INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal, Hyderabad - 500043, Telangana

STRUCTURAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	**Dr. JSR PRASAD**	Department:	**Structural Engineering**
Regulation:	**IARE - R18**	Batch:	**2018-2020**
Course Name:	**ADVANCED SOLID MECHANICS**	Course Code:	**BSTB02**
Semester:	**I**	Target Value:	**60% (1.8)**

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Explain theory of elasticity including strain/displacement and Hooke's law relationships for analysing the structures with in elastic range.	2.00	2.60	2.1	Attained
CO2	Develop constitutive relationships between stress and strain in linearly elastic solid for analysing the stresses in the field.	1.40	2.40	1.6	Not Attained
CO3	Analyze the Stresses and Strains, Strain Displacement and Compatibility Relations for Boundary Value Problems in the Principal Directions.	1.30	2.30	1.5	Not Attained
CO4	Explain the Plane Stress and Plane Strain Problems using Airy's stress Function and Two-Dimensional Problems in Polar Coordinates.	1.30	2.40	1.5	Not Attained
CO5	Analyze boundary value problems using Modified Galerkin Method.	0.30	2.30	0.7	Not Attained
CO6	Examine the properties of ideally plastic solids using different yield criterion.	0.00	2.40	0.5	Not Attained

Action Taken Report: (To be filled by the concerned faculty / course coordinator)

CO2: Conducted classroom demonstrations on stress–strain relationships and generalized Hooke's law for linearly elastic solids under different loading conditions.

CO3: Provided numerical worksheets and weekly assignments focused on evaluating stress and strain fields for typical boundary value problems.

CO4: Organized guided problem-solving sessions where students solved 2D elasticity problems using Airy's stress function in Cartesian and polar coordinates.

CO5: Provided numerical worksheets and assignments focused on trial functions, weighting functions, and residual minimization techniques.

CO6: Arranged MATLAB-based tutorials to visualize yield surfaces and compare responses of ideally plastic solids under various stress conditions.

Course Coordinator **Mentor** **Head of the Department**

Head of the Department
Civil Engineering
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