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Fourth Semester B. Arch Degree Examination, Dec.2015/Jan.2016
Structures – IV

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 Analyse the propped cantilever shown in Fig. Q1 and draw SFD and BMD. (20 Marks)

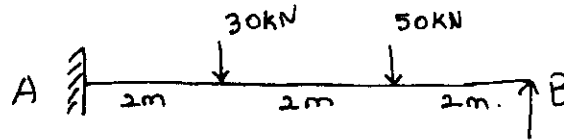


Fig.Q1

- 2 a. Discuss the advantages and disadvantages of fixed beam. (05 Marks)
 b. Analyse the fixed beam shown in Fig. Q2(b) and draw SFD and BMD. (15 Marks)

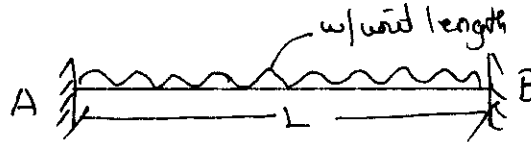


Fig.Q2(b)

- 3 Analyse the fixed beam shown in Fig. 3 and draw SFD and BMD. (20 Marks)

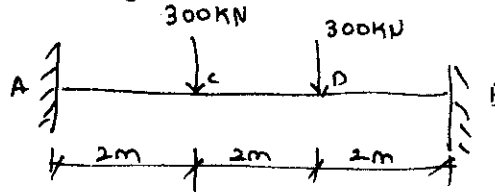


Fig.Q3

- 4 Analyse the continuous beam shown in Fig. Q4 and draw SFD and BMD using three moment theorem. (20 Marks)

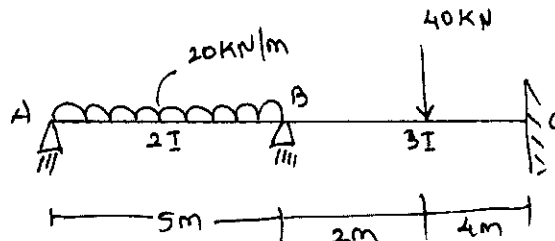


Fig.Q4

- 5 Analyse the continuous beam shown in Fig. Q5 and draw SFD and BMD. Use three moment theorem. (20 Marks)

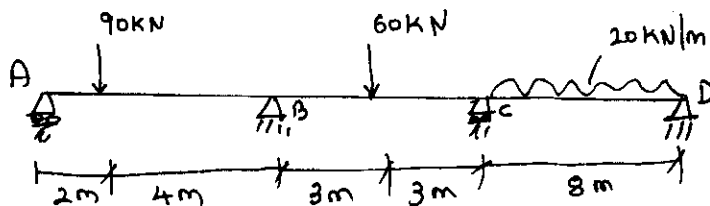


Fig.Q5

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.

- 6 Analyse the continuous beam shown in Fig. Q6 by moment distribution theorem draw BMD. (20 Marks)

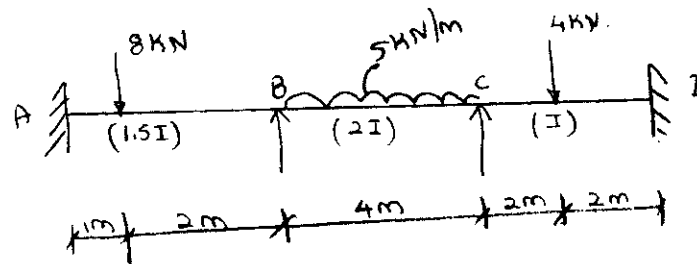


Fig.Q6

- 7 Analyse the portal frame by moment distribution method. Shown in Fig.Q7. Draw SFD and BMD. (20 Marks)

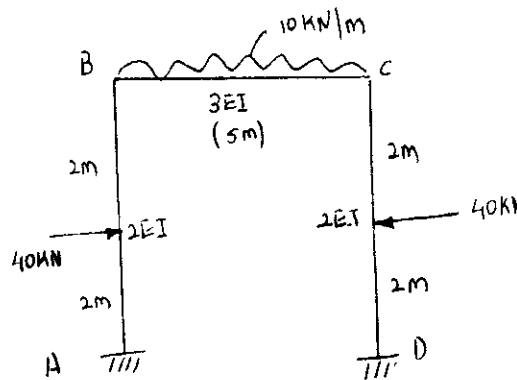


Fig. Q7

- 8 Analyse the portal frame shown in Fig. Q8. (20 Marks)

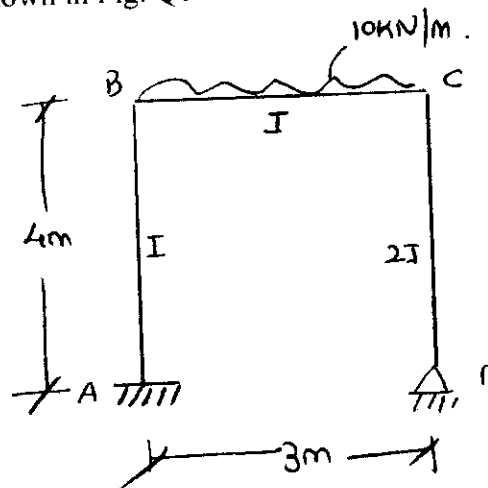


Fig.Q8
