CBCS SCHEME

USN | | | | | | | | | | |

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.

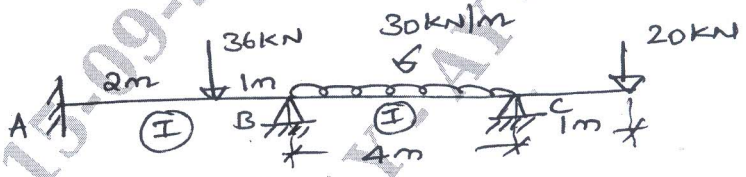

Fig.Q1 **(16 Marks)**

OR

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

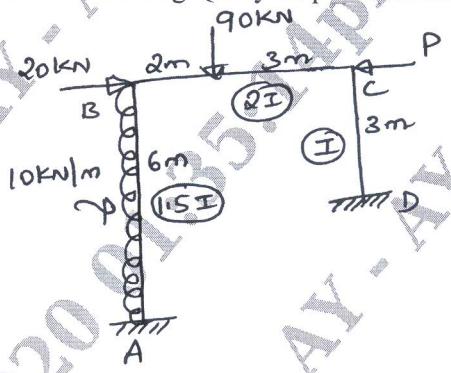

Fig.Q2 **(16 Marks)**

Module-2

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

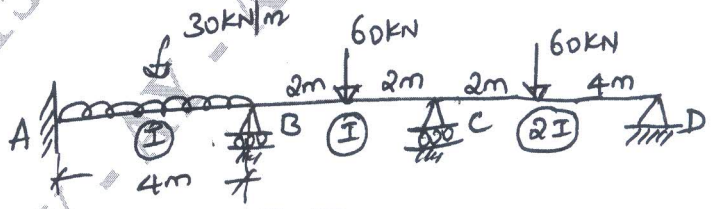

Fig.Q3 **(16 Marks)**

OR

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

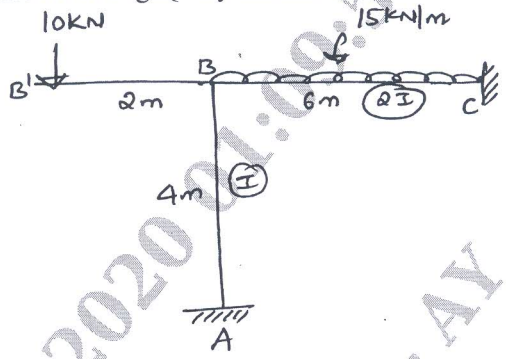

Fig.Q4 **(16 Marks)**

Module-3

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

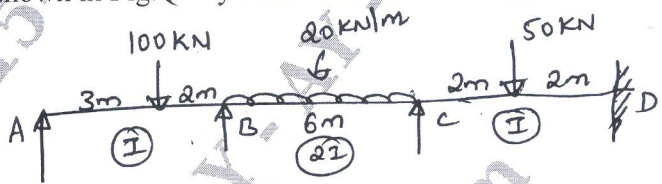

Fig.Q5 **(16 Marks)**

OR

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

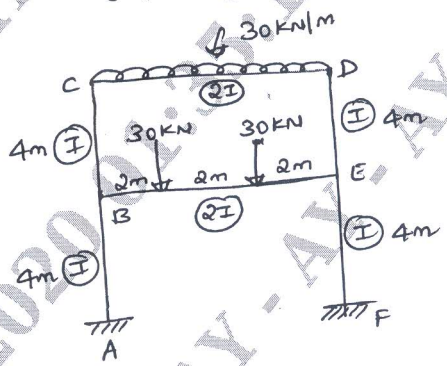

Fig.Q6 **(16 Marks)**

Module-4

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

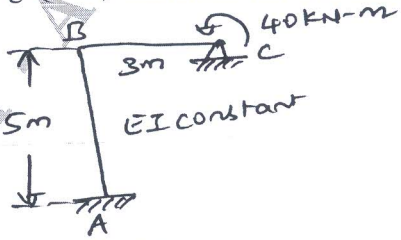

Fig.Q7 **(16 Marks)**

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.

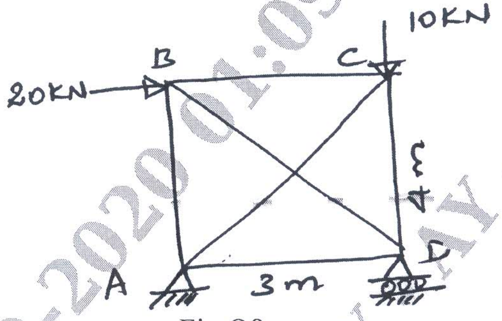

Fig.Q8 **(16 Marks)**

Module-5

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

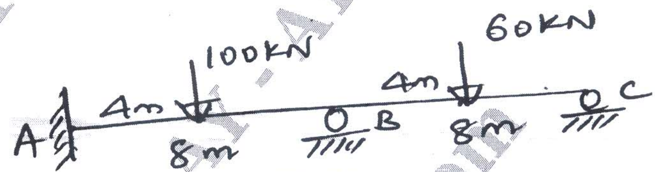

Fig.Q9 **(16 Marks)**

OR

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

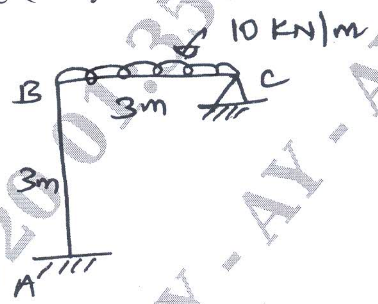

Fig.Q10 **(16 Marks)**

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