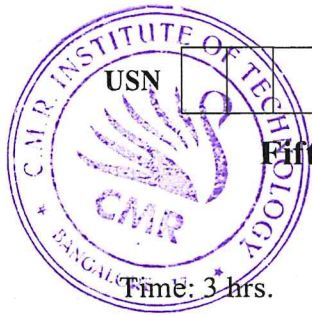


CBCGS SCHEME



USN

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15CV52

Fifth Semester B.E. Degree Examination, Aug./Sept.2020

Analysis of Indeterminate Structures

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 Analyze the continuous beam shown in Fig.Q1 by slope deflection method and sketch BMD.

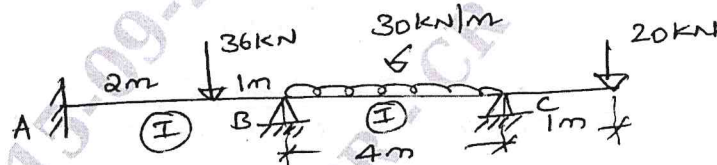


Fig.Q1

(16 Marks)

OR

- 2 Analyze the rigid plane frame shown in Fig.Q2 by slope deflection method and draw BMD.

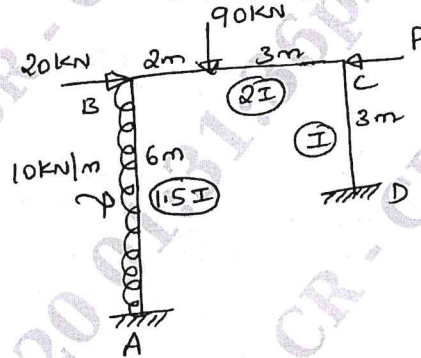


Fig.Q2

(16 Marks)

Module-2

- 3 Determine the moments for the given continuous beam shown in Fig.Q3 by moment distribution method. Sketch BMD.

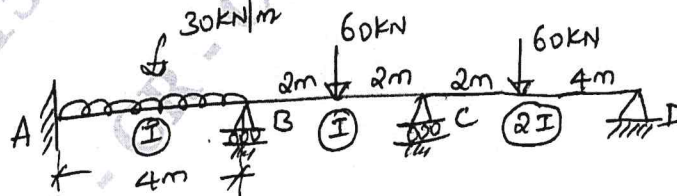


Fig.Q3

(16 Marks)

OR

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8 = 50, will be treated as malpractice.

- 4 Analyze the given frame shown in Fig.Q4 by moment distribution method. Sketch BMD.

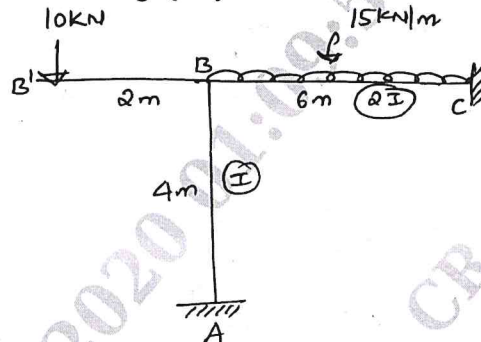


Fig.Q4

(16 Marks)

Module-3

- 5 Analyze the beam shown in Fig.Q5 by Kani's method. Draw BMD.

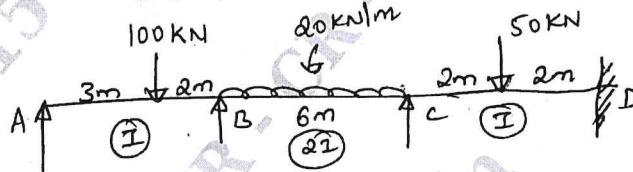


Fig.Q5

(16 Marks)

OR

- 6 Analyze the given frame shown in Fig.Q6 using Kani's method. Draw BMD.

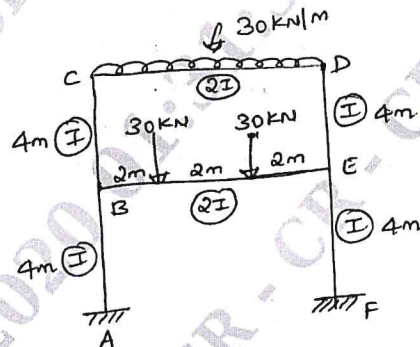


Fig.Q6

(16 Marks)

Module-4

- 7 Analyze the frame shown in Fig.Q7 and sketch BMD. Use flexibility method.

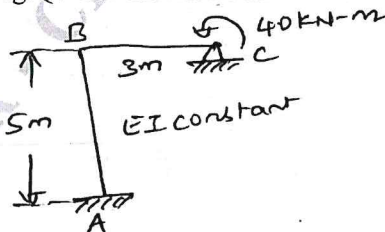


Fig.Q7

(16 Marks)

OR

- 8 Using the flexibility method, analyze the pin-jointer frame in Fig.Q8. The cross-sectional areas A and E for all members is same.

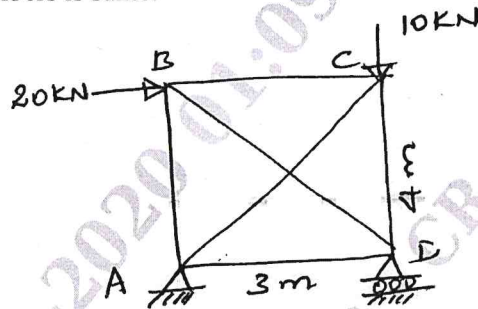


Fig.Q8

(16 Marks)

Module-5

- 9 Using displacement method, analyze the continuous beam shown in Fig.Q9 and sketch BMD.

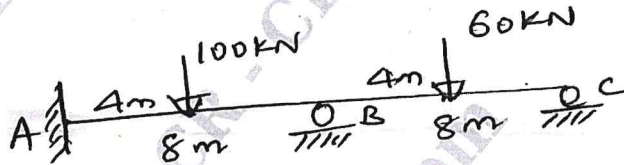


Fig.Q9

(16 Marks)

OR

- 10 Analyze the frame shown in Fig.Q10 by stiffness method.

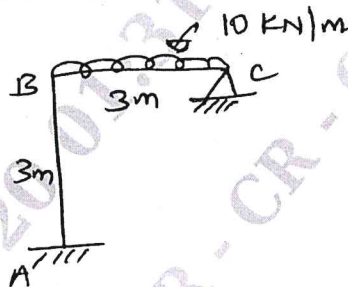


Fig.Q10

(16 Marks)
