

Test-II
MM: 15

Time: 50 mins

Roll No. _____
Dated: 10.11.2025

Q1. Analyze the frame shown in Fig. 1 by slope deflection method. Take $E = 200 \times 10^6 \text{ kN/m}^2$ and $I = 80 \times 10^{-6} \text{ m}^4$. Draw BMD. (6)

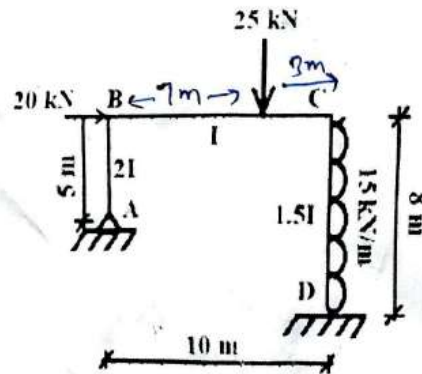


Fig.1

Q2. Analyze the frame shown in Fig. 2 by Cantilever method. Take EI constant. Show atleast one calculation for each step and write other values directly in the frame diagram. (6)

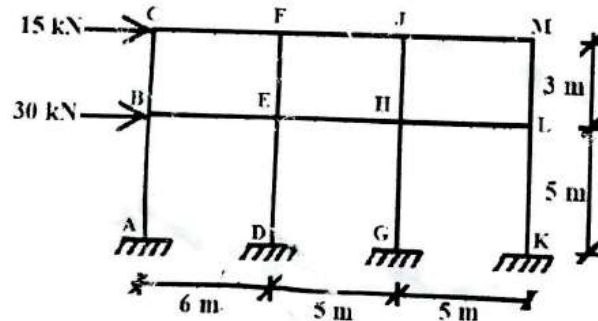


Fig. 2

Q3. Determine the deflection at 'C' in the cantilever beam shown in Fig.3 by using the Conjugate Beam method. Take $E = 200 \times 10^6 \text{ kN/m}^2$ and $I = 80 \times 10^{-6} \text{ m}^4$. (3)

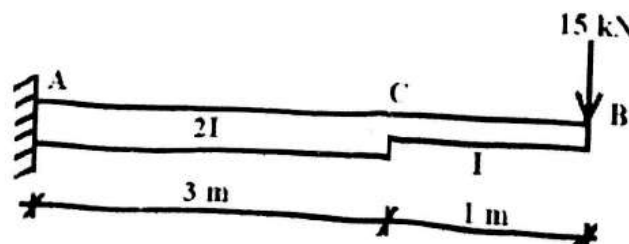


Fig. 3