

Instructions: Answer All Questions

To be Submitted on the Exam Day

Problem 23

What is “Degree of static Indeterminacy”?

Obtain the degrees of static indeterminacy for the following beams in Figure 23.

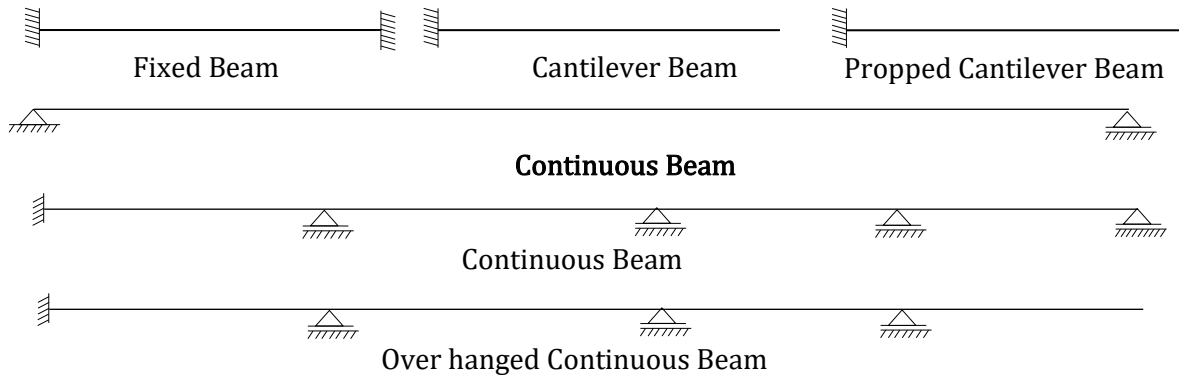


Figure 23

Problem 24

- Compute the reactions, A_V , B_V and A_H for the simply supported beams shown in Figure 24.
- Hence, draw the shear force and bending moment diagrams of the beam.

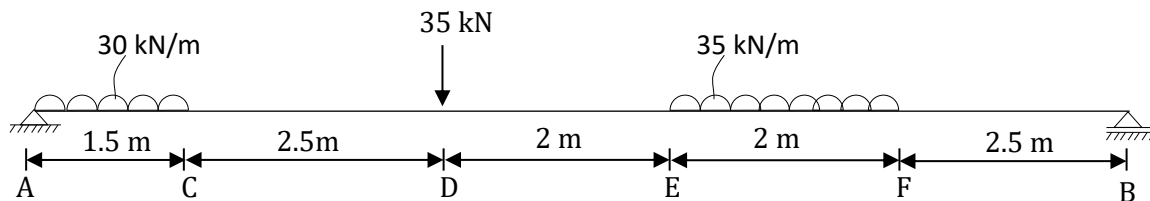


Figure 24

Problem 25

Determine the forces in the members of the pinned-jointed truss shown in Figure 25.

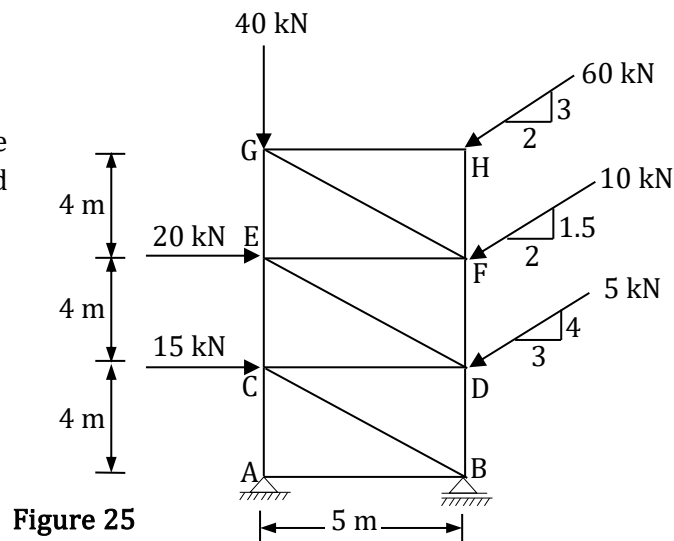


Figure 25