Code: 15A03101 **SS**

B.Tech II Year II Semester (R15) Supplementary Examinations December 2017

ENGINEERING DRAWING

(Electronics and Communication Engineering)

Time: 3 hours Max. Marks: 70

(Answer all five units, 05 X 14 = 70 Marks)

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UNIT – I

1 Draw an ellipse by oblong method. The major and minor axes given as 150 mm and 90 mm respectively. Draw normal and tangent at any point on the ellipse at a distance of 55 mm from the geometrical center of the ellipse.

OR

2 Show by means of a drawing that when the diameter of the directing circle is twice that of the generating circle, the hypocycloid is a straight line. Take the diameter of the generating circle equal to 50 mm.

UNIT – II

3 The distance between Delhi and Agra is 200 km and its equivalent distance on map measures 10 cm. Draw a diagonal scale to indicate 223 km and 135 km.

OR

4 (a) Draw the projections of the following points on the same reference line, keeping the projectors 50 mm apart.

(i) A, in the HP and 30 mm infront of VP.
(ii) B, 45 mm below HP and in the VP.
(iii) C, 40 mm above HP and 20 infront of the VP.

(b) Two points A and B are in the H.P. The point A is 30 mm in front of the VP, while B is behind the VP. The distance between their projectors is 75 mm and the line joining their top views makes an angle of 45° with xy. Find the distance of the point B from the VP.

UNIT – III

5 (a) A line AB, 100 mm long, is inclined at 30° to the HP and parallel to the VP. Its end A is in the HP and 30 mm infront of the VP. Draw its projections.

(b) Draw the projections of a regular pentagon of 25 mm side, with its surface making an angle of 45° with HP. One of the sides of the pentagon is parallel to HP and 15 mm away from it.

OR

6 A rhombus has its diagonals 100 mm and 60 mm long. Draw the projections of the rhombus when it is so placed that its top view appears to be a square of diagonals 60 mm long and the vertical plane through the longer diagonal makes 30 degrees with the VP.

UNIT – IV

7 A hexagonal prism, base 30 mm side and axis 75 mm long, has an edge of the base parallel to HP and inclined at 45° to the VP. Its axis makes an angle of 60° with the HP. Draw its projections.

OR

8 A cone of base diameter 40 mm and slant height 60 mm is kept on the ground on its base. An AIP inclined at 45° to the HP cuts the cone through the midpoint of the axis. Draw the development of remaining portion after removing the cutting portion.

UNIT – V

9 Draw the isometric projection of the frustum of a hexagonal pyramid of bottom base side 30 mm and top base side 15 mm having a height of 65 mm. the frustum is resting on HP on its bottom base with one of the edge of the base parallel to VP.

OR

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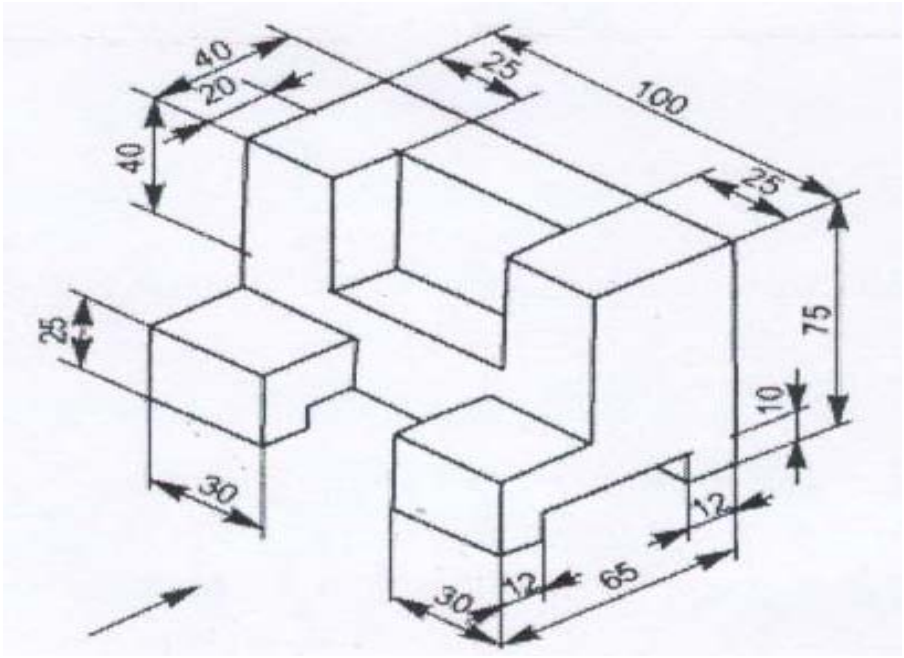
10 Draw the front view, top view and side view of the block shown in figure below. All dimensions are in mm.



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