

Total number of printed pages-4

53 (CE 503) STAN

2015

**STRUCTURAL ANALYSIS-II**

Paper : CE 503

Full Marks : 100

Time : Three hours

**The figures in the margin indicate full marks for the questions.**

Answer **any five** questions out of six.

1. Analyse the fixed beam shown in figure 1 and draw BMD and SFD. 20

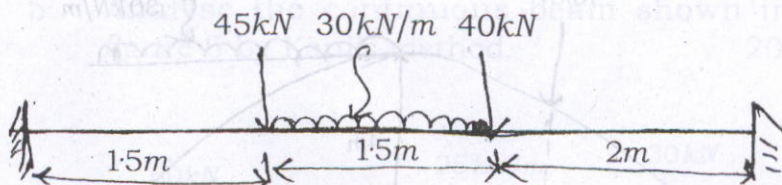


fig.1

Contd.

2. Using Clapeyron's theorem, analyse the three span continuous beam shown in figure 2 and draw BMD and SFD. 20

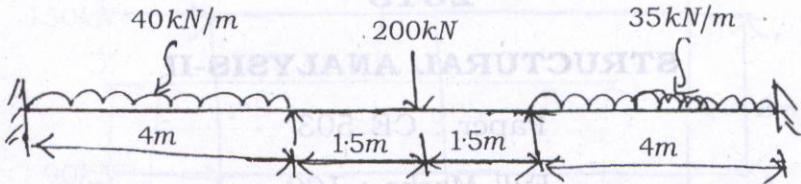


fig.2

3. A two winged arch is loaded as shown in figure 3. Determine 20

- (a) Horizontal thrusts and moments at different sections and draw BMD.
- (b) Radial shear and normal thrust at 5m from left support.

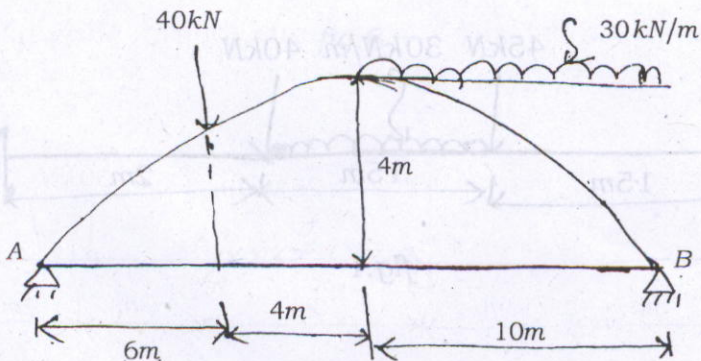
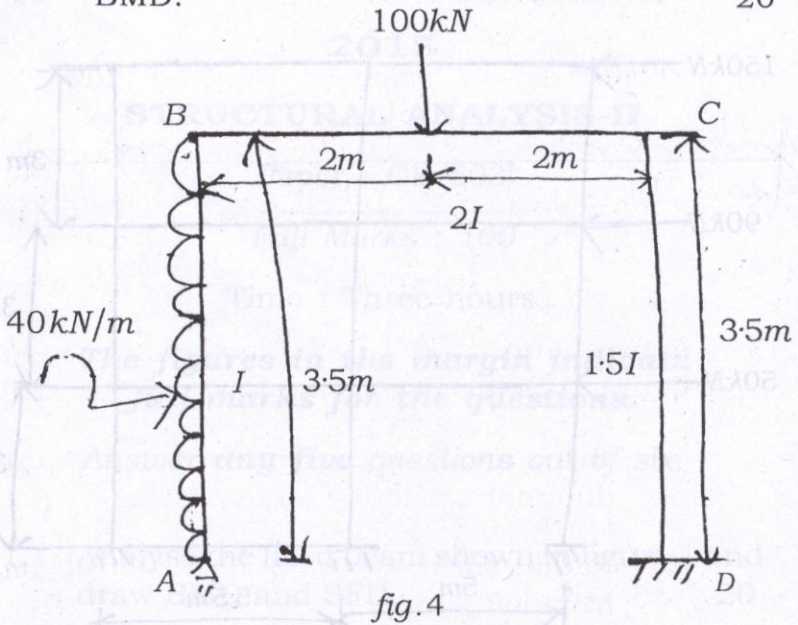
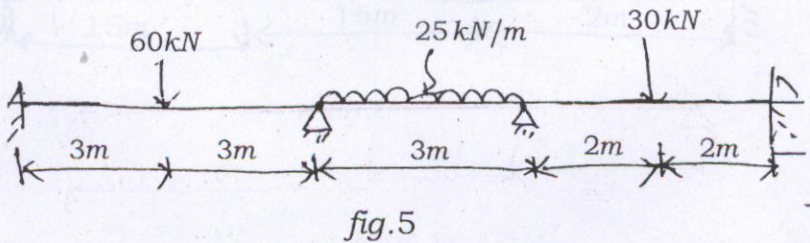


fig.3

4. Analyse the portal frame shown in figure 4 by moment distribution method and draw BMD. 20



5. Analyse the continuous beam shown in figure 5 by Kani's method. 20





6. Analyse the building frame shown in figure 6 by Portal method. 20

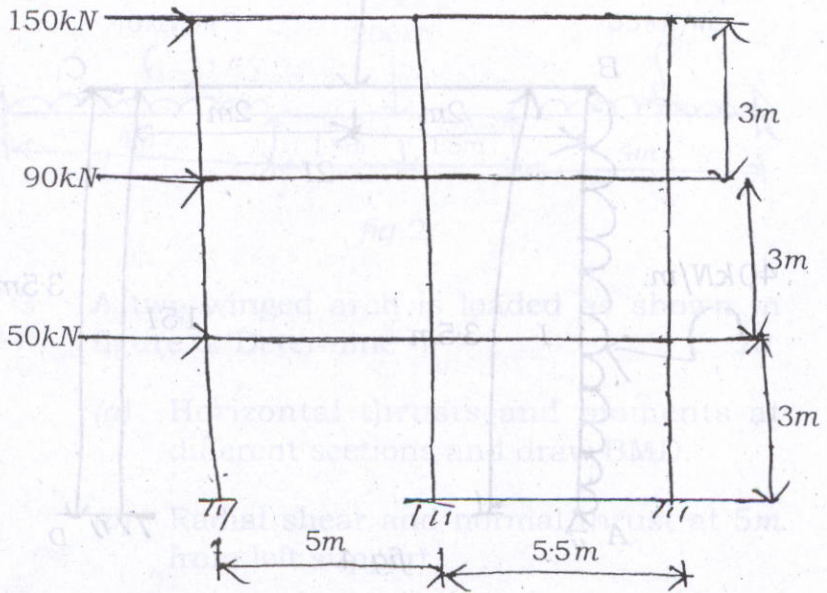


fig.6