CBCS SCHEME

USN | | | | | | | | | | 18CV52

Fifth Semester B.E. Degree Examination, July/August 2022
Analysis of Indeterminate Structures

Time: 3 hrs. Max. Marks: 100

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

Module-1

1 Analyse the continuous beam ABCD shown in Fig Q1 by slop deflection method and draw SFD and BMD.

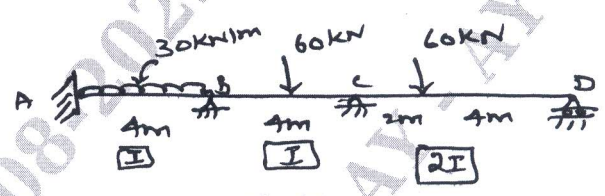

Fig Q1 **(20 Marks)**

OR

2 Analyse the frame shown in Fig Q2 by slop deflection method and draw BMD.

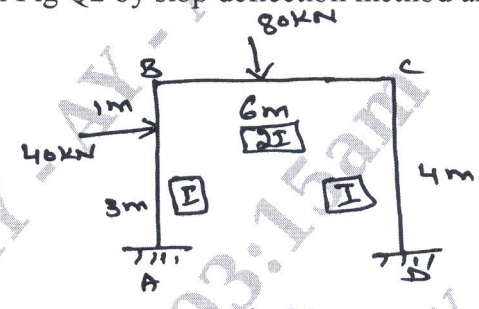

Fig Q2 **(20 Marks)**

Module-2

3 Analyse the continuous beam shown in Fig Q3 by moment distribution method and draw BMD.

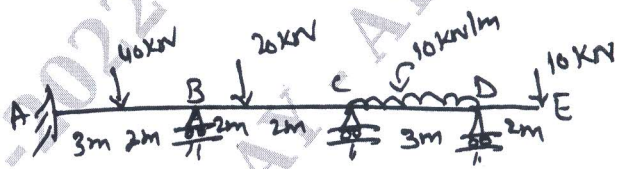

Fig Q3 **(20 Marks)**

OR

4 Analyse the frame shown in Fig Q4 by moment distribution method and draw BMD and SFD.

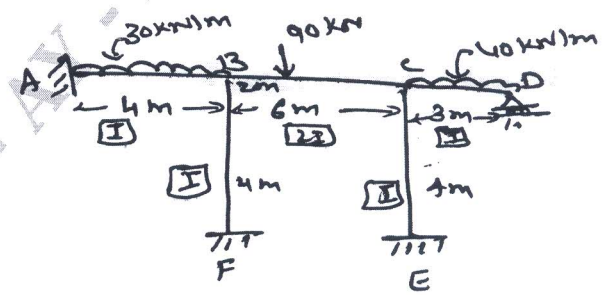

Fig Q4 **(20 Marks)**

Module-3

5 Analyse the beam shown in Kani's method in Fig Q5. Take EI = 1. Draw BMD.

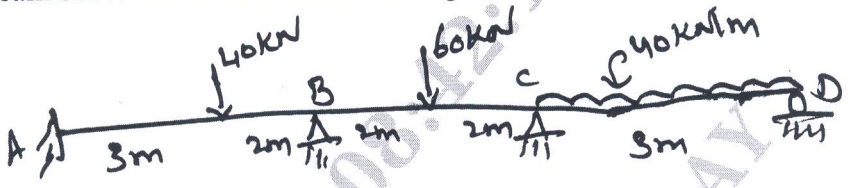

Fig Q 5 **(20 Marks)**

OR

6 Analyse the frame shown in By Kani's method in Fig Q6. Draw BMD.

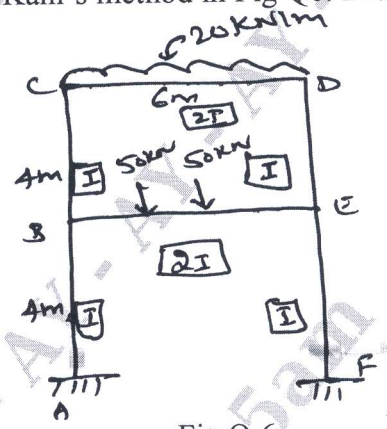

Fig Q 6 **(20 Marks)**

Module-4

7 Analyse the two spanned beam shown in Fig Q7, by flexibility matrix method. Draw BMD.

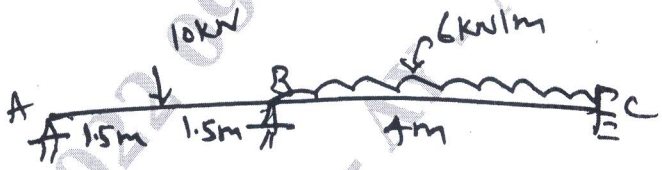

Fig Q7 **(20 Marks)**

OR

8 Analyse the frame shown in Fig Q8 by using flexibility matrix method.

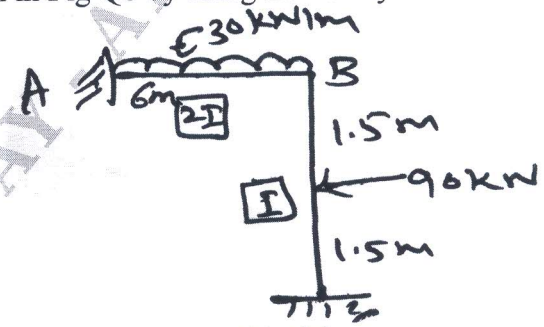

Fig Q8 **(20 Marks)**

Module-5

9 Analyse the portal frame shown in Fig Q9 by stiffness matrix method. Draw BMD.

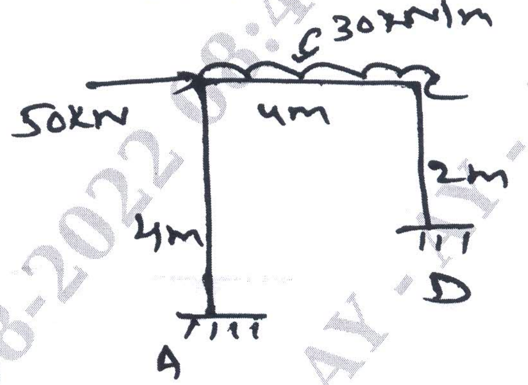

Fig Q9 **(20 Marks)**

OR

10 Analyse the pin jointed frame shown in Fig Q10, by stiffness matrix method. The area of member in sq mm shown in parentheses.

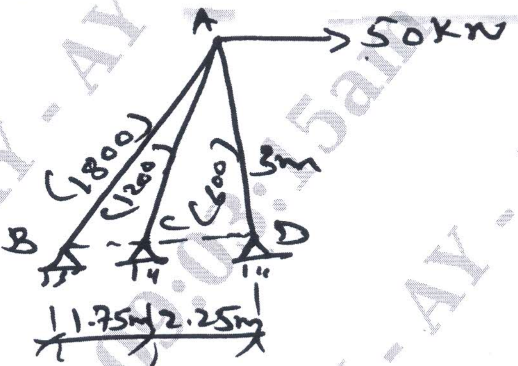

Fig Q10 **(20 Marks)**

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