

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- 2025

M.Tech- Ist Semester (SE)

COURSE CODE (CREDITS): 25M11CE113 (3)

MAX. MARKS: 25

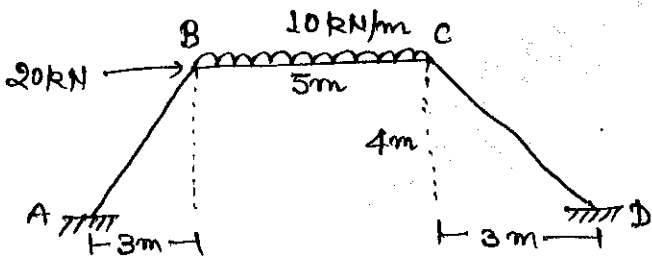
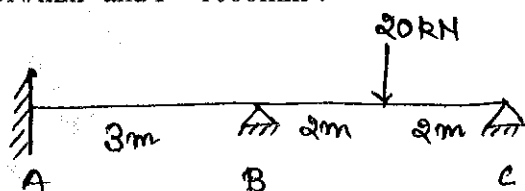
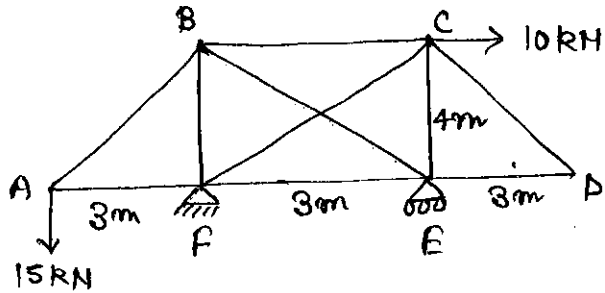
COURSE NAME: Advanced Structural Analysis

COURSE INSTRUCTORS: Mr. Chandra Pal Gautam

MAX. TIME: 1 Hour 30 Min

Note: (a) All questions are compulsory. Calculator is allowed.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	CO	Marks
Q1	Solve the given frame and find all end moments. 	CO-3	8
Q2	Solve the given beam by using Slope deflection Equation and draw the bending moment diagram along with reinforcement pattern in the beam. Support B settles by 10mm and support C settles by 20mm. Assume $E = 210\text{N/mm}^2$ and $I = 1000\text{mm}^4$. 	CO-3	8
Q3	Solve the given truss by using Force Method and find the forces in all the members. Assume AE is constant for all members. 	CO-2	9