

Roll No.																			
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**PRESIDENCY
UNIVERSITY**

BENGALURU

School of Engineering

Mid - Term Examinations - November 2024

Semester: V

Date: 04-11-2024

Course Code: CIV3002

Time: 09.30am to 11.00am

Course Name: Analysis of Indeterminate Structures

Max Marks: 50

Program: B.Tech (Civil Engineering)

Weightage: 25%

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

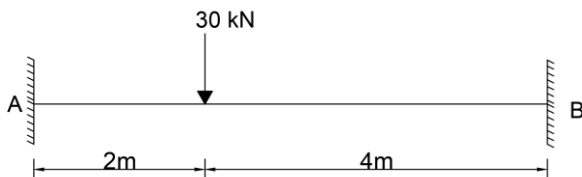
5Qx2M=10M

- 1** Determine the fixed end moments for the beam loaded as shown in figure.

2 Marks

L2

C01

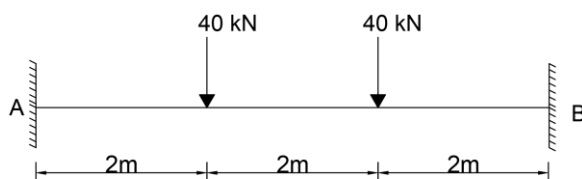


- 2** Determine the fixed end moments for the beam loaded as shown in figure.

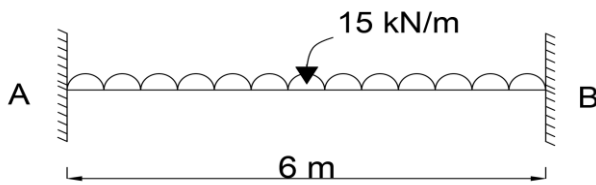
2 Marks

L2

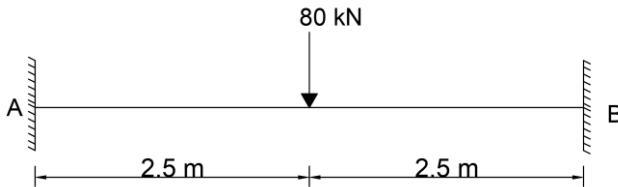
C01



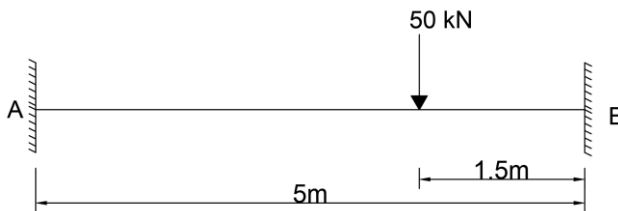
- 3 Determine the fixed end moments for the beam loaded as shown in figure. **2 Marks** **L2** **C01**



- 4 Determine the fixed end moments for the beam loaded as shown in figure. **2 Marks** **L2** **C01**



- 5 Determine the fixed end moments for the beam loaded as shown in figure. **2 Marks** **L2** **C01**

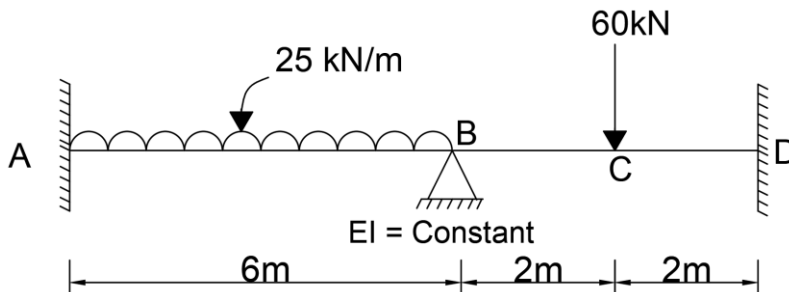


Part B

Answer ALL Questions. Each question carries 10 marks.

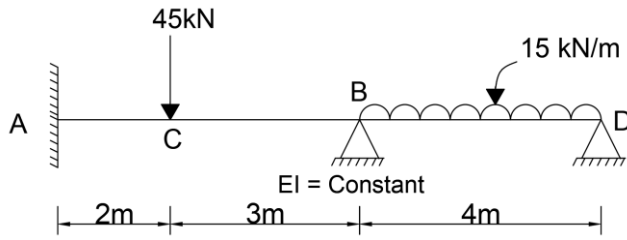
2QX10M=20M

- 6 Analyze the continuous beam ABD loaded as shown in figure by slope deflection method and calculate only slopes and final moments. **10 Marks** **L3** **C02**

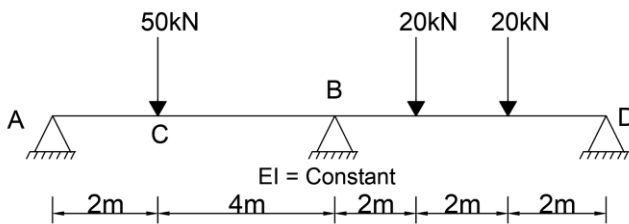


Or

- 7 Analyze the continuous beam ABD loaded as shown in figure by slope deflection method and calculate only slopes and final moments. **10 Marks** **L3** **C02**

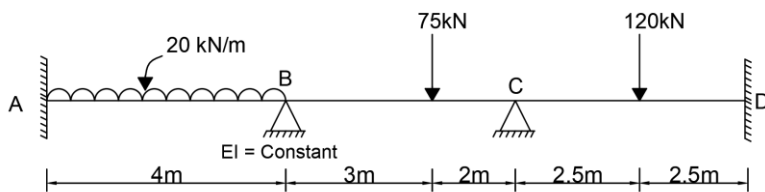


- 8 Analyze the continuous beam ABD loaded as shown in figure by moment distribution method and calculate only slopes and final moments. **10 Marks** **L3** **C02**



Or

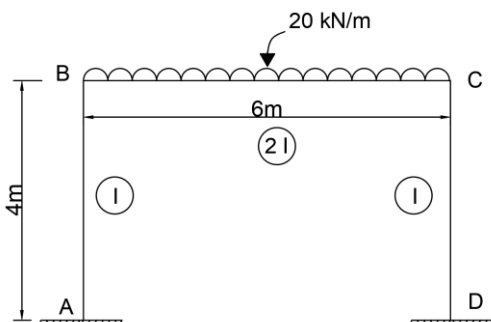
- 9 Analyze the continuous beam ABCD loaded as shown in figure by moment distribution method and calculate the final moments. **10 Marks** **L3** **C02**



Answer ALL Questions. Each question carries 20 marks.

1QX20M=20M

- 10 Analyze the Portal frame loaded as shown in figure by slope deflection method or moment distribution method and draw the BMD. Also sketch the deflected shape of the structure. **20 Marks** **L4** **C03**



Or

- 11 Analyze the continuous beam loaded as shown in figure by slope deflection method or moment distribution method and draw the BMD. Also sketch the deflected shape of the structure. **20 Marks L4 C03**

