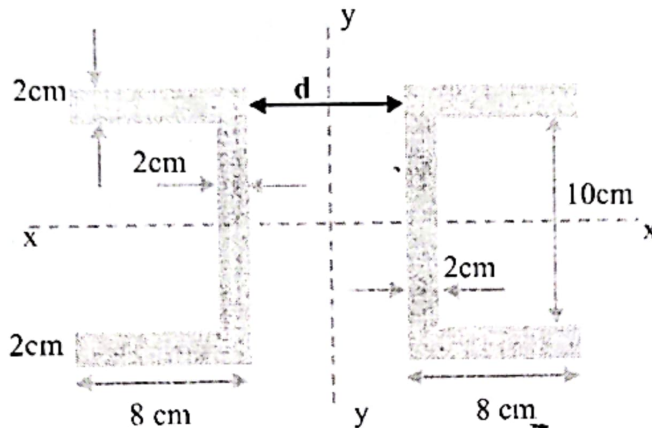
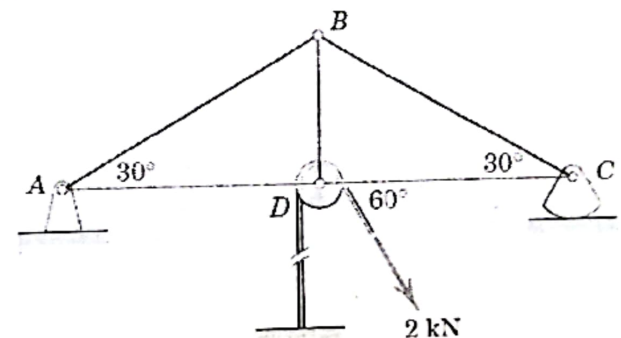
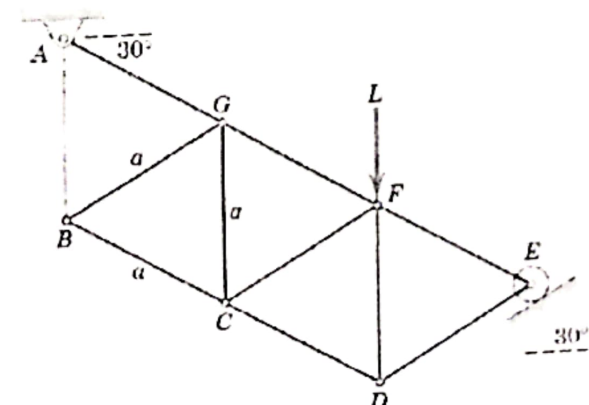


Maulana Azad National Institute of Technology, Bhopal
Department of Civil Engineering
Mid Term Exam-Apr. 2025

Class: B.Tech. II Semester
Subject: Engineering Mechanics
Total Questions: 03

Class: Section G
Subject code: CE24103
Max. Marks: 20

Note: All questions are compulsory. Assume any missing data suitably.

S.No.	Questions	Marks
Q1.	<p>Two equal Channels are kept as shown below at a distance d between them to form the cross-section of a column. Calculate the value of distance d if the centroidal moments of inertia I_{xx} and I_{yy} of the cross-section are equal.</p> 	08
Q2.	<p>Determine the force in each member of the truss using Method of Joints.</p> 	06
Q3	<p>The truss is composed of equilateral triangles of side a and is supported and loaded as shown. Determine the forces in members BC and CG using Method of sections.</p> 	06