# SNS College of Technology, Coimbatore-35. (Autonomous) <br> B.E - Mechatronics Engineering <br> 23MET101 Engineering Mechanics <br> Assignment Problem 

1. Three smooth pipes each weighing 20 KN and of diameter 60 cm are to be placed in a rectangular channel with horizontal base as shown in fig. Calculate the reactions at the points of contact between the pipes and between the channel and the pipes. Take, width of channel as 160 cm .

2. Determine the tension developed in each cord required for equilibrium of the $20-\mathrm{kg}$ lamp as shown.

3. Calculate the reactions R1, R2 and R3 for the two beams AB and CDsupported as shown. There being a Hingeconnecting B and C.

4. Find the support reactions of the beam shown of the beam shown

5. Find the support reactions of the beam shown of the beam shown

