

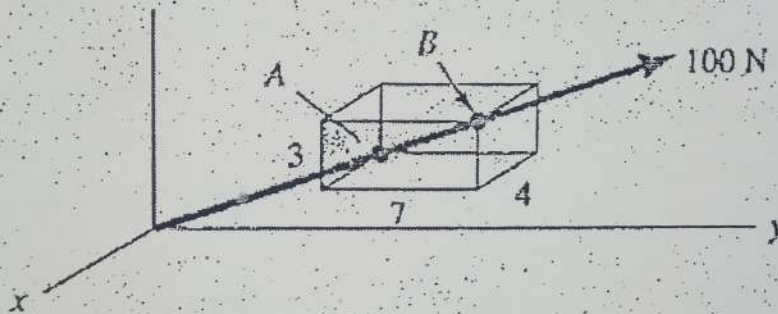
DEPARTMENT OF MECHANICAL ENGINEERING

ENGINEERING MECHANICS (M-32)

Note: Attempt all questions

Max. Marks: 15

Q: 1. Express the 100 N force in terms of the unit vectors i , j and k . What is the unit vector in the direction of 100 N force? The force lies along the diagonal AB.



Q: 2. Derive the equation for efficiency of a screw jack while lifting of loads.

Q: 3. Draw the Shear Force and Bending Moment diagrams for the beam shown below:

