| Roll No | | | | | | | | | | | |
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# PRESIDENCY UNIVERSITY
# BENGALURU

## SCHOOL OF ENGINEERING
## MID TERM EXAMINATION - OCT 2023

**Semester :** Semester V - 2021
**Course Code :** CIV3002
**Course Name :** Sem V - CIV3002 - Analysis of Indeterminate Structures
**Program :** B.TECH

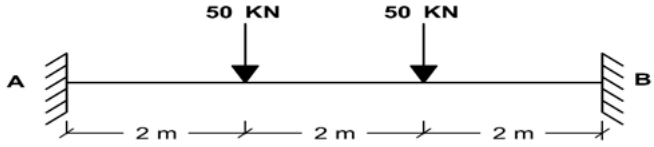
**Date :** 31-OCT-2023
**Time :** 11:30AM - 1:00PM
**Max Marks :** 50
**Weightage :** 25%

**Instructions:**
*(i) Read all questions carefully and answer accordingly.*
*(ii) Question paper consists of 3 parts.*
*(iii) Scientific and non-programmable calculator are permitted.*
*(iv) Do not write any information on the question paper other than Roll Number.*

### PART A

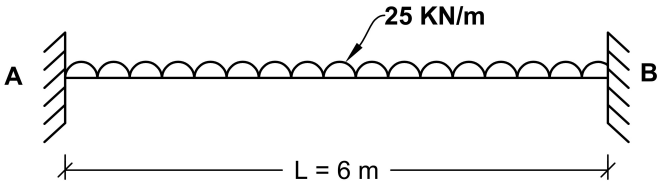
**ANSWER ALL THE QUESTIONS** **(2 X 5 = 10M)**

**1.** Calculate the fixed end moments for the beam loaded as shown in the fig




(CO1) [Knowledge]

**2.** Find the fixed end moments for the beam loaded as shown in the fig

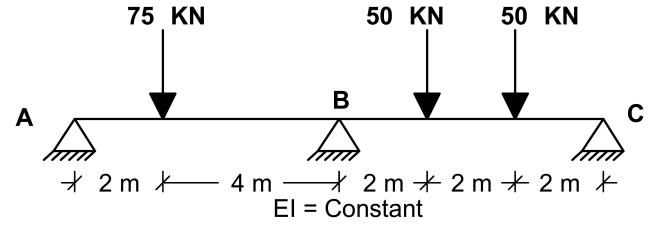



(CO1) [Knowledge]

## PART B

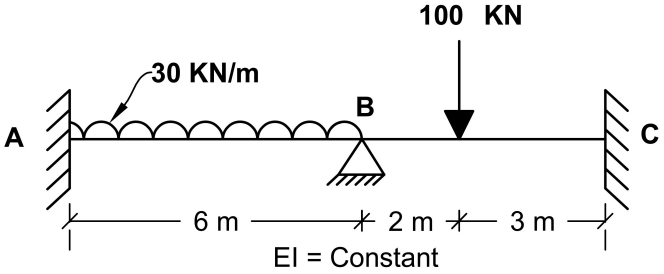
**ANSWER ALL THE QUESTIONS** **(2 X 10 = 20M)**

**3.** Analyze the continuous beam ABC loaded as shown in the fig by moment distribution method and final moments also draw BMD.




(CO2) [Comprehension]

**4.** Analyze the continuous beam ABC loaded as shown in fig by slope deflection method and calculate only slopes and final moments also draw BMD

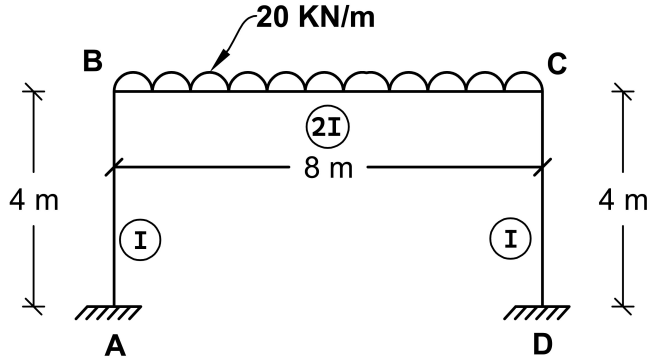



(CO2) [Comprehension]

## PART C

**ANSWER ALL THE QUESTIONS** **(1 X 20 = 20M)**

**5.** Analyze the Portal frame loaded as shown in the fig by slope deflection method and draw the BMD also sketch the deflected shape of the structure.




(CO3) [Application]