

USN



09ENG4.5

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)

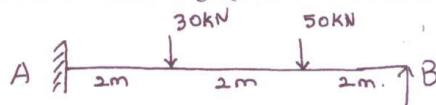


Fig.Q1

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

(05 Marks)

(15 Marks)



Fig.Q2(b)

- 3 Analyse the fixed beam shown in Fig. 3 and draw SFD and BMD.

(20 Marks)

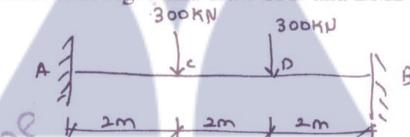


Fig.Q3

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

(20 Marks)

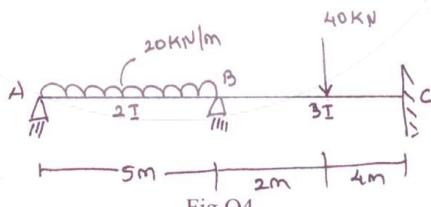
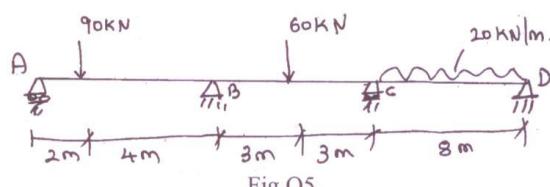
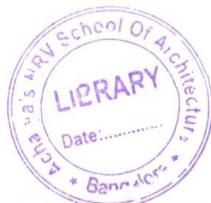


Fig.Q4

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

(20 Marks)

Fig.Q5
1 of 2



09ENG4.5

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

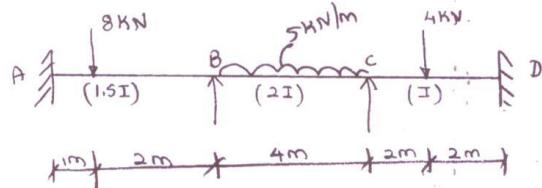


Fig.Q6

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

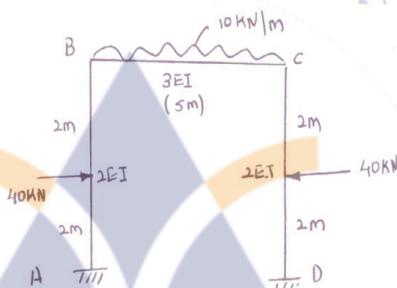


Fig. Q7

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

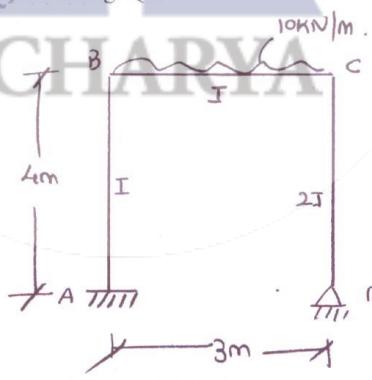


Fig.Q8

* * * * *