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:	**2019-2021**
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.	0.90	2.50	1.2	Not Attained
CO2	Develop constitutive relationships between stress and strain in linearly elastic solid for analysing the stresses in the field.	0.90	2.60	1.2	Not Attained
CO3	Analyze the Stresses and Strains, Strain Displacement and Compatibility Relations for Boundary Value Problems in the Principal Directions.	0.90	2.40	1.2	Not Attained
CO4	Explain the Plane Stress and Plane Strain Problems using Airy's stress Function and Two-Dimensional Problems in Polar Coordinates.	2.10	0.00	1.7	Not Attained
CO5	Analyze boundary value problems using Modified Galerkin Method.	2.10	0.00	1.7	Not Attained
CO6	Examine the properties of ideally plastic solids using different yield criterion.	1.40	0.00	1.1	Not Attained

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

CO1: Conducted classroom lectures explaining strain–displacement relations, stress–strain behavior, and Hooke's law with clear derivations and physical interpretation.

CO2: Organized guided problem-solving sessions where students derived and applied constitutive matrices for one-, two-, and three-dimensional stress states.

CO3: Provided worksheets and assignments focusing on derivation and application of compatibility equations for elastic continua.

CO4: Delivered a seminar on "Two-Dimensional Elasticity Problems" highlighting applications in thick cylinders, discs, and plates.

CO5: Discussed previous university-level problems to strengthen conceptual understanding and application skills.

CO6: Provided tutorial sheets and assignments to compare different yield criteria and interpret yielding conditions in structural members.

Course Coordinator

Mentor

Head of the Department

Head of the Department
Civil Engineering
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