


VIT

Vellore Institute of Technology

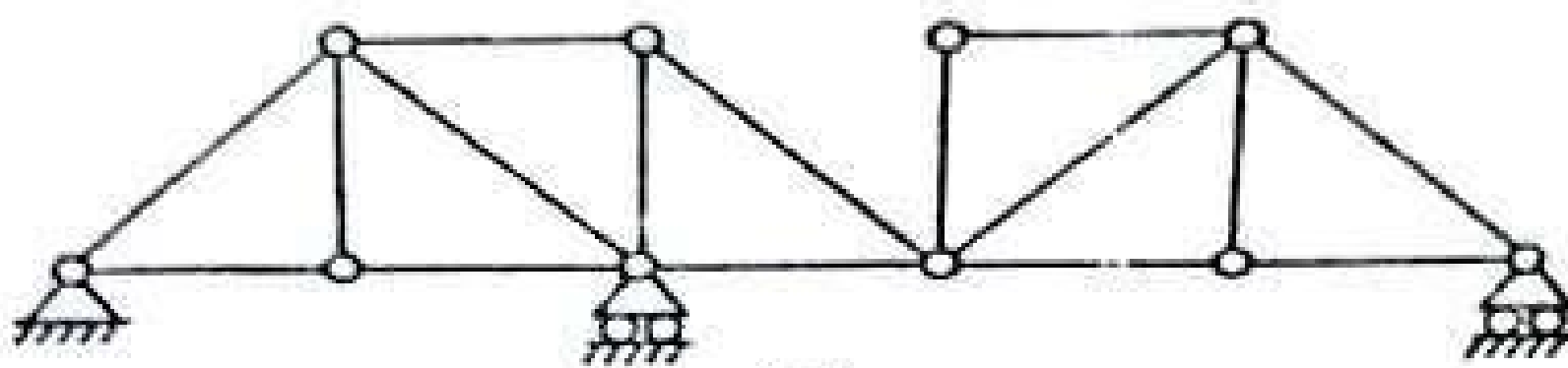
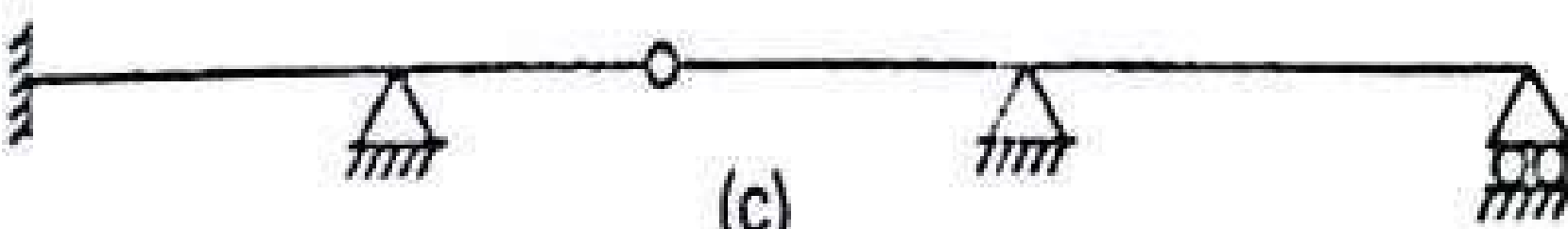
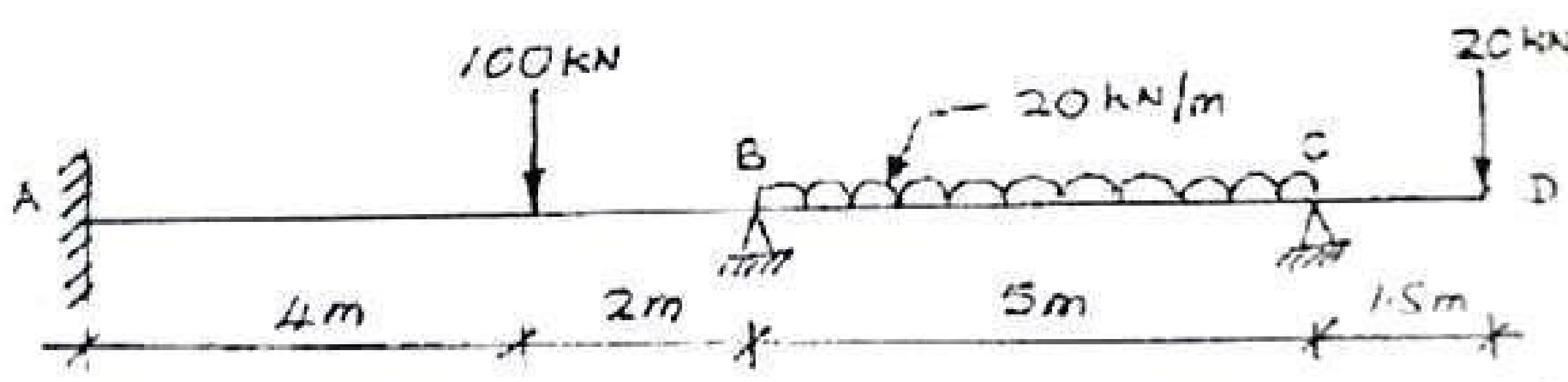
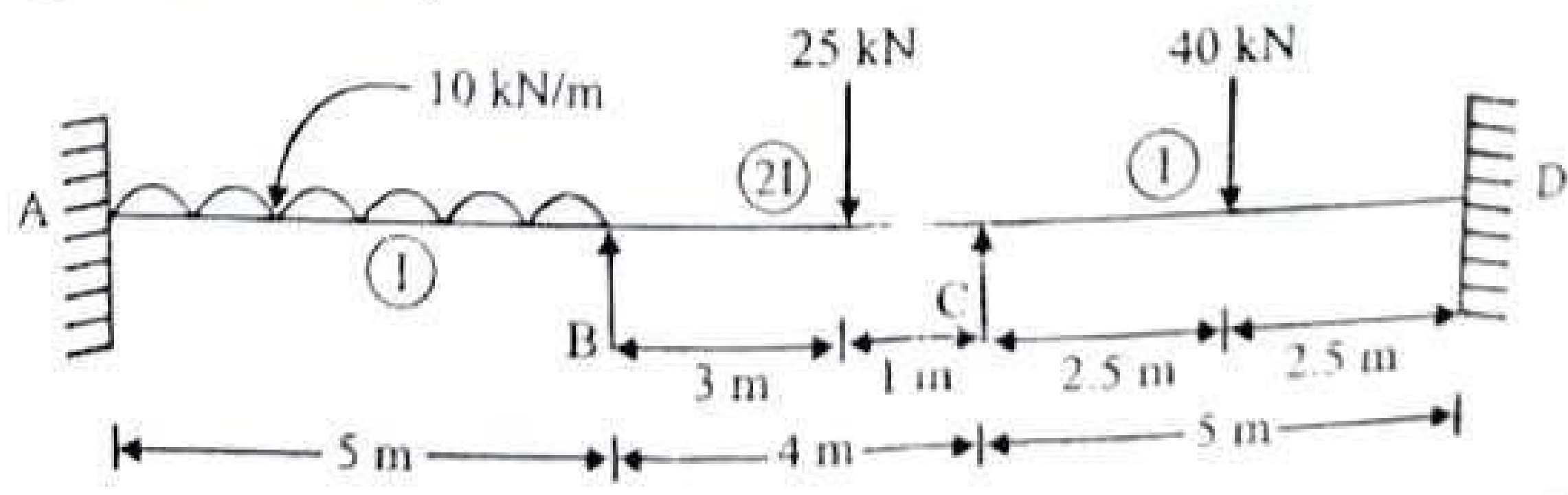
Approved by the University Grants Commission (UGC)

Continuous Assessment Test – I

Programme Name & Branch: B.Tech- Civil Engineering

Course Name & Code: CLE 2003 Structural Analysis Class

Number: VL2019205006069 Slot: A1+TA1 Exam Duration: 90 Mins Maximum Marks: 50

| S.No | Question |
|------|---|
| | Join VIT QUESTION PAPERS By Simply Searching It On Telegram App. |
| 1. | <p>a) What is meant by static and kinematic indeterminacy? (3 Marks)</p> <p>b) Find the internal, external and total indeterminacy of given truss (4 Marks)</p>  <p>(b)</p> <p>c) Find the indeterminacy of the beam (3 marks)</p>  <p>(c)</p> |
| 2. | <p>Analyse the continuous beam ABCD shown in Fig by three moment equation. The support B sinks by 15mm. Take $E = 200 \times 10^5 \text{ kN/m}^2$ and $I = 120 \times 10^6 \text{ m}^4$ (20 marks)</p>  |
| 3. | <p>Analyse the continuous beam loaded as shown in Fig. by the moment distribution methods. Sketch the bending moment and shear force diagrams (20 Marks)</p>  |