

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION-2022

M.Tech-I Semester (Civil)

COURSE CODE (CREDITS): 11M1WCE111 (3)

MAX. MARKS: 25

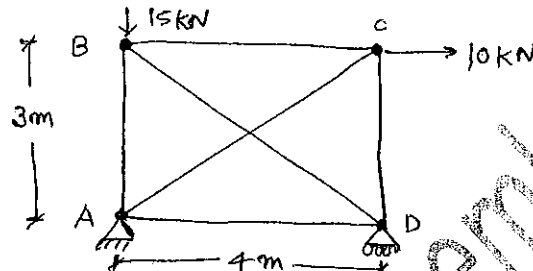
COURSE NAME: Advanced Structural Analysis

COURSE INSTRUCTORS: Mr. Chandra Pal Gautam

MAX. TIME: 1 Hour 30 Min

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

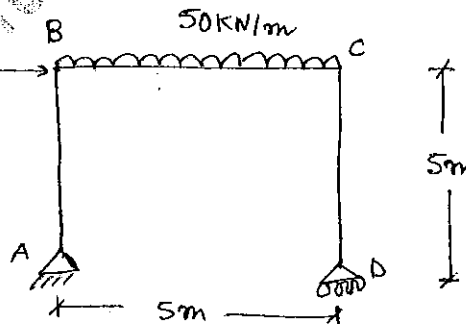
Q1. Solve the given truss by using force method and find the final forces in all members. [8]



Q2. Solve the given beam by using force method. [5]



Q3. Find the displacement at joint C, along x axis using unit load method. Assume EI constant for all members. [6]



Q4. Solve the given beam by using Slope deflection equation and draw the bending moment diagram along with deflection pattern of the beam. [6]

