CBCS Scheme

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

15CV52

Fifth Semester B.E. Degree Examination, Dec.2017/Jan.2018
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. Draw BMD and EC.

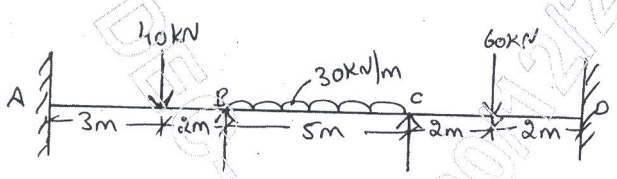

Fig.Q1 **(16 Marks)**

OR

2 Analyze the portal frame shown in Fig.Q2 by slope deflection method. Draw BMD.

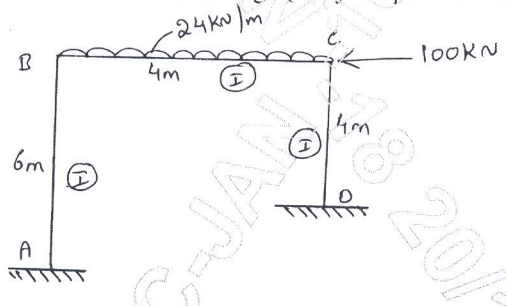

Fig.Q2 **(16 Marks)**

Module-2

3 Analyze the continuous beam by moment distribution method shown in Fig.Q3. The support 'B' sinks by 10 mm. Take EI = 4000 kN-m^2. Draw BMD and EC.

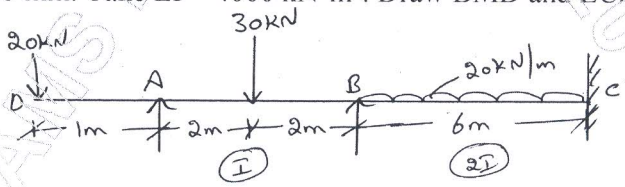

Fig.Q3 **(16 Marks)**

OR

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

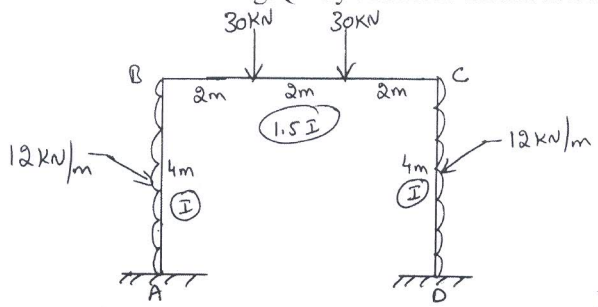

Fig.Q4 **(16 Marks)**

Module-3

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

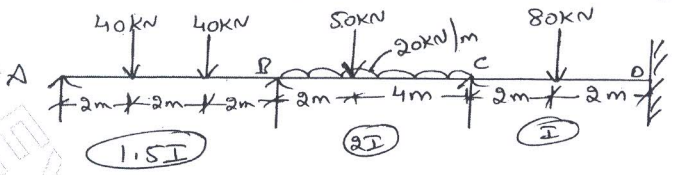

Fig.Q5 **(16 Marks)**

OR

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

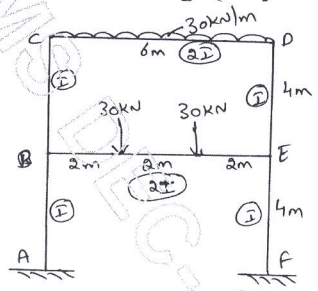

Fig.Q6 **(16 Marks)**

Module-4

7 Analyze the beam shown by flexibility matrix method. Draw BMD.

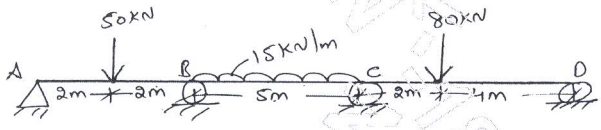

Fig.Q7 **(16 Marks)**

OR

8 Analyze the beam shown in Fig.Q8 by flexibility matrix method. Draw BMD.

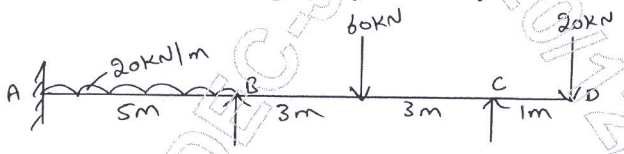

Fig.Q8 **(16 Marks)**

Module-5

9 Analyze the continuous beam shown in Fig.Q9 by stiffness matrix method. Draw BMD.

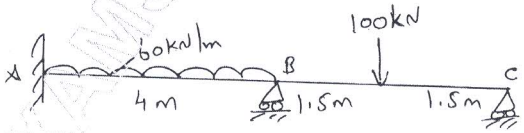

Fig.Q9 **(16 Marks)**

OR

10 Analyze the portal frame shown in Fig.Q10 by stiffness matrix method. Draw BMD.

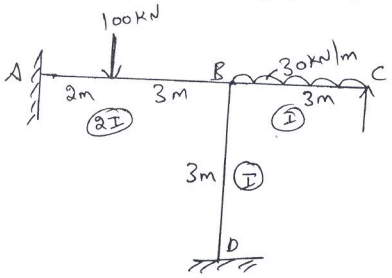

Fig.Q10 **(16 Marks)**

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