



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Fifth Semester, B.E. - Civil Engineering

Semester End Examination; Dec - 2017/Jan - 2018

Analysis of Indeterminate Structures

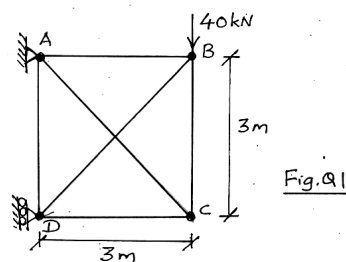
Time: 3 hrs

Max. Marks: 100

Note: i) Answer **FOUR** full questions, selecting **ONE** full question from each unit.
 ii) Missing data may suitably assume.

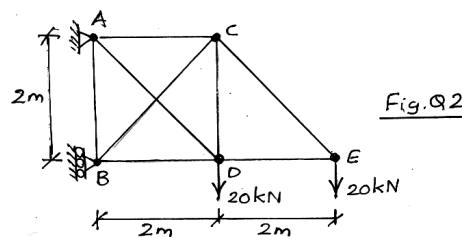
UNIT - I

- Find the forces in the pin-jointed plane truss shown in Fig. Q1. Take AE to be constant for all members.



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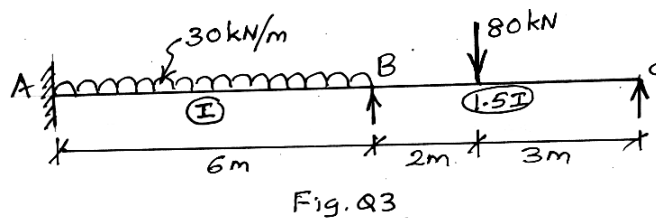
- Find the forces in the pin-jointed plane truss shown in Fig. Q2. Take AE to be constant for all members.



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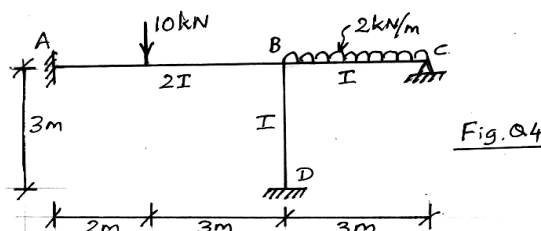
UNIT - II

- Analyse the continuous beam shown in Fig. Q3 by Slope deflection method. Sketch BMD, SFD and elastic curve.



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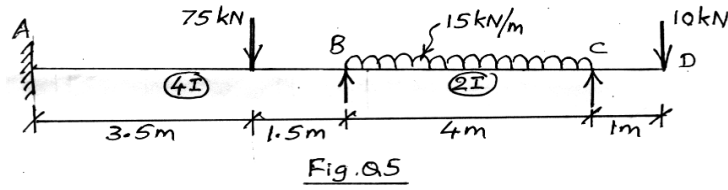
- Analyse the rigid jointed frame shown in Fig. Q4 by Slope deflection method. Sketch BMD and elastic curve.



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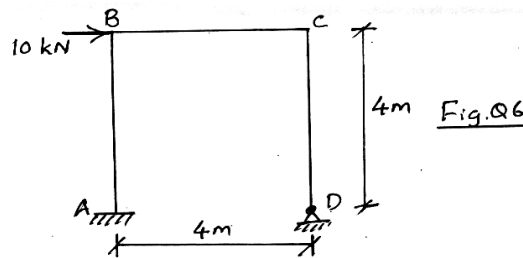
UNIT - III

5. Analyse the continuous beam shown in Fig. Q5 by Moment distribution method. Sketch BMD, SFD and elastic curve.



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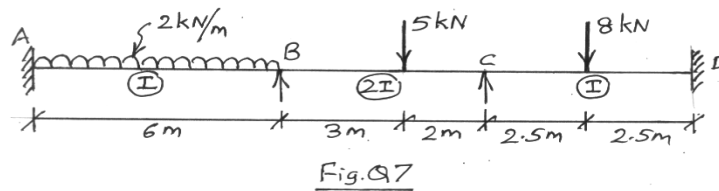
6. Analyse the rigid jointed frame shown in Fig. Q6 by moment distribution method. Sketch BMD and elastic curve. Take EI constant for all members.



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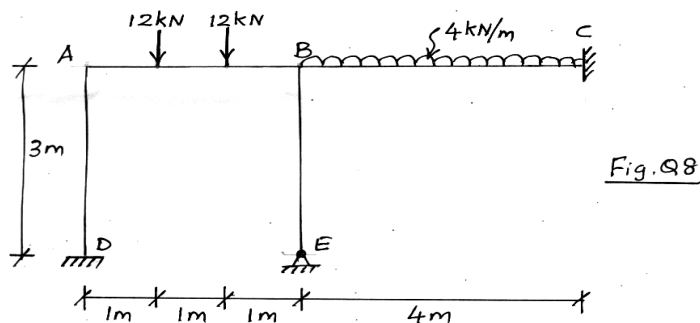
UNIT - IV

7. Analyse the continuous beam shown in Fig. Q7 by Kani's method. Sketch BMD and elastic curve.



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8. Analyse the rigid jointed frame shown in Fig. Q8 by Kani's method. Take EI constant for all members. Sketch BMD.



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