	1	-	-	2	-	-	2	-
CO 3	2	-	-	1	-	-	3	-
CO 4	2	-	-	-	-	-	2	-
CO 5	2	2	-	-	-	-	2	-
CO 6	2	2	2	1	-	-	-	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	66.66	66.66	66.66	-	-	-	-
CO 2	50.00	-	-	66.66	-	-	50.00	-
CO 3	100.00	-	-	33.33	-	-	75.00	-
CO 4	100.00	-	-	-	-	-	50.00	-
CO 5	100.00	66.66	-	-	-	-	50.00	-
CO 6	100.00	66.66	66.66	33.33	-	-	-	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation;

2 – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	3	3	-	-	-	-
CO 2	2	-	-	3	-	-	2	-

CO 3	3	-	-	1	-	-	3	-
CO 4	3	-	-	-	-	-	2	-
CO 5	3	3	-	-	-	-	2	-
CO 6	3	3	3	1	-	-	-	-
TOTAL	17	9	6	8			9	-
AVERAGE	2.83	3	3	2			2.25	-

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO3, PO4, PO7	SEE Exams	PO1, PO2, PO3, PO4, PO7.	Assignments	PO4, PO7	Seminars	PO 2, PO 3
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	PO 1, PO 7						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO FINANCIAL ACCOUNTING
Importance, objectives and principles, accounting concepts and conventions, and the generally accepted accounting principles (GAAP), their implications on accounting system; double entry system, recording business transactions, classification of accounts, accounting cycle.	
UNIT-II	THE ACCOUNTING PROCESS
Books of original record: journal and subsidiary books, ledger, trial balance, final accounts with adjustments: Methods of depreciation: Meaning, definitions, causes of depreciation, methods of depreciation like fixed installment method, diminishing balance method, annuity method and depreciation fund method (simple problems).	
UNIT-III	INVENTORY VALUATION
Meaning, objectives of inventory valuation, methods, merits and demerits of inventory valuation methods like FIFO method, LIFO method, weighted average method, simple average method (problems). Issue of shares: entries for issue of shares at par, issue of shares at discount and premium, calls in arrears, forfeiture of shares, reissue of forfeiture of shares (problems).	
UNIT-IV	FINANCIAL ANALYSIS
Meaning, definitions, significance, limitations of funds flow and cash flow statements, Statement showing changes in working capital, funds from operations, distinction between funds flow and cash flow statements, funds flow and income statement, funds flow and balance sheet, cash profits and book profits;	

preparation and analysis of funds flow statement and cash flow statement (problems).	
UNIT-V	FINANCIAL STATEMENTS AND RATIO ANALYSIS
Analysis and interpretation of financial statements from investor and company point of view, horizontal analysis and vertical analysis of company financial statements; meaning, definitions, significance and limitations of ratio analysis; types of ratios like liquidity, leverage, solvency and profitability ratios(problems).	
Textbooks:	
<ol style="list-style-type: none"> 1. Paresh Shah, "Financial Accounting for Management", Oxford University Press, 3rd Edition, 2019. 2. Prter& Norton, "Financial Accounting", Cengage publications, 9th Edition, 2017. 3. N.Ramachandran, "Financial Accounting and Analysis" Tata McGraw-Hill Publishing Limited, 3rd Edition, 2015. 4. S.N.Maheswari, "Financial Accounting", IBH Publications, 7th Edition, 2015. 5. Maheshwari S. N., and Maheshwari S. K., "Accounting for Management", Vikas Publishing House, 3rd Edition, 2014. 6. S Ramanathan, "Accounting for Management", Oxford University Press, 1st Edition, 2014. 7. Narayana Swamy, "Financial Accounting and Analysis" PHI Publications, 2nd Edition, 2012. 8. Narayana Swamy R, "Financial Accounting: A Management Perspective", Prentice Hall of India, Delhi, 4th Edition, 2011. 9. Jelsy Josheph Kuppapally, "Accounting for Managers", Prentice Hall of India, Delhi, 1st Edition, 2010. 10. S.P.Jain and K.L.Narang, "Financial Accounting" Kalyani Publishers, 10th revised Edition, 2010. 11. S.P.Jain and K.L.Narang, "Cost & Management Accounting", Kalyani Publishers, 10th revised Edition, 2010. 12. Shashi.K.Gupta and R.K.Sharma, "Advanced Management Accounting" Kalayani publishers, 2nd revised Edition, 2003. 	
Reference Books:	
<ol style="list-style-type: none"> 1. V.Rajasekharam "Financial Accounting and Analysis" Pearson Education, 13th Edition, 2012. 2. Ranjan Kumar Bai: "Financial Accounting and Analysis", S.Chand, 1st revised Edition, 2012. 3. S.N.Maheswari and S.K.Maheswari, "Financial Accounting", Vikas publications, 4th Edition, 2009. 4. Hanif and Mukarjee, "Financial Accounting", Tata McGraw Hill Ltd., 2nd Edition, 2011. 5. Tulsian P.C., "Financial Accounting", Pearson Education, Revised 1st Edition, 2013. 	

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Meaning, definitions, functions, importance and limitations of financial accounting.	CO1	T1: 1.1- 1.6.
2	Objectives, significance of financial accounting and different stages in the accounting cycle.	CO1	T1:1.3 - 1.4.
3	Limitations of financial accounting and different meanings of the single entry and double entry systems.	CO1	T1:1.16 -1.19.

Lecture No	Topics to be Covered	COs	Reference
4	Business entity concept, dual aspect concept, realization concept, going concern concept, money measurement concept, cost concept, accounting period concept, accrual concept, matching concept, objective evidence concept with suitable examples.	CO1	T1:2.28 -2.36.
5	Different types of convention of full disclosure, convention of materiality	CO1	T1:2.38 -2.40.
6	Convention of conservatism and convention of consistency with suitable examples.	CO1	T1:2.38 -2.40.
7	Definition, meaning, merits, demerits of double entry system and differences between double entry system and single entry systems.	CO1	T1:1.18 -1.21. T4:2.67-2.84
8	Classification of accounts and principles of personal and impersonal accounts with suitable examples.	CO1	T1:1.17 -1.19. T4: 2.62-2.64
9	Definitions, meaning, definition, advantages and disadvantages of journal. Write different types of subsidiary journals.	CO1	T1:3.43 -3.61. T4: 2.84-2.87.
10	Definitions, meaning, advantages of ledger and uses of purchases, sales, purchase returns and sales returns journals. Journal entries, ledger accounts and subsidiary books.	CO1	T1:5.100-140.
11	Definitions, meaning, advantages of ledger and uses of purchases, sales, purchase returns and sales returns journals. Journal entries, ledger accounts and subsidiary books.	CO1	T1:5.100-140.
12	Definitions, meaning, objectives, limitations, methods of preparing trial balance and significance of trial balance. Show trial balance.	CO1	T1: 3.71-3.77. T4: 2.87-2.91
13	Definitions of depreciation, the causes of deprecation and factors influencing on depreciation.	CO2	T1:11.345-47. T4:8.293-295.
14	Accounting procedure of charging depreciation under fixed installment method, diminishing balance method, annuity method, sinking fund method.	CO2	T1:11.347-64. T4:8.293-295
15	Differences between fixed installment method and diminishing balance method.	CO2	T1:11.353-54.
16	Meaning of capital and revenue expenditure and differences between capital and revenue expenses.	CO2	T1:7.177-180.
17	Impact, objectives of deprecation and need for providing depreciation.	CO3	T1:11.346-47.
18	Discuss the meaning, merits and demerits of fixed installment method, diminishing balance method, annuity method and sinking fund method. Problems on methods of depreciation.	CO3	T1:11.347-64. T4:8.293-295.
19	Meaning and advantages of trading account. Valuation of fixed assets. Problems on trading account.	CO3	T1: 7.181-187
20	Definitions of profit and loss account and the significance of profit and loss account. Problems on profit and loss account.	CO4	T1:7.188-196
21	Definition, meaning and the significance of Balance sheet. Problems on final accounts with adjustments.	CO4	T1:7.197-238.
22	Meaning, advantages and disadvantages of first in first out method. Problems on stores ledger under FIFO method.	CO4	T2: 1.74-1.75.
23	Meaning, advantages and disadvantages of last in first out method. Problems on stores ledger under LIFO method.	CO5	T2: 1.76-1.77.
24	Meaning, advantages and disadvantages of simple average method. Prepare stores ledger under simple average method.	CO5	T2: 1.77-1.79.
25	Meaning, advantages and disadvantages of weighted average method. Prepare stores ledger under weighted average method.	CO5	T2:1.80-1.84.
26	Definitions and different methods of inventory valuation. Problems on stores ledger under different methods.	CO5	T2: 1.85-101.
27	Objectives of inventory valuation. Problems on stores ledger under different methods.	CO5	T2: 1.85-101. T4:7.251-263.

Lecture No	Topics to be Covered	COs	Reference
28	Meaning of goodwill and different methods of valuation of goodwill. Problems on different methods of valuation of goodwill.	CO5	T1: 8.1-8.13.
29	Meaning and different types of preference shares and issue of shares. Entries on issue of shares at par, discount, premium forfeiture of shares and reissue of forfeiture of shares.	CO5	T1: 8.15-8.26.
30	Meaning, different types and issue of debentures and redemption of debentures Problems on issue of shares.	CO5	T1: 1.295-317
31	Definitions, meaning, significance and limitations of funds flow statement. Problems on funds flow and cash flow statements.	CO5	T3: 5.9-5.78.
32	Definitions, meaning, significance and limitations of cash flow statement. Problems on funds flow and cash flow statements.	CO5	T3:6.2-6.17.
33	Factors which are influenced on working capital requirement.	CO5	T3:4.7-4.10.
34	Factors which are influenced on working capital requirement.	CO5	T3:4.7-4.10.
35	Differences between cash flow and funds flow statements. Problems on funds flow and cash flow statements.	CO5	T3:6.8-6.9
36	Differences between funds flow and Balance sheet. Problems on funds flow and cash flow statements.	CO5	T3: 5.9-5.78. T4:12.586-291
37	Differences between funds flow and income statement. Problems on funds flow and cash flow statements.	CO5	T3: 5.9-5.78. T4:12.586-591
38	Meaning, different types and importance of working capital.	CO5	T3: 5.9-5.78. T4:12.586-608
39	Problems on funds flow and cash flow statements.	CO5	T3: 5.9-5.78. T4:12.586-608
40	Definitions, meaning and significance of Financial statement analysis. Problems on different types of financial statements.	CO6	T2:1. 285-303. T4:11.524-527
41	Definitions and limitations of financial statements and types of financial statements.	CO6	T2:1.285-303. T4:11.524-525
42	Definitions, meaning, significance and limitations of ratio analysis	CO6	T2:1.311-313.
43	Meaning, uses and different types	CO6	T2:1.313-342.
44	different types of liquidity ratios	CO6	T2:1.313-342.
45	Problems on different types of liquidity Ratios.	CO6	T2:1.313-342.
46	Meaning, uses and different types of activity ratios.	CO6	T2:1.313-342.
47	Determination of different types of activity ratios.	CO6	T2:1.313-342.
48	Meaning, uses and different types of capital structure ratios.	CO6	T2:1.313-342. T4:11.523-558
49	Determination of different types of capital structure Ratios.	CO6	T2:1.313-342.
50	Meaning, uses and different types of Profitability ratios.	CO6	T2:1.313-342.
51	Meaning, uses and different types of Profitability ratios.	CO6	T2:1.313-342.
52	Determination of different types of Profitability ratios.	CO6	T1: 1.1- 1.6.
53	Determination of liquidity Ratios and profitability ratios.	CO6	T1:1.3 - 1.4.
54	Determination of activity ratios and capital structure ratios.	CO6	T1:1.16 - 1.19
55	Determination of activity ratios and capital structure ratios.	CO6	T1:1.16 - 1.19

Lecture No	Topics to be Covered	COs	Reference
QUESTION BANK DISCUSSION			
56	Question Bank Discussions Unit 1	CO 1	T-1, R-2
57	Question Bank Discussions Unit 2	CO 2	T-2, R-2
58	Question Bank Discussions Unit 3	CO 3	T-1, R-1
59	Question Bank Discussions Unit 4	CO 4	T-2, R-2
60	Question Bank Discussions Unit 5	CO 5	T-1, R-2

Prepared By:

Dr. Vara Lakshmi Thavva, Associate Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	MANAGERIAL ECONOMICS				
Course Code	CMBC03				
Program	MBA				
Semester	FIRST				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Dr. P Lavanya, Associate Professor				

I. COURSE OVERVIEW:

This course helps to understand the economic goals of firm and optimal decision making. Managerial economics considers macroeconomic factors such as population growth and economic growth in market. It includes production management, Demand and supply, cost of production, market structure pricing, pricing strategies and output decision. It deals with tools of math's and statistics in order to analyse and make optimal decision making.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	-

III. MARKSD ISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Managerial Economics	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

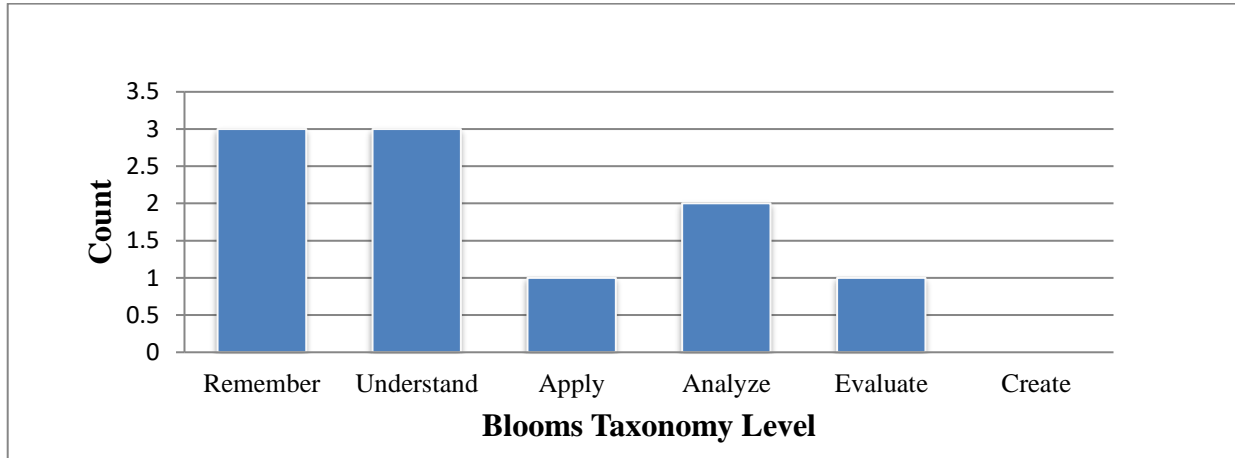
The students will try to learn:	
I	The application of economic theory and methodology as alternative in managerial decisions in an organization.
II	Quantitative techniques to business decisions using economic concepts such as supply and demand, price elasticity and marginal analysis.
III	Production function that helps organization to do business efficiently.
IV	The price to charge that maximizes profits under a variety of circumstances, including perfect and imperfect competition and when the firm can identify groups' of consumers.
V	Competition strategies, including costing, pricing, product differentiation, and market. Environment according to the natures of products and the structures of the markets.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Demonstrate the nature and scope of managerial economics in the modern business to foster the goals of the organization.	Remember
CO 2	Identify the fundamentals of managerial economics such as demand, production, price and supply which helps in doing business effectively. Examine about the marketing research approaches to demand estimation in demand forecasting	Understand
CO 3	Evaluate benefit/cost, life cycle and break even analyses on one or more economic alternatives.	Apply
CO 4	Discuss various forms of production functions to know its affects in the cost of production.	Analyze

CO 5	Examine the cost concepts and determinants of cost function and compare the differences between short-run and long-run cost function.	Evaluate
CO 6	Summarize the industry structure at firm level to develop pricing strategies with profit maximization.	Create

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2	Seminars
PO2	Decision making Skills: Foster Analytical and critical thinking abilities for data-based decision making.	2	Assignments
PO3	Ethics: Ability to develop Value based Leadership ability.	1	Guest lectures
PO4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	2	Seminars
PO5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	2	Assignments

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	√	-	-	-	-
CO 2	-	√	-	-	-	-	-	-
CO 3	-	√	-	-	-	-	-	-
CO 4	-	-	√	-	-	-	-	-
CO 5	-	-	√	√	-	-	-	-
CO 6	-	-	-	√	√	-	-	-

X.JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect the basic economic principles and methodologies to key management decisions within the organization.	2
	PO 2	Explain the nature of managerial economics that helps organizations to take managerial decisions.	2
	PO 4	Understand the scope of managerial economics that helps to understand global aspects of business.	2
CO 2	PO 2	Understand the fundamentals of managerial economics such as demand, production, price and supply which helps in decision making.	2
CO 3	PO 2	Comprehend and write cost, life cycle and break-even analysis which helps in decision making.	2
CO 4	PO 3	Discuss various forms of production function like Iso - quant and Iso - cost and finding out optimal combinations of inputs including the Cobb-Douglas function.	1
CO 5	PO 3	Understand concepts of market structures like Monopoly, Oligopoly, Monopolistic competition's that increase efficiency in the organization.	1
	PO 4	Examine the cost function and differences between short-run and long-run cost function. Helps to analyze economic aspects of business.	2
CO 6	PO 4	Identify (Knowledge) the cost-efficient method of producing components which are better sourced from other companies.	2
	PO 5	Summarize the industry structure at firm level to develop production which leads in the achievement of organizational goals.	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	2	-	2	-	-	-	-
CO 2	-	2	-	-	-	-	-	-
CO 3	-	2	-	-	-	-	-	-
CO 4	-	-	1	-	-	-	-	-
CO 5	-	-	1	2	-	-	-	-
CO6	-	-	-	2	2	-	-	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00%	66.66%	-	66.66%	-	-	-	-
CO 2	-	66.66%	-	-	-	-	-	-
CO 3	-	66.66%	-	-	-	-	-	-
CO 4	-		33.33%	-	-	-	-	-
CO 5	-	-	33.33%	66.66%	-	-	-	-
CO 6	-	-	-	66.66%	40.00%	-	-	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ –No correlation;

2 – $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	2	2	-	2	-	-	-	-
CO 2	-	2			-	-	-	-
CO 3	-	2	-		-	-	-	-
CO 4	-	-	1	-	-	-	-	-
CO 5	-	-	1	2	-	-	-	-
CO 6	-	-	-	2	2	-	-	-
TOTAL		6	2	6	2	-	-	-
AVERAGE	2	2	0.66	2	0.4			

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO3, PO4, PO5	SEE Exams	PO1, PO2, PO3, PO4, PO5	Assignments	PO2, PO5	Seminars	PO1, PO4
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

MODULE-I	INTRODUCTION TO MANAGERIAL ECONOMICS
Definition, nature and scope, Relationship with other areas in economics, production management, marketing, finance and personnel, Operations research, The role of managerial economist, Basic economic principles- the concept of opportunity cost, incremental concept, scarcity, marginalize, Equi marginalize, time perspective, discounting principle, risk and uncertainty.	
MODULE-II	THEORY OF DEMAND AND SUPPLY
Demand Analysis, Elasticity of demand-types and significance of elasticity of demand, Demand estimation, Marketing research approaches to demand estimation, Need for forecasting, forecasting techniques, Supply Analysis, Supply function, the law of supply, elasticity of supply.	
MODULE-III	PRODUCTION AND COST ANALYSIS
Production function, Production function with one and two variables, Cobb-Douglas production function, Marginal rate of technical substitution, Iso-quants and Iso-costs, returns to scale and returns to factors, economies of scale, Innovations and global competitiveness. Cost concepts, determinants of cost, cost-output relationship in the short run and long run, short run vs. long run costs, average cost curves, overall cost leadership.	
MODULE-IV	MARKET STRUCTURES- PRICING AND OUTPUT DECISIONS
Classification of Market structures –Features-Competitive situations-price- output determination in perfect competition, monopoly, monopolistic competition and oligopoly both the long run and short run.	
MODULE-V	PRICING STRATEGIES
Pricing philosophy, Price Discrimination, Cost plus pricing, Pricing of multiple products, Transfer pricing, pricing over product life cycle .Theory of firm-Managerial Theories and behavioral Theories of firm. International price Discrimination: Dumping, Effects of Dumping.	

Textbooks:	
1.	TR Jain and Khanna OP, “Managerial Economics”, VK Global Publications Pvt Ltd, 1 st Edition, 2020.
2.	G Keat, Young K Y, Erfile E, Benarjee S, “Managerial Economics”, Pearson Education, 6 th Edition, 2017.
3.	H L Ahuja, “Managerial Economics – Analysis of managerial Decision making”, S. Chandpublications, New Delhi, 2 nd Edition, 2017.
4.	P L Mehta – “Managerial Economics-Analysis, problems and Cases”, Sultan Chand & Sons, NewDelhi, 2 nd Edition, 2016.
5.	Dwivedi D N, “Managerial Economics”, VikasPublishingHouse Pvt ltd, 8 th Edition, 2015.
6.	R.L. Varshney& K.L. Maheshwari, “Managerial Economics”, Sultan Chand & Sons, New Delhi, 3 rd Edition, 2014.
7.	P.L Mehta, "Managerial Economics", Sultan Chand and Sons, 2 nd Edition, 2014.
8.	Dr. D.M. Mithani, “Managerial Economics”, Himalaya Publishing House, 1 st Edition, 2010.
Reference Books:	
1.	D M Mithani “ManagerialEconomics: Theory and Applications”, Himalaya Publication house,Hyderabad, 2 nd Edition, 2016.
2.	G S Gupta, “Managerial Economics”, Tata McGraw Hill Publications, New Delhi, 2 nd Edition, 2017.

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture no	Topics to be covered	Course outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Acquire knowledge of basic terms related to managerial economics	CO1	T1- 1.3-1.8
2	Definition and nature of managerial economics	CO1	T1- 1.3-1.8
3	Understand managerial economics relationship with other areas	CO1	T1-2.6-2.10
4	Managerial economics relationship with mathematics and statistics	CO1	T1-2.6-2.10
5	Explain the importance of managerial economist	CO1	T1-3.1-3.18
6	Explain the advantages of managerial economist	CO1	T1-3.1-3.18
7	Understand the basic economic principles	CO1	T1-4.5-4.15
8	Economic principles with equi- marginal ism	CO1	T1-4.5-4.15
9	Economic principles with risk and uncertainty	CO1	T1-4.5-4.15
10	Definition of demanded and price of product	CO2	T1- 5.2-3.2
11	Understand the relationship between quantity demanded and price of product	CO2	T1- 5.2-3.2
12	Type and methods demanded and price of product	CO2	T1- 5.2-3.2

Lecture no	Topics to be covered	Course outcomes	Reference
13	Explain various approaches to demand estimation	CO2	T1- 5.3 4-4.9
14	Explain various type of income to demand estimation	CO2	T1- 5.3 4-4.9
15	Explain various approaches to demand determination	CO2	T1- 5.3 4-4.9
16	Identify the methods to estimate demand in an organization	CO2	T1- 5.51-6.8
17	Price elasticity of demand in an organization	CO2	T1- 5.51-6.8
18	Methods to estimate elasticity of demand	CO2	T1- 5.51-6.8
19	Approaches elasticity of demand	CO2	T1-7.117.13
20	Understand relationship between price and quantity supply	CO2	T1-7.117.13
21	Supply determinations, functions	CO2	T1-7.117.13
22	Elasticity of supply,types	CO2	T1-7.117.13
23	Understand the change in output with change in inputs	CO3	T1-7.14-7.21
24	Production functions.	CO3	T1-7.14-7.21
25	Determinate and types of production functions	CO3	T1-7.14-7.21
26	One variable function	CO3	T1-7.14-7.21
27	Two variable Production function	CO3	T1-7.14-7.21
28	Marginal rate of technical substitution	CO3	T1-7.14-7.21
29	Analysis of law	CO3	T1-7.14-7.21
30	Understand the measurement of demand in numerical	CO3	T1- 8.4-8.16
31	Cost and output determination	CO3	T1- 8.4-8.16
32	Understand the measurement of Iso - quant function	CO3	T1- 8.4-8.16
33	Understand the measurement of ISO cost function	CO3	T1- 8.4-8.16
34	Law of returns to scale	CO3	T1- 8.4-8.16
35	Analyze the benefits obtained by expanding production	CO3	T1-8.19-8.25
36	Analyze the internal and external economies of scale	CO3	T1-8.19-8.25
37	Innovations and global competition	CO3	T1-8.19-8.25
38	Understand the concepts of cost and types	CO4	T1-9.3-9.13
39	Managerial use of concepts of cost and the factors affecting cost	CO4	T1-9.3-9.13
40	Determination of cost function	CO4	T1-9.3-9.13
41	Analyze the relationship between output and cost	CO4	T19.11-0.25

Lecture no	Topics to be covered	Course outcomes	Reference
42	Analyze the relationship between output and cost in short-run	CO4	T19.11-0.25
43	Analyze the relationship between output and cost long run	CO4	T19.11-0.25
44	Recall the different cost concepts to minimize cost	CO4	T19.21-0.27
45	Marginal cost concepts to minimize cost	CO	T19.21-0.27
46	Market structure	CO5	T19.21-0.27
47	Types of market structures	CO5	T19.21-0.27
48	Acquire knowledge of market and its structure	CO5	T1.11.511.7
49	Perfect competition market and its structure	CO5	T1.11.511.7
50	Monopoly structure	CO5	T1.11.511.7
51	Analyze the relationship between output and price in the market in monopolistic	CO5	T1.12.512.29
52	Relationship between output and price in the market in monopoly	CO5	T1.12.512.29
53	Analyze the relationship between output and price in the monopolistic	CO5	T1.12.512.29
54	Analyze the relationship between output and price in the oligopoly market	CO5	T1.12.512.29
55	Long run and short run cost curves	CO5	T1.12.512.29
56	Understand the price and pricing philosophy	CO6	T113.615.19
57	Cost plus pricing and multiple pricing policy	CO6	T113.615.19
58	Transfer pricing and product life cycle	CO6	T113.615.19
59	Analyse the different theories of firm	CO6	T113.615.19
60	International price discrimination and dumping effect	CO6	T113.615.19
QUESTION BANK DISCUSSIONS			
61	Question Bank Discussions Unit 1	CO 1	T1-5.51-6.8
62	Question Bank Discussions Unit 2	CO 2	T1-5.51-6.8
63	Question Bank Discussions Unit 3	CO 3	T1-7.14-7.21
64	Question Bank Discussions Unit 4	CO 4	T19.21-0.27
65	Question Bank Discussions Unit 5	CO 5	T113.615.19

Prepared by:
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HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	BUSINESS LAW AND ETHICS				
Course Code	CMBC04				
Program	MBA				
Semester	I				
Course Type	CORE				
Regulation	IARE - PG-21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Dr. P Lavanya. Associate Professor				

I. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	-

II. COURSE OVERVIEW:

This course focus on the sale of goods and its relating issues in the international purchase or sale at the time of executing of contracts with the various kinds of negotiable instruments. Business law provides the knowledge regarding the companies act to incorporate a company and also about partnership form of business organizations and duties and rights of partners and also about concepts relating to competition act. In addition to the above the course imparts the knowledge on various types of cyber-crimes and frauds and about concepts relating to digital signature which are relating to IT act.

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Business Law and Ethics	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
16.67 %	Remember
16.67 %	Understand
33.33 %	Apply
33.33 %	Analyze
-	Evaluate
-	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

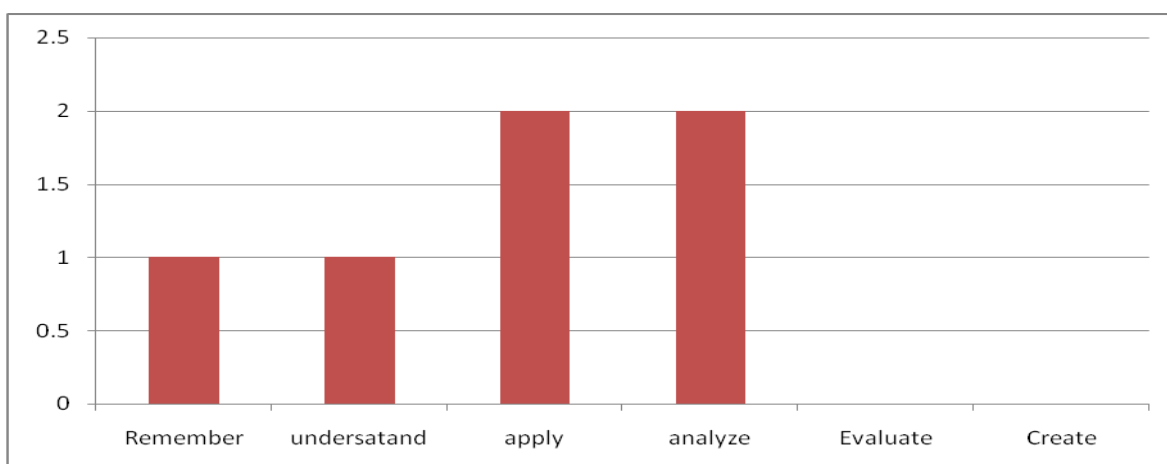
In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

The students will try to learn:	
I	About business law, business functions in internal and external environment.
II	The laws of contract, sale of goods act 1930
III	An overview on basic business legal environment and negotiable instruments.
IV	Prevailing legal environment of company and competition acts in India
V	The information technologies acts and cyber security aspects

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Demonstrate the important elements of the Indian contract act like indemnity, guarantee and agency contracts for effective decision making in business.	Understand
CO 2	Make use of the importance of contract of sales and situations in real time business.	Apply
CO 3	Justify the features of negotiable instruments like promissory note, bill of exchange and cheque and their usages while dealing with them.	Analyze
CO 4	Utilize various ways of crossing and discharge and dishonour related issues while making payments through cheques etc.	Apply
CO 5	Discuss about types of business organization to take decisions by enhancing competition act.	Analyze
CO 6	Summarize various cyber laws and relating rules and regulations to prevent cybercrimes and cyber frauds in the organization.	Remember



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	2	Lectures
PO3	Ethics: Ability to develop value based leadership ability.	3	Guest Lectures
PO4	Communication Skills: Ability to understand, analyze and Communicate global, economic, legal, and ethical aspects of business.	2	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	3	Guest Lectures / Seminars

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	✓	✓	✓	-	-	-	-
CO 2	-	✓	-	✓	-	-	-	-
CO 3	-	✓	✓	-	-	-	-	-
CO 4	-	✓	-	-	-	-	-	-
CO 5	-	-	✓	-	-	-	-	✓
CO 6	-	✓	✓	-	-	-	-	-

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 2	Understand the main source of law regulating contracts in India. Foster analytical thinking about contract and agreement, types to solve the issues.	3
	PO 3	Ability to understand about the Valid contracts, Void contracts, Voidable Contracts, Illegal Contracts and Unenforceable contracts.	3
	PO 4	Remember the concepts of breach of contract, understanding the discharge of contracts and its type latest developments.	2
CO 2	PO 2	Analyze sale of contract, classification of price Evaluate rights of the unpaid seller through enforcement of auction and hire purchases.	2
	PO 4	Understand and Compare about transfer of property which enabled the performance of contract.	3
CO 3	PO 2	Understand the features of negotiable instruments like promissory note, bill of exchange and cheques.	2
	PO 3	Apply the relevant legal terms in business.	2
CO 4	PO 2	Understand the honour and dishonour of negotiable instruments	2
CO 5	PO 3	Overview of competition act with	3
	PO 8	Inculcate and develop technical skills to face the competitive world successfully with latest developments acts	2
CO 6	PO 2	Understand the cyber crime scenario in Indian issues	2
	PO 3	Apply the Challenges in Cyber crime and strategies to face the challenges of cyber crime.	2

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	3	3	2	-	-	-	-
CO 2	-	2	-	3		-	-	-
CO 3	-	2	2		-	-	-	
CO 4	-	2	-	-	-	-	-	
CO 5	-	-	3		-	-	-	2
CO 6	-	2	2		-	-	-	

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	100.00	100.00	66.66	-	-	-	-
CO 2	-	66.66	-	100.00		-	-	-
CO 3	-	66.66	66.66		-	-	-	
CO 4	-	66.66	-	-	-	-	-	
CO 5	-	-	100.00		-	-	-	100.00
CO 6	-	66.66	66.66	-	-	-	-	

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being **thelow correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ –Nocorrelation;**2** – $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	3	3	2	-	-	-	-

CO 2	-	2	-	3	-	-	-
CO 3	-	2	2	-	-	-	-
CO 4	-	2	-	-	-	-	-
CO 5	-	-	3	-	-	-	2
CO 6	-	2	2	-	-	-	-
TOTAL	-	11	10	5	0	-	2
AVERAGE	0	2.2	2	2.5	0	0	1

XV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO 2,PO3, PO 4,PO 8	SEE Exams	PO 2,PO3, PO 4,PO 8	Assignments	PO 2,PO 3, PO 4,PO 8	Seminars	PO 2,PO3, PO 4,PO 8
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XVI. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

MODULE-I	LAW OF CONTRACT - 1872
Nature of contract; classification; Offer and Acceptance; Capacities of Parties to contract; Free consents; Consideration, Legality of object; Agreement declared void. -Performance of contract; Discharge of contract; Remedies for breach of contract. Special contracts: Indemnity and guarantee, Contract of Agency.	
MODULE-II	SALE OF GOODS ACT (1930)
Formation of Contracts of sale - goods and their classification; price - conditions and warranties – transfer of property in goods – performance of the contract of sale - Unpaid seller and his Rights – sale by auction – hire purchase agreement.	
MODULE-III	NEGOTIABLE INSTRUMENTS ACT (1881)
Definition of Negotiable Instruments – features – Promissory note; Bill of Exchange & cheque; Holder and holder in the due course. Crossing of a cheque, types of crossing; Negotiation; Dishonor and discharge of Negotiable Instrument.	
MODULE-IV	COMPANY and COMPETITIONACT
Companies Act: Memorandum and alteration of Articles of Association-Partnership Act 1932: Duties of Partners- Dissolution of Partnership- Competition Act 2002; an Overview of Competition	

Law in India, Important Definitions under the Competition Act, 2002.	
MODULE-V	INFORMATION TECHNOLOGY ACTS
Information Technology Act 2000: Digital Signature-Cyber Frauds, Cybercrime scenarios. Law of Information Technology (IT), scheme of IT act, digital signature attribution, acknowledgement and dispatch of electronics records-Regulation certifying authorities.	
Textbooks:	
<ol style="list-style-type: none"> 1. N.D. Kapoor, Dr.Rajni Abbi, Bharat Bhushan, Rajiv Kapoor, "Business Law", Sultan Chand & Sons (P) Ltd, 1stEdition, 2019. 2. Richard A Mann, Barry S Roberts, "Business Law and the Regulation of Business", Cengage Publications, 13thEdition, 2018. 3. N.D. Kapoor, Dr. Rajni Abbi, Bharat Bhushan, Rajiv Kapoor, "Elements of Business Law", Sultan Chand & Sons (P) Ltd, 1stEdition, 2018. 4. K.R. Bulchandani, "Business Law for Management", Himalaya Publishing House, India, 1st Edition, 2017. 5. Ravinder Kumar, "Legal Aspects of Business", Sengage Learning, 4thEdition, 2016. 6. P.P.S.Gogna, „Company Law", S.Chand, 9thEdition, 2016. 7. RSN Pillai, Bagavathi, "Legal Aspects of Business", S.Chand, 8thEdition, 2016. 8. Akhileshwar Pathak, "Legal Aspects of Business", Tata McGraw Hill, 3rdEdition, 2011. 9. Nina Godbole & SunitBelapure, "Cyber Security", Wiley India, 2012. 10. Don Mayer, University of Miami, "Business Law and the Legal Environment", Saylor Foundation, 1stEdition, 2012. 11. RSN Pillai, Bagavathi, "Business Law", S.Chand, 4thEdition,2013. 	
Reference Books:	
<ol style="list-style-type: none"> 1. K.Aswhappa, Essentials of Business Environment, Himalaya Publishers. 2. P.K.Dhar, Indian Economy Growing Dimensions, Kalyani Publishers. 3. N.D.Kapoor, Mercantile Law, Sultan Chand Publishers. 4. Chaula and Garg, Mercantile Law, Kalyani Publishers 5. Francis Cherunillam, Business Environment, Himalaya Publishers 	
Web References:	
<ol style="list-style-type: none"> 1. https://www.pdfdrive.com/introduction-to-law-e28667799.html 2. https://www.pdfdrive.com/introduction-to-business-law-e187119724.html 	
E-Text Books:	
<ol style="list-style-type: none"> 1. https://www.pdfdrive.com/business-law-e18720370.html 2. https://www.pdfdrive.com/business-law-an-introduction-e28723759.html 3. https://pingpdf.com/pdf-managerial-economics-by-t-r-jain-free-pdf-download.html 4. https://mrcet.com/downloads/MBA/Managerial%20Economics.pdf 5. https://www.academia.edu/34707649/Managerial_Economics_Textbook 	

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
2	Understand the different between agreement and a Contract.	CO 1	T1

Lecture No	Topics to be Covered	COs	Reference
3	Different types of contracts and essential elements of contracts in brief	CO 1	T1
4	Offer and valid elements	CO 1	T1
5	Describe the performance of contract	CO 1	T1, T3
6	Describe the discharge of contracts,	CO 1	T1, T3
7	Illustrate remedies of breach of contract	CO 1	T1, T3
8	Capacities of Parties to contract	CO 1	T1.T2
9	Consideration and execution	CO 1	T1,T2
10	Free consents;	CO 1	T1,T2
12	Legality of object	CO 1	T1,T2
13	Agreement declared void.	CO 1	T1,T2
14	Formation of Contracts of sale	CO 2	T1,T2
15	Goods and their classification; price analysis	CO 2	T1
16	Execution of contract laws	CO 2	T1
17	Learn concepts and differences between indemnity and guarantee	CO 2	T2
18	Illustrate general principles related to conditions & Warranties	CO 2	T2
19	Learn the difference between Conditions and Warranties	CO 2	T2
20	Learn the difference between Conditions and Warranties	CO 2	T2
21	Understand the principles related to sales, performance of contract of sale.	CO 2	T1,T2,T3
22	Understand the principles related to sales,	CO 2	T1,T2,T3
23	Performance of contract of sale.	CO 2	T1,T2
24	Executing the Law of Performance of contract	CO 2	T1,T2
25	Unpaid seller and his Rights	CO 2	T1
26	Responsibilities of unpaired seller	CO 2	T1
27	Executing the delivery contract	CO 2	T1
28	Demonstrate Auction	CO 2	T1
29	Hire purchase agreement.	CO 2	T1,T2
30	Understand the negotiable instruments act 1881.	CO 3	T1 , T3
31	Negotiable Instruments – features	CO 3	T1 , T3
32	Describe rules related to all negotiable instruments.	CO 3	T1 , T3

Lecture No	Topics to be Covered	COs	Reference
33	Promissory note-Features	CO 3	T1,T2
34	Bill of Exchange rules related to it.	CO 4	T1,T2
35	cheque; Holder and holder in the due course. Crossing of a cheque, types of crossing; Negotiation; Dishonor and discharge of Negotiable	CO 4	T1
36	Describe rules related to Crossing of a cheque, types of crossing	CO 4	T1
37	Discuss endorsements, Holder in due course,	CO 4	T1,T2
38	Discuss endorsements, Discharge of Parties.	CO 4	T1,T2
39	Discuss the companies Act:	CO 5	T1
40	Memorandum and Articles of Association	CO 5	T1
41	Alteration of Articles of Association	CO 5	T1
42	Understanding Partnership Act 1932: -	CO 5	T1,T2
43	Duties of Partners	CO 5	T1,T2
44	Dissolution of Partnership	CO 5	T1,T2
45	Competition Act 2002; an Overview of Competition	CO 5	T1
46	Law in India - rules	CO 5	T1
47	Competition Act 2002-Important	CO 5	T1
48	Definitions under the Competition Act, 2002.	CO 6	T1,T2
49	Competition Act 2002- Amendments	CO 6	T1,T2
50	Information Technology Act 2000	CO 6	T1,T2
51	Digital Signature - Cyber Frauds, Cyber crime scenarios	CO 6	T1,T2
52	Describe the challenges facing in Indian IT Act to Indian Law	CO 6	T1
53	Law of Information Technology (IT)	CO 6	T1
54	challenges facing in Indian IT Act to Indian Law	CO 6	T1
55	Understand the cyber crime scenario in Indian issues and Challenges in Cyber Crime	CO 6	T2
56	Scheme of IT act	CO 6	T2
57	Digital signature attribution,	CO 6	T2
58	Acknowledgement and Dispatch of electronics records	CO 6	2
59	Regulation certifying authorities.	CO 6	2
60	Discuss the cyber cases	CO 6	2

Lecture No	Topics to be Covered	COs	Reference
61	Question Bank Discussions Unit 1	CO 1	T-1, R-2
62	Question Bank Discussions Unit 2	CO 2	T-1, R-1
63	Question Bank Discussions Unit 3	CO 3,4	T-1, R-2
64	Question Bank Discussions Unit 4	CO 5	T-1, R-2
65	Question Bank Discussions Unit 5	CO 6	T-1, R-2

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(Autonomous)
Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	STATISTICS FOR MANAGEMENT				
Course Code	CMBC05				
Program	MBA				
Semester	I				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	-	-
Course Coordinator	Ms. I. Sireesha, Assistant Professor, MBA				

I. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	-

II. COURSE OVERVIEW:

This course helps to improve their ability to make effective managerial decisions, including application of statistics and developing statistical strategies and measurement of central tendency, which provide with the relevant mathematical tools required in the analysis of problems in engineering and scientific professions. The course includes tabulation of univariate, small sample test and regression analysis, selection random variables, probability distributions, correlation, regression, sampling distribution, testing of hypothesis and analysis of variance. The mathematical skills derived from this course form a necessary base to analytical and design concepts encountered in the program.

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Statistics For Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
16.67 %	Remember
50 %	Understand
-	Apply
-	Analyze
16.67 %	Evaluate
-	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

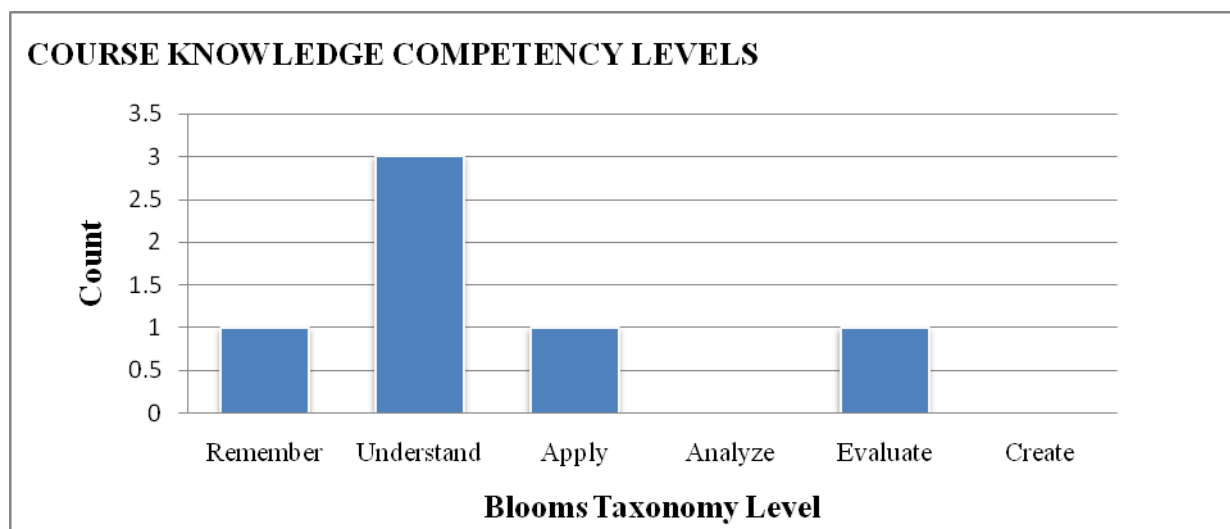
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	The various statistical techniques and solve problems effectively in the statistics.
II	Different types of skewness and know about the coefficient variations of skewness.

III	The application of statistical measures of central tendency and also statistical measures of dispersion.
IV	Application of ANOVA, other non-parametric test and analyze the recent trends.
V	Time series analysis and also trend analysis of data and its importance for solving the Problems.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO 1	Recognize the significance, limitations, origin and different branches of statistics for better managerial analysis.	Remember
CO 2	Discuss various types of measures of dispersion like, coefficient of skewness coefficient of variation for solving direct and indirect problems.	Understand
CO 3	Narrate the tabulation and classification of data to draw effective solutions for solving problems.	Understand
CO 4	Demonstrate the diagrammatical and graphical representation for analysis of data by using different dimensional diagrams.	Understand
CO 5	Examine the various T-distribution sample tests like ANOVA techniques and correlation analysis for testing the samples.	Apply
CO 6	Evaluate regression analysis and different types of time series for testing goodness of attributes fitness.	Evaluate



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments.
PO2	Decision making skills: An ability to analyze a problem identifies, formulate and use the appropriate managerial skills for obtaining its solution.	3	Seminars
PO4	Communication skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	3	Seminars
PO6	Entrepreneurial and Innovation Skills: Demonstrate the skills in evaluating business opportunity and identifying sources of potential funding, and develop as successful entrepreneurs	3	Assignments

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcome s(COs)	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	√	-	-	-	-	-	-	-

CO 2	-	√	-	√	-	-	-	-
CO 3	-	-	-	√	-	-	-	-
CO 4	-	-	-	-	-	√	-	-
CO 5	-	-	-	-	-	√	-	-
CO 6	-	-	-	-	-	√	-	-

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of statistical system and to an extent appreciate (understand) the importance of mathematical functions to promote the organized economy system and to solve business problems.	2
CO 2	PO 2	Recognizing (knowledge) the contribution of various types of measures of central tendency and measures of dispersion (application) for foster analytical and critical thinking abilities for data-based decision making	3
	PO 4	Identify (knowledge) the appropriate types of coefficient of skewness and the coefficient of variation in managing and communicate global, economic, legal, and ethical aspects of business.	2
CO 3	PO 4	Apply (knowledge) the managerial principles and characteristics of the tabulation and classification of data to draw effective solutions to understand the economy aspects of the business.	2
	PO 6	Construct the pricing models of diagrammatical and graphical representation for analysis of data to analyze and communicate the inherent reasons for decision making.	3

CO 4	PO 6	Derive the existence activities of various T-distribution applications with independent and dependent variables inevaluating business opportunities.	3
CO 5	PO 6	Understanding the different types of small sample tests, techniques of ANOVA and correlation analysis to identifying sources of potential funding, and to develop as successful entrepreneurs.	3
CO 6	PO 6	Examine the regression analysis and different types of timeseries while testing attributes goodness to improve innovation skills.	3

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	3	-	-	-	-	-	-	-
CO 2	-	3	-	3	-	-	-	-
CO 3	-	-	-	3	-	-	-	-
CO 4	-	-	-	-	-	3	-	-
CO 5	-	-	-	-	-	3	-	-
CO 6	-	-	-	-	-	3	-	-

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100%	-	-	-	-	-	-	-
CO 2	-	100%	-	100%	-	-	-	-
CO 3	-	-	-	100%	-	-	-	-
CO 4	-	-	-	-	-	100%	-	-

CO 5	-	-	-	-	-	100%	-	-
CO 6	-	-	-	-	-	100%	-	-

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	3	-	-	-	-	-	-	-
CO 2	-	3	-	3	-	-	-	-
CO 3	-	-	-	3	-	-	-	-
CO 4	-	-	-	-	-	3	-	-
CO 5	-	-	-	-	-	3	-	-
CO 6	-	-	-	-	-	3	-	-
TOTAL	3	3	-	6	-	9	-	-
AVERAGE	3	3	0	3	0	3	0	0

XV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1,PO2, PO4,PO6	SEE Exams	PO1,PO2, PO4,PO6	Assignments	PO1,PO6	Seminars	PO 2, PO 4
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XVI. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

Unit-I	INTRODUCTION TO STATISTICS
Measures of central Tendency- Mean, Median, Mode, Geometric Mean and Harmonic Mean. Range, Quartile deviation, Mean Deviation, Standard deviation and co- efficient of variation. Skewness: Karl Pearson's co-efficient of skewness, Bowley's co-efficient of skewness, Kelleys co-efficient of skewness, Kurtosis.	
Unit-II	TABULATION OF UNIVARIATE
Bi variate and multi variate data, data classification and tabulation, diagrammatic and graphical representation of data. One dimensional, two dimensional and three dimensional diagrams and graphs.	
Unit-III	SMALL SAMPLE TESTS
Analysis of Variance: One Way and Two Way ANOVA (with and without Interaction). Chi-Square distribution: Test for a specified Population variance, Test for Goodness of fit, Test for Independence of Attributes.	
Unit-IV	CORRELATION ANALYSIS
Correlation Analysis: Scatter diagram, Positive and Negative correlation, limits for coefficient of Correlation, Karl Pearson's coefficient of correlation, Spearman's Rank correlation, concept of Multiple and partial Correlation, Regression Analysis-Concept, least square fit of a linear regression, two lines of regression, Properties of regression coefficients.	
Unit-V	TIME SERIES ANALYSIS
Components, Models of Time Series–Additive, Multiplicative and Mixed models, Trend analysis- Free hand curve, Semi averages, moving averages, Least Square methods and Index numbers – introduction, Characteristics and uses of index numbers, types of index numbers, un weighted price indexes, weighted price indexes, Tests of adequacy and consumer price indexes.	
Textbooks:	
<ol style="list-style-type: none"> 1. Gerald Keller, "Statistics for Management and Economics", Cengage Learning, 11th Edition, 2018. 2. Levin Richard (Author), H. Siddiqui Masood (Author), S. Rubin David (Author), Rastogi Sanjay (Author), "Statistics for Management", Pearson Education, 8th Edition, 2017. 3. P.C. Tulsian, Bharat Jhunjhnuwala, "Business Statistics", S. Chand, 2016. 4. Levin R.I., Rubin S. David, "Statistics for Management", Pearson, 7th Edition, 2015. 5. Anderson, Sweeney, Williams, Cam, Cochran, "Statistics for Business Economics", Cengage 12th Edition, 2014. 6. J. K Sharma, "Business Statistics", Vikas Publishing House, 4th Edition, 2015. 7. Beri, "Business Statistics", Tata McGraw Hill, 1st Edition, 2015. 8. Gupta S.C., "Fundamentals of Statistics", Himalaya Publishing House, 6th Edition, 2015. 9. Barry Render and Ralph M. Stair, "Quantitative Analysis for Management", Prentice Hall of India, 12th Edition, 2012. 10. P N Arora & S Arora, "Statistics and Management", Sulthan Chand & Son's Publishing, 5th Edition, 2003. 	
Reference Books:	
<ol style="list-style-type: none"> 1. Levine, Stephan, krehiel, Berenson, "Statistics for Managers using Microsoft Excel", PHI, 	

1st Edition, 2015.
 2. J. K Sharma, "Business Statistics", Pearson Publications, 2nd Edition, 2015.

Web References:

1. <https://aditya30702.files.wordpress.com/2012/07/statistics-for-managers-using-microsoft-excel-gnv64.pdf>
2. <http://www.nprcet.org/mba/document/First%20Semester/BA7102%20STATISTICS%20FOR%20MANAGEMENT%20LT%20P%20C%203%201%200%204%20ODD.pdf>

E-Text Books:

1. <http://bookboon.com/en/statistics-and-mathematics-ebooks>
2. <http://www.ebay.com/bhp/statistics-for-managers-using-microsoft-excel>
3. <https://www.sapnaonline.com/books/statistics-management-levin-richard-8177585843-9788177585841-academic>
4. <https://link.springer.com/book/10.1007/b101868>

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
2	Overview, origin and development	CO1	T-1, R-2
3	Overview, origin and development	CO1	T-2, R-2
4	Managerial applications of statistics, branches of the study	CO1	T-1, R-2
5	Managerial applications of statistics, branches of the study	CO1	T-1, R-2
6	Statistics with computers, limitations of statistics	CO1	T-2, R-2
7	Statistics with computers, limitations of statistics	CO1	T-1, R-1
8	Mean, median, mode, geometric mean and harmonic mean	CO1	T-2, R-2
9	Mean, median, mode, geometric mean and harmonic mean	CO2	T-1, R-2
10	Mean, median, mode, geometric mean and harmonic mean	CO2	T-2, R-2
11	Dispersion, range, quartile deviation, mean deviation	CO2	T-2, R-2
12	Dispersion, range, quartile deviation, mean deviation	CO2	T-2, R-2
13	Dispersion, range, quartile deviation, mean deviation	CO2	T-1, R-2
14	Co-efficient of variation skewness: Karl Pearson co-efficient of	CO2	T-2, R-2

	skewness, Bowley's co-efficient of skewness		
15	Co-efficient of variation skewness: Karl Pearson co-efficient of skewness, Bowley's co-efficient of skewness	CO2	T-1, R-2
16	Co-efficient of variation skewness: Karl Pearson co-efficient of skewness, Bowley's co-efficient of skewness	CO2	T-2, R-2
17	Kelley's co-efficient of skewness; theory and problems, discussion on direct and indirect methods of solving the problems	CO2	T-1, R-2
18	Kelley's co-efficient of skewness; theory and problems, discussion on direct and indirect methods of solving the problems	CO2	T-2, R-2
19	Kelley's co-efficient of skewness; theory and problems, discussion on direct and indirect methods of solving the problems	CO3	T-1, R-1
20	Bi variate and multi variate data, data classification and tabulation, diagrammatic and graphical representation of data.	CO3	T-2, R-2
21	Bi variate and multi variate data, data classification and tabulation, diagrammatic and graphical representation of data.	CO3	T-1, R-2
22	One dimensional, two dimensional and three dimensional diagrams and graphs	CO3	T-2, R-2
23	T-Distribution: properties and applications, testing for one and two means, paired t-test; analysis of variance:	CO4	T-2, R-1
24	T-Distribution: properties and applications, testing for one and two means, paired t-test; analysis of variance:	CO4	T-2, R-2
25	T-Distribution: properties and applications, testing for one and two means, paired t-test; analysis of variance:	CO4	T-1, R-1
26	One way and two way ANOVA (with population variance	CO4	T-2, R-2
27	One way and two way ANOVA (with and population variance	CO4	T-2, R-2
28	One way and two way ANOVA (with and interaction), chi-square distribution: test for	CO4	T-1, R-2
29	One way and two way ANOVA (with and interaction), chi-square distribution: test for	CO4	T-1, R-1
30	Test for goodness of fit, test for independence of attributes; correlation analysis: scatter diagram, positive and negative correlation, limits for coefficient of correlation, Karl Pearson's coefficient of correlation.	CO4	T-1, R-1
31	Test for goodness of fit, test for independence of attributes; correlation analysis: scatter diagram, positive and negative correlation, limits for coefficient of correlation, Karl Pearson's Coefficient of correlation.	CO5	T-1, R-1
32	Test for goodness of fit, test for independence of attributes; correlation analysis: scatter diagram, positive	CO5	T-1, R-1

	and negative correlation, limits for coefficient of correlation, Karl Pearson's coefficient of correlation.		
33	Spearman's rank correlation, concept of multiple and partial correlation	CO5	T-1, R-1
34	Spearman's rank correlation, concept of multiple and partial correlation	CO5	T-1, R-1
35	Spearman's rank correlation, concept of multiple and partial correlation	CO5	T-1, R-1
36	Concept, least square fit of a linear regression, two lines of regression, properties of regression coefficients	CO5	T-2, R-1
37	Concept, least square fit of a linear regression, two lines of regression, properties of regression coefficients	CO5	T-1, R-1
38	Concept, least square fit of a linear regression, two lines of regression, properties of regression coefficients	CO6	T-1, R-2
39	Time Series Analysis: Components, models of time series additive, multiplicative and mixed models; Trend analysis	CO6	T-1, R-1
40	Time Series Analysis: Components, models of time series additive, multiplicative and mixed models; Trend analysis	CO6	T-1, R-1
41	Time Series Analysis: Components, models of time series additive, multiplicative and mixed models; Trend analysis	CO6	T-1, R-1
42	Free hand curve, semi averages, moving averages, least square methods; Index numbers	CO6	T-2, R-1
43	Characteristics and uses of index numbers, types of index numbers, un weighted price indices, weighted price indices	CO6	T-2, R-1
44	Tests of adequacy and consumer price indexes.	CO6	T-1, R-1
45	Tests of adequacy and consumer price indexes.	CO6	T-1, R-1
46	Problem solving and case study of Unit 1	CO 1	T-1, R-2
47	Problem solving and case study of Unit 2	CO 2	T-2, R-2
48	Problem solving and case study of Unit 3	CO 3,4	T-1, R-1
49	Problem solving and case study of Unit 4	CO 6	T-2, R-2
50	Problem solving and case study of Unit 5	CO 6	T-1, R-2
51	Question Bank Discussions Unit 1	CO 1	T-1, R-2
52	Question Bank Discussions Unit 1	CO 1	T-2, R-2
53	Question Bank Discussions Unit 2	CO 2	T-1, R-1
54	Question Bank Discussions Unit 2	CO 2	T-2, R-2
55	Question Bank Discussions Unit 3	CO 3	T-1, R-2
56	Question Bank Discussions Unit 3	CO 4	T-1, R-2

57	Question Bank Discussions Unit 4	CO 5	T-2, R-2
58	Question Bank Discussions Unit 4	CO 5	T-1, R-1
59	Question Bank Discussions Unit 5	CO 6	T-2, R-2
60	Question Bank Discussions Unit 5	CO 6	T-1, R-2

Prepared By:
Ms. I. Sireesha, Assistant Professor, MBA

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	BUSINESS ENVIRONMENT				
Course Code	CMBC06				
Programme	MBA				
Semester	FIRST				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	0	3	--	--
Course Coordinator	Ms. P Rajini, Assistant Professor				

I. COURSE OVERVIEW:

To analyse the overall business environment and evaluate its various components in business decision making and provides an analysis and examination of significant contemporary ethical issues and challenges exist throughout the professional business arena. Emphasis will be placed upon the manager's social and environmental responsibilities to a wide variety of stakeholders, including employees, customers and the public.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
UG	-	-	Indian Economy

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Business Environment	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

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	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

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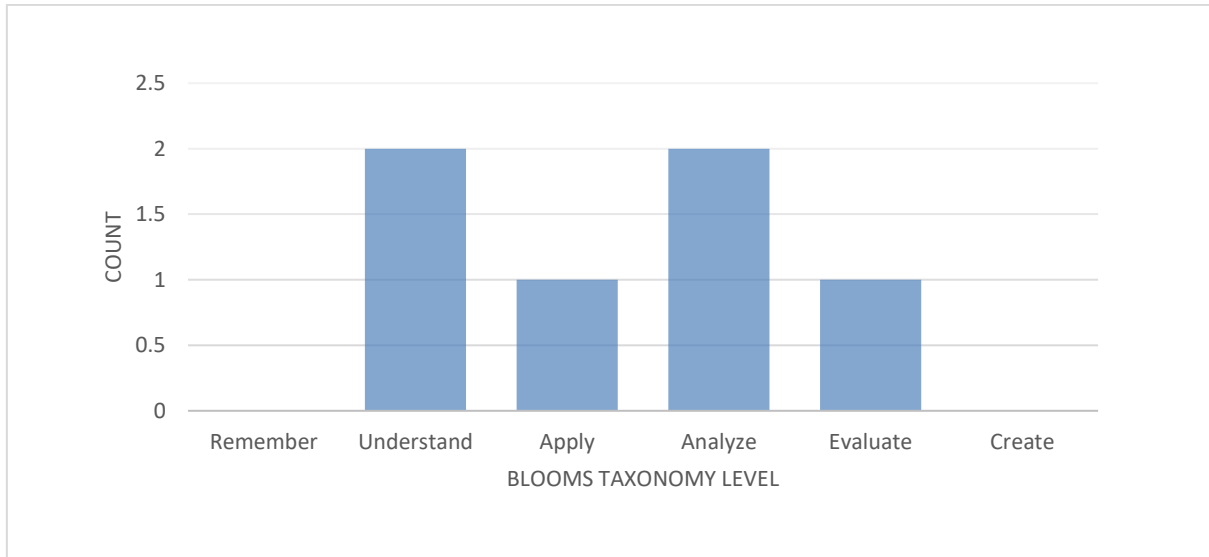
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	The macro environmental factors that influence the business activities, role of planning commission and NITI Aayog in building Indian economy.
II	The issues related to the Industrial policy and regulation and their amendments.
III	The union budget, fiscal policy, monetary policy and banking system and its impact on business operations.
IV	The changes in various economic growth factors including national income, poverty measurement, unemployment and inflation and its influence on Indian economy.
V	Trade, EXIM policies and FEMA Act for organization stability and sustainability

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Analyze the business environmental factors that help the management in future planning and decision-making.	Analyze
CO 2	Discuss the concepts of national income, balance of payments and HDI to maintain the capital stock of a community.	Understand
CO 3	Assess Five year plans, Industrial Policies to improve resource allocation efficiency and promote industrial development.	Apply
CO 4	Examine foreign direct investment imprint in income and impact of purchasing power to promote domestic business activities.	Evaluate
CO 5	Analyze union budget, fiscal policy and monetary policy to assist in maintaining stable economic growth.	Analyze
CO 6	Describe domestic and international trade policies to assess economy of the nation.	Understand

COURSE KNOWLEDGE COMPETENCY LEVEL



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	2	CIE/AAT
PO4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	3	Seminar/ Conferences/ Research papers
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	3	CIE/AAT

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	√	-	-	√	-
CO 2	√	√	-	√	-	-	√	-
CO 3		√	-	√	-	-		-
CO 4		√	-		-		-	-
CO 5	√	√	-	√	-	-		-
CO 6		√	-	√	-	-	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recall (understand) the basic concept of the nature and scope of the business environment, which aids businesses in identifying various opportunities and threats.	2
	PO2	Understand the techniques of the business environment that help in business decisions.	1
	PO 4	Develop good communication skills to analyze various social, global, economic, legal, political, and ethical aspects of business.	2
	PO 7	Distinguish the internal and external environment for business analysis to determine how to shape the future of entire industries with appropriate implantable strategies.	2
CO 2	PO 1	Analyze (knowledge) the concepts of poverty, unemployment, and inflation in India to manage and maintain the GDP.	2
	PO2	Apply the concepts of national income, one helps to maintain the capital stock of a community by applying decision-making.	1
	PO 4	Focus on HDI and rural development programmes in India that create a healthy environment for people in the organization with its communication abilities.	2
	PO 7	Discuss (knowledge) the concept of BOP, which affects the economic stability of a nation (application) through its functional strategic principles and methodology.	3
CO 3	PO 2	Implement five-year plans to improve resource allocation efficiency by applying decision-making skills.	2
	PO 4	Comprehend the existing and new industrial policies on the various legal aspects of business to promote industrial development by developing good communication aspects.	2
CO 4	PO 2	Discuss foreign direct investments to promote domestic business activities by applying decision-making skills.	3
CO 5	PO 1	Examine the union budget and its reform in the country for effective resource allocation by putting managerial theories and practices into practice.	1
	PO 2	Elaborate on the concept of fiscal policy by applying knowledge-based decision making skills to achieve a high rate of economic growth.	2
	PO 4	Identify the role of regulatory institutions in the Indian financial system that prevents fraud in the organisation by applying its communication abilities.	1
CO 6	PO 2	Identify (knowledge) the conceptual framework of EXIM policy to give a boost to India's industrial growth by applying decision-making skills.	2
	PO 4	Describe domestic trade policies to facilitate the exchange of goods within the country by applying its communication abilities.	2
	PO 7	Discuss (understand) international trade policies in order to assess the nation's economy using functional strategic principles and methodology.	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	1	-	2	-	-	2	-
CO 2	2	1	-	2	-	-	3	-
CO 3		2	-	2	-	-		-
CO 4		3	-		-		-	-
CO 5	1	2	-	1	-	-		-
CO 6		2	-	2	-	-	3	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	33.33	-	66.67	-	-	50.00	-
CO 2	100.00	33.33	-	66.67	-	-	75.00	-
CO 3		66.67	-	66.67	-	-		-
CO 4		100.00	-		-		-	-
CO 5	50.00	66.67	-	33.33	-	-		-
CO 6		66.67	-	66.67	-	-	75.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ –No correlation; **2** – $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	1	-	3	-	-	2	-
CO 2	3	1	-	3	-	-	3	-
CO 3		3	-	3	-	-		-
CO 4		3	-		-		-	-

CO 5	2	3	-	1	-	-		-
CO 6		3	-	3	-	-	3	-
TOTAL	8	14		13			8	
AVERAGE	2.66	2.33		2.6			2.66	

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO4, PO7	SEE Exams	PO1, PO2, PO4, PO7	Assignments	PO2, PO4	Seminars	PO1, PO7
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	PO 1, PO 7						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO BUSINESS ENVIRONMENT
Business Environment - Meaning, Nature, Scope and Importance, Environmental Factors - external and internal. Environmental analysis – scanning, monitoring, forecasting, assessing, Planning in India including Planning Commission- NITI Aayog, Made in India, Digital Economy.	
UNIT-II	DEVELOPMENT OF INDIAN ECONOMY
Economic Growth National Income - Concepts, Foreign Trade and Balance of Payment, Poverty in India, Unemployment in India, Inflation, Human Development Index, Rural Development - Schemes, Problems of Economic Growth.	
UNIT-III	INDUSTRIAL POLICIES
Five Year Planning- Industrial Policy 1991, New Industrial Policy, Start-ups, MSME, Small Scale Industries (SSI) - Industrial Finance - Foreign Direct Investment (FDI) - Modes - India's Inflow and Outflow.	
UNIT-IV	FISCAL AND MONETARY POLICIES
Economic Policies Fiscal Policy- Latest Union Budget - Reforms Undertaken - Role of Government. Monetary Policy - Basic Concepts, Monetary Policy in the 21st Century - Banking Sector Reforms. Role of Regulatory Institutions in Indian Financial system - RBI and SEBI, Capital Market Institutions - Stock Indices- Derivatives Market - Global and Indian Scenario.	
UNIT - V	DOMESTIC AND INTERNATIONAL TRADE POLICY
Domestic and International Trade Policy Evolution of International Financial System, Global Recession and Developing Economies: Policy Changes and Issues - Sector wise Trade Policies: Recent Developments GATT - WTO - Agreements and Implications. EXIM Policies and FEMA: India's New EXIM Policy - Legal Framework - Initiatives, FEMA - Indian Multinational Companies - Role in World Economy.	
Text books	
1. V.K. Puri and SK Mishra, "Indian Economy" Himalaya Publication House, 37th edition, 2019. 2. P Subba Rao, "International Business Text & Cases", Himalaya Publishing house, 2nd edition, 2016. 3. Cavusgil, S.T., Knight, G.Riesenberger, "International Business: The New Realities", J.R. Prentice Hall, 5nd edition, 2016. 4. Gaurav Datt and Ashawani Mahazan, - "Indian Economy", S. Chand Publishers, 7th edition, 2016.	

5. Anant K Sundaram and J Stewart Black, “The International Business Environment”, Prentice Hall of India, New Delhi, 1st edition, 2015.

6. Pailwar V.K, “Business Environment”, Prentice Hall of India, 3rd edition, 2014.

7. V K Bhalla and S Shiva Ramu, “International Business”, Anmol Publications Private Ltd. New Delhi 110002 (India), 12th edition, 2013.

8. Justin Paul – “Business Environment Text and Cases”, Tata McGraw Hill Publishers, 3rd edition, 2012.

References

1. Francis Cherunillam, -”Business Environment Text and Cases”, Himalaya Publication House, Hyderabad, 27th edition, 2019.

2. Ramesh Singh, - “Indian Economy”, McGraw Hill Education private limited, Chennai, 11th edition, 2019.

E-text books:

1. <https://www.pdfdrive.com/the-business-environment-e15342606.html>

2. <https://www.pdfdrive.com/international-business-environment-e56594187.html>

3. <https://www.pdfdrive.com/business-environment-entrepreneurship-the-institute-of-e9042612.html>

4. <https://www.pdfdrive.com/indian-economy-e178348843.html>

5. https://www.google.co.in/books/edition/Business_Law/QGbgkOKoeQ0C?hl=en

6. <https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbm9saWI3YWEyZjgyfGd4OjdkNzY1OTRiOGQ4NGJkODM>

7. <https://www.ebooks.com/en-in/book/209720942/contract-law/andrew-stewart/>

8. <https://www.ebooks.com/en-in/book/210232691/goode-and-mckendrick-on-commercial-law/roygoode/>

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
2	Business Environment - Meaning, Nature	CO 1	T1- 1.4-1.8
3	Business Environment - Scope and Importance	CO 1	T1- 1.4-1.8
4	Environmental Factors - External and Internal	CO 1	T1-2.6-2.11
5	Environmental Factors - Micro and Macro	CO 1	T1-2.6-2.11
6	Environmental analysis - scanning, monitoring, forecasting, assessing.	CO 1	T1-3.2-3.20
7	Planning in India - Objectives, Benefits and Strategies	CO 1	T1-4.6-4.19
8	Planning Commission - Functions, Role of Planning Commission	CO 1	T1-4.6-4.19
9	NITI Aayog – Introduction, Aims, Objectives, Functions and Members involved in NITI Aayog	CO 1	T1- 5.35.18
10	Made in India – Features, Concept, Objectives, Aims	CO 1	T1- 5.35.18
11	Digital Economy – Components, Major Attributes, Smart Economy, Advantages and Disadvantages	CO 1	T1- 5.35.18
12	Economic Growth - Importance, Factors and Types	CO 2	T1- 5.3-5.18
13	National Income - Traditional and Modern, GDP, GNP and Importance	CO 2	T1- 5.3-5.18
14	Foreign Trade – Features and Importance	CO 2	T1- 5.3-5.18

Lecture No	Topics to be Covered	COs	Reference
15	Balance of Payment - Features and Importance	CO 2	T1- 5.3-5.18
16	Balance of Payment - Types, Disequilibrium	CO 2	T1- 5.3-5.18
17	Balance of Payment - Measures Disequilibrium	CO 2	T1- 5.3-5.18
18	Poverty in India – Factors, Impact and Measures taken	CO 2	T1- 5.29-6.8
19	Unemployment in India – Types, Nature, Reasons, Solutions, Policies to reduce unemployment	CO 2	T1- 5.29-6.8
20	Human Development Index – Origin, Index, Measures in HDI, Calculations of HDI and Limitations	CO 2	T1- 5.29-6.8
21	Rural Development – Programmes and Schemes	CO 2	T1-7.137.14
22	Problems of Economic Growth	CO 2	T1-7.137.14
23	Five Year Planning- Industrial Policy 1991, Objectives	CO 3	T1- 7.8-7.12
24	Five Year Planning- New Industrial Policy, Major Initiatives of NIP	CO 3	T1- 7.8-7.12
25	New Industrial Policy – Appraisal of NIP, Positive and Negative Aspects	CO 3	T1- 7.8-7.12
26	Start-ups, MSME – Introduction and Responsibilities of MSME	CO 3	T1- 8.4-8.16
27	Small Scale Industries (SSI) – Characteristics, Objectives and Role	CO 3	T1- 8.4-8.16
28	Industrial Finance – Sources, short term Finance, Long term finance	CO 3	T1- 8.4-8.16
29	Foreign Direct Investment (FDI) – Modes, Forms of Exporting	CO 4	T1-8.218.25
30	Foreign Direct Investment (FDI) – Exporting and Importing, Differences	CO 4	T1-8.218.25
31	Foreign Direct Investment (FDI) – Licensing, Franchising – agreements, Advantages and Disadvantages	CO 4	T1-8.218.25
32	FDI – Strategic Alliances	CO 4	T1-8.218.25
33	Mergers and Acquisitions - Strategy, Joint Venture	CO 4	T1-8.218.25
34	Economic Policies Fiscal Policy- Positive, Normative and Goals	CO5	T1-9.4-9.15
35	Types Economic Policies - Fiscal Policy Objectives, Components, Types	CO5	T1-9.4-9.15
36	Receipts – Government, Revenue, Capital, Expenditure	CO5	T1-9.4-9.15
37	Monetary Policy – Objectives, Tools, Instruments, Impact	CO5	T1-9.4-9.15
38	Financial Environment – Components, Markets System and Services	CO5	T1-9.4-9.15
39	Latest Union Budget - Reforms Undertaken - Role of Government.	CO5	T1-9.4-9.15
40	Banking Sector Reforms	CO 5	T19.210.23
41	Role of Regulatory Institutions in Indian Financial system	CO 5	T19.210.23
42	RBI – Functions, Reforms Evaluation of IBI	CO 5	T19.210.23
43	SEBI- PFRDA, IRDA, FMC	CO 5	T19.210.23

Lecture No	Topics to be Covered	COs	Reference
44	Capital Market Institutions – Types, Benchmark, Sectorial indices, Market cap based indices	CO 5	T111.511.5
45	Stock Indices – Types, Role play	CO 5	T111.511.5
46	Derivatives Market – Introduction, Participants, Types, Exchange Rate	CO 5	T111.511.5
47	Global and Indian Scenario	CO 5	T111.511.5
48	Domestic and International Trade Policy	CO 6	T112.512.26
49	Evolution of International Financial System	CO 6	T113.613.15
50	International Financial System	CO 6	T113.613.15
51	Recession and Developing Economies	CO 6	T113.613.15
52	Policy Changes and Issues	CO 6	T113.613.15
53	Sector wise Trade Policies	CO 6	T113.613.15
54	Recent Developments GATT	CO 6	T113.413.15
55	WTO - Agreements and Implications	CO 6	T113.413.15
56	India's New EXIM Policy	CO 6	T113.413.15
57	Legal Framework	CO 6	T113.413.15
58	WTO Advantages and Limitations	CO 6	T113.413.15
59	FEMA – Functions, Objectives	CO 6	T113.413.15
60	Role in World Economy	CO 6	T113.413.15
OBE DISCUSSION			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-2
62	Question Bank Discussions Unit 2	CO 2	T-2, R-2
63	Question Bank Discussions Unit 3	CO 3,4	T-1, R-1
64	Question Bank Discussions Unit 4	CO 5	T-2, R-2
65	Question Bank Discussions Unit 5	CO 6	T-1, R-2

Prepared by:
Ms. P Rajini, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

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MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	INTELLECTUAL PROPERTY RIGHTS				
Course Code	CMBC07				
Programme	MBA				
Semester	FIRST				
Course Type	Open Elective-I				
Regulation	IARE- PG 21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	-	3	-	-
Course coordinator	Mr. Nunna Suresh, Assistant Professor				

I. COURSE OVERVIEW:

This course introduces the international legal rules, principles and institutions of the world trade organization as well as intellectual property rights. It provides the knowledge on the rights of the governments to regulate international trade in goods and services and requires them to protect intellectual property. The intellectual property for the protection of creation or innovation or ideas which are to be used to make a product or service or design layout or process which is economical called patents, utilities etc. The main objective is to examine the trade laws and procedures, to protect the intellectual property rights.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
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III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Intellectual Property Rights	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✓	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE): The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into five MODULEs and each MODULE carries equal weight age in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each MODULE. Each question carries 14 marks. There could be a maximum of two sub divisions in a question.

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
20%	Evaluate
0%	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

The students will try to learn:	
I	Different types of intellectual property, international organizations, agencies and treaties.
II	The selecting and evaluating trade mark, trade mark registration processes.
III	The fundamental of copy right law, originality of material, rights of reproduction, rights to Perform the work publicly.
IV	Trade secret laws related to intellectual property rights.
V	Trade mark law; copy right law, patent law and intellectual property audits.

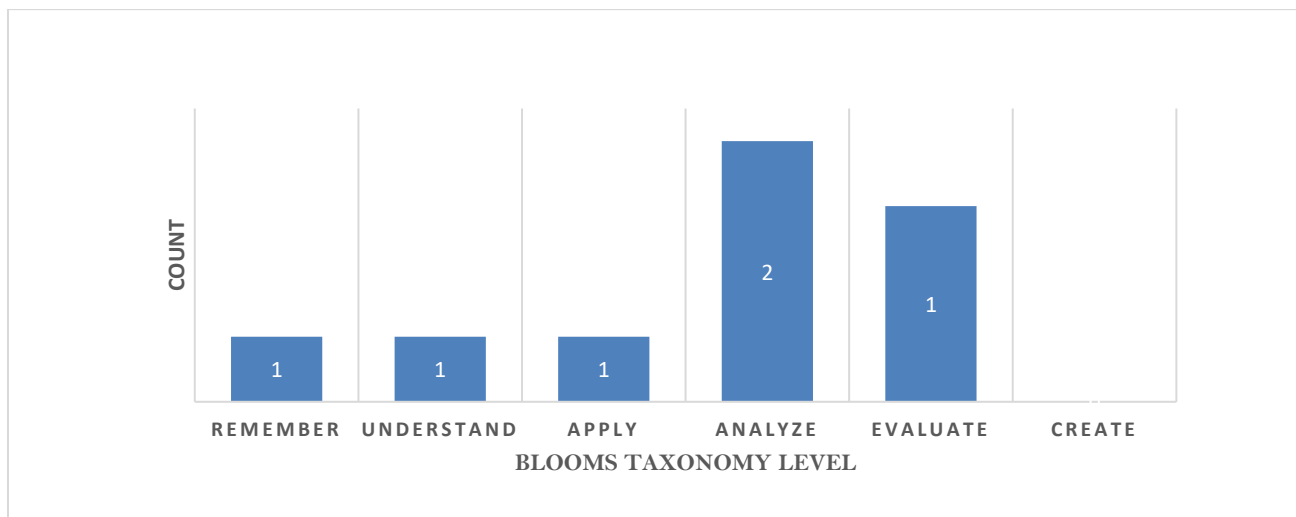
VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Spell out the importance, various types of international organization and their duties for registering their Intellectual Property.	Remember
CO 2	Explain the trademarks acquisition process and concept of protectable matter while acquiring the rights to defend in situations of infringement against trademarks.	Understand
CO 3	Assess the originality of material with respect to copyrights during the time of registration of copyrights.	Evaluate
CO 4	Analyze the fundamentals of patent law to transfer the ownership rights against trademarks.	Analyze
CO 5	Apply the various concepts of trade secrets law to implementations in various business activities.	Apply

CO 6	Assess the new international developments on the importance of the IP audits and its duties for the purpose of maintaining proper documentation for future reference.	Analyze
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3 = High; 2 = Medium; 1 = Low

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	Discussions / Assignments
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal and ethical aspects of business	3	Seminars / Guest Lectures
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2	Guest Lectures / Discussions
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	2	Assignments / Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	-	-	-	-	-	-	-
CO 2	-	-	-	-	-	-	√	-
CO 3	√	-	-	√	-	-	-	-
CO 4	-	-	-	-	-	-	-	√
CO 5	√	-	-	√	-	-	-	-
CO 6	-	-	-	-	-	-	-	√

3 = High; 2 = Medium; 1 = Low

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of Intellectual properly to appreciate (understand) the need and importance of acquiring Intellectual Properties.	2
CO 2	PO 7	Explains the role of Intellectual Properties in their business after having a thorough understanding of the theoretical concepts of the Intellectual Properties in their strategy formulation.	3
CO 3	PO 1	Understanding (knowledge) the various functions of agencies and international organizations in providing solutions to their business problems with respect to the procedure of acquiring Intellectual Properties	2
	PO 4	Recognizing (knowledge) the importance and role of organizations in registering different kinds of Intellectual Properties with respect to various categories of innovations and their procedure in a pre-determined way of communication to registering agencies.	2
CO 4	PO 8	Applying the technology in creating a new trademark era	1
CO 5	PO 1	Evaluate (knowledge) the Intellectual Properties with respect to cost incurred and profit gained on the Intellectual Properties.	2
	PO 4	Focus on working of applying and registering with the copy right and registration process.	2
CO 6	PO 8	Applied to create new technology for latest ingestions in the areas of patents and copyrights.	1

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	-	-	-	-	-	-	-
CO 2	-	-	-	-	-	-	3	-
CO 3	2	-	-	2	-	-	-	-
CO 4	-	-	-	-	-	-	-	1
CO 5	2	-	-	2	-	-	-	-
CO 6	-	-	-	-	-	-	-	1

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	-	-	-	-	-	-	-
CO 2	-	-	-	-	-	-	75.00	-
CO 3	100.00	-	-	66.66	-	-	-	-
CO 4	-	-	-	-	-	-	-	50.00
CO 5	100.00	-	-	66.66	-	-	-	-
CO 6	-	-	-	-	-	-	-	50.00

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation;

2 – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	3	-	-	-	-	-	-	-
CO 2	-	-	-	-	-	-	3	-
CO 3	3	-	-	3	-	-	-	-
CO 4	-	-	-	-	-	-	-	2
CO 5	3	-	-	3	-	-	-	-
CO 6	-	-	-	-	-	-	-	2
TOTAL	9			6			3	4
AVERAGE	3			3			3	2

XIV. ASSESSMENT METHODOLOGIES–DIRECT

CIE Exams	PO 1, PO 4, PO 7, PO 8	SEE Exams	PO 1, PO 4, PO 7, PO 8	Assignments	PO 1, PO 8	Seminars	PO 4, PO 8
Guest Lectures	PO 4, PO 7	Discussions	PO 1, PO 7	Student Viva	-	Certification	-
Term Paper	-	Laboratory Practices	-				

XV. ASSESSMENT METHODOLOGIES-INDIRECT

✓	Assessment of course outcomes (by feedback, once)	✓	Student feedback on faculty(Twice)
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

MODULE – I	INTRODUCTION TO INTELLECTUAL PROPERTY
Introduction, types of intellectual property, international organizations, agencies and treaties, importance of intellectual property rights.	
MODULE – II	TRADE MARKS
Purpose and function of trademarks, acquisition of trade mark rights, protectable matter, selecting and evaluating trade mark, trade mark registration processes.	
MODULE – III	LAW OF COPY RIGHTS AND PATENTS
Fundamental of copy right law, originality of material, rights of reproduction, rights to perform the work publicly, copy right ownership issues, copy right registration, notice of copy right, international copy right law. Law of patents: Foundation of patent law, patent searching process, ownership rights and transfer.	
MODULE – IV	TRADE SECRETS AND UNFAIR COMPETITION
Trade secretes law, determination of trade secretes status, liability for misappropriations of trade secrets, and protection for submission, trade secretes litigation. Unfair competition: Misappropriation right of publicity, False advertising.	
MODULE – V	NEW DEVELOPMENT OF INTELLECTUAL PROPERTY
New developments in trade mark law; copy right law, patent law, intellectual property audits. International overview on intellectual property, international trade mark law, copy right law, international patent law and international development in trade secrets law.	
Text Books:	
<ol style="list-style-type: none"> Deborah, E. Bouchoux, “Intellectual property right”, Cengage learning, 5th Edition, 2008. Prabuddha ganguli,” Intellectual property right - Unleashing the knowledge economy”, Tata McGraw Hill Publishing Company Ltd, 7th Edition, 2009. Carlos M.Correa” Intellectual property rights, The WTO and Developing countries”, Zed books, 4th Edition, 2006. 	
Reference Books:	
<ol style="list-style-type: none"> Caves, Frankel, Jones, “World Trade and Payments-An Introduction”, Pearson Education, 4th Edition, 2015. Carlos M.Correa, “Intellectual property rights, The WTO and Developing countries”,Zed books. Peter-Tobias stoll, Jan busche, Katrianarend, “WTO- Trade –related aspects of IPR”, Library of Congress. Surendra Bhandari, “World Trade Organization (WTO) and Developing Countries”, Vikas Publishing House. P. K. Vasudeva, “World Trade Organization: Implications on Indian Economy”, Pearson Education, 2015. P.KrishnaRao, WTO, “Text and cases”, Excel Books, 2015. 	

XVII. COURSE PLAN

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Introduction of Intellectual Property (IP)	CO 1	T1:1.1, 1:1.2, R1
2	Needs of Intellectual Property (IP)	CO 1	T1:1.1, 1:1.2, R1
3	Importance of Intellectual Property (IP)	CO 1	T1:1.1, 1:1.2, R1
4	Benefits of Intellectual Property (IP)	CO 1	T1:1.1, 1:1.2, R1
5	Types of Intellectual Property (IP)	CO 1	T1:1.4
6	International Organizations in (IP)	CO 1	T1:1.4
7	International Organizations in ipr	CO 1	T1:1.4
8	Agencies of Intellectual Property Rights	CO 1	T1:1.4, R2, R3
9	Treaties of Intellectual Property Rights	CO 1	T1:1.4, R2, R3
10	Importance of Intellectual Property Rights	CO 1	T1:1.4, R2, R3
11	Purpose and function of Trademarks Introduction	CO 2	T1:2.2, R3, R5
12	Purpose of a Trademarks	CO 2	T1:2.2, R3, R5
13	function of Trademarks	CO 2	T1:2.2, R3, R5
14	Acquisition of Trademarks Rights introduction	CO 2	T1:2.4, 2.9
15	Acquisition of Trademarks Rights	CO 2	T1:2.4, 2.9
16	Acquisition of Trademarks Protectable Matter	CO 2	T1:2.4, 2.9
17	Selecting and Evaluating Trade Mark introduction	CO 2	T1:3.1, R5, R6
18	Selecting and Evaluating Trademark Registration Processes through online	CO 2	T1:3.1, R5, R6
19	Selecting and Evaluating Trade Mark procedure	CO 2	T1:3.1, R5, R6
20	Selecting and Evaluating Trade Mark	CO 2	T1:3.1, R5, R6
21	Trademark Registration Processes	CO 2	T1:3.1, R5, R6
22	Copyright Law and its rights	CO 3	T1:10.2, R2
23	Copyright Law important	CO 3	T1:10.2, R2
24	Fundamentals of Copyright Law	CO 3	T1:10.2, R2

25	Originality of material and rights of Reproduction and Right to perform the work publicly	CO 3	T1:11.2
26	Originality of material and rights	CO 3	T1:11.2
27	Originality of Reproduction	CO 3	T1:11.2
28	Right to perform the work publicly	CO 3	T1:11.2
29	Copy right registration, notice	CO 4	T1: 12.3
30	International Copy right law	CO 4	T1: 12.3
31	Foundation of laws	CO 4	T1: 12.5
32	Foundation of patent law and its importance	CO 4	T1: 12.5
33	Foundation of patent law	CO 4	T1: 12.5
34	patent searching process and implementation	CO 4	T1: 12.5
35	ownership rights and transfer	CO 4	T1: 12.5
36	Introduction Trade Secrets Law, Trade Secrets status	CO 5	T1:2.1, T1:2.3, R2, R3
37	Trade Secrets Law	CO 5	T1:2.1, T1:2.3, R2, R3
38	Determination of Trade Secrets status	CO 5	T1:2.1, T1:2.3, R2, R3
39	Liability for misappropriations of Trade Secrets	CO 5	T1:22.2
40	Liability for misappropriations of Trade Secrets and Benefits	CO 5	T1:22.2
41	Protection for submission	CO5	T1:22.5, 1:22.8
42	Trade secrets Litigation	CO 5	T1:22.5, 1:22.8
43	Unfair Competition	CO 5	T1:23 R3, R4
44	Unfair Competition: Misappropriation	CO 5	T1:23 R3, R4
45	Unfair Competition: Misappropriation of right of publicity	CO 5	T1:23 R3, R4
46	Misappropriation of right of publicity, False advertising	CO 5	T1:23 R3, R4
47	New developments in Trade Law	CO 6	T1:23.3
48	New developments in Trade Law with example	CO 6	T1:23.3
49	New developments in Copyright Law	CO 6	T1:7 R5, R6
50	New developments in Copyright Law in India	CO 6	T1:7 R5, R6
51	New developments in Patent Law in India	CO 6	T1:8
52	New developments in Patent Law	CO 6	T1:8
53	Intellectual Property Audits	CO 6	T1:15.7
54	International Overview of IP	CO 6	T1:15.7

55	Intellectual Property Audits and International Overview of IP	CO 6	T1:15.7
56	International Trademark Law	CO 6	T1:16, 1:21.1,2
57	International Copy right Law	CO 6	T1:16, 1:21.1,2
58	International patent Law	CO 6	T1:16, 1:21.1,2
59	International Trade Secrets Law	CO 6	T1:16, 1:21.1,2
60	International Trademark Law, Copy right Law, patent Law and Trade Secrets Law	CO 6	T1:16, 1:21.1,2
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-2
63	Question Bank Discussions Unit 2	CO 3	T-1, R-2
64	Question Bank Discussions Unit 2	CO 4	T-1, R-1
65	Question Bank Discussions Unit 2	CO 5	T-1, R-2

3 = High; 2 = Medium; 1 = Low

XVIII. GAPS IN THE SYLLABUS - TO MEET INDUSTRY / PROFESSION REQUIREMENTS:

S No	Description	Proposed actions	Relevance with PO's
1	Global rules of Treaties.	Guest Lectures	PO 1, PO 4
2	Historical reasons behind the establishment of World Intellectual Property Organization and its scope.	Seminars/ Guest Lectures	PO 7, PO 8
3	Federal law and common law for the protection of Intellectual Properties at International Level.	Seminars/ Guest Lectures	PO 4, PO 8

Prepared by:

Mr. Nunna Suresh, Assistant Professor.

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

COURSE DESCRIPTION

Department	MASTER OF BUSINESS ADMINISTRATION				
Course Title	HUMAN RESOURCE MANAGEMENT				
Course Code	CMBC15				
Program	MBA				
Semester	II				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	1	4	-	-
Course Coordinator	Dr. P. Lavanya, Associate Professor				

I. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC15	II	-

II. COURSE OVERVIEW:

Human Resource Management links people-related activities to business strategy. The course develops a critical understanding of the role and functions of the various human resource activities in an organization, providing students with a comprehensive review of key HRM concepts, techniques, and issues. Topics include job analysis and design; recruitment and selection; evaluation; performance management; occupational health and safety; and the strategic contribution of HRM to organizational performance and evaluating HRM effectiveness. Working with contemporary case studies, collaborative and individual work processes enhance communication and discourse, which are characteristic of the HRM context and environment.

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Human Resource Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
33.33%	Remember
33.33%	Understand
0%	Apply
0%	Analyze
33.33%	Evaluate
0%	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

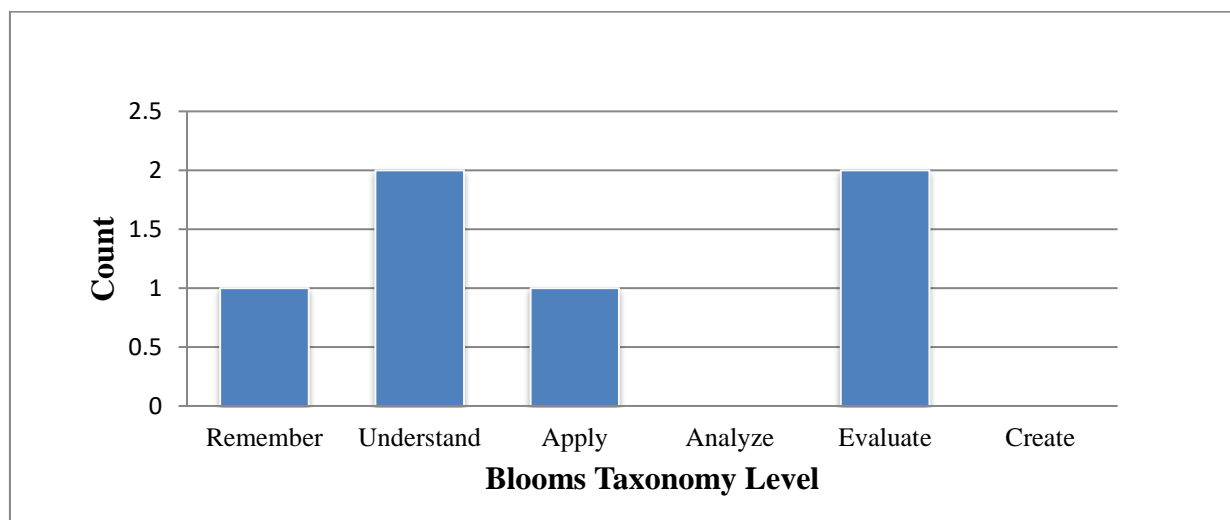
The students will try to learn:	
I	The role of human resource management in the effective management of organizations.
II	The process of recruitment, selection and performance management system in an organization.
III	Basic training strategies and specifications for the delivery of training programs.
IV	The processes for compensation management and reward systems.
V	The industrial relations and knowledge of labor laws and contemporary issues in human resource management.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Summarize and apply basic human resource management concepts to real-world business situations.	Understand
CO 2	Recognize and classify various recruitment and selection processes to enhance employees' performance.	Remember
CO 3	Demonstrate the concept of training and development, as well as describe the different types of training to improve employees' talents and performance.	Understand

CO 4	Identify performance appraisal procedures that can help you to improve your work skills, knowledge, talents, and personalities	Apply
CO 5	Develop compensation and reward strategy to recruit, motivate, and retain outstanding talent.	Evaluate
CO 6	Incorporate strong employee and employer relations to promote cooperation and productivity among employees.	Evaluate

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial skills: Apply knowledge of management theories and practices to solve business problems	3	Assignments.
PO2	Decision making skills: Foster Analytical and critical thinking Abilities for data-based decision making solution.	3	Assignments

Program Outcomes		Strength	Proficiency Assessed by
PO3	Ethics: Ability to develop Value based Leadership ability.	3	Seminars
PO4	Communication skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	3	Seminars
PO5	Leadership skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	3	Assignments
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2	Seminars

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	√	-	-	-	-
CO 2	√	-	√	√	√	-	√	-
CO 3	√	-	-	√	-	-	-	-
CO 4	√	-	-	-	-	-	-	-
CO 5	√	√	√	√	√	-	√	-
CO 6	-	√	√	√	√	-	√	-

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Understand the scope and need of Human resource management.	2
	PO 4	Ability to understand the human resource management, human resource objectives and human resource activities.	3
	PO 2	Illustrate the circumstances job analysis and design, uses of job analysis and methods of data collection.	2
CO 2	PO 4	Apply the concept of performance management skills, job description and specifications, job design, job redesign and job rotation.	2
	PO 7	Analyze the principles of job enlargement, job enrichment, strategic and human resource planning.	3
	PO 1	Understand and Compare about information of human resource planning process, human resource information systems and assessment of human resource requirements.	2
	PO 3	Understand the importance of medical evaluation, job offer, induction and placement.	3
	PO 5	Remember the information of designing and conducting the effective interview, reference and background verification.	3

CO 3	PO 1	Understand the concept of the recruitment process and methods of recruiting.	2
	PO 4	Remember the realistic job preview, challenges of recruiting, selection process and type of tests.	3
CO 4	PO 1	Analyze the concept of training process, training methods, and training methods.	2
CO 5	PO 4	Understand the need of training and the training management.	3
	PO 5	Understand the features of the individual group. Organizational techniques, evaluation of training and development	3
	PO 1	Apply the levels of the appraisal process and methods of evolution.	2
	PO 2	Understand the concept of performance evaluation and the appraisal interview.	2
	PO 3	Apply the concept of the feedback interview and the role of appraisal in managing performance	3
	PO 7	Remember the principles of reward systems.	3
CO 6	PO 2	Remember the performance related concepts like benchmarking, six sigma and competency mapping.	2
	PO 4	Understand the concept of career planning and development.	2
	PO 7	Remember the concept of Quality of work life.	2
	PO 3	Understand the causes of remedial measures, collective bargaining and the management of conflicts.	2
	PO 5	Remember the concept of the grievance procedure, guidelines for handling grievances.	3

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	-	3	-	-	-	-
CO 2	2		3	2	3		3	
CO 3	2	-	-	3	-	-	-	-
CO 4	2	-	-	-	-	-	-	-
CO 5	2	2	3	3	3	-	3	-
CO 6	-	2	2	2	3	-	2	-

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100%	100%	-	-	-	-	-	-
CO 2	100%	-	100%	100%	40%	-	75%	-
CO 3	100%	-	-	100%	-	-	-	-
CO 4	100%	-	-	-	-	-	-	-
CO 5	100%	100%	100%	100%	40%	-	-	-
CO 6	100%	-	-	100%	40%	-	-	-

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ –No correlation;

2 – $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	3	3	-	-	-	-	-	-
CO 2	3	-	3	3	2	-	3	-
CO 3	3	-	-	3	-	-	-	-
CO 4	3	-	-	-	-	-	-	-
CO 5	3	3	3	3	2	-	-	-
CO 6	-	-	-	3	2	-	-	-
TOTAL	15	6	6	12	6	-	3	-
AVERAGE	3	3	3	3	2	0	3	0

XV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO 2, PO3,PO 4, PO5,PO 7	SEE Exams	PO1,PO 2, PO3,PO 4, PO5,PO 7	Assignments	PO1,PO 2, PO3,PO 4, PO5,PO 7	Seminars	PO1,PO 2, PO3,PO 4, PO5,PO 7
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XVI. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
X	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

MODULE-I	INTRODUCTION TO HUMAN RESOURCE MANAGEMENT	Classes:10
Nature, importance of HRM, objectives and functions HR as a source of competitive advantage, Equal opportunity and the Law, Human Resource Management and Analysis, Human Resource Planning and Human capital Analysis, agile HR		
MODULE -II	RECRUITMENT AND SELECTION	Classes:10
Hiring process and hiring decision, external and internal hiring, screening the candidates, Job analysis – critical incident technique, position analysis questionnaire, subject expert workshops, job analysis questionnaire.		
MODULE -III	TRAINING AND DEVELOPMENT	Classes:10
Training and developing of employees, methods of training, performance management and appraisal. Methods and techniques of performance appraisal, Managing employee retention, engagement, and careers.		
MODULE -IV	COMPENSATION AND REWARD MANAGEMENT	Classes:10
Establishing Strategic Pay Plans, components of Employee remuneration, Pay for Performance and Financial Incentives, Benefits and Services		
MODULE -V	EMPLOYEE RELATIONS	Classes:10
Ethics, Employee Relations, and Fair Treatment at Work, Labor Relations and Collective Bargaining, Employee welfare measures, Managing Global Human Resources, Managing Human Resources in Small and Entrepreneurial Firms, employee separation.		
Text Books:		
<ol style="list-style-type: none"> 1. V.S.P. Rao, “Human Resource Management”, Cengage Learning, 8thEdition, 2019. 2. Raman Preet, “Future of Human Resource Management: Case Studies with Strategic Approach”, Cengage Learning, 5thEdition, 2019. 3. K.Asathappa, “Human Resource Management”, Mc Graw-Hill, 8thEdition, 2017. 4. Gary Dessler, Biju Varkkey. “Human Resource Management”, Pearson, 4thEdition, 2017. 5. Robert L.Mathis, John H.Jackson, Manas Ranjan Tripathy, “Human Resource Management”, Cengage Learning, 10thEdition, 2016. 6. Gary Dessler, Human Resource Management, Pearson Publications, 15thEdition, NewDelhi, 2011. 7. Aryasri, A. V. V Raju, "Human Resources Management", Students Helpline Publishing House Private Limited, 2ndEdition, 2010. 8. R S. Dwivedi, Human Resource Management, Vikas publishing house, 2ndEdition, Bangalore,2009. 		
Reference Books:		

<ol style="list-style-type: none"> 1. Venkata Raman C. S, Srivastava B. K, "Personnel Human Resource Management", Tata McGraw Hill, 2nd Edition, 2009. 2. Cynthia D. Fisher, Lyle F. Schoenfeld, "Human Resource Management", Wiley India Publishers, 3rd Edition, 2009. 3. Jyothi, " Human Resource Management", Pearson Education, 12th Edition, 2009. 4. R. Wayne Mondy, Robert M. Noe, "Human Resource Management", Pearson Education, 5th revised Edition, 2009.
Web References:
<ol style="list-style-type: none"> 1. https://play.google.com/books/reader?id=-NbrDQAAQBAJ&hl=en&pg=GBS.PT14 2. https://play.google.com/books/reader?id=QCkq8zyRPYC&hl=en&pg=GBS.PT26.w.5.0.49 3. https://play.google.com/books/reader?id=51G11zh2yp8C&hl=en&pg=GBS.PR13 4. https://play.google.com/books/reader?id=3tY8DgAAQBAJ&hl=en&pg=GBS.PA6
E - Text Books:
<ol style="list-style-type: none"> 1. https://www.pdfdrive.com/human-resources-management-set-concepts-methodologies-tools-and-applications-human-resources-management-concepts-methodologies-tools-and-applications-e175226969.html 2. https://www.pdfdrive.com/human-resource-management-e5972245.html 3. https://www.pdfdrive.com/human-resource-management-e30956441.html 4. https://www.pdfdrive.com/human-resource-management-practice-yimgcom-e11037371.html 5. https://open.lib.umn.edu/humanresourcemanagement/ 6. https://primo.csu.edu.au/permalink/61CSU_INST/1hkg98a/alma991001683790402357 7. https://www.freebookcentre.net/business-books-download/Human-Resource-Management-by-Kamaraj-College.html

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
2	Definition and Nature of HRM	CO 1	T-1 1-5, R-2 2-10
3	Importance of HRM	CO 1	T-1 1-5, R-2 2-10
4	Objectives and functions HR	CO 1	T-2 6-18, R-2 25-26
5	HR as a source of competitive advantage	CO 1	T-2 6-18, R-2 25-26
6	Law of Equal opportunity	CO 1	T-1 19 - 23, R-2 27-32
7	Human Resource Management and Analysis	CO 1	T-1 19 - 23, R-2 27-32
8	Human Resource Planning - Introduction	CO 1	T-1 19-25, R-2 33-35
9	Human capital Analysis,	CO 1	T-1 19-25, R-2 33-35

Lecture No	Topics to be Covered	COs	Reference
10	Strategy of HR Capital Analysis	CO 1	T-1 19-25, R-2 33-35
11	Agile HR.	CO 1	T-1 19-25, R-2 33-35
12	Hiring process and Hiring decision,	CO 2	12-13
13	External and Internal hiring Process.	CO 2	12-13
14	external and internal hiring & screening the candidates	CO 2	R-2 99-105
15	Job analysis – critical incident technique,	CO 2	T-2 104-115,
16	Job Analysis - Introduction	CO 2	T-2 104-116,
17	Critical incident technique.	CO 2	T-2 104-117,
18	Position analysis questionnaire, subject expert workshops	CO 2	T-2 104-117,
19	Job Analysis - Questionnaire - Types	CO 2	T-2 104-185,
20	Training and developing of employees - Introduction	CO 3	T-2 104-115,
21	Methods of training – Advantages & Disadvantages	CO 3	T-2 104-115,
22	Types of Training methods	CO 3	T-2 104-115
23	Performance management – Introduction	CO 3	T-2 117-126, R-2 155-198
24	Importance Performance management	CO 3	T-2 117-126, R-2 155-198
25	Appraisal Methods and techniques	CO 4	T-2 117-126, R-2 155-198
26	Appraisal Methods and techniques	CO 4	T-2 117-126, R-2 155-198
27	Appraisal Methods and techniques	CO 4	T-2 117-126, R-2 155-198
28	Managing Employee Retention - Nature	CO 4	T-2 117-126, R-2 155-198
29	Managing Employee Retention - Methods	CO 4	T-2 117-126, R-2 155-198
30	Engagement, and Careers.	CO 4	T-2 117-126, R-2 155-198
31	Components of Employee remuneration - Introduction	CO 5	T-2 138-165, R-2 142-153
32	Components of Employee remuneration – Areas & Ways	CO 5	T-2 138-165, R-2 142-153
33	Establishing Strategic Pay Plans – types of pay	CO 5	T-2 138-165, R-2 142-153
34	Establishing Strategic Pay Plans – Methods of Pay	CO 5	T-2 138-165, R-2 142-153
35	Pricing Strategy - Remuneration	CO 5	T-2 138-165, R-2 142-153
36	Remuneration Methods – Financial & Non Financial	CO 5	T-2 138-165, R-2 142-153

Lecture No	Topics to be Covered	COs	Reference
37	Pay for Performance and Financial Incentives,	CO 5	T-2 138-165, R-2 142-153
38	Pay for Performance and Financial Incentives - Importance	CO 5	T-2 138-165, R-2 142-153
39	Benefits and Services – Financial Nature	CO 5	T-2 138-165, R-2 142-153
40	Types of Employee Benefits	CO 5	T-2 138-165, R-2 142-153
41	Types of Employee Benefits	CO 5	T-2 138-165, R-2 142-153
42	Employee Services - Importance	CO 5	T-2 138-165, R-2 142-153
44	Employee Services - Importance	CO 5	T-2 138-165, R-2 142-153
45	Ethics – Introduction to HRM - Ethics	CO 5	T-1 168-175, R-2 65-68
46	Employee Relations - Importance	CO 5	T-2 77-85, R-2 112-116
47	Employee Relations – Rights - Objectives	CO 5	T-1 177-186, R-1 117-125
48	Fair Treatment at Work - importance	CO 5	T-2 98-105, R-2 214-225
49	Fair Treatment at Work - Areas	CO 6	T-2 235-258, R-2 214-225
50	Labor Relations - Nature	CO 6	T-2 235-258, R-2 214-225
51	Labor Relations - methods	CO 6	T-2 235-258, R-2 214-225
52	Collective Bargaining – definition, nature	CO 6	T-2 235-258, R-2 214-225
53	Collective Bargaining – importance, methods	CO 6	T-2 235-258, R-2 214-225
54	Employee welfare measures Managing Global Human Resources	CO 6	T-2 235-258, R-2 214-225
55	Employee welfare measures Managing Global Human Resources	CO 6	T-2 235-258, R-2 214-225
56	Issues of Global HRM	CO 6	T-2 235-258, R-2 214-225
57	Managing Human Resources in Small and Entrepreneurial Firms	CO 6	T-2 235-258, R-2 214-225
58	Managing Human Resources in Small and Entrepreneurial Firms	CO 6	T-2 235-258, R-2 214-225
59	Employee separation - Introduction	CO 6	T-2 235-258, R-2 214-225
60	Employee separation - Modes	CO 6	T-2 235-258, R-2 214-225
QUESTION BANK DISCUSSION			
61	Human Resource Management	CO 1	T-1, R-2
62	Recruitment and Selection	CO 2	T-1, R-1

Lecture No	Topics to be Covered	COs	Reference
63	Training and Development	CO 3,4	T-1, R-2
64	Compensation and Reward Management	CO 5	T-2, R-2
65	Employee Relations	CO 6	T-1, R-2

Prepared by:

Dr. P. Lavanya, Associate Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	FINANCIAL MANAGEMENT				
Course Code	CMBC16				
Program	MBA				
Semester	II				
Course Type	CORE				
Regulation	PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	1	4	-	-
Course Coordinator	Dr. T Vara Lakshmi, Associate Professor				

I. COURSE OVERVIEW:

The course focuses on the nature, scope, evolution of finance function; goals of finance function enable students to understand maximizing profit, wealth, welfare and earnings per share of business concern. Financial management is also very useful to the business concerns to take investment decisions, capital structure decisions and dividend decisions from time to time for the growth and development of business. This course includes management of cash, receivables, inventory and current assets in working capital planning. This course uses the analytical techniques and arriving at conclusions from financial information for the purpose of decision making.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC02	I	Accounting for management

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Financial Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

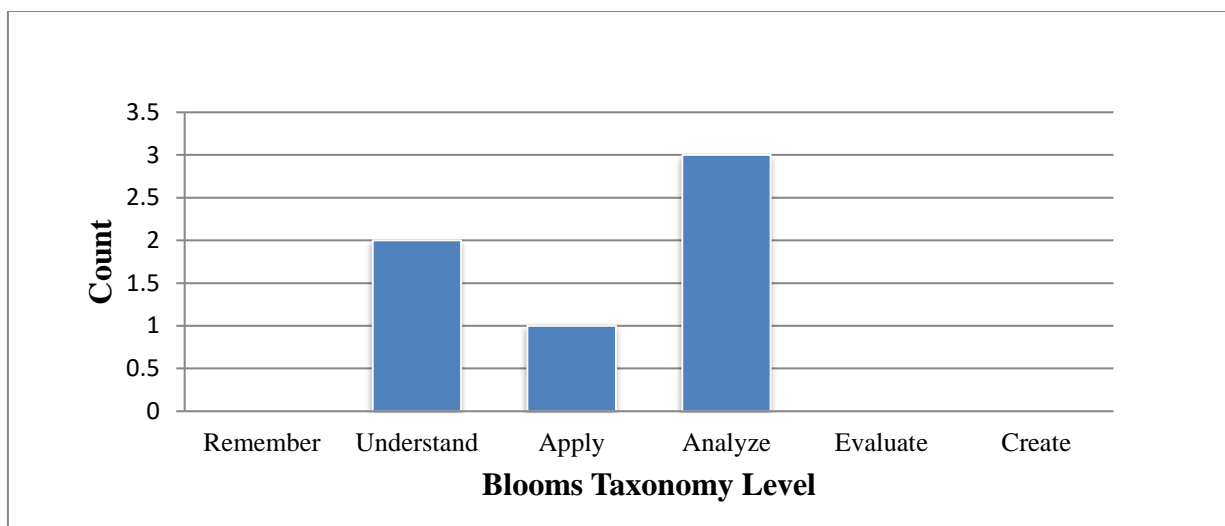
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	The basic functions and goals of financial management for better utilization of funds.
II	Investment strategies for effective utilization of financial resources.
III	Capital structure decisions for proper utilization of funds.
IV	Dividend decisions and related theories to help investors earn a high return on their investment.
V	Strategies and techniques of current asset management to fund day-to-day business operations.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO 1	Describe the basic functions and goals of financial management to know the importance of finance function in the contemporary scenario.	Understand
CO 2	Discuss the characteristics and importance of investment decisions and capital budgeting principles to evaluate the cash flows	Analyze
CO 3	Demonstrate the importance of financial structure and leverages decisions to analyze the capital structure.	Analyze
CO 4	Explain the measurement of cost of capital to help the business organizations in expanding the operations.	Analyze
CO 5	Enumerate the dividend decisions, value of the firm and relevance for dividends declaration and payments.	Apply
CO 6	Examine the concept of working capital and committees recommendations on this concept to identify the fund requirement for day to day operations.	Understand

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO4	Ethics: An ability to understand professional and ethical responsibility.	3	Assignments
PO6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.	3	Seminars
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2.75	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	√	-	-	-	-
CO 2	-	√	-	-	-	-	√	-
CO 3	√	√	-	-	-	-	-	-
CO 4	√	-	-	√	-	-	-	-
CO 5	√	-	-	-	-	√	√	-
CO 6	-	-	-	-	-	√	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of financial management concepts and to an extent appreciate (understand) the importance of finance management system to promote the organized economy system and solve the business problems.	2
	PO 2	Describe (knowledge) the importance of time value of money in the investments for business developments in the context of risk return decisions.	3
	PO 4	Interpret (knowledge) about the risk return tradeoff to communicate effectively with the users to contribute to the development of the company.	3
CO 2	PO 2	Comprehend and write effective reports on the capital budgeting techniques by developing good communicational aspects with investors.	3
	PO 7	Recognizing (knowledge) the contribution of capital budgeting (application) by its functional strategic principles and methodology	3
CO 3	PO 1	Apply (knowledge) the leverages and its importance of managing the statistical analysis of the financing.	2
	PO 2	Recognize the importance of financial structure in implementing strategies of the funds maintenance.	3
CO 4	PO 1	Construct the managerial models in the capital structure activities to communicate with the investors.	2
	PO 4	Examine the significance of breakeven analysis of financial leverage to formulate profitable strategies in quantitative restrictions.	2
CO 5	PO 1	Derive the existence possibility of dividend decisions in meeting the practical solutions of the organization.	2
	PO 6	Differentiate the value of the firm and relevance for dividends declaration to analyze the managerial strategies in the funding business environment.	2
	PO 7	Outline the contribution of dividend to meet the funding activities of the investments.	3
CO 6	PO 6	Explain the working capital techniques with appropriate implementable strategies.	2
	PO 7	Examine the strategies in cash, receivables and inventory management while implementing the managerial decisions of businesses.	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	-	3	-	-	-	-
CO 2	-	3	-	-	-	-	3	-
CO 3	2	3	-	-	-	-	-	-
CO 4	2	-	-	3	-	-	-	-
CO 5	2	-	-	-	-	3	3	-
CO 6	-	-	-	-	-	3	2	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	100.00	-	100.00	-	-	-	-
CO 2	-	100.00	-	-	-	-	75.00	-
CO 3	100.00	100.00	-	-	-	-	-	-
CO 4	100.00	-	-	100.00	-	-	-	-
CO 5	100.00	-	-	-	-	100.00	75.00	-
CO 6	-	-	-	-	-	100.00	50.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation;

2 – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	3	-	-	-	-
CO 2	-	3	-	-	-	-	3	-
CO 3	3	3	-	-	-	-	-	-

CO 4	3	-	-	3	-	-	-	-
CO 5	3	-	-	-	-	3	3	-
CO 6	-	-	-	-	-	3	2	-
TOTAL	12	9	-	6	-	6	8	-
AVERAGE	3	3	-	3	-	3	2.75	-

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO4, PO6, PO7	SEE Exams	PO1, PO2, PO4, PO6, PO7.	Assignments	PO1, PO4	Seminars	PO 2, PO 6, PO 7.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	THE FINANCE FUNCTION
Nature and scope, evolution of finance function , new role in the contemporary scenario , goals of finance function, maximizing vs. satisfying, profit vs. wealth vs. welfare, the agency relationship and costs, risk-return trade off, concept of time value of money ,future value and present value.	
UNIT-II	THE INVESTMENT DECISION
Investmentdecisionprocess,developingcashflow,datafornewprojects,capitalbudgetingtechniques :traditional and discounted cash flow methods: payback period method, average rate of return method, net present value method, profitability index method, internal rate of return method (problems), the net present value vs. internal rate return; approaches for reconciliation, capital budgeting decision under conditions of risk and uncertainty.	
UNIT-III	CAPITAL STRUCTURE DECISIONS
Cost of capital: concept and measurement of cost of capital, debt vs. equity, cost of equity, preference shares, equity capital and retained earnings, weighted average cost of capital and marginal cost of capital. Importance of cost of capital in capital budgeting decisions. Capital structure vs. financial structure: capitalization, financial leverage, operating leverage and composite leverage, earnings before interest and tax, Earning Per Share Analysis (problems).	
UNIT-IV	DIVIDEND DECISIONS
Dividends and value of the firm ,Relevance of dividends, MM hypothesis, Factors determining dividend policy, dividends and valuation of the firm, the basic models. Declaration and payment of dividends, bonus shares, rights issue, share-splits, and major forms of dividends: cash and bonus shares, The theoretical backdrop: dividends and valuation, Major theories centered on the works of Gordon and Walter models (problems). A brief discussion on dividend policies of Indian companies.	

UNIT-V	WORKING CAPITAL MANAGEMENT
<p>Components of working capital, gross vs. net working capital, determinants of working capital needs, the operating cycle approach. Management of cash, basic strategies for cash management, cash budget (problems) , cash management techniques/processes; management of receivables and management of inventory (problems), the importance of current assets management in working capital planning, planning of working capital, financing of working capital through bank finance and trade credit, recommendations of Tandon and Daheja committee on working capital, cases.</p>	
Textbooks:	
<ol style="list-style-type: none"> 1. Chandra, Prasanna, “Fundamentals of Financial Management”, McGraw-Hill Education, 9th Edition, 2020. 2. Rajesh Kothari, “Financial Management a contemporary Approach”, Sage publications, 1st Edition, 2017. 3. Srivastava, “Financial Management”, Himalaya Publication House, Mumbai, 6th Edition, 2016. 4. Prasanna Chandra, “Financial Management Theory and Practice”, McGraw Hill, New Delhi, 9th Edition, 2015. 5. I.M. Pandey, “Financial Management”, Vikas Publishing House, New Delhi, 11th Edition, 2015. 6. Brigham, E. F. and Ehrhardt. M. C. “Financial Management Theory and Practice”, Cengage Learning, USA, 15th Edition, 2015. 7. I.M. Pandey, “Financial Management”, Vikas Publishing House Publications, 10th Edition, 2010. 8. Jonathan Berk, Peter De Marzo and Ashok Thampy, “Financial Management”, Pearson Publications, 4th Edition, 2010. 	
Reference Books:	
<ol style="list-style-type: none"> 1. Brigham, E. F. and Ehrhardt. M. C., “Financial Management Theory and Practice”, Thomson South- Western Publications, 10th Edition, 2006. 2. Vishwanath S. R., “Corporate Finance Theory and Practice”, Sage Publications, 2nd Edition, 2007. 3. Prasanna Chandra, “Financial Management Theory and Practice”, Tata McGraw Hill, 4. 7th Edition, 2005. 5. Sudershana Reddy, “Financial Management”, HPH Publications, 6th Edition, 2010. 6. Rajiv Srivastava and Anil Misra, “Financial Management”, Oxford Higher Education Publications, 4th Edition, 2009. 	

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these COs are mapped with POs		
CONTENT DELIVERY (THEORY)			
1	Definition, nature, scope and evolution of finance function.	CO1	T-1, R-2
2	New role of finance function in the contemporary scenario.	CO1	T-2, R-2
3	Goals of finance function.	CO1	T-1, R-2
4	Maximizing profit Vs wealth Vs welfare maximization.	CO1	T-1, R-2

Lecture No	Topics to be Covered	COs	Reference
5	The agency relationship and costs	CO1	T-2, R-2
6	Basic finance function concept i.e., risk return trade-off.	CO1	T-1, R-1
7	Concept of time value of money.	CO1	T-2, R-2
8	Concept of future value and present value.	CO1	T-1, R-2
9	Investment decision process.	CO2	T-2, R-2
10	Developing cash flow, data for new projects.	CO2	T-1, R-2
11	Capital budgeting techniques- traditional and discounted cash flow methods.	CO2	T-1, R-2
12	Net present value Vs Internal rate of return debate.	CO2	T-2, R-2
13	Approaches for reconciliation.	CO2	T-1, R-2
14	Capital budgeting decision under conditions of risk and uncertainty.	CO2	T-2, R-2
15	Concept and measurement of cost of capital. Debt Vs Equity.	CO2	T-1, R-1
16	Cost of equity.	CO3	T-2, R-2
17	Cost of preference shares.	CO3	T-1, R-2
18	Cost of retained earnings.	CO3	T-2, R-2
19	Weighted average cost of capital and marginal cost of capital.	CO3	T-2, R-1
20	Importance of cost of capital in capital budgeting decisions.	CO3	T-2, R-2
21	Capital structure Vs financial structure.	CO4	T-1, R-1
22	Over and under capitalizations.	CO4	T-2, R-2
23	Financial leverage.	CO4	T-1, R-2
24	Operating leverage and composite leverage.	CO4	T-1, R-1
25	Earnings before interest and tax.	CO4	T-1, R-1
26	Earnings per share analysis	CO4	T-2, R-1
27	Break even analysis of financial leverage.	CO4	T-1, R-1
28	The Modigliani miller theory.	CO4	T-1, R-2
29	Net Income theory of Financial Management	CO4	T-1, R-1
30	Traditional theory and NOI theory	CO4	T-1, R-1
31	Dividends and value of the firm.	CO5	T-1, R-1
32	Relevance of dividends, the MM hypothesis.	CO5	T-1, R-1

Lecture No	Topics to be Covered	COs	Reference
33	Factors determining dividend policy.	CO5	T-2, R-1
34	Dividends and valuation of the firm, the basic models.	CO5	T-1, R-1
35	Declaration and payment of dividends, bonus shares, Rights issue, share-splits.	CO5	T-1, R-1
36	Major forms of dividends: cash and bonus shares.	CO5	T-1, R-1
37	Major theories cantered on the works of GORDON, WALTER and LITNER.	CO5	T-1, R-2
38	A brief discussion on dividend policies of Indian companies.	CO5	T-1, R-1
39	Components of working capital, gross vs. net working capital.	CO6	T-1, R-1
40	Determinants of working capital needs.	CO6	T-1, R-1
41	The operating cycle approach.	CO6	T-1, R-1
42	Management of cash	CO6	T-1, R-2
43	Functions, characteristics of cash management	CO6	T-1, R-2
44	Basic strategies for cash management	CO6	T-1, R-2
45	Problems on the cash budget.	CO6	T-1, R-1
46	Problems on the cash budget	CO6	T-1, R-1
47	Problems on the cash budget	CO6	T-1, R-1
48	Management of receivables and management of inventory.	CO6	T-2, R-1
49	The importance of current assets management in working capital planning.	CO6	T-1, R-1
50	working capital planning mechanisms	CO6	T-1, R-1
51	Planning of working capital.	CO6	T-1, R-1
52	Working Capital strategies	CO6	T-1, R-1
53	Financing of working capital through bank finance	CO6	T-2, R-1
54	Financing of working capital through trade credit	CO6	T-2, R-1
55	Recommendations of Tendon committee on working capital.	CO6	T-2, R-1
56	Recommendations of other committees on working capital.	CO6	T-2, R-1
57	Discussion of Case studies on Unit 1	CO1	T-1, R-1
58	Discussion of Case studies on Unit 2	CO2	T-1, R-1
59	Discussion of Case studies on Unit 3	CO3,4	T-1, R-1
60	Discussion of Case studies on Unit 4	CO5	T-1, R-1

Lecture No	Topics to be Covered	COs	Reference
61	Discussion of Case studies on Unit 5	CO6	T-1, R-1
DISCUSSION ON QUESTION BANK			
62	Discussion of Question Bank Unit 1	CO1	T-1, R-1
63	Discussion of Question Bank Unit 2	CO2	T-1, R-1
64	Discussion of Question Bank Unit 3	CO3,4	T-1, R-1
65	Discussion of Question Bank Unit 4	CO5	T-1, R-1
66	Discussion of Question Bank Unit 5	CO6	T-1, R-1

Prepared By:

Dr. Vara Lakshmi Thavva, Associate Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING (Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	MARKETING MANAGEMENT				
Course Code	CMBC17				
Programme	MBA				
Semester	II				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	1	4	--	--
Course Coordinator	Dr. K Jagannayaki, Professor				

I. COURSE OVERVIEW:

This course imparts the skills to make effective decision making with respect to the various marketing function including assessing marketing opportunities and also develop them to formulating marketing strategies along with implementation plans. Course topics include market-oriented strategic planning, marketing research and information systems, buyer behavior, target market selection, competitive positioning, product and service planning and managing pricing, distribution, and integrated communications, including advertising, public relations, Internet marketing, media, direct marketing, and sales promotions. Through a combination of interactive discussions, and applies mar topics to consumer and business-to-business products, services, and non-profit organizations.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	-

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Marketing Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
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✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

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	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

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VI. COURSE OBJECTIVES:

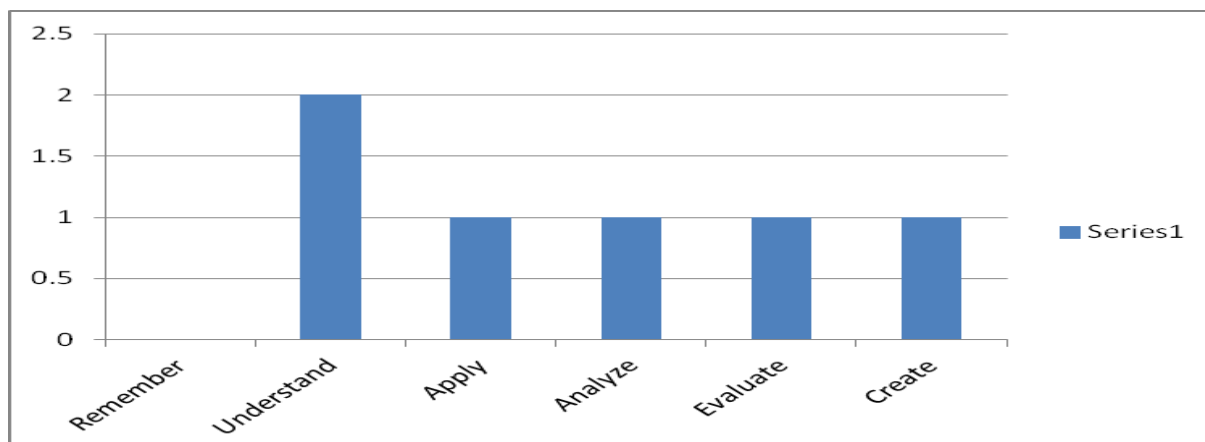
The students will try to learn:	
I	Core concepts of marketing and the role of marketing in business and society.
II	Aspects of consumer behavior and consumer decisions.
III	Conduction of market segmentation, targeting, and positioning analysis.
IV	Distribution, promotion, and communication strategies into an action plan.
V	Various pricing strategies as well as contemporary issues in marketing.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Illustrate the marketing concepts and information system skills to evaluate current business events in the Industry.	Understand
CO 2	Analyze consumer markets, customer value, product and brand development to increase customer satisfaction.	Analyze
CO 3	Integrate the concepts of consumer and business market segmentation for effective product design and development.	Understand
CO 4	Apply the concept of market target and positioning to establish the image of a brand.	Apply
CO 5	Develop marketing channels, promotional mix and sales promotion strategies to set a business apart from its competitors.	Create

CO 6	Appraise pricing-related strategies, and developing marketing trends to maximize sales growth.	Evaluate
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COURSE KNOWLEDGE COMPETENCY LEVEL



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decisionmaking.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency assessed by
PO 2	Decision making Skills: Foster Analytical and critical thinking abilities for data-based decision making.	3	Assignments
PO 3	Ethics: Ability to develop Value based Leadership ability	2	Assignments
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	3	Seminar
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.	3	Assignments
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	1	Presentation on real-world problem

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	-	√	-	-	-	√	-	-
CO 2	-	√	-	-	√	-	√	-
CO 3	-	-	-	-	√	√	-	-
CO 4	-	√	-	-	-	-	√	-
CO 5	-	√	-	-	-	√	√	-
CO 6	-	√	√	-	√	-	√	-

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 6	Recollect (knowledge) the basic concept of marketing to formulate different strategies and marketing plans to market different types of products and make the customers satisfy.	3
	PO 2	Adapt (knowledge) various kinds of methods to conduct research for recognizing the needs of the customers from time to time.	4
CO 2	PO 2	Identify (knowledge) the concepts for taking decisions to manufacture such products which results in creating customer value.	4
	PO 7	Apply (knowledge) the things practically for analyzing the formulating the customer strategies to make products successful in the market.	2
	PO 5	Identify (knowledge) the social and personal factors of the customers which determine the products to be developed by the entrepreneurs.	2
CO 3	PO 5	Apply (knowledge) the marketing concepts to reach organizational goal by developing and marketing products to the requirements of the customers in the market.	2
	PO 6	Focus on manufacture of different kinds of products which fit to the customers relating to number of segments in the market.	1
CO 4	PO 2	Apply (knowledge) the Marketing concepts to take decisions regarding Dissemination of the total market in to various categories on any bases.	2
	PO 7	Apply (knowledge) the Marketing concepts to classify and categorize the entire market strategically.	
CO 5	PO2	Interpretation (Knowledge) of the concepts of marketing to take decisions regarding marketing channels to make products to available to the customers.	2
	PO7	Apply (Knowledge) of the concepts of marketing to make a critical analysis strategically to ascertain the channel effectiveness.	2
	PO 6	Understand (Knowledge) the marketing concepts to decide which kind of promotions to be followed to achieve competitive advantage.	2
CO 6	PO 2	Examine (Knowledge) the various kinds of sales promotion techniques to identify and select best technique which gives us optimum sales.	2

	PO 5	Differentiate between different kinds of promotion mix decision to satisfy the market demand in time and as a result they able to reach organizational goals in time.	2
	PO 3	Observe (knowledge) various ethical aspects and following the same in developing new products which helpful to wellbeing of mankind in ethical way.	4
	PO 7	Apply (Knowledge) the balance of payments and market sustainability to take strategic decisions.	1

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	3	-	-	-	3	-	-
CO 2	-	3	-	-	3	-	3	-
CO 3	-	-	-	-	3	3	-	-
CO 4	-	3	-	-	-	-	3	-
CO 5	-	3	-	-	-	3	3	-
CO 6	-	3	3	-	3	-	3	-

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	100%	-	-	-	100%	-	-
CO 2	-	100%	-	-	60%	-	75%	-
CO 3	-	-	-	-	60%	100%	-	-
CO 4	-	100%	-	-	-	-	-	-
CO 5	-	100%	-	-	-	100%	75%	-
CO 6	-	100%	100%	-	60%	-	75%	-

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ –No correlation; **2** – $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	-	3	-	-	-	2	-	-
CO 2	-	3	-	-	3	-	3	-
CO 3	-	-	-	-	3	2	-	-
CO 4	-	3	-	-	-	3	-	-
CO 5	-	3	-	-	-	2	3	-
CO 6	-	3	3	-	3	-	3	-
TOTAL	-	15	3	-	9	9	9	-
AVERAGE	0	3	3	0	3	2.25	3	0

XV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO 2, PO 3, PO 5, PO 6, PO 7	SEE Exams	PO 2, PO 3, PO 5, PO 6, PO 7	Assignments	PO 2, PO 3, PO 5, PO 6, PO 7	Seminars	PO 2, PO 3, PO 5, PO 6, PO 7
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XVI. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

UNIT-I	INTRODUCTION TO MARKETING AND MARKET RESEARCH
Importance and scope of Marketing, Core Marketing Concepts, Marketing Philosophies, Marketing Environment, Marketing Strategies & Plans, and Changing Marketing landscape, Market Research - Definition of MR, Marketing Research process, Marketing Information systems, Marketing Research & Ethics, International Marketing Research.	
UNIT-II	ANALYZING MARKETING OPPORTUNITIES CUSTOMER VALUE AND MARKETING MIX
Decision Making, Building Customer Value, Analyzing Consumer Markets – Consumer Behavior – Cultural, Social & Personal Factors, developing products & brands – product levels; classifying products, product range, product line & product mix, Product Life Cycles, new product development, New Service Development, Stages of Product/ Service innovation development, The process of adoption, Branding.	

UNIT-III	DESIGNING A CUSTOMER DRIVEN STRATEGY
Market segmentation - STP Process - segmentation of consumer market, business market, requirement for effective segmentation, market targeting.	
Evaluating market segmentation, selecting target market segmentation, positioning – Positioning and repositioning, positioning maps, product positioning strategies.	
UNIT- IV	DISTRIBUTION DECISIONS, PROMOTIONS AND COMMUNICATION STRATEGIES
Marketing Channels, Channel intermediates and functions, channel structure, channel for consumer products, business and industrial products, alternative channel, channel strategy decisions. The promotional mix, advertising, public relations, sales promotion, personal selling, Direct and online Marketing. Marketing communication- communication process, communication promotion mix, factors affecting the promotion mix.	
UNIT – V	PRICING DECISION AND PERSONAL COMMUNICATION
Importance of price, cost determinant of price, mark-up pricing, profit maximization pricing, break even pricing, pricing strategies, ethics of pricing strategy, product line pricing, WOM, Rural marketing, BOP, relationship Marketing, Digital marketing, Social media marketing, postmodern marketing, market sustainability and ethics, Global marketing, green marketing.	
Text books	
<ol style="list-style-type: none"> 1. Iacobucci, Dawn. “Marketing management”, Cengage Learning, 6th Edition, 2021. 2. Park, Seohee. “Marketing Management“, Vol. 3. Seohee Academy, 6th Edition, 2020. 3. Kotler, P., Armstrong, G., Agnihotri, P. K., and Haque, E. “Principles of Marketing: A South Asian Perspective”, Pearson Education Prentice Hall of India, 17th Edition, 2018. 4. Philip Kotler, Gray Armstrong, “Principles of Marketing”, Pearson Education, 15th Edition, 2016. 5. Lamb, Hair, Sharma, Mc Daniel, “Principles of Marketing”, a South Asian Perspective Cengage Learning, 2016. 6. Paul Baines, Chris Fill, Kelly Page, Piyush Sinha, “Marketing”, Oxford University Press, Asian Edition, 2015. 7. Arun Kumar & N. Meenakshi, “Marketing Management”, Vikas, 2012 8. Rajan Saxena, “Marketing Management”, Tata Mc Graw Hill, 3rd Edition, 2012. 9. Kenneth E Clow, Donald S Baack, “Cases in Marketing Management”, Sage South Asia Edition, 2012. 	
References	
<ol style="list-style-type: none"> 1. Ramaswamy Namakumari, “Marketing Management”, TMH, 5th Edition, 2013. 2. Philip Kotler, Gray Armstrong, Prafulla. Y. Agnihotri, Ehsan UL Haque, “Principles of Marketing, SouthAsian perspective”, Pearson Education, 13th Edition, 2012. 3. K.Karunakaran, “Marketing Management”, Himalaya Publishing House, 2nd Edition, 2012. 4. Rajan Saxena, “Marketing Management”, TMH, 4th Edition, 2013. 	
Web References:	
<ol style="list-style-type: none"> 1. http://www.pondiuni.edu.in/storage/dde/downloads/mbaii_mm.pdf 2. http://www.ddegjust.ac.in/studymaterial/pgdapr/pgdapr-105.pdf 	
E-text books:	
<ol style="list-style-type: none"> 1. http://dl.ueb.edu.vn/bitstream/1247/2250/1/Marketing_Management_-_Millenium_Edition.pdf 2. http://197.14.51.10:81/pmb/GESTION2/MARKETING/Fundamentals_of_Marketing.pdf 3. https://ipsedu.in/downloads/MBABooks/principles-of-marketing-philip-kotler.pdf 4. http://solr.bccampus.ca:8001/bcc/file/ddbe3343-9796-4801-a0cb-7af7b02e3191/1/Core%20Concepts%20of%20Marketing.pdf 	

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Introduction to Markets, Marketing Concepts	CO 1	T1:22.5R1:2.3
2	Importance & Scope of Marketing	CO 1	T1:22.5R1:2.4
3	Core Marketing Concepts	CO 1	T1:22.6R1:2.6
4	Marketing Philosophies	CO 1	T1:22.7R1:4.4
5	Marketing Environment	CO 1	T1:22.7R1:4.10
6	Marketing Strategies & Plans	CO 1	T1:22.8R1:4.15
7	Changing Marketing landscape	CO 1	T1:22.9R1:5.4
8	Market Research - Definition of MR	CO 1	T1:22.9R1:5.8
9	Marketing Research process	CO 1	T1:23.10R1:6.8
10	Marketing Information systems	CO 1	T1:23.10R1:6.13
11	Marketing Research & Ethics	CO 1	T1:23.9R1:7.5
12	International Marketing Research.	CO 1	T1:23.10R1:7.5
13	Decision Making-Introduction	CO 2	T1:23.10R1:8.1
14	Building Customer Value	CO 2	T1:23.1
15	Analyzing Consumer Markets	CO 2	T1:23.1R1:9.4
16	Consumer Behavior – Cultural, Social & Personal Factors	CO 2	T1:23.1R1:9.9
17	Developing products & brands – product levels	CO 2	T1:23.1R1:9.10
18	Classifying products, product range, product line & product mix	CO 2	T1:23.1R1:9.9
19	Product Life Cycles- New product development	CO 2	T1:23.1R1:9.10
20	New Service Development	CO 2	T1:23.1R1:9.9
21	Stages of Product/ Service innovation development	CO 2	T1:23.1R1:9.10
22	The process of adoption, Branding	CO 2	T1:23.1R1:9.9
23	Market segmentation-Introduction	CO 3	T1:23.1R1:9.10

24	STP Process	CO 3	T1:23.1R1:9.9
25	Segmentation of consumer market, business market,	CO 3	T1:23.1R1:9.9
26	Requirement for effective segmentation	CO 3	T1:23.1R1:9.9
27	Market targeting	CO 3	T1:23.1R1:9.9
28	Evaluating market segmentation	CO 4	T1:23.1R1:9.9
29	Selecting target market segmentation	CO 4	T1:23.1R1:9.9
30	Positioning and repositioning	CO 4	T1:23.1R1:9.9
31	Positioning maps	CO 4	T1:23.1R1:9.9
32	Product positioning strategies	CO 4	T1:23.1R1:9.9
33	Introduction to Marketing Channels	CO 5	T1:23.1R1:9.9
34	Channel intermediates and functions	CO 5	T1:23.1R1:9.9
35	Channel structure	CO 5	T1:23.1R1:9.9
36	Channel for consumer products, business and industrial products	CO 5	T1:23.1R1:9.9
37	Alternative channel	CO 5	T1:23.1R1:9.9
38	Channel strategy decisions	CO 5	T1:23.1R1:9.9
39	The promotional mix	CO 5	T1:23.1R1:9.9
40	Advertising, public relations	CO 5	T1:23.1R1:9.9
41	Sales promotion, personal selling	CO 5	T1:23.1R1:9.9
42	Direct and online Marketing	CO 5	T1:23.1R1:9.9
43	Marketing communication	CO 5	T1:23.1R1:9.9
44	Communication process	CO 5	T1:23.1R1:9.9
45	Communication promotion mix	CO 5	T1:23.1R1:9.9
46	Factors affecting the promotion mix	CO 5	T1:23.1R1:9.9
47	Importance of price	CO 6	T1:23.1R1:9.9
48	Cost determinant of price	CO 6	T1:23.1R1:9.9
49	Markup pricing, profit maximization pricing	CO 6	T1:23.1R1:9.9
50	Break even pricing	CO 6	T1:23.1R1:9.9
51	Pricing strategies	CO 6	T1:23.1R1:9.9
52	Ethics of pricing strategy	CO 6	T1:23.1R1:9.9

53	Product line pricing	CO 6	T1:23.1R1:9.9
54	WOM, Rural marketing	CO 6	T1:23.1R1:9.9
55	BOP, Relationship Marketing	CO 6	T1:23.1R1:9.9
56	Digital marketing, Social media marketing	CO 6	T1:23.1R1:9.9
57	Postmodern marketing	CO 6	T1:23.1R1:9.9
58	Market sustainability and ethics	CO 6	T1:23.1R1:9.9
59	Global marketing	CO 6	T1:23.1R1:9.9
60	Green marketing	CO 6	T1:23.1R1:9.9
OBE DISCUSSION			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-2
62	Question Bank Discussions Unit 2	CO 2	T-2, R-2
63	Question Bank Discussions Unit 3	CO 3, CO4	T-1, R-1
64	Question Bank Discussions Unit 4	CO 5	T-2, R-2
65	Question Bank Discussions Unit 5	CO 6	T-1, R-2
66	Case Studies Discussion		

Prepared by:
Dr. K Jagannayaki, Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043, Ranga Reddy

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	ENTREPRENEURSHIP DEVELOPMENT				
Course Code	CMBC18				
Program	MBA				
Semester	II				
Course Type	CORE				
Regulation	PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Ms. P Rajini, Assistant Professor				

I. COURSE OVERVIEW:

The purpose of the course is to acquire necessary knowledge and skills required for organizing and carrying out entrepreneurial activities, for analysing and understanding business situations in entrepreneurs act and to master the knowledge necessary to plan entrepreneurial activities. The objective of the course is, further on, to develop the ability of analysing various aspects of entrepreneurship—especially of taking over the risk, and the specificities as well as the pattern of entrepreneurship development and, finally, to contribute to their entrepreneurial and managerial potentials.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	-

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Entrepreneurship Development	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✗	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

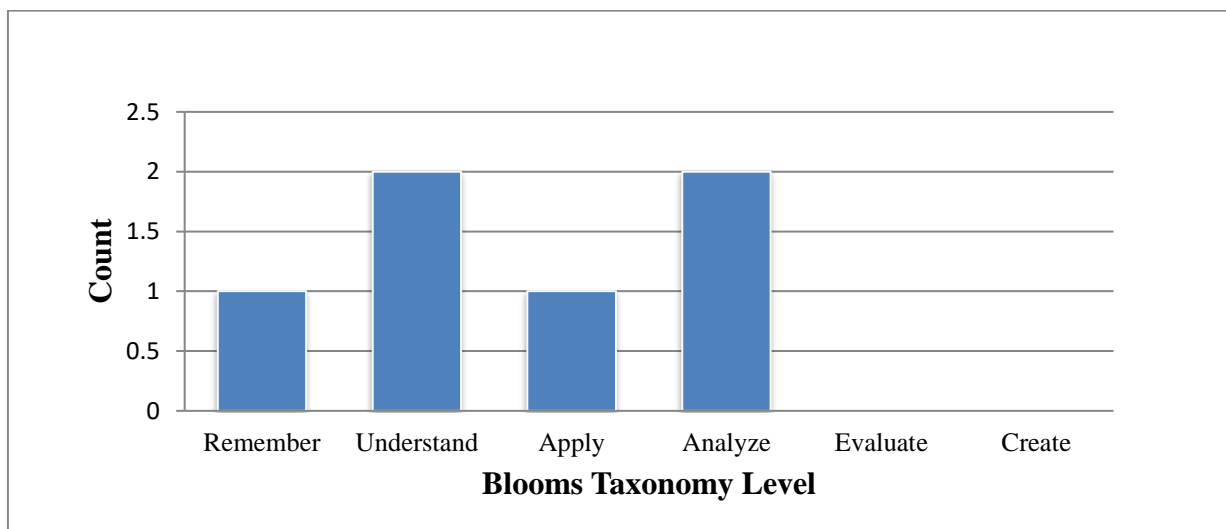
The students will try to learn:	
I	Describe the key factors and be able to apply the key entrepreneurial process – command and control, calculated risk-taking and opportunity recognition to business development
II	Understand the function of the entrepreneur in the successful, commercial application of innovations in business landscape
III	Summarize the key resources required to develop an existing business such as ideas and finance, launch a new venture, or initiate a business enterprise
IV	Demonstrate an ability to engage in critical thinking by analyzing situations and constructing and selecting viable solutions to solve problems

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Explore new vistas of entrepreneurship in the twenty-first century environment to establish new business opportunities.	Understand
CO 2	Evaluate entrepreneurial mindset and personality of each individual helping to detect difficulties and propose a timely solution.	Analyze
CO 3	Recognize the entrepreneurial mindset for giving value to the company.	Remember
CO 4	Develop entrepreneurial imagination and creativity to develop the value of the company.	Analyze

CO 5	Identify and establish new venture prospects based on new technology to evaluate the feasibility of a new business concept.	Apply
CO 6	Investigate strategic entrepreneurial perspectives that aid in the development of a competitive mindset.	Understand

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2.25	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO4	Ethics: An ability to understand professional and ethical responsibility.	3	Assignments
PO5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.	3	Assignments
PO6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.	3	Seminars
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2.5	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	√	√	√	-	-
CO 2	-	√	-	-	√	√	-	-
CO 3	√	√	-	-	√	√	-	-
CO 4	√	-	-	√	-	√	-	-
CO 5	√	√	-	-	-	√	√	-
CO 6	-	-	-	-	-	√	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of entrepreneurship concepts and to an extent appreciate (understand) the importance of entrepreneurial mind set to promote the organized economy system and solve the business problems.	1
	PO 2	Describe (knowledge) the importance of approaches for business developments in the context of risk return decisions.	3
	PO 4	Interpret (knowledge) about the evolution of entrepreneurship to the development of the global economic aspects of business.	2
	PO 5	Enumerate (market trends) the twenty first century trends in entrepreneurship to lead themselves and others in the competition world.	4
	PO 6	Enhance (Skills) entrepreneurial mind set and behaviour to demonstrate the skills and issues related to entrepreneurs to develop as entrepreneur.	3
CO 2	PO 2	Comprehend and achieve entrepreneurial personality by developing good communicational aspects with stakeholders.	3
	PO 5	Recognize (knowledge) the contribution of ethical aspects by its functional strategic principles and methodology	3
	PO 6	Explore (Creativity and Innovation) the entrepreneurial ventures by identifying the entrepreneurial skills.	3
CO 3	PO 1	Apply (knowledge) the identified opportunities to the technical analysis of the launching entrepreneurial ventures.	2
	PO 2	Recognize the importance of imagination and creativity in implementing strategies of the venture maintenance.	3

	PO 5	Develop (Skills) the ideas generation by finding market gaps to achieve the organizational goals.	3
	PO 6	Stabilize (strategies) the corporate entrepreneurship to take competitive advantage of entrepreneurship.	3
CO 4	PO 1	Construct the managerial models in the franchising activities to communicate with the investors.	1
	PO 4	Examine the significance of new ventures to understand the business activities.	3
	PO 6	Ability (Skills) to improve innovative ventures to establish an enterprise.	3
CO 5	PO 1	Derive the existence possibility of legal decisions in meeting the practical solutions of the organization.	1
	PO 2	Promote the intellectual property protections for entrepreneurial establishment decisions.	3
	PO 6	Differentiate the entrepreneurial plans for industry and competitors declaration to analyze the managerial strategies in the funding business environment.	3
	PO 7	Outline the contribution of sources of finance to meet the funding activities of the enterprises.	2
CO 6	PO 6	Explain the strategic perspectives with appropriate implementable strategies.	3
	PO 7	Examine the strategies in building, growth and venture management while implementing the managerial decisions of businesses.	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	1	3	-	2	4	3	-	-
CO 2	-	3	-	-	3	3	-	-
CO 3	2	3	-	-	3	3	-	-
CO 4	1	-	-	3	-	3	-	-
CO 5	1	3	-	-	-	3	2	-
CO 6	-	-	-	-	-	3	3	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	50.00	100.00	-	66.66	80.00	100.00	-	-
CO 2	-	100.00	-	-	60.00	100.00	-	-
CO 3	100.00	100.00	-	-	60.00	100.00	-	-
CO 4	50.00	-	-	100.00	-	100.00	-	-
CO 5	50.00	100.00	-	-	-	100.00	50.00	-
CO 6	-	-	-	-	-	100.00	75.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ –No correlation;

2 – $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ –Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	2	3	-	3	3	3	-	-
CO 2	-	3	-	-	3	3	-	-
CO 3	3	3	-	-	3	3	-	-
CO 4	2	-	-	3	-	3	-	-
CO 5	2	3	-	-	-	3	2	-
CO 6	-	-	-	-	-	3	3	-
TOTAL	9	12	-	6	9	18	5	-
AVERAGE	2.25	3	-	3	3	3	2.5	-

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO4, PO5, PO6, PO7	SEE Exams	PO1, PO2, PO4, PO5, PO6, PO7.	Assignments	PO1, PO4, PO5	Seminars	PO 2, PO 6, PO 7.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	UNDERSTANDING ENTREPRENEURIAL MIND-SET
The revolution impact of entrepreneurship - The evolution of entrepreneurship - Functions of Entrepreneurs – types of entrepreneurs - Approaches to entrepreneurship - Process approach - Role of entrepreneurship in economic development - Twenty first century trends in entrepreneurship.	
UNIT-II	ENTREPRENEURIAL PERSONALITY
The individual entrepreneurial mind-set and Personality- The entrepreneurial journey - Stress and the entrepreneur - the entrepreneurial ego – Entrepreneurial motivations- Motivational cycle – Entrepreneurial motivational behavior, Entrepreneurial competencies.	
UNIT-III	LAUNCHING ENTREPRENEURIAL VENTURES
Corporate Entrepreneurial Mind-set, the nature of corporate entrepreneur- conceptualization of corporate entrepreneurship Strategy-sustaining corporate entrepreneurship Opportunities identification- Finding gaps in the market place – techniques for generating ideas. Entrepreneurial Imagination and Creativity- the nature of the creativity process - Innovation and entrepreneurship. Methods to initiate Ventures - Creating new ventures - Acquiring an Established entrepreneurial venture – Franchising - advantage and disadvantages of Franchising.	
UNIT-IV	LEGAL CHALLENGES&FEASIBILITY ANALYSIS
Intellectual property protection - Patents, Copyrights - Trademarks and Trade secrets - Avoiding trademark pitfalls. Feasibility Analysis - Industry and competitor analysis - Formulation of the entrepreneurial Plan- The challenges of new venture start-ups, developing an effective business model – Sources of finance - Critical factors for new venture development - The Evaluation process.	
UNIT-V	STRATEGIC PERSPECTIVES IN ENTREPRENEURSHIP
Strategic planning - Strategic actions- strategic positioning- Business stabilization - Building the adaptive firms - Understanding the growth stage – Internal growth strategies and external growth strategies, Unique managerial concern of growing ventures. Initiatives by the Government of India to promote entrepreneurship, Social and women entrepreneurship.	
Textbooks:	
<ol style="list-style-type: none"> Sharma, Sangeeta. “Entrepreneurship development”, PHI Learning Pvt. Ltd., 7th Edition, 2021. Akino, Susan. "SMEs and Entrepreneurship Development Determinants in Practice: Case of Uganda." Handbook of Research on Sustaining SMEs and Entrepreneurial Innovation in the Post-COVID-19 Era”, IGI Global, 5th Edition, 2021. S.S.Khanka, “Entrepreneurship Development”, S. Chand Publications, 5th Edition, 2015. Bruce R. Barringer/ R.Duane Ireland. “Entrepreneurship Successfully launching new ventures”, Pearson, 4th Edition, 2015. S.S. Khanka “Entrepreneurial Development” S. Chand Company Ltd, 4th Edition, 2012 D F Kuratko and T V Rao, “Entrepreneurship- A South-Asian Perspective”, Cengage Learning, 2012. 	
Reference Books:	
<ol style="list-style-type: none"> Sangeeth Sharama, “Entrepreneurship Development”. PHI learning private limited, 2nd Edition, 2013. 	

2. Poornima M Charantimath, "Entrepreneurship Development and Small Business Enterprises", Pearson Publications, 2nd Edition, 2012.

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these COs are mapped with POs		
CONTENT DELIVERY (THEORY)			
1	Finance Function - Nature and scope	CO1	T-1, R-2
2	Functions, objectives and importance of financial management	CO1	T-2, R-2
3	Evolution of finance function	CO1	T-1, R-2
4	New role in the contemporary scenario	CO1	T-1, R-2
5	Profit maximization, wealth maximization and EPS maximization	CO1	T-2, R-2
6	Role of financial manager	CO1	T-1, R-1
7	Agency relationship and costs	CO1	T-2, R-2
8	Risk return trade off	CO1	T-1, R-2
9	Concept of time value of money	CO1	T-2, R-2
10	Future value and present value	CO1	T-1, R-2
11	Investment decision process, developing cash flow	CO2	T-1, R-2
12	Data for new projects, capital budgeting techniques	CO2	T-2, R-2
13	Traditional and discounted cash flow methods	CO2	T-1, R-2
14	Payback period method	CO2	T-2, R-2
15	Average rate of return method	CO2	T-1, R-1
16	Net present value method, profitability index method	CO2	T-2, R-2
17	Internal rate of return method (problems)	CO2	T-1, R-2
18	Net present value vs. internal rate return	CO2	T-2, R-2
19	Approaches for reconciliation	CO2	T-2, R-1
20	Capital budgeting decision under conditions of risk and uncertainty	CO2	T-2, R-2
21	Capital budgeting decision under conditions of risk and uncertainty	CO2	T-2, R-2
22	Concept and measurement of cost of capital	CO3	T-1, R-1

Lecture No	Topics to be Covered	COs	Reference
23	Debt vs. equity, cost of equity, preference shares	CO3	T-2, R-2
24	Debt vs. equity, cost of equity, preference shares	CO3	T-2, R-2
25	Equity capital and retained earnings	CO3	T-1, R-2
26	Weighted average cost of capital and marginal cost of capital	CO3	T-1, R-2
27	Importance of cost of capital in capital budgeting decisions.	CO3	T-1, R-1
28	Capital structure vs. financial structure	CO4	T-1, R-1
29	Capitalization, financial leverage	CO4	T-2, R-1
30	Operating leverage and composite leverage	CO4	T-2, R-1
31	Earnings before interest and tax, Earning Per Share Analysis (problems)	CO4	T-1, R-1
32	Earnings before interest and tax, Earning Per Share Analysis (problems)	CO4	T-1, R-1
33	Dividends and value of the firm	CO5	T-1, R-2
34	Relevance of dividends	CO5	T-1, R-1
35	MM hypothesis, Factors determining dividend policy	CO5	T-1, R-1
36	Dividends and valuation of the firm, the basic models.	CO5	T-1, R-1
37	Declaration and payment of dividends	CO5	T-1, R-1
38	Bonus shares, rights issue	CO5	T-2, R-1
39	Share-splits	CO5	T-1, R-1
40	Major forms of dividends	CO5	T-1, R-1
41	Cash and bonus shares	CO5	T-1, R-1
42	Theoretical backdrop	CO5	T-1, R-2
43	Dividends and valuation	CO5	T-1, R-1
44	Major theories centered on the works of Gordon and walter models (problems)	CO5	T-1, R-1
45	A brief discussion on dividend policies of Indian companies	CO5	T-1, R-1
46	Components of working capital	CO6	T-1, R-1
47	Gross vs. net working capital	CO6	T-1, R-1
48	Determinants of working capital needs	CO6	T-2, R-1
49	Operating cycle approach	CO6	T-1, R-1
50	Management of cash, basic strategies for cash management	CO6	T-1, R-1

Lecture No	Topics to be Covered	COs	Reference
51	Cash budget (problems), cash management techniques/processes	CO6	T-1, R-1
52	Management of receivables and management of inventory (problems)	CO6	T-1, R-1
53	Management of receivables and management of inventory (problems)	CO6	T-2, R-1
54	Importance of current assets management in working capital planning	CO6	T-2, R-1
55	Planning of working capital	CO6	T-2, R-1
56	Financing of working capital through bank finance	CO6	T-1, R-1
57	Trade credit	CO6	T-1, R-1
58	Recommendations of Tandon and Daheja committee on working capital	CO6	T-2, R-1
59	Recommendations of Tandon and Daheja committee on working capital	CO6	T-1, R-1
60	Working capital Cases	CO6	T-1, R-1
DISCUSSION ON QUESTION BANK			
61	Finance Function	CO1	T-1, R-1
62	Investment Decision	CO2	T-1, R-1
63	Capital Structure Decisions	CO3, 4	T-1, R-1
64	Dividend Decision	CO5	T-1, R-1
65	Working Capital Management	CO6	T-1, R-1

Prepared by:
Ms. P Rajini, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	MANAGEMENT INFORMATION SYSTEM				
Course Code	CMBC19				
Program	MBA				
Semester	II				
Course Type	Core				
Regulation	PG 21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	--	3	-	-
Course Coordinator	Ms. D Sandhya, Assistant Professor				

I. COURSE OVERVIEW:

The course focuses on the importance of management, management concepts, and management practices with the study of human behavior within organizations. The primary goal of this course is to provide knowledge on advanced leadership roles in modern organization. This course will create awareness of various information system solutions like ERP, CRM, Data warehouses and the issues in successful implementation of technologies in any organization.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	-

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Management Information System And ERP	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
16%	Remember
33.33%	Understand
16%	Apply
16%	Analyze
16%	Evaluate
0%	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively. The CIE exam is conducted for 25 marks of 2 hours duration consisting of two parts. Part–A shall have five compulsory questions of one mark each. In part–B, four out of five questions have to be answered where, each question carries 5 marks. Marks are awarded by taking average of marks scored in two CIE exams.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

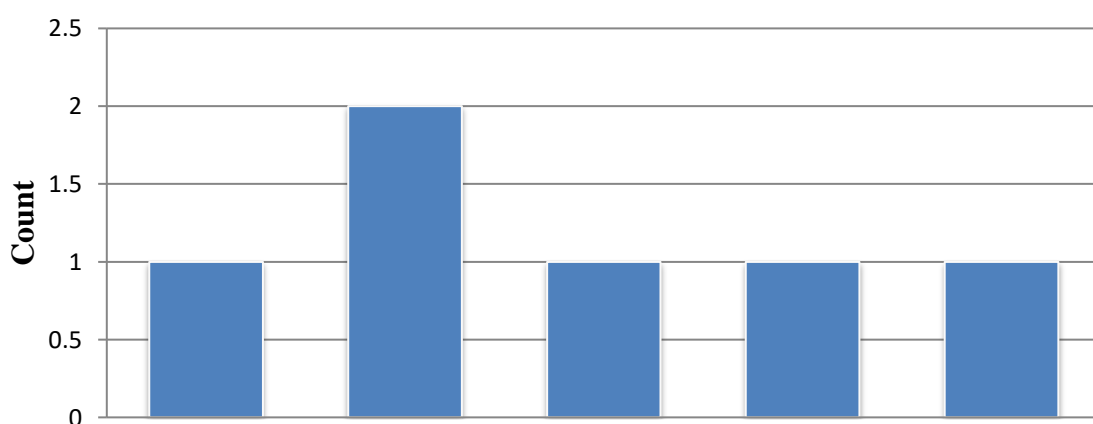
The course should enable the students to:	
I	Information systems and its various categories.
II	Different business applications of information systems.
III	The underlying principles of information system security and control.
IV	The concept of system development stages, approaches, systems analysis, and design
V	The tools for MIS that helps in strategic planning, management control, operational control and transaction processing.

VII. COURSE OUTCOMES :

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Summarize the basic concepts of management information system process, structure, and classification in order to develop strategic and operational planning and management control.	Understand

CO 2	Narrate electronic commerce, enterprise resource planning systems, and database management systems that help to make decisions in the selection, creation, and evaluation of computer-based systems.	Remember
CO 3	Determine information system planning, acquisition, and implementation to improve the performance of the company.	Evaluate
CO 4	Describe the maintenance of information systems that help to satisfy organizational and user requirements.	Understand
CO 5	Analyze system development stages, systems analysis, and business information to facilitate and evaluate strategic alternatives to solve business problems.	Analyze
CO 6	Apply the concept of cybercrime, classify cyber criminals, and resolve security issues to protect an IT infrastructure.	Apply

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	Seminars
PO2	Decision making Skills: Foster Analytical and critical thinking abilities for data-based decision making.	2	Lectures
PO5	Leadership skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	1.6	Assignments
PO8	Technical skills: Inculcate and develop technical skills to face competitive world successfully	5	Seminars

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	√	-	-	-	-	-	-	√
CO 2	√	√	-	-	-	-	-	-
CO 3	-	-	-	-	-	-	-	√
CO 4	-	√	-	-	-	-	-	-
CO 5	-	√	-	-	√	-	-	-
CO 6	-	-	-	-	√	-	-	√

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO1	Describe the meaning, definition, nature, scope, goals of management information system that helps to solve organizational problems.	2
	PO8	Define the structure and classification of management information system that helps in problem identification	3
CO 2	PO1	Explain Electronic commerce, enterprise resource planning systems that helps to take decision in selection, creation of computer based systems.	2
	PO2	Examine the role of decision support system that helps managers in decision making by accessing large volumes of information generated.	2
CO3	PO8	Determine Information system planning, acquisition that develops technical skills to achieve competitive advantage.	3
CO 4	PO2	Enumerate the maintenance of information system to satisfy organizational and user requirements.	2

CO 5	PO5	AnalyzeSystem development stages that helps to transform the idea of a project into functional and operational structure.	3
	PO8,	Demonstrate systems analysis that helps to resolve issues in the organization.	3
CO 6	PO8	Examine the concept of cybercrime by using technical skills to achieve competitive advantage.	3

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
		2	3	3	3	5	3	4
CO 1	2	-	-	-	-	-	-	3
CO 2	2	2	-	-	-	-	-	-
CO 3	-	-	-	-	-	-	-	3
CO 4	-	2	-	-	-	-	-	-
CO 5	-	-	-	-	5	-	-	3
CO 6	-	-	-	-	-	-	-	3

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
		2	3	3	3	5	3	4
CO 1	100%	-	-	-	-	-	-	100%
CO 2	100%	100%	-	-	-	-	-	-
CO 3	-	-	-	-	-	-	-	100%
CO 4	-	100%	-	-	-	-	-	-
CO 5	-	-	-	-	100%	-	-	100%
CO 6	-	-	-	-	-	-	-	100%

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	3	-	-	-	-	-	-	3
CO 2	3	3	-	-	-	-	-	-
CO 3	-	-	-	-	-	-	-	3
CO 4	-	3	-	-	-	-	-	-
CO 5	-	-	-	-	3	-	-	3
CO 6	-	-	-	-	-	-	-	3
TOTAL	6	6	-	-	3	-	-	12
AVERAGE	3	3	0	0	3	0	0	3

XV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1,PO2, PO5, PO8	SEE Exams	PO1,PO2, PO5, PO8	Assignments	PO1,PO2, PO5, PO8	Seminars	PO1,PO2, PO5, PO8
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XVI. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

Unit-I	INTRODUCTION
Management information system importance, definition, nature and scope of management information system, structure and classification of management information system, information and systems concept, types of information, information systems for competitive advantage.	

Unit -II	BUSINESS APPLICATIONS OF INFORMATION SYSTEM
Electronic commerce, enterprise resource planning systems, decision support system, Business intelligence and knowledge management system.	
Unit -III	MANAGEMENT OF INFORMATION SYSTEM
Information system planning, system acquisition, systems implementation. Evaluation and maintenance of information system, information system security and control.	
Unit -IV	BUILDING OF INFORMATION SYSTEMS
System development stages, system development approaches, systems analysis and design, Requirement determination, strategies for requirement determination, structured analysis tools, system design, design objectives, conceptual design, design methods and detailed system design.	
Unit -V	TOOLS OF MANAGEMENT INFORMATION SYSTEM
System development models: Waterfall model, system development life cycle, v-model, computer assisted and software engineering tools, prototype iterative model, evaluation & maintenance, alternative methods for building information systems, new approaches for system building in the digital firm era.	
Textbooks:	
<ol style="list-style-type: none"> 1. Rainer, R. Kelly, and Brad Prince, "Introduction to information systems", John Wiley & Sons, 4thEdition, 2021. 2. Laudon & Laudon, "Management Information Systems", Pearson, 12thEdition, 2015. 3. Murthy, "Management Information System, Himalaya", 9thEdition, 2013. 4. S.A.Kelkar, Software Project Management-A Concise Study, PHI, 3rdEdition, 2012. 5. James O'Brien & George Marakas, "Management Information Systems", McGraw Hill, 10thEdition,2011. 6. David M. Kroenke, "Experiencing MIS", Prentice Hall, 4thEdition, 2011. 7. D P Goyal, Management Information Systems, Managerial Perspective, MacMillan, 3rdEdition,2010. 	
Reference Books:	
<ol style="list-style-type: none"> 1. Ken Laudon, Jane P. Laudon, Management Information Systems, Pearson education, 15thEdition, 2015. 2. Jennifer L Bayuk, Jason Healey, Paul Rohmeyer, Marcus H.Sachs, Jeffrey Schmidt, Joseph Weiss, Cyber security Policy Guidebook, Wiley, 1stEdition,2012. 3. A K Gupta, Sharma "Management of Systems" Macmillan, 1stEdition, 2012. 	
Web References:	
<ol style="list-style-type: none"> 1. http://www.ijcse.com/docs/IJCSE11-02-01-054.pdf 2. http://www.pitt.edu/~druzdzel/psfiles/dss.pdf 	
E-Text Books:	
<ol style="list-style-type: none"> 1. https://www.scribd.com/doc/252519209/Decision-Support-Systems-and-Intelligent-Systems-7th-Edition-Free-eBook-Download 2. http://link.springer.com/book/10.1007%2F978-3-540-48713-5 3. https://www.jerrypost.com/Books/MISBook/Bookfiles5/Chapters/MISPost-Preface-500.pdf 4. https://www.researchgate.net/profile/Javed-Saani/publication/340647719_Management_Information_Systems/links/5eb7f7fe299bf1287f782bb5/Management-Information-Systems.pdf 5. https://repository.dinus.ac.id/docs/ajar/Kenneth_C.Laudon,Jane_P_.Laudon_Management_Information_System_13th_Edition_.pdf 	

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Management information system Introduction	CO 1	T1
2	Management information system importance	CO 1	T1
3	definition, nature and scope of management information system	CO 1	T1
4	Functions of MIS	CO 1	T1
5	Information SYS Processing Function	CO 1	T1
6	Level of MIS	CO 1	T1
7	structure of management information system	CO 1	T1
8	classification of management information system	CO 1	T1
9	Decision support system of MIS	CO 1	T1
10	Alternative Processing	CO 1	T1
11	Enterprise System of MIS	CO 1	T1
12	Business Expert Systems	CO 1	T1
13	Expert Systems MIS	CO 1	T1
14	information and systems concept,	CO 1	T1
15	types of information,	CO 1	T1
16	information systems for competitive advantage.	CO 1	T1
17	Electronic commerce	CO 2	T1
18	Electronic commerce Sales Life Cycle Model	CO 2	T1
19	Electronic commerce Infrastructure	CO 2	T1
20	Electronic commerce Hardware and Software	CO 2	T1
21	ERP Information Perspective of ERP and lifecycle	CO 2	T1
22	Enterprise Information System	CO 2	T1
23	CRM Cycle and Process	CO 2	T1
24	Datamining Sequence System	CO 2	T1

Lecture No	Topics to be Covered	COs	Reference
25	Introduction to Decision support system	CO 2	T1
26	Concepts of Building of Information Systems	CO 2	T1
27	Business intelligence and knowledge management system.	CO 2	T1
28	Information system planning	CO 2	T1
29	Evaluation and maintenance of information system	CO 2	T1
30	system acquisition System development stages, system development approaches	CO 2	T1
31	Concepts of Building of Information Systems	CO 3	T1
32	Business intelligence and knowledge management system.	CO 3	T1
33	Information system planning	CO 3	T1
34	Evaluation and maintenance of information system	CO 3	T1
35	Nolan Stage Models, Assumptions	CO 3	T1
36	Information Resource Management	CO 3	T1
37	Organizational structure and Location of MIS	CO 3	T1
38	System Implementation, Evolution and Maintenance of IS	CO 3	T1
39	Evolution Classes	CO 3	T1
40	Building of Information Systems	CO 3	T1
41	System development life cycle	CO 3	T1
42	system acquisition System development stages, system development approaches	CO 4	T1
43	Requirement determination, strategies for requirement determination, structured analysis tools	CO 4	T1
44	System design, design objectives, conceptual design, design methods and detailed system design.	CO 4	T1
45	System development models: Waterfall model, system development life cycle, v-model	CO 4	T1
46	Cyber Crime, categories of Cyber Crime	CO 5	T1
47	Types of Cyber Crime	CO 5	T1
48	Cyber Crime and information securitys	CO 5	T1
49	Classification of cyber criminals	CO 5	T1
50	Cybercrime legal perspectives	CO 5	T1
61	Cyber Crimean Indian perspective	CO 6	T1
62	Indian information technology act200	CO 6	T1

Lecture No	Topics to be Covered	COs	Reference
63	Cyber Crime ERA	CO 6	T1
QUESTION BANK DISCUSSION			
64	Problem solving and Question Bank Discussion of Unit 1	CO 1	T-1, R-2
65	Problem solving and Question Bank Discussion of Unit 2	CO 2	T-2, R-2
66	Problem solving and Question Bank Discussion of Unit 3	CO 3, 4	T-1, R-1
67	Problem solving and Question Bank Discussion of Unit 4	CO 5	T-2, R-2
68	Problem solving and Question Bank Discussion of Unit 5	CO 6	T-1, R-2
69	Case Study Discussion		

Prepared By:
Ms. D Sandhya Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal - 500 043, Hyderabad, Telangana

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	DISASTER MANAGEMENT				
Course Code	CMBC24				
Programme	MBA				
Semester	II				
Course Type	PROFESSIONAL ELECTIVE -III				
Regulation	IARE-PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3		3	-	-
Chief Coordinator	Mr. Nunna Suresh, Assistant Professor				

I. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	-

II. COURSE OVERVIEW:

Disaster Management course imparts knowledge related to the disaster including preparedness, mitigation and rehabilitation. Disaster Management helps in the time of emergency, natural calamity and man-made calamity. This course reduces the potential losses from hazards, assure prompt and appropriate assistance to the victims of a disaster, and achieve a rapid and effective recovery.

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Compensation and Reward Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✗	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into five units and each unit carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each unit. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table:1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
0%	Remember
66.67%	Understand
33.37%	Apply
0%	Analyze
0%	Evaluate
0%	Create

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively. The CIE exam is conducted for 25 marks of 2 hours duration consisting of two parts. Part–A shall have five compulsory questions of one mark each. In part–B, four out of five questions have to be answered where, each question carries 5 marks. Marks are awarded by taking average of marks scored in two CIE exams.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

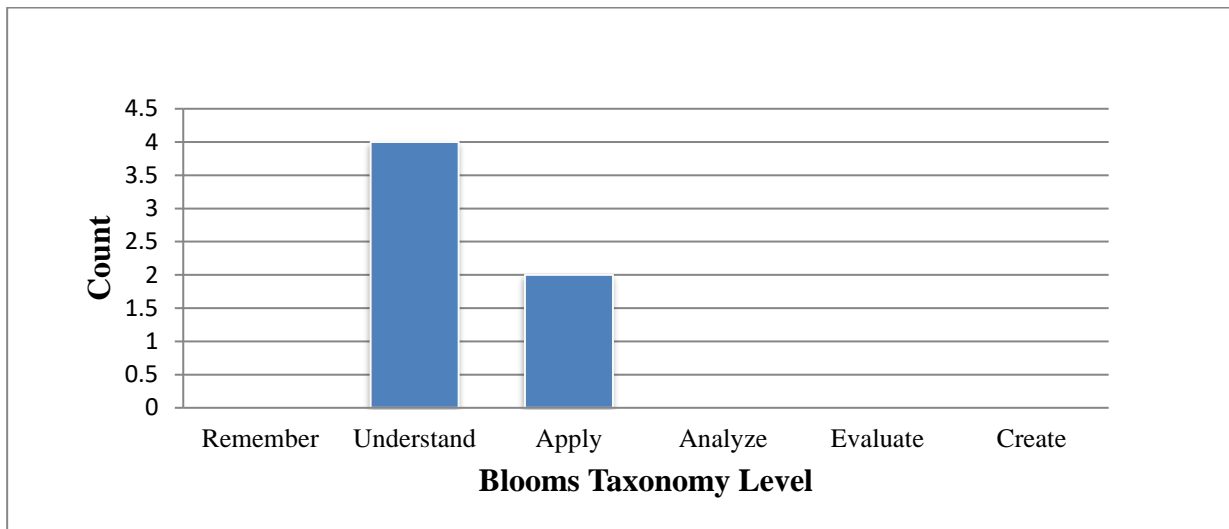
The course should enable the students to:	
I	Disaster management types, trends, causes, consequences and control of disasters
II	Disaster management theories (cycle, phases) and the framework.
III	International disaster management experience to identify gaps and best practices.
IV	Disaster risk management institutional processes in India.
V	The applications of science and technology to disaster management

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:

Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Outline the disaster management concepts to reduce the risks and consequences.	Understand
CO 2	Discuss various aspects of emergencies and society's role for disaster communication to get an immediate response	Understand
CO 3	Analyze the concept of disaster communication for experiences of the international disaster management efforts.	Understand
CO 4	Demonstrate the critical analysis of international disaster management and identify gaps that improves strong coordination.	Apply
CO 5	Recognize Disaster Administration to reduce the vulnerability of the disaster	Understand
CO 6	Apply the scientific tools of disaster management to prevent 88the risk involved in natural disasters.	Apply

COURSE KNOWLEDGE COMPETENCY LEVELS



VII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	1	Lectures
PO 2	Decision making skills: An ability to analyze a problem identifies, formulate and use the appropriate managerial skills for obtaining its solution.	1	Lectures
PO 3	Ethics: Ability to develop value-based leadership ability.	2	Assignments
PO 5	Leadership skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	3	Lectures
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications	3	Lectures

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
CO 1	√	-	-	-	-	-	-	-
CO 2	√	-	√	-	-	-	-	-
CO 3	-	√	-	-	-	-	-	-
CO 4	-	-	√	-	-	-	-	-
CO 5	-	√	-	-	√	-	√	-
CO 6	-	-	-	-	√	-	-	-

X. MAPPIN JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Understand the concept of disaster management that helps to resolve organizational problems.	1
CO 2	PO 1	Understand the concept of disaster management that helps to resolve organizational problems	1
	PO 3	Discuss the concepts of environmental hazards that reduce potential losses and develop a leader-based ability to face risks.	2
CO 3	PO 2	Analyze various problems in the organization and take right decision to get optimum solution.	1
CO 4	PO 3	Identify the causes and hazardous effects of earthquakes for the survival of the community.	2
CO 5	PO 2	Analyze various problems in the organization and take right decision to get optimum solution.	1
	PO 7	Ability to conduct strategic analysis using theoretical and practical applications	4
CO 6	PO 5	Recognize issues and challenges arising after disaster in the organization.	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	1	-	-	-	-	-	-	-
CO 2	1	-	2	-	-	-	-	-
CO 3	-	1	-	-	-	-	-	-
CO 4	-	-	2	-	-	-	-	-

CO 5	-	1	-	-	3	-	3	-
CO 6	-	-	-	-	3	-	-	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	50%	-	-	-	-	-	-	-
CO 2	50%	-	66.3%	-	-	-	-	-
CO 3	-	33%	-	-	-	-	-	-
CO 4	-	-	66.3%	-	-	-	-	-
CO 5	-	33%	-	-	60%	-	75%	-
CO 6	-	-	-	-	60%	-	-	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**

0 – $0 \leq C \leq 5\%$

–No correlation;

1 – $5 < C \leq 40\%$

– Low/ Slight;

2 – $40\% < C < 60\%$

–Moderate.

3 – $60\% \leq C < 100\%$

– Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	1	-	-	-	-	-	-	-
CO 2	1	-	2	-	-	-	-	-
CO 3	-	1	-	-	-	-	-	-
CO 4	-	-	2	-	-	-	-	-
CO 5	-	1	-	-	2	-	3	-
CO 6	-	-	-	-	2	-	-	-
TOTAL	2	2	4	-	4	-	3	-
AVERAGE	1	1	2	0	2	0	3	0

XV. ASSESSMENT METHODOLOGIES–DIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
X	Assessment of Mini Projects by Experts		

XVI. ASSESSMENT METHODOLOGIES-INDIRECT

√	Early Semester Feedback	√	End Semester OBE Feedback
X	Assessment of mini projects by experts		

XVII. SYLLABUS

UNIT-I	TYPES, TRENDS, CAUSES, CONSEQUENCES AND CONTROL OF DISASTERS
Geological Disasters (earthquakes, landslides, tsunami, mining); Hydro-Meteorological Disasters (floods, cyclones, lightning, thunder-storms, hail storms, avalanches, droughts, cold and heat waves); Biological Disasters (epidemics, pest attacks, forest fire); Technological Disasters (chemical, industrial, radiological, nuclear) and Manmade Disasters (building collapse, rural and urban fire, road and rail accidents, nuclear, radiological, chemicals and biological disasters); Global Disaster Trends – Emerging Risks of Disasters – Climate Change and Urban Disasters.	
UNIT-II	DISASTER MANAGEMENT CYCLE AND FRAMEWORK
Disaster Management Cycle – Paradigm Shift in Disaster Management Pre-Disaster – Risk Assessment and Analysis, Risk Mapping, Prevention and Mitigation of Disasters, Early Warning System; Preparedness, Capacity Development; Awareness During Disaster – Evacuation – Disaster Communication – Search and Rescue – Emergency Operation Centre – Incident Command System– Relief and Rehabilitation – Post-disaster – Damage and Needs Assessment, Restoration of Critical Infrastructure – Early Recovery – Reconstruction and Redevelopment.	
UNIT-III	INTERNATIONAL DISASTER MANAGEMENT EXPERIENCE
International Disaster Management Experience: International disaster management efforts during Spanish Flu (1918), Tsunamis (2004) and COVID (2019). The Cuban Model of Hurricane Risk Management. Japan’s Emergency Management and response System. Bangladesh multi-hazard risk reduction Model. Critical analysis of international disaster management experience- identifying gaps and best practices.	
UNIT-IV	DISASTER ADMINISTRATION
Disaster Administration: United Nations and its Disaster Management Mechanism UNDP, UNDRR, WHO. Disaster Administration in India: Disaster Management Authority at National, State and District levels; Allied governmental bodies, institutions and mechanisms/resources for Disaster Management; State and National Disaster Mitigation Funds. Gaps in Disaster Policy and Administration	
UNIT-V	APPLICATIONS OF SCIENCE AND TECHNOLOGY FOR DISASTER MANAGEMENT
Geo-informatics in Disaster Management (RS, GIS, GPS and RS) Disaster Communication System (Early Warning and Its Dissemination) Land Use Planning and Development Regulations Disaster Safe Designs and Constructions Structural and Non-Structural Mitigation of Disasters S&T Institutions for Disaster Management in India.	
Text books	
<ol style="list-style-type: none"> Rivera, Jason D., ed. “Disaster and Emergency Management Methods: Social Science Approaches in Application”, Routledge, 8thEdition, 2021. Kapoor, Mukesh. “Disaster management”, Saurabh Publishing House, 6thEdition, 2020. Elvas, Luís B., "Disaster Management in Smart Cities", Smart Cities, 4thEdition, 2021. D.R Khullar, "Environment & Disaster Management”, 3rdEdition, 2021. 	

<ol style="list-style-type: none"> 5. Brebbia, C. A., ed. "Disaster Management", WIT Press, 6th Edition, 2018. 6. Frumkin, Howard, ed. "Environmental health: from global to local", John Wiley & Sons, 11th Edition, 2016. 7. Encyclopedia of Disasters – Environmental Catastrophes and Human Tragedies, Vol. 1 & 2, Angus M. Gunn, Greenwood Press, 2008. 8. Encyclopedia of disaster management, Vol I, II and III. Disaster management policy and administration, S L Goyal, Deep & Deep, New Delhi, 2006.
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<ol style="list-style-type: none"> 1. Manual on natural disaster management in India, M C Gupta, NIDM, New Delhi 2. R K Bhandani, "An overview on natural & man-made disasters and their reduction", CSIR, New Delhi 3. World Disasters Report, International Federation of Red Cross and Red Crescent, Switzerland, 2009. 4. Coppola D P, "Introduction to International Disaster Management", Elsevier Science London, 2007. 5. Disasters in India Studies of grim reality, Anu Kapur & others, 2005, 283 pages, Rawat Publishers, Jaipur 6. Management of Natural Disasters in developing countries, H.N. Srivastava & G.D. Gupta, Daya Publishers, Delhi, 2006, 201 pages 7. H. K. Gupta (Ed) Disaster Management, Universities Press, 2nd Edition, 2003.
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<ol style="list-style-type: none"> 1. http://ndmindia.nic.in/disaster_management_in_india_09052017.pdf 2. http://epdfiles.engr.wisc.edu/dmcweb/AA02AimandScopeofDisasterManagement.pdf
E-Text Books
<ol style="list-style-type: none"> 1. https://www.iare.ac.in/sites/default/files/lecture_notes/dm%20notes.pdf 2. http://www.cbse.nic.in/natural%20hazards%20&%20disaster%20management.pdf 3. http://196.223.158.148/bitstream/handle/123456789/619/Improving%20Disaster%20Management.pdf?sequence=1&isAllowed=y 4. https://books.google.co.in/books?hl=en&lr=&id=s6oxEraqWWwC&oi=fnd&pg=PP1&dq=disaster+MANAGEMENT&ots=tTefaw793r&sig=2SXMNkQHRieKKXn4dLFRg0ljkQY&redir_esc=y#v=onepage&q=disaster%20MANAGEMENT&f=false 5. https://www.mdpi.com/2624-6511/4/2/42

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
2	Geological Disasters (earthquakes, landslides, tsunami, mining)	CO1	T1, T2
3	Hydro-Meteorological Disasters (floods, cyclones, lightning,)	CO1	T1, T2
4	Hydro-Meteorological Disasters (thunder-storms, hail storms avalanches);	CO1	T1, T2
5	Hydro-Meteorological Disasters (droughts, cold and heat waves)	CO1	T1, T2
6	Biological Disasters (epidemics, pest attacks, forest fire)	CO1	T2, R1, R2
7	Technological Disasters (chemical, industrial, radiological, nuclear)	CO1	T3, R1, R2

Lecture No	Topics to be Covered	COs	Reference
8	Manmade Disasters (building collapse, rural and urban fire, road and rail accidents)	CO1	T2, R1, R2
9	Manmade Disasters (nuclear, radiological, chemicals and biological disasters)	CO1	T3, R1, R2
10	GlobalDisaster Trends	CO1	T1, R1, R4
11	Emerging Risks of Disasters	CO1	T1, R1, R4
12	Climate Change and Urban Disasters.	CO1	T1, R1, R4
13	Disaster Management Cycle	CO2	T1, T3
14	Paradigm Shift in Disaster Management	CO2	T1, T3
15	Risk Assessment and Analysis, Risk Mapping	CO2	T1, T3
16	Prevention and Mitigation of Disasters,	CO2	T2, R1, R3
17	Early Warning System; Preparedness, Capacity Development;	CO2	T2, R1, R3
18	Awareness During Disaster – Evacuation – Disaster Communication	CO2	T2, R1, R3
19	Search and Rescue – Emergency Operation Centre – Incident Command System	CO2	T2, R1, R4
20	Relief Rehabilitation – Post-disaster	CO2	T3, R1, R2
21	Damage and Needs Assessment	CO2	T3, R1, R2
22	Restoration of CriticalInfrastructure	CO2	T3, R1, R2
23	Early Recovery	CO2	T3, R1, R2
24	Reconstruction and Redevelopment.	CO2	T3, R1, R2
25	International Disaster Management Experience: International disaster management efforts during Spanish Flu (1918),) and	CO3	T1, R1, R2
26	International Disaster Management Experience: Tsunamis (2004	CO3	T1, R1, R2
27	International Disaster Management Experience: COVID (2019).	CO3	T1, R1, R2
28	The Cuban Model of Hurricane Risk Management.	CO3	T2, R3, R4
29	The Cuban Model of Hurricane Management facing problems	CO3	T2, R3, R4
30	Japan’s Emergency Management and response System.	CO4	T3, R1, R2
31	Japan’s Emergency Management policy at time of disaster	CO4	T3, R1, R2
32	Bangladesh multi-hazard risk reductionModel	CO4	T3, R1, R2
33	Critical analysis of international disaster management experience	CO4	T3, T2, R2
34	Critical analysis of international disaster management experience how to using the other situations	CO4	T3, T2, R2
35	Identifying gaps and best practices	CO4	T3, T2, R2
36	Disaster Administration: United Nations and its Disaster Management Mechanism,	CO5	T2, R1, R2

Lecture No	Topics to be Covered	COs	Reference
37	Disaster Administration: UNDP	CO5	T2, R1, R2
38	Disaster Administration: UNDRR	CO5	T2, R1, R2
39	Disaster Administration: WHO	CO5	T2, R1, R2
40	Disaster Administration in India: Disaster Management Authority at National	CO5	T1, T2
41	Disaster Administration in India: Disaster Management State levels	CO5	T1, T2
42	Disaster Administration in India: Disaster Management Authority District levels	CO5	T1, T2
43	Allied governmental bodies, Management;	CO5	T2, R1, R2
44	Institutions and mechanisms/resources for Disaster	CO5	T2, R1, R2
45	State and National Disaster Mitigation Funds.	CO5	T2, R1, R2
46	Gaps in Disaster Policy and Administration	CO5	T2, R1, R2
47	Allied governmental bodies, Management;	CO5	T2, R1, R2
48	Bangladesh multi-hazard risk reduction Model	CO5	T2, R1, R2
49	Geo-informatics in Disaster Management (RS, GIS, GPS and RS)	CO6	T3, R1, R2
50	Disaster Communication System(Early Warning)	CO6	T3, R1, R2
51	Disaster Communication System Dissemination	CO6	T3, R1, R2
52	Land Use Planning and Development Regulations	CO6	T1, T2
53	Disaster Safe Designs and Constructions	CO6	T1, T2
54	Structural Mitigation of Disasters Disaster Management in India	CO6	T1, R1, R2
55	Non-Structural Mitigation of Disasters Disaster Management in India	CO6	T1, R1, R2
56	S&T Institutions for Disaster Management in India	CO6	T1, R1, R2
57	Structural and Non-Structural Mitigation of Disasters S&T Institutions for Disaster Management in India	CO6	T1, R1, R2
58	Applications Of Science and Technology for Disaster Management	CO6	T1, R1, R2
59	Structural and Non-Structural Mitigation of Disasters implementation	CO6	T1, R1, R2
60	Land Use Planning and Development Regulations case study	CO6	T1, R1, R2
QUESTION Bank DISCUSSION			
61	Problem solving and Question Bank Discussion of Unit 1	CO 1	T-1, R-2
62	Problem solving and Question Bank Discussion of Unit 2	CO 2	T-2, R-2
63	Problem solving and Question Bank Discussion of Unit 3	CO 3,4	T-1, R-1
64	Problem solving and Question Bank Discussion of Unit 4	CO 5	T-2, R-2

Lecture No	Topics to be Covered	COs	Reference
65	Problem solving and Question Bank Discussion of Unit 5	CO 6	T-1, R-2
66	Case Study Discussion	-	-

Prepared by:

Mr. Nunna Suresh, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
 Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTOR

Course Title	BUSINESS ANALYTICS				
Course Code	CMBC31				
Program	MBA				
Semester	THIRD				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	1	4	-	-
Course Coordinator	Dr. T Vara Lakshmi, Professor				

I. COURSE OVERVIEW:

The course intends to provide knowledge of basic concept of business analytics like data, data science and its challenges. This course is going to give at length exposure on different types of analytics like data warehousing and data marts, meta data and data transformation and also gives knowledge on data mining and text mining and text analytics and web mining and data simulation and automated decision systems gives exposure on the concepts of hadoop, python, machine learning and artificial intelligence for the purpose of analysis and decision making in business.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC19	I	Management Information Systems

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Business Analytics	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

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10 %	Evaluate
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Component		Marks	Total Marks
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	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

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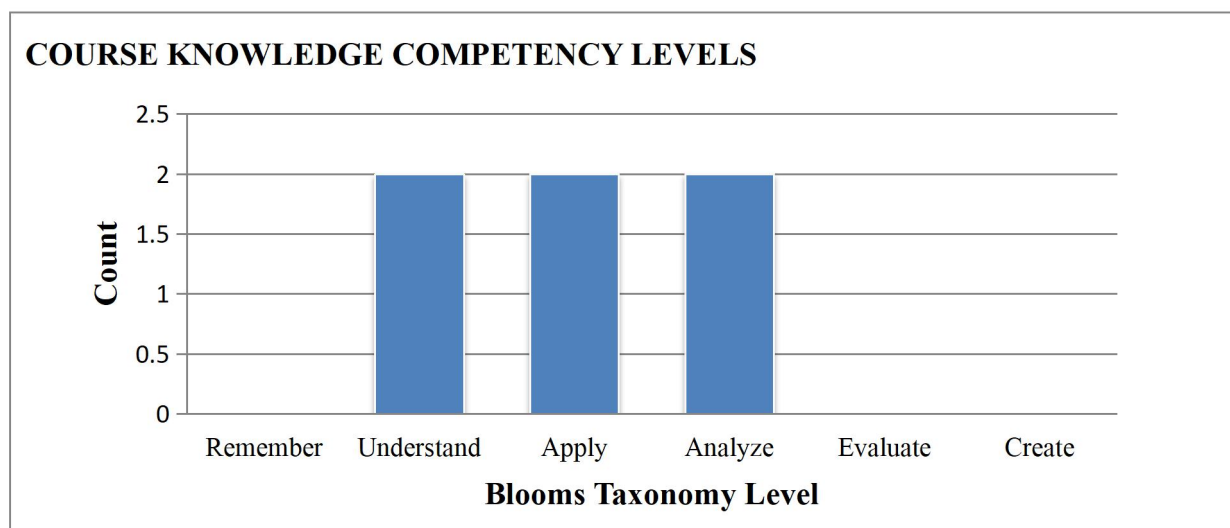
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	The data handling techniques and analytical tools that can be used for decision making.
II	Data warehousing concepts, data mining techniques.
III	Data mining and text mining and web mining techniques.
IV	Prescriptive Analytics and its usage to help business to decide a course of action
V	Big data technologies for drawing analytics in various functional areas of business.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Contrast on concepts, challenges and framework of business analytics for making effective business decisions.	Understand
CO 2	Demonstrate data warehousing architecture and data marts for reporting and performance measurement through visual analytics.	Apply
CO 3	Summarize the data mining, and text mining to extract information from the web, analyze weblogs, etc.	Analyze
CO 4	Develop suitable system for web mining process to web analytics and easy access of data.	Analyze
CO 5	Experiment with prescriptive analytics and its models to develop effective decision making support system.	Apply
CO 6	Distinguish the Finance, HR and Marketing analytics and big data technologies for applying them in their respective fields.	Understand

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	3	Assignments
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2.75	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully career paths, to be an entrepreneur, and a zest for higher studies.	3	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	√	-	-	-	√
CO 2	-	√	-	-	-	-	-	√
CO 3	-	√	-	-	-	-	√	√
CO 4	√	√	-	√	-	-	√	√
CO 5	√	√	-	-	-	-	-	√
CO 6	-	√	-	-	-	-	√	√

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of business analytics to understand the technical system and solve the business problems.	2
	PO 2	Describe (knowledge) the importance of analytics in the for business developments in the context of technical decisions.	3
	PO 4	Interpret (knowledge) about the technological and analytical tools to communicate effectively with the users to contribute to the development of the company.	3
	PO 8	Conclude the applications of business analytics to develop technical skills to face the competitive world successfully career paths, to be an entrepreneur.	2
CO 2	PO 2	Comprehend and write effective reports of organizations by developing good communicational aspects with data warehouses.	3
	PO 8	Recognizing (knowledge) the contribution of analytics (application) by its functional strategic principles and methodology	2
CO 3	PO 2	Apply (knowledge) the data mining and its importance of managing the data analysis of the organizations.	2
	PO 7	Recognize the importance of text analytics in implementing strategies of the enterprise maintenance.	3
	PO 8	Make use of data mining tools to face the competitive world successfully with effective business analysis reports.	2
CO 4	PO 1	Construct the technical models in the organizational activities to communicate with the decision makers.	2
	PO 2	Develop the usage of web analytics in various fields for data-based decision making.	2
	PO 4	Examine the significance of web mining to formulate profitable strategies in accessing of data.	2
	PO 7	Apply the web mining strategies to conduct strategic analysis using theoretical and practical applications.	2
	PO 8	Make use of web analytics to face the competitive world successfully with effective business analysis reports.	2
CO 5	PO 1	Derive the existence possibility of prescriptive analytics in meeting the practical solutions of the organization.	2
	PO 2	Differentiate the value of the firm and relevance for future sustainability to analyze the managerial strategies in the business environment.	2
	PO 8	Outline the contribution of implementable solutions to meet the activities of the enterprises.	2
CO 6	PO 2	Explain the future of big data techniques with appropriate implementable strategies.	2
	PO 7	Examine the strategies in maintaining the data while implementing the managerial decisions of businesses.	3
	PO 8	Compare the best implementable techniques for future business analytics to be a leader in the changing business scenario.	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	-	3	-	-	-	2
CO 2	-	3	-	-	-	-	-	2
CO 3	-	2	-	-	-	-	3	2
CO 4	2	2	-	2	-	-	2	2
CO 5	2	2	-	-	-	-	-	2
CO 6	-	2	-	-	-	-	3	2

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	100.00	-	100.00	-	-	-	100.00
CO 2	-	100.00	-	-	-	-	-	100.00
CO 3	-	66.66	-	-	-	-	75.00	100.00
CO 4	100.00	66.66	-	66.66	-	-	50.00	100.00
CO 5	100.00	66.66	-	-	-	-	-	100.00
CO 6	-	66.66	-	-	-	-	75.00	100.00

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, 0 being **no correlation**, 1 being the **low correlation**, 2 being **medium correlation** and 3 being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation;

2 – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	3	-	-	-	3
CO 2	-	3	-	-	-	-	-	3
CO 3	-	3	-	-	-	-	3	3

CO 4	3	3	-	3	-	-	2	3
CO 5	3	3	-	-	-	-	-	3
CO 6	-	3	-	-	-	-	3	3
TOTAL	9	18	-	6	-	-	8	18
AVERAGE	3	3	-	3	-	-	2.75	3

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO4, PO7, PO8	SEE Exams	PO1, PO2, PO4, PO7, PO8.	Assignments	PO1, PO4	Seminars	PO 2, PO 7, PO 8.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO BUSINESS ANALYTICS
Introduction to Analytics, Data Science, Big Data, Applications of Analytics in different Domains, Business Analytics - Challenges from Outside and Within, BASP (Business Analytics Success Pillars) framework, Analyst's Role in the BA Model - Three Requirements the Analyst Must Meet.	
UNIT-II	DESCRIPTIVE ANALYTICS
Data Warehousing - Introduction, Characteristics, Data Marts, Meta Data, Data Warehouse Architecture, Data Extraction, Transformation and Load Processes in a Data Warehouse Business Reporting and Business Performance Measurement and Visual Analytics.	
UNIT-III	PREDICTIVE ANALYTICS
Data Mining - Introduction, Characteristics, and Data Mining Process. Text Mining - Introduction, Text Analytics, Applications and Sentiment Analytics and Applications. Web Mining - Introduction, Web Analytics.	
UNIT-IV	PRESCRIPTIVE ANALYTICS
Prescriptive Analytics - Introduction, Prescriptive Models - Simulation, Heuristic, Automated Decision Systems and Expert Systems, Knowledge Management.	
UNIT-V	FUTURE OF BIG DATA
Big Data: Definition. Big Data Technologies - Hadoop, R, Python, Machine Learning and Artificial Intelligence. Data Scientist, Applications of Analytics in different Domains. Fundamentals of Marketing Analytics, Finance Analytics, HR - Analytics and Supply Chain Analytics.	

Textbooks:
<ol style="list-style-type: none"> 1 U.Dinesh Kumar, “Business Analytics”, Wiley, 2017. 2 Laursen, Thorlund, “Business Analytics for Managers”, Wiley, 2nd edition, 2017. 3 Sahil Raj, “Business Analytics”, Cengage Learning, 3rd edition, 2015 4 Albright, Winston, “Business Analytics - Data Analysis and Decision Making”, Cengage Learning, 5th edition, 2015. 5 Jac Fitz, Mattox II, “Predictive Analytics for Human Resources”, Wiley, 3rd edition, 2015 6 Ramesh Sharada, Dursun Delen, Efraim Turban, “Business Intelligence and Analytics”, Pearson, 10th edition, 2014. 7 Jean Paul Isson, Jesse S.Harriot, “Win with Advanced Business Analytics”, Wiley, 1st edition, 2012. 8 Gert H.N. Laursen, Jesper Thorlund, “Business Analytics for Managers”, John Wiley and Sons, Inc.2010.
Reference Books:
<ol style="list-style-type: none"> 1. Artun, Levin, “Predictive Marketing”, Wiley, 2nd edition, 2015. 2. RN Prasad, Seema Acharya, “Fundamentals of Business Analytics”, Wiley, 2011.

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
1	Introduction to Analytics.	CO1	T-1, R-2
2	Data Science.	CO1	T-2, R-2
3	Big Data.	CO1	T-1, R-2
4	Applications of Analytics in different Domains.	CO1	T-1, R-2
5	Business Analytics - Challenges from Outside and Within	CO1	T-2, R-2
6	BASP (Business Analytics Success Pillars) framework.	CO1	T-1, R-1
7	Analyst’s Role in the BA Model.	CO1	T-2, R-2
8	Three Requirements the Analyst Must Meet.	CO1	T-1, R-2
9	Data Warehousing - Introduction.	CO2	T-2, R-2
10	Data Warehousing - Characteristics.	CO2	T-1, R-2
11	Data Marts	CO2	T-1, R-2
12	Meta Data	CO2	T-2, R-2
13	Data Warehouse Architecture.	CO2	T-1, R-2
14	Data Extraction.	CO2	T-2, R-2
15	Transformation and Load Processes in a Data Warehouse.	CO2	T-1, R-1
16	Business Reporting and Business Performance Measurement and Visual Analytics.	CO2	T-2, R-2

Lecture No	Topics to be Covered	COs	Reference
17	Data Mining - Introduction.	CO3	T-1, R-2
18	Data Mining - Characteristics.	CO3	T-2, R-2
19	Data Mining Process.	CO3	T-2, R-1
20	Text Mining - Introduction.	CO3	T-2, R-2
21	Text Analytics.	CO3	T-1, R-1
22	Applications and Sentiment Analytics and Applications.	CO3	T-2, R-2
23	Web Mining - Introduction.	CO4	T-1, R-2
24	Web Analytics	CO4	T-1, R-1
25	Web Analytics	CO4	T-1, R-1
26	Web Analytics	CO4	T-2, R-1
27	Web Analytics	CO4	T-1, R-1
28	Web Analytics	CO4	T-1, R-2
29-30	Web Analytics	CO4	T-1, R-1
31	Prescriptive Analytics - Introduction.	CO5	T-1, R-1
32	Prescriptive Models.	CO5	T-1, R-1
33	Prescriptive Models - Simulation, Heuristic, Automated Decision Systems and Expert Systems.	CO5	T-2, R-1
34	Prescriptive Models - Simulation, Heuristic, Automated Decision Systems and Expert Systems.	CO5	T-1, R-1
35	Prescriptive Models - Simulation, Heuristic, Automated Decision Systems and Expert Systems.	CO5	T-1, R-1
36	Prescriptive Models - Simulation, Heuristic, Automated Decision Systems and Expert Systems.	CO5	T-1, R-1
37	Prescriptive Models - Simulation, Heuristic, Automated Decision Systems and Expert Systems.	CO5	T-1, R-2
38	Knowledge Management.	CO5	T-1, R-1
39	Big Data.	CO6	T-1, R-1
40	Big Data Technologies - Hadoop, R, Python, Machine Learning and Artificial Intelligence.	CO6	T-1, R-1
41	Big Data Technologies - Hadoop, R, Python, Machine Learning and Artificial Intelligence.	CO6	T-1, R-1
42-44	Big Data Technologies - Hadoop, R, Python, Machine Learning and Artificial Intelligence.	CO6	T-1, R-2
45	Big Data Technologies - Hadoop	CO6	T-1, R-1
46	R, Python, Machine Learning	CO6	T-1, R-1
47	Artificial Intelligence	CO6	T-1, R-1
48	Big Data Technologies - Hadoop, R, Python, Machine Learning and Artificial Intelligence.	CO6	T-2, R-1

Lecture No	Topics to be Covered	COs	Reference
49	Big Data Technologies - Hadoop,	CO6	T-1, R-1
50	R, Python, Machine Learning and Artificial Intelligence.	CO6	T-1, R-1
51	Data Scientist.	CO6	T-1, R-1
52	Data Scientist importance	CO6	T-1, R-1
53	Applications of Analytics in different Domains	CO6	T-2, R-1
54	Applications of Analytics in different Domains	CO6	T-2, R-1
55	Fundamentals of Marketing Analytics.	CO6	T-2, R-1
56	Finance Analytics	CO6	T-1, R-1
57	HR - Analytics	CO6	T-2, R-1
58	Supply Chain Analytics	CO6	T-1, R-1
59	Revision of analytics	CO6	T-2, R-1
60	Questions and Answers	CO6	T-1, R-1

Prepared By:
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HOD, MBA



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MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	BUSINESS RESEARCH METHODS				
Course Code	CMBC29				
Programme	MBA				
Semester	THREE				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	--	--
Course Coordinator	Dr. K Jagannayaki, Professor				

I. COURSE OVERVIEW:

The course gives knowledge on various concepts of research methodologies of nature of research and types of research and formulation of hypothesis and also concentrates on various kinds of data collection techniques at various situations and how to analyze the data in a systematic manner and measuring the data by implementing various scaling techniques and to test hypothesis and its testing methods and the data analysis by applying various kinds of techniques in various situations.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	Credits
--	--	--	--	--

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Business Research Methods	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

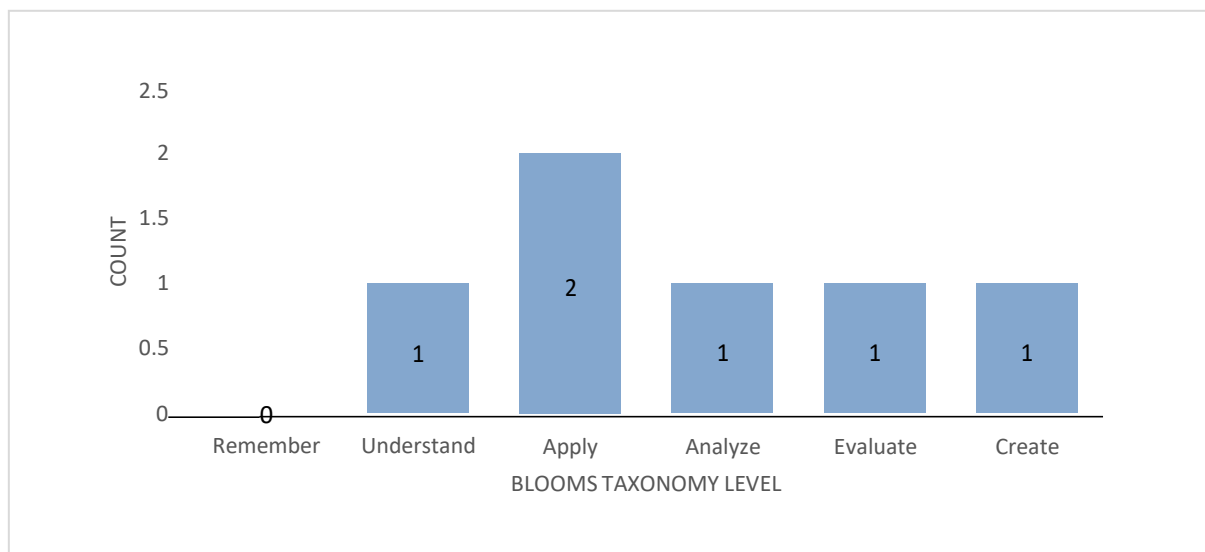
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	The nature, importance, process and types of business research.
II	Data collect methods and sampling technique types available for data collection.
III	Scaling techniques available to best fit for research and data projection methods.
IV	Types of hypothesis and its testing tools for complex problems.
V	Data analysis and interpretation in relation to research process.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Develop the basic framework of research process for making business solutions.	Understand
CO 2	Formulate the hypothesis to answer various research questions	Create
CO 3	Choose appropriate techniques for collecting data in research studies.	Apply
CO 4	Compare scaling techniques to be used for data collecting instruments	Analyze
CO 5	Appraise the data analysis by statistical techniques for data validity and reliability.	Evaluate
CO 6	Apply the relevant data analysis techniques for effective research.	Apply

COURSE KNOWLEDGE COMPETENCY LEVEL



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	1	Assignment
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	CIE/AAT
PO6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.	2	Seminar/ Conferences/ Research papers
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	3	CIE/AAT

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	-	-	-	-	-
CO 2	-	√	-	√	-	√	-	-
CO 3	-	√	√	√	-	-	-	-
CO 4	-	√	√	-	-	-	-	-
CO 5	√	√	-	-	-	√	√	-
CO 6	√	√	-	-	-	-	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of research and to an extent appreciate (understand) the importance of research process for making business solutions	2
	PO2	Understand the various research designs to analyze various research questions.	2
CO 2	PO 2	Describe the basic concept of hypotheses by applying (knowledge) appropriate methods of hypotheses testing for decision making.	2
	PO4	To identify the key issues and provide relevant data that helps to make effective business decisions.	3
	PO 6	Examine (knowledge) and familiarize (understand) the data collection methods and draw statistical inferences of selected samples for business analysis.	2
CO 3	PO 2	Recognizing (knowledge) the use of various data collection methods on this basis of nature of study and methodology.	2
	PO 3	Identify (knowledge) the conceptual framework of sampling design and errors in sampling selection.	2
	PO 4	Illustrate the conceptual framework of sample selection methods.	3
CO 4	PO 2	Describe (knowledge) the various scaling techniques to measure the attitudes that help to assess individual and group behaviour.	2
	PO 3	Identify the appropriate measurement of scales to analyse and suggest to get optimized solutions.	3
CO 5	PO 1	Appraise the data analysis by applying necessary statistical techniques to know the effectiveness of data	2
	PO 2	Distinguish the qualitative and quantitative methods for data analysis to determine appropriate solutions to the real life problems.	2
	PO 7	Measure the effectiveness of various statistical tools.	2
CO 6	PO 1	Examine the types of data analytics for strategic decisions in businesses.	2
	PO 2	Apply the needy data analysis techniques for ones research in doing their research.	2
	PO 7	Discuss (knowledge) the relevant techniques to assess data validity and reliability.	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	2	-	-	-	-	-	-
CO 2	-	2	-	3	-	2	-	-

CO 3	-	2	2	3	-	-	-	-
CO 4	-	2	3	-	-	-	-	-
CO 5	2	2	-	-	-	-	2	-
CO 6	1	2	-	-	-	-	2	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	66.67	-	-	-	-	-	-
CO 2	-	66.67	-	100.00	-	66.67	-	-
CO 3	-	66.67	66.67	100.00	-	-	-	-
CO 4	-	66.67	100.00	-	-	-	-	-
CO 5	100.00	66.67	-	-	-	-	50.00	-
CO 6	50.00	66.67	-	-	-	-	50.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	-	-	-	-	-
CO 2	-	3	-	3	-	3	-	-
CO 3	-	3	3	3	-	-	-	-
CO 4	-	3	3	-	-	-	-	-
CO 5	3	3	-	-	-	-	2	-
CO 6	2	3	-	-	-	-	2	-
TOTAL	8	18	6	6	-	3	4	-
AVERAGE	2.66	3	3	3	-	3	2	-

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1,PO2, PO6, PO7	SEE Exams	PO1,PO2, PO6, PO7	Assignments	PO1	Seminars	PO6
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	PO 1, PO 7						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO RESEARCH
Nature and Importance of Research-Role of Business Research-Aims of social research- Research Process – Types of Research –Defining Research Problem – Formulation of Hypothesis – Research Design.	
UNIT-II	DATA COLLECTION
Primary data and Secondary data -Tools and Techniques of Collecting Data. Methods of Collecting Data Determination of sample size and sampling procedures and techniques - Personal Interviews Telephone Interviews - Principles of good interview - Designing of Questionnaire – Self-administered questionnaires -the nature of field work management.	
UNIT-III	DATA ANALYSIS
Survey Research and Data Analysis: Measurement and Scaling – Nominal Scale – Ordinal Scale – Interval Scale – Ratio Scale – Guttman Scale – Likert Scale – Schematic Differential Scale. Data processing - Editing – Coding – Classification of Data – Tables and Graphic Presentation – Preparation and Presentation of Research Report.	
UNIT- IV	TESTING OF HYPOTHESIS
Tests of Hypothesis - Introduction to Null hypothesis Vs. Alternative hypothesis, Parametric Vs. Nonparametric tests - Procedure for testing of hypothesis - Tests of significance for small samples – Application - T-test - Chi Square test.	
UNIT – V	DATA ANALYSIS AND TECHNIQUES
Uni-variate and Bivariate Analysis - Tests of differences - T-test for comparing two means and test for comparing two proportions - Nature of multivariate analysis - Classifying Multivariate Techniques -Analysis of Dependence - Analysis of Interdependence and ANOVA for Complex Experimental Designs.(Using SPSS).	
Text books	
<ol style="list-style-type: none"> 1. C R Kothari and Gaurav Garg, “Research Methodology –Methods and Techniques” New Age international publishers, 8thEdition, 2019. 2. Donald R Cooper and Pamela S Schindler,” Business Research Methods”, 12thEdition, TMH, 2018. 	

<ol style="list-style-type: none"> 3. Deepak Chawla and Neena Sondhi “Research Methodology - Concepts and Cases”, Vikas Publications, 2018. 4. Naval Bajpai, “Business Research Methods”, Pearson Publications, 2nd Edition, 2017. 5. Deepak Chawla, Neena Sondhi, “Research Methodology Concepts”, Vikas Publications, 2 nd Edition, 2016. 6. William G. Zikmund Et al., “Business Research Methods”, Cengage Learning, 2016. 7. Wilkinson & Bhandarkar: “Methodology and Techniques of Social Research”, 2016 8. Prahalad Mishra, ” Business Research Methods”, Oxford University Press, 2015. 9. Ranjit Kumar, “Research Methodology “, 2nd Edition, Pearson publications, New Delhi, 2012.
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<ol style="list-style-type: none"> 1. Research Methodology- Concept and cases “Deepak Chawla&NeenaSodhi, Vikas publishing House, 2 nd Edition. 2. Business Research Methods “Donald R. Cooper Pramela S. Schindler J.K. Sharma 12th Edition, McGraw-Hill Education, New Delhi. 3. Business Research Methods and Statistics using SPSS” Robert P Burns Richard Burns” Sage Publications, Loss Angels.
Web References:
<ol style="list-style-type: none"> 1. https://play.google.com/books/reader?id=WK05AwAAQBAJ&hl=en&pg=GBS.PT56 2. https://play.google.com/books/reader?id=bKqEDwAAQBAJ&hl=en&pg=GBS.PT10 3. https://play.google.com/books/reader?id=pBeBAAAQBAJ&hl=en&pg=GBS.PR7.w.18.9.11 4. https://play.google.com/books/reader?id=335ZDwAAQBAJ&hl=en&pg=GBS.PT19.w.4.0.130 5. https://play.google.com/books/reader?id=CxhBDwAAQBAJ&hl=en&pg=GBS.PP20 6. https://play.google.com/store/books/details/K_N_Krishnaswamy_Management_Research_Methodology_I?id=iuGy9Jg6WvIC
E-Text Books:
<ol style="list-style-type: none"> 1. https://www.academia.edu/43821533/Research_Methodology_by_C_R_Kothari 2. http://bookboon.com/en/statistics-and-mathematics-ebooks 3. http://www.ebay.com/bhp/statistics-for-managers-using-microsoft-excel

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Introduction to Research, Meaning and Definitions	CO 1	T2
2	Characteristics of Research, Role and Significance of Research	CO 1	T2
3	Objectives of Research, Nature and Importance of Research	CO 1	T2
4	Role of Business Research	CO 1	T2
5	Aims of social research	CO 1	T2
6	Research Process	CO 1	T2
7	Types of Research	CO 1	T2

Lecture No	Topics to be covered	Course Outcomes	Reference
8	Defining Research Problem	CO 1	T2
9	Formulation of Hypothesis	CO 1	T2
10	Research Design	CO 1	T2
11	Primary data and Secondary data	CO 1	T2
12	Tools and Techniques of Collecting Data	CO 2	T1, T2
13	Methods of Collecting Data	CO 2	T1, T2
14	Personal Interviews	CO 2	T1, T2
15	Telephone Interviews	CO 2	T1, T2
16	Principles of good interview	CO 2	T1, T2
17	Designing of Questionnaire	CO 2	T1, T2
18	Self-administered questionnaires	CO 2	T1, T2
19	the nature of field work management	CO 2	T1, T2
20	Determination of sample size	CO 2	T1, T2
21	Sampling procedures and techniques	CO 2	T1, T2
22	Survey Research and Data Analysis-Introduction	CO 2	T1, T2
23	Measurement and Scaling-Nominal Scale	CO 2	T1, T2
24	Measurement and Scaling-Ordinal Scale	CO 2	T1, T2
25	Interval Scale – Ratio Scale	CO 3	T1,R3
26	Guttman Scale – Likert Scale	CO 3	T1,R3
27	Schematic Differential Scale.	CO 3	T1,R3
28	Data processing - Editing – Coding	CO 3	T1,R3
29	Classification of Data	CO 3	T1,R3
30	Tables and Graphic Presentation	CO 3	T1,R3
31	Preparation and Presentation of Research Report	CO 4	T1,R1
32	Tests of Hypothesis	CO 4	T1,R1
33	Introduction to Null hypothesis Vs. Alternative hypothesis	CO 4	T1,R1
34	Tails of tests, Type I & Type II errors	CO 4	T1,R1
35	Parametric Vs. Nonparametric tests	CO 4	T1,R1
36	Procedure for testing of hypothesis	CO 4	T1,R1

Lecture No	Topics to be covered	Course Outcomes	Reference
37	Tests of significance for small samples-Application - T-test - Chi Square test	CO 4	T1,R1
38	Univariate and Bivariate Analysis	CO 4	T1,R1
39	Tests of differences - T-test for comparing two means	CO 5	T1,T2
40	Tests of differences - T-test for comparing two means	CO 5	T1,T2
41	Tests of differences - T-test for comparing two means	CO 5	T1,T2
42	Tests of differences - T-test for comparing two means	CO 5	T1,T2
43	Test for comparing two proportions	CO 5	T1,T2
44	Test for comparing two proportions	CO 5	T1,T2
45	Test for comparing two proportions	CO 5	T1,T2
46	Nature of multivariate analysis - Classifying Multivariate Techniques	CO 5	T1,T2
47	Nature of multivariate analysis - Classifying Multivariate Techniques	CO 5	T1,T2
48	Factor Analysis	CO 5	T1,T2
49	Factor Analysis	CO 5	T1,T2
50	Cluster Analysis	CO 5	T1,T2
51	Cluster Analysis	CO 5	T1,T2
52	Multi Discriminant Analysis	CO 5	T1,T2
53	Multi Discriminant Analysis	CO 5	T1,T2
54	Multiple Regression Analysis	CO 6	T1,T2
55	Analysis of Dependence	CO 6	T1,T2
56	Analysis of Dependence	CO 6	T1,T2
57	Analysis of Interdependence	CO 6	T1,T2
58	Analysis of Interdependence	CO 6	T1,T2
59	ANOVA for Complex Experimental Designs.(Using SPSS).	CO 6	T1,T2
60	ANOVA for Complex Experimental Designs.(Using SPSS).	CO 6	T1,T2
QUESTION BANK DISCUSSION			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-1
63	Question Bank Discussions Unit 3	CO 3	T-1, R-1
64	Question Bank Discussions Unit 4	CO 4	T-1, R-1

Lecture No	Topics to be covered	Course Outcomes	Reference
65	Question Bank Discussions Unit 5	CO 5	T-1, R-1

Prepared by:
Dr. K Jagannayaki, Professor

HOD, MBA

**MASTER OF BUSINESS ADMINISTRATION****COURSE DESCRIPTION**

Course Title	PRODUCTION OPERATIONS MANAGEMENT				
Course Code	CMBC30				
Program	MBA				
Semester	III				
Course Type	Core				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	-	-
Course Coordinator	Mrs. S Sireesha, Assistant Professor				

I. COURSE OVERVIEW:

This course introduces major concepts and tools used in the design and use of operations systems in organizations. It introduces the discipline and the role the function plays in a value-creating organization. Emphasis is given both to familiarization of various production processes and service systems, and to quantitative analysis of problems/ issues arising in the management of operations. As competition becomes fiercer in an increasingly open and global marketplace, a company's survival and growth become greatly contingent on its ability to run its operations efficiently and to exploit its resources productively.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
--	--	--	--

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Production Operations Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
16.67%	Remember
50%	Understand
16.67%	Apply
16.67%	Analyze
16.67%	Evaluate
16.67%	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc

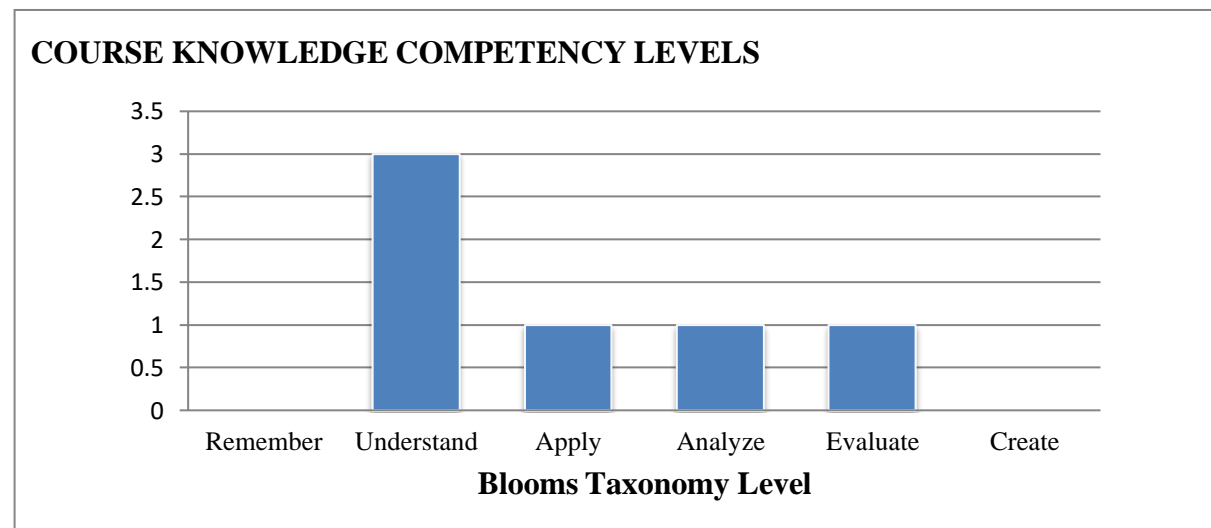
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	The concepts relating to production and production systems available for manufacturing units
II	Scheduling and layout alternatives to decide on plant location decisions.
III	The quality and quality determination with quality control charts and work study.
IV	Material requirement planning and materials budgeting for making production related decisions.
V	Stores management and inventory management techniques.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Identify and assess the procedures, methods, and concepts of production and operations management to get a better understanding of logistics and supply chain operations.	Apply
CO 2	Demonstrate the ability to schedule and control production processes in order to reduce production time and costs.	Understand
CO 3	Summarize the basic ideas of quality circles, quality assurance, and quality control to improve decision-making abilities.	Understand
CO 4	Conclude the quality processes, tools, and techniques in the manufacturing and service sectors to improve their operational performance.	Analyze

CO 5	Describe the Materials Requirement Planning and MRPII systems to choose the optimum quality.	Understand
CO 6	Recognize the importance of store management and inventory control to ensure their availability with minimum capital lock up.	Evaluate



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes (POs)		Strength	Proficiency Assessed by
PO1	Managerial skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments.
PO2	Decision making skills: An ability to analyze a problem identifies, formulate and use the appropriate managerial skills for obtaining its solution.	3	CIE/AAT
PO4	Communication skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	3	Seminars
PO6	Entrepreneurial and Innovation Skills: Demonstrate the skills in evaluating business opportunity and identifying sources of potential funding, and develop as successful entrepreneurs	2.5	Assignments
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	3	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	√	-	√	-	√	-	-

CO 2	-	√	-	-	-	√	√	-
CO 3	√	-	-	-	-	-	-	-
CO 4	√	-	-	-	-	-	-	-
CO 5	-	-	-	√	-	-	√	-
CO 6	-	√	-	-	-	√	-	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 4	Recollect (knowledge) the basic concept of derivative market system and to an extent appreciate (understand) the importance of financial system to promote the organized economy system to improve the financial literacy.	2
	PO 2	Describe (knowledge) the various services rendering by the customers from the derivatives market and new managerial developments in the financial sectors in the context of managerial decisions.	2
	PO 6	Interpret (knowledge) about services of the derivatives to communicate effectively with the customers to contribute to the economy development of the country.	3
CO 2	PO 7	Recognizing (knowledge) the contribution of forwards and futures markets which affects economy stability of country (application) by its functional strategic principles and methodology	3
	PO 2	Identify (knowledge) the appropriate pricing strategies and interest rate controlling the currency fluctuations in managing the stable financial system.	2
	PO 6	Demonstrate the currency fluctuations and its impact on in evaluating international business opportunities and to identify the sources of potential funding.	2
CO 3	PO 1	Apply (knowledge) the managerial principles and characteristics of options markets and its importance in managing the economy conditions of the country.	2
CO 4	PO 1	Construct the pricing models of currency options and hedging strategies in communicating with the customers to sell options products.	2
CO 5	PO 7	Derive the existence activities of commodity futures and swap products in meeting the needs and wants of the investors with its legal and ethical business aspects of international trade.	3
	PO 4	Understanding the business and economic conditions of the commodity derivatives to communicate the changing mindsets of the global tastes and preferences.	3
CO 6	PO 6	Examine the risk and its types in the risk management processes at swap markets while implementing the managerial decisions of financial businesses.	2
	PO 2	Explain the qualitative and quantitative measures for swap valuation with appropriate implantable strategies.	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes (COs)	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	3	-	3		3	-	-
CO 2	-	3	-	-	-	3	3	-
CO 3	2	-	-	-	-	-	-	-
CO 4	2	-	-	-	-	-	-	-
CO 5	-	-	-	3	-	-	3	-
CO 6	-	3	-	-	-	3	-	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	100%	-	100%		100%	-	-
CO 2	-	100%	-	-	-	100%	75%	-
CO 3	100%	-	-	-	-	-	-	-
CO 4	100%	-	-	-	-	-	-	-
CO 5	-	-	-	100%	-	-	75%	-
CO 6	-	100%	-	-	-	100%	-	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes (POs) / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	3	-	3		3	-	-
CO 2	-	3	-	-	-	3	3	-
CO 3	3	-	-	-	-	-	-	-
CO 4	3	-	-	-	-	-	-	-
CO 5	-	-	-	3	-	-	3	-
CO 6	-	3	-	-	-	3	-	-
TOTAL	6	9	-	6	-	9	6	-
AVERAGE	3	3	0	3	0	3		0

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO2	SEE Exams	PO1, PO2, PO4, PO6, PO7	Assignments	PO1, PO6	Seminars	PO 2, PO 4
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	PO1, PO7						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

Unit-I	INTRODUCTION TO OPERATIONS MANAGEMENT
Introduction to operations management, role of operations management in total management system, and interface between the operation systems and systems of other functional areas, process planning and process design, production planning and control: basic functions of production planning and control, production cycle, characteristics of process technologies, project, job shop, assembly, batch and continuous, inter relationship between product life cycle and process life cycle.	
Unit-II	SCHEDULING AND CONTROL OF PRODUCTION OPERATIONS
Aggregate planning, operations scheduling and product sequencing: sequencing of products in multi-product multi stage situations, plant capacity and line balancing; Plant layout, different types of layouts location and the factors influencing location; Maintenance management: objectives, failure concept, reliability, preventive and breakdown maintenance, replacement policies.	

Unit-III	QUALITY CONTROL
Standards and specifications, quality assurance and quality circles, statistical quality control: control charts for variables, average, range and standard deviation; Control charts for attributes, fraction defective and number of defects, acceptance sampling plans, oc curve work study. Various techniques in the methods study for identifying the most appropriate method; Work measurement, its uses and different methods, computation of allowance and allowed time.	
Unit-IV	MATERIALS MANAGEMENT
Need and importance of materials management-materials requirement planning materials budgeting-techniques for prioritization of materials-sources of supply of materials ,selection, evaluation and A performance of suppliers makes or buys decisions and its implications under various circumstances vendor rating, determinants of vendor rating, concept of waste management.	
Unit-V	STORES MANAGEMENT
Objectives of stores management, requirements for efficient. Management o stores, safety stock inventory control, different systems of inventory control types of inventory; Costs systems of inventory control ABC, VED and FNSD analyses, value analysis, importance in cost reduction, concepts and procedures.	
Textbooks:	
1. Mahadevan.B, —Operations Management, Pearson Education, Revised 2nd Edition, 2010. 2. Stevenson J. William, —Operations Management, Tata McGraw-Hill, 9th Edition, 2009. 3. James R Evans, David A. Collier, —Operations Management, Cengage Learning, 3rd Edition, 2007.	
Reference Books:	
1 AswathappaK.andSridharaBhat,—ProductionandOperationsManagement,HPH,2 nd Edition, 2010. 2. KanishkaBedi,—ProductionandOperationsManagement,OxfordUniversityPress,2 nd Edition, 2007. 3. UpendraKachru,—ProductionandOperationsManagement,ExcelBooks,2 nd Edition,2010.	

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Introduction to operations management	CO 1	T1: 1.7
2	ole of operations management in total management system	CO 1	T1: 1.7
3	Interface between the operation systems and systems of other functional areas	CO 1	T1: 2.1
4	Process planning and process design	CO 1	T1: 2.1
5	Fundamental linkages between spot & derivative markets	CO 1	T1: 2.8
6	production planning and control	CO 1	T1: 3.7
7	: basic functions of productionplanning and control	CO 1	T1: 3.5
8	production cycle	CO 1	T1: 3.7

9	characteristics of process technologies	CO 1	T1: 3.5
10	project, job shop, assembly life cycle	CO 1	T1: 3.5
11	Batch and continuous	CO 1	T1: 3.5
12	Inter relationship between product life cycle and process life cycle	CO 1	T1: 4.1
13	Aggregate planning	CO 2	T1: 4.1
14	operations scheduling and product sequencing	CO 2	T1: 5.1
15	sequencing of products in multi- product multi stage situations	CO 2	T1: 5.1
16	, plant capacity and line balancing	CO 2	T1: 5.3
17	Plant layout, different types of layouts location	CO 2	T1: 5.3
18	Plant layout, different types of layouts location and the factors influencing location; Maintenance management	CO 2	T1: 5.1
19	Maintenance management	CO 2	T1: 5.3
20	Objectives, failure and concept	CO 2	T1: 5.1
21	Reliability, preventive maintenance	CO 2	T1: 5.3
22	Breakdown maintenance	CO 2	T1: 5.3
23	Replacement policies	CO 2	T1: 5.1
24	Standards and specifications	CO 3	T1:5.7
25	quality assurance and quality circles	CO 3	T1:5.7
26	statistical quality control	CO 3	T1:5.7
27	control charts for variables	CO 3	T1: 6.1
28	Average, range and standard deviation	CO 3	T1: 5.7
29	Control charts for attributes	CO 3	T1: 6.1
30	fraction defective and number of defects	CO 4	T1: 6.1
31	Acceptance sampling plans	CO 4	T1: 5.7
32	oc curve work study	CO 4	T1: 6.1,
33	Various techniques in the methods study for identifying the most appropriate method	CO 4	T1: 5.7
34	Various techniques in the methods study for identifying the most appropriate method	CO 4	T1: 6.1
35	Work measurement	CO 4	T1: 6.1,
36	Its uses and different methods	CO 4	T1: 5.7
37	computation of allowance and allowed time.	CO 4	T1: 6.1,
38	Need and importance of materials management	CO 5	T1: 6.1
39	Basic option strategies, advanced option strategies	CO 5	T2: 7.1

40	materials requirement planning materials budgeting	CO 5	T2: 7.3,
41	Techniques for prioritization of materials	CO 5	T1: 6.1
42	sources of supply of materials	CO 5	T2: 7.3,
43	Evaluation and A performance of suppliers makes	CO 5	T2: 7.3,
44	Buy decisions and its implications under various circumstances	CO 5	T1: 6.1
45	Introduction, types, commodity futures and options	CO 5	T1: 6.1
46	vendor rating material Management	CO 5	T2: 7.3,
47	Determinants of vendor rating	CO 5	T1: 6.1
48	Concept of waste management	CO 5	T2: 8.3,
49	Objectives of stores management	CO 6	T2: 9.2
50	Requirements for efficient	CO 6	T2: 9.8
51	Management o stores	CO 6	T1: 7.1
52	Safety stock inventory control	CO 6	T1: 7.1
53	Different systems of inventory control types of inventories	CO 6	T2: 9.2
54	Costs systems of inventory control ABC	CO 6	T2: 9.8
55	VED and FNSD analyses of store management	CO 6	T2: 9.2
56	Value analysis of store management	CO 6	T2: 9.8
57	Importance in cost reduction	CO 6	T1: 7.1
58	Concepts and procedures	CO 6	T1: 7.1
59	Store management topic revisions	CO 6	T2: 9.2
60	Storage management different systems	CO 6	T2: 9.8
QUESTION BANK DISCUSSION			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-2
62	Question Bank Discussions Unit 2	CO 2	T-2, R-2
63	Question Bank Discussions Unit 3	CO 3	T-1, R-1
64	Question Bank Discussions Unit 4	CO 4	T-2, R-2
65	Question Bank Discussions Unit 5	CO 5	T-1, R-2

Prepared By:

Mrs.S. Sireesha, Assistant Professor, MBA

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT				
Course Code	CMBC35				
Programme	MBA				
Semester	THREE				
Course Type	Professional Elective – I				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	--	--
Course Coordinator	Dr. K Jagannayaki, Professor				

I. COURSE OVERVIEW:

This course aims to provide an insight into the evaluation and analysis of a wide range of financial securities and thereby developing techniques for designing an optimal portfolio. The main emphasis of the course is to impart an understanding of the methods and techniques of Risk Quantification, Security Valuation, Fundamental Analysis, and Technical Analysis required for security selection for designing an optimal portfolio.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	Credits
PG	CMBB17	II	Financial Management	4

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Security Analysis and Portfolio Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking an average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
0 %	Remember
16.67 %	Understand
16.67 %	Apply
33.33%	Analyze
33.33 %	Evaluate
0 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

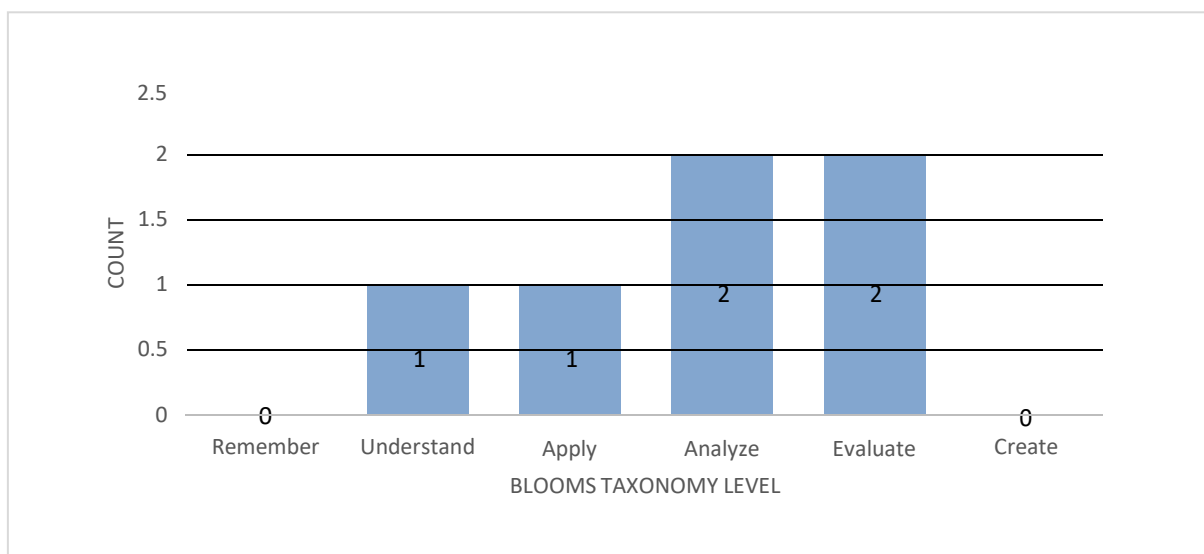
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	About the stock markets of India for valuation of securities.
II	Investment alternatives, process and portfolio management in an organization.
III	The bond analysis and bond management strategies.
IV	The equity valuation and derivatives theory and practice of portfolio management.
V	Schemes and structures of mutual funds and its trends.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Describe the investment environment and management process to take various investment decisions.	Analyze
CO 2	Evaluate the significance of risk and return relationship from Markowitz portfolio theory and mean variance approach.	Evaluate
CO 3	Analyze different types of bonds, interest rates and measuring bond yields in the real world.	Analyze
CO 4	Apply bond pricing theorems and bond immunization for formulating active and passive bond management strategies.	Apply
CO 5	Summarize the overview of derivative market strategies to find out the strength of the firm in investment decisions.	Understand
CO 6	Assess the trends in Indian mutual funds and measure their performances through various evaluation models.	Evaluate

COURSE KNOWLEDGE COMPETENCY LEVEL



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strengt h	Proficiency assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	1	Assignment
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	CIE/AAT
PO6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.	2	Seminar/ Conferences/ Research papers
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	3	CIE/AAT

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	-	-	√	-	-
CO 2	-	√	-	-	-	-	√	-
CO 3	-	-	-	-	-	-	√	-
CO 4	-	√	-	-	-	√	-	-
CO 5	-	-	-	-	-	-	√	-
CO 6	√	-	-	-	-	-	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of financial system and to an extent appreciate (understand) the importance of stock market to promote the investment environment in India.	2
	PO2	Understand the techniques of investment patterns, and choose the best investment alternative to manage the risk and return.	2
	PO6	Compare the Indian and global markets to identify the impact of political, regional and foreign markets fluctuations of stocks.	2
CO 2	PO 2	Describe the investment management process by applying (knowledge) fundamental and technical analysis for decision making.	1
	PO 7	Examine (knowledge) efficient market hypothesis of the securities to familiarize (understand) the investment alternatives for the investors globally and societally.	2
CO 3	PO 1	Recognizing (knowledge) the contribution of stock markets which affects economy stability of country (application) by its functional strategic principles and methodology.	2
	PO 2	Identify (knowledge) the conceptual framework of investment alternatives and their deficiencies and reforms in managing the stable financial markets.	2
	PO 6	Illustrate the conceptual framework portfolio selection in managing risk and return with in the country and globally to meet the expectations of investors.	1
CO 4	PO 1	Describe (knowledge) the managerial principles and strategies for bond management practices to manage the bond market conditions of the stock market.	2
	PO 7	Identify the Impact of bond pricing theorems by applying (knowledge) the bond management techniques and tools nationally and internationally to get optimized solutions.	3
CO 5	PO 2	Distinguish the qualitative and quantitative methods for equity analysis to determine the market value with appropriate implantable strategies.	3
	PO 7	Measure the importance of derivative markets with implementable investment strategies of the investors	2
CO 6	PO 1	Examine the types of mutual fund schemes and its types in the risk management processes while implementing the managerial decisions of Mutual fund businesses.	1
	PO 7	Discuss (knowledge) the contribution of mutual funds which affects economic stability of stock markets(application) by its functional strategic principles and methodology	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	2	-	-	-	2	-	-
CO 2	-	1	-	-	-	-	2	-
CO 3	2	2	-	-	-	2	-	-
CO 4	2	-	-	-	-	-	3	-
CO 5	-	3	-	-	-	-	2	-
CO 6	1	-	-	-	-	-	2	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	66.67	-	-	-	66.67	-	-
CO 2	-	33.33	-	-	-	-	50.00	-
CO 3	100.00	-	-	-	-	66.67	-	-
CO 4	100.00	66.67	-	-	-	-	75.00	-
CO 5	-	100.00	-	-	-	-	50.00	-
CO 6	50.00	-	-	-	-	-	50.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ –No correlation; **2** – $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	-	-	3	-	-
CO 2	-	1	-	-	-	-	1	-
CO 3	3	-	-	-	-	3	-	-

CO 4	3	3	-	-	-	-	3	-
CO 5	-	3	-	-	-	-	1	-
CO 6	2	-	-	-	-	-	1	-
TOTAL	11	10	-	-	-	06	06	-
AVERAGE	2.75	2.50	-	-	-	3	1.50	-

XIV. ASSESSMENT METHODOLOGY – DIRECT

CIE Exams	PO2, PO7	SEE Exams	PO1,PO2, PO6, PO7	Assignments	PO1	Seminars	PO6
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	PO 1, PO 7						

XV. ASSESSMENT METHODOLOGY – INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT– I	INVESTMENT AND SECURITY ANALYSIS
Investment environment in India, overview of Indian financial system securities trading in stock markets, investment alternatives, the investment management process, Security analysis: fundamental analysis, technical analysis, efficient market hypothesis.	
UNIT–II	PORTFOLIO ANALYSIS
The returns and risks from investing Markowitz portfolio theory, mean variance approach, portfolio selection-efficient portfolios, the single index model capital asset pricing model, arbitrage pricing theory.	
UNIT-III	BOND ANALYSIS AND VALUATION AND MANAGEMENT
Types of bonds, interest rates, term structure of interest rates, measuring bond yields, yield to maturity, yield to call, yield to maturity, holding period return, bond pricing theorems. Bond duration, active and passive bond management strategies, bond immunization, bond volatility, bond convexity.	
UNIT– IV	EQUITY VALUATION AND DERIVATIVES
Equity analysis & valuation, balance sheet analysis equity valuation models, intrinsic value & market price, the p/e ratio & earnings multiplier approach, price/book value, price/ sales ratio, economic value added , overview of derivatives markets, option markets, option strategies and option valuation forward & future markets, strategies. A stock index future, interest rate futures, swaps contracts.	
UNIT – V	MUTUAL FUNDS

Types of mutual funds schemes, structure, net asset value, risk and return, performance evaluation models Sharpe model, treynor model, Jensen model, fama's decomposition. Trends in Indian mutual funds.
Text books
<ol style="list-style-type: none"> 1. William. Sharpe, Gordon J Alexander and Jeffery V Bailey, "Fundamentals of Investments", Prentice Hall, 2012. 2. Reilly, Brown, "Analysis of Investment and Management of Portfolios", Cengage, 10th Edition, 2012.
References
<ol style="list-style-type: none"> 1. Donald E Fischer, Ronald J Jordan, "Security Analysis and Portfolio Management", 6th Edition, 2012 2. M. Ranganatham, R. Madhumathi, "Security Analysis and Portfolio Management", 2nd Edition, 2011 3. Punithavathi Pandian "Security Analysis and Portfolio Management" 2nd Edition TMH 2012
E-text books:
<ol style="list-style-type: none"> 1. http://www.ddegjust.ac.in/studymaterial/mba/fm-304.pdf 2. https://www.amazon.in/Security-Analysis-Portfolio-Management-Kevin-ebook/dp/B00K7YGOZ4

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with POs		
CONTENT DELIVERY (THEORY)			
1	Introduction-Meaning, Definition and Dimensions of Investment	CO 1	T2
2	Investment Vs. Speculation Vs. Gambling	CO 1	T2
3	Investment environment in India.	CO 1	T2
4	Overview of Indian financial system, Investment alternatives	CO 1	T2
5	Securities trading in stock markets	CO 1	T2
6	Securities trading in stock markets	CO 1	T2
7	The investment management process, Security analysis	CO 1	T2
8	The investment management process, Security analysis	CO 1	T2
9	Fundamental analysis	CO 1	T2
10	Technical analysis	CO 1	T2
11	Efficient market hypothesis	CO 1	T2
12	The returns and risks from investing	CO 2	T1, T2

Lecture No	Topics to be covered	Course Outcomes	Reference
13	Portfolio selection-efficient portfolios	CO 2	T1, T2
14	Individual securities – risk and return analysis	CO 2	T1, T2
15	Portfolio Risk and Return	CO 2	T1, T2
16	Portfolio Theories-Traditional Theory	CO 2	T1, T2
17	Modern Portfolio Theory	CO 2	T1, T2
18	Markowitz Mean Variance Analysis	CO 2	T1, T2
19	Characteristic Line	CO 2	T1, T2
20	Capital Asset Pricing Theory	CO 2	T1, T2
21	Security Market Line (SML)	CO 2	T1, T2
22	Capital Market Line (CML)	CO 2	T1, T2
23	Arbitrage Pricing Theory	CO 2	T1, T2
24	Sharpe Single Index Model	CO 2	T1, T2
25	Introduction to bonds	CO 3	T1,R3
26	Types of bonds, interest rates of bonds	CO 3	T1,R3
27	Term structure of interest rates	CO 3	T1,R3
28	Measuring bond yields- yield to maturity	CO 3	T1,R3
29	Yield to call	CO 3	T1,R3
30	Holding period return	CO 3	T1,R3
31	Bond pricing theorems	CO 4	T1,R1
32	Bond pricing theorems	CO 4	T1,R1
33	Bond duration	CO 4	T1,R1
34	Active and passive bond management strategies	CO 4	T1,R1
35	Bond immunization	CO 4	T1,R1
36	Bond volatility	CO 4	T1,R1
37	Bond convexity	CO 4	T1,R1
38	Related Problems	CO 4	T1,R1
39	Equity analysis & valuation	CO 5	T1,T2
40	Balance sheet analysis	CO 5	T1,T2
41	Equity valuation models, intrinsic value & market price	CO 5	T1,T2

Lecture No	Topics to be covered	Course Outcomes	Reference
42	Equity valuation models, intrinsic value & market price	CO 5	T1,T2
43	The p/e ratio & earnings multiplier approach	CO 5	T1,T2
44	The p/e ratio & earnings multiplier approach	CO 5	T1,T2
45	Price/book value, price/ sales ratio	CO 5	T1,T2
46	Economic value added	CO 5	T1,T2
47	Economic value added- Problems	CO 5	T1,T2
48	Overview of derivatives markets	CO 5	T1,T2
49	Option markets, Option strategies	CO 5	T1,T2
50	Option valuation	CO 5	T1,T2
51	Forward market strategies	CO 5	T1,T2
52	stock index future, interest rate futures	CO 5	T1,T2
53	swaps contracts	CO 5	T1,T2
54	Introduction-Mutual funds	CO 6	T1,T2
55	Types of mutual funds schemes	CO 6	T1,T2
56	Net asset value, risk and return	CO 6	T1,T2
57	Performance evaluation model of Sharpe	CO 6	T1,T2
58	Performance evaluation model of Treynor	CO 6	T1,T2
59	Performance evaluation model of Jenson	CO 6	T1,T2
60	Fama's decomposition	CO 6	T1,T2
QUESTION BANK DISCUSSION			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-1
63	Question Bank Discussions Unit 3	CO 3	T-1, R-1
64	Question Bank Discussions Unit 4	CO 4	T-1, R-1
65	Question Bank Discussions Unit 5	CO5	T-1, R-1

Prepared by:
Dr. K Jagannayaki, Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	STRATEGIC MANAGEMENT ACCOUNTING				
Course Code	CMBC36				
Program	MBA				
Semester	III				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Dr. P Lavanya, Associate Professor				

I. COURSE OVERVIEW:

The course enlightens the student's knowledge in terms of basic concept of cost accounting and management accounting and cost control techniques, allocation and apportionment of overheads, unit costing, job costing, profit planning, application of breakeven point enables students to understand and solve various business problems. Budgetary control system helps in fixing the goals for the organization as a whole and concerned efforts are made for its achievements. Budgetary control system enables economies in the enterprise. Standard costing ascertains beforehand what should be the cost of a product and controls the cost of such product by facilitating the comparison of actual cost with predetermined cost. This course includes appreciate and use financial statements as means of business communication. This course uses the analytical techniques and arriving at conclusions from financial information for the purpose of management control and decision making.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC02	I	Accounting and Financial Management

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Strategic Management Accounting	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
15 %	Remember
20 %	Understand
25 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

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In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

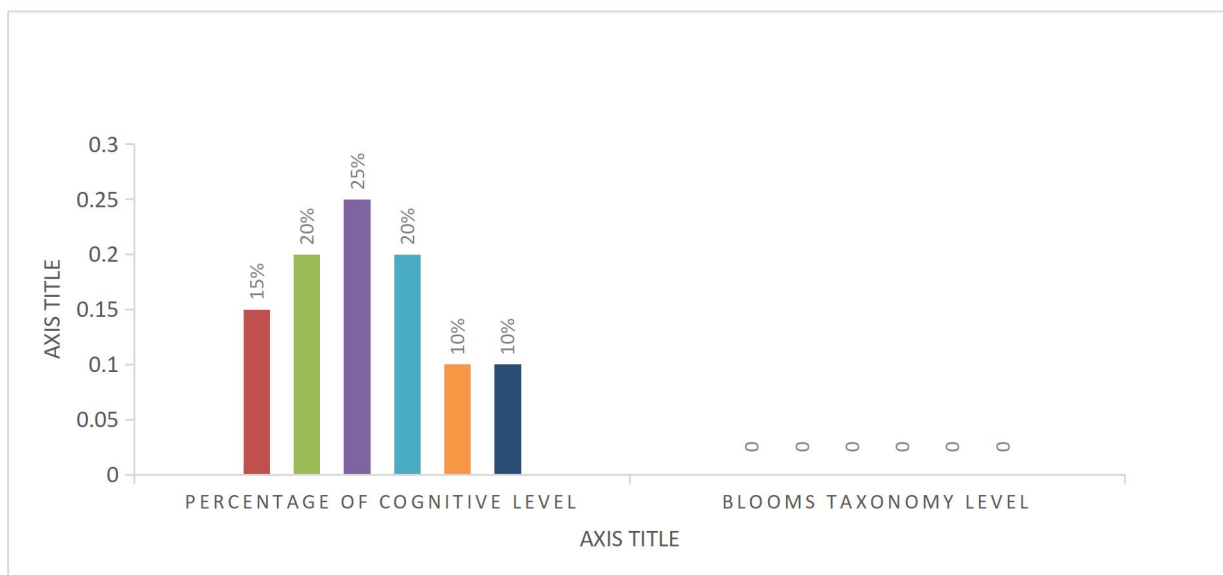
The students will try to learn:	
I	Emphasis on developing analytical and critical abilities related to management accounting and cost accounting
II	Management and cost accounting principles, techniques and their applications at specific industries.
III	The marginal cost applications in decision making to maximize profit by minimizing costs.
IV	Preparation various kinds of budgets in regular and occasional basis and also conducting audits.
V	Conceptual knowledge about standard and actual costs and identifies the variances.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Recall the cost concepts for demonstrating accounting and apportionment of overheads for the purpose of attaining accurate	Remember

	cost to perform effective role in planning and control.	
CO 2	Outline the Importance of various costing systems and cost sheet preparation for comparing the costs of various production systems.	Understand
CO 3	Illustrate the applications of marginal costing which enable the managerial decision making	Remember
CO 4	Contrast the inter firm compares and solve problems accordingly.	Create
CO 5	Recall the concepts of budget, budgetary control and audits in financial planning for effective cost controlling decisions	Apply
CO 6	Utilize the standard costing and variance analysis to make cost effective decisions.	Evaluate

COURSE KNOWLEDGE COMPETENCY LEVELS



□

VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	CIE1/CIE2/SEE
PO4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	2	CIE1/CIE2/SEE
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√						
CO 2	√	√		√				
CO 3	√	√		√				
CO 4	√	√						
CO 5	√	√						
CO 6	√	√		√			√	

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Remembering the basic concepts of Management Accounting and financial Accounting in management theories for getting the knowledge of cost accounting to plan and controlling cost in Organization. (Management fundamental concepts, Management theories, Management techniques, Knowledge).	4
	PO 2	Identifying the different types overheads (knowledge) Solve apportionment Management technique of overheads in management theories various formats for applying the different cost in the overheads. (Management theories, Management techniques, Knowledge).	3
CO 2	PO 1	Relate (Knowledge) the different types of unit costing, job costing, process costing Management theories to apply the rules of cost accounting Management concept in cost sheet. (Management theories, Knowledge, Management fundamental concepts).	3
	PO 2	Develop Cost Sheet, Process costing strategy used to identify to solve data-based decision making for analyzing the approaches for the complex problems. (Strategy used to solve the identified problems, tools, solutions, approaches for the complex problems).	4
	PO 4	Ability to understand the job costing, analyze and communicate the organization in different situations with different Skills and development of solutions for the treatment of normal losses and abnormal losses, inter-process profits. (Communication of Organization ,Style, Skills, Development of Solutions).	4
CO 3	PO 1	Make Use of marginal costing (knowledge) for finding the solutions for cost sheet Management concept problems which satisfy the user constraints of and cost limitations . (knowledge, management concept, Management techniques)	3

	PO 2	Understand the given problem and strategy used to identified problem tools used the solution using product mix from the provided information and interpret the results for effective decision Making. (Strategy, tools, solutions Problem Analysis).	3
	PO 4	Ability to understand the marginal costing, analyze and communication of organization , Skills is specific fixed assets with suitable product mix and development of solutions to profit planning. (Communication Organization, Skills Development of Solutions).	3
CO 4	PO 1	Identifying(knowledge) the diversification of products Management concepts for analyzing (management theories)different types of activities. (Management theories, knowledge, Management Concept)	3
	PO 2	Understand the problem and diversification of products for solving the given problem from the provided Information communicating organization with skills to solve in different activities. (Communication Organization, Skills , Development of Solutions).	3
CO 5	PO 1	List (knowledge) the concepts of Budget, budgetary control for understanding various types of budget. (Management theories, knowledge)	2
	PO 2	Understand the given problem and choose the suitable method for solving the given problem related to management audit the provided information and data in reaching substantiated conclusions by the interpretation of results for activity control. (Strategy used to solve the identified problems, tools, solutions, approaches for the complex problems).	4
CO 6	PO 1	Identify Knowledge of the standard costing Management concept and marginal costing in cost sheet different counting techniques for finding the solution. (Management concepts, Knowledge, Management technique)	3
	PO 2	Understand the given budgetary control problems and choose appropriate method for finding solution from the provided information and data for finding standard costing for effective decision making in controlling. (Strategy used to solve the identified problems, tools, solutions, approaches for the complex problems).	4
	PO 4	Ability to understand the standard costing, budgetary control, analyze and communicate the solutions of given problems for Skills to development of effective Management techniques of cost control. (Communication of Organization, Skills, Development of Solutions).	3
	PO 7	Analyze and formulate standard costing tools with managerial strategies Management principles to sustain in dynamic global business environment (Strategic Skills, Management Principles, Tools).	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	4	5	6	8	15	3	4	5
CO 1	4	3						
CO 2	3	4		4				
CO 3	3	3		3				
CO 4	3			3				
CO 5	3	4						
CO 6	3	4		3			3	

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	4	5	6	8	15	3	4	5
CO 1	100.00	60						
CO 2	75	80		50				
CO 3	75	60		37.5				
CO 4	75			37.5				
CO 5	75	80						
CO 6	75	80		37.5			75	

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, 0 being **no correlation**, 1 being the **low correlation**, 2 being **medium correlation** and 3 being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation;

2 – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	-	-	-	-	-
CO 2	3	3	-	3	-	-	-	-
CO 3	3	3	-	1	-	-	-	-

CO 4	3		-	1	-	-	-	-
CO 5	3	3	-	-	-	-	-	-
CO 6	3	3	-	1	-	-	3	-
TOTAL	18	15					3	
AVERAGE	3	3		1.5			3	

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO4, PO7	SEE Exams	PO1, PO2, PO4, PO7	Assignments	PO1, PO2, PO4, PO7	Seminars	PO1, PO2, PO4, PO7
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	MANAGEMENT ACCOUNTING VS COST ACCOUNTING
Definitions, nature, scope, objectives and functions of management accounting, importance and limitations of cost accounting and management accounting; differences between cost accounting, management accounting and financial accounting. Types of costing used in industries. Role of accounting information in planning and control, cost concepts and managerial use of classification of costs, the management process and accounting, cost analysis and control: direct and indirect expenses, allocation and apportionment of overheads, calculation of machine hour rate (problems), introduction to activity based costing and life cycle costing	
UNIT-II	COSTING FOR SPECIFIC INDUSTRIES
Unit costing, job costing, cost sheet and tender and process costing and their variants, treatment of normal losses and abnormal losses (problems), inter process profits, costing for byproducts and equivalent production, introduction, application of marginal costing in terms of cost control, profit planning, closing down a plant, dropping a product line, charging general and specific fixed costs, fixation of selling price.	
UNIT-III	MAKE OR BUY DECISIONS
Key or limiting factor, selection of suitable product mix, desired level of profits, diversification of products, closing down or suspending activities, level of activity planning. Break even analysis: application of break even point for various business problems, meaning, significance and limitations of break even analysis and problems on break even point, inter firm comparison: need for inter firm comparison, types of comparisons, advantages.	

UNIT-IV	BUDGETORY CONTROL
Budget, definitions, advantages and disadvantages of budgetary control, steps in budgetary control, different types of budgets: flexible budget, sales budget, cash budget, production budget (problems), master budget, performance budgets, material vs. purchase budgets, zero based budgeting, introduction to cost audit and management audit.	
UNIT-V	STANDARD COSTING
Standard cost and standard costing, standard costing vs. budgetary control, standard costing vs. estimated cost, standard costing and marginal costing analysis of variance, material variance, labor variance, Sales and Profit variance (problems), case studies.	
Textbooks:	
1 S.P.Jain and K.L.Narang, "Cost and Management Accounting", Kalyani publishers, 2012 2. M.N.Arora, "Cost and Management Accounting", Himalaya Publishing House, 2012	
Reference Books:	
1. Shashi K.Gupta and R.K.Sharma, "Advanced Management Accounting", Kalyani Publishers, 2nd Revised Edition, 2003 2. M.E. ThukaramRao, "Management and Cost Accounting", New Age International Publishers, 2012."	

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Introduction and Definition of cost accounting	CO1	T-1, R-2
2	Objectives, advantages and limitations of management accounting	CO1	T-2, R-2
3	cost accounting, Role of accounting information in planning and control	CO1	T-1, R-2
4	Advantages of management accounting and cost accounting,	CO1	T-1, R-2
5	Role of accounting information in planning and control	CO1	T-2, R-2
6	Difference between cost and financial accounting	CO1	T-1, R-1
7	Limitations of management accounting and cost accounting	CO1	T-2, R-2
8	Cost concepts and types of cost	CO1	T-1, R-2
9	Managerial use of classification of costs	CO1	T-2, R-2
10	The management process and accounting in cost accounting	CO1	T-1, R-2
11	Cost concepts and managerial use of	C1	T-1, R-2
12	Cclassification of costs,	CO1	T-2, R-2

Lecture No	Topics to be Covered	COs	Reference
13	The management process and accounting	CO1	T-1, R-2
14	Cost analysis and control: Direct and indirect expenses	CO1	T-2, R-2
15	Allocation and apportionment & Machine hour rate	CO1	T-1, R-1
16	Calculation of machine hour rate	CO1	T-2, R-2
17	Introduction to activitybased costing	CO1	T-1, R-2
18	Life cycle costing.	CO1	T-2, R-2
19	Introduction to unit costing	CO2	T-2, R-1
20	Job costing, and problems	CO2	T-2, R-2
21	Cost sheet and tender sheet	CO2	T-1, R-1
22	Process costing and their variants	CO2	T-2, R-2
23	Treatment of normal losses and abnormal losses, interprocess profits	CO2	T-1, R-2
24	Treatment of normal losses and abnormal losses,	CO2	T-1, R-1
25	Interprocess profits	CO2	T-1, R-1
26	Costing for byproducts and introduction,	CO2	T-2, R-1
27	Equivalent production, application	CO2	T-1, R-1
28	Application of marginal costing in terms of cost control	CO2	T-1, R-2
29-30	Marginal costing in terms of cost control and decision making	CO3	T-1, R-1
31	Profit planning, closing down a plant.	CO3	T-1, R-1
32	Dropping a product line and application	CO3	T-1, R-1
33	Charging general and specific fixed costs.	CO3	T-2, R-1
34	Fixation of selling price and problems	CO3	T-1, R-1
35	Key or limiting factor.	CO3	T-1, R-1
36	Selection of suitable product mix,	CO3	T-1, R-1
37	Desired level of profits.	CO3	T-1, R-2
38	Diversification of products, closing down	CO3	T-1, R-1
39	Suspending activities, level of activity planning	CO3	T-1, R-1
40	Application of break even point for various business problems,	CO4	T-1, R-1
41	Meaning, significance and limitations of break even analysis and problems on break even point,	CO4	T-1, R-1
42-44	Inter firm comparison: need for inter firm comparison, types of comparisons, advantages.	CO4	T-1, R-2

Lecture No	Topics to be Covered	COs	Reference
45	Problems in Break even	CO4	T-1, R-1
46	Application of Break even analysis	CO 4	T-1, R-1
47	Inters firm comparison: need for inter firm comparison	CO4	T-1, R-1
48	Budget, budgetary control, Introduction	CO5	T-2, R-1
49	Budget, budgetary control and steps	CO5	T-1, R-1
50	Budget, budgetary methods	CO5	T-1, R-1
51	Different types of budgets	CO5	T-1, R-1
52	Flexible budget and sales budget	CO5	T-1, R-1
53	Cash budget and types	CO5	T-2, R-1
54	performance budgets, material vs. purchase budgets,	CO5	T-2, R-1
55	zero based budgeting, introduction to cost audit and management audit	CO5	T-2, R-1
56	Standard cost and standard costing	CO5	T-1, R-1
57	standard costing vs. budgetary control	CO5	T-2, R-1
58	standard costing vs. estimated cost	CO5	T-1, R-1
59	standard costing and marginal costing	CO5	T-2, R-1
60	Analysis of variance, material variance	CO6	T-1, R-1
QUESTION BANK DISCUSSION			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-1
63	Question Bank Discussions Unit 3	CO 3	T-1, R-1
64	Question Bank Discussions Unit 4	CO 4	T-1, R-1
65	Question Bank Discussions Unit 5	CO 5	T-1, R-1

Prepared by:
Dr. P Lavanya, Associate Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTOR

Course Title	FINANCIAL INSTITUTIONS, MARKETS AND SERVICES				
Course Code	CMBC37				
Programme	MBA				
Semester	III	MBA			
Course Type	Professional Elective				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Faculty	L Sainath Yadav, Assistant Professor, MBA Department				

I. COURSE OVERVIEW:

The objective of this course is the operation of the financial services industry, the products and services available, and market efficiency to satisfy the needs of consumers. Topics include an overview of the financial services industry, leasing finance, factoring, leasing finance, venture capital, merchant banking and aspects including in the issue of new shares.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	Credits
PG	CMBC16	II	Financial management	4

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Financial Institutions, Markets And Services	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE): The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weight age in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled

together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES :

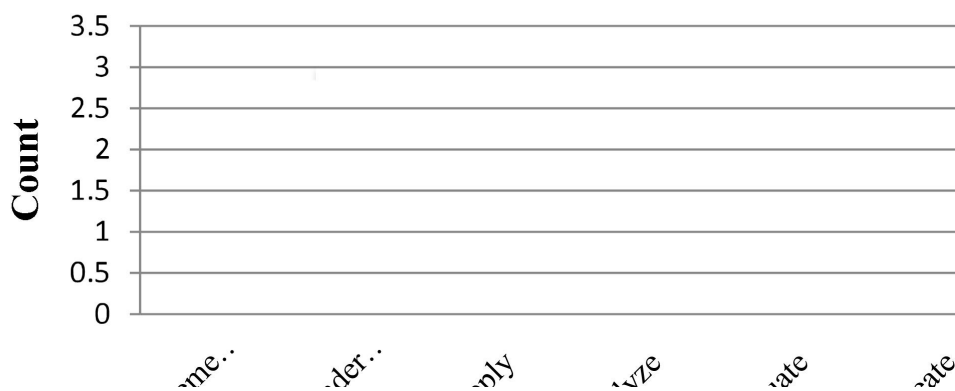
Students will try to learn:	
I	The current and emerging financial system in India.
II	The concepts, principles and issues connected with leasing finance.
III	Important provisions of factoring and bill discounting aspects.
IV	The legal norms related to venture financing.
V	The merchant banking and guidelines of new shares issue.

VII. COURSE OUTCOMES (COs):

At the end of the course the students are able to:

CO No	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO 1	Acknowledge the overview of Indian Financial System for efficient allocation of economic resources.	Understand
CO 2	Summarize the financial and legal aspects in Leasing process to track and optimize every aspect of the company's portfolio of leased assets.	Apply
CO 3	Demonstrate the factoring mechanisms for maintaining working capital sources from future payables.	Analyze
CO 4	Describe the bill discounting methodologies to trade bill before it becomes due for payment at par value.	Understand
CO 5	Examine the funding strategies of Venture Capital finance to fill the void between sources of funds for innovation.	Evaluate
CO 6	Conclude SEBI guidelines, credit rating and merchant banking concepts to taking more informed investment decisions with risk-return preferences.	Understand

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2.83	Guest Lectures
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	2	Assignments
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	2.25	Assignments

IX. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES

Course Outcomes (COs)	Program Outcomes (POs)							
	1	2	3	4	5	6	7	8
CO 1	√	√						
CO 2	√	√		√			√	
CO 3	√	√		√				
CO 4	√			√				
CO 5	√	√					√	
CO 6	√			√				

X. JUSTIFICATIONS FOR CO-PO MAPPING:

Course Outcomes (COs)	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Remember the basic concepts of financial services and management in financial system for gaining an understanding of reasons for growth in new products and knowledge of the services (Management theories, Knowledge).	2

	PO2	Apply the learnt concepts towards analyzing the needs for introducing innovative new products, promoting an understanding of how IFS fostered itself towards the economic scenario (Critical thinking abilities, Decision making, Problem Analysis).	3
CO 2	PO 1	Extend the understanding of products in financial system to the basic concepts of leasing, understanding the legal aspects (Management fundamental concepts, Knowledge)	2
	PO2	Develop a deeper ability to evaluate the financial aspects towards decision-based approach using NPV and IRR Critical thinking abilities, Decision making, Problem Analysis).	2
	PO 4	Explain the legal and tax frame work connecting with financial evaluation of hire purchase from both the hirer's and the finance company's viewpoint. (Communication, Development of Solutions, Presentation skills)	2
	PO7	Utilize the concept of leasing in leasing or buying an asset in a strategic approach towards profits of the lesser and lease. (Problem Solving, Management principles, Management solutions, Management techniques).	2
CO 3	PO 1	Understand the concept of factoring and gain knowledge how this financial transaction it acts as type of debtor finance (Knowledge).	2
	PO 2	Apply the concept of factoring to evaluate critically decision analysis of financial procedures using factor analysis-Foster analytical and critical thinking abilities for data-based decision making Critical thinking abilities, Decision making, Problem Analysis).	3
	PO 4	Understand the legal aspects of Factoring extending to multiple financing and utilizing the financing instruments like letter of disclaimer and the scenario globally (Communication, Development of Solutions, Presentation skills)	2
CO 4	PO 1	List the characteristics of the trade activity Bill discounting and explain how it can be beneficial to the financial institutions in increasing the revenue. (knowledge, Management Concept)	2
	PO 4	Describe how effective interest rates for assessing its legal aspects and their obligations in bill discounting (Communication, Development of Solutions, Presentation skills)	2
CO 5	PO 1	Understand why the venture capital is a form of private equity and how its financing strategies promote growth in startups with high potential (Knowledge).	2
	PO 2	Explain how venture evaluation capital financing methods in assessing a company based on its industrial and financing phase helps in understanding its exit stages (Critical thinking abilities, Decision making, Problem Analysis).	2
	PO7	Analyze the process of promoting growth (management principles) in market place using venture capital financial strategies (management solutions) , to overcome the risks (Problem Solving, Management principles, Management solutions, Management techniques).	3
CO 6	PO1	Recognize how merchant bankers play a major role as Primary market intermediaries specially in documentation procedures (Knowledge)	2
	PO4	Identify the aspects which SEBI take into account while granting recognition to a merchant banker and the conditions it lays on them in the procedure (Communication,	2

		Development of Solutions, Presentation skills)	
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XI. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:

Course Outcomes (COs)	Program Outcomes (POs) / Number of Vital Features							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3						
CO 2	2	2		2			2	
CO 3	2	3		2				
CO 4	2			2				
CO 5	2	2					3	
CO 6	2			2				

XII. PERCENTAGE FOR KEY COMPETENCIES FOR CO-PO MAPPING:

Course Outcomes (COs)	Program Outcomes (POs) / Number of Vital Features							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.0	100.0						
CO 2	100.0	66.66		66.66			50.00	
CO 3	100.0	100.0		66.66				
CO 4	100.0			66.66				
CO 5	100.0	66.66					75.00	
CO 6	100.0			66.66				

XIII. COURSE ARTICULATION MATRIX (CO-PO MAPPING)

COs and POs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.
1 – $5 < C \leq 40\%$ – Low / Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes (COs)	Program Outcomes (POs)							
	1	2	3	4	5	6	7	8
CO 1	3	3						
CO 2	3	3		3			2	
CO 3	3	3		3				
CO 4	3			3				
CO 5	3	3					3	
CO 6	3			3				
TOTAL	18	12		12			5	
AVERAGE	3.0	3.0		3.0			2.5	

XIV. ASSESSMENT METHODOLOGIES – DIRECT

CIE Exams	PO1, PO2, PO4, PO7	SEE Exams	PO1, PO2, PO4, PO7	Assignments	PO1
Laboratory Practices	-	Seminars	PO7	Mini Project	-
Term Paper	-				

XV. ASSESSMENT METHODOLOGIES – INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	FINANCIAL SYSTEM
Financial system: growing importance of financial services in financial system, classification traditional and modern view, fund based and non-fund-based services, financial engineering, need for innovation, new financial products and services, an overview of Indian financial services sector scenario.	
UNIT-II	CONCEPT OF LEASING
Concept of leasing: classification, rationale, advantages of leasing, legal aspects, lease documentation and contract, tax and accounting aspects of leasing, financial evaluation of leasing, net present value (NPV) and internal rate of return (IRR) approaches, break even lease rental, lease v/s buy decisions hire purchase concept and features, legal and tax frame work, financial evaluation of hire purchase, hire purchase mathematics, flat and effective interest rates.	
UNIT-III	FACTORING
Factoring concept and features, classification, functions of factor, legal aspects, financial evaluation of factoring, and decision analysis for factoring, factoring scenario in India. Bill discounting, concept and characteristics, process of bill discounting, legal aspects, parties involved and their legal obligations, financial aspects, calculation of discount charges and effective interest rates.	
UNIT-IV	VENTURE CAPITAL FINANCING
Venture capital financing, concept and features, venture capital funding process, funding and entry strategies of venture capital financing, structuring of venture capital financing, valuation of venture capital financing conventional valuation method, first Chicago method, revenue multiplier method, exit strategies of venture capital financing ventures capital financing scenario in India, regulatory frame work of venture capital financing.	
UNIT-V	MERCHANT BANKING
Merchant banking concept and evolution, functions of merchant banking, eligibility norms, lead manager, underwriter, brokers and bankers to issue, registrar, portfolio managers, new issue management process and stages involved pricing of public issues, book building process, green shoe option initial public offering promoter's contribution, preferential issues, SEBI guidelines relating to new issues of securities, credit rating concept and advantages of ratings, types of ratings, symbols of ratings and grades.	

Text Books:
<ol style="list-style-type: none"> 1. Sandeep Goel, “Financial Markets, Institutions and services”, PHI Learning, 2018. 2. Kumar Vinod, Gupta Atul, Kaur Manmeet, “Financial Markets Institutions & Financial Services”, Taxman’s, 2017 Edition, July, 2017. 3. Padmalatha Suresh & Justin Paul, “Management of Banking & Financial Services”, 3rd Edition. Pearson Education, 2016. 4. M Y Khan, “Financial Services”, McGraw Hill Education (India), 8th Edition, 2015. 5. Peter.S.Rose & Sylvia. C. Hudgins, “Bank Management & Financial Services’, 8th Edition, Tata McGraw Hill, 2014. 6. Meir Kohn, “Financial Institutions and Markets” Oxford University Press, 2nd Edition, 2009. 7. Khan. M.Y, “Financial Services”, Tata McGraw-Hill, Pvt. Ltd., New Delhi, 5th Edition, 2010. 8. Gordon and Natarajan, “Financial Markets and Services”, Himalaya publishing House, Mumbai, 7th Edition, 2009.
References:
<ol style="list-style-type: none"> 1. Vasant Desai, “Financial Markets and Financial Services”, Himalaya publishing House, Mumbai, 1st Edition, 2009. 2. Punithavathy Pandian, “Financial Services and Markets”, Vikas Publishing House, 3rd Edition, 2009. 3. Mishkin. F.S. and Eakins. S.G., “Financial Markets and Institutions”, Pearson Education, 5th Edition, 2006. 4. Harold L Vogel, “Financial Markets Bubble and Crashes”, Cambridge, 1st Edition, 2009.
Web References:
<ol style="list-style-type: none"> 1. https://www.scribd.com/document/184434634/45790874-mba-3-sem-finance-notes-bangalore-university. 2. http://www.slideshare.net/venkykk/fifm-2013-final-financial-institutions-and-notes-as-per-bput-syllabus-for-mba-2nd.
E-Text Books:
<ol style="list-style-type: none"> 1. http://iimsnepal.com/download/e%20book%20materials/mba%20ebook%20material/mba%203rd%20semester%20ebook%20materials/dmgt512_financial_institutions_and_services.pdf. 2. http://www.ddegjust.ac.in/studymaterial/mba/fm-404.pdf.

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes (COs)	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Outcome based education	CO	T1,T3
2	Financial system	CO1	T1
3	Growing importance of financial services in financial system	CO1	T1,T3,R1
4	Classification traditional and modern view	CO1	T1,T3,R2
5	Fund based services	CO1	T1,T3
6	Non-fund based services	CO1	T1,T3
7	Financial engineering	CO1	T1,T3,R1

Lecture No	Topics to be covered	Course Outcomes (COs)	Reference
8	Need for innovation	CO1	T1
9	New financial products and services	CO1	T1,T3,R2
10	An overview of Indian financial services sector scenario	CO1	T2
11	Concept of leasing	CO2	T1,T3,R1
12	Leasing-classification, rationale	CO2	T1,T3,R2
13	Advantages of leasing	CO2	T2,T3
14	Legal aspects	CO2	T1,T3,R2
15	Lease documentation and contract	CO2	T1
16	Tax and accounting aspects of leasing	CO2	T1,T3
17	Financial evaluation of leasing	CO2	T1
18	Net present value (NPV)	CO2	T1,T3,R1
19	Internal rate of return (IRR) approaches	CO2	T1,T3,R1
20	Break even lease rental	CO2	T1,T3,R2
21	Lease v/s buy decisions	CO2	T1,T3
22	Hire purchase concept and features	CO2	T1,T3,R1
23	Legal and tax frame work	CO2	T1
24	Financial evaluation of hire purchase	CO2	T1,T3,R2
25	Hire purchase mathematics	CO2	T2
26	Flat and effective interest rates	CO2	T1,T3,R1
27	Factoring concept and features	CO3	T1,T3,R2
28	Classification, functions of factor	CO3	T2,T3
29	Legal aspects, financial evaluation of factoring	CO3	T1,T3,R2
30	Decision analysis for factoring	CO3	T1
31	Factoring scenario in India	CO3	T1,T3
32	Bill discounting	CO4	T1
33	Concept and characteristics	CO4	T1,T3,R1
34	Process of bill discounting	CO4	T1,T3,R2
35	Legal aspects	CO4	T1,T3
36	Parties involved and their legal obligations	CO4	T1,T3,R1
37	Financial aspects	CO4	T1
38	Calculation of discount charges and effective interest rates	CO4	T1,T3,R2

Lecture No	Topics to be covered	Course Outcomes (COs)	Reference
39	Venture capital financing, concept and features	CO5	T2
40	Venture capital funding process	CO5	T1,T3,R1
41	Funding and entry strategies of venture capital financing	CO5	T1,T3,R2
42	Structuring of venture capital financing	CO5	T2,T3
43	Valuation of venture capital financing conventional valuation method	CO5	T1,T3,R2
44	First Chicago method,	CO5	T1
45	Revenue multiplier method	CO5	T1
46	Exit strategies of venture capital financing	CO5	T1
47	Ventures capital financing scenario in India	CO5	T1,T3,R1
48	Ventures capital financing scenario in India	CO5	T1,T3,R1
49	Ventures capital financing scenario in India	CO5	T1,T3,R1
50	Regulatory frame work of venture capital financing	CO5	T1,T3
51	Merchant banking concept and evolution	CO6	T1,T3,R1
52	Functions of merchant banking, eligibility norms	CO6	T1
53	Lead manager, underwriter, brokers and bankers to issue	CO6	T1,T3,R2
54	Lead manager, underwriter, brokers and bankers to issue	CO6	T2
55	Lead manager, underwriter, brokers and bankers to issue	CO6	T1,T3,R1
56	Registrar, portfolio managers,	CO6	T1,T3,R2
57	New issue management process and stages involved pricing of public issues	CO6	T1,T3,R2
58	Book building process, green shoe option	CO6	T2,T3
59	Initial public offering, promoter's contribution, preferential issues.	CO6	T1,T3,R2
60	SEBI guidelines relating to new issues of securities	CO6	T1
61	Types of ratings, symbols of ratings and grades.	CO6	T1,T3
Question Bank Discussions			
62	Question Bank Discussions Module 1	CO1	T1
63	Question Bank Discussions Module 2	CO2	T1,T3,R1
64	Question Bank Discussions Module 3	CO3	T1,T3,R2
65	Question Bank Discussions Module 4	CO4	T1,T3
66	Question Bank Discussions Module 5	CO5	T1,T3,R1

Prepared by:

Mr. L Sainath Yadav, Assistant Professor.

HOD, MBA



MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTOR

Course Title	TRAINING AND DEVELOPMENT				
Course Code	CMBC38				
Programme	MBA				
Semester	THREE				
Course Type	Core				
Regulation	IARE -PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Chief Coordinator	Mr. Nunna Suresh, Assistant Professor				
Course Faculty	Mr. Nunna Suresh, Assistant Professor				

I. COURSE OVERVIEW:

This course describes the role of Training and Development in Human Resource Management. The key elements covered include: needs analysis, program design, development, administration, delivery and program evaluation. Other topics include adult learning theory, transfer of training, career planning, counselling, training techniques, budgeting and trends in training.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	Credits
PG	CMBC15	II	Human Resource Management	4

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Training and Development	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
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✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES :

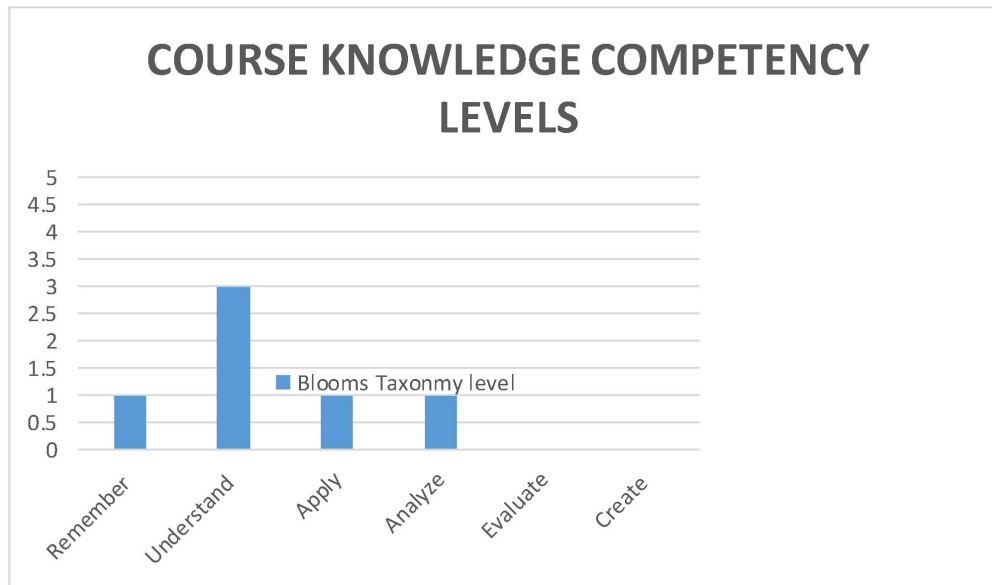
The course should enable the students to:	
I	The concepts of training, its procedure and its significance in various sectors.
II	Training methods and leadership exercises.
III	Various training centers and consultancies as well as training need assessment models.
IV	E-learning and evaluation methods of training and development program.
V	Contents of training skills, facilities and motives of trainees.

VII. COURSE OUTCOMES:

At the end of the course the students are able to:

CO No	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO 1	Enumerate the concepts and methods of training that assist in better career development	Remember
CO 2	Demonstrate training programmes to nurture employees' basic skills and support their personal development.	Understand
CO 3	Examine the role of external agencies in training and development to improve employee's productivity.	Analyze
CO 4	Assess the training needs to identify the gap between performance required and current performance	Understand
CO 5	Visualize the concept of Employee Performance through E-LEARNING platform.	Understand

CO 6	Attain organizational effectiveness by skill Development Programs	Apply
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VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	CIE/AAT
PO 2	Decision making Skills: Foster Analytical and critical thinking abilities for data-based decision making.	2	CIE/AAT
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal and ethical aspects of business.	2	Seminar/ Conference/ Research papers
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment	3	Seminar/ Conference Research papers
PO 7	Strategic Analysis: Ability to conduct strategic analysis using theoretical and practical applications	2	Assignments/ Discussion
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	2	Assignments/ Discussion

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	-	√	-	-	-
CO 2	√	√	-	√	-	-	√	-

CO 3	-	√	-	√	-	-	√	-
CO 4	√	-	-	-	-	-	-	-
CO 5	√	-	-	-	-	-	√	-
CO6	-	-	-	-	√	-	-	√

X. JUSTIFICATIONS FOR CO-PO MAPPING:

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Apply knowledge of training, career opportunities, and the role of HR in training and development to solve business problems.	2
	PO 2	Foster Analytical and critical thinking abilities for data-based decision making of basic concepts of training, career opportunities, and the role of HR in training and development	1
	PO 5	Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment in concepts of training, career opportunities, and the role of HR in training	2
CO 2	PO 1	Apply knowledge of classification of integrating organizational development, strategy, motivation, performance designing to solve business problems	2
	PO 2	Foster Analytical and critical thinking abilities for classification of integrating organizational development, strategy, motivation, performance designing with learning process	2
	PO 4	Ability to understand, analyze and communicate Analytical and critical thinking abilities for data-based decision making of basic concepts of training, career opportunities	1
	PO 7	Ability to conduct strategic analysis using theoretical and practical applications of classification of integrating organizational development, strategy, motivation, performance designing with learning process	2
CO 3	PO 2	Foster Analytical and critical thinking abilities for motivation, performance and design with learning process for effective training	1
	PO 4	Ability to understand, analyze and communicate integrating organizational development, strategy, motivation, performance designing with learning process	3
	PO 7	Ability to conduct strategic analysis and communicate integrating organizational development, strategy, motivation, performance designing with learning process	2
CO 4	PO 1	Understand the importance of Training Need Analysis (TNA) model, different approaches to Training Need Analysis (TNA) and design & Apply knowledge of	2

		management theories and practices to solve business problems.	
CO 5	PO 1	Understand the use of organizational constraints, developing objectives, facilitation of learning, and training transfer to job analysis & Apply knowledge of management theories and practices to solve business problems.	2
	PO 7	Ability to conduct strategic analysis using organizational constraints, developing objectives, facilitation of learning, and training transfer to job analysis & Apply knowledge of management theories and practices to solve business problems.	1
CO 6	PO 5	Understand the trend of different types of training matching methods with outcomes, lectures and demonstrations & Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment	2
	PO 8	Inculcate and develop technical skills to Understand and be able to use appropriate training software packages in Training & Development	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes/ Number of Vital Features							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	1			2			
CO 2	2	2		1			2	
CO 3		1		3			2	
CO 4	2							
CO 5	2						1	
CO 6					2			2

XII. PERCENTAGE FOR KEY COMPETENCIES FOR CO-PO:

Course Outcomes	Program Outcomes / Number of Vital Features							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100	33.33			40			
CO 2	100	66.66		33.33			50	
CO 3		33.33		100			50	
CO 4	100							

CO 5	100						25	
CO 6					40			100

XIII. COURSE ARTICULATION MATRIX (CO-PO MAPPING)

COs and POs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation;

2 – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low / Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	3	1			2			
CO 2	3	3		1			2	
CO 3		1		3			2	
CO 4	3							
CO 5	3						1	
CO 6					2			2
TOTAL	12	5		4	4		5	2
AVERAGE	3	1.6		2	2		1.6	2

XIV. ASSESSMENT METHODOLOGIES – DIRECT

CIE Exams	PO 1, PO 2, PO 4, PO 5, PO 7, PO 8.	SEE Exams	PO 1, PO 2 PO 4, PO 5 PO 7, PO8	Assignments	PO 7, PO 8.	Seminars	PO 4, PO 5
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGIES - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO TRAINING
Introduction – Concept – Training Process- Significance- Models of Training- Systematic Model- Transitional Model- Systems approach to training, Trends in training, career opportunities in	

training. Training in various sectors including Banking, BPO, IT, Training Issues resulting from External & Internal Environment.	
UNIT-II	TRAINING METHODS
Indoor training methods: On-the-job Training-Job Instruction Technique- - Coaching-Off –the –job methods- Straight Lectures-Discussion Methods- Demonstrations- Games and Simulations- - Case studies- Role play- Behavior Modeling- Audio Visual Enhancements to Training-Static and Dynamic Media- Outdoor training methods- field games-leadership exercises.	
UNIT-III	TRAINING ORGANIZATIONS& ASSESMENTS
Training Centers in organizations- Role of external agency in T&D- Training as consultancy – Evolving Training Policy–On-the-job training- Off-the-job training-Training budget and schedules/calendar. Training Needs Assessment (TNA) – Definition and purposes – Components of Needs assessment- Advantages- Competency modeling – Organization Analysis – Team Work for Conducting Training Needs Analysis- selection of Trainees.	
UNIT-IV	E-LEARNING AND EVALUATION OF T&D PROGRAMME
E-learning methods- Computer Based Training (CBT) –programmed Instruction- Intelligent Tutoring Systems- Interactive Multimedia- Virtual Reality Monitoring and evaluation of training programme- Conceptual model of training – Effectiveness –Evaluation criteria-Kirkpatrick model.	
UNIT-V	DESIGN OF TRAINING PROGRAMME
Course content design – Trainer skill development - Facilities design- Trainee design –Resistance in Training- Motivation of Trainee: Goal setting- Pre-training communication –Use of ice breakers to stimulate interest, succession planning.	
Text Books:	
<ol style="list-style-type: none"> 1. Dr.Rubee Singh, “Training & Development” Crescent Publishing Corporation, 2020. 2. Raymond A Noe, AmitabhDeo Kodwani, “Employee Training and Development” McGraw Hill,2018. 3. Radha Raj, “Training and Development”, Nirali Prakashan, 1st Edition, 2017. 4. Elaine Biech, “Training & Development for Dummies”, Dummies; 1stEdition, 2015 5. Dipak Kumar Bhattacharyya, “Training and Development: Theories and Applications”, Sage Publications, 2015. 6. Jean Barbazette,“Training Needs Assessment: Methods, Tools, and Techniques” Wiley, 2014 7. P. Nick Blanchard, James W. Thacker, A. Anand Ram, “Effective Training”, Pearson Education,4th Edition, 2012. 8. Raymond A Noe, Amitabh DeKodwani, “Employee Training and Development”, McGraw-Hill,3rd Edition, 2012. 	
References:	
<ol style="list-style-type: none"> 1. B.Rathan Reddy, “Effective Human Resource Training and development Strategy”, Himalaya, 2009. 2. Donald L. Kirkpatrck and James D.Kirckpatrck, “Evaluating Training programs”, TaMcGrawHill, 2009. 	
E-Text Books:	
<ol style="list-style-type: none"> 1. http://trainingstation.walkme.com/5-best-employee-training-books/ 2. https://www.free-books.net/ebook/Human-Resources-Management-Course 3. http://www.e-booksdirectory.com/listing.php?category=439 	

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Introduction of Training	CO 1	T1:1.1, 1:1.2, R1
2	Concept of Training	CO 1	T1:1.1, 1:1.2, R1
3	Training Process	CO 1	T1:1.1, 1:1.2, R1
4	Models of Training	CO 1	T1:1.1, 1:1.2, R1
5	Systematic Model of Training	CO 1	T1:1.4
6	Transitional Model of Training	CO 1	T1:1.4
7	Systems approach to training	CO 1	T1:1.4
8	Trends in training	CO 1	T1:1.4, R2, R3
9	career opportunities in training.	CO 1	T1:1.4, R2, R3
10	Training in various sectors including Banking	CO 1	T1:1.4, R2, R3
11	BPO, IT, Training Issues	CO 1	T1:2.2, R3, R5
12	External & Internal Environment.	CO 1	T1:2.2, R3, R5
13	TRAINING METHODS	CO 2	T1:2.2, R3, R5
14	Indoor training methods	CO 2	T1:2.4, 2.9
15	On-the-job Training	CO 2	T1:2.4, 2.9
16	Job Instruction Technique	CO 2	T1:2.4, 2.9
17	Coaching methods	CO 2	T1:3.1, R5, R6
18	Off the job method	CO 2	T1:3.1, R5, R6
19	Straight Lectures Method	CO 2	T1:3.1, R5, R6
20	Demonstrations- Games and Simulations	CO 2	T1:3.1, R5, R6
21	Case studies- Role play	CO 2	T1:3.1, R5, R6
22	Behavior Modeling	CO 2	T1:10.2, R2
23	Audio Visual Enhancements to Training	CO 2	T1:10.2, R2
24	Static and Dynamic Media	CO 2	T1:10.2, R2
25	Outdoor training methods	CO 2	T1:11.2
26	field games-leadership exercises	CO 2	T1:11.2
27	Training Centers in organizations	CO 3	T1:11.2
28	Role of external agency in T&D	CO 3	T1:11.2
29	Training as consultancy	CO 3	T1: 12.3
30	Evolving Training Policy	CO 3	T1: 12.3
31	On-the-job training	CO 3	T1: 12.5
32	Off-the-job training	CO 3	T1: 12.5
33	Training budget and schedules/calendar.	CO 3	T1: 12.5
34	Training Needs Assessment (TNA)	CO 4	T1: 12.5
35	Definition and purposes	CO 4	T1: 12.5
36	Components of Needs assessment	CO 4	T1:2.1, T1:2.3, R2, R3
37	Competency modeling and advantages	CO 4	T1:2.1, T1:2.3, R2, R3
38	Organization Analysis	CO 4	T1:2.1, T1:2.3, R2
39	Team Work for Conducting Training	CO 4	T1:22.2
40	Training Needs Analysis- selection of Trainees.	CO 4	T1:22.2
41	E-learning methods	CO5	T1:22.5, 1:22.8
42	Computer Based Training (CBT)	CO 5	T1:22.5, 1:22.8
43	programmed Instruction- Intelligent Tutoring Systems-	CO 5	T1:23 R3, R4
44	Intelligent Tutoring Systems purpose	CO 5	T1:23 R3, R4

45	Interactive Multimedia	CO 5	T1:23 R3, R4
46	Virtual Reality Monitoring and evaluation of training program	CO 5	T1:23 R3, R4
47	Conceptual model of training	CO 5	T1:23.3
48	Evaluation criteria-Kirkpatrick model	CO 5	T1:23.3
49	Course content design	CO 6	T1:7 R5, R6
50	Trainer skill development	CO 6	T1:7 R5, R6
51	Facilities design	CO 6	T1:8
52	Trainee design	CO 6	T1:8
53	Resistance in Training	CO 6	T1:15.7
54	Motivation of Trainee: Goal setting	CO 6	T1:15.7
55	Goal setting objectives and importance	CO 6	T1:15.7
56	Pre-training communication	CO 6	T1:16, 1:21.1,2
57	Use of ice breakers	CO 6	T1:16, 1:21.1,2
58	Use of ice breakers to stimulate interest	CO 6	T1:16, 1:21.1,2
59	succession planning.	CO 6	T1:16, 1:21.1,2
60	succession planning TRAINING PROGRAMME	CO 6	T1:16, 1:21.1,2
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-2
63	Question Bank Discussions Unit 2	CO 3	T-1, R-2
64	Question Bank Discussions Unit 2	CO 4	T-1, R-1
65	Question Bank Discussions Unit 2	CO 5	T-1, R-2

Prepared by:
Mr. Nunna Suresh, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	HR METRICS AND ANALYSIS				
Course Code	CMBC39				
Program	MBA				
Semester	III				
Course Type	Elective				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Ms.K.L.Revathi, Assistant Professor				

I. COURSE OVERVIEW:

This course imparts knowledge in respect of HR analytics and HRIS and also HR metrics. The course also provides the information relating to equality to be maintained and the diversity strategies. The course intends to give specific evaluating methods of reliability and validity of HR data and to take necessary measures to control employee turnover and measures to be taken for improvement of employee performances and its evaluation methodologies and performance monitoring techniques and also concentrates on necessary measures to be taken to control the stress levels of employees.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC19	I	Management Information Systems

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
HR Metrics and Analytics	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

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Component		Marks	Total Marks
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	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

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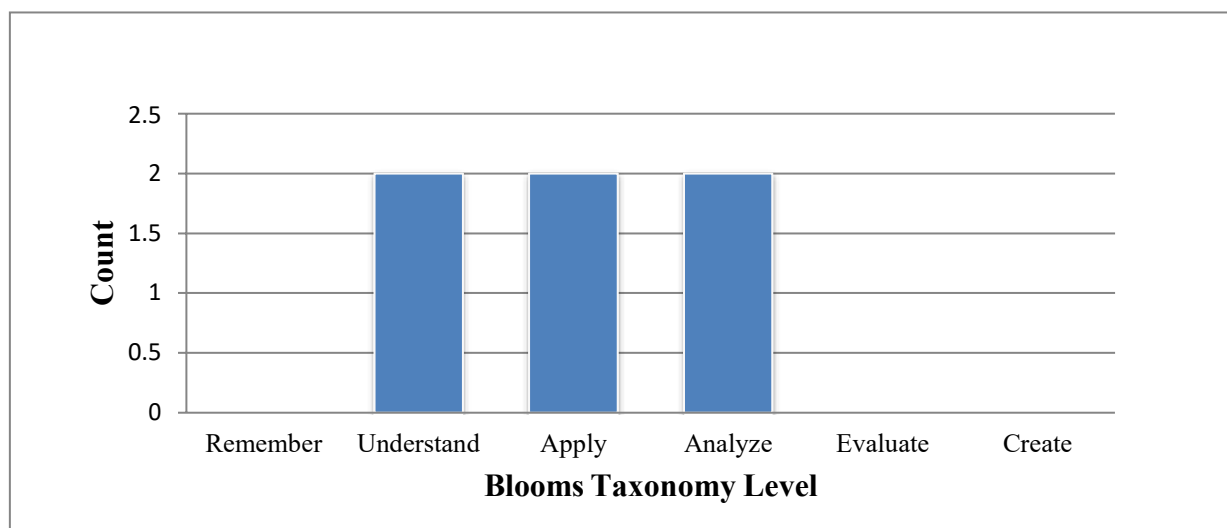
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	The role and importance of HR analytics, and the ability to track, store, retrieve, analyses and interpret HR data.
II	The theory, concepts about the methodology and situations in which the organization have to be diversified.
III	Types of recruitment and selection methods for the purpose of attaining the competitive personnel to deal with critical job roles.
IV	The performance of various employees in the organization for providing training and development programs.
V	Concept of stress management and mediation and modernization of organizations.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Contrast on HR analytics evolution and metrics and framework for implementing in modern organizations.	Understand
CO 2	Apply the inclusion and measuring and testing diversity with respect to human resources in organizations	Apply
CO 3	Discuss the reliability and validity of selection models and bases for selection	Analyze
CO 4	Examine the performance of employees and the measures to be taken to control employee turnover.	Analyze
CO 5	Examine the performance of employees and the measures to be taken to control employee turnover.	Apply
CO 6	Determine various methods of performance monitoring for the performances employees are to be monitored.	Understand

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO4	Ethics: An ability to understand professional and ethical responsibility.	3	Assignments
PO6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as Entrepreneurs.	3	Seminars
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2.75	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	√	-	-	-	-
CO 2	-	√	-	-	-	-	√	-
CO 3	√	√	-	-	-	-	-	-
CO 4	√	-	-	√	-	-	-	-
CO 5	√	-	-	-	-	√	√	-
CO 6	-	-	-	-	-	√	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of human resource management concepts and the importance of hr analytics and theories	2
	PO 2	Describe (knowledge) the importance of hr metrics and analysis for measuring and testing diversity with respect to human resources in organizations	3
	PO 4	Interpret (knowledge) about the gathering information for decision making to communicate effectively with the users to increase the productivity	3
CO 2	PO 2	Comprehend and write impact of testing diversity with respect to human resources in organizations	3
	PO 7	Recognizing (knowledge) By applying theories and practical's to contribute of the Equality, diversity and inclusion, measures	3
CO 3	PO 1	Apply (knowledge) importance of the reliability and validity Models	2
	PO 2	Recognize the importance of the reliability and validity of selection models and bases for selection.	3
CO 4	PO 1	Construct the measures to be taken to control employee turnover Communication of employees.	2
	PO 4	Examine the performance of employees and the measures by Optimizing selection and promotion decisions.	2
CO 5	PO 1	Derive the monitoring Tracking impact interventions to the employees in the Organization	2
	PO 6	Differentiate the contribution of dividend to meet the funding activities of the investments.	2
	PO 7	Outline the contribution of dividend to meet the funding activities of the investments.	3
CO 6	PO 6	Explain the working capital techniques with appropriate implementable strategies.	2
	PO 7	Examine the strategies in cash, receivables and inventory management while implementing the managerial decisions of Businesses.	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	-	3	-	-	-	-
CO 2	-	3	-	-	-	-	3	-
CO 3	2	3	-	-	-	-	-	-

CO 4	2	-	-	3	-	-	-	-
CO 5	2	-	-	-	-	3	3	-
CO 6	-	-	-	-	-	3	2	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	100.00	-	100.00	-	-	-	-
CO 2	-	100.00	-	-	-	-	75.00	-
CO 3	100.00	100.00	-	-	-	-	-	-
CO 4	100.00	-	-	100.00	-	-	-	-
CO 5	100.00	-	-	-	-	100.00	75.00	-
CO 6	-	-	-	-	-	100.00	50.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**. **0** – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate. **1** – $5\% < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	3	-	-	-	-
CO 2	-	3	-	-	-	-	3	-
CO 3	3	3	-	-	-	-	-	-
CO 4	3	-	-	3	-	-	-	-
CO 5	3	-	-	-	-	3	3	-
CO 6	-	-	-	-	-	3	2	-
TOTAL	12	9	-	6	-	6	8	-
AVERAGE	3	3	-	3	-	3	2.75	-

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO4, PO6, PO7	SEE Exams	PO1, PO2, PO4, PO6, PO7	Assignments	PO1, PO4	Seminars	PO 2, PO 6, PO 7.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO HR ANALYTICS
HR Analytics-Evolution of HR Analytics, HR information systems and data sources, HR Metric and HR Analytics, Evolution of HR Analytics; HR Metrics and HR Analytics; Intuition versus analytical thinking; HRMS/HRIS and data sources; Analytics frameworks like LAMP, HCM: 2II Model.	
UNIT-II	DIVERSITY ANALYSIS
Equality, diversity and inclusion, measuring diversity and inclusion, Testing the impact of diversity, Workforce segmentation and search for critical job roles.	
UNIT-III	RECRUITMENT AND SELECTION ANALYTICS
Evaluating Reliability and validity of selection models, Finding out selection bias. Predicting the performance and turnover.	
UNIT-IV	PERFORMANCE ANALYSIS
Predicting employee performance, training requirements, evaluating training and development, Optimizing selection and promotion decisions.	
UNIT-V	MONITORING IMPACT OF INTERVENTIONS
Tracking impact interventions, Evaluating stress levels and value-change. Formulating evidence based practices and responsible investment. Evaluation mediation process, moderation and interaction analysis	
Textbooks:	
<ol style="list-style-type: none"> 1. Michael J.Walsh, "HR Analytics Essentials", Vibrant Publishers, Jan, 2021. 2. Bharti Motwani, "HR Analytics:Application and Design", Wiley Publisher, June 2021. 3. Poonam Kaushal, Sakshi Vashisht, "HR Metrics and Analytics", Walnut Publication, 2020. 4. Jac FITZ-ENZ, "The NEW HR Analytics", HarperCollins Focus Publisher, 2018 5. Dipak Kumar Bhattachar, "HR Analytics", Sage Publications India Private, May, 2017. 6. Edwards Martin R, Edwards Kirsten, "Predictive HR Analytics: Mastering the HR Metric", Kogan Page Publishers, ISBN-0749473924, 2016. 7. Fitz-enzJac, "The new HR analytics: Predicting the Economic Value of your Company's Human Capital Investments", AMACOM, ISBN-13: 978-0-8144-1643-3, 2010. 8. Fitz-enzJac, Mattox II John, "Predictive Analytics for Human Resources", Wiley, ISBN-1118940709, 2014 	

Reference Books:

1. Sundmark, Lyndon “Doing HR Analytics: Handbook with R examples. First Edition, Lyndon Sundmark publication, USA.
2. Ramesh Soundrajan, Kul deep Singh, “Winning on HR Analytics”, First Edition, Sage publications.
3. Pratush Banerjee, JatinPandey, Manish Guptha, “Practical Applications of HR Analytics” First Edition, Sage publications

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Evolution of HR Analytics	CO1	T-1, R-2
2	Evolution of HR Analytics	CO1	T-2, R-2
3	HR information systems and data sources	CO1	T-1, R-2
4	HR information systems and data sources	CO1	T-1, R-2
5	HR Metric and HR Analytics	CO1	T-2, R-2
6	HR Metric and HR Analytics	CO1	T-1, R-1
7	HR Metric and HR Analytics	CO1	T-2, R-2
8	Intuition versus analytical thinking	CO1	T-1, R-2
9	Intuition versus analytical thinking	CO1	T-2, R-2
10	HRMS/HRIS and data sources	CO1	T-1, R-2
11	HRMS/HRIS and data sources	CO1	T-1, R-2
12	HRMS/HRIS and data sources	CO1	T-2, R-2
13	Diversity Analysis	CO2	T-1, R-2
14	Equality	CO2	T-2, R-2
15	Diversity and inclusion	CO2	T-1, R-1
16	Diversity and inclusion	CO2	T-2, R-2
17	Measuring diversity and inclusion	CO2	T-1, R-2
18	Measuring diversity and inclusion	CO2	T-2, R-2

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
19	Testing the impact of diversity	CO2	T-2, R-1
20	Testing the impact of diversity	CO2	T-2, R-2
21	Workforce segmentation	CO2	T-1, R-1
22	Workforce segmentation	CO2	T-2, R-2
23	Search for critical job roles	CO2	T-1, R-2
24	Search for critical job roles	CO2	T-1, R-1
25	RECRUITMENT AND SELECTION ANALYTICS	CO3	T-1, R-1
26	Evaluating Reliability	CO3	T-2, R-1
27	Evaluating Reliability	CO3	T-1, R-1
28	Validity of selection models	CO3	T-1, R-2
29	Validity of selection models	CO3	T-1, R-1
30	Validity of selection models	CO3	T-1, R-2
31	Finding out selection bias.	CO3	T-1, R-1
32	Finding out selection bias.	CO3	T-1, R-1
33	Predicting the performance	CO4	T-2, R-1
34	Predicting the performance	CO4	T-1, R-1
35	Predicting the performance	CO4	T-1, R-1
36	Predicting the turnover	CO4	T-1, R-1
37	Predicting the turnover	CO4	T-1, R-2
38	Predicting the turnover	CO4	T-1, R-1
39	Performance Analysis	CO5	T-1, R-1
40	Predicting employee performance	CO5	T-1, R-1
41	Predicting employee performance	CO5	T-1, R-1
42	Training requirements	CO5	T-1, R-2
43	Training requirements	CO5	T-2, R-1
44	Evaluating training and development	CO5	T-1, R-2

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
45	Evaluating training and development	CO5	T-2, R-1
46	Evaluating training and development	CO5	T-2, R-1
47	Optimizing selection and promotion decisions	CO5	T-1, R-1
48	Optimizing selection and promotion decisions	CO5	T-2, R-1
49	Optimizing selection and promotion decisions	CO5	T-1, R-1
50	Monitoring Impact of Interventions	CO6	T-2, R-1
51	Tracking impact interventions	CO6	T-1, R-1
52	Tracking impact interventions	CO6	T-1, R-2
53	Evaluating stress levels and value-change	CO6	T-1, R-2
54	Evaluating stress levels and value-change	CO6	T-2, R-1
55	Formulating evidence-based practices	CO6	T-2, R-2
56	Formulating evidence-based practices	CO6	T-1, R-2
57	Responsible investment	CO6	T-2, R-2
58	Evaluation mediation process	CO6	T-2, R-2
59	Moderation and interaction analysis.	CO6	T-1, R-1
60	Moderation and interaction analysis.	CO6	T-2, R-2
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-2
63	Question Bank Discussions Unit 2	CO 3, 4	T-1, R-2
64	Question Bank Discussions Unit 2	CO 5	T-1, R-1
65	Question Bank Discussions Unit 2	CO 6	T-1, R-2

Prepared by:
Mr. K.L.Revathi, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	STRATEGIC HUMAN RESOURCE MANAGEMENT				
Course Code	CMBC40				
Program	MBA				
Semester	III				
Course Type	Professional Elective –III				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	-	-
Course Coordinator	Mrs. B V S V Lakshmi Mondem, Assistant Professor				

I. COURSE OVERVIEW:

Strategic human resource management involves a future-oriented process of developing and implementing HR programs that solve business problems and directly contribute to major long-term business objectives. Specific topics covered in this course include International Human Resource Management theories and practices, social environment and staffing skills, National and International organizations of human resource management approaches, methods and practices of Europe, Japan and American approaches to human resource management with appropriate case studies.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
MBA	CMBC15	II	Human Resource Management

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Strategic human resource management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. There could be a maximum of two sub divisions in a question.

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively. The CIE exam is conducted for 25 marks of 2 hours duration consisting of two parts. Part–A shall have five compulsory questions of one mark each. In part–B, four out of five questions have to be answered where, each question carries 5 marks. Marks are awarded by taking average of marks scored in two CIE exams.

Alternative Assessment Tool (AAT):

Marks shall be awarded considering the average of two AAT for every course. The AAT may include seminars, assignments, term paper, open ended experiments, five minutes video and MOOCs.

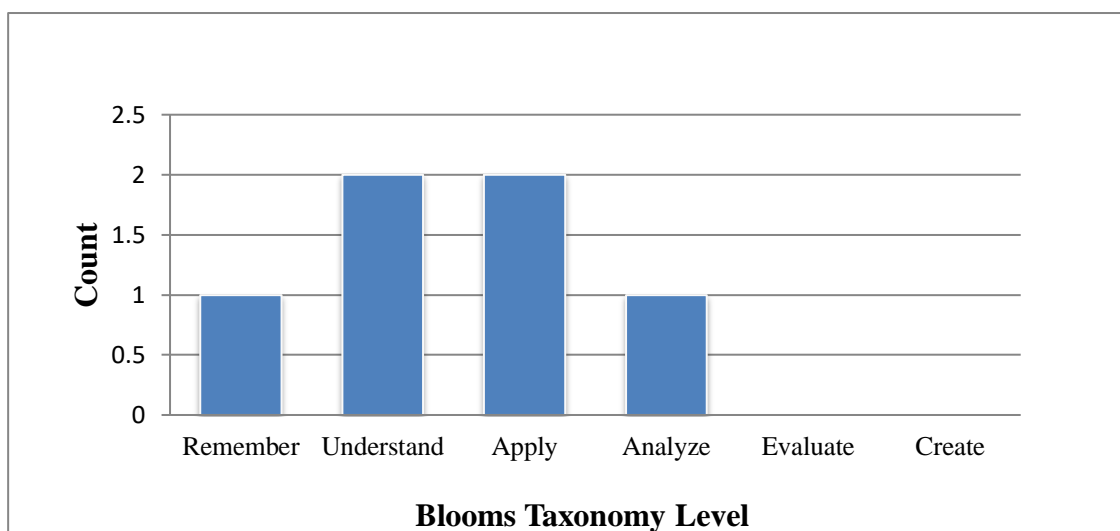
VI. COURSE OBJECTIVES:

The students will try to:	
I	Understand the significance of international management and human resource planning.
II	Know the cultural literacy and human resource information system in global business.
III	Examine the qualities, communication, abilities and interpersonal relations of global literate leader.
IV	Develop and maintain the quality of work life which makes employment in the organization a desirable personnel and social situation.
V	Identify the role of scientific management, and organic theories of in American organizations.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Describe IHRM staffing policies and models to emphasize organizational core competencies.	Understand
CO 2	Discuss the international staffing techniques that ensure continuity and growth of the organization.	Apply
CO 3	Demonstrate the role and approaches of HRM to explore the global organizations with regards to geographical boundaries.	Understand
CO 4	Evaluate the qualities for Global managers through training that enhance employee performance.	Apply
CO 5	Identify the European committee legislative procedures that help in decision making.	Remember
CO 6	Analyze International compensation methods and practices that improve organizational effectiveness.	Analyze

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2.8	Assignment
PO 2	Decision Making Skills: An ability to analyze a problem, identify, formulate and use the appropriate managerial skills for obtaining its solution	2.66	Assignment
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organization goals, contributing effectively to a team environment	2.5	Seminar
PO 7	Strategic Skills: Ability to conduct strategic analysis using theoretical and practical applications	2.66	Discussion

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	-	-	-	-	-	-	-
CO 2	√	√	-	-	-	-	-	-
CO 3	-	√	-	-	-	-	√	-
CO 4	√		-	-	√	-		-
CO 5	√	√	-	-	-	-	√	-
CO 6	-	√	-	-	-	-	-	-

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Understand the basic concept of international human resource management, cultural and reality shock models that helps to solve business problems in the organization.	2
CO 2	PO 1	Examine the basic concept of pool's adaptation of Harvard model, the Brewster model that reduces organizational problems.	1
	PO2	Analyze the concept of significance, convergence theory, Marxist theory, the cultural approach power distance that helps to take business decision.	2
CO 3	PO2	Understand the basic concept of uncertainty avoidance (UAI), individuality (INV), masculinity (MASC) that helps manger in decision making.	2
	PO 7	Interpret the basic concept of cultural literacy and human resource information system in global business, cultural awareness that develops technical skills to gain competitive advantage.	2
CO 4	PO 1	Recall the basic concept of European Community (E.C.): the council of ministers, the commission, the court of justice that helps to solve business problems.	2
	PO 5	Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.	
CO 5	PO 1	Understand the basic concept of global organizations, HRM approaches in global companies so they can facilitate cooperation and coordination among member nations.	2
	PO2	Understand the basic concept of Social environment and human resource practices, staffing: international recruitment, selection, training and hiring policies, staff retaining and motivating techniques that helps to take decisions in the organizations.	1
	PO 7	Recall the basic concept of cultural skills for co-operative advantages, human resource information system that helps	3

		employees to sustain in a global business environment.	
CO 6	PO2	Recollect the basic concept of Global literate leader that helps organizations to take business decisions.	2

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
		2	3	3	3	5	3	4
CO 1	2	-	-	-	-	-	-	-
CO 2	1	2	-	-	-	-	-	-
CO 3	-	2	-	-	-	-	3	-
CO 4	1	-	-	-	2	-	-	-
CO 5	2	1	-	-	-	-	3	-
CO 6	-	2	-	-	-	-	-	-

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
		2	3	3	3	5	3	4
CO 1	100.00	-	-	-	-	-	-	-
CO 2	50.00	66.66	-	-	-	-	-	-
CO 3	-	66.66	-	-	44.44	-	75.00	-
CO 4	50.00	-	-	-	-	-	-	-
CO 5	100.00	33.33	-	-	-	-	75.00	-
CO 6	-	66.66	-	-	-	-	-	-

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ –Nocorrelation; **2** – $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	-	-	-	-	-	-	-
CO 2	2	3	-	-	-	-	-	-
CO 3	-	3	-	-	-	-	2	-
CO 4	3	-	-	-	-	-	-	-
CO 5	3	1	-	-	2	-	3	-
CO 6	-	3	-	-	-	-	-	-
TOTAL	11	10	-	-	-	-	-	-
AVERAGE	2.8	2.5	-	-	2.5	-	2.66	-

XV. ASSESSMENT METHODOLOGY – DIRECT

CIE Exams	PO1, PO2, PO7, PO5	SEE Exams	PO1, PO2, PO7, PO5	Assignments	PO1, PO2, PO7, PO5	Seminars	PO2, PO5,
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-	-	-	-	-	-	-

XVI. ASSESSMENT METHODOLOGY – INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

MODULE-I	INTERNATIONAL HUMAN RESOURCE MANAGEMENT
Introduction, objectives an scope of international human resource management, cultural and reality shock, international human resource management models , concept, pool’s adaptation of Harvard model, the Brewster and bournois model, case study, comparative employment policy , concept, significance, convergence theory, Marxist theory, the cultural approach power distance (PDI), uncertainty avoidance (UAI), individuality (INV), masculinity (MASC).	
MODULE -II	SOCIAL ENVIRONMENT AND STAFFING
Concept, social environment and human resource practices, staffing: international recruitment, selection, training and hiring policies, staff retaining and motivating techniques, case study, cultural literacy and human resource information system in global business ,cultural awareness, essentials, advantages, cultural skills for co-operative advantages, human resource information system: concept ,limitations and uses, designing of human resource information system, computerized skill inventories.	
MODULE - III	BUSINESS MANAGEMENT OF GLOBAL COMPANIES

Characteristics of global companies, Difference between domestic and global companies, H.R. strategy planning for global organizations, HRM approaches in global companies. Developing Global Managers, Global literate leader: concept, essential qualities, communication and interpersonal Relations, Training, Career development, succession planning, managerial stimulation's.	
MODULE -IV	HRM IN EUROPE AND JAPAN
Background of Europe, the institutions of the European Community (E.C.): the council of ministers, the commission, the court of justice, the parliament, the social charter, E.C. legislation procedure, case study; Japans Employee management: Introduction, lifetime employment, characteristics, importance, limitations, the seniority wage system, relevance of Japanese Management in Indian Context, case study.	
MODULE -V	THE AMERICAN APPROACH TO HRM
Scientific Management, Behavioral an humanistic psychology, organic theories of management, the practice of HRM in American organizations, encouragement of union avoidance, transforming unionized industrial relations, case study. International Compensation - Principles of International Compensation, Methods and practices of International Compensation, International Compensation and employee satisfaction, case study.	
Textbooks:	
<ol style="list-style-type: none"> 1. Randall s. Schuler and Susan e Jackson, "Strategic Human Resource Management" Black well Publishing, 1st Edition, 1999. 2. Catherine Truss, David Manikin, Clare Kelleher, "Strategic Human Resource Management" Pearson Education, 2nd Edition, 2001. 3. Mark Saunders, Mike Mill more, Philip Lewis, Adrian Thorn hill, Trevor Morrow "Strategic Human Resource Management" Pearson, 2nd Edition, 2007. 4. Catherine Truss, David Manikin, Clare Kelleher, "Strategic Human Resource Management" Harvard Business School Press, 2nd Edition, 1999. 	
Reference Books:	
<ol style="list-style-type: none"> 1. Human Resource Champions by Dave Ulrich, Publisher: Harvard Business School Press. 2. International Human Resource Management by Randall Schuler and Dennis Briscoe, (Rout ledge Global Human Resource Management Series 3. International Human Resource Management by Monir Tayeb, Publisher: Oxford University Press. 4. Corporate HRD by Biswajeet Pattanayak, Publisher: Excel Books 	

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture no	Topics to be covered	Course outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
2	Introduction, to SHRM	CO1	T1, R1
3	Strategic Human resource objectives	CO1	T1, R1
4	SHRM and the Staffing Policy:	CO1	T2, R1
5	Scope of international human resource management	CO1	T2, R2

6	Cultural and reality shock	CO1	T1, R1
7	International human resource management models	CO1	T2, R1
8	Concept, pool's adaptation of Harvard model	CO2	T2, R2
9	Brewster and bournois model, case study	CO2	T3, R1
10	Comparative employment policy	CO2	T3, R1
11	Concept, significance, convergence theory	CO2	T2, R2
12	Marxist theory	CO2	T2, R2
13	The cultural approach power distance (PDI),	CO2	T3, R1
14	Uncertainty avoidance	CO3	T3, R1
15	(UAI), individuality (INV),	CO3	T4, R3
16	Masculinity (MASC).	CO3	T4, R3
17	Concept, social environment and human resource practices,	CO3	T4, R4
18	Staffing: international recruitment	CO3	T4, R2
19	Selection, training and hiring policies	CO3	T1, R3
20	Staff retaining and motivating techniques, case study, cultural literacy	CO3	T1, R2
21	Human resource information system in global business	CO3	T11, R4
22	Cultural awareness, essentials, advantages	CO3	T4, R2
23	Cultural skills for co-operative ,	CO3	T4, R2
24	Human resource information system: concept	CO3	T2, R2
25	Limitations of Human resource information system	CO3	T2, R2
26	Designing of human resource information system	CO3	T3, R3
27	Computerized skill inventories.	CO3	T2, R2
28	Characteristics of global companies	CO3	T1, R1
29	Difference between domestic and global companies	CO3	T2, R1

30	H.R. strategy planning for global organizations	CO3	T2, R2
31	HRM approaches in global companies.	CO3	T2, R2
32	Developing Global Managers	CO3	T2, R2
33	Global literate leader: concept	CO3	T3, R1
34	Essential qualities of Global literature leader	CO3	T3, R1
35	Communication and interpersonal Relations	CO4	T2, R2
36	Training, Career development	CO4	T2, R2
37	Succession planning	CO4	T2, R2
38	Managerial stimulation's	CO4	T2, R2
39	Background of Europe	CO4	T2, R2
40	The institutions of the European Community	CO4	T2, R2
41	The council of ministers	CO5	T3, R1
42	Commission, the court of justice	CO5	T4, R3
43	The parliament, the social charter, E.C	CO5	T4, R4
44	Legislation procedure	CO5	T4, R2
45	Case study; Japans Employee management	CO5	T1, R3
46	Introduction, lifetime employment	CO5	T1, R2
47	Characteristics, importance of seniority wage system	CO6	T1,R2
48	Limitations, the seniority wage system	CO6	T1,R2
49	Relevance of Japanese Management	CO6	T11, R4
50	Indian Context	CO6	T4, R2
51	Scientific Management	CO6	T2, R2
52	Organic theories of management, the practice of HRM in American organizations, encouragement of union avoidance,	CO6	T3, R3

53	transforming unionized industrial relations,	CO6	T2, R2
54	Case study. International Compensation	CO6	T1, R1
55	Principles of International Compensation	CO6	T1, R1
56	Methods and practices of International Compensation	CO6	T1, R1
57	Employee satisfaction,	CO6	T1, R1
58	International Compensation	CO6	T1, R1
59	HRM in American organizations	CO6	T1, R1
60	Behavioral an humanistic psychology	CO6	T1, R1
Question Bank Discussion			
61	Question Bank Discussions Unit 1	CO 1	T2, R1
62	Question Bank Discussions Unit 2	CO 2	T2, R2
63	Question Bank Discussions Unit 3	CO 3, 4	T3, R1
64	Question Bank Discussions Unit 4	CO 5	T4, R2
65	Question Bank Discussions Unit 5	CO 6	T3, R3

Prepared By:

Ms.B V S V Lakshmi Mondem, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	BUSINESS INTELLIGENCE				
Course Code	CMBC41				
Program	MBA				
Semester	III				
Course Type	Elective				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Ms.K.L.Revathi, Assistant Professor				

I. COURSE OVERVIEW:

This course imparts knowledge for students are designed to equip aspiring business leaders with the essential knowledge and skills to harness the power of data for strategic decision-making, informed insights, and sustainable organizational growth. In today's dynamic business landscape, the ability to transform raw data into actionable intelligence is a critical skill for effective management and leadership. This course offers a comprehensive exploration of business intelligence concepts, tools, techniques, and their integration within modern business contexts.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
UG	-	-	Business Intelligence

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Business Intelligence	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

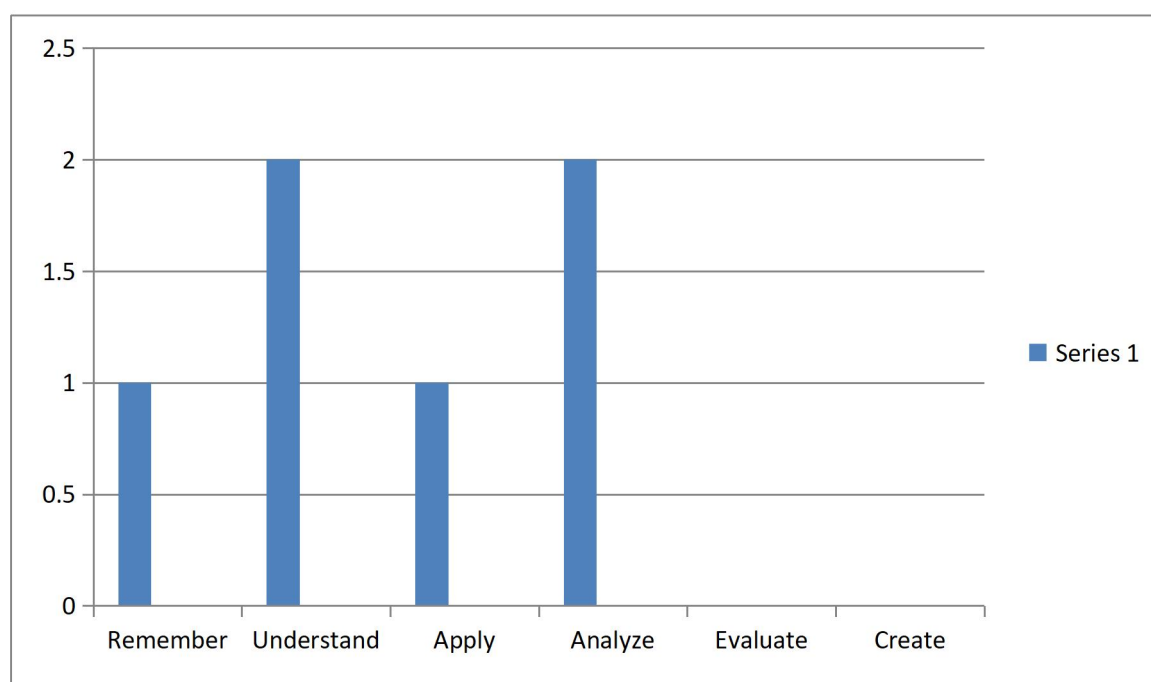
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	Understand data warehousing, data mining for business intelligence.
II	Apply business rules and data mining for business intelligence.
III	Understand how data processing machines used for auto-abstracting and auto-encoding Of documents.
IV	Improve the timelessness and quality of inputs to the decision process.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO 1	Recall the fundamental concepts and principles of business intelligence With sources of data within an organization.	Remembering
CO 2	Contrast fundamental concepts and principles of business intelligence.	Understand
CO 3	Describe the role of data warehousing in supporting business intelligence	Understand
CO 4	Apply data visualization tools to create informative and interactive dashboards.	Apply
CO 5	Analyze case studies involving in business intelligence.	Analyze
CO 6	Evaluate the ethical and legal implications of business intelligence practices.	Analyze

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	2	Seminars
PO5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	2	Seminars
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	2	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	3	Assignments

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	-	-	-	-	√
CO 2	-	√	-	-	√	-	√	√

CO 3	√	√	-	-	-	-	-	√
CO 4	-	√	-	-	√	-	-	√
CO 5	-	√	-	-	√	-	√	-
CO 6	-	√	-	-	-	-	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concepts and principles of business intelligence With sources of data within an organization.	2
	PO 2	Describe (knowledge) the importance and its data sources equips students with knowledge that can aid in managerial decision-making.	3
	PO 8	Interpret (knowledge) and understand technical tools to assess the data in organization.	2
CO 2	PO 5	Recognizing (knowledge) Effective leadership necessitates a deep understanding of concepts. Contrasting business intelligence principles equips students with comprehensive knowledge they can convey to their teams, promoting effective communication and teamwork while pursuing organizational goals	3
	PO 7	Strategic analysis involves evaluating various approaches. By contrasting business intelligence concepts, students refine their ability to assess different strategies for implementing data-driven decision-making processes in an evolving business landscape.	2
	PO 8	Contrasting business intelligence principles requires understanding various technological tools and their applications. This cultivates technical skills as students engage with different software and platforms, preparing them to face the competitive business environment effectively.	2
CO 3	PO 1	Apply (knowledge) this knowledge helps students make informed decisions and solve business problems effectively.	2
	PO 2	Recognize the importance of the data warehousing involves understanding its significance in organizing and managing large datasets.	3
	PO 8	Learning about data warehousing contributes to technical skills development. Students gain an understanding of the technology infrastructure required to support business intelligence.	2
CO 4	PO 2	Construct the data visualization tools involve analyzing data patterns and trends to create meaningful visual representations.	3
	PO 5	Examine & Creating informative and interactive dashboards require effective communication and presentation skills.	3
	PO 8	Applying data visualization tools requires proficiency in using relevant software and technologies.	2
CO 5	PO 2	Derive the case studies requires students to extract insights, patterns, and trends from complex data scenarios.	3

	PO 5	Differentiate the individual effort but also collaborative interpretation.	3
	PO 7	Outline the development of strategic skills by requiring students to assess various business scenarios and formulate strategies based on data insights.	2
CO 6	PO 2	Explain Evaluating ethical and legal implications requires a comprehensive understanding of business intelligence practices, including their potential impacts.	3
	PO 7	Examine Ethical and legal considerations are integral to developing effective managerial strategies.	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	-	-	-	-	-	2
CO 2	-	-	-	-	3	-	2	2
CO 3	2	3	-	-	-	-	-	2
CO 4	-	3	-	-	3	-	-	2
CO 5	-	3	-	-	3	-	2	-
CO 6	-	3	-	-	-	-	2	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	100.00	-	-	-	-	-	100.00
CO 2	-	-	-	-	60.00	-	50.00	100.00
CO 3	100.00	100.00	-	-	-	-	-	100.00
CO 4	-	100.00	-	-	60.00	-	-	100.00
CO 5	100.00	100.00	-	-	60.00	-	50.00	-
CO 6	-	100.00	-	-	-	-	50.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	-	-	-	-	3
CO 2	-	-	-	-	2	-	2	3
CO 3	3	3	-	-	-	-	-	3
CO 4	-	3	-	-	2	-	-	3
CO 5	3	3	-	-	2	-	2	-
CO 6	-	3	-	-	-	-	2	-
TOTAL	9	15	-	-	6	-	6	12
AVERAGE	3	3	-	-	2	-	2	3

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO5, PO7, PO8	SEE Exams	PO1, PO2, PO5, PO7, PO8	Assignments	PO1, PO2, PO8	Seminars	PO 2, PO 5, PO 7, PO8.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO BUSINESS INTELLIGENCE
The business pressure, responses and support model, definition of business intelligence, architecture of business intelligence, styles of business intelligence, vents driven alerts, a cyclic process of intelligence creation. The value of business intelligence, value driven and information use, performance metrics and key performance indicators, horizontal use cases for business intelligence.	
UNIT-II	DATA WARE HOUSING
Definitions and concepts, data ware housing process an innovation, data warehousing Implementation , data warehousing administration, security issues and future trends. Business performance management, overview strategic plan, monitor, performance measurement, business	

performance management methodologies, business performance management techniques, performance dashboard and scorecards.	
UNIT-III	DATA MINING FOR BUSINESS INTELLIGENCE
Data mining concepts and definitions, data mining applications, artificial neural networks for data mining. Text and web mining, natural language processing. Text mining applications, text mining process, tools, web mining overview, web content overview, web structure mining, web usage mining.	
UNIT-IV	BUSINESS RULES
The value proposition of business rules, business rules approach, business rule system sources of business rules and management approach.	
UNIT-V	BUSINESS INTELLIGENCE IMPLEMENTATION
Business intelligence and integration implementation, connecting in business intelligence systems, issues of legality, privacy and ethics, social networking and business intelligence.	
Textbooks:	
<ol style="list-style-type: none"> 1. U.Dinesh Kumar, "Business Analytics", Wiley, 2017. 2. Laursen, Thorlund, "Business Analytics for Managers", Wiley, 2 nd Edition, 2017. 3. Sahil Raj, "Business Analytics", Cengage Learning, 3 rd Edition, 2015. 4. Albright, Winston, "Business Analytics - Data Analysis and Decision Making", Cengage Learning, 5 th Edition, 2015. 5. Jac Fitz, Mattox II, "Predictive Analytics for Human Resources", Wiley, 3 rd Edition, 2015. 6. Efraim Turban et al. "Business Intelligence", Pearson Education, 2nd Edition, 2012. 7. David Loshin "Business Intelligence", Elsevier, 2nd Edition, 2012. 8. Rajiv Sabherwal "Business Intelligence" Wiley Publications, 2nd Edition, 2012. 	
Reference Books:	
<ol style="list-style-type: none"> 1. Philo Janus, Stacia Misner, "Building Integrated Business Intelligence Solutions with SQL Server", TMH, 1st Edition, 2011. 2. Nina Godbole and Sunlit Belpre, "Cyber Security", Wiley India, 2nd Edition, 2012. 	

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Business pressure, responses and support model	CO1	T-1, R-2
2	Definition of business intelligence	CO1	T-2, R-2
3	Architecture of business intelligence	CO1	T-1, R-2
4	Styles of business intelligence	CO1	T-1, R-2
5	Vents driven alerts	CO1	T-2, R-2

6	A cyclic process of intelligence creation	CO1	T-1, R-1
7	Value of business intelligence	CO1	T-2, R-2
8	Value driven and information use	CO1	T-1, R-2
9	Horizontal use cases for business intelligence	CO1	T-2, R-2
10	Performance metrics and key performance indicators	CO1	T-1, R-2
11	Key performance indicators	CO1	T-1, R-2
12	Business Intelligence	CO1	T-2, R-2
13	Definitions and concepts, data ware housing process	CO2	T-1, R-2
14	Innovation, data warehousing Implementation , data warehousing administration	CO2	T-2, R-2
15	Security issues and future trends	CO2	T-1, R-1
16	Business performance management	CO2	T-2, R-2
17	Overview strategic plan	CO2	T-1, R-2
18	Monitor, performance measurement	CO2	T-2, R-2
19	Business performance management methodologies	CO2	T-2, R-1
20	Business performance management techniques	CO2	T-2, R-2
21	Strategic plan	CO2	T-1, R-1
22	Performance dashboard and scorecards.	CO2	T-2, R-2
23	Performance dashboard and scorecards.	CO2	T-1, R-2
24	Innovation, data warehousing	CO2	T-1, R-1
25	Data mining concepts and definitions	CO3	T-1, R-1
26	Data mining applications, artificial neural networks for data mining.	CO3	T-2, R-1
27	Text and web mining, natural language processing.	CO3	T-1, R-1
28	Text mining applications	CO3	T-1, R-2
29	Text mining process	CO3	T-1, R-1
30	Text mining process tools	CO3	T-1, R-2
31	Web mining overview, web content overview	CO3	T-1, R-1
32	Web structure mining, web usage mining.	CO3	T-1, R-1
33	Performance dashboard and scorecards.	CO4	T-2, R-1
34	Innovation, data warehousing	CO4	T-1, R-1
35	Data mining concepts and definitions	CO4	T-1, R-1

36	Data mining applications, artificial neural networks for data mining.	CO4	T-1, R-1
37	Text and web mining, natural language processing.	CO4	T-1, R-2
38	Text mining applications	CO4	T-1, R-1
39	The value proposition of business rules	CO5	T-1, R-1
40	Business rules approach	CO5	T-1, R-1
41	Business rule system sources	CO5	T-1, R-1
42	Business rules and management approach	CO5	T-1, R-2
43	Business rules approach	CO5	T-2, R-1
44	Business rule system sources	CO5	T-1, R-2
45	Business performance management techniques	CO5	T-2, R-1
46	Strategic plan	CO5	T-2, R-1
47	Business Intelligence	CO5	T-1, R-1
48	Definitions and concepts, data ware housing process	CO5	T-2, R-1
49	Business rules approach	CO5	T-1, R-1
50	Business rule system sources	CO6	T-2, R-1
51	Business intelligence	CO6	T-1, R-1
52	Integration implementation	CO6	T-1, R-2
53	Connecting in business intelligence systems	CO6	T-1, R-2
54	Issues of legality	CO6	T-2, R-1
55	Privacy and ethics	CO6	T-2, R-2
56	Social networking and business intelligence.	CO6	T-1, R-2
57	Connecting in business intelligence systems	CO6	T-2, R-2
58	Issues of legality	CO6	T-2, R-2
59	Privacy and ethics	CO6	T-1, R-1
60	Business intelligence systems	CO6	T-2, R-2
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-2
63	Question Bank Discussions Unit 2	CO 3, 4	T-1, R-2

64	Question Bank Discussions Unit 2	CO 5	T-1, R-1
65	Question Bank Discussions Unit 2	CO 6	T-1, R-2

Prepared by:

Ms.K.L.Revathi, Assistant Professor.

HOD, MBA



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MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	DATA BASE MANAGEMENT SYSTEMS				
Course Code	CMBC42				
Program	MBA				
Semester	III				
Course Type	Elective				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Ms.D.Sandhya Rani, Assistant Professor				

I. COURSE OVERVIEW:

This course imparts knowledge and tailored for MBA students provides a comprehensive understanding of the fundamental concepts, principles, and practical applications of managing and utilizing databases in modern business environments. In today's data-driven world, the ability to effectively manage, retrieve, and analyze data is crucial for informed decision-making and efficient business operations. This course is designed to equip MBA students with the knowledge and skills needed to leverage databases for strategic advantage and organizational success.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
UG	-	-	DBMS

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
DATA BASE MANAGEMENT SYSTEMS	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

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20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

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Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

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Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

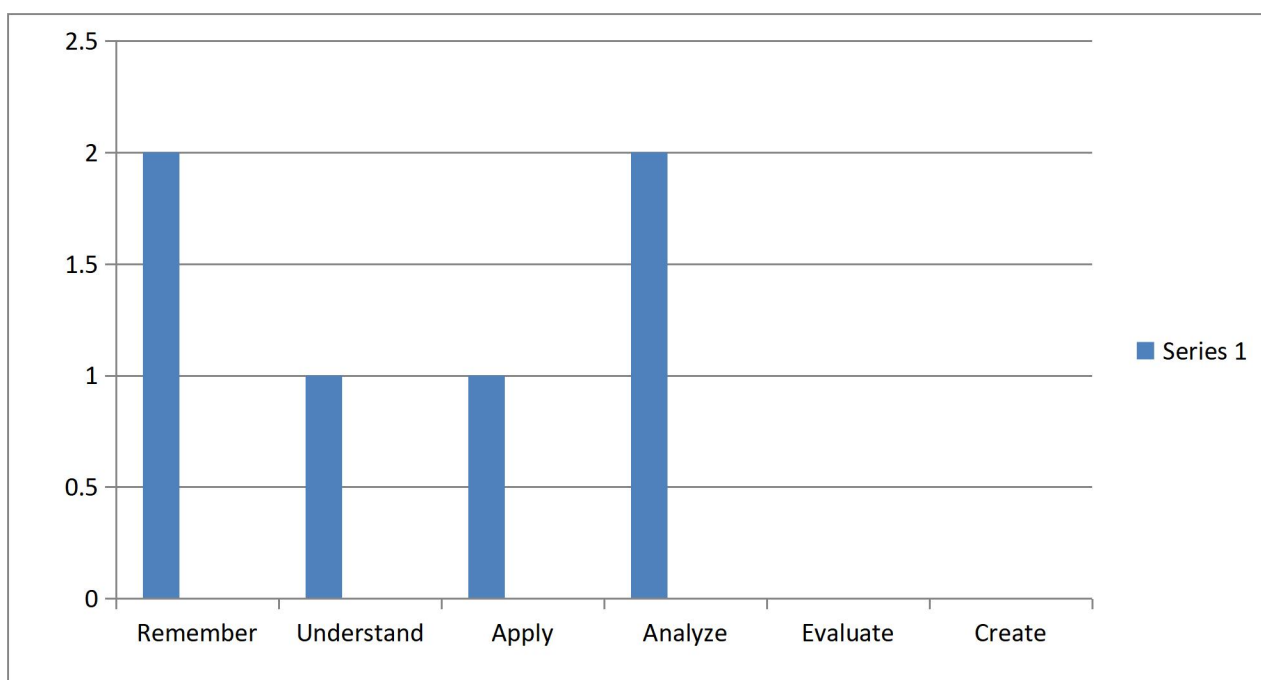
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	Understand the role of database management system in an organization and learn the database concepts.
II	Design databases using data modeling and data normalization techniques.
III	Construct database queries using relational algebra and calculus.
IV	Understand the concept of a database transaction and related database facilities.
V	Learn how to evaluate a set of queries in query processing.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO 1	Recall fundamental concepts of database management systems, including data models, schemas, and normalization techniques.	Remember
CO 2	Identify basic SQL syntax for querying and manipulating databases.	Remember
CO 3	Summarize the ethical and legal considerations associated with database management and data privacy.	Understand
CO 4	Utilize SQL queries to extract specific information from a database. Implement basic security measures to safeguard database integrity.	Apply
CO 5	Evaluate the trade-offs between different database architectures for specific organizational needs.	Analyze
CO 6	Analyze a given database design for potential inefficiencies and suggest improvements.	Analyze

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	3	Assignments
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	2	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	3	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	-	√	-	-	-	-	-	√
CO 2	√	-	-	-	-	-	-	√
CO 3	-	√	-	-	√	-	-	-
CO 4	-	-	-	-	√	-	-	√

CO 5	√	-	-	-	-	-	√	-
CO 6	-	√	-	-	√	-	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 2	Recall fundamental concepts of database management systems is foundational for analyzing and interpreting data.	3
	PO 8	Fundamental concepts of database management systems, including data models and schemas, are the building blocks of technology skills.	2
CO 2	PO 1	Identifying basic SQL syntax aligns with managerial skills by providing students with the ability to interact with databases, extract relevant information, and utilize data for solving business problems.	2
	PO 8	Proficiency in identifying basic SQL syntax contributes directly to technology skills.	2
CO 3	PO 2	Summarizing ethical and legal considerations aligns with developing value-based leadership ability	3
	PO 5	Ethical and legal considerations are essential components of effective leadership.	3
CO 4	PO 5	Utilizing SQL queries aligns with leadership skills by enabling students to effectively extract and manipulate data, thereby contributing to informed decision-making.	3
	PO 8	Utilizing SQL queries and implementing security measures directly align with technology skills.	2
CO 5	PO 1	Evaluating trade-offs between different databases architectures aligns with managerial skills.	2
	PO 7	Strategic decision-making involves analyzing options and choosing the best fit for the organization's goals.	3
CO 6	PO 2	This aligns with decision-making skills as students evaluate the effectiveness of the design and make informed decisions about potential improvements.	3
	PO 5	Identifying inefficiencies and proposing changes contribute to enhancing processes and achieving organizational goals, thereby demonstrating effective leadership.	3
	PO 7	Identifying inefficiencies and proposing improvements align with the strategic objective of optimizing processes and resources to adapt to dynamic business environments.	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	3	-	-	-	-	-	2
CO 2	2	-	-	-	-	-	-	2

CO 3	-	3	-	-	3	-	-	-
CO 4	-	-	-	-	3	-	-	2
CO 5	2	-	-	-	-	-	3	-
CO 6	-	3	-	-	3	-	3	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	100.00	-	-	-	-	-	100.00
CO 2	100.00	-	-	-	-	-	-	100.00
CO 3	-	100.00	-	-	60.00	-	-	-
CO 4	-	-	-	-	60.00	-	-	100.00
CO 5	100.00	-	-	-	-	-	75.00	-
CO 6	-	100.00	-	-	60.00	-	75.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, 0 being **no correlation**, 1 being **low correlation**, 2 being **medium correlation** and 3 being **high correlation**.

0 – 0 ≤ C ≤ 5% – No correlation; 2 – 40 % < C < 60% – Moderate.

1 – 5 < C ≤ 40% – Low/ Slight; 3 – 60% ≤ C < 100% – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	-	3	-	-	-	-	-	3
CO 2	3	-	-	-	-	-	-	3
CO 3	-	3	-	-	2	-	-	-
CO 4	-	-	-	-	2	-	-	3
CO 5	3	-	-	-	-	-	3	-
CO 6	-	3	-	-	2	-	3	-
TOTAL	6	9	-	-	6	-	6	9
AVERAGE	3	3	-	-	2	-	3	3

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO5, PO7, PO8	SEE Exams	PO1, PO2, PO5, PO7, PO8	Assignments	PO1, PO2 PO5	Seminars	PO 1, PO 2, PO 7, PO 8
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	CONCEPTUAL MODELING
Introduction to file and database systems: Database system structure, data models, introduction to network and hierarchical models, ER model, relational model	
UNIT-II	RELATIONAL APPROACH
Relational algebra and calculus: Relational algebra, selection and projection, set operations, renaming, joins, division, examples of algebra queries, relational calculus, tuple relational calculus, domain relational calculus, expressive power of algebra and calculus	
UNIT-III	BASIC SQL QUERY
SQL data definition; Queries in SQL: updates, views, integrity and security, relational database design. Functional dependencies and normalization for relational databases up to five normal forms	
UNIT-IV	TRANSACTION MANAGEMENT
Transaction processing: Introduction, need for concurrency control, desirable properties of transaction, schedule and recoverability, serializability and schedules; Concurrency control: Types of locks, two phases of locking, deadlock, time stamp based concurrency control, recovery techniques, concepts, immediate update, deferred update, shadow paging.	
UNIT-V	DATA STORAGE AND QUERY PROCESSING
Record storage and primary file organization, secondary storage devices, operations on files, heap file, sorted files, hashing techniques, and index structures for files; Different types of indexes, B tree, B+ tree, query processing.	

Textbooks:
<ol style="list-style-type: none"> 1. Jeff Hoffer, V.Ramesh, Heikki Topi, “Modern Database Management”, Pearson, August, 2019. 2. Wilfried Lemahieu, Seppe Vanden Broucke, Bart Baesens, “Principles of Database Management”, Cambridge Univeristy Press, July 2018. 3. Carlos Coronel, Steven Morris, “Database Systems: Design, Implementation, & Management”, 13thEdition, Cengage Learning, Jan, 2018. 4. Mukesh Changra Negi, “Fundamental of Database Management System”, BPB, 1stEdition, Jan, 2019. 5. R.S.Negi, “Database Management System”, Astha Publishers & Distributors , Jan, 2014 6. Abraham Silberschatz, Henry F. Korth, S. Sudarshan, "Database System Concepts", McGraw Hill, 4thEdition, 2002
Reference Books:
<ol style="list-style-type: none"> 1. Ramez Elmasri, Shamkant B.Navathe, "Fundamental Database Systems", Pearson Education, 3rd Edition, 2003. 2. Raghu Ramakrishnan, "Database Management System", Tata McGraw-Hill Publishing Company, 3 rd Edition, 2003. 3. Hector Garcia Molina, Jeffrey D. Ullman, Jennifer Widom, "Database System Implementation", Pearson Education, United States, 1st Edition, 2000. 4. Peter Rob, Corlos Coronel, "Database System, Design, Implementation and Management", Thompson Learning Course Technology, 5 thEdition, 2003.

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Introduction to file and database systems	CO1	T-1, R-2
2	Evolution of database systems	CO1	T-2, R-2
3	Role and importance of databases in modern businesses	CO1	T-1, R-2
4	Overview of data models, Hierarchical and network models Entity-Relationship (ER) model and its components and Advantages and limitations of different data models	CO1	T-1, R-2
5	Introduction to the relational model, Relational schema and relational database concepts, Keys, attributes, and relationships and relational algebra and relational calculus	CO1	T-2, R-2
6	Basics of SQL,Data definition language (DDL) and data manipulation language (DML) commands, Retrieving data with SELECT statements, Join operations and data	CO1	T-1, R-1

	aggregation		
7	Database design process, Functional dependencies and normalization, First, second, and third normal forms Entity-Relationship (ER) diagram to relational schema mapping.	CO1	T-2, R-2
8	Enforcing data integrity with constraints, Primary keys, foreign keys, and referential integrity, Triggers and stored procedures, Transaction management and ACID properties.	CO1	T-1, R-2
9	Physical storage of data in databases, File organization and access methods, Indexing techniques: B-trees, hash indexes, etc. Performance optimization through indexing.	CO1	T-2, R-2
10	No SQL databases and their characteristics	CO1	T-1, R-2
11	Big Data and distributed databases	CO1	T-1, R-2
12	Data security and privacy considerations, Ethical and legal aspects of database systems	CO1	T-2, R-2
13	Overview of relational algebra and calculus	CO2	T-1, R-2
14	Role and significance in database query operations	CO2	T-2, R-2
15	Comparison between algebra and calculus approaches	CO2	T-1, R-1
16	Selection (σ) and Projection (π) operations	CO2	T-2, R-2
17	Set operations: Union, Intersection, Difference	CO2	T-1, R-2
18	Renaming (ρ) and Cross Product (\times) operations	CO2	T-2, R-2
19	Examples of algebraic queries and expressions	CO2	T-2, R-1
20	Extended operations: Outer Join, Semi-Join, Anti-Join	CO2	T-2, R-2
21	Aggregation and Grouping	CO2	T-1, R-1
22	Nested sub queries and correlated sub queries and Recursive queries	CO2	T-2, R-2
23	Applying relational algebra and calculus in real-world scenarios	CO2	T-1, R-2
24	Case studies involving complex queries and optimizations, Evaluating performance implications of different query approaches and Ethical and legal considerations in query design	CO2	T-1, R-1
25	Introduction to SQL and its role in database management	CO3	T-1, R-1
26	Overview of relational databases and their components	CO3	T-2, R-1
27	Importance of data integrity, security, and normalization.	CO3	T-1, R-1
28	Data types and constraints in SQL	CO3	T-1, R-2
29	Creating and modifying database objects: tables, indexes, and constraints	CO3	T-1, R-1

30	Inserting, updating, and deleting data	CO3	T-1, R-2
31	Transactions, ACID properties, and data integrity	CO3	T-1, R-1
32	Writing basic SELECT statements	CO3	T-1, R-1
33	Retrieving data using WHERE, ORDER BY, and GROUP BY clauses	CO4	T-2, R-1
34	Working with multiple tables: JOIN operations, Creating and using views to simplify data access	CO4	T-1, R-1
35	Using built-in SQL functions: string, numeric, date, Aggregating data using SUM, AVG, COUNT, etc.	CO4	T-1, R-1
36	Sub-queries and correlated sub-queries Using CASE statements for conditional logic	CO4	T-1, R-1
37	Principles of relational database design, Identifying entities, attributes, and relationships, Entity-Relationship (ER) modeling and diagramming, Mapping ER diagrams to relational schemas.	CO4	T-1, R-2
38	Understanding functional dependencies and keys, First, second, and third normal forms, Boyce-Cod Normal Form (BCNF), Fourth and fifth normal forms and their significance	CO4	T-1, R-1
39	Demoralization and trade-offs, Handling complex queries and optimization techniques, Ethical and legal considerations in database design and management Case studies illustrating database design, normalization, and query optimization	CO5	T-1, R-1
40	The need for concurrency control in multi-user environments, desirable properties of transactions: ACID properties.	CO5	T-1, R-1
41	Understanding schedules and transaction recovery, Recoverable and cascade less schedules Introduction to serializability and conflict graphs Testing schedules for serializability using precedence graph.	CO5	T-1, R-1
42	Types of locks: Shared and exclusive locks, Two-phase locking protocol: Growing and shrinking phases, Deadlock and strategies for deadlock prevention and resolution, Lock-based concurrency control algorithms	CO5	T-1, R-2
43	Introduction to time stamp ordering, Wait-die and wound-wait schemes, Implementing time stamp ordering for concurrency control, Pros and cons of time stamp ordering	CO5	T-2, R-1
44	Overview of recovery techniques and their significance Immediate update recovery technique: Logging and undo/redo operations, Writing a log record: Write-ahead logging protocol, Analysis, redo, and undo phases in immediate update recovery.	CO5	T-1, R-2
45	Deferred update recovery technique: Shadow paging, Shadow paging: Mapping between logical and physical blocks, Comparing immediate update and deferred update recovery techniques, Logging and recovery from system crashes.	CO5	T-2, R-1

46	Concurrency control in distributed databases, Handling long-duration transactions and distributed deadlock, Handling distributed recovery and global transactions, Ethical and legal considerations in transaction processing.	CO5	T-2, R-1
47	Case studies illustrating real-world scenarios of concurrency control and recovery, Optimizing concurrency control strategies for specific business needs, Implementing recovery techniques in different database systems, Evaluating performance implications of different concurrency and recovery approaches.	CO5	T-1, R-1
48	Introduction to file storage and organization in databases	CO5	T-2, R-1
49	Heap file organization: Storing records sequentially, Sorted file organization: Storing records in sorted order	CO5	T-1, R-1
50	Introduction to hashing and its significance, Hash functions and collision resolution methods	CO6	T-2, R-1
51	The role of indexes in enhancing query performance, Types of indexes: Dense, sparse, and clustered, Introduction to B-tree index structure, Balanced search trees and their applications.	CO6	T-1, R-1
52	Understanding B+ tree index structure	CO6	T-1, R-2
53	Introduction to query processing and optimization, Parsing, translation, and optimization of queries, Cost-based query optimization and query execution plans, Join strategies and algorithms	CO6	T-1, R-2
54	In-depth study of B-tree indexing and Leveraging B-trees for range queries.	CO6	T-2, R-1
55	Query optimization strategies in complex scenarios Indexing in distributed databases and cloud environments	CO6	T-2, R-2
56	Ethical and legal considerations in indexing and query optimization.	CO6	T-1, R-2
57	Case studies illustrating the impact of different indexing strategies on query performance.	CO6	T-2, R-2
58	Properties and advantages of B+ trees	CO6	T-2, R-2
59	Multi-level indexing and its benefits, Implementing B+ trees for efficient data retrieval.	CO6	T-1, R-1
60	Primary and secondary storage devices: Concepts and characteristics.	CO6	T-2, R-2
Question Bank Discussions			
61	Operations on files: Insertion, deletion, modification.	CO 1	T-1, R-1
62	Exploring B+ tree indexing for efficient range queries, Pros and cons of B-tree and B+ tree indexing.	CO 2	T-1, R-2
63	Static and dynamic hashing techniques.	CO 3, 4	T-1, R-2

64	Comparing heap and sorted file organization methods Pros and cons of heap and sorted files.	CO 5	T-1, R-1
65	Hashing for large databases and practical considerations.	CO 6	T-1, R-2

Prepared by:

Ms.D.SandhyaRani, Assistant Professor.

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	CLOUD COMPUTING				
Course Code	CMBC43				
Program	MBA				
Semester	III				
Course Type	Elective				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Mr.L.Sainath Yadav, Assistant Professor				

I. COURSE OVERVIEW:

In today's rapidly evolving business landscape, cloud computing has emerged as a transformative technology that enables organizations to streamline operations, enhance scalability, and drive innovation. The "Cloud Computing for MBA Students" course is designed to provide MBA students with a comprehensive understanding of cloud computing concepts, strategies, and applications. This course will equip students with the knowledge and skills necessary to harness the power of cloud computing in various business contexts.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
-	-	-	-

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Cloud Computing	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

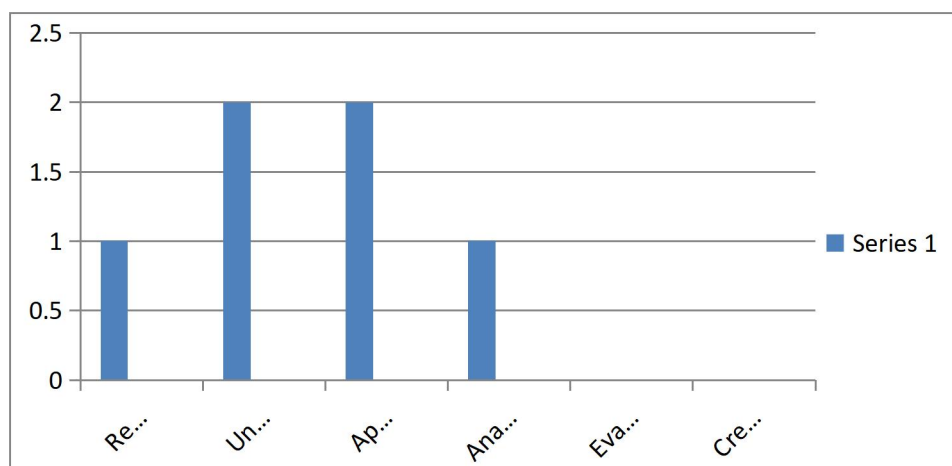
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	Understand the foundational concepts of cloud computing and its significance in modern business environments.
II	Analyze the benefits and challenges of adopting cloud computing for businesses across different industries.
III	Develop the skills to make informed decisions about cloud adoption, resource management, and cost optimization.
IV	Illustrate and explore the benefits of cloud storage and its applications, usage by managers
V	Gain insights into real-world case studies of organizations successfully implementing cloud solutions.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO 1	Recall the fundamental concepts of cloud computing, including virtualization, resource provisioning, and service models (IaaS, PaaS, SaaS).	Remember
CO 2	Explain the strategic advantages and challenges of integrating cloud computing into diverse business models and industries.	Understand
CO 3	Understand the role of cloud-based collaboration tools in supporting effective communication and teamwork.	Understand
CO 4	Apply cloud computing concepts to solve business challenges, enhance operations, and foster innovation.	Apply
CO 5	Apply models to specific business needs and evaluate their alignment with organizational goals.	Apply
CO 6	Analyze security risks in cloud computing and formulate strategies to ensure data privacy, protection, and regulatory compliance.	Analyze

COURSE KNOWLEDGE COMPETENCY LEVELS:



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.	3	Assignments
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	2	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	3	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	-	√	-	-	-	-	-	√
CO 2	√	-	-	-	-	-	-	√
CO 3	-	√	-	-	√	-	-	-
CO 4	-	-	-	-	√	-	-	√
CO 5	√	-	-	-	-	-	√	-
CO 6	-	√	-	-	√	-	√	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 2	Understanding the fundamental concepts of cloud computing, such as virtualization, resource provisioning, and service models, enables MBA students to think critically about technology-related decisions.	3
	PO 8	Cloud computing does a technology-driven paradigm that requires technical understand.	2
CO 2	PO 1	Understanding the strategic advantages and challenges of cloud computing integration is crucial for applying management theories and practices effectively.	2
	PO 8	Cloud computing is a technological advancement that necessitates technical awareness.	2
CO 3	PO 2	Understanding the role of cloud-based collaboration tools requires analytical thinking.	3
	PO 5	Effective communication and teamwork are crucial aspects of leadership. By grasping the significance of these tools, students are better equipped to lead themselves and others in a team environment.	3
CO 4	PO 5	Applying cloud computing concepts to solve business challenges requires effective leadership.	3
	PO 8	Applying cloud computing concepts is inherently linked to technical competence. It involves utilizing cloud technology to solve business challenges and enhance operations.	2
CO 5	PO 1	Defining models to business needs requires a solid understanding of management theories.	2
	PO 7	Valuating models in the context of organizational objectives.	3
CO 6	PO 2	This aligns with the development of data-based decision-making skills to address security challenges effectively.	3
	PO 5	Ensuring data privacy and protection is an essential aspect of leadership. It emphasizes formulating strategies to protect data and comply with regulations.	3
	PO 7	This aligns with the development of strategic skills to sustain the organization's security posture over time.	3

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	3	-	-	-	-	-	2
CO 2	2	-	-	-	-	-	-	2
CO 3	-	3	-	-	3	-	-	-
CO 4	-	-	-	-	3	-	-	2
CO 5	2	-	-	-	-	-	3	-
CO 6	-	3	-	-	3	-	3	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	100.00	-	-	-	-	-	100.00
CO 2	100.00	-	-	-	-	-	-	100.00
CO 3	-	100.00	-	-	60.00	-	-	-
CO 4	-	-	-	-	60.00	-	-	100.00
CO 5	100.00	-	-	-	-	-	75.00	-
CO 6	-	100.00	-	-	60.00	-	75.00	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being **the low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	-	3	-	-	-	-	-	3
CO 2	3	-	-	-	-	-	-	3
CO 3	-	3	-	-	2	-	-	-
CO 4	-	-	-	-	2	-	-	3
CO 5	3	-	-	-	-	-	3	-
CO 6	-	3	-	-	2	-	3	-
TOTAL	6	9	-	-	6	-	6	9
AVERAGE	3	3	-	-	2	-	3	3

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO5, PO7, PO8	SEE Exams	PO1, PO2, PO5, PO7, PO8	Assignments	PO1, PO2 PO5	Seminars	PO 1, PO 2, PO 7, PO 8.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO CLOUD COMPUTING
Evolution -Cloud Computing, Hardware, Internet and Software, Virtualization. Cloud service Attributes: Access to the cloud, Cloud Hosting, Information technology support. Characteristics of Cloud Computing: Rapid Elasticity, Pay per use, Independent Resource Pooling, Network Access, Web Services on Cloud.	
UNIT-II	CLOUD SERVICES APPLICATIONS
Cloud Delivery Models- Infrastructure-as-a-Service, Platform-as-a-Service, Software-as-a-Service. Cloud Categories: Public Cloud, Private Cloud, Hybrid Cloud, Community Cloud. Applications – Online Planning and Task Management –Event Management – CRM. Cloud Service Development tools - Word Processing, Databases, Storing and File Sharing on Cloud	
UNIT-III	CLOUD COMPUTING FOR MANAGERS
Centralizing Email Communications – Collaborating on Schedules - To-Do Lists, Contact Lists. Online Community development, Online collaboration tools for Projects, Cloud Computing for Business.	
UNIT-IV	CLOUD MANAGEMENT
Privacy and its relation to Cloud-based Information Systems. Security in the Cloud: Data Security and Control, Provider Loss, Subpoenaed Data, Lack of Provider Security, Encryption. Common Standards in the Cloud, End-User Access to the Cloud Computing, Legal and Ethical dimensions, Cloud Pricing Models.	
UNIT-V	VIRTUAL OFFICE MANAGEMENT
Web-based communication tools, Web Mail Services, Web Conference Tools, Social Networks and Groupware, collaborating via blogs and .Wikis, IBM, Amazon Ec2, Google Apps for Business.	
Textbooks:	
<ol style="list-style-type: none"> 1. Rastogi Surbhi, “Cloud Simplified”, BPB Publication, 2021. 2. John R.Vacca, “Cloud Computing Security foundations and challenges”, CRC Press, Nov, 2020. 3. Frederic Magoules, Jie Pan, and Fei Teng, “Cloud Computing Data-Intensive Computing and Scheduling”, Crc Press, 1stEdition 2018. 	
Reference Books:	
<ol style="list-style-type: none"> 1. Igor Fyanberg, Hui-LanLu, Dorskuler, “Cloud Computing business Trends and Technologies”, Wiley Publishers, 2016. 2. Ignor Faynberg, Hui-Lan Li, Dor Skuler, “Cloud Computing”, Wiley-Blackwell, 1st Edition, Dec 2015. 	

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Overview of cloud computing evolution and its impact on modern IT landscape.	CO1	T-1, R-2
2	Understanding the key terminologies: Cloud Computing, Hardware, Internet and Software, Virtualization.	CO1	T-2, R-2
3	Discussing the driving forces behind the adoption of cloud computing.	CO1	T-1, R-2
4	Exploring Cloud Service Attributes: Access to the cloud, Cloud Hosting, IT support.	CO1	T-1, R-2
5	Understanding different cloud service models: IaaS, PaaS, SaaS.	CO1	T-2, R-2
6	Discussing the advantages and limitations of each service model.	CO1	T-1, R-1
7	In-depth exploration of cloud computing characteristics	CO1	T-2, R-2
8	Explaining the concept of Rapid Elasticity and its implications	CO1	T-1, R-2
9	Understanding Pay per use and its economic advantages	CO1	T-2, R-2
10	Independent Resource Pooling and its impact on scalability	CO1	T-1, R-2
11	Network Access and its importance in remote resource usage	CO1	T-1, R-2
12	Web Services on Cloud and their role in application development	CO1	T-2, R-2
13	Exploring virtualization and its relevance in cloud computing.	CO2	T-1, R-2
14	Understanding server, storage, and network virtualization.	CO2	T-2, R-2
15	Discussing the benefits of virtualization in resource optimization.	CO2	T-1, R-1
16	Hands-on experience with virtualization tools and platforms.	CO2	T-2, R-2
17	Understanding public, private, hybrid, and community cloud deployment models.	CO2	T-1, R-2
18	Real-world case studies showcasing different deployment approaches.	CO2	T-2, R-2
19	Discussing the advantages and challenges of each deployment model.	CO2	T-2, R-1
20	Analyzing security risks and challenges in cloud computing.	CO2	T-2, R-2
21	Exploring data privacy and regulatory compliance concerns.	CO2	T-1, R-1

22	Formulating strategies for ensuring data security and privacy in the cloud.	CO2	T-2, R-2
23	Introduction to major cloud service providers (e.g., Amazon Web Services, Microsoft Azure, Google Cloud).	CO2	T-1, R-2
24	Understanding the cloud ecosystem and its key players.	CO2	T-1, R-1
25	Evaluating factors for choosing a suitable cloud service provider.	CO3	T-1, R-1
26	Exploring emerging trends in cloud computing (e.g., edge computing, serverless architecture).	CO3	T-2, R-1
27	Discussing ethical considerations related to cloud computing (e.g., data sovereignty, vendor lock-in).	CO3	T-1, R-1
28	Overview of the significance of online communication and collaboration in modern business environments.	CO3	T-1, R-2
29	Understanding the benefits of centralizing email communications, schedules, to-do lists, and contact lists.	CO3	T-1, R-1
30	Exploring the role of online community development in fostering collaboration and knowledge sharing.	CO3	T-1, R-2
31	Exploring tools for scheduling meetings, events, and appointments collaboratively.	CO3	T-1, R-1
32	Discussing the use of online platforms for managing to-do lists and tasks.	CO3	T-1, R-1
33	Understanding the importance of maintaining updated and shared contact lists.	CO4	T-2, R-1
34	Introduction to project management tools for online collaboration.	CO4	T-1, R-1
35	Exploring features of project management platforms, task assignment, progress tracking, and team communication.	CO4	T-1, R-1
36	Case studies showcasing successful project collaboration using online tools.	CO4	T-1, R-1
37	Introduction to cloud computing and its relevance in business contexts.	CO4	T-1, R-2
38	Understanding the benefits of cloud computing, including scalability, cost efficiency, and accessibility.	CO4	T-1, R-1
39	Exploring cloud service models (IaaS, PaaS, SaaS) and deployment models (public, private, hybrid).	CO5	T-1, R-1
40	Integrating cloud-based email solutions for streamlined communication.	CO5	T-1, R-1
41	Utilizing cloud-based scheduling and task management tools for effective collaboration.	CO5	T-1, R-1
42	Hands-on activities to set up cloud-based contact lists and shared calendars.	CO5	T-1, R-2
43	Exploring real-world use cases of cloud computing in various industries.	CO5	T-2, R-1
44	Understanding data security and compliance considerations in cloud computing.	CO5	T-1, R-2
45	Formulating strategies for selecting appropriate cloud services and providers.	CO5	T-2, R-1

46	Data ownership and responsibility in the cloud.	CO5	T-2, R-1
47	Importance of data classification and access control.	CO5	T-1, R-1
48	Implementing role-based access control (RBAC) in the cloud.	CO5	T-2, R-1
49	Exploring the risks associated with cloud service provider shutdown or bankruptcy.	CO5	T-1, R-1
50	Legal implications and procedures regarding subpoenaed cloud data.	CO6	T-2, R-1
51	Strategies for data backup, redundancy, and business continuity planning.	CO6	T-1, R-1
52	Evaluating cloud service provider security measures.	CO6	T-1, R-2
53	Encryption techniques for data in transit and data at rest.	CO6	T-1, R-2
54	Implementing encryption key management and its importance.	CO6	T-2, R-1
55	Overview of common cloud security standards (ISO 27001, NIST, CSA).	CO6	T-2, R-2
56	Compliance requirements for various industries (HIPAA, GDPR, etc.).	CO6	T-1, R-2
57	Ensuring cloud service provider compliance and auditing.	CO6	T-2, R-2
58	Ethical considerations in using cloud services (data ownership, privacy, surveillance).	CO6	T-2, R-2
59	Legal implications of data breaches and privacy violations in the cloud.	CO6	T-1, R-1
60	Case studies of cloud-related legal battles and their outcomes.	CO6	T-2, R-2
Question Bank Discussions			
61	Question Bank Discussions Unit 2	CO 2	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-2
63	Question Bank Discussions Unit 3	CO 3, 4	T-1, R-2
64	Question Bank Discussions Unit 4	CO 5	T-1, R-1
65	Question Bank Discussions Unit 5	CO 6	T-1, R-2

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INSTITUTE OF AERONAUTICAL ENGINEERING

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MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	STRATEGIC MANAGEMENT				
Course Code	CMBC48				
Programme	MBA				
Semester	IV SEMESTER				
Course Type	CORE				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	3	1	4	--	--
Course Coordinator	Dr. K Jagannayaki, Professor				

I. COURSE OVERVIEW:

The course develops the strategic thinking and decision making abilities, especially in relation to understanding the employability of various strategies in different situations of the business world considerably more complex in the changing scenario. Both the challenges and opportunities facing organizations of all sizes are greater than ever. Organizations are required to continuously find better ways to compete in the rapidly changing global business environment. Survival and competition have become imperative for organizations in the current global scenario, which can be answered with the context of this course.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	Credits
--	--	--	--	--

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Management and Organization Behavior	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
0 %	Remember
16.67 %	Understand
33.33%	Apply
16.67 %	Analyze
16.67 %	Evaluate
16.67 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

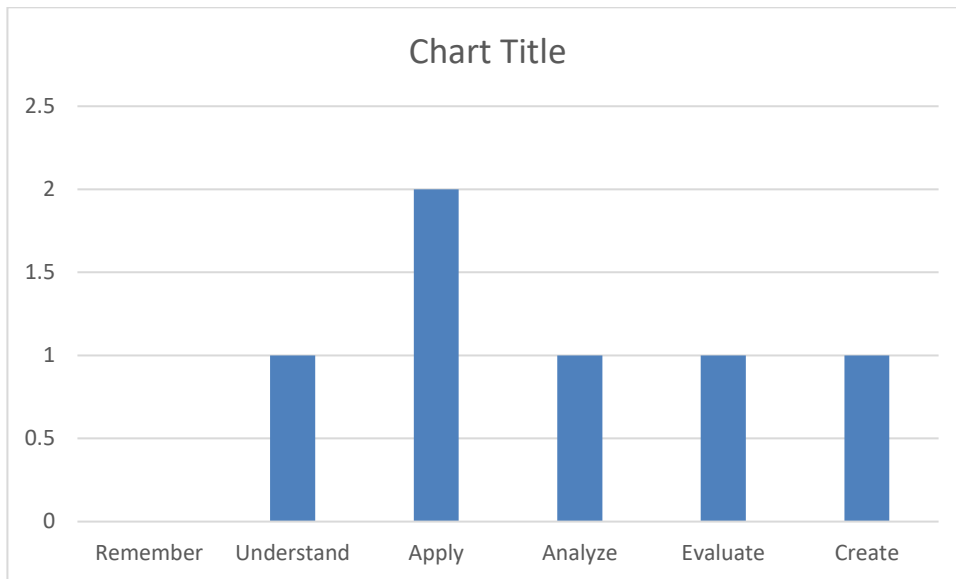
VII. COURSE OBJECTIVES:

The students will try to learn:	
I	Various perspectives and concepts in the field of Strategic Management.
II	Strategy formulation process and frameworks, tools and techniques of strategic analysis and its application.
III	Conceptual, diagnostic , analytical and decision making skills in strategy formulation and execution.
IV	Competitive situation and strategic dilemma in dealing with dynamic global business environment in terms of rapidly changing market trends and technological advancement.
V	Evaluation and implementation of strategies based on the nature of business, industry, and cultural differences.

VIII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Describe major theories, strategic plans and concepts in the field of strategic management.	Understand
CO 2	Develop and execute strategies and will appreciate its integrative and interdisciplinary nature.	Apply
CO 3	Analyze the real situations for diagnosing and solving organizational problems by effective application of concepts, tools & techniques.	Analyze
CO 4	Formulate the strategies and competitive analysis, strategy development processes for real-time business problems.	Create
CO 5	Build the capability of making effective decisions in dynamic business environment.	Evaluate
CO 6	Improve capacity to think, evaluate and execute plans strategically.	Apply

COURSE KNOWLEDGE COMPETENCY LEVEL



IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency assessed by
PO1	Managerial Skills: Apply knowledge of strategic management theories and practices to solve business problems.	2.5	Assignment
PO2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making	3	CIE/AAT
PO3	Ethics: Ability to develop Value based Leadership ability	3	Seminar/ Conferences/ Case Study
PO4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business	3	CIE/AAT
PO5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment	3	Seminar/ Conferences/ Case Study
PO6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs	3	Assignment
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications	3	Seminar

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	√	-	√	-	√	-
CO 2	-	√	-	√	√	-	√	-
CO 3	-	-	-	√	√	√	√	-

CO 4	-	√	√	√	-	√	√	-
CO 5	-	√	-	-	√	√	√	-
CO 6	√	√	-	√	√	-	√	-

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO1	Recollect (knowledge) the basic concepts of strategic management and purpose of the business.	2
	PO2	Understand the process of Crafting and Executing Strategies that helps in Strategic Decision Making.	3
	PO3	Interpret the developed strategic model and identify choices of strategy among core competencies.	3
	PO5	Enhance Strategic Capability and Core competencies of Business by leadership skills and team building.	3
	PO7	Ability to construct and analyze strategic model to solve real life problems.	3
CO 2	PO2	Describe (knowledge) Environmental Scanning, SWOT & PESTEL Framework, Different Tools and Techniques for analyzing Strategies in the context of managerial decisions.	2
	PO4	Develop (formulate) the Strategies and competitive analysis, strategy development processes for real-time Business problems.	2
	PO5	Assess real life situation for exit, entry barriers, Industry life cycle to be Leaders in business.	3
	PO7	Conduct strategic analysis using theoretical and practical applications	3
CO 3	PO 4	Comprehend and create awareness of business ethics in all aspects.	3
	PO 5	Ascertain (knowledge) about firm's internal and external environment and build strategic teams.	3
	PO6	Assess real life situation for exit, entry barriers, Industry life cycle to be Leaders in business.	3
	PO7	Conduct strategic analysis using SWOT analysis	3
CO 4	PO 2	Identify (knowledge) and formulate the business strategies in managerial decisions.	3
	PO3	Explain the need for leadership skills in strategic development.	3
	PO4	Summarize competitive analysis and apply strategies to get the work done through proper Communication channel.	2
	PO6	Identify the opportunities and apply strategies to avail competitive advantage.	3
	PO7	Make use of different strategic analysis tools for organizational growth.	3
CO 5	PO 2	Apply (knowledge) the strategies and identify the impact on organization culture.	2
	PO5	Allocation of limited resources efficiently, influence people to motivate themselves to attain organizational goal.	3
	PO6	Identify the role of Culture, Organizational Values and their impact on Strategic Implementation.	3
	PO 7	Focus on growth strategies and resolve issues of culture, resource allocation, manage the conflicts with effective communicational abilities.	3

CO6	PO1	Understand (knowledge) the meaning of strategic evaluation and need of it in the entrepreneurial growth.	2
	PO2	Analyze the strategic contemporary issues and challenges in strategic decision making.	3
	PO4	Understand, analyse and communicate global, economic, legal, and ethical aspects of business	2
	PO5	Contribute team efforts in the achievement of organizational growth and development.	3
	PO7	Analyse the strategic issues in managing technology and take necessary action for Sustainable development.	3

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	3	--	3	--	3	--
CO 2	--	2	--	2	3	--	3	--
CO 3	--	--	--	3	3	3	3	--
CO 4	--	3	3	2	--	3	3	--
CO 5	--	2	--	--	3	3	3	--
CO 6	2	3	--	2	3	--	3	--

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	100.00	100.00	--	60.00	--	75.00	--
CO 2	--	66.67	--	66.67	60.00	--	75.00	--
CO 3	--	--	--	100.00	60.00	100.00	75.00	--
CO 4	--	100.00	100.00	100.00	--	100.00	75.00	--
CO 5	--	66.67	--	--	60.00	100.00	75.00	--
CO 6	100.00	100.00	--	66.67	60.00	--	75.00	--

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	3	3	3	--	3	--	3	--
CO 2	--	3	--	3	3	--	3	--
CO 3	--	--	--	3	3	3	3	--
CO 4	--	3	3	3	--	3	3	--
CO 5	--	3	--	--	3	3	3	--
CO 6	3	3	--	3	3	--	3	--
TOTAL	6	15	6	12	15	9	18	--
AVERAGE	3	3	3	3	3	3	3	--

XV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1,PO2 PO6,PO7	SEE Exams	PO1,PO2, PO6, PO7	Assignments	PO1	Seminars	PO6
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	PO 1, PO 7						

XVI. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

UNIT-I	INTRODUCTION TO STRATEGIC MANAGEMENT
Introduction to Strategic Management, Purpose of Business, Crafting and Executing Strategies, Strategic Intent, Developing Strategic Model, Choices of Strategy, Strategic Capability and Core competencies of Business, Phases of Strategic management, Strategic Decision Making.	
UNIT-II	STRATEGIC ANALYSIS AND FORMULATION
Environmental Scanning, SWOT & PESTEL Framework, Different Tools and Techniques for analyzing Strategies, Porters Five Force Framework, Organic Model of Strategic Planning, Real-time Strategy Planning, Strategic Formulation, Competitive Analysis, Strategy Development Processes.	

UNIT-III	STRATEGIES FOR BUSINESS
Types of Strategies- Offensive, Defensive, Exit and Entry barriers, Industry Life Cycle States and Strategies, Tailoring Strategy for Leaders.	
Challengers, Followers, weak and crisis Businesses The Five Generic Competitive Strategies, Red and Blue Ocean Strategies, Grand Strategies.	
UNIT- IV	STRATEGIC IMPLEMENTATION
Impact and Issues of Culture, leadership, Resource Allocation, Staffing, Directing and Organizational Values on Strategic Implementation, Operationalizing and Institutionalizing strategy, Strategies for competing in International Markets, Managing Conflicts, Managing Strategic Change.	
UNIT – V	STRATEGIC EVALUATION AND CONTROL
Strategic Evaluation, The Balanced Scorecard, Measuring Performance, Strategic control-Types, Strategic Information System, Issues in Managing Technology, Strategic issues in Entrepreneurial Ventures, small Businesses, Not-for-Profit Organizations, Sustainability and Sustainable Development.	
Text books	
<ol style="list-style-type: none"> 1. Azhar Kazmi, Adela Kazmi “Strategic management”, 5th Edition, in 2021. 2. Fred R David,” Strategic Management: A Competitive Advantage Approach, Concepts and Cases,” 17th Edition, “Francis Marion University” in 2019 3. Pearson paper back “Strategic management concepts: A Competitive Advantage Approach”, 16th Edition, in 30-07-2018. 4. W. Cham Kim, Renee Mauborgne, “The Blue Ocean Strategy”,” Harvard Business Review Press “, 2017. 5. P.Subba Rao “Business policy and strategic management” ,2ndEdition .Hyderabad, Himalaya publishing house.” in 2015. 6. Abdulrahman Al-Aali, Abbas Ali, “Strategic Management: Concepts and Cases”, Pearson Publication, 1st Arab World Edition, 2011. 7. Bowman EH, Singh H.,” Overview of Corporate Restructuring: trends and consequences. In Corporate Restructuring”, McGraw-Hill, 1st Edition, 1990. 8. Bleeke J, Ernst D, “Collaborating to Compete: Using Strategic Alliances and Acquisitions in the Global Marketplace”, John Wiley & Sons Publications, 1st Edition, 1993.Harold Koontz & Heinz Wehrich_ Essentials of Management _McGraw Hill Publication, 10th Edition, New Delhi, 2015. 9. AfsanehNahavandi, RobertB. Denhardt, JanetV. Denhardt, Maris P. Aristigueta, _Organizational Behavior _Sage Publications, 10th Edition, 2015. 10. P Subbarao, “Management Theory & Practice: Text & Cases”, Himalaya Publishing House, 1st Edition, 2014. 	
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<ol style="list-style-type: none"> 1. Allaire, Y., and M. E. Firsirotu, “Theories of organizational culture” Prentice Hall, 1st Edition, 1999. 2. Albrecht, K, “Brain Power: Learning to Improve Your Thinking Skills” Simon and Schuster Publications, 1st Edition, 1980. 3. Allen, R.W, ‘Organizational politics: tactics and characteristics of its actors’ 1st California Management Review, 1979. 	
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<ol style="list-style-type: none"> 1. https://play.google.com/store/audiobooks/details/Introbooks_Team_Introduction_to_Strategic_Management?id=AQAAAECseWU52M 2. https://bookboon.com/en/genesis-of-strategic-management-ebook 3. https://bookboon.com/en/principles-of-strategic-management-ebook 	
E-Text Books:	
<ol style="list-style-type: none"> 1. https://www.amazon.in/dp/B07VM7HLKS/ref=cm_sw_r_apan_glt_MSVMJJGPN721CSN5Y4HK. 2. https://www.amazon.in/dp/B06XKTVGZD/ref=cm_sw_r_apan_glt_BSSVY978TCTNBPBGH31A0?_encoding=UTF8&pvc=1. 3. https://pressbooks.lib.vt.edu/strategicmanagement. 	

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
1	Introduction to Strategic Management	CO1	T-1, R-1
2	Purpose of Business	CO1	T-1, R-1
3	Crafting Strategies	CO1	T-1, R-1
4	Executing Strategies	CO1	T-1, R-1
5	Strategic Intent	CO1	T-1, R-1
6	Developing Strategic Model	CO1	T-1, R-1
7	Choices of Strategy	CO1	T-1, R-1
8	Strategic Capability of Business	CO1	T-1, R-1
9	Core competencies of Business	CO1	T-1, R-1
10	Phases of Strategic management	CO1	T-1, R-1
11	Strategic Decision Making	CO1	T-1, R-1
12	Environmental Scanning-Introduction	CO2	T-1, R-1
13	Internal Environmental Scanning	CO2	T-1, R-1
14	External Environmental Scanning	CO2	T-1, R-1
15	SWOT Framework	CO2	T-2, R-2
16	PESTEL Framework	CO2	T-2, R-2
17	Different Tools for analysing Strategies	CO2	T-2, R-2
18	Techniques for analysing Strategies	CO2	T-2, R-2
19	Porters Five Force Framework	CO2	T-2, R-2
20	Organic Model of Strategic Planning	CO2	T-2, R-2
21	Real-time Strategy Planning	CO2	T-2, R-2
22	Strategic Formulation	CO2	T-2, R-2
23	Competitive Analysis	CO2	T-2, R-2
24	Introduction to Strategy Development	CO2	T-2, R-2

25	Steps involved in Strategy Development Processes	CO2	T-2, R-2
26	Introduction to Strategies For Business	CO3	T-2, R-2
27	Entry barriers	CO3	T-2, R-2
28	Exit barriers	CO3	T-2, R-2
29	Industry Life Cycle States	CO3	T-2, R-2
30	Industry Life Cycle Strategies	CO3	T-2, R-2
31	Tailoring Strategy for Leaders	CO3	T-1, R-1
32	Challengers	CO4	T-1, R-1
33	Followers	CO4	T-1, R-1
34	Weak Businesses	CO4	T-1, R-1
35	Crisis Businesses	CO4	T-1, R-1
36	The Five Generic Competitive Strategies	CO4	T-1, R-1
37	Red Ocean Strategies	CO4	T-1, R-1
38	Blue Ocean Strategies	CO4	T-1, R-1
39	Grand Strategies	CO4	T-1, R-1
40	Introduction to strategic implementation	CO5	T-1, R-1
41	Impact and Issues of Culture	CO5	T-1, R-1
42	Leadership	CO5	T-1, R-1
43	Resource Allocation	CO5	T-1, R-1
44	Staffing	CO5	T-2, R-1
45	Directing	CO5	T-2, R-1
46	Organizational Values on Strategic Implementation	CO5	T-2, R-1
47	Operationalizing and Institutionalizing strategy	CO5	T-2, R-1
48	Strategies for competing in International Markets	CO5	T-2, R-1
49	Managing Conflicts	CO5	T-2, R-1
50	Managing Strategic Change	CO5	T-2, R-1
51	Strategic Evaluation-Introduction	CO6	T-1, R-1
52	Measuring Performance	CO6	T-1, R-1
53	Strategic control-Types	CO6	T-1, R-1
54	Strategic Information System	CO6	T-1, R-1

55	Issues in Managing Technology	CO6	T-1, R-1
56	Strategic issues in Entrepreneurial Ventures	CO6	T-1, R-1
57	Strategic issues in small Businesses	CO6	T-1, R-1
58	Not-for-Profit Organizations	CO6	T-1, R-1
59	Sustainability	CO6	T-1, R-1
60	Sustainable Development	CO6	T-1, R-1
QUESTION BANK DISCUSSION			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-1
63	Question Bank Discussions Unit 3	CO 3, CO 4	T-1, R-1
64	Question Bank Discussions Unit 4	CO 5	T-1, R-1
65	Question Bank Discussions Unit 5	CO 6	T-1, R-1

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MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	FINANCIAL DERIVATIVES				
Course Code	CMBC52				
Program	MBA				
Semester	FOUR				
Course Type	Professional Elective - VII				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	-	-
Course Coordinator	Ms. S Shireesha, Associate Professor				

I. COURSE OVERVIEW:

The objective of this course is to make students efficient in the area of Derivatives, such as Forwards, Future Markets, Swaps and Option Strategies. It gives understanding about the derivatives in stock, commodity and FOREX markets with changes in interest rates, exchange rates, stock prices, commodity prices, inflation, weather, etc.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
MBA	CMBC16	II	Financial Management

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Financial Derivatives	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component	Theory		Total Marks
	CIE Exam	AAT	
CIA Marks	25	05	30

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively. The CIE exam is conducted for 25 marks of 2 hours duration consisting of two parts. Part–A shall have five compulsory questions of one mark each. In part–B, four out of five questions have to be answered where, each question carries 5 marks. Marks are awarded by taking average of marks scored in two CIE exams.

Alternative Assessment Tool (AAT):

Marks shall be awarded considering the average of two AAT for every course. The AAT may include seminars, assignments, term paper, open ended experiments, five minutes video and MOOCs.

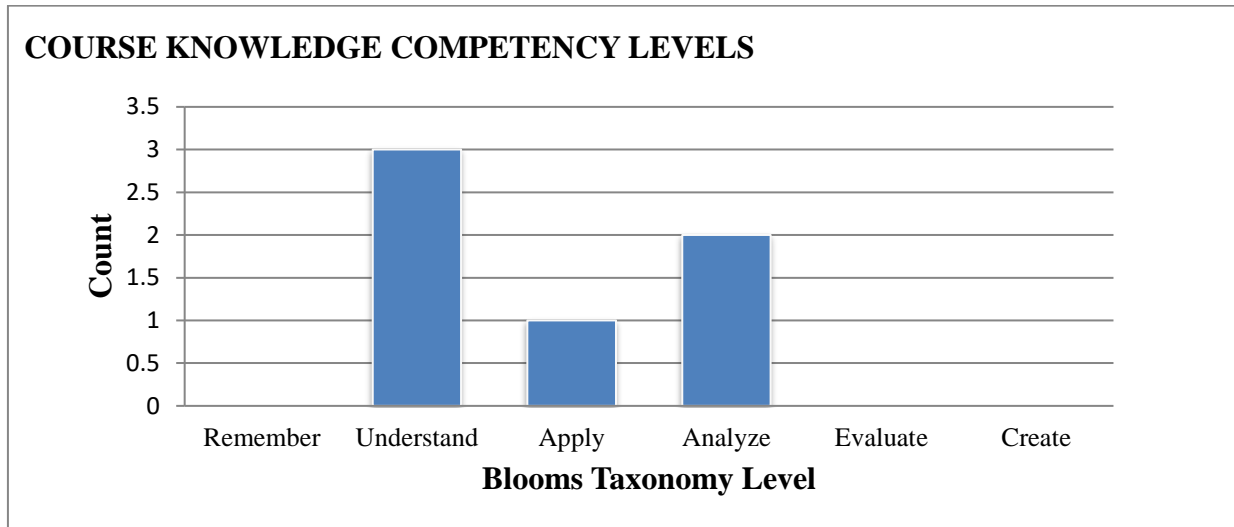
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	Understand fundamental relationship between spot markets and derivative markets and uses and misuses of derivatives.
II	Apply knowledge about basic option strategies, advanced option strategies, trading with options, hedging with options, currency options.
III	Analyze the commodity futures and options and swaps for the effectiveness of derivative markets
IV	Evaluate the role of swaps in terms of interest rate, currency, commodity, equity index, credit risk and credit.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Explain the derivative market system and its origin and structure for better investment decisions.	Understand
CO 2	Classify the prices and interest rates of futures and forwards markets for controlling currency fluctuations.	Analyze
CO 3	Explain the need, importance, principles and characteristics of options markets to promote strategic contracts.	Understand
CO 4	Examine different pricing models, strategies and advanced options in hedging and currency options for promoting the trading.	Analyze
CO 5	Enumerate role and functioning of commodity derivative exchanges for enhancing trading activities.	Apply
CO 6	Summarize the currency, commodity and equity index swaps and its valuation to fix the risk managed prices.	Understand

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments.
PO2	Decision making skills: An ability to analyze a problem identifies, formulate and use the appropriate managerial skills for obtaining its solution.	3	Seminars
PO4	Communication skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	3	Seminars
PO6	Entrepreneurial and Innovation Skills: Demonstrate the skills in evaluating business opportunity and identifying sources of potential funding, and develop as successful entrepreneurs	2.5	Assignments

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	-	-	-	√	-	-	-	-
CO 2	-	√	-	-	-	√	-	-
CO 3	√	-	-	-	-	-	-	-
CO 4	√	-	-	-	-	-	-	-
CO 5	-	-	-	√	-	-	-	-
CO 6	-	√	-	-	-	√	-	-

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 4	Recollect (knowledge) the basic concept of derivative market system and to an extent appreciate (understand) the importance of financial system to promote the organized economy system to improve the financial literacy.	2
CO 2	PO 2	Identify (knowledge) the appropriate pricing strategies and interest rate controlling the currency fluctuations in managing the stable financial system.	2
	PO 6	Demonstrate the currency fluctuations and its impact on in evaluating international business opportunities and to identify the sources of potential funding.	2
CO 3	PO 1	Apply (knowledge) the managerial principles and characteristics of options markets and its importance in managing the economy conditions of the country.	2
CO 4	PO 1	Construct the pricing models of currency options and hedging strategies in communicating with the customers to sell options products.	2
CO 5	PO 4	Understanding the business and economic conditions of the commodity derivatives to communicate the changing mindsets of the global tastes and preferences.	3
CO 6	PO 2	Explain the qualitative and quantitative measures for swap valuation with appropriate implantable strategies.	3
	PO 6	Extend the concept of risk with identified technological techniques in the currency and commodity swaps.	1

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	-	-	2	-	-	-	-
CO 2	-	2	-	-	-	2	-	-
CO 3	2	-	-	-	-	-	-	-
CO 4	2	-	-	-	-	-	-	-
CO 5	-	-	-	3	-	-	-	-
CO 6	-	3	-	-	-	1	-	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	-	-	66.66	-	-	-	-
CO 2	-	66.66	-	-	-	66.66	-	-
CO 3	100.00	-	-	-	-	-	-	-
CO 4	100.00	-	-	-	-	-	-	-
CO 5	-	-	-	100.00	-	-	-	-
CO 6	-	100.00	-	-	-	33.33	-	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation; **2** – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; **3** – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	-	-	-	3	-	-	-	-
CO 2	-	3	-	-	-	3	-	-
CO 3	3	-	-	-	-	-	-	-
CO 4	3	-	-	-	-	-	-	-
CO 5	-	-	-	3	-	-	-	-
CO 6	-	3	-	-	-	1	-	-
TOTAL	6	6		6		4	-	-
AVERAGE	3	3		3		2	-	-

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO4, PO6, PO7	SEE Exams	PO1, PO2, PO4, PO6, PO7	Assignments	PO1, PO6	Seminars	PO 2, PO 4
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	PO1, PO7						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO DERIVATIVES
Development and growth of derivative markets, types of derivatives uses of derivatives, fundamental linkages between spot and derivative markets, the role of derivatives market, uses and misuses of derivatives.	
UNIT-II	FUTURE AND FORWARD MARKET
Structure of forward and future markets, mechanics of future markets hedging strategies, using futures, determination of forward and future prices, interest rate futures currency futures and forwards.	
UNIT-III	BASIC OPTION STRATEGIES
Options, distinguish between options and futures, structure of options market, principles of option pricing. Option pricing models: the binomial model, the black, scholes Merton model. Basic option strategies, Advanced option strategies, trading with options, hedging with options, currency options.	
UNIT-IV	COMMODITY MARKET DERIVATIVES
Introduction, types, commodity futures and options, swaps commodity exchanges multi commodity exchange, national commodity derivative exchange role, functions and trading.	
UNIT-V	SWAPS
Concept and nature, evolution of swap market, features of swaps, major types of swaps, interest rate swaps, currency swaps, commodity swaps, equity index swaps, credit risk in swaps, credit swaps, using swaps to manage risk, pricing and valuing swaps.	
Textbooks:	
<ol style="list-style-type: none"> 1. John C Hull, "Options, Futures and Other Derivatives", Pearson Education, 8th Edition, 2012. 2. Robert A Strong, "Derivatives an Introduction", Thomson, 1st Edition, 2012. 3. Gupta, "Financial Derivatives", PHI, 1st Edition, 2012. 	
Reference Books:	
<ol style="list-style-type: none"> 1. Dubofsky, Miller, "Derivatives Valuations and Risk Management", Oxford, 1st Edition, 2012 2. Don M. Chance, Robert Brooks, "Derivatives and Risk Management Basic", Cengage Learning, 9th Edition, 2012. 3. Sundaram Das, "Derivatives Principles and Practice", McGraw Hill, 1st Edition, 2012. 	

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
1	Development of derivative markets	CO 1	T1: 1.7
2	Growth of derivative markets	CO 1	T1: 2.1
3	Types of derivatives	CO 1	T1: 2.2
4	Uses of derivatives	CO 1	T1: 2.2
5	Fundamental linkages between spot & derivative markets	CO 1	T1: 2.3
6	Fundamental linkages between spot & derivative markets	CO 1	T1: 2.3
7	The role of derivatives market in the financial system	CO 1	T1: 2.4
8	The role of derivatives market in the financial system	CO 1	T1: 2.4
9	Uses of derivative market.	CO 2	T1: 2.6
10	Misuses of derivative market.	CO 2	T1: 2.6
11	Structure of future markets	CO 2	T1: 2.7
12	Structure of forward markets	CO 2	T1: 2.7
13-14	Mechanics of future markets in Financial derivatives	CO 2	T1: 4.1
15	Risk free strategies using futures market	CO 2	T1: 5.3
16	Hedging and Speculating strategies	CO 3	T1: 5.6
17-18	Determination of forward and future prices	CO 3	T1: 5.6
19	Interest rate futures and forwards.	CO 3	T1:5.7
20	Currency rate futures and forwards	CO 3	T1:5.6
21	Introduction to Options	CO 4	T1:5.6
22	Distinguish between options and futures	CO 4	T1:5.3
23	Structure of options market	CO 4	T1:5.3
24	Principles of option pricing,	CO 4	T1: 6.1
25	The binomial model	CO 5	T1: 5.7
26	The black- Scholes Merton model	CO 5	T1: 6.1,
27	Basic option strategies	CO 5	T2: 7.1
28	Advanced option strategies	CO 5	T2: 7.3,
29	Trading with options	CO 5	T1: 6.1

Lecture No	Topics to be Covered	COs	Reference
30	Hedging with options, currency options.	CO 5	T2: 8.3,
31	Introduction to futures and options	CO 5	T1: 7.1
32	Types of commodity futures and options	CO 5	T2: 7.2
33	Role of Multi commodity exchange	CO 5	T2: 7.4
34	Functions and trading of Multi commodity exchange.	CO 6	T2: 9.2
35	Concept and nature of swap market	CO 6	T2: 9.8
36	Evolution of swap market and features of swaps	CO 6	T2: 9.8
37	Currency swaps	CO 6	T2: 9.8
38	Interest rate swaps	CO 6	T2: 9.8
39	Commodity swaps	CO 6	T2: 9.8
40	Equity index swaps	CO 6	T2: 9.8
41	Credit risk in swaps	CO 6	T2: 9.8
42	Using swaps to manage risk	CO 6	T2: 9.8
43	Pricing and valuing swaps.	CO 6	T2: 9.8

Prepared By:

Mrs. S Shireesha, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING (Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTOR

Course Title	BANKING, INSURANCE AND RISK MANAGEMENT			
Course Code	CMBC53			
Programme	MBA			
Semester	IV			
Course Type	Professional Elective - V			
Regulation	IARE – PG21			
Course Structure	Lectures	Tutorials	Practical Work	Credits
	4	-	-	4
Chief Coordinator	Dr. T.Vara Lakshmi, Professor, MBA			

I. COURSE OVERVIEW:

Banking, insurance, and risk management are critical components of the financial system. These areas involve the management and assessment of financial risk and the provision of financial services to individuals and businesses. This course focuses on the objectives and importance of managing financial risk, including credit risk, market risk, and operational risk within organizations and the management of financial risk across markets.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC37	III	Financial Institutions, Markets and Services

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Banking, Insurance and Risk Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✓	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE

Percentage of Cognitive Level	Blooms Taxonomy Level
0 %	Remember
33.33 %	Understand
16.66 %	Apply
50 %	Analyze
0 %	Evaluate
0 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning centre. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

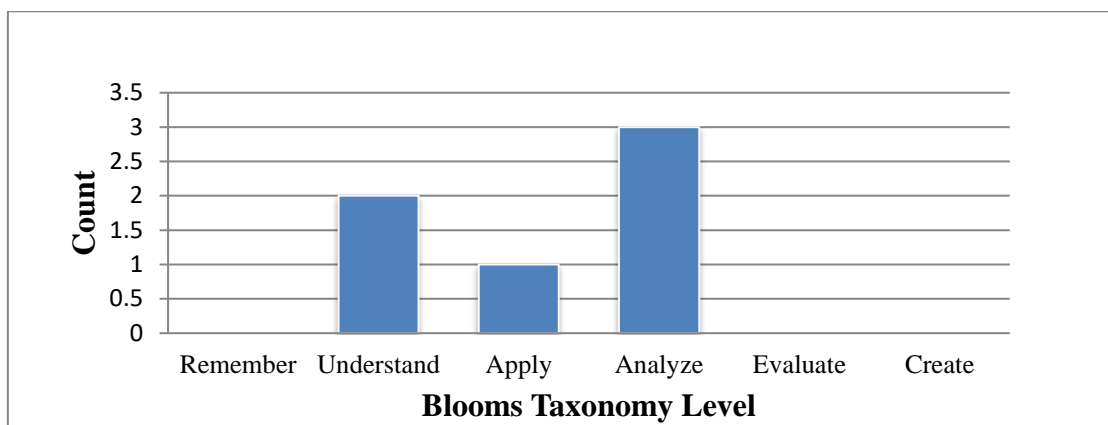
VI. COURSE OBJECTIVES :

The students will try to learn:	
I	Banking business in the country to know the new dimensions of banking system in India.
II	Banking sector reforms and regulations to understand and minimize deficiencies in Indian Banking system.
III	Business and economics of insurance for changing mind-set and implement latest trends in Insurance business.
IV	Reforms in the insurance sector for better promotion of insurance services.
V	Risk management techniques and non-insurance methods to explore diversified investment opportunities.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Familiarize the banking system to enumerate financial services providing in the real world.	Understand
CO 2	Analyze various reforms & deficiencies in Indian banking system to promote legal and ethical financial system.	Analyze
CO 3	Promote the principles and characteristics of insurance to encourage insurance contracts.	Understand
CO 4	Examine various insurance products and the role of agents and brokers to improve insurance mechanism.	Analyze
CO 5	Describe regulatory frameworks that govern the insurance industries to ensure consumer protection.	Analyze
CO 6	Identify the techniques and measurements of risks to communicate ethical financial products.	Apply

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes (POs)		Strength	Proficiency assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	Assignments
PO4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal and ethical aspects of business	3	Guest Lectures
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	3	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	3	Seminars

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	-	-	√	-	-	-	-
CO 2	√	-	-	√	-	-	√	-
CO 3	√	-	-	√	-	-	-	-
CO 4	√	-	-	√	-	-	-	-
CO 5	-	-	-	√	-	-	-	√
CO 6	√	-	-	-	-	-	√	√

X. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) the basic concept of financial system concepts and to an extent appreciate	3

		(understand) the importance of banking system to promote the organized economy system and solve the investment problems.	
	PO 4	Interpret (knowledge) about the various banking services to contribute to the development of the financial inclusion.	3
CO 2	PO 1	Comprehend and analyze effective reforms on the banking system by developing good analytical skills on regulations and guidelines.	3
	PO 4	Recognizing (knowledge) the contribution of RBI and SEBI by its functional strategic principles and methodology to global, economic, legal and ethical aspects of business	3
	PO 7	Interpret (knowledge) the involvement of regulatory authorities to take better strategical decisions.	3
CO 3	PO 1	Apply (knowledge) the insurance and its importance of managing the life and financial risk.	3
	PO 4	Recognize the importance of insurance structure in implementing strategies of the funds maintenance.	3
CO 4	PO 1	Construct the managerial models in the insurance activities to communicate with the investors.	3
	PO 4	Examine the significance of insurance products to formulate profitable strategies in fund pooling.	3
CO 5	PO 4	Derive the existence possibility of IRDAI in meeting the practical solutions of the insurance organization.	3
	PO 8	Differentiate the value of the firm and relevance for ethical declaration to promote the funding activities in insurance environment.	3
CO 6	PO 1	Explain the risk management techniques with appropriate implementable strategies.	3
	PO 7	Examine the strategies in risk evaluation while investing in the non-banking financial services.	3
	PO 8	Inculcate and Adopt technical skills to assess the risk in the competitive world successfully.	

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	-	-	3	-	-	-	-
CO 2	2	-	-	3	-	-	4	-
CO 3	2	-	-	3	-	-	-	-
CO 4	2	-	-	3	-	-	-	-

CO 5	-	-	-	3	-	-	-	2
CO 6	2	-	-	-	-	-	4	2

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	-	-	100.00	-	-	-	-
CO 2	100.00	-	-	100.00	-	-	100.00	-
CO 3	100.00	-	-	100.00	-	-	-	-
CO 4	100.00	-	-	100.00	-	-	-	-
CO 5	-	-	-	100.00	-	-	-	100.00
CO 6	100.00	-	-	-	-	-	100.00	100.00

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation;

2 – $40\% < C < 60\%$ – Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	-	-	3	-	-	-	-
CO 2	3	-	-	3	-	-	3	-
CO 3	3	-	-	3	-	-	-	-
CO 4	3	-	-	3	-	-	-	-
CO 5	-	-	-	3	-	-	-	3
CO 6	3	-	-	-	-	-	3	3
TOTAL	15	-	-	15	-	-	6	6
AVERAGE	3	-	-	3	-	-	3	3

3 = High; 2 = Medium; 1 = Low

XIV. ASSESSMENT METHODOLOGIES – DIRECT

CIE Exams	PO1, PO4, PO7, PO8	SEE Exams	PO1, PO4, PO7, PO8	Assignments	PO1, PO4	Seminars	PO7, PO8
Laboratory Practices	-	Guest Lecture	-	Mini Project	-	Certification	-
Term Paper							

XV. ASSESSMENT METHODOLOGIES – INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO BANKING BUSINESS
Introduction to banking sectors, History of banking business in India, Structure of Indian banking system, Types of accounts, advances and deposits in a bank, New dimensions and Products, E-banking, Mobile banking, Net banking, CRM, Cheque system and KYC system	
UNIT-II	BANKING REFORMS AND REGULATIONS
Banking regulation act-1949, Reserve Bank of India Act-1934, Establishment of RBI, Functions and credit control system, Role of commercial banks and its functions, Banking sector reforms in India and deficiencies in Indian banking including problems accounts and Non -Performing Assets	
UNIT-III	INTRODUCTION TO INSURANCE
Introduction to insurance, Need and importance of insurance, principles of Insurance, characteristics of insurance contract. Branches of insurance and types of insurance, life insurance and its products: role of agents and brokers.	
UNIT- IV	INSURANCE BUSINESS ENVIRONMENT
Regulatory and legal framework governing the insurance sector, history of IRDAI and its functions: Business and economics of insurance need for changing mind set and latest trends.	
UNIT – V	INTRODUCTION TO RISK MANAGEMENT
Introduction to Risk, meaning and types of risk in business and individual Risk management process, methods, Risk identification and measurement, risk management techniques, non-insurance methods.	
Text books	
<ol style="list-style-type: none"> 1. Scott Harrington Gregory Niehaus “Risk Management and Insurance “, July 2017. 2. Mohan Prakash N.R. “Banking, Risk & Insurance Management “in 2016. 3. Prof .Roy “Banking and risk management “in 2016. 4. R.K.Mishra, Inder Sekhar Yadav “Risk Management in Banking, Insurance and Financial Services “, in 2015. 5. Varshney, P.N, “Banking Law and Practice”, Sultan Chand and Sons, 25th Revised Edition, 2014. 6. Reddy K S and Rao R N, “Banking and Insurance”, Paramount publishers, 9thEdition, 2013. 7. Mark S. Dorfman, “Risk Management and Insurance”, Pearson Publications, 9thEdition, 2009. 	
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XIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes (COs)	Referen ce
OBE Discussion			
1	Course Overview, Objectives and Course Outcomes	CO	
Course Content Discussion			
1	Introduction to banking sectors	CO1	T-1, R-2
2	History of banking business in India	CO1	T-2, R-2
3	Structure of Indian banking system	CO1	T-1, R-2
4	Types of accounts	CO1	T-1, R-2
5	Advances and deposits in a bank	CO1	T-2, R-2
6	New dimensions and Products	CO1	T-1, R-1
7	E-banking, Mobile banking	CO1	T-1, R-1
8	CRM,	CO1	T-2, R-2
9	Cheque system	CO1	T-1, R-1
10	KYC system	CO1	T-1, R-1
11	Net banking,	CO1	T-2, R-2
12	Banking regulation act-1949	CO2	T-1, R-2
13	Banking regulation act-1949-reforms	CO2	T-1, R-2
14	Introduction to RBI	CO2	T-1, R-2
15	Reserve Bank of India Act-1934	CO2	T-2, R-2
16	Reserve Bank of India Act-1934-reforms	CO2	T-2, R-2
17	Establishment of RBI	CO2	T-1, R-2
18	Currency maintenance in RBI mechanism	CO2	T-1, R-2
19	International commercial banking system	CO2	T-1, R-2
20	Functions of Credit system	CO2	T-1, R-2
21	Credit control system	CO2	T-1, R-2
22	Role of commercial banks and its functions	CO2	T-1, R-2
23	Banking sector reforms in India	CO2	T-2, R-2
24	Deficiencies in Indian banking including problems	CO2	T-1, R-2

Lecture No	Topics to be covered	Course Outcomes (COs)	Reference
25	Non -Performing Assets	CO2	T-2, R-2
26	Introduction to Indian insurance mechanism	CO3	T-1, R-1
27	Insurance types	CO3	T-1, R-1
28	Introduction to insurance	CO3	T-1, R-1
29	Need and importance of insurance	CO3	T-2, R-2
30	Characteristics of Insurance mechanism	CO3	T-2, R-2
31	Types of Life insurances	CO3	T-2, R-2
32	Types of general insurances	CO3	T-2, R-2
33	LIC and GIC origin	CO3	T-2, R-2
34	Principles of Insurance	CO3	T-1, R-2
35	Characteristics of insurance contract	CO3	T-2, R-2
36	Introduction to insurance reforms	CO4	T-2, R-1
37	Insurance business in India	CO4	T-2, R-1
38	Branches of insurance	CO4	T-2, R-1
39	Types of insurance	CO4	T-2, R-2
40	Life insurance and its products	CO4	T-1, R-1
41	Role of agents and brokers	CO4	T-2, R-2
42	Regulatory framework governing the insurance sector of	CO4	T-1, R-2
43	Legal framework governing the insurance sector of IRDAI	CO4	T-1, R-2
44	Reformation of IRDAI	CO4	T-1, R-2
45	IRDAI functions	CO4	T-1, R-2
46	History of IRDAI	CO5	T-1, R-1
47	Evolution of IRDAI	CO5	T-1, R-1
48	Role of IRDAI	CO5	T-1, R-1
49	IRDAI functions	CO5	T-1, R-1
50	IRDAI new regimes	CO5	T-1, R-1
51	Business and economics of insurance	CO5	T-2, R-1
52	Insurance need for changing mind-set and latest trends	CO5	T-1, R-1
53	Introduction to Risk	CO6	T-1, R-2
54	Meaning and types of risk in business	CO6	T-1, R-1
55	Individual Risk management process	CO6	T-1, R-1
56	Risk Management methods	CO6	T-1, R-1
57	Risk identification and measurement	CO6	T-2, R-1
58	Risk management techniques	CO6	T-1, R-1
59	Risk management techniques	CO6	T-1, R-1
60	Non insurance methods	CO6	T-1, R-1
Question Bank and Case study discussion			
61	Discussion of Question Bank Unit 1		
62	Discussion of Question Bank Unit 2		
63	Discussion of Question Bank Unit 3		
64	Discussion of Question Bank Unit 4		
65	Discussion of Question Bank Unit 5		
66	Discussion of Case studies		

Prepared by:
Dr. T. Vara Lakshmi, Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043, Ranga Reddy

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	INTERNATIONAL FINANCIAL MANAGEMENT				
Course Code	CMBC54				
Program	MBA				
Semester	IV				
Course Type	PROFESSIONAL ELECTIVE – VI				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	-	-
Course Coordinator	Dr. P. Lavanya, Associate Professor				

I. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	Credits
PG	CMBB17	II	Financial Management	4

II. COURSE OVERVIEW:

The course focuses on the nature, scope, evolution and goals of finance function enable students to understand maximizing profit, wealth, welfare and earnings per share of business concern. Financial management is also very useful to the business concerns to take investment decisions, capital structure decisions and dividend decisions from time to time for the growth and development of business. This course includes management of cash, receivables, inventory and current assets in working capital planning. This course uses the analytical techniques and arrives at conclusions from financial information for the purpose of decision making.

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
International Financial Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✗	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

The course should enable the students to:	
I	The overview, importance, nature and scope of International Financial Management.
II	Fundamentals of BOP, Accounting components of BOP, factors affecting international trade flows.
III	Functions and Structure of the Forex markets, major participants, and types of transactions and settlements dates.
IV	Exchange rate movements exchange, rate systems and purchasing power parity and theory.
V	Foreign direct investment, international capital budgeting, international capital structure and cost of capital and international portfolio management.

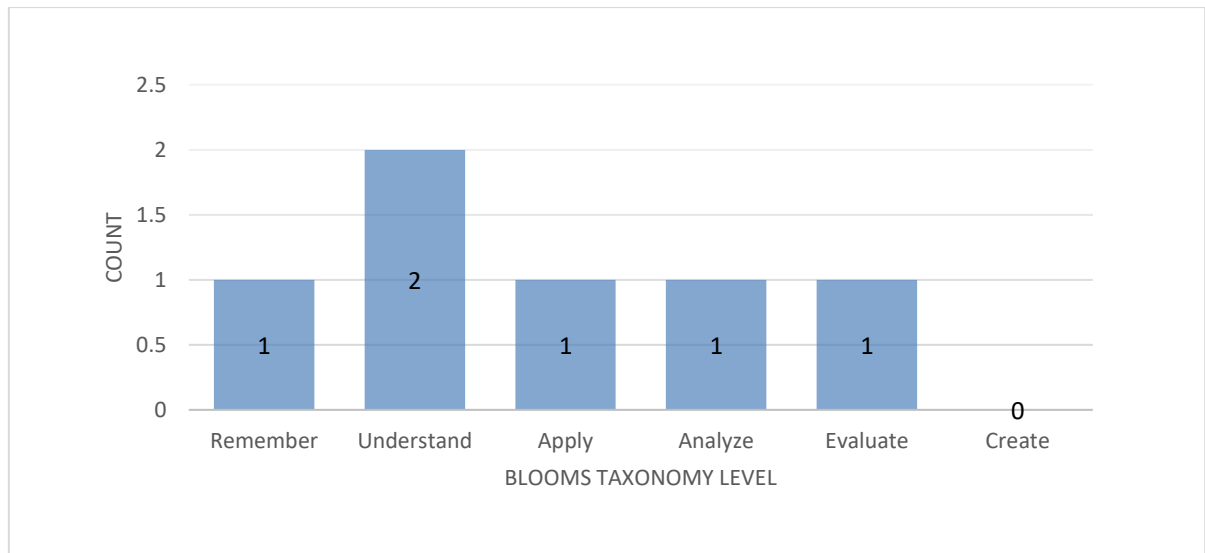
VI. COURSE OUTCOMES:

At the end of the course, the student will have the ability to:		Knowledge Level (Bloom's Taxonomy)
CO 1	Illustrate the International Business Methods, their recent changes and challenges in international financial management for establishing the new operations in foreign countries.	Remember
CO 2	Analyse the concept of BOP and international flow of funds to learn about countries economic growth.	Analyse
CO 3	Describe the structure and types of the Forex markets, and quotations for the transfer of purchasing power among countries.	Understand

CO 4	Identify the exchange rate markets to determine a nation's economic health.	Evaluate
CO 5	Measure the exchange rate movements and their relationships to analyse the economic status of the Nation.	Understand
CO 9	Apply the assets – liability management Techniques to enhance the profit and net worth of a company	Apply

3 = High; 2 = Medium; 1 = Low

COURSE KNOWLEDGE COMPETENCY LEVEL:



VII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2	Guest Lectures
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Seminars
PO7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	1	Assignment

3= High; 2 = Medium; 1 = Low

VIII. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√						√	√
CO 2	√						√	
CO 3	√	√						
CO 4		√						√
CO 5							√	
CO 6		√					√	

3= High; 2 = Medium; 1 = Low

IX. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	Program outcomes	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Ability to memorize the concept of financial management, nature and scope of International financial management for the better competition in foreign markets.	2
	PO7	Formulate and conduct strategies for the international business methods to examine new operations in foreign countries.	4
	PO8	Apply (Knowledge) the methods of international business by using different technical skills to evaluate operations in foreign countries.	1
CO 2	PO 1	Focus on the concept of BOP to analyse and understand the economic dealings of a country with other countries.	2
	PO7	To formulate the strategic analysis using theoretical and practical applications to examine BOP role in decision making with regard to economic dealings.	4
CO 3	PO 1	Apply (knowledge) of managerial principles and practices for successful transfer of foreign exchange quotations for the purchasing power between countries	1

	PO 2	To Construct and formulate the strategies for the different types of .foreign exchange quotations between the two countries.	3
CO4	PO2	To Identify and implementation strategies for the exchange rate markets to determine a nation's economic health.	3
	PO 8	To Inculcate and develop technical skills to adapt and manage different exchange markets for decision making, and for the competitive world successfully.	2
CO 5	PO7	To formulate the strategic analysis using theoretical and practical applications to Measure the exchange rate movements for the value of various currencies.	2
CO 6	PO 2	To Apply and implement the methods and principles of capital budgeting for selecting the research and development projects.	3
	PO7	To formulate different strategies for by using different capital budgeting techniques for project selection.	4

X. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
		2	3	3	3	5	3	4
CO 1	2						4	1
CO 2	2						4	
CO 3	1	3						
CO 4		3						2
CO 5							2	
CO 6		3					4	

XI. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
		2	3	3	3	5	3	4
CO 1	100.00						100	
CO 2	100.00						100	50.00
CO 3	50.00	100						
CO 4		100						100
CO 5							50	
CO 6		100.00					100	

XII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, 0 being no correlation, 1 being the low correlation, 2 being medium correlation and 3 being high correlation.

0 – $0 \leq C \leq 5\%$ –No correlation; 2– $40\% < C < 60\%$ –Moderate.

1 – $5 < C \leq 40\%$ – Low/ Slight; 3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3						3	2
CO 2	3						3	
CO 3	2	3						
CO 4		3						
CO 5							2	4
CO 6		3					3	
TOTAL	8	9					11	5
AVERAGE	2.7	3					2.8	2.5

XIII. ASSESSMENT METHODOLOGIES – DIRECT

CIE Exams	PO1, PO2, PO7, PO8.	SEE Exams	PO1,PO2, PO7,PO8	Assignments	PO8	Seminars	PO2, PO7.
Laboratory Practices	-	Guest Lecture	PO1	Mini Project	-	Certification	-
Term Paper							

XIV. ASSESSMENT METHODOLOGIES - INDIRECT

√	Assessment of course outcomes (by feedback, once)	√	Student feedback on faculty (twice)
x	Assessment of mini projects by experts		

XV. SYLLABUS

MODULE– I	INTRODUCTION
An overview, importance, nature and scope of international financial management, domestic FM Vs. IFM, International Business Methods, recent changes and challenges in international financial management.	

MODULE–II	INTERNATIONAL FLOW OF FUNDS
Balance of Payments (BOP), fundamentals of BOP, Accounting components of BOP, factors affecting international trade flows, agencies that facilitate international flows. Indian BOP trends. International Monetary System: Evolution, gold standard, Bretton Woods’s system, the flexible exchange rate regime, evaluation of floating rates, the current exchange rate arrangements, the economic and monetary union (EMU).	
MODULE-III	FOREIGN EXCHANGE MARKET
Function and Structure of the Forex markets, major participants, types of transactions and settlements dates, foreign exchange quotations. Process of arbitrage, speculation in the forward market. Currency futures and options markets, overview of the other markets, Euro currency market, Euro credit market, Euro bond market, international stock market.	
MODULE– IV	EXCHANGE RATES
Measuring exchange rate movements, factors influencing exchange rates. Government influence on exchange rates, exchange rate systems. Managing Foreign exchange Risk. International arbitrage and interest rate parity. Relationship between inflation, interest rates and exchange rates, purchasing power parity, international Fisher effect, Fisher effect, interest rate parity, expectations theory.	
MODULE– V	ASSET–LIABILITY MANAGEMENT
Foreign direct investment, international capital budgeting, international capital structure and cost of capital. International portfolio management. International financing: Equity, Bond financing, parallel loans, international cash management, accounts receivable management, inventory management. Payment methods of international trade, trade finance methods, export and import bank of India, and recent amendments in EXIM policy, regulations and guidelines.	
Text Books:	
1. Jeff Madura, “International Corporate Management”, Cengage Learning, 2 nd Edition, 2012. 2. Alan C. Shapiro, “Multinational Financial Management”, John Wiley publications, 5 th Edition, 2012 3. S. Eun Choel and Risnick Bruce, ”International Financial Management”, TMH, 4 th Edition,2012	
References:	
1. Sharan. V, “International Financial Management” PHI Publications, 5 th Edition, 2012 2. P. G. Apte, “International Financial Management”, TMH publications, 3 rd Edition, 2012. 3. Madhu Vij, “International Financial Management”, Excel Publications, 4 th Edition, 2012.	
E-Text Books:	
1. http://www.indiaclass.com/financia-management-references-books 2. https://www.loc.gov/rr/business/BERA/issue/finance.html	

XVI. COURSE PLAN

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes	Reference
DISCUSSION ON OBE			
1	Discussion on Outcome Based Education, PO, PSO and COs		

Lecture No	Topics to be covered	Course Outcomes	Reference
COURSE CONTENT			
1	An overview IFM	CO 1	T1- 1.4-1.8
2	Importance, nature of IFM	CO 1	T1- 1.4-1.8
3	Scope of international financial management	CO 1	T1-2.6-2.11
4	Domestic FM Vs. IFM, International Business Methods	CO 1	T1- 1.4-1.8
5	Domestic FM Vs. IFM, International Business Methods	CO 1	T1- 1.4-1.8
6	Recent changes in international financial management...	CO 1	T1-3.2-3.20
7	Challenges in international financial management...	CO 1	T1- 1.4-1.8
8	Balance of Payments (BOP)	CO 2	T1- 5.35.18
9	Fundamentals of BOP	CO 2	T1- 5.35.18
10	Accounting components of BOP.	CO 2	T1- 5.35.18
11	Factors affecting international trade flows.	CO 2	T1- 5.35.18
12	Agencies that facilitate international flows.	CO 2	T1- 5.35.18
13	Indian BOP trends. International Monetary System.	CO 2	T1- 5.35.18
14	Evolution, gold standard, Breton Woods's system	CO 2	T1- 5.35.18
15	The flexible exchange rate regime,	CO 2	T1- 5.35.18
16	Evaluation of floating rates,	CO 2	T1- 5.35.18
17	The current exchange rate arrangements	CO 2	T1- 5.35.18
18	The economic and monetary union (EMU).	CO 2	T1- 5.35.18
19	Function and Structure of the Forex markets,.	CO 3	T1- 8.4-8.16
20	Major participants, types of transactions and settlements dates	CO 3	T1- 8.4-8.16
21	Foreign exchange quotations – types.	CO 3	T1- 8.4-8.16
22	Process of arbitrage.	CO 3	T1- 8.4-8.16
23	speculation in the forward market	CO 3	T1- 8.4-8.16
24	Currency futures and options markets, overview of the market.	CO 3	T1- 8.4-8.16
25	Currency futures and options markets, overview of the market.	CO 3	T1- 8.4-8.16
26	Measuring exchange rate movements - overview	CO 4	T1-8.218.25

Lecture No	Topics to be covered	Course Outcomes	Reference
27	Measuring exchange rate movements - methods	CO 4	T1-8.218.25
28	Factors influencing exchange rates	CO 4	T1-8.218.25
29	Government influence on exchange rates	CO 4	T1-8.218.25
30	International arbitrage. Relationship between inflation, interest rates and exchange rates.	CO 4	T1-8.218.25
31	International arbitrage. Relationship between inflation, interest rates and exchange rates.	CO 4	T1-8.218.25
32	Interest rate parity – overview	CO 4	T1-8.218.25
33	Interest rate parity – overview	CO 4	T1-8.218.25
34	Relationship between inflation, interest rates and exchange rates.	CO 4	T1-8.218.25
35	Relationship between inflation, interest rates and exchange rates.	CO 5	T19.210.23
36	Difference between inflation, interest rates and exchange rates.	CO 5	T19.210.23
37	Purchasing power parity – overview	CO 5	T19.210.23
38	Purchasing power parity – methods	CO 5	T19.210.23
39	International Fisher effect,	CO 5	T19.210.23
40	Fisher effect, interest rate parity	CO 5	T19.210.23
41	Expectations theory	CO 5	T19.210.23
42	Euro currency market - overview	CO 5	T19.210.23
43	Euro credit market	CO 5	T19.210.23
44	Euro bond market	CO 5	T19.210.23
45	International stock market	CO 5	T19.210.23
46	International stock market	CO 5	T19.210.23
47	Foreign direct investment - overview	CO 6	T113.613.15
48	Foreign direct investment - overview	CO 6	T113.613.15
49	international capital budgeting	CO 6	T113.613.15
50	international capital structure	CO 6	T113.613.15
51	Cost of capital. International - Problems	CO 6	T113.613.15
52	Portfolio management	CO 6	T113.613.15
53	International financing: Types	CO 6	T113.613.15

Lecture No	Topics to be covered	Course Outcomes	Reference
54	Equity, Bond financing other sources	CO 6	T113.613.15
55	parallel loans international cash management,	CO 6	T113.613.15
56	parallel loans international cash management,	CO 6	T113.613.15
57	Accounts receivable management	CO 6	T113.613.15
58	Payment methods of international trade,	CO 6	T113.613.15
59	Trade finance methods, export and import bank of India	CO 6	T113.613.15
60	Recent amendments in EXIM policy, regulations and guidelines.	CO 6	T113.613.15
DISCUSSION ON QUESTION BANK			
61	Problem Solving and Case Study in Unit -1	CO 1	T1- 1.4-1.8
62	Problem Solving and Case Study in Unit - 2	CO 2	T1- 5.35.18
63	Problem Solving and Case Study in Unit -3	CO 3	T1- 8.4-8.16
64	Problem Solving and Case Study in Unit -3	CO 4	T1-8.218.25
65	Problem Solving and Case Study in Unit -4	CO 5	T19.210.23
66	Problem Solving and Case Study in Unit -5	CO 6	T113.613.15

Prepared by:

Dr. P Lavanya, Associate Professor.

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal - 500 043, Hyderabad, Telangana

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	COMPENSATION AND REWARD MANAGEMENT				
Course Code	CMBC55				
Programme	MBA				
Semester	IV				
Course Type	Professional Elective - VI				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Chief Coordinator	Mr. Nunna Suresh, Assistant Professor				

I. COURSE OVERVIEW:

Compensation and reward management statements are very useful to the business concerns to interpret and analyze the organization growth of different companies. This course uses the growth statements as means of business communication. This course uses the analytical techniques and arriving at conclusions from market information for the purpose of effective decision making.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC15	II	Human Resource Management

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Compensation and Reward Management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✗	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into five units and each unit carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each unit. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1. Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
0 %	Remember
16.6 %	Understand
16.6 %	Apply
16.6 %	Analyze
33.3 %	Evaluate
16.6 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively. The CIE exam is conducted for 25 marks of 2 hours duration consisting of two parts. Part–A shall have five compulsory questions of one mark each. In part–B, four out of five questions have to be answered where, each question carries 5 marks. Marks are awarded by taking average of marks scored in two CIE exams.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

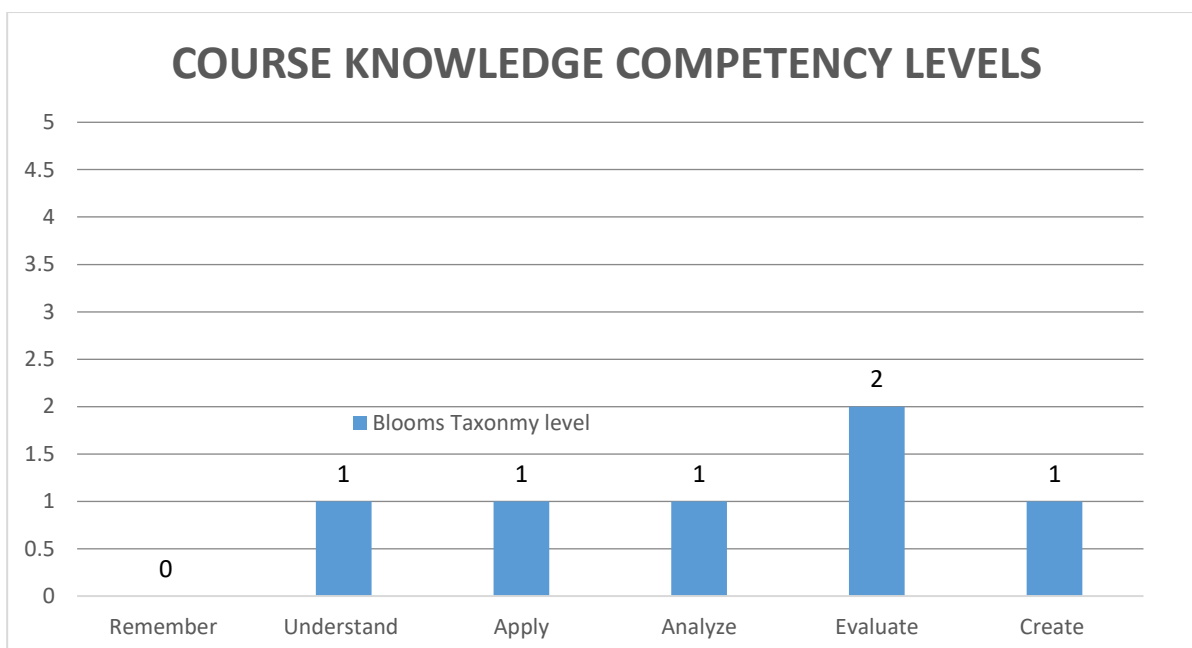
VI. COURSE OBJECTIVES:

The students will try to learn:	
I.	To attract competent and qualified persons towards organization by offering fair wage and incentive.
II.	Maintain good human relation between employer and employee through a process of payment of bonus, profit sharing and other fringes benefits.
III.	The company should comply with the laws and regulations especially rights of labor.
IV.	Explore the new realities of how organizations are approaching the vital tasks of managing for rewards and developing the capabilities of their people.
V	Provide a well-qualified staff to perform the work of organization by establishing compensation program that is competitive in the market place.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:

Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Outline the concept of compensation and design of strategic compensation plan.	Understand
CO 2	Analyze various compensation structures in MNCs.	Analyze
CO 3	Identify the fringe benefits and establish fundamental linkage between performance appraisal and compensation.	Apply
CO 4	Evaluate the Performance based compensation along with benefits and services.	Evaluate
CO 5	Assess the performance-based pay system incentives; Illustrate the executive's compensation plan and packages.	Evaluate
CO 6	Develop compensation and reward plans according to the present scenario.	Create



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	3	CIE/AAT
PO 2	Decision making Skills: Foster Analytical and critical thinking abilities for data-based decision making.	3	CIE/AAT
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal and ethical aspects of business.	2	Seminar/ Conference/ Research papers

PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.	2	CIE/AAT
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	2	Assignments/ Discussion

3 = High; 2 = Medium; 1 = Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	√	-	-	-	-
CO 2	√	√	-	-	-	-	-	-
CO 3	√	-	-	-	-	-	-	-
CO 4	-	-	-	√	-	-	-	-
CO 5	-	-	-	√	-	-	√	√
CO 6	-	-	-	-	-	-	√	√

X. MAPPIN JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) Compensation, theoretical dimension, economic and behavioral of Compensation Management	2
	PO 2	Describe (knowledge) the importance of Compensation Management for designing the pay model strategic in compensation plan	3
	PO 4	Interpret (knowledge) about the gathering information for decision making to wage and salary administration at the micro level.	3
CO 2	PO 1	Comprehend Wage and salary administration at the micro level job evaluation	3
	PO 2	Recognizing (knowledge) By applying wage boards, pay commissions, compensation management in multinational organizations.	3
CO 3	PO 1	Apply (knowledge) establishing a link with performance appraisal and compensation management	2
CO 4	PO 4	Examine the the performance of employees and the measures by Optimizing selection and promotion decisions.	3
CO 5	PO 4	Derive Performance based incentives ethically.	3
	PO 7	Differentiate the wage pay system based on levels of management.	2
	PO 8	Assess value-based performance in accordance with the competitive world.	2
CO 6	PO 7	Explain compensation package according to current lifestyle and new thinking in the new millennium the	2
	PO 8	Develop the worth and value of employee's knowledge and skill, rewarding employees to contributions and results achieved, supporting team work	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	-	3	-	-	-	-
CO 2	2	3	-	-	-	-	-	-
CO 3	2	-	-	-	-	-	-	-
CO 4	-	-	-	3	-	-	-	-
CO 5	-	-	-	3	-	-	2	2
CO 6	-	-	-	-	-	-	2	2

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	100.00	-	100.00	-	-	-	-
CO 2	100.00	100.00	-	-	-	-	-	-
CO 3	100.00	-	-	-	-	-	-	-
CO 4	-	-	-	100.00	-	-	-	-
CO 5	-	-	-	100.00	-	-	50.00	100.00
CO 6	-	-	-	-	-	-	50.00	100.00

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$

– Non correlation;

2 – $40\% < C < 60\%$

– Moderate.

1 – $5 < C \leq 40\%$

– Low/ Slight;

3 – $60\% \leq C < 100\%$

– Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	3	-	-	-	-
CO 2	3	3	-	-	-	-	-	-
CO 3	3	-	-	-	-	-	-	-

CO 4	-	-	-	3	-	-	-	-
CO 5	-	-	-	3	-	-	2	2
CO 6	-	-	-	-	-	-	2	2
TOTAL	9	6	-	9	-	-	4	4
AVERAGE	3	3	-	3	-	-	2	2

XIV. ASSESSMENT METHODOLOGIES–DIRECT

CIE Exams	PO1, PO2, PO4, PO7, PO8.	SEE Exams	PO1, PO2, PO4, PO7, PO8.	Assignments	PO1,PO4	Seminars	PO2, PO8
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGIES-INDIRECT

√	Early Semester Feedback	√	End Semester OBE Feedback
X	Assessment of mini projects by experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO COMPENSATION MANAGEMENT
Compensation, theoretical dimension, economic and behavioral; designing the pay model strategic compensation plan; wage and salary administration at the macro level.	
UNIT-II	WAGE AND SALARY ADMINISTRATION
Wage and salary administration at the micro level job evaluation, definition, traditional and new techniques; compensation structure, Indian practices; wage boards, pay commissions, compensation management in multinational organizations.	
UNIT-III	CONCEPTS OF EMPLOYEE BENEFITS
Incentives, fringe benefits; establishing a link with performance appraisal and compensation management. Performance linked compensation; benefits and services.	
UNIT-IV	PERFORMANCE BASED PAY
Managerial remuneration pays commission; performance-based pay system incentives, executives' compensation plan and packages.	
UNIT-V	COMPENSATION STRATEGIES
Recognizing the worth and value of employee's knowledge and skill, rewarding employees' contributions and results achieved, supporting team work, compensation package according to current lifestyle and new thinking in the new millennium.	
Text books	
1. Richard. I. Henderson, —Compensation Management in a Knowledge Based World —, Prentice-hall, 1 st Edition, 2001.	

<ol style="list-style-type: none"> 2. Edwarde.e. Lawler, Rewarding excellence (pay strategies for the new economy) , Prentice-hall, 1st Edition, 2004. 3. B D Singh, = „, Compensation and Reward Management ,,,,, Sterling Publishers (P) Ltd, KindleEdition, 2001.
References
<ol style="list-style-type: none"> 1. Thomas. P. Plannery, David, —People Performance and Pay , Free Press, 1st Edition, 2002. 2. Michael Armstrong, —Hand book of Reward Management , Crust Publishing House, 2nd Edition, 2003. 3. Joseph.J. Martocchio, —Strategic Compensation - A Human Resource Management Approach , Prentice Hall, 4th Edition, 2005
Web References
<ol style="list-style-type: none"> 1. https://iedunote.com/compensation-management 2. https://www.managementstudyguide.com/compensation-management.htm 3. https://www.slideshare.net/805984/compensation-management-16470965 4. http://www.pondiuni.edu.in/sites/default/files/Compensation-mgt-260214.pdf 5. http://www.eiilmuniversity.co.in/downloads/Compensation-Management.pdf 6. https://www.studynama.com/community/threads/compensation-management-pdf-notes-ebook-download-for-mba-hr-students.348/
E-Text Books
<ol style="list-style-type: none"> 1. https://www.amazon.in/Compensation-Management-DipaKumarBhattacharyya 2. https://www.peoplesmatters.in/blog/sports-books-movies/4-books-every-compensation-and-benefits-professional-should-read-16440

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Outcomes	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Able to know about the different trends compensation and reward management system.	CO1	T-1, R-2
2	Know the importance and process of reward system.	CO1	T-2, R-2
3	Understand the organizational development and ineffective strategies	CO1	T-1, R-2
4	Designing the pay model Strategic Compensation plan architectural framework	CO1	T-1, R-2
5	Able to know the differences and its, financial and non-financial benefits.	CO1	T-1, R-2
6	Understand the wage and salary administration at the macro level.	CO1	T-1, R-2
7	Encryption techniques payment systems and also design.	CO1	T-2, R-2
8	Know about the types of payments legal, ethical	CO1	T-1, R-1
9	Tax issues in wage and salary administration	CO1	T-1, R-1
10	Analyze the job evaluation models of compensation management	CO1	T-1, R-2
11	multinational organizations. and its importance	CO1	T-1, R-2

12	multinational organizations know about its model.	CO1	T-1, R-2
13	Able to understand the design of fringe	CO2	T-1, R-2
14	benefits methods and strategies compensation	CO2	T-1, R-2
15	Understand about the developing objectives and	CO2	T-1, R-2
16	facilitation of job analysis	CO2	T-1, R-2
17	Know about the transfer procedure and also design the benefits.	CO2	T-1, R-2
18	Analyse the importance of and trends in Incentives	CO2	T-1, R-2
19	Analyse the importance of and trends in Methods	CO2	T-1, R-2
20	Establishing a link with performance appraisal and compensation management.	CO2	T-2, R-2
21	Establishing a link with performance compensation management	CO2	T-2, R-2
22	Performance linked compensation	CO2	T-2, R-2
23	Know about the on the Online financial services	CO2	T-1, R-2
24	Know about the on the Online financial services to the employees.	CO2	T-1, R-2
25	Know how the computer-based technique is followed in an organization.	CO3	T-2, R-2
26	Implementation of computer-based technique is followed in an organization.	CO3	T-2, R-2
27	Analyze the online insurance services,	CO3	T-1, R-1
28	online incentive services.	CO3	T-1, R-1
29	Able to know about the major players in, measuring results behaviors and development	CO3	T-1, R-2
30	Know about supporting team work in the particular organization	CO3	T-1, R-2
31	Supporting Team work in the different organisation	CO3	T-1, R-2
32	Able to know about the different trends in compensation and reward management system.	CO4	T-2, R-2
33	Implementation of compensation and reward management system.	CO4	T-2, R-2
34	Know the importance and process of reward system.	CO4	T-1, R-2
35	Apply the reward management system in the organization	CO4	T-2, R-2
36	Understand the organizational development of designing	CO5	T-2, R-2
37	organizational development and ineffective strategies of designing	CO5	T-2, R-2
38	pay model strategic Compensation plan architectural framework.	CO5	T-2, R-2
39	Able to know the differences and its, financial and non-financial benefits	CO5	T-1, R-1
40	Understand the wage and salary administration at the macro level.	CO5	T-2, R-2

41	Encryption techniques payment systems and also design.	CO5	T-1, R-2
42	Know about the types of payments legal, ethical administration	CO5	T-1, R-2
43	Know about the types of payments tax issues in wage and salary administration	CO5	T-1, R-2
44	Analyze the job evaluation models of compensation management.	CO5	T-1, R-2
45	Job evaluation models of compensation management in multinational organizations	CO5	T-1, R-2
46	Job evaluation models of compensation management in multinational organizations. and its importance	CO5	T-1, R-2
47	Compensation management in multinational organizations know about its model	CO5	T-1, R-2
48	Able to understand the design of fringe benefits	CO6	T-1, R-1
49	Design of methods and strategies compensation	CO6	T-1, R-1
50	Recognizing worth and value of Employees	CO6	T-2, R-1
51	Employee knowledge and skill	CO6	T-2, R-1
52	Rewarding employee Contribution	CO6	T-1, R-1
53	Result and achievement of Employee rewarding	CO6	T-1, R-2
54	Supporting Team work of compensation management	CO6	T-1, R-1
55	Performance linked compensation	CO6	T-2, R-1
56	Know about the on the Online financial services to the employees.	CO6	T-1, R-1
57	Know how the Current life style of employee	CO6	T-1, R-1
58	Employee Thinking in the new Millennium	CO6	T-2, R-1
59	Compensation packages according to Employee life Style	CO6	T-2, R-1
60	Compensation strategies overall organisation	CO6	T-2, R-1
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-2
63	Question Bank Discussions Unit 3	CO 3, CO 4	T-1, R-2
64	Question Bank Discussions Unit 4	CO 5	T-1, R-1
65	Question Bank Discussions Unit 5	CO 6	T-1, R-2
66	Case Study Discussion		

Prepared by:
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HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal - 500 043, Hyderabad, Telangana

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	MANAGEMENT OF INDUSTRIAL RELATIONS				
Course Code	CMBC56				
Programme	MBA				
Semester	IV				
Course Type	PROFESSIONAL ELECTIVE - VI				
Regulation	IARE – PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Chief Coordinator	Ms. P Rajini, Assistant Professor				

I. COURSE OVERVIEW:

The course will make the students to learn the basic theory of Industrial law encompasses all the laws that dictate how to manage the relations between employees and employer in the organization. This includes all of the laws that govern how to manage, motivate the employees legally and to safe guard the employees from the organizations. It also regulates the organization to provide minimum needs to the employees.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC15	II	Human Resource Management

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Management of Industrial Relations	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✓	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE

Percentage of Cognitive Level	Blooms Taxonomy Level
0 %	Remember
66.66 %	Understand
16.67 %	Apply
16.67 %	Analyze
0 %	Evaluate
0 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination – 1 (Mid-term)	10	30
	Continuous Internal Examination – 2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning centre. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

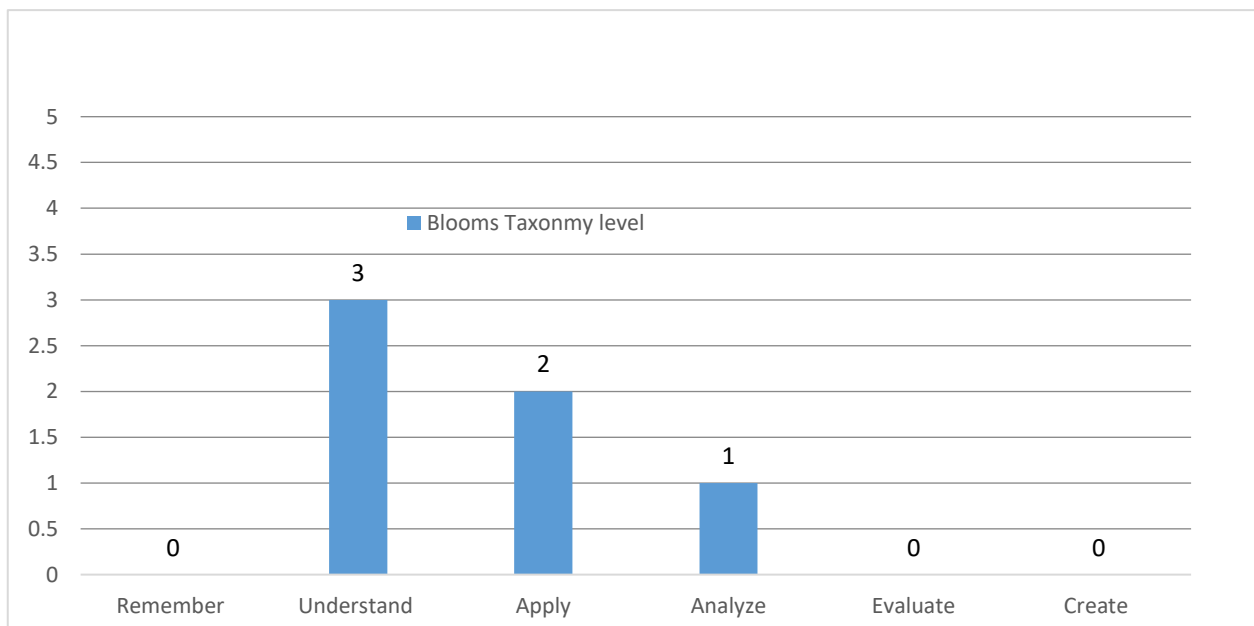
The students will try to learn:	
I	The current and emerging industrial relations, trends and their impact on the parties, processes and rules of Indian industrial relations.
II	Acquainted with the concepts, principles and issues connected with trade unions, collective bargaining, grievance redressal, and employee discipline and dispute resolution.
III	Important provisions of Wage Legislations, in reference to Payment of wages Act 1936, Factories act 1948 & Payment of bonus Act 1965
IV	The legal norms regulating employment contract, labor relations and the rights and obligations of employees and employers.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:

Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Analyze the characteristics of industrial relation systems to evaluate their impact on labor relations and organizational dynamics	Understand
CO 2	Evaluate the effectiveness of dispute settlement machinery to identify appropriate dispute settlement mechanisms	Understand
CO 3	Summarize the collective bargaining procedures and mechanisms for better negotiation process.	Understand
CO 4	Illustrate labour welfare activities and worker's participation for effective involvement of employees and workers.	Analyze
CO 5	Analyze wage policy and regulation machinery to evaluate their effectiveness in addressing wage-related issues	Apply
CO 6	Application of The Factories Act 1948 and identifying compliance requirements to propose strategies for ensuring workplace safety and health	Apply

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.

Program Outcomes	
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Level	Proficiency assessed by
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2	Seminars
PO 2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	3	Assignments
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.	3	Seminars/ Assignments
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to at environment.	3	Seminars/ Assignments

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	-	-	-	-	-	-	-
CO 2	√	√	-	-	-	-	-	-
CO 3	√	-	-	-	√	-	-	-
CO 4	√	√	-	√		-	-	-
CO 5	√	√	-	√	-	-	-	-
CO 6	√	-	-	-	√	-	-	-

XI. MAPPIN JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Evaluate the key processes of industrial relations at the workplace level and their relationships to the institutions. Remember the parties and approaches (management theories) to solve (knowledge) the key issues at workplace	2
CO 2	PO 1	Remembering(knowledge) the basic frame work of industrial relations including the mechanisms (management theories) of the grievance process and collective bargaining.	2

	PO 2	Ability to understand the basic framework of industrial relations (critical thinking abilities) and apply the mechanisms (decision making) of grievance procedure and collective bargaining to solve the disputes (problem analysis)	3
CO 3	PO 1	Understand the administration of collective bargaining agreements for solving the disputes through the grievance and arbitration process. (knowledge)	2
	PO 5	Ability to implement administration of collective bargaining agreements (independence on the activities) for solving the disputes (team effort and work) through the grievance and arbitration (responsibility) process.	3
CO 4	PO 1	Apply the principles of contract bargaining (management theories) for settling the wage issues including bargaining environments(knowledge) and standards used in negotiations.	3
	PO 2	Develop the contract bargaining principles (critical thinking abilities) for resolving the wage issues (decision making) and create the bargaining environment (problem analysis) for negotiation mechanism.	3
	PO 4	Understand the principles of collective bargaining (communication) for settling the wage disputes by using the negotiation mechanism (development solutions)	3
CO 5	PO 1	Understand the wage policy and minimum wage issues (knowledge) of India and help to contribute the design, setting and implementation of wage policies (management theories) at the national and state level.	2
	PO 2	Develop the wage policy mechanism (critical thinking abilities) for settling the issues (problem analysis) at state and national wage policy related problems. (Decision making)	2
	PO 4	Ability to solve the wage policy related issues (development of solutions) and design the new rules for settling the wage related issues (communication) at state and national level.	2
CO 6	PO 1	Identify the safe practices of working conditions (management theories) under the provisions of mine rules and regulations(knowledge) at the workplace	2
	PO 5	Analyze and understand the administration of collective bargaining agreements (team efforts & work) for resolving disputes(responsibility) through the grievance and arbitration process (independence on the activities)	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	-	-	-	-	-	-	-
CO 2	2	3	-	-	-	-	-	-
CO 3	2	-	-	-	3	-	-	-

CO 4	2	3	-	3	-	-	-	-
CO 5	2	3	-	3	-	-	-	-
CO 6	2	-	-	-	3	-	-	-

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	-	-	-	-	-	-	-
CO 2	100.00	100.00	-	-	-	-	-	-
CO 3	100.00	-	-	-	-	-	-	-
CO 4	100.00	100.00	-	100.00	-	-	-	-
CO 5	100.00	100.00	-	100.00	-	-	-	-
CO 6	100.00	-	-	-	60.00	-	-	-

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0 – $0 \leq C \leq 5\%$ – No correlation;

2 – $40\% < C < 60\%$ – Moderate

1 – $5 < C \leq 40\%$ – Low/ Slight;

3 – $60\% \leq C < 100\%$ – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	-	-	-	-	-	-	-
CO 2	3	3	-	-	-	-	-	-
CO 3	3	-	-	-	-	-	-	-
CO 4	3	3	-	3	-	-	-	-
CO 5	3	3	-	3	-	-	-	-
CO 6	3	-	-	-	3	-	-	-
TOTAL	18	9	-	6	3	-	-	-
AVERAGE	3	3	-	3	3	-	-	-

XIII. ASSESSMENT METHODOLOGIES – DIRECT

CIE Exams	PO1, PO2, PO4, PO5	SEE Exams	PO1, PO2, PO4, PO5	Assignments	PO2, PO4, PO5	Seminars	PO1, PO4, PO5
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XIV. ASSESSMENT METHODOLOGIES – INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XV. SYLLABUS

UNIT-I	INDUSTRIAL RELATIONS
Introduction, Dunlop’s Industrial relations systems, characteristics of Indian IR System; Trade Unions: Union Purpose. Trade union, functions, methods, Politics, types of unions, Trade Unions in India: Union Structure and characteristics. Recognition of Unions: States provisions for recognition. Rights of recognized Unions, unfair labour Practices: Case 1. Let us get back to work (p.no. 720, C.B.Mamoria) Case 2. A case of complicated multi-union manoeuvres (J.A. Kulkarni)	
UNIT-II	SETTLEMENT OF DISPUTES:
Role of state dispute settlement machinery and its instruments, legislation: Causes of disputes, Right to Strike, Major Strikers, Tripartite and Bipartite Bodies, Standing orders and Grievance Procedure. Case 1. Stop the shouting game please (p.no. 760, C.B.Mamoria) Case 2. The dish ends Ltd. (p.no.07, J.A. Kulkarni)	
UNIT-III	COLLECTIVE BARGAINING
Collective bargaining, conciliation, arbitration, adjudication, The Industrial dispute Act 1947, labour welfare work, labour welfare officer, worker’s participation. Case 1.who is to be blamed (p.no. 685, C.B.Mamoria)	
UNIT –IV	WAGE POLICY AND WAGE REGULATION
Wage policy and wage regulation machinery, wage legislation, payment of wages Act 1936, The payment of bonus Act,1965 Case 1. Rules and regulations still guide actions at UPS (p.no. 37,C.B.Mamoria)	
UNIT -V	THE FACTORIES ACT 1948 AND MINES ACT 1952
The factories Act 1948, mines Act 1952, Industrial relations and technological change. Case 1. Organizations and unions working as partners (p.no. 738, C.B.Mamoria)	
Text Books:	
1 Mamoria, Mamoria, Gankar “Dynamics of Industrial Relations” Himalaya Publishing House, 14th Edition, 2012. 2. C.B.Mamoria, VSP Rao “personnel management- text & cases”, Himalaya Publishers 15th edition,2012. 3. J.A.Kulkarni, Asha Pachpande, Sandeep Pachpande, “ case studies in amangement”, pearson, 10th Editioon, 2011.	
Reference Books:	
1. Padhi, “ Labour and Industrial Relations” PHI, 8 th Edition, 2012. 2. Arun Monappa, 2. Ranjeet Nambudiri, Selvaraj “ Industrial Relations and Labour Laws”, 5th Edition, 3. TMH,2012 3. Ratna Sen “Industrial Relations-Text and Cases “Macmillan Publishers, 10th Edition, 2011.	

Web References:
1. https://www.uk.ask.com/management references/try_ it 2. https://www.shodhganga.intlibnet.ac.in/bitstream/10603/463/46313/8
E-Text Books:
1. https://www.pondiuni.edu.in/storage/dde/download/hrmiii_irm.pdf 2. https://www.eh.wikipedia.org/wiki/industries_relations

XVI. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No.	Topics to be covered	Course Outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos		
CONTENT DELIVERY (THEORY)			
2	Introduction Industrial Relations	CO 1	T1, T2
3	Dunlop's Industrial relations systems	CO 1	T1, T2
4	characteristics of Indian IR System;	CO 1	T1, T2
5	Trade Unions: Union Purpose. Trade union,	CO 1	T1
6	Trade unions functions, methods	CO 1	T1
7	Politics, types of unions, Trade Unions in India: Union Structure and characteristics.	CO 1	T1, T3
8	Union Structure and characteristics.	CO 1	T1, T3
9	Recognition of Unions: States provisions for recognition.	CO 1	T1, T3
10	Rights of recognized Unions	CO 1	T1, T3
11	Case 1. Let us get back to work (p.no. 720, C.B. Mamoria	CO 1	T1, T3
12	Case 2. A case of complicated multi-union maneuver's (J.A. Kulkarni)	CO 1	T1, T3
13	Introduction settlement of Disputes	CO 2	T2
14	Role of state dispute settlement machinery and its instruments, legislation	CO 2	T2
15	Causes of disputes	CO 2	T2
16	Case 2. A case of complicated multi-union manoeuvres (J.A. Kulkarni)	CO 2	T1,T3
17	Role of state dispute settlement machinery and its instruments,	CO 2	T2
18	Right to Strike dispute settlement	CO 2	T1, T3
19	Major Strikers dispute settlement	CO 2	T1, T3
20	Tripartite and Bipartite Bodies	CO 2	T1, T3

21	Standing orders and Grievance Procedure	CO 2	T1, T3
22	Case 1. Stop the shouting game please (p.no. 760, C.B. Mamoria)	CO 2	T1, T3
23	Case 2. The dish ends ltd. (p.no.07, J.A. Kulkarni)	CO 2	T1, T3
24	Overall topics	CO 2	T1, T3
25	Introduction of Collective Bargaining	CO 3	T1, T3
26	Features of Collective Bargaining	CO 3	T1, T3
27	Importance of Collective Bargaining	CO 3	T1, T3
28	Pre-requisites for collective bargaining	CO 3	T1, T3
29	Worker's participation in Management (WPM)	CO 3	T1, T3
30	importance of WPM	CO 3	T1, T3
31	Participation through Joint Councils and Committees:	CO 4	T1, T3
32	Participation through Quality Circles	CO 4	T1, T3
33	Quality in the job of the QC Personnel.	CO 4	T1, T3
34	Evolution of WPM in India:	CO 4	T1, T3
35	Case 1.who is to be blamed	CO 4	T1, T3
36	Total Quality Management:	CO 4	T1, T3
37	Introduction of Wage Policy and Wage Regulation	CO 5	T3
38	Workmen Compensation Act,	CO 5	T2
39	Accident Arising Out of And in The Course of Employment	CO 5	T1
40	Registration Of Agreements of Compensation	CO 5	T2
41	Filing Of Claims	CO 5	T3
42	Wage policy and wage regulation machinery, wage legislation,	CO 5	T2
43	Duties Of Employees	CO 5	T2
44	Enhanced Sickness Benefit	CO 5	T2
45	Temporary disablement benefit	CO 5	T3
46	Maternity Benefit Act 1961	CO 5	T3
47	Industrial Disputes Act	CO 5	T3
48	Industrial Tribunal National Tribunal	CO 5	T3
49	Introduction of The Factories Act 1948	CO 6	T3
50	Introduction of The Factories Act 1952	CO 6	T1, T3

51	Payment of wages Act 1936, The payment of bonus Act,1965	CO 6	T1, T3
52	The payment of bonus Act,1965	CO 6	T1, T3
53	Case 1. Rules and regulations still guide actions at UPS C.B. Mamoria	CO 6	T2
54	The factories act with regard to the Health of workers	CO 6	T2
55	The welfare facilities to be provided in a factory under the factories act, 1948	CO 6	T2
56	The factories Act 1948- Definitions clauses, sections, penalties, rules	CO 6	T1, T3
57	Mines Act 1952 – Definitions clauses, sections, penalties, rules	CO 6	T1, T3
58	Industrial relations and technological change.	CO 6	T3
59	Case 1. Organizations and unions working as partners (C.B. Mamoria)	CO 6	T1, T3
60	The Factories Act regarding the Working hours of adults	CO 6	T3
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO 1	T-1, R-1
62	Question Bank Discussions Unit 2	CO 2	T-1, R-2
63	Question Bank Discussions Unit 3	CO 3, CO 4	T-1, R-2
64	Question Bank Discussions Unit 4	CO 5	T-1, R-1
65	Question Bank Discussions Unit 5	CO 6	T-1, R-2
66	Case Study Discussion		

Prepared by:

Ms. P Rajini, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	INTERNATIONAL HUMAN RESOURCE MANAGEMENT				
Course Code	CMBC57				
Program	MBA				
Semester	IV				
Course Type	Professional Elective –IV				
Regulation	IARE –PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	--	4	-	-
Course Coordinator	Mrs. B V S V Lakshmi Mondem, Assistant Professor				

I. COURSE OVERVIEW:

Strategic human resource management involves a future-oriented process of developing and implementing HR programs that solve business problems and directly contribute to major long-term business objectives. Specific topics covered in this course include International Human Resource Management theories and practices, social environment and staffing skills, National and International organizations of human resource management approaches, methods and practices of Europe, Japan and American approaches to human resource management with appropriate case studies.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
MBA	CMBC15	II	Human Resource Management

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
International human resource management	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD / PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. There could be a maximum of two sub divisions in a question.

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table: 1.

Table 1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table 2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination–1 (Mid-term)	10	30
	Continuous Internal Examination–2 (End-term)	10	
	Assignments	5	
	Alternative Assessment Tool (AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning centre. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

VI. COURSE OBJECTIVES:

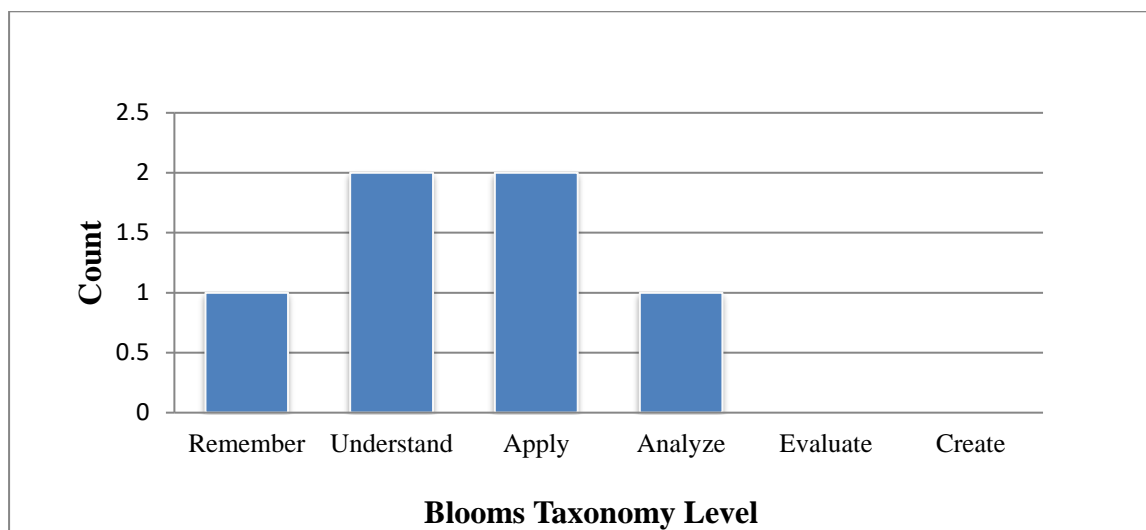
The students will try to:	
I	Understand the significance of international Human Resource Management models
II	Know the International Human Resource planning and Recruitment and selection
III	Examine the Performance Management , Training and development
IV	Develop and Components/Structure of International Compensation Package,
V	Identify the role of International industrial relations

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
Course Outcomes		Knowledge Level (Bloom's Taxonomy)
CO 1	Describe the International human resource management models	Understand
CO 2	Discuss the international staffing techniques that ensure continuity and growth of the organization.	Apply
CO 3	Demonstrate the role and approaches of HRM to explore the global organizations with regards to geographical boundaries.	Understand

CO 4	Evaluate the qualities for Global managers through training that enhance employee performance.	Apply
CO 5	Identify the European committee legislative procedures that help in decision making.	Remember
CO 6	Analyze International compensation methods and practices that improve organizational effectiveness.	Analyze

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. PROGRAM OUTCOMES:

Program Outcomes	
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.
PO 2	Decision-making Skills: Foster Analytical and critical thinking abilities for data-based decision making.
PO 3	Ethics: Ability to develop Value based Leadership ability.
PO 4	Communication Skills: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.
PO 6	Entrepreneurial Skills: Ability to demonstrate the skills and evaluate issues related to entrepreneurship and to develop as entrepreneurs.
PO 7	Strategic analysis: Ability to conduct strategic analysis using theoretical and practical applications.
PO 8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.

IX. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO 1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	2.8	Assignment

Program Outcomes		Strength	Proficiency Assessed by
PO 2	Decision Making Skills: An ability to analyze a problem, identify, formulate and use the appropriate managerial skills for obtaining its solution	2.66	Assignment
PO 5	Leadership Skills: Ability to lead themselves and others in the achievement of organization goals, contributing effectively to a team environment	2.5	Seminar
PO 7	Strategic Skills: Ability to conduct strategic analysis using theoretical and practical applications	2.66	Discussion

3 = High; 2 = Medium; 1 = Low

X. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	-	-	-	-	-	-	-
CO 2	√	√	-	-	-	-	-	-
CO 3	-	√	-	-	-	-	√	-
CO 4	√		-	-	√	-		-
CO 5	√	√	-	-	-	-	√	-
CO 6	-	√	-	-	-	-	-	-

XI. JUSTIFICATIONS FOR CO – (PO) MAPPING –DIRECT

Course Outcomes	POs / PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Understand the basic concept of international human resource management, cultural and reality shock models that helps to solve business problems in the organization.	2
CO 2	PO 1	Examine the basic concept of pool's adaptation of Harvard model, the Brewster model that reduces organizational problems.	1
	PO2	Analyze the concept of significance, convergence theory, Marxist theory, the cultural approach power distance that helps to take business decision.	2
CO 3	PO2	Understand the basic concept of uncertainty avoidance (UAI), individuality (INV), masculinity (MASC) that helps manger in decision making.	2
	PO 7	Interpret the basic concept of cultural literacy and human resource information system in global business, cultural awareness that develops technical skills to gain competitive advantage.	2
CO 4	PO 1	Recall the basic concept of European Community (E.C.): the council of ministers, the commission, the court of justice that helps to solve business problems.	2
	PO 5	Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to team environment.	

CO 5	PO 1	Understand the basic concept of global organizations, HRM approaches in global companies so they can facilitate cooperation and coordination among member nations.	2
	PO2	Understand the basic concept of Social environment and human resource practices, staffing: international recruitment, selection, training and hiring policies, staff retaining and motivating techniques that helps to take decisions in the organizations.	1
	PO 7	Recall the basic concept of cultural skills for co-operative advantages, human resource information system that helps employees to sustain in a global business environment.	3
CO 6	PO2	Recollectthe basic concept of Global literate leader that helps organizations to take business decisions.	2

XII. TOTAL COUNT OF KEY COMPETENCIES FOR CO – (PO) MAPPING

Course Outcomes	Program Outcomes / No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	-	-	-	-	-	-	-
CO 2	1	2	-	-	-	-	-	-
CO 3	-	2	-	-	-	-	3	-
CO 4	1	-	-	-	2	-	-	-
CO 5	2	1	-	-	-	-	3	-
CO 6	-	2	-	-	-	-	-	-

XIII. PERCENTAGE OF KEY COMPETENCIES FOR CO – (PO):

Course Outcomes	Program Outcomes / No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	-	-	-	-	-	-	-
CO 2	50.00	66.66	-	-	-	-	-	-
CO 3	-	66.66	-	-	44.44	-	75.00	-
CO 4	50.00	-	-	-	-	-	-	-
CO 5	100.00	33.33	-	-	-	-	75.00	-
CO 6	-	66.66	-	-	-	-	-	-

XIV. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, 0 being **no correlation**, 1 being **low correlation**, 2 being **medium correlation** and 3 being **high correlation**.

0 – 0 ≤ C ≤ 5% – No correlation; 2 – 40 % < C < 60% – Moderate.

1 – 5 < C ≤ 40% – Low/ Slight; 3 – 60% ≤ C < 100% – Substantial /High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	-	-	-	-	-	-	-
CO 2	2	3	-	-	-	-	-	-
CO 3	-	3	-	-	-	-	2	-
CO 4	3	-	-	-	-	-	-	-
CO 5	3	1	-	-	2	-	3	-
CO 6	-	3	-	-	-	-	-	-
TOTAL	11	10	-	-	-	-	-	-
AVERAGE	2.8	2.5	-	-	2.5	-	2.66	-

XV. ASSESSMENT METHODOLOGY – DIRECT

CIE Exams	PO1, PO2, PO7, PO5	SEE Exams	PO1, PO2, PO7, PO5	Assignments	PO1, PO2, PO7, PO5	Seminars	PO2, PO5,
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-	-	-	-	-	-	-

XVI. ASSESSMENT METHODOLOGY – INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVII. SYLLABUS

MODULE-I	INTERNATIONAL HUMAN RESOURCE MANAGEMENT MODELS
Harvard Model, 5Ps Model of HRM, Social and culture and context of HRM, managing culture Diversity, strategies for managing workforce diversity, IHRM over view. Organizational structure and HRM.	
MODULE-II	INTERNATIONAL HUMAN RESOURCE PLANNING & RECRUITMENT AND SELECTION
International Division of Labor, Global Human Resource Planning, Issues in Supply of International Human Resources, Why Do MNCs Require Different Categories of Employees, Recruitment, Selection.	

MODULE-III	PERFORMANCE MANAGEMENT, TRAINING AND DEVELOPMENT
Challenges of International Performance Management, Areas to be Appraised, Organizational Role Expectations, Methods of performance appraisal. Introduction, Why Global Training? Training methods, Areas of Global Training and Development.	
MODULE-IV	COMPENSATION AND BENEFITS
Complexities in International Compensation Management, Objectives of International Compensation Management, Factors that Affect International Compensation, Components/Structure of International Compensation Package, Executive Compensation, Approaches to International Compensation Management.	
MODULE -V	INTERNATIONAL INDUSTRIAL RELATIONS
Three Actors of Industrial Relations , Trade Unions , Concerns of Trade Unions in Multinational Companies, Collective Negotiations, Disputes or Conflicts, Quality Circles and Participative Management, Shifts in Global Business, Shifts in Human Resource Management, Shifts in Industrial Relations	
Textbooks:	
<ol style="list-style-type: none"> 1. Tarique, T&F/Routledge, “International Human Resource Management”, 5th Edition, 2020. 2. Kandula Srinivas R, “International Human Resource Management”, 2nd Edition, 2018. Peter J. Dowling Marion Festing, Allen D. Engle, “International Human Resource Management “, 3rd Edition, 2017. 	
Reference Books:	
<ol style="list-style-type: none"> 1. P.L. Rao “International Human Resource Management” Excel Books, first Edition, New Delhi. 2. K. Aswathappa & Sadhna Dash, “International Human Resource Management”, Second Edition, McGraw hill Publication, New Delhi. 3. Tony Edwards “International Human resource Management “Pearson publication, New Delhi, 4th Edition. 4. P. Subba Rao, International Human Resource Management, second Edition, Himalaya publishinghouse, New Delhi. <ol style="list-style-type: none"> 1. Peter J. Dowling & Marion Festing, “International Human Resource Management “, 2nd Edition, Cengage publishing, New Delhi. 	

XVIII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture no	Topics to be covered	Course outcomes	Reference
OBE DISCUSSION			
1	Discussion on Course Outcomes and how these Cos are mapped with Pos.		
CONTENT DELIVERY (THEORY)			
2	Harward Model of Human Resource Management	CO1	T1, R1
3	5Ps Model of Human Resource Management	CO1	T1, R1
4	Social and culture and context of HRM	CO1	T2, R1

5	Managing Culture diversity	CO1	T2, R2
6	International human resource management overview	CO1	T1, R1
7	Organizational structure and HRM	CO1	T2, R1
8	International division of Labour	CO2	T2, R2
9	Global Human Resource Planning	CO2	T3, R1
10	Issues in supply of international human resources	CO2	T3, R1
11	MNC's Require different categories of employees	CO2	T2, R2
12	Recruitment process and the nature of the position	CO2	T2, R2
13	Specific requirements of the position and the organization's selection process	CO2	T3, R1
14	Challenges of International performance Management	CO3	T3, R1
15	Environmental variations, Time and distance	CO3	T3, R1
16	Cultural adjustment, Inconsistency of implementation	CO3	T3, R1
17	Areas to be appraised	CO3	T4, R3
18	Organizational role Expectations	CO3	T4, R3
19	Expectations of the agent role in the organization	CO3	T4, R3
20	Staff Relationships	CO3	T4, R3
21	County Coordinators for Operational Responsibilities	CO3	T4, R3
22	Professional Expectations	CO3	T4, R3
23	Professional Development	CO3	T4, R3
24	a Agent Work Schedules	CO3	T4, R3
25	Concept, of Human resource practices	CO4	T4, R4
26	Social environment and human resource practices,	CO4	T4, R2
27	Methods of performance appraisal	CO4	T1, R3
28	Management by objectives	CO4	T1, R3

29	360-Degree Feedback	CO4	T1, R3
30	Assessment Centre Method	CO4	T1, R2
31	Behaviorally Anchored Rating Scale (BARS)	CO4	T11, R4
32	Psychological Appraisals	CO4	T4, R2
33	Human-Resource (Cost) Accounting Method	CO4	T4, R2
34	Why global Training	CO4	T2, R2
35	Introduction to global training	CO4	T2, R2
36	Global training methods	CO4	T3, R3
37	Technology based learning, on job training	CO4	T3, R3
38	Simulators , Instructors –led training	CO4	T3, R3
39	Role Playing, Films and videos	CO4	T2, R1
40	Coaching and mentoring	CO4	T2, R2
41	Complexities International compensation management	CO5	T2, R2
42	Factors that Affect International Compensation	CO5	T2, R2
43	Internal Environment Factors	CO5	T3, R1
44	External Environment Factors	CO5	T3, R1
45	Components/Structure of International Compensation Package	CO5	T3, R1
46	Executive Compensation	CO5	T3, R1
47	Approaches of International Compensation	CO5	T3, R1
48	Three Actors of Industrial Relations	CO6	T2, R2
49	Concerns of Trade Unions in Multinational Companies	CO6	T2, R2
50	Collective Negotiations	CO6	T2, R2
51	Manage conflicts when multiple parties are involved	CO6	T2, R2
52	Disputes involving individuals from diverse cultural backgrounds	CO6	T2, R2

53	Quality Circles and Participative Management	CO6	T2, R2
54	Shifts in Global Business	CO6	T2, R2
55	Shifts in Human Resource Management	CO6	T2, R2
56	Remote employees create a need for a global approach	CO6	T1, R1
57	The future is in the Cloud, Employee culture is changing	CO6	T1, R1
58	Video as a critical component in HR management practices	CO6	T1, R1
59	Shifts in Industrial Relations	CO6	T1, R1
60	Industrial relations after World War II	CO6	T1, R1
Question Bank Discussion			
61	Question Bank Discussions Unit 1	CO 1	T2, R1
62	Question Bank Discussions Unit 2	CO 2	T2, R2
63	Question Bank Discussions Unit 3	CO 3, 4	T3, R1
64	Question Bank Discussions Unit 4	CO 5	T4, R2
65	Question Bank Discussions Unit 5	CO 6	T3, R3

Prepared By:

Ms.B V S V Lakshmi Mondem, Assistant Professor

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

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Dundigal, Hyderabad -500043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

CourseTitle	CYBER SECURITY				
Course Code	CMBC58				
Program	MBA				
Semester	IV				
Course Type	Elective				
Regulation	IARE-PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Ms. K.L.Revathi, Assistant Professor				

I. COURSE OVERVIEW:

This course provides MBA students with a comprehensive understanding of cyber security within the context of information systems. Key topics include cyber threats, information security principles, network security, secure software development, and identity management. Emphasis is placed on risk assessment, legal considerations, and ethical practices. Students will gain practical insights into cyber security management strategies, preparing them to safeguard organizational assets and mitigate potential threats.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC19	I	Management Information Systems

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Cyber Security	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONAL METHODOLOGIES:

✓	Chalk & Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD/PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100marks, with 30marks for Continuous Internal Assessment (CIA) and 70marks for Semester End Examination (SEE). Out of 30marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table:1.

Table1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool (AAT).

Table2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination– 1(Mid-term)	10	30
	Continuous Internal Examination– 2(End-term)	10	
	Assignments	5	
	Alternative Assessment Tool(AAT)	5	
SEE	Semester End Examination(SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

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In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

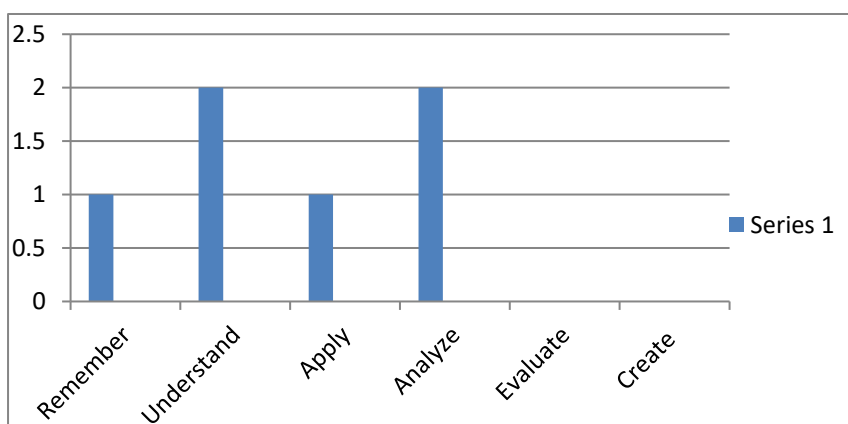
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	Understand cybercrime tools and methods used in cybercrime and cyber security.
II	Analyze the computer forensic system and cyber security.
III	Be aware of intellectual property rights for cyber security.
IV	Emphasize the technologic challenges from hand held devices.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO1	Demonstrate an understanding of mobile and wireless device security challenges, implementing authentication services and evaluating potential attacks on mobile phones.	Remember
CO2	Interpret and counter cyber threats effectively, including proxy servers, phishing, and password cracking, while implementing security measures against attacks on wireless networks.	Understand
CO3	Apply forensic analysis techniques to emails and comprehend the digital forensic life cycle.	Understand
CO4	Establish and manage a computer forensic laboratory, considering the OSI 7 layer model and compliance perspectives.	Apply
CO5	Utilize toolkits for hand-held devices in forensic investigations, addressing technologic challenges associated with evidence from hand-held devices.	Analyze
CO6	Analyze security and privacy implications of social media in organizational contexts.	Analyze

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	1	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	2	Seminars
PO3	Ethics: Ability to develop value based leadership ability.	3	Seminars
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	2	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	3	Assignments

3=High; 2=Medium; 1=Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	√	√	-	-	-	-	-	√
CO 2	√	-	√	-	-	-	√	√
CO 3	√	√	√	-	-	-	-	√
CO 4	-	√	-	-	-	-	-	√
CO 5	√	-	√	-	-	-	√	√
CO 6	-	-	√	-	-	-	√	√

X. JUSTIFICATIONS FOR CO –(PO) MAPPING –DIRECT

Course Outcomes	POs /PSOs	Justification for mapping (Students will be able to)	No. of key competencies
CO 1	PO 1	Recollect (knowledge) Understanding mobile and wireless device security challenges is crucial for managerial decision-making. Managers need to assess and address potential security threats to ensure the continuity and integrity of business operations.	2
	PO 2	Describe (knowledge) requires students to evaluate and interpret potential attacks on mobile phones, necessitating analytical and critical thinking. Making informed decisions about implementing authentication services and countering mobile threats requires a data-based approach, aligning with the development of decision-making skills.	3
	PO 8	Interpret (knowledge) involves implementing authentication services and understanding mobile security challenges, requiring technical skills.	2
CO 2	PO 1	Recognizing (knowledge) involves interpreting and countering cyber threats, which is essential for managers to safeguard business operations. Managers must apply knowledge of security practices to mitigate risks and address challenges related to cyber threats.	2

	PO 3	Strategic analysis Counteracting cyber threats involves ethical considerations, as individuals must make decisions aligned with values and principles. By addressing phishing and other threats, contributes to the development of value-based leadership abilities, which is in line with PO3.	2
	PO 7	Contrasting Effectively countering cyber threats requires strategic thinking to formulate security measures that can adapt to a dynamic environment. Aligns with by emphasizing strategic skills necessary for sustained business operations in the face of evolving cyber security challenges.	2
	PO 8	Describe (knowledge) involves implementing security measures against attacks on wireless networks, requiring technical skills. This aligns with, emphasizing the importance of technical proficiency to navigate and succeed in a competitive business environment.	2
CO 3	PO 2	Apply (knowledge) involves applying forensic analysis techniques to emails, requiring analytical and critical thinking skills for data-based decision-making. Deciphering information from emails and understanding the digital forensic life cycle contribute to developing decision-making skills.	2
	PO 8	Recognize involves comprehending the digital forensic life cycle, which requires technical skills. Students engaging in forensic analysis of emails align, emphasizing the importance of technical proficiency to face the challenges of the competitive business world.	2
CO 4	PO 2	Construct the involves establishing and managing a computer forensic laboratory, requiring analytical and critical thinking skills for effective decision-making in the design and operation of the laboratory.	3
	PO 8	Examine& Creating emphasizes considering the OSI 7 layer model and compliance perspectives in managing a computer forensic laboratory, which involves technical skills. This aligns with PO8, highlighting the importance of technical proficiency to navigate the competitive business world.	2
CO 5	PO 1	Derive the involves utilizing toolkits for hand-held devices in forensic investigations, which is crucial for managers dealing with technological challenges in solving business problems related to digital forensics.	2
	PO 3	Differentiate the Addressing technologic challenges associated with evidence from hand-held devices and involves ethical considerations. It contributes to the development of value-based leadership abilities.	3
	PO 7	Outline requires strategic thinking to address technologic challenges in forensic investigations of hand-held devices. Emphasizing strategic skills for sustaining business operations in a dynamic global environment.	2
	PO 8	Involves utilizing toolkits for hand-held devices, emphasizing technical skills in forensic investigations. Highlighting the importance of technical proficiency in facing the competitive business world.	2
CO 6	PO 3	Explain involves analyzing security and privacy implications of social media, which requires ethical considerations. It contributes to the development of value-based leadership abilities,	3
	PO 7	Analyzing the security and privacy implications of social media in CO6 requires strategic thinking. This aligns with PO7, emphasizing strategic skills for sustained business operations in a dynamic global environment	2

	PO 8	Examine involves understanding the technological aspects of social media security, aligning with PO8. It highlights the importance of technical proficiency to navigate and succeed in a competitive business environment.	2
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XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO–(PO) MAPPING

Course Outcomes	Program Outcomes/ No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	-	-	-	-	-	2
CO 2	2	-	2	-	-	-	2	2
CO 3	-	2	-	-	-	-	-	2
CO 4	-	3	-	-	-	-	-	2
CO 5	2	-	3	-	-	-	2	2
CO 6	-	-	3	-	-	-	2	2

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO–(PO):

Course Outcomes	Program Outcomes /No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	100.00	-	-	-	-	-	100.00
CO 2	100.00	-	66.66	-	-	-	50.00	100.00
CO 3	-	66.66	-	-	-	-	-	100.00
CO 4	-	100.00	-	-	-	-	-	100.00
CO 5	100.00	-	100.00	-	-	-	50.00	100.00
CO 6	-	-	100.00	-	-	-	50.00	100.00

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0– $0 \leq C \leq 5\%$ –No correlation; **2**– $40\% < C < 60\%$ –Moderate.

1– $5 < C \leq 40\%$ – Low/Slight; **3** – $60\% \leq C < 100\%$ – Substantial/High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	-	-	-	-	3
CO 2	3	-	3	-	-	-	2	3
CO 3	-	3	-	-	-	-	-	3
CO 4	-	3	-	-	-	-	-	3
CO 5	3	-	3	-	-	-	2	3

CO 6	-	-	3	-	-	-	2	3
TOTAL	9	9	-	-	-	-	6	18
AVERAGE	3	3	3	-	-	-	2	3

XIV. ASSESSMENT METHODOLOGY - DIRECT

CIE Exams	PO1, PO2, PO3, PO7, PO8	SEE Exams	PO1, PO2, PO3, PO7, PO8	Assignments	PO1, PO2, PO8	Seminars	PO2, PO3, PO7, PO8.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY - INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	CYBER CRIME
Mobile and wireless devices, trend mobility, authentication service security, attacks on mobile phones, mobile phone security implications for organizations, organizational measurement for handling mobile- security policies and measures in mobile computing era.	
UNIT-II	TOOLS AND METHODS USED IN CYBER CRIME
Proxy servers and Anonymizers, phishing, password cracking, key loggers and spy wares, virus and worms, Trojan horse and backdoors, steganography ,structured query language injection, buffer overflow, attacks on wireless network	
UNIT-III	UNDERSTANDING COMPUTER FORENSIC
Historical background of cyber forensic, forensic analysis of Email, digital forensic life cycle, network forensic. Setting up a computer forensic laboratory, relevance of the OSI 7 layer model to computer forensic, computer forensic from compliance perspectives	
UNIT-IV	FORENSIC OF HAND
Held devices, understanding cell phone working characteristics, hand-held devices and digital forensic, toolkits for hand-held device, forensic of I pod and digital music devices, technologic challenges with evidence from hand held devices.	
UNIT-V	CYBER SECURITY
Organizational implications cost of cybercrimes and intellectual property rights issues, web threats for organizations: The evils and perils, social media marketing, security and privacy implications, protecting people privacy in the organizations, forensic best practices for organizations	

Textbooks:

1. Dr Mansur Hasib, “Cyber security Leadership: Powering the Modern Organization “, 2021.
2. Matthew Hickey, “Hands on Hacking: Become an Expert at Next Gen Penetration Testing”, 4 th Edition, 2020.
3. Kim Crawley, “8 Steps to Better Security a Simple Cyber Resilience Guide for Business” in 2020.
4. Paul D. Williams, Matt McDonald “Introduction to Security Studies”, 3 rd Edition, 2018.
5. Kuan-Ching Li, Brij B. Gupta, Dharma P. Agrawal “Systems”, in 2018.
6. Nina Godbole and Sunit Belapure, Cyber Security, Wiley India, 3 rd Edition, 2012.
7. Harish Chander, Cyber Laws and IT protection, PHI learning pvt.ltd, 3rd Edition, 2012.
8. Dhiren R Patel, Information security theory and practice, PHI learning Pvt ltd, 4thEdition, 2010.

Reference Books:

1. MS.M.K.Geetha and Ms. Swapne Raman” Cyber Crimes and Fraud Management” MacMillan, 2012.
2. Pankaj Agrawal, “Information Security and Cyber Laws (Acme Learning)”, Excel, 2015.
3. Vivek Sood, “Cyber Law Simplified”, TMH, 2012.

XVII. COURSEPLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY(THEORY)			
1	Overview of Cyber Crime: Definition and Types	CO1	T-1,R-2
2	Evolution of Mobile and Wireless Devices	CO1	T-2,R-2
3	Security Trends in Mobility	CO1	T-1,R-2
4	Authentication Service Security in Mobile Computing	CO1	T-1,R-2
5	Common Attacks on Mobile Phones	CO1	T-2,R-2
6	Implications of Mobile Phone Security for Organizations	CO1	T-1,R-1
7	Organizational Measures for Handling Mobile Security	CO1	T-2,R-2
8	Security Policies in the Mobile Computing Era	CO1	T-1,R-2
9	Proxy Servers and Anonymizers: Risks and Countermeasures	CO1	T-2,R-2
10	Understanding Phishing Attacks	CO1	T-1,R-2
11	Password Cracking Techniques	CO1	T-1,R-2
12	Key Loggers and Spyware: Detection and Prevention	CO1	T-2,R-2
13	Viruses and Worms: Analysis and Defense Strategies	CO2	T-1,R-2
14	Trojan Horses and Backdoors: Threats and Mitigation	CO2	T-2,R-2
15	Steganography in Cyber Crime	CO2	T-1,R-1

16	SQL Injection: Attacks and Prevention	CO2	T-2,R-2
17	Buffer Overflow Vulnerabilities	CO2	T-1,R-2
18	Historical Background of Cyber Forensic	CO2	T-2,R-2
19	Forensic Analysis of Emails	CO2	T-2,R-1
20	Digital Forensic Life Cycle	CO2	T-2,R-2
21	Network Forensic: Techniques and Challenges	CO2	T-1,R-1
22	Setting up a Computer Forensic Laboratory	CO2	T-2,R-2
23	OSI 7 Layer Model and its Relevance to Computer Forensic	CO2	T-1,R-2
24	Computer Forensic from Compliance Perspectives	CO2	T-1,R-1
25	Characteristics of Cell Phone Working	CO3	T-1,R-1
26	Digital Forensic for Hand-Held Devices	CO3	T-2,R-1
27	Toolkits for Hand-Held Device Forensics	CO3	T-1,R-1
28	Forensic Analysis of iPod and Digital Music Devices	CO3	T-1,R-2
29	Technological Challenges with Evidence from Hand-Held Devices	CO3	T-1,R-1
30	Organizational Implications of Cyber Crimes	CO3	T-1,R-2
31	Cost of Cyber Crimes for Organizations	CO3	T-1,R-1
32	Intellectual Property Rights Issues in Cyber Security	CO3	T-1,R-1
33	Web Threats for Organizations: Analysis and Mitigation	CO4	T-2,R-1
34	Evils and Perils of Social Media Marketing	CO4	T-1,R-1
35	Security and Privacy Implications in Social Media	CO4	T-1,R-1
36	Cyber Forensic Challenges in Cloud Computing Environments	CO4	T-1,R-1
37	Live Forensics: Analyzing Running Systems	CO4	T-1,R-2
38	Mobile Device Forensics: Challenges and Solutions	CO4	T-1,R-1
39	Data Recovery Techniques in Computer Forensics	CO5	T-1,R-1
40	Cloud Forensics: Investigating Cloud-based Attacks	CO5	T-1,R-1
41	Cyber Forensics in IoT Environments	CO5	T-1,R-1
42	Legal Aspects of Computer Forensic Investigations	CO5	T-1,R-2
43	Cyber Forensic Reporting and Documentation	CO5	T-2,R-1
44	Role of Machine Learning in Computer Forensic Analysis	CO5	T-1,R-2
45	Cyber Threat Hunting: Strategies and Tools	CO5	T-2,R-1
46	Behavioral Analysis for Malware Detection	CO5	T-2,R-1
47	Advanced Persistent Threats (APTs): Detection and Prevention	CO5	T-1,R-1

48	Cyber Deception Techniques and Tools	CO5	T-2,R-1
49	Digital Watermarking as a Countermeasure for Steganography	CO5	T-1,R-1
50	AI-driven Approaches to Phishing Detection	CO6	T-2,R-1
51	Real-time Monitoring of Network Traffic	CO6	T-1,R-1
52	Wireless Network Security Protocols and Vulnerabilities	CO6	T-1,R-2
53	Ethical Hacking for Cyber security Professionals	CO6	T-1,R-2
54	Automated Penetration Testing Tools	CO6	T-2,R-1
55	Social Media Forensics: Analyzing Digital Footprints	CO6	T-2,R-2
56	Wearable Technology and Digital Forensic Challenges	CO6	T-1,R-2
57	Biometric Data Forensics in Hand-Held Devices	CO6	T-2,R-2
58	Forensic Analysis of Messaging Apps	CO6	T-2,R-2
59	Geo-location Forensics: Tracing Device Movements	CO6	T-1,R-1
60	Extracting Evidence from Mobile Cloud Storage	CO6	T-2,R-2
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO1	T-1,R-1
62	Question Bank Discussions Unit 2	CO2	T-1,R-2
63	Question Bank Discussions Unit 3	CO3, 4	T-1,R-2
64	Question Bank Discussions Unit 4	CO5	T-1,R-1
65	Question Bank Discussions Unit 5	CO6	T-1,R-2

Prepared by:

Ms. K.L.Revathi, Assistant Professor.

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	DATA MINING, WAREHOUSE AND VISULIZATION				
Course Code	CMBC59				
Program	MBA				
Semester	IV				
Course Type	Elective				
Regulation	IARE-PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Mr. L.Sainath Yadav, Assistant Professor				

I. COURSE OVERVIEW:

The MBA course on Data Mining, Warehouse, and Visualization provides students with a comprehensive understanding of the strategic importance of data in modern business decision-making. The course covers fundamental concepts and techniques related to data mining, emphasizing the extraction of valuable insights from large datasets to inform business strategies. Students learn the principles of data warehousing, exploring how to efficiently store, organize, and retrieve data for analysis. Additionally, the course delves into advanced visualization techniques, equipping students with the skills to communicate complex data findings effectively. Through practical applications and case studies, students gain hands-on experience in leveraging data to enhance organizational decision-making, ultimately preparing them to navigate the data-driven landscape of contemporary business environments.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC19	I	Management Information Systems

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Data Mining, Warehouse And Visualization	70 Marks	30 Marks	100

IV. DELIVERY/ INSTRUCTIONAL METHODOLOGIES:

✓	Chalk& Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD/PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100marks, with 30marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

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	Assignments	5	
	Alternative Assessment Tool(AAT)	5	
SEE	Semester End Examination (SEE)	70	70
Total Marks			100

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Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

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In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

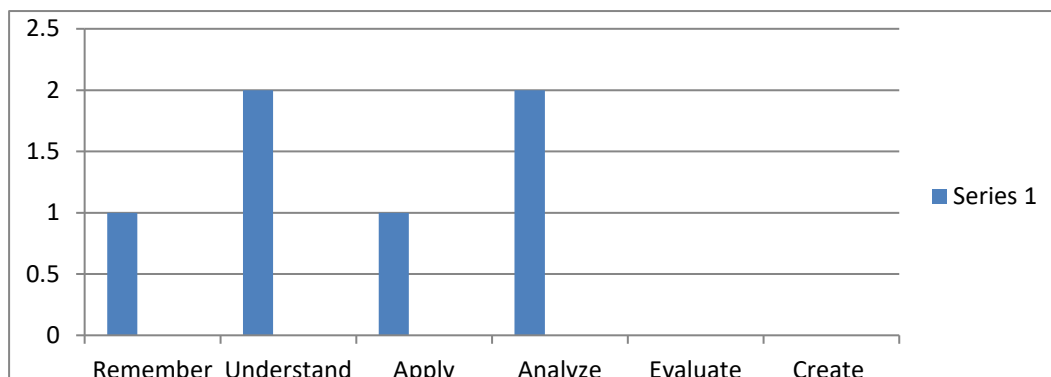
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	Familiarize the students to understand the concepts of data mining and preprocessing of data.
II	Provide insights on association rule mining and clustering.
III	Demonstrate the application of logistic regression and sentiment analytics to solve business problems.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO1	Demonstrate various data mining algorithms to extract meaningful patterns, trends, and insights from large datasets.	Remember
CO2	Design and Implement the effective data warehousing solutions, including the development of data extraction, transformation, and loading (ETL) processes.	Understand
CO3	Utilize Data Visualization Tools and hands-on experience in using data visualization tools, demonstrating the ability to create compelling visual representations of complex business data.	Understand
CO4	Apply Statistical and Machine Learning Models statistical and machine learning models to analyze and interpret business data, making informed decisions based on predictive modeling and classification.	Apply
CO5	Utilize popular Business Intelligence (BI) platforms, showcasing their ability to leverage technology for data-driven decision-making.	Analyze
CO6	Evaluate the appropriateness of different data visualization techniques for specific business scenarios.	Analyze

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program Outcomes		Strength	Proficiency Assessed by
PO1	Managerial Skills: Apply knowledge of management theories and practices to solve business problems.	1	Assignments
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	2	Seminars
PO3	Ethics: Ability to develop value based leadership ability.	3	Seminars
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	2	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	3	Assignments

3=High; 2=Medium; 1=Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO1	√	√	-	-	-	-	-	√
CO2	√	-	√	-	-	-	√	√
CO3	√	√	√	-	-	-	-	√
CO4	-	√	-	-	-	-	-	√
CO5	√	-	√	-	-	-	√	√
CO6	-	-	√	-	-	-	√	√

X. JUSTIFICATIONS FOR CO –(PO) MAPPING –DIRECT

Course Outcomes	POs /PSOs	Justification for mapping(Students will be able to)	No. of key competencies
CO1	PO1	Involve the acquisition of knowledge and skills related to data analysis, including understanding various data mining algorithms, statistical and machine learning models, and data warehousing solutions.	2

	PO2	Ability to compare and evaluate different data analysis techniques and determine their suitability for specific business scenarios.	3
	PO8	Ethical leadership skills and the ability to make decisions that consider the ethical implications of data analysis.	2
CO2	PO1	Apply knowledge of management theories and practices to solve business problems.	2
	PO3	Ability to develop value-based leadership ability it may need to consider ethical implications related to data privacy, security, and governance when designing and implementing data warehousing solutions.	2
	PO7	Demonstrate and consider strategic objectives and business requirements when designing data warehousing solutions to ensure they align with organizational goals and support sustained growth in a dynamic global business environment.	2
	PO8	Develop technical skills related to data warehousing technologies, database management systems, ETL tools, and data integration processes to effectively design and implement data warehousing solutions.	2
CO3	PO2	Data visualization is essential for analyzing and interpreting data to make informed decisions. By utilizing data visualization tools, students develop the skills to analyze data visually, identify patterns and trends, and make data-driven decisions.	2
	PO8	Inculcate and develop technical skills to face the competitive world successfully. Data visualization tools, which involves learning technical skills related to using software platforms such as Tableau, Power BI.	2
CO4	PO2	Evaluate statistical and machine learning models, interpret the results, and make informed decisions based on the insights gained from the analysis.	3
	PO8	Inculcate and develop technical skills to face the competitive world successfully. By mastering these technical skills, students become proficient in leveraging technology for advanced data analysis and decision-making.	2
CO5	PO1	Apply knowledge of management theories and practices to solve business problems to extract insights of managerial decisions and solve business problems effectively.	2
	PO3	Develop leadership ability to consider ethical implications related to data usage, privacy, and security when utilizing BI platforms for data-driven decision-making.	3
	PO7	Elucidate the BI platforms to analyze data, identify trends, and formulate strategic decisions to sustain competitiveness in a dynamic global business environment.	2
	PO8	Involves mastering the use of BI platforms, which requires technical proficiency in navigating and utilizing these tools effectively for data analysis and decision-making.	2
CO6	PO3	To consider ethical implications related to data visualization, such as ensuring accuracy, transparency, and fairness in representing data to stakeholders.	3
	PO7	Strategically assessing business needs, understanding the audience, and selecting appropriate data visualization techniques to effectively convey insights and support strategic decision-making.	2
	PO8	Understanding and utilizing various data visualization tools and technologies effectively to create compelling visual representations of data for business analysis and decision-making.	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO–(PO) MAPPING

Course Outcomes	Program Outcomes/No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	2	3	-	-	-	-	-	2
CO 2	2	-	2	-	-	-	2	2
CO 3	-	2	-	-	-	-	-	2
CO 4	-	3	-	-	-	-	-	2
CO 5	2	-	3	-	-	-	2	2
CO 6	-	-	3	-	-	-	2	2

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO–(PO):

Course Outcomes	Program Outcomes /No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	100.00	100.00	-	-	-	-	-	100.00
CO 2	100.00	-	66.66	-	-	-	50.00	100.00
CO 3	-	66.66	-	-	-	-	-	100.00
CO 4	-	100.00	-	-	-	-	-	100.00
CO 5	100.00	-	100.00	-	-	-	50.00	100.00
CO 6	-	-	100.00	-	-	-	50.00	100.00

XIII. COURSE ARTICULATION MATRIX (POMAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, 0 being no correlation, 1 being the low correlation, 2 being medium correlation and 3 being high correlation.

0– 0% < C ≤ 5% – No correlation; 2– 40% < C < 60% – Moderate.

1– 5 < C ≤ 40% – Low/Slight; 3– 60% ≤ C < 100% – Substantial/High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	3	3	-	-	-	-	-	3
CO 2	3	-	3	-	-	-	2	3
CO 3	-	3	-	-	-	-	-	3
CO 4	-	3	-	-	-	-	-	3
CO 5	3	-	3	-	-	-	2	3
CO 6	-	-	3	-	-	-	2	3
TOTAL	9	9	-	-	-	-	6	18
AVERAGE	3	3	3	-	-	-	2	3

XIV. ASSESSMENT METHODOLOGY- DIRECT

CIE Exams	PO1,PO2, PO3,PO7, PO8	SEE Exams	PO1,PO2, PO3,PO7, PO8	Assignments	PO1,PO2, PO8	Seminars	PO2,PO3, PO7,PO8.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY -INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	INTRODUCTION TO DATA MINING, WAREHOUSE AND VISUALIZATION
Data Mining; Kinds of data that can be mined-Database Data, Data Warehouses, Transactional Data, Other Kinds of Data; Major Issues in Data Mining-Mining Methodology, User Interaction, Efficiency and Scalability, Diversity of Database Types, Data Mining and Society.	
UNIT-II	DATA PRE-PROCESSING
Data Preprocessing: An Overview-Reasons to process the data, Major Tasks in Data Preprocessing; Data Cleaning-Missing Values, Noisy Data, Data Cleaning as a Process; Data Reduction-Principal Component Analysis, Histograms, Clustering, Sampling, Data Cube Aggregation; Data Transformation and Data Discretization-Data Transformation by Normalization, Discretization by Binning, Discretization by Histogram Analysis. Case Study: Handling Missing Values in Melbourne Housing Price Data.	
UNIT-III	MANAGING WAREHOUSE EFFICIENCY
Order picking - Picking methods-pick path - Measuring Warehouse Efficiency - Warehouse Workforce design and development - cross docking. Warehousing Operations: warehousing operations- inbound process, outbound processes, Functions of Warehouse- break-bulk, cross docking, order mixing, Risk management.	
UNIT-IV	CLASSIFICATION PROBLEMS – I-LOGISTICS REGRESSION
Overview of Classification; Binary Logistic Regression; Classification-Encoding Categorical Features, Building Logistic Regression Model, Printing Model Summary, Predicting on Test Data; Measuring Accuracies-Creating Confusion Matrix, Receiver Operating Characteristic (ROC) and Area Under the Curve; Finding Optimal Classification Cut-off -Youden's Index and Cost-Based Approach. Case Study: Predicting Employee Attrition on HR Attrition Dataset.	
UNIT-V	DATA VISUALISATION FOR BUSINESS
Introduction to Data Visualization for businesses, Visualization of Numerical and Non-Numerical Data Creation of Dashboards using IT Tools, Business Activity Monitoring through Dashboard.	
Text Books:	
<ol style="list-style-type: none"> 1. Ikvinderpal "Data Mining & Warehousing", 1st Edition, 2020. 2. Max Bramer and Springer "Principles of Data Mining 2020" 8th Edition, 2020. 3. Szabo, Gungar Polatkan, Oscar Boykin, Chalkiopoulos, "Social Media Data Mining and Analytics", Wiley, 3rd Edition, 2019. 4. Pang-Ning Tan, "Introduction to Data Mining, Global Edition", 4th Edition, May 2019. 5. Ian H. Witten, Eibe Frank, Mark A. Hall, Christopher J. Pal, "Data Mining: Practical Machine Learning Tools and Techniques", Elsevier, 4th Edition, 2017. 6. Megan Squire, "Mastering Data Mining with Python –Find patterns hidden in your data", 1st Edition. PACKT Publishing, 2016 	

Reference Books:
<ol style="list-style-type: none"> 1. Luis Torgo, “Data Mining with R: Learning with Case Studies”, CRC Press, 2nd Edition, 2011. 2. Jiawei Han, Jian Pei, Micheline Kamber, “Data Mining: Concepts and Techniques”, Elsevier, 3rd Edition, 2010. 3. Joseph B. Pigus, “Data Mining with Neural Networks”, 2nd Edition, TMH, 2017. 4. Robert Layton, “Learning Data Mining with Python”, PACKT Publishing, 2nd Edition, 2015. 5. Xin-She Yang, “Introduction to Algorithms for Data Mining and ML”, Academic Press, 1st Edition, 2019
Web References:
<ol style="list-style-type: none"> 1. https://www.amazon.in/dp/B07YG4QSZR/ref=cm_sw_r_apan_glt_2FGRNQAEBE4AEV5JQRB7?_encoding=UTF8&psc=1
E-Text Books:
<ol style="list-style-type: none"> 1. https://www.amazon.in/dp/B00UVBJSAQ/ref=cm_sw_r_apan_glt_1Y1H0P2MRK1KM0SFG1AJ?_encoding=UTF8&psc=1. 2. https://www.amazon.in/dp/B075GB7FT5/ref=cm_sw_r_apan_glt_G8RNA0P6W9YSQZ2N0P16?_encoding=UTF8&psc=1.

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Introduction To Data Mining	CO1	T-1,R-2
2	Kinds Of Data That Can Be Mined	CO1	T-2,R-2
3	Database Data	CO1	T-1,R-2
4	Data Warehouses,	CO1	T-1,R-2
5	Transactional Data	CO1	T-2,R-2
6	Other Kinds Of Data	CO1	T-1,R-1
7	Major Issues In Data Mining	CO1	T-2,R-2
8	Mining Methodology	CO1	T-1,R-2
9	User Interaction	CO1	T-2,R-2
10	EfficiencyAnd Scalability	CO1	T-1,R-2
11	Diversity Of Database Types	CO1	T-1,R-2
12	Data Mining And Society	CO1	T-2,R-2
13	Introduction To Data Preprocessing	CO2	T-1,R-2
14	Overview-Reasons To Process The Data,	CO2	T-2,R-2
15	Major Tasks In Data Preprocessing	CO2	T-1,R-1

Lecture No	Topics to be Covered	COs	Reference
16	Data Cleaning-Missing Values	CO2	T-2,R-2
17	Noisy Data, Data Cleaning As A Process	CO2	T-1,R-2
18	Data Reduction, Principal Component Analysis	CO2	T-2,R-2
19	Histograms, Clustering, Sampling	CO2	T-2,R-1
20	Data Cube Aggregation	CO2	T-2,R-2
21	Data TransformationAnd Data Discretization	CO2	T-1,R-1
22	Data Transformation By Normalization	CO2	T-2,R-2
23	Discretization By Binning	CO2	T-1,R-2
24	Discretization By Histogram Analysis	CO2	T-1,R-1
25	Order Picking	CO3	T-1,R-1
26	Batch Picking	CO3	T-2,R-1
27	Picking Methods	CO3	T-1,R-1
28	Pick Path	CO3	T-1,R-2
29	Measuring Warehouse Efficiency	CO3	T-1,R-1
30	Warehouse WorkforceDesign	CO3	T-1,R-2
31	Warehouse Workforce Development	CO3	T-1,R-1
32	Cross Docking	CO3	T-1,R-1
33	Introduction to Warehousing Operations	CO4	T-2,R-1
34	Inbound Process	CO4	T-1,R-1
35	Outbound Processes	CO4	T-1,R-1
36	Functions of Warehouse	CO4	T-1,R-1
37	Break-Bulk, Cross Docking, Order Mixing	CO4	T-1,R-2
38	Risk Management	CO4	T-1,R-1
39	Overview of Classification	CO5	T-1,R-1
40	Binary Logistic Regression	CO5	T-1,R-1
41	Encoding Categorical Features	CO5	T-1,R-1
42	Building Logistic Regression Model	CO5	T-1,R-2
43	Printing Model Summary	CO5	T-2,R-1
44	Predicting on Test Data	CO5	T-1,R-2
45	Measuring Accuracies	CO5	T-2,R-1

Lecture No	Topics to be Covered	COs	Reference
46	Creating Confusion Matrix	CO5	T-2,R-1
47	Receiver Operating Characteristic (ROC) and Area Under the Curve	CO5	T-1,R-1
48	Finding Optimal Classification Cut-off -Youden's Index and Cost-Based Approach	CO5	T-2,R-1
49	Case Study: Predicting Employee Attrition on HR Attrition Dataset	CO5	T-1,R-1
50	Introduction to Data Visualization for businesses	CO6	T-2,R-1
51	Importance of Data Visualization in Business	CO6	T-1,R-1
52	Visualization of Numerical	CO6	T-1,R-2
53	Non-Numerical Data	CO6	T-1,R-2
54	Creation of Dashboards using IT Tools	CO6	T-2,R-1
55	Tableau	CO6	T-2,R-2
56	Microsoft Power BI	CO6	T-1,R-2
57	Qlik View/ Qlik Sense	CO6	T-2,R-2
58	Google Data Studio	CO6	T-2,R-2
59	Business Activity Monitoring through Dashboard	CO6	T-1,R-1
60	Effective Data Visualization	CO6	T-2,R-2
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO1	T-1,R-1
62	Question Bank Discussions Unit 2	CO2	T-1,R-2
63	Question Bank Discussions Unit 3	CO3,4	T-1,R-2
64	Question Bank Discussions Unit 4	CO5	T-1,R-1
65	Question Bank Discussions Unit 5	CO6	T-1,R-2

Prepared by:

Mr. L Sainath Yadav, Assistant Professor.

HOD, MBA



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500043

MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION

Course Title	MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE				
Course Code	CMBC60				
Program	MBA				
Semester	IV				
Course Type	Elective				
Regulation	IARE-PG21				
Course Structure	Theory			Practical	
	Lectures	Tutorials	Credits	Laboratory	Credits
	4	-	4	-	-
Course Coordinator	Ms. D. Sandhya Rani, Assistant Professor				

I. COURSEOVERVIEW:

Machine Learning (ML) and Artificial Intelligence (AI) are transformative technologies reshaping businesses across various industries. This course provides MBA students with a comprehensive understanding of ML and AI concepts, applications, and implications in the business world. Through a combination of theoretical knowledge and practical applications, students will learn how ML and AI can drive innovation, enhance decision-making, and create competitive advantages in today's data-driven economy.

II. COURSE PRE - REQUISITES:

Level	Course Code	Semester	Prerequisites
PG	CMBC19	I	Management Information Systems

III. MARKSDISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
Machine Learning And Artificial Intelligence	70 Marks	30 Marks	100

IV. DELIVERY/INSTRUCTIONALMETHODOLOGIES:

✓	Chalk &Talk	✗	Quiz	✓	Assignments	✗	MOOCs
✓	LCD/PPT	✓	Seminars	✗	Mini Project	✓	Videos
✗	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100marks, with 30marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE):

The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into FIVE modules and each module carries equal weight age in terms of marks distribution. The question paper pattern is as follows. Two full questions with “either” or “choice” will be drawn from each module. Each question carries 14 marks. **There could be a maximum of two sub divisions in a question.**

The expected percentage of cognitive level of the questions is broadly based on the criteria given in Table:1.

Table1: The expected percentage of cognitive level of questions in SEE.

Percentage of Cognitive Level	Blooms Taxonomy Level
10 %	Remember
30 %	Understand
20 %	Apply
20 %	Analyze
10 %	Evaluate
10 %	Create

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 2), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Alternative Assessment Tool(AAT).

Table2: Assessment pattern for CIA

Component		Marks	Total Marks
CIA	Continuous Internal Examination– 1(Mid-term)	10	30
	Continuous Internal Examination– 2(End-term)	10	
	Assignments	5	
	Alternative Assessment Tool(AAT)	5	
SEE	Semester End Examination(SEE)	70	70
Total Marks			100

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively for 10 marks each of 2 hours duration consisting of five descriptive type questions out of which four questions have to be answered. The valuation and verification of answer scripts of CIE exams shall be completed within a week after the conduct of the Examination.

Assignment:

To improve the writing skills in the course an assignment will be evaluated for 05 marks. One assignment has to submit at the end of the CIE2 for the questions provided by the each course coordinator in that semester. Assignments to be handed in as loose paper collection stapled together at the top left corner. The assignment should be presented as a professional report. It must consist of a cover sheet, content page, and should have an introduction, a body, a conclusion or recommendation, and a reference page.

Alternative Assessment Tool (AAT):

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the Alternative Assessment Tool (AAT). This AAT enables faculty to design own assessment patterns during the CIA. The AAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. If properly applied, the AAT converts the classroom into an effective learning center. The AAT may include, concept videos, course related term paper, management talks, paper presentations conducted by reputed organizations relevant to the course etc.

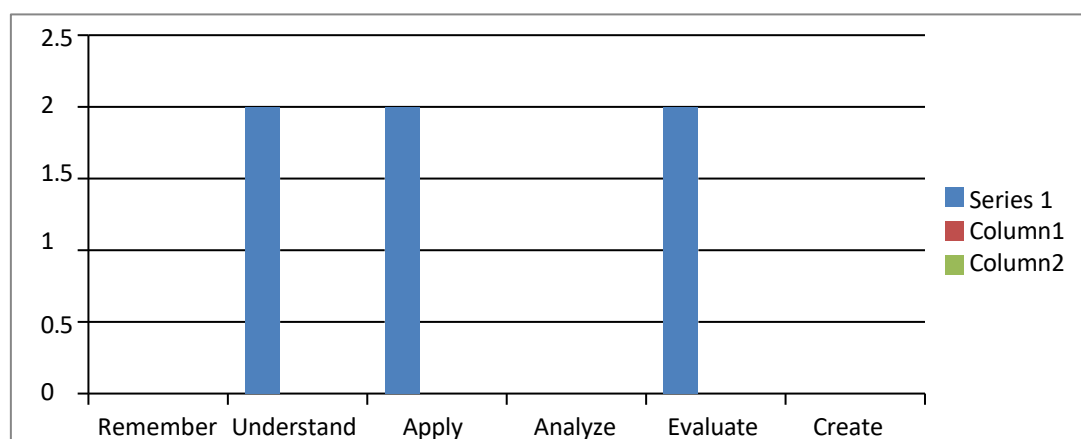
VI. COURSE OBJECTIVES:

The students will try to learn:	
I	Understand the various Machine Learning Algorithms.
II	Familiarize various Classification Techniques and Recommender Systems.
III	Promote the students acquainted with the concepts of different searching techniques of AI systems.

VII. COURSE OUTCOMES:

After successful completion of the course, students will be able to:		
	Course Outcomes	Knowledge Level (Bloom's Taxonomy)
CO1	Evaluate the effectiveness of various machine learning algorithms, including supervised (K Nearest Neighbors, Random Forest, Boosting) and unsupervised methods, in solving real-world business problems such as predicting employee churn.	Understand
CO2	Design: Formulate recommender systems using machine learning techniques, such as user-based and item-based similarity calculations, and matrix factorization, to enhance decision-making processes in business contexts.	Apply
CO3	Construct decision tree classifiers using both Gini and entropy criteria, and assess their performance metrics to make informed decisions in classification tasks, such as credit risk assessment.	Evaluate
CO4	Apply artificial intelligence concepts, including the foundations of AI, intelligent agents, and problem-solving strategies, to analyze and solve complex business problems efficiently and ethically.	Evaluate
CO5	Critically evaluate the limitations and advantages of various problem-solving algorithms, such as uninformed and informed search strategies, in addressing diverse business challenges and environments.	Understand
CO6	Communicate effectively about machine learning and artificial intelligence concepts, methodologies, and applications to diverse stakeholders, using appropriate terminology and visualization techniques.	Apply

COURSE KNOWLEDGE COMPETENCY LEVELS



VIII. HOW PROGRAM OUTCOMES AREA SSESED:

Program Outcomes		Strength	Proficiency Assessed by
PO2	Decision making Skills: Foster analytical and critical thinking abilities for data-based decision making.	2	Seminars
PO3	Ethics: Ability to develop value based leadership ability.	3	Seminars
PO7	Strategic Skills: Analyze and formulate managerial strategies to sustain in dynamic global business environment.	2	Seminars
PO8	Technology Skills: Inculcate and develop technical skills to face the competitive world successfully.	3	Assignments

3=High; 2=Medium; 1=Low

IX. MAPPING OF EACH CO WITH PO(s):

Course Outcomes	Program Outcomes							
	1	2	3	4	5	6	7	8
CO 1	-	√	-	-	-	-	√	√
CO 2	-	-	√	-	-	-	√	√
CO 3	-	√	√	-	-	-	-	√
CO 4	-	√	-	-	-	-	-	√
CO 5	-	-	√	-	-	-	√	√
CO 6	-	-	√	-	-	-	√	√

X. JUSTIFICATIONS FOR CO –(PO) MAPPING –DIRECT

Course Outcomes	POs /PSOs	Justification for mapping(Students will be able to)	No. of key competencies
CO 1	PO 2	They need to analyze datasets, choose appropriate machine learning algorithms based on the problem at hand, interpret results, and make informed decisions. By grasping the basic principles of machine learning, students enhance their ability to critically evaluate data.	2
	PO 7	Machine learning plays a significant role in strategic decision-making within organizations. Understanding machine learning fundamentals enables students to analyze data trends, identify business opportunities, and formulate strategic plans to address dynamic global business challenges effectively.	2
	PO 8	Machine learning is a core component of modern technology and is widely used across various industries. Understanding the fundamentals of machine learning equips students with essential technical skills required to navigate the competitive job market.	2
CO 2	PO 3	Designing and implementing recommender systems involves handling user data and making recommendations based on their preferences. Students need to consider ethical principles such as privacy, fairness, and transparency when developing these systems.	2
	PO 7	Recommender systems play a strategic role in businesses by enhancing customer experience, increasing sales, and improving retention. Understanding how to design and implement effective recommender systems enables students to analyze consumer behavior, identify market trends, and formulate strategic marketing and sales strategies.	2

	PO 8	Designing and implementing recommender systems requires students to have technical skills in machine learning algorithms, data preprocessing, and software development.	2
CO 3	PO 2	Comparing decision tree classifiers involves analyzing their performance metrics, such as accuracy, precision, recall, and F1-score, to make informed decisions about which classifier is more effective for a particular classification task.	2
	PO 8	Understanding and comparing decision tree classifiers require technical skills in machine learning algorithms, statistical analysis, and data visualization. Students need to implement decision tree classifiers, calculate evaluation metrics, and interpret the results effectively.	2
CO 4	PO 2	Evaluating decision tree classifiers involves analyzing their benefits, disadvantages, and performance metrics, such as accuracy, precision, recall, and F1-score, in real-world scenarios.	3
	PO 8	Evaluating decision tree classifiers requires technical skills in machine learning algorithms, statistical analysis, and data visualization. Students need to implement decision tree classifiers, calculate evaluation metrics, and interpret the results effectively in real-world scenarios.	2
CO 5	PO 3	Exploring the foundations of artificial intelligence involves understanding the ethical considerations surrounding AI development and deployment. Students need to consider the societal impacts, ethical dilemmas, and potential biases associated with AI technologies.	3
	PO 7	Understanding the foundations of artificial intelligence enables students to analyze its strategic implications for businesses in a dynamic global environment. Students need to assess how AI technologies can be strategically utilized to gain a competitive advantage, optimize business processes, and adapt to changing market conditions.	2
	PO 8	Exploring the foundations of artificial intelligence involves gaining technical knowledge about AI algorithms, applications, and emerging technologies. Students need to understand the technical aspects of AI, including machine learning algorithms, neural networks, and natural language processing.	2
CO 6	PO 3	When applying problem-solving techniques, students must consider ethical implications, ensuring that solutions adhere to moral and ethical standards. Ethical considerations may include ensuring fairness, transparency, and accountability in decision-making processes.	3
	PO 7	Problem-solving techniques play a crucial role in strategic decision-making within organizations. Students learn to analyze complex problems, identify optimal solutions, and formulate strategic plans to address dynamic global business challenges.	2
	PO 8	Applying problem-solving techniques often involves utilizing technological tools and platforms. Students learn to leverage technology to implement and optimize solutions efficiently.	2

XI. TOTAL COUNT OF KEY COMPETENCIES FOR CO–(PO) MAPPING

Course Outcomes	Program Outcomes/No. of Key Competencies Matched							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	3	-	-	-	-	2	2
CO 2	-	-	2	-	-	-	2	2
CO 3	-	2	-	-	-	-	-	2
CO 4	-	3	-	-	-	-	-	2
CO 5	-	-	3	-	-	-	2	2
CO 6	-	-	3	-	-	-	2	2

XII. PERCENTAGE OF KEY COMPETENCIES FOR CO–(PO):

Course Outcomes	Program Outcomes /No. of key competencies							
	1	2	3	4	5	6	7	8
	2	3	3	3	5	3	4	2
CO 1	-	100.00	-	-	-	-	50.00	100.00
CO 2	-	-	66.66	-	-	-	50.00	100.00
CO 3	-	66.66	-	-	-	-	-	100.00
CO 4	-	100.00	-	-	-	-	-	100.00
CO 5	-	-	100.00	-	-	-	50.00	100.00
CO 6	-	-	100.00	-	-	-	50.00	100.00

XIII. COURSE ARTICULATION MATRIX (PO MAPPING)

COs and POs and COs and PSOs on the scale of 0 to 3, **0** being **no correlation**, **1** being the **low correlation**, **2** being **medium correlation** and **3** being **high correlation**.

0– $0 \leq C \leq 5\%$ –No correlation; **2**– $40\% < C < 60\%$ –Moderate.

1– $5 < C \leq 40\%$ – Low/Slight; **3**– $60\% \leq C < 100\%$ – Substantial/High

Course Outcomes	Program Outcomes							
	2	3	3	3	5	3	4	2
CO 1	-	3	-	-	-	-	2	3
CO 2	-	-	3	-	-	-	2	3
CO 3	-	3	-	-	-	-	-	3
CO 4	-	3	-	-	-	-	-	3
CO 5	-	-	3	-	-	-	2	3
CO 6	-	-	3	-	-	-	2	3
TOTAL	-	9	-	-	-	-	8	18
AVERAGE	-	3	3	-	-	-	4	3

XIV. ASSESSMENT METHODOLOGY – DIRECT

CIE Exams	PO2,PO3,P O7,PO8	SEE Exams	PO2,PO3,P O7,PO8	Assignments	PO2,PO8	Seminars	PO2,PO3, PO7,PO8.
Laboratory Practices	-	Student Viva	-	Mini Project	-	Certification	-
Term Paper	-						

XV. ASSESSMENT METHODOLOGY -INDIRECT

✓	Early Semester Feedback	✓	End Semester OBE Feedback
✗	Assessment of Mini Projects by Experts		

XVI. SYLLABUS

UNIT-I	MACHINE LEARNING
What is Machine Learning; Types of Machine Learning Algorithms-Supervised, Unsupervised and Reinforcement Learning. Supervised Learning-K Nearest Neighbors, Random Forest and Boosting Case Study: Predicting Employee Churn Using KNN, RF and Boosting.	
UNIT-II	RECOMMENDER SYSTEMS USING MACHINE LEARNING
User Based Similarity-Calculating Cosine Similarity Between Users, Filtering Similar Users, Challenges with User Based Similarity. Item Based Similarity-Calculating Cosine Similarity between Movies, Finding Most Similar Movies. Matrix Factorization.	
UNIT-III	DECISION TREE CLASSIFICATION
Introduction to Decision Tree; Building Decision Tree Classifier using Gini Criteria; Measuring Test Accuracy; Displaying the Tree; Building Decision Tree Classifier using Entropy Criteria; Finding Optimal Criteria; Maximum Depth of the Tree and Benefits and Disadvantages of Decision Tree Case Study: Applying Decision Tree Classification on German Credit Data.	
UNIT-IV	ARTIFICIAL INTELLIGENCE
Introduction-Meaning and Foundations of AI, History of AI. Intelligent Agents-Agents and Environments, Concept of Rationality, Nature of Environments, The Structure of Agents, AI: The present and Future. Problem Solving-I: Solving Problems by Searching-Problem Solving Agents, Searching for Solutions, Uninformed Search Strategies, Informed Search Strategies, Heuristic Functions.	
UNIT-V	PROBLEM SOLVING
Beyond Classical Search-Local Search Algorithms and Optimization Problems, Beyond Classical Search, Adversarial Search, Constraint Satisfaction Problems, Chabot –Introduction, Characteristics and its importance.	
Text Books:	

1. Sergio's Theodoratos, Elsevier "Machine Learning A Bayesian and Optimization Perspective ", 1 st Edition, 2020.
2. Dr. Dheeraj Mehrotra "Basics of Artificial Intelligence & Machine Learning ", 3rdEdition, 2019.
3. Wei- Meng Lee, "Python Machine Learning", Weily, 3rd Edition, 2019.
4. David L. Poole, Alan K. Mackworth "Artificial Intelligence", 2nd Edition, 2018.
5. Steven W Knox, JOHN WILEY "Machine Learning a Concise Introduction ", 4thEdition, 2018.
6. Richard E. Neapolitan, Taylor &Francis "Artificial Intelligence with an Introduction to Machine Learning" 2 nd Edition, 2018.
7. Rich, Knight, Nair, "Artificial Intelligence", Tata McGraw Hill, 3rd Edition, 2017.
8. Tom M. Mitchell, "Machine Learning", McGraw Hill, 4thEdition, 2017.
9. Russell, Norvig, "Artificial Intelligence: A Modern Approach", Pearson Education, 2ndEdition, 2015.

Reference Books:

1. Paul Deitel, Harvy Deitel, "Python for Programmers- with introductory AI Case Studies", 1 St Edition, Pearson Education, 2019.
2. Puneet Mathur, "Machine Learning Applications Using Python: Cases Studies from Healthcare, Retail, and Finance", 1stEdition, Apress, 2019.
3. Joshua Eckroth, "Python AI Projects for Beginners", 1stEdition, Packt Publishers, 2018.
4. Shalev-Shwartz, Ben-David, "Understanding ML from Theory to Algorithms", 1stEdition, Cambridge University Press, 2014.

XVII. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be Covered	COs	Reference
OBE DISCUSSION			
Discussion on Course Outcomes and how these Cos are mapped with Pos.			
CONTENT DELIVERY (THEORY)			
1	Introduction to Machine Learning	CO1	T-1,R-2
2	Definition and Scope of Machine Learning	CO1	T-2,R-2
3	Types of Machine Learning Algorithms: Supervised, Unsupervised, and Reinforcement Learning	CO1	T-1,R-2
4	Overview of Supervised Learning	CO1	T-1,R-2
5	Introduction to K Nearest Neighbors (KNN) Algorithm	CO1	T-2,R-2
6	Understanding Random Forest Algorithm	CO1	T-1,R-1
7	Overview of Boosting Algorithms	CO1	T-2,R-2
8	Predicting Employee Churn Using KNN	CO1	T-1,R-2
9	Predicting Employee Churn Using Random Forest	CO1	T-2,R-2
10	Predicting Employee Churn Using Boosting	CO1	T-1,R-2
11	Case Study Analysis: Predicting Employee Churn	CO1	T-1,R-2
12	Introduction to Recommender Systems	CO1	T-2,R-2
13	User-Based Similarity in Recommender Systems	CO2	T-1,R-2
14	Calculating Cosine Similarity Between Users	CO2	T-2,R-2
15	Filtering Similar Users	CO2	T-1,R-1
16	Challenges with User-Based Similarity	CO2	T-2,R-2
17	Item-Based Similarity in Recommender Systems	CO2	T-1,R-2
18	Calculating Cosine Similarity between Movies	CO2	T-2,R-2
19	Finding Most Similar Movies	CO2	T-2,R-1
20	Calculating Cosine Similarity between Movies	CO2	T-2,R-2
21	Introduction to Decision Trees	CO2	T-1,R-1
22	Building Decision Tree Classifier using Gini Criteria	CO2	T-2,R-2
23	Measuring Test Accuracy of Decision Tree Classifier	CO2	T-1,R-2
24	Displaying the Decision Tree	CO2	T-1,R-1
25	Building Decision Tree Classifier using Entropy Criteria	CO3	T-1,R-1
26	Finding Optimal Criteria for Decision Trees	CO3	T-2,R-1

27	Maximum Depth of the Decision Tree	CO3	T-1,R-1
28	Benefits of Decision Trees in Classification	CO3	T-1,R-2
29	Disadvantages of Decision Trees in Classification	CO3	T-1,R-1
30	Case Study: Applying Decision Tree Classification on German Credit Data	CO3	T-1,R-2
31	Introduction to Artificial Intelligence (AI)	CO3	T-1,R-1
32	Meaning and Foundations of AI	CO3	T-1,R-1
33	History of AI: From Classical to Modern Approaches	CO4	T-2,R-1
34	Understanding Intelligent Agents in AI	CO4	T-1,R-1
35	Agents and Environments in AI	CO4	T-1,R-1
36	Concept of Rationality in AI	CO4	T-1,R-1
37	Nature of Environments in AI	CO4	T-1,R-2
38	The Structure of Agents in AI	CO4	T-1,R-1
39	Present and Future of AI	CO5	T-1,R-1
40	Problem Solving in AI: Solving Problems by Searching	CO5	T-1,R-1
41	Problem Solving Agents in AI	CO5	T-1,R-1
42	Searching for Solutions in AI	CO5	T-1,R-2
43	Uninformed Search Strategies	CO5	T-2,R-1
44	Informed Search Strategies	CO5	T-1,R-2
45	Heuristic Functions in Problem Solving	CO5	T-2,R-1
46	Beyond Classical Search in AI	CO5	T-2,R-1
47	Local Search Algorithms and Optimization Problems	CO5	T-1,R-1
48	Beyond Classical Search Techniques in AI	CO5	T-2,R-1
49	Adversarial Search in AI	CO5	T-1,R-1
50	Constraint Satisfaction Problems in AI	CO6	T-2,R-1
51	Introduction to Chat bots	CO6	T-1,R-1
52	Characteristics of Chat bots	CO6	T-1,R-2
53	Importance of Chat bots in AI	CO6	T-1,R-2
54	Case Studies and Examples of Chat bots	CO6	T-2,R-1
55	Applications of Chat bots in Various Industries	CO6	T-2,R-2
56	Challenges and Limitations of Chat bots	CO6	T-1,R-2
57	Enhancements and Future Trends in Chat bots	CO6	T-2,R-2
58	Importance of AI Ethics and Responsible AI	CO6	T-2,R-2
59	Ethical Considerations in AI Development and Deployment	CO6	T-1,R-1

60	Ensuring Fairness, Transparency, and Accountability in AI Systems	CO6	T-2,R-2
Question Bank Discussions			
61	Question Bank Discussions Unit 1	CO1	T-1,R-1
62	Question Bank Discussions Unit 2	CO2	T-1,R-2
63	Question Bank Discussions Unit 3	CO3, 4	T-1,R-2
64	Question Bank Discussions Unit 4	CO5	T-1,R-1
65	Question Bank Discussions Unit 5	CO6	T-1,R-2

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