K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

Subject Code: BSC204   Subject Name: Engineering Graphics

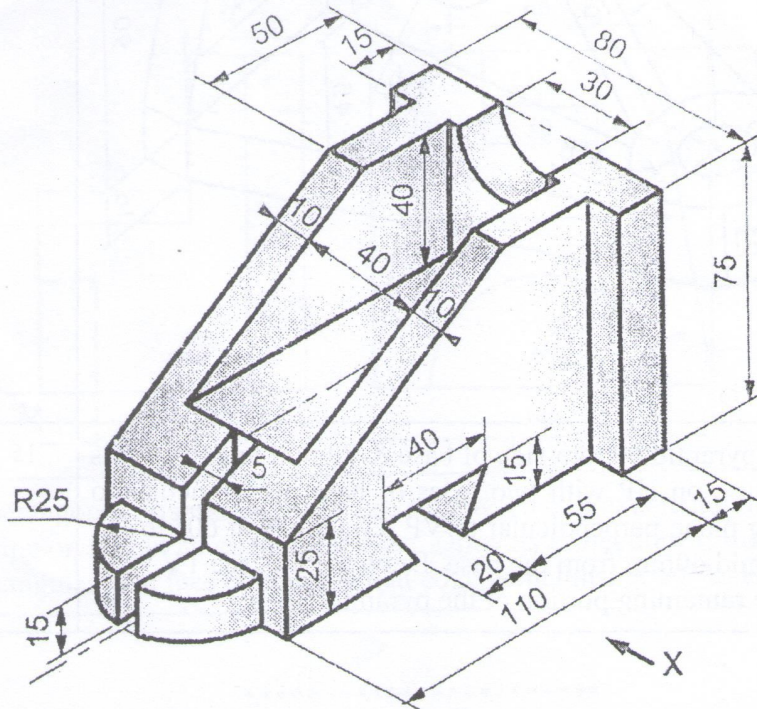Date: 25/05/2024

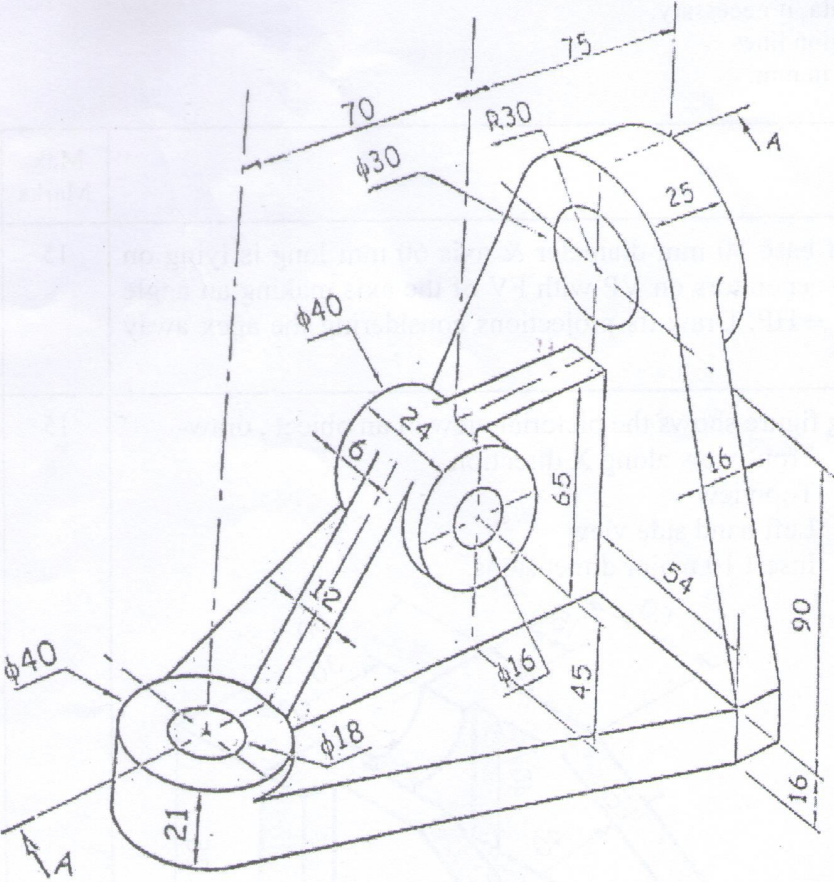|	
May-June 2024 (B.Tech) Program: All Branches Regular: FY Semester: II Course Code: BSC204 and Course Name: Engineering Graphics	
Duration: 3 Hours	Max. Marks: 60

Instructions:

(1) Attempt any <u>four</u> questions out of six questions.

(2) Assume suitable data, if necessary.

(3) Retain all construction lines.

(4) All dimensions are in mm.

		Max. Marks	CO	BT level
Q 1.	A cone of base 50 mm diameter & axis 60 mm long is lying on one of its generators on VP with FV of the axis making an angle of 45° with HP. Draw its projections considering the apex away from HP.	15	CO2	A

Q 2.	Following figure shows the pictorial view of an object, draw-
	    i) Front view along X direction
	    ii) Top view
	    iii) Left hand side view
	    iv) Insert 10 major dimensions
		15	CO4	A

Q 3.	Following figure shows the pictorial view of an object , draw-
	  i) Sectional front view along section A-A
	  ii) Top view
	  iii) Left hand side view
	  iv) Insert 10 major dimensions
		15	CO5	A

Q 4.	A hexagonal pyramid 40 mm side of base & 70 mm length of axis rests on its base on HP with two sides of base perpendicular to VP. A cutting plane perpendicular to VP & inclined at 60° to HP cuts the pyramid 40mm from the base. Draw the FV, sec TV, TSS & DLS of the remaining portion of the pyramid.	15	CO3	A

Q 5.	i)	The TV of 70mm long line AB measures 60 mm. the end A is 10 mm above HP & 20 mm in front of VP. The other end B is 70 mm in front of VP. Draw the projections of line AB & find inclinations of the line with HP & VP. Consider line in first quadrant.	09	CO1	A
	ii)	From the given 2D views shown in figure, draw an Isometric View.	06	CO6	A
Q 6.	i)	From the given 2D views shown in figure, draw an Isometric View	09	CO6	A
	ii)	A pentagonal prism of 40 mm base edge & 70 mm axis length is resting on HP on an edge of the base. Draw its projections if the rectangular side face containing that edge is inclined at 30° to HP.	06	CO2	A

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