

Fourth Semester B.Arch. Degree Examination, Dec.2018/Jan.2019
Structures - IV

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 Determine the reaction components and the moments for the propped Cantilever shown in Fig. Q1. (20 Marks)

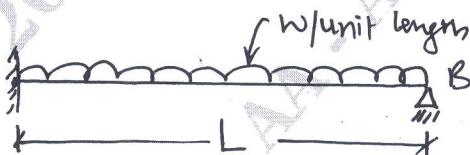


Fig. Q1

- 2 Find the following, for the fixed beam shown in Fig. Q2.
 a. Fixing moments at the ends.
 b. Reactions at the supports.
 Draw BMD and SF diagrams also. (20 Marks)

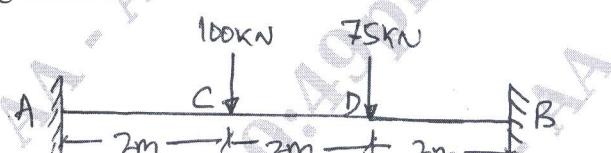


Fig. Q2

- 3 Analyze the continuous beam shown in Fig. Q3 by using Clapeyron's three moments equation. Draw BMD and SF diagrams. (20 Marks)

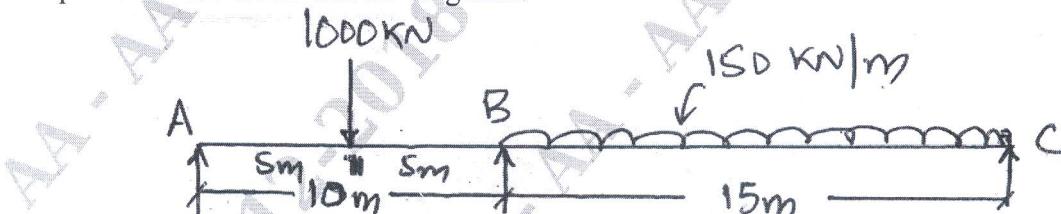


Fig. Q3

- 4 Analyse the continuous beam shown in Fig. Q4 by using Claperon's three moments equation. Draw BM and SF diagrams. (20 Marks)

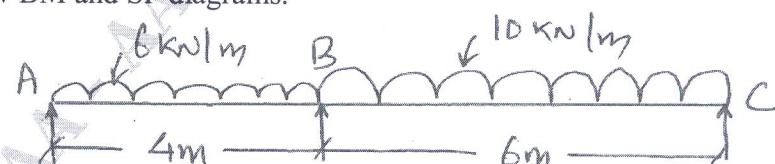
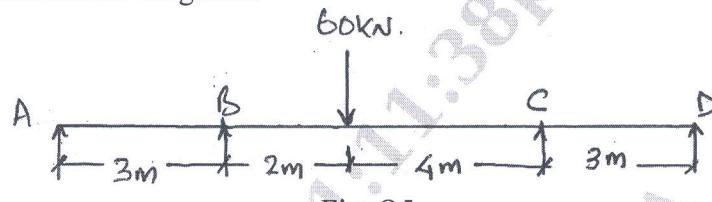
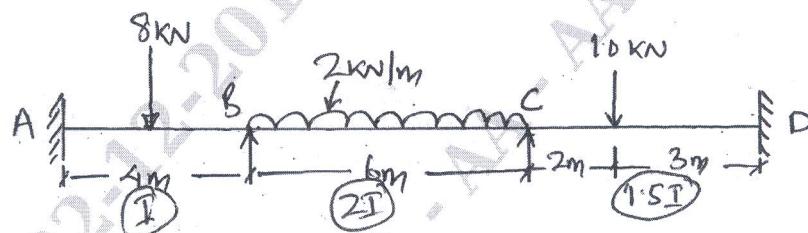


Fig. Q4

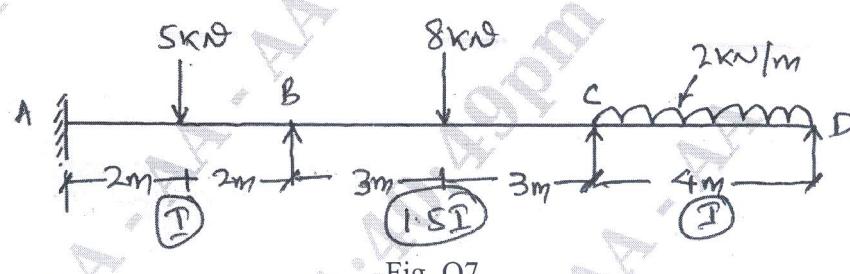
- 5 Analyze the continuous beam shown in Fig. Q5 by using Clapeyron's three moments equation. Draw BM and SF diagrams. (20 Marks)



- 6 Analyze the continuous beam shown in Fig. Q6 by using moment distribution method. Draw BMD. (20 Marks)



- 7 Analyze the continuous beam shown in Fig. Q7 by using moment distribution method. Draw BMD. (20 Marks)



- 8 Analyze the portal frame shown in Fig. Q8 by using moment distribution method. Draw BMD. (20 Marks)

