Total No. of printed pages = 3

CE 181103

Roll No. of candidate

2018

B.Tech. 1st Semester End-Term Examination

ENGINEERING GRAPHICS AND DESIGN

(New Regulation) (w.e.f. 2017-2018)

(New Syllabus) (w.e.f. 2018-2019)

(Group-B)

Full Marks – 70   Time – Four hours

The figures in the margin indicate full marks
for the questions.

Answer Q.No. 1 is compulsory and any *five* from
remaining.

1.　(a)　Write freehand in single stroke capital letters of
　　　　 12 mm height, the following sentence :　　　(12)

　　　　 "Lettering is generally done in capital letters".

　(b)　Draw the projections of a point P is 25 mm
　　　　 below the H.P and 35 mm behind the V.P.　(8)

2.　Construct a plain scale of R.F = 1/45 to read yards
　 and feet and show 3 feet 2 yard and 4 feet 1 yard
　 on it.　　　　　　　　　　　　　　　　　　(10)

[Turn over

3. Two points P and Q are 100 mm apart. The point R is 75 mm from P·and 60 mm from Q. Draw an ellipse passing through P, Q and R. (10)

4. Construct a hyperbola when the distance of the focus from the directrix is 80 mm and eccentricity is 4/3.

(10)

5. A line PQ, 65 mm long makes an angle 30° with the V.P and 45° with H.P. Its end P is 25 mm above the H.P and 20 mm in front of V.P. Draw the projections of the line. (10)

6. A regular hexagon of 30 mm side has one side on the ground. Its plane is inclined at 45° to the H.P and perpendicular to the V.P. Draw the projections of the hexagon. (10)

7. Draw the projections of a square pyramid having one of its triangular faces in the V.P and the axis parallel to and 40 mm above the H.P. The base of the pyramid is of 30 mm side and axis is 75 mm long. (10)

8. A triangular prism, base 30 mm side and axis 50 mm long is lying on the H.P on one of its rectangular faces with its axis inclined at 35° to the V.P. It is cut by a horizontal section plane, at a distance of 12 mm above the ground. Draw its front view and sectional top view. (10)

9. Draw the isometric view of model, front view and top view are shown below. (All dimensions are in millimetres) (10)