I B. Tech I Semester Supplementary Examinations, May/June – 2019
ENGINEERING DRAWING
(Common to CSE, IT, Agri E)

Time: 3 hours   Max. Marks: 70

Note: 1. Question paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is Compulsory
3. Answer any **FOUR** Questions from **Part-B**
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PART –A

1. a) A triangular prism of base 30 mm and axis 55 mm long lies on its rectangular face   (6M)
in HP with its axis parallel to the VP. Draw the three views of the prism.

    b) An equilateral triangle of side 30mm stands on HP and one of its edges is inclined   (8M)
at 15° to HP. The lamina is parallel to VP and 20mm in front of it. Draw its
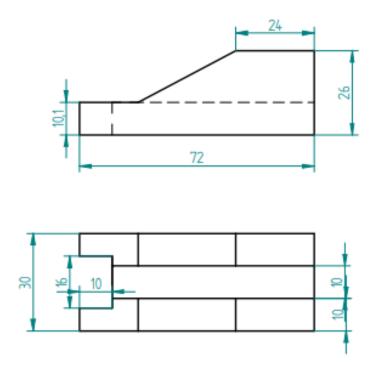projections.

PART –B

2. a) The major axis of an ellipse is 150 mm long and the minor axis is 100 mm long.   (6M)
Find the foci and draw the ellipse by arcs of circles method.

    b) The distance between two stations A and B is 100 kilometers and its equivalent   (8M)
distance on railway map measures 2.5 centimeters. What is the RF? Draw a
diagonal scale showing single kilometer and show on this scale the following
distances : (i) 577 kilometers (ii) 455 kilometers and (iii) 333 kilometers

3. a) Draw the projection of the following points along a common reference line.   (6M)
(i) Point A 20mm below HP and 25mm behind VP.
(ii) Point B 25mm away from the reference planes and is in IV quadrant.
(iii) Point C 20mm above HP and the same distance behind VP.

    b) The length of the top view of a line parallel to the VP and inclined at 45^0 to the   (8M)
HP is 50 mm. One end of the line is 12 mm above the HP and 25 mm in front of
the VP. Draw the projections of the line and determine its true length.

4. The front view of a line AB is inclined at 30^0 to the XY line and measures 60
mm. The line is inclined at 45^0 to VP. The end B is in HP and VT of the line is 20   (14M)
mm below HP. Draw the projections of the line, and find its true length and
inclinations with HP and VP.

5. Draw the projections of a circle of 50 mm diameter when its plane is equally   (14M)
inclined to HP and VP. One end of a diameter of the circle touches the HP while
the other end touches the VP.

6. Draw the projection of a tetrahedron of base side 30mm is kept such that a face is   (14M)
perpendicular to both HP and VP and one of its edges in HP and perpendicular to
VP.

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7.   Draw the isometric projection of the object from the views shown in figure   (14M) below. All dimensions are in mm.

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