

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION-May-2018

B.Tech. – VIth Semester

COURSE CODE:10B11CE615

MAX. MARKS:35

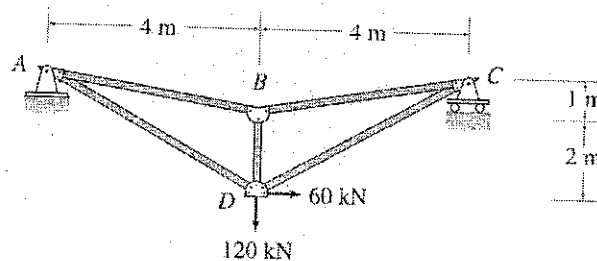
COURSE NAME: Advanced Structure Analysis

COURSE CREDITS: 4

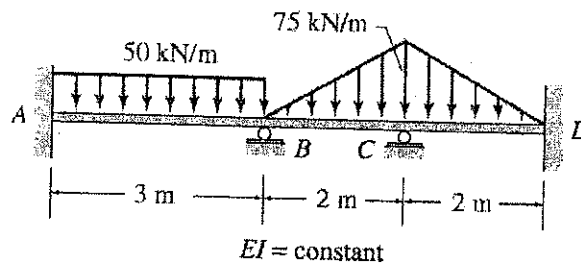
MAX. TIME: Two Hours

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

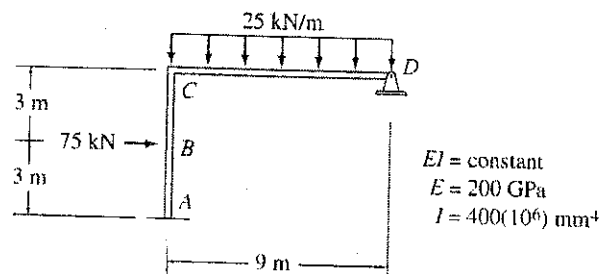
Q.1 Find all support reaction and unknown displacements of the given truss by Stiffness Matrix Method. Also find force in member BD. (8)



Q.2. Solve the given beam by using Stiffness Matrix Method and draw the bending moment diagram of the beam. (9)



Q.3. Solve the given frame by using flexibility matrix method. (9)



Q.4. Find the value of W at collapse for the portal frame as shown below.

(9)

