

F.E.Semester I			
UNIT TEST-I	SUB: Engg.Mechanics	Max Marks:20	Duration: 1 Hr. Date:25.08.15
SET - B			
Instruction : 1) Solve any four questions (2) All questions carry 5 marks			

Q.1	Four Concurrent forces act at a point as shown. Find their resultant		5
Q.2	The beam is acted upon by the forces as shown. Determine magnitude, direction & position of resultant		5
Q.3	Explain various types of Loads on beam		5
Q.4	A circular roller of weight 1000N & radius 20cm is hanged by tie rod AB=40cm & rest against smooth vertical wall at C. determine tension in rod & reaction at C		5
Q.5	Find support reactions at A & B for the beam as shown.		5
Q.6	Locate the centroid of shaded portion with respect to OX & OY. Radius r= 90mm		5

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