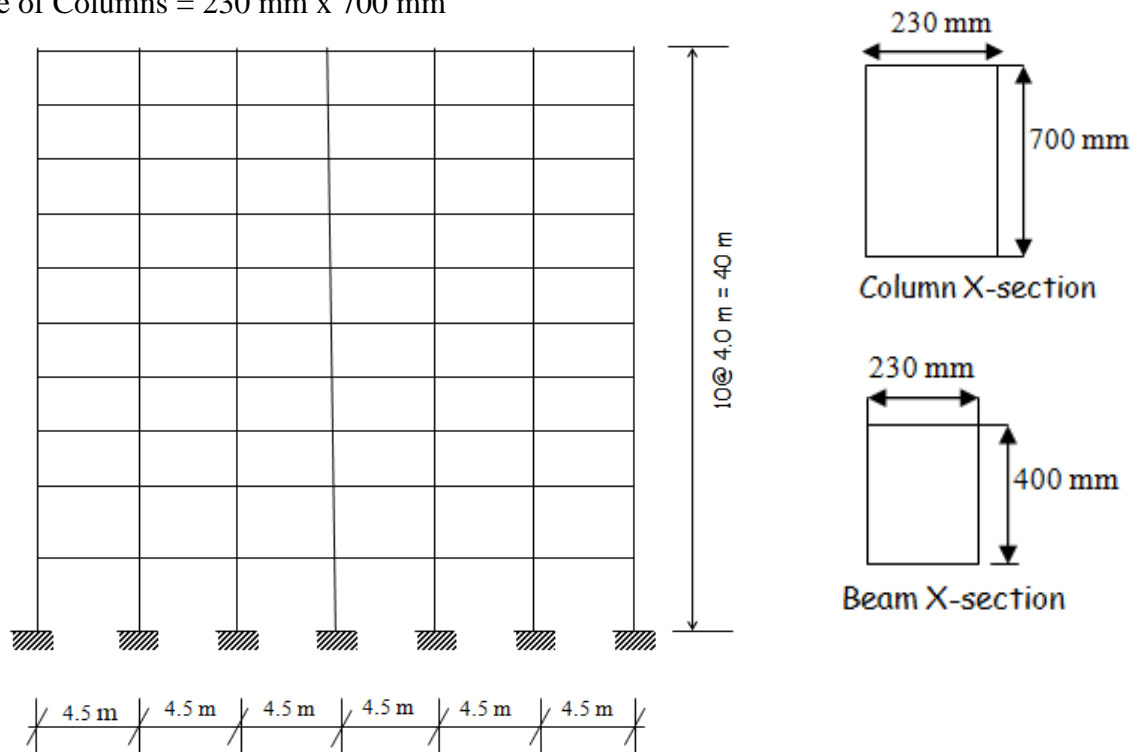


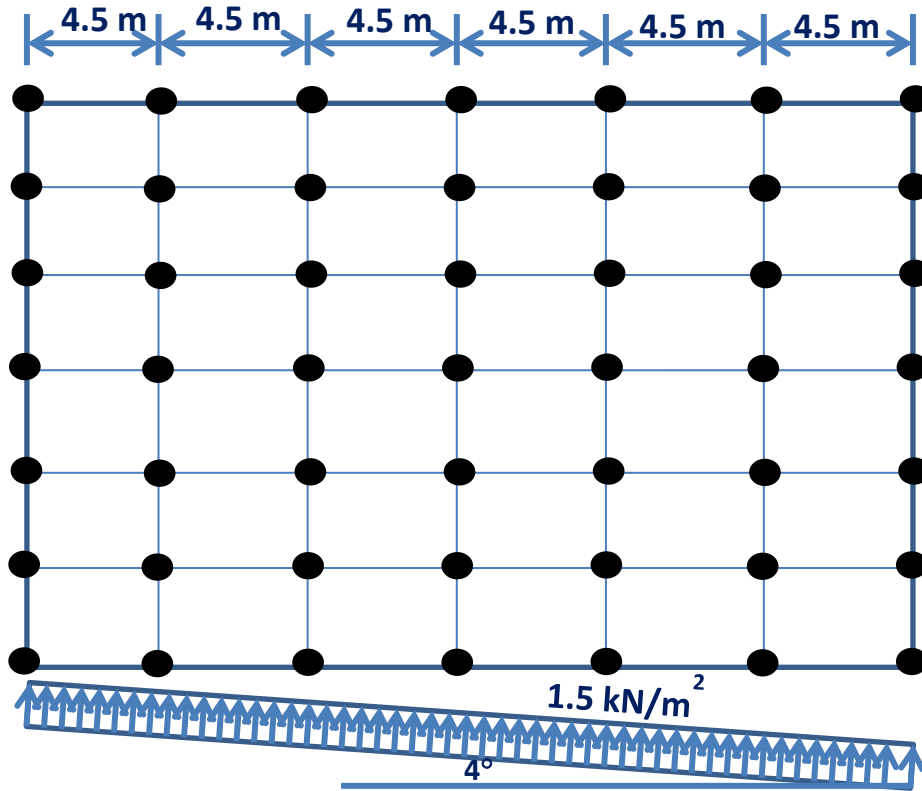
Q.3 A 10 storeyed building has 6 bays at 4.5 m spacing as shown in *Fig. Q4(a)*. Calculate the drift at the top under a wind pressure of 1.5 kN/m^2 . M40 grade of concrete has been used in construction. [12]

Size of Beams = 230 mm x 400 mm
 Size of Columns = 230 mm x 700 mm



Q.4 (b) gives the line plan of the above building. However direction of wind has been changed now and it is shown in the figure. Now you have four shear walls (150 mm thick and 7 meter long). You are required to locate these shear walls with proper orientation on the plan.

[8]



Q.4 For the tower Shown in Fig.Q4

- i) Compute the support reactions at Support M & N [6]
- ii) Find the forces in the members HJ, HI & GI as indicated in the Fig.Q4 [24]

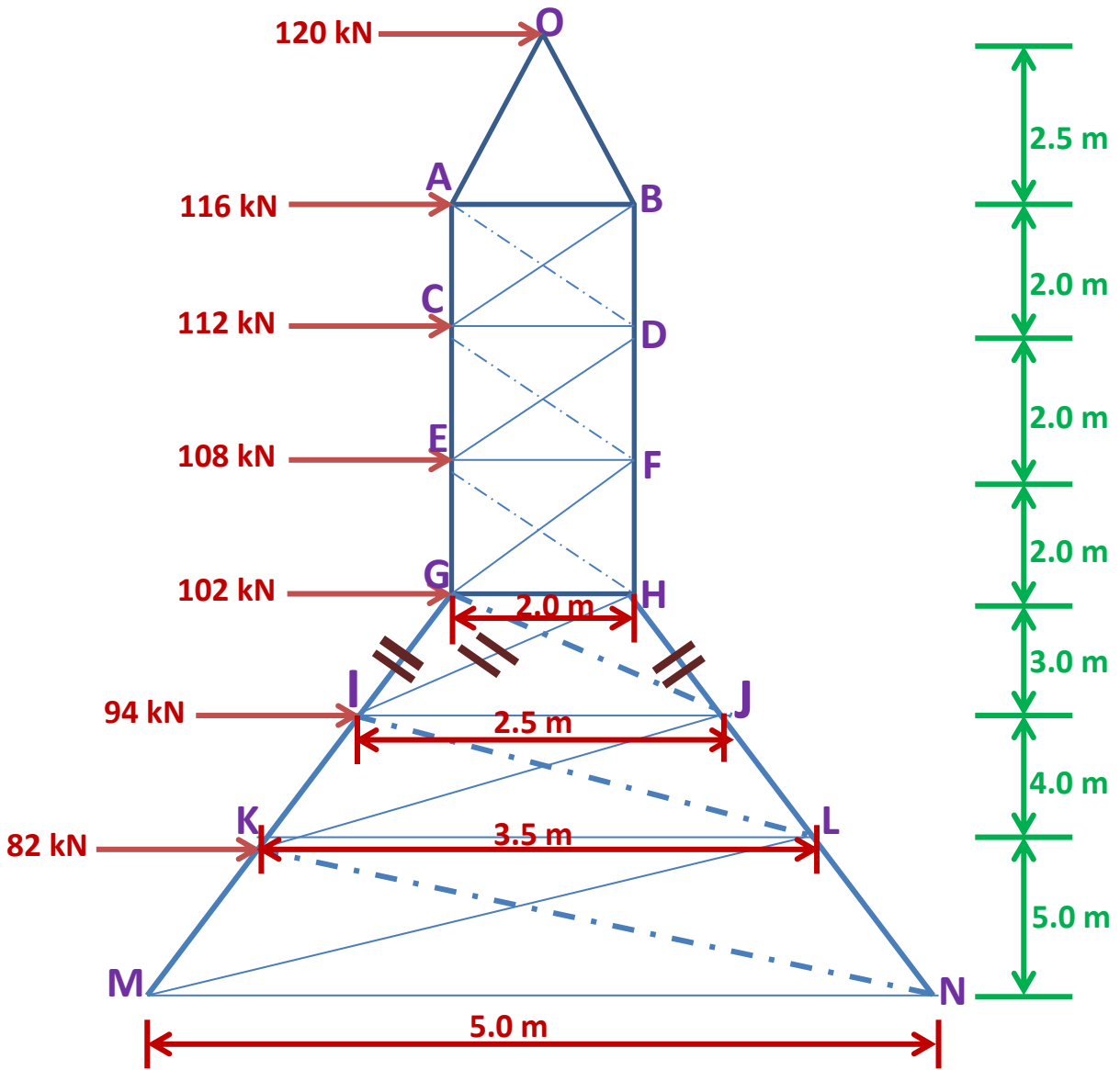


Fig.Q4