Code No. : 11027

VASAVI COLLEGE OF ENGINEERING *(Autonomous)*, HYDERABAD
B.E. (CBCS) I-Semester Main Examinations, Dec.-2018/Jan.-2019
Engineering Drawing-I
(CSE, ECE & IT)

Time: **3** hours

Max. Marks: **60**

*Note: Answer **ALL** questions in **Part-A** and any **FIVE** from **Part-B***

Q.No.	Stem of the question	M	L	CO	PO
	Part-A (10 × 2 = 20 Marks)				
1.	Define reduced and enlarged scale.	2	1	2	1
2.	On a map, the distance between two points is 14cm. The real distance between them is 20km. Find the R.F.	2	2	2	2
3.	What are conic sections?	2	1	3	1
4.	Draw a regular pentagon of side 30mm.	2	2	4	1
5.	What is meant by projector and projection?	2	1	4	1
6.	A line 50mm long lying in the ground and it is parallel to the V.P. What will be the length of projections of the line in F.V. and T.V?	2	1	4	2
7.	Define horizontal and vertical trace of a plane.	2	1	4	1
8.	A circle of diameter 50mm resting on the HP, with the plane parallel to H.P. and perpendicular to V.P. Draw the projections.	2	2	4	2
9.	Define polyhedron. Give the three names of polyhedra.	2	1	4	1
10.	What is meant by truncated solid?	2	1	4	1
	Part-B (5 × 8 = 40 Marks)				
11. a)	Classify different types of lines as per BIS?	3	2	1	1
b)	Construct a vernier scale with R.F. = 1/2 to show decimeter, centimeter and Millimeter and to measure upto 4 decimeters. Mark on it a distance of 3.42dm, 0.37dm and 2.84dm.	5	3	2	2
12. a)	Draw a parabola of axis 40mm and height 60mm.	3	2	3	2
b)	Construct a ellipse with an eccentricity of 2/3. The distance of the focus from the directrix is 50mm. Also draw a tangent and normal to the curve at a distance of 30mm from the directrix.	5	4	3	2
13. a)	Point 'A' is 20mm above H.P. and 30mm in front of V.P. and point 'B' is in the H.P. and 36mm behind V.P. The distance between their projectors is 40mm. Draw the projectors of the points and straight lines joining their top and front views.	3	3	4	2
b)	A line AB, 75mm long is inclined at 30° to H.P. Its end 'A' is 15mm above H.P. and 30mm infront of V.P. Its front view measures 55mm. Draw the top view of AB and also traces of the line.	5	4	4	2

					M	L	CO	PO
14.	a)	Top view of a rectangular plane of 60mm and parallel to XY. Draw its front view, if its width is 40mm.			2	2	4	2
	b)	A semi circular lamina of 50mm resting on its straight edge on H.P. which makes an angle of 50° to V.P. Its surface is inclined at 30° to the H.P. Draw its Projections.			6	4	4	2
15.	a)	Draw the projection of a cube of side 40mm resting on H.P. with one of the solid diagonals of the cube makes 30° to V.P.			3	2	4	2
	b)	Draw the projections of right circular cone of base diameter 50mm and axis Length 70mm resting on one of its generators on V.P. with its axis parallel to H.P.			5	4	4	1
16.	a)	What are the two systems of placing dimensions on the drawing? Illustrate your answer with sketches.			3	1	1	1
	b)	Point 'P' is 40mm and 30mm from horizontal and vertical axes respectively. Draw a Hyperbola through it.			5	2	3	1
17.		Answer any *two* of the following:						
	a)	A straight line AB 60mm long has its end 'A' in H.P. and 'B' in the V.P. The line is inclined at 60° to H.P. and 30° to V.P. Draw its projections.			4	5	4	2
	b)	An equilateral triangle of 30mm side as its V.T. parallel to and 15mm above, it has no H.T. Draw its projections, when of its side is inclined at 30° to the V.P.			4	5	4	2
	c)	A top view of frustum of a right circular cone resting on H.P. are concentric circles of 60mm and 40mm diameters. Draw its front view when axis length is 50mm.			4	5	4	2

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome

S. No.	Criteria for questions	Percentage
1	Fundamental knowledge (Level-1 & 2)	50%
2	Knowledge on application and analysis (Level-3 & 4)	36%
3	*Critical thinking and ability to design (Level-5 & 6) (*wherever applicable)	14%

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