

B.Tech I Year I Semester (R15) Supplementary Examinations November/December 2019

ENGINEERING DRAWING

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

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

UNIT – I

- 1 Draw a parabola when the distance between its focus and directrix is 50 mm. Also draw a tangent and a normal at a point 70 mm from the directrix?

OR

- 2 Construct a hypocycloid, rolling circle 60 mm diameter and directing circle 180 mm diameter. Draw a tangent to it at a point 60 mm from the center of the directing circle.

UNIT – II

- 3 (a) The distance between two stations is 100 km and on a road map it is shown by 30 cm. Draw a diagonal scale and mark 46.8 km and 32.4 km on it.
(b) A point P is 10 mm above HP and 25 mm in front of VP. Point Q is 50 mm above HP and 45 mm in front of VP. The distance between the projectors is 55 mm. Draw the projections and draw the projection of line joining P & Q.

OR

- 4 (a) A forward reading vernier scale gives the following details 1 msd = 40 cm, 1 vsd = 25 cm, RF = 1:100. The scale is to be able to read up to 10 meters. Construct and mark on the scale a distance of 7.85 m and 8.15 m.
(b) Draw the projections of the following points on the same ground line, keeping the projectors 25 mm apart:
(i) In the HP and 20 mm behind the VP.
(ii) 40 mm above the HP and 25 mm in front of the VP.
(iii) In the VP and 40 mm above the HP.
(iv) 25 mm below the HP and 25 mm behind the VP.
(v) 15 mm above the HP and 50 mm behind the VP.
(vi) 40 mm below the HP and 25 mm in front of the VP.
(vii) In both the HP and the VP.

UNIT – III

- 5 A line measuring 80 mm long has one of its ends 60 mm above HP and 20 mm in front of VP, the other end is 15 mm above HP. The front view of the line is 60 mm long. Draw the top view.

OR

- 6 A circular plate of diameter 70mm has the end P of the diameter PQ in the HP, and the plane is inclined at 40° to HP. Draw its projections when:
(i) The top view of diameter PQ is inclined at 45° to X Y line.
(ii) The diameter PQ makes 45° with VP.

UNIT – IV

- 7 A pentagonal prism of base side 30 mm and axis 60 mm has one of its rectangular faces on the H.P and the axis inclined at 60° to the V.P. Draw the projections.

OR

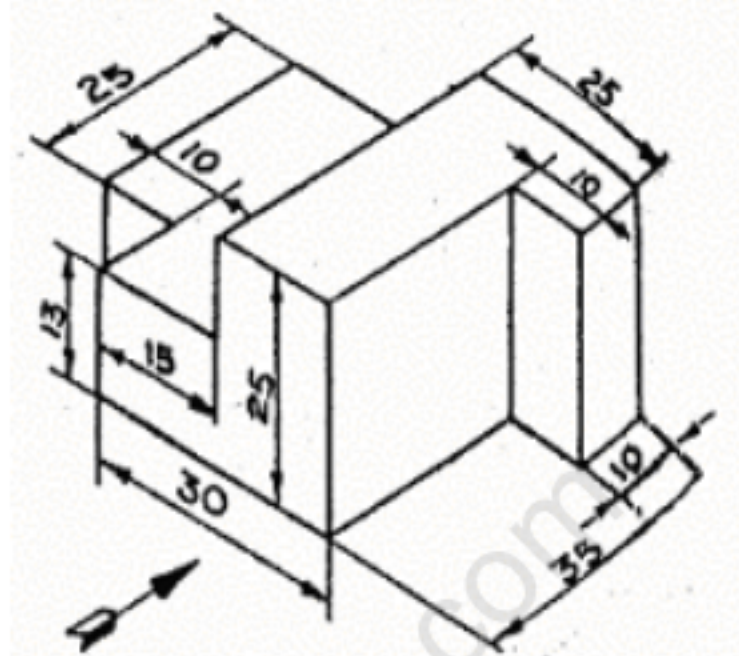
- 8 A cone of base diameter 50 mm and axis length 70 mm rests with its base on HP. A section plane perpendicular to V.P and inclined at 35° to HP bisects the axis of the cone. Draw the development of the truncated cone.

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UNIT - V

- 9 Draw the front view, top view and left side view for the picture shown in figure below.



OR

- 10 For the isometric view shown below figure below, draw:
(i) Front view. (ii) Top view. (iii) Left side view.

