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

STRUCTURAL ENGINEERING

ATTAINMENT OF COURSE OUTCOME - ACTION TAKEN REPORT

Name of the faculty:	**Ms. V N VANDANA REDDY**	Department:	**Structural Engineering**
Regulation:	**IARE - R18**	Batch:	**2020-2022**
Course Name:	**DESIGN OF PRE STRESSED CONCRETE STRUCTURES**	Course Code:	**BSTB22**
Semester:	**III**	Target Value:	**60% (1.8)**

Attainment of COs:

	Course Outcome	Direct Attainment	Indirect Attainment	Overall Attainment	Observation
CO1	Explain the concepts of stresses and strains developed within the structures subjected to different loads and their combinations for understanding the behavior of prestressed concrete structures	3.00	2.30	2.9	Attained
CO2	Elucidate the concept of methods of pre and post tensioning and the systems of prestressing for the designing of prestressed concrete structural elements	1.60	2.40	1.8	Attained
CO3	Estimate the losses in the prestress and post tensioned members for the efficient design of prestressed concrete structures.	0.90	2.40	1.2	Not Attained
CO4	Design prestressed and post tensioned structural elements using Indian standard code method.	0.90	2.50	1.2	Not Attained
CO5	Summarize the concepts of transfer of prestress in pre and post tensioned members by bond and transmission length using Indian standard code method.	0.90	2.30	1.2	Not Attained
CO6	Design the composite prestressed concrete structural elements subjected to flexure and shear for designing multi storied structures	0.90	2.40	1.2	Not Attained

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

CO3: Organized problem-solving sessions to estimate total prestress loss in various structural members.
CO4: Assigned numerical exercises to practice IS code-based design for pre-tensioned and post-tensioned elements.
CO5: Demonstrated step-by-step calculation of transmission length, bond stresses, and anchorage zones as per IS 1343.
CO6: Demonstrated step-by-step IS code-based design procedures for beams, slabs, and girders in multi-storied structures.

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

Head of the Department
Civil Engineering
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