

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2025

B.Tech-II Semester (CE)

COURSE CODE (CREDITS): 18B11CE415

MAX. MARKS: 35

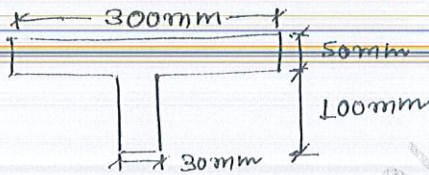
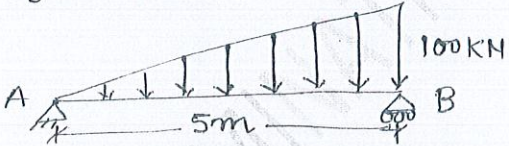
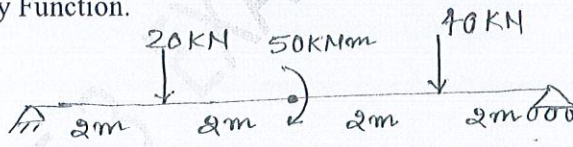
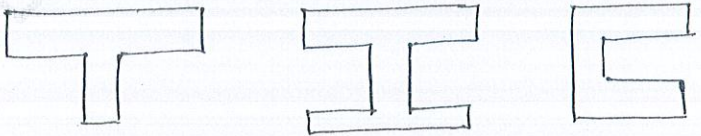
COURSE NAME: MECHANICS OF SOLIDS

COURSE INSTRUCTORS: Mr. Chandra Pal Gautam

MAX. TIME: 2 Hours

**Note:** (a) All questions are compulsory.

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

Q.No	Question	CO	Marks
Q1	(i) Find the section modulus of the given cross section of the beam.	CO3	5+2 = 7
			
Q2	(ii) Draw the bending stress diagram of a beam at a given cross section Find the general equation of deflection and slope of the given beam by using Double Integration Method.	CO5	7
			
Q3	Find the slope at A and deflection at middle of the beam by using Singularity Function.	CO5	7
			
Q4	Draw the shear stress diagram of the given cross sections of beam.	CO4	6
			
Q5	Draw the shear force and bending moment diagram for the given beam. Also find the maximum bending stress in the beam.	CO3	8
	