AR16

CODE: 16ME1001 **SET-2**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

I B.Tech I Semester Supplementary Examinations, June, 2022

ENGINEERING DRAWING

(Common to CE, ME, CSE & IT)

Time: 3 Hours **Max Marks: 70**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1. The distance between two towns is 250 km and is represented by a line of length 50mm on a map. Construct a scale to read 600 km and indicate a distance of 530 km on it. 14M

(OR)

2. Construct an Ellipse by Concetric Circle Method for Major Axis 120mm and Minor Axis 80mm 14M

UNIT-II

3. A point P is 15 mm above the H.P. and 20 mm in front of the V.P. Another point Q is 25 mm behind the VPand 40 mm below the H.P. Draw the projections of P and Q keeping the distance between their projectors equal to 90 mm. draw straight lines joining (1) their top views and (2) their front views. 14M

(OR)

4. a A line CD 30 mm long is parallel to both the planes. The line is 40 mm above HP and 20 mm in front of V.P. Draw its projection. 6M
   b Draw the projections of straight-line AB 60 mm long parallel to HP and inclined at an angle of 40□ to V.P. The end A is 30 mm above HP. and 20 mm in front of V.P. 8M

UNIT-III

5. A square plane of side 40 mm has its surface parallel to and 20 mm in front of H.P. Draw its projections, when (a) a side is parallel to the VP, (b) one side is inclined at 30° to the VP., (c) all sides are equally Inclined to the VP. 14M

(OR)

6. A hexagonal plane of side 30 mm has an edge in the V.P. The surface of the plane is inclined at 45° to the VP and perpendicular to the H.P. Draw its projections. 14M

UNIT-IV

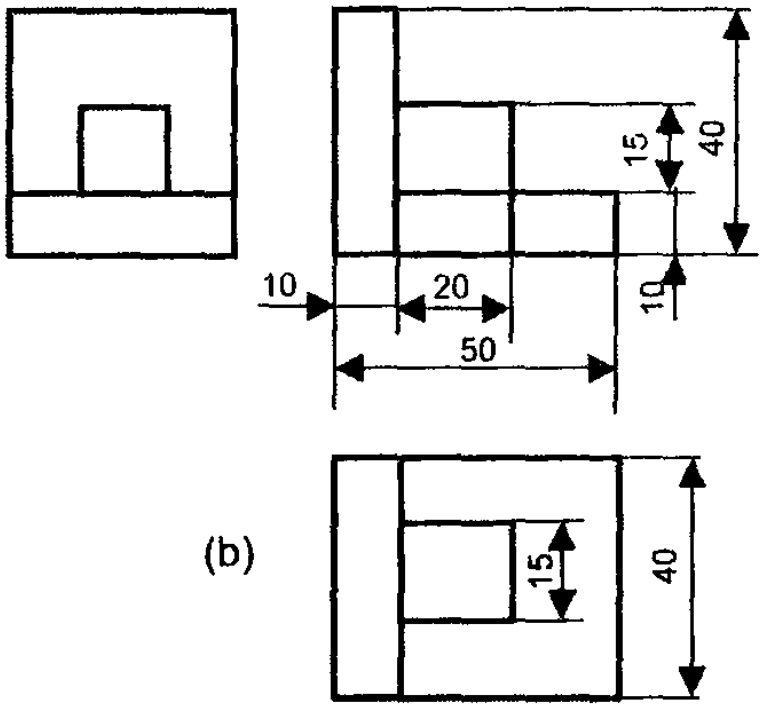
7. A hexagonal prism with side of base 30mm and axis 60mm long lies with one of its longer edges on HP such that its axis is perpendicular to V.P. Draw the projections of the prism when the base nearer to V.P is at a distance of 20mm from it. 14M

(OR)

8. Draw the projections of a cone, base 75 mm diameter and axis 100 mm long, lying on the H.P. on one of its generators with the axis parallel to the V.P. 14M

UNIT-V

9. Construct the isometric view from the given views below: 14M



(OR)

10. Construct the front view, top view and view from left hand side for the component shown below 14M