SS

Code: 15A03101

B.Tech II Year I Semester (R15) Supplementary Examinations June 2017
ENGINEERING DRAWING
(Electrical and Electronics Engineering)

Time: 3 hours   Max. Marks: 70

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

UNIT – I

1   Two conjugate diameters EF and GH of an ellipse are 75 and 50 long with an included angle of
     60° between the two. Draw an ellipse passing through the points E, G, F and H.

OR

2   Draw a hypo-cycloid of a circle of 40 diameter, which rolls inside of another circle of 160 diameter,
     for one revolution counter clock-wise. Draw a tangent and a normal to it at a point 65 from the
     centre of the directing circle.

UNIT – II

3   Construct a diagonal scale of 1/48, showing meters, decimeters and centimeters and to measure
     up to 6 m. Mark a length of 3.76 m on it.

OR

4   (a) A point A is 15 above HP and 20 in front of VP. Another point B is 25 behind VP and 40 below HP.
          Draw the projections of A and B keeping the distance between the projectors equal to 90. Draw
          straight lines, joining their top views and front views.
     (b) A point A is 20 above HP and in the first quadrant. Its shortest distance from the reference line XY
          is 40. Draw the projections of the point and determine its distance from VP.

UNIT – III

5   A line of 100 long makes an angle 35° with HP and 45° with VP. Its mid-point is 20 above HP and
     15 in front of VP. Draw the projections of the line.

OR

6   A regular pentagonal plane of 25 side is resting on HP on one of its sides, while the opposite
     corner touches VP. Draw the projections of the plane, when it makes an angle 60° with HP.

UNIT – IV

7   Draw the projections of a cylinder of 40 diameter and axis 60 long, when it is lying on HP with its
     axis inclined at 45° to HP and parallel to VP.

OR

8   A square prism of side of base 40 and axis 80 long is resting on its base on HP such that a
     rectangular face of it is parallel to VP. Draw the development of the prism.

SS

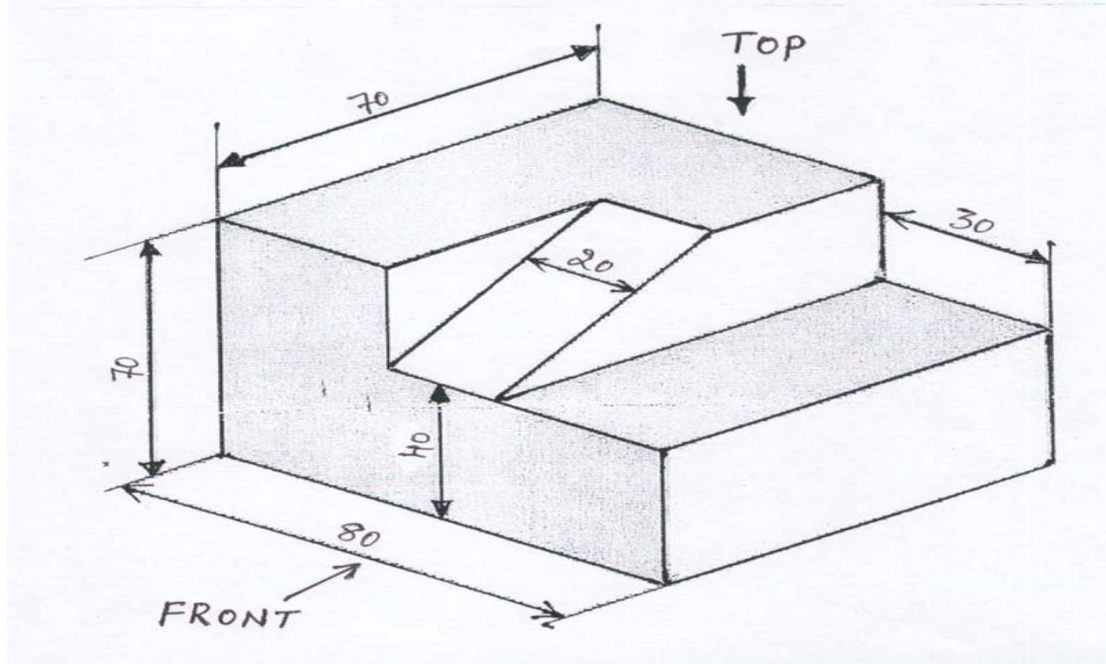9   Draw the isometric projection of a cone of base diameter 30 mm and axis 60 long:
        (i) Axis is vertically.
        (ii) Axis is horizontally.

OR

10   Draw the front view, top view and side view for the following isometric view.

*****