

ASSIGNMENT (CHAPTER 2)

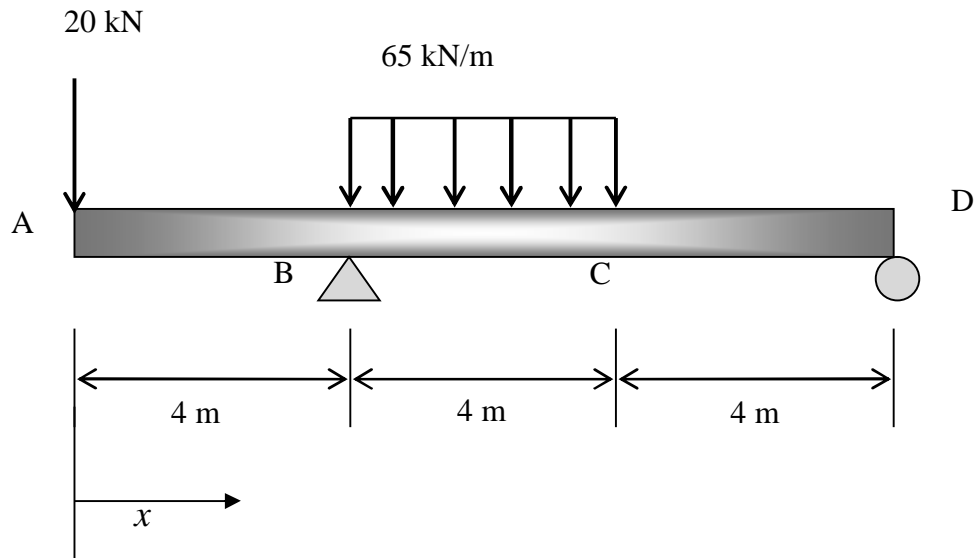


Figure Q1

An overhanging steel beam AD shown in **Figure Q1** is subjected to an axial compression load of 20 kN at point A and a uniformly distributed load with intensity of 65 kN/m acts along segment BC. Take EI for the beam as $20 \times 10^3 \text{ kNm}^2$. With the distance, x start from the overhanging point A and using the Unit Load Method, determine:

- The real moment function for segment AB, BC and DC
- The displacement at the center between segment BD
- The slope at the overhanging, A of the beam. using