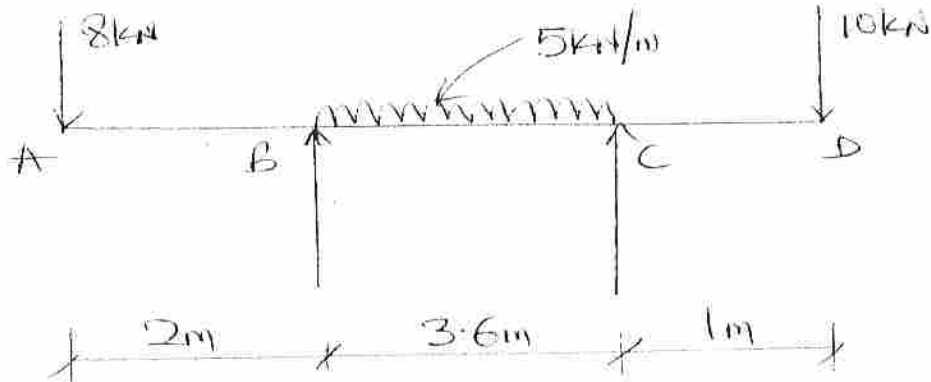




- iii. Mechanism of load transfer in buildings. (6 marks)
- c. With the aid of a diagram, derive and show that the maximum bending moment for a simply supported beam with uniformly distributed load  $= \frac{WL^2}{8}$

Where  $W$  = Intensity of load per length  
 $L$  = Length of beam (10 marks)

5. Sketch the bending moment and shear force diagrams of the beam system below. (20 marks)



6. The diagram below is a simply supported beam loaded as shown.
- a. Sketch the bending moment and shear force diagrams. (15 marks)
- b. What are the values of the bending moment at 2m from A and shear force at 2m from B? (5 marks)

