Code No: R161206 **R16** SET - 1

I B. Tech II Semester Supplementary Examinations, Nov/Dec - 2019
ENGINEERING DRAWING
(Com. to CE, EEE, Bio-Tech)

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) Draw the projections of a 75 mm long line in the following positions (6M)
(i) Perpendicular to HP, 18 in front of VP, and its one end 12 m, above HP
(ii) Perpendicular to HP in the VP, and its one end is in HP.

b) A Pentagon of side 30mm, has one corner on HP. its plane is inclined at 65^0 to VP and perpendicular to HP. draw its projections. (8M)

PART –B

2. a) Draw an ellipse using arcs of circles method having major axis of 130 mm and foci being 100 mm apart. (7M)

b) Construct a vernier scale to read the distances corrected to decameter on a map in which the actual distances are reduced in the ratio of 1:50,000.The scale should be long enough to measure 8 km. Mark a length of 4.82 km on scale by constructing backward vernier scales. (7M)

3. a) A point H is 15 mm above HP, 10 mm behind VP and 10 mm in front of profile plane. Draw front view, top view and left side view of the point. (7M)

b) A line of 100 mm long is parallel to 30 mm above HP. Its two ends are 25 mm and 50 mm in front of VP respectively. Find its inclination with VP. (7M)

4. A line PQ of 90 mm long has its end P at 20 mm above HP and 25 mm in front of VP. Its front view and top view measure 75 mm and 80 mm respectively. Draw the projections of the line and determine its inclinations with HP and VP. Locate traces also. (14M)

5. A Square plane ABCD of side has its plane parallel to HP and 20 mm away from it. Draw its projections of the plane, when two of its sides are (i) parallel to VP (ii) Inclined at 30^0 to VP. (14M)

6. A hexagonal pyramid of base side 30 mm and axis 60 mm is lying on a slant edge on the HP with the axis parallel to VP. Draw its projections. (14M)
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7. Draw the front view, top view and side view of the figure.1. (14M)

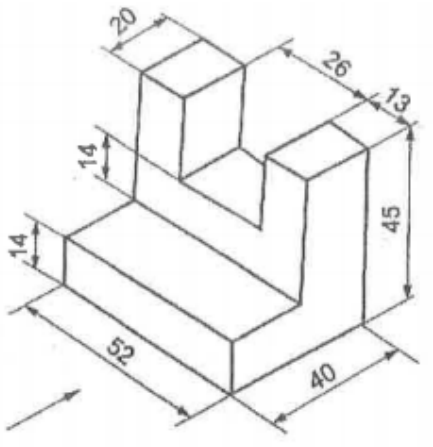

Figure.1