[B19ME1201]

I B. Tech I Semester (R19) Regular Examinations
ENGINEERING DRAWING
(Common to CSE,ECE & IT)
Department of Mechanical Engineering
MODEL QUESTION PAPER

TIME: 3Hrs.   **Max. Marks: 75 M**

Answer **ONE Question** from **EACH UNIT.**
All questions carry equal marks.
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			CO	KL	M
		UNIT-I			
1.		An inelastic string 145 mm long has its one end attached to the circumference of a circular disc of 40 mm diameter. Draw the curve traced t by the other end of the string, when it is completely wnd arnd the disc, keeping the string always tight.	1	K3	15
		OR			
2.		Two fixed points A and B are 100mm apart, Trace the complete path of a point P moving (in the same plane as that of A and B) in such a way that the sum of its distance from A and B is always the same and equal to 125mm. Name the curve and draw another curve parallel to and 25mm away from this curve.	1	K3	15
		UNIT-II			
3.	a).	Draw the projections of the following points on the same grnd line, keeping the projectors 25mm apart. (i) Point A in the HP and lying 20mm behind the VP; (ii) Point B is 40mm above the HP and 25mm in front of the VP; (iii) Point C is 25mm below the HP and 25mm behind the VP; (iv) Point D is 15mm above the HP and 50mm behind the VP.	2	K3	8
	b).	) Draw the projections of a 75mm long straight line in the following positions: (i) parallel to and 30mm above the HP and in the VP; (ii) perpendicular to the VP, 25mm above the HP and its one end in the VP; (iii) Inclined at 30^0 to the HP and its one end 20mm above it, parallel to and 30mm in front of the VP.	2	K3	7
		OR			
4.		A line AB, of 80 mm long has its end **A**, 15 mm in front of VP and 20 mm above HP. The other end B is 40 mm above HP and 50 mm in front of VP. Draw the projections of the line and determine the inclinations of the line with HP and VP.	2	K3	15
		UNIT-III			
5.		Draw a rhombus of diagonals 100 mm and 60 mm long, with the longer diagonal horizontal. The figure is the top view of a square of 100mm long diagonals, with a corner on the grnd. Draw its front view and determine the angle which its surface makes with the grnd.	3	K3	15

		OR			
6.		A semicircular plate of 40mm diameter has its straight edge in the VP and inclined at 45° to the HP, the surface of the plate makes an angle of 30° with the VP. Draw its projections.	3	K3	15
		UNIT-IV			
7.		A hexagonal pyramid, base 25mm side and axis 50mm long, has an edge of its base on the grnd. Its axis is inclined at 30⁰ to the grnd and parallel to the VP. Draw its projections.	4	K3	15
		OR			
8.		Draw the projections of a cylinder 75mm diameter and 100mm long, lying on the grnd with its axis inclined at 30° to the VP and parallel to the grnd.	4	K3	15
		UNIT-V			
9.		A square pyramid with base side 40mm and height 60mm is resting on a cube of sides 50mm, the axes of the cube and the pyramid being in the same line. Two sides of the base of the pyramid are parallel to the edges of the cube. Draw the isometric view.	5	K3	15
		OR			
10.		Draw (i) Front View (ii) Top View (iii) Side View of the object shown below: All the dimensions are in mm	6	K3	15