Printed Pages : 3

NAR-303

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 181315

Roll No.

B. Arch.

(SEM. III) (ODD SEM.) THEORY EXAMINATION, 2014-15

ARCHITECTURE STRUCTURES - III

Time : **3** Hours] [Total Marks : **50**

Note : (1) Attempt any **five** questions.

(2) Assume any missing data.

1 (a) Discuss various types of supports and reactions on the support in continuous beams and portal frames. **5**

(b) Define the degree of Redundancy. **5**

2 Discuss 3M equations with diagram, defining all variables including sinking of supports. **10**

3 Analyse the portal frame given in fig.1. Using slope deflection method. **10**

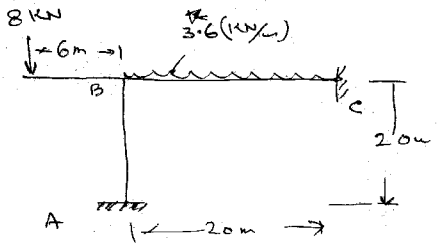

Fig.1

4 Analyse the beam shown in fig.2 using 3M equation and draw B.M. and SF diagram. **10**

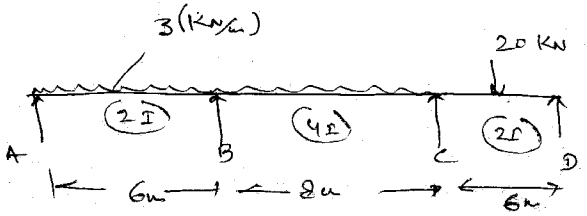

Fig.2

5 Determine the reaction at C given in fig. 3, using consistent deformation method. **10**

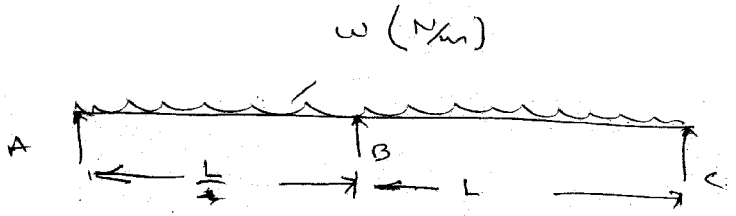

Fig.3

6 Analyse the beam given in fig. 4, using moment distribution method and draw B.M. and SF. **10**

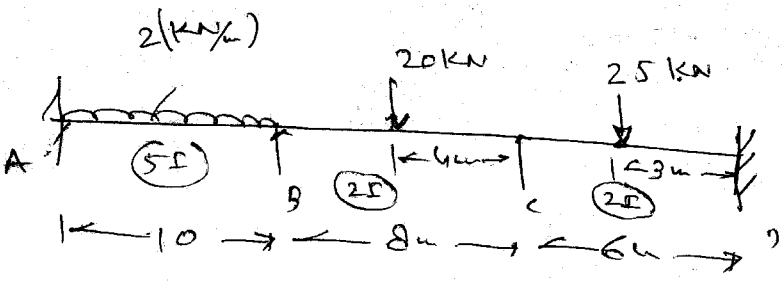

Fig.4