Printed Pages :3

270

NAR-303

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

PAPER ID :181315

Roll No. | | | | | | | | | |

B. Tech.

SPL. THEORY EXAMINATION, 2014-15

ARCHITECTURAL STRUCTURES-III

Time : 3 Hours] [*Total Marks : 100*
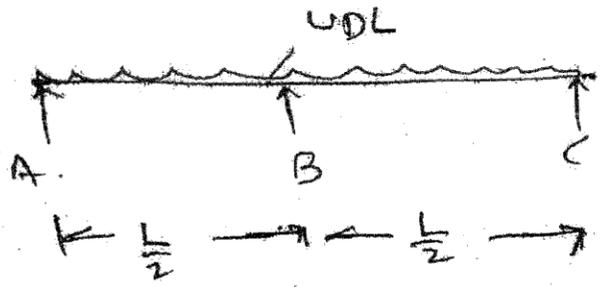
Note: (a) Attempt any five questions.

(b) All questions carry equal marks.

1. (a) Define Portal Frame of one bay and two bay and one storey and two storey.

   (b) Define the sway in two storey Portal Frame.

2. (a) State the Moment Area Method.

   (b) Using Moment Area Method and consistent Deformation, find reaction R_B for the beam shown below:
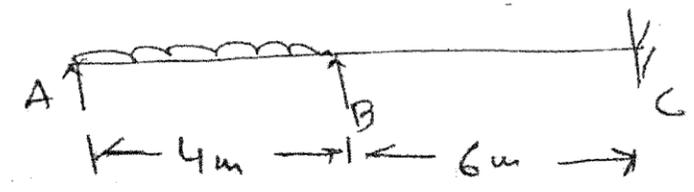
3. State the 3M equation with proper diagram. Define all variables including the effect of Settlement of Support.

4. Analyse and plot the B.M. and S.F. for the beam shown below, using Slope Deflection Method.
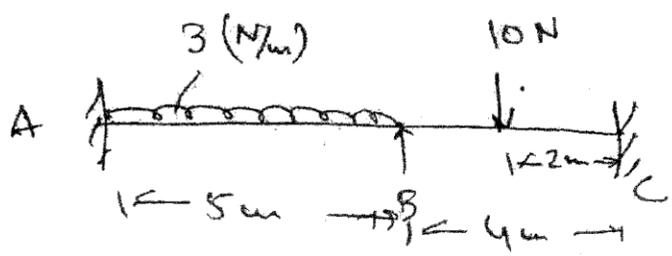
5. Analyse and plot B.M. and S.F. for the beam shown below:
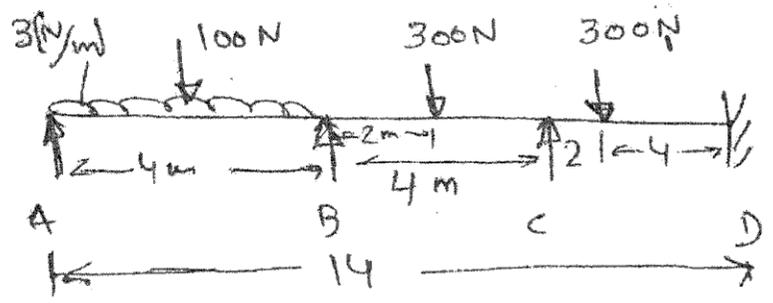
6. Analyse and draw B.M. and S.F. for the beam shown below using 3M equation support B sinks by 4mm $E = 2 \times 10^5$ N/mm^2 I $= 10^7$ mm^4.

7. (a) Define the principle of Supperposition.

   (b) State Potential Energy and state Castigliano's theorem.

—x—