



4. Discuss the Indian Standard method of determine the vertical pressure and horizontal pressure in a bin.
5. Design the elevated portion of a cylindrical steel tank with hemispherical bottom for 1, 60,000 liters capacity. The tank has conical roof. Take  $F_y = 250 \text{ N/mm}^2$ .
6.
  - a) Give an overview of bridge development from the early wooden bridges to the current pre-stressed and steel bridges.
  - b) What are the factors to be considered in the selection of a suitable bridge site?
7. Write a short note on following :
  - a) Lateral Bracing
  - b) Different types of Trusses
8. Design the frame using plastic method. Loads shown are working loads.

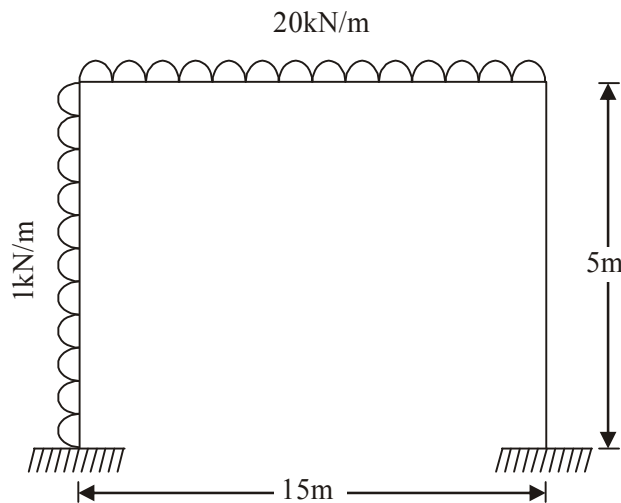


FIG.1

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