

Quiz

For the following beam draw N.F.D, S.F.D and B.M.D

SOL.

$$\sum F_x = 0$$

$$X_b = 3$$

$$\sum M_a = 0$$

$$6 \times 1.5 + 4 \times 5 + 12 \times 9 + 4 \times 11 - Y_b \times 11 = 0$$

$$Y_b = 16.455 \text{ t}$$

$$\sum F_y = 0$$

$$Y_a + 16.455 - 6 - 4 - 12 - 4 = 0$$

$$Y_a = 9.545 \text{ t}$$

