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Code No. : 11022 S(A)

**VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD**  
**B.E. (CBCS) I-Semester Supplementary (New/Old) Examinations, June/July-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*

**Part-A (10 × 2 = 20 Marks)**

1. What are the uses of Dotted line and Hatching line in engineering drawing?
2. What is meant by R.F? Give the values for various types of scales.
3. Define focus, directrix and vertex of a conic.
4. Define Ellipse and Hyperbola.
5. Why the first and third angle projections are followed in projections?
6. A line 50mm long is parallel to H.P. and 20mm above it, and perpendicular to V.P, one end of the line is on VP. Draw the projections.
7. A square of side 40mm is kept in such a way that it is perpendicular to both H.P. and V.P. Draw the projections.
8. Draw the trace of a plane which is perpendicular to H.P. and inclined at 60° to V.P.
9. Define regular polyhedra with two examples.
10. A cone of base diameter 50mm and 60mm long axis is resting on its base on H.P, Draw the projections.

**Part-B (5 × 8 = 40 Marks)**  
*(All sub-questions carry equal marks)*

11. a) A room of 1000m<sup>3</sup> volume is represented by a block of 125cm<sup>3</sup>. Find R.F.  
b) Construct a diagonal scale with R.F. = 1/200 to show meter, decimeter and centimeter and to measure upto 10meters. Mark on it a distance of 8.38m, 0.34m and 6.84m.
12. a) Draw a regular hexagon of side 20mm.  
b) Draw a hyperbola with an eccentricity of 3/2. 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.
13. a) Two pegs fixed on the wall are 4.5m. The distance between the pegs measured one parallel to the floor is 3.6m. If one peg is 1.5m above the floor, find the height of the second peg and inclination of the line joining the two pegs, with the floor.  
b) A line AB, 90mm long is inclined at 30° to H.P and 45° to V.P. Its end 'A' is 10mm above H.P. and 20mm in front of V.P. Draw the projections of AB.
14. a) Draw the projections of Rhombus having diagonals 120mm and 60mm long, the smaller diagonal of which is parallel to both the planes, while the other is inclined at 45° to the H.P.  
b) A circular plate of 50mm diameter resting on H.P on one of its point. Its plane is inclined at 30° to the H.P. Draw its Projections.

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15. a) Draw the projection of a square pyramid of base side 40mm and height 60mm resting on H.P. one of its corner is on HP, with axis inclined at  $40^\circ$  to H.P.
- b) Draw the projections of right circular cone of base diameter 30mm and axis 50mm, axis is perpendicular to HP and apex is on HP.
16. a) Draw a scale of 1:6 to show decimeter and centimeter to read upto 1m. Show on it a length of 5.5dm.
- b) Two points 'A' and 'B' are 110mm apart. A point 'C' is 75mm from 'A' and 60mm from 'B'. Draw an ellipse passing through A, B and C.
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  $40^\circ$  to H.P. and  $50^\circ$  to V.P. Draw its projections.
- b) A pentagonal plate resting on H.P. on one of its corners with its plane inclined at  $30^\circ$  to the H.P. Draw its projections.
- c) Draw the projections of a square pyramid of base side 40mm and axis length 70mm resting on one of its slant edge on H.P. with its axis parallel to V.P.

