H.T.No. | | | | | | | | | | |

Code No: ME1501 **GEC-R14**

I B. Tech I Semester Supplementary Examinations, June 2017

ENGINEERING DRAWING

(Civil Engineering, Electrical and Electronics Engineering and Electronics and Communication Engineering)

Time: 3 Hours **Max. Marks: 60**

Note: Answer any Five Questions. All questions carry equal marks.

1. a) Inscribe a Hexagon in a circle of 60 mm diameter. (6M)

   b) Construct a vernier scale of R.F.= 1/25 and long enough to measure up to 4 m. Show 3.14 m and 0.28 m lengths on the scale. (6M)

2. Construct an ellipse when the distance between the focus and the directrix is 50 mm and the eccentricity 2/3. Also draw normal and tangent to the curve at a point 30 mm from the directrix. (12M)

3. a) Draw the projection of points given below on a common reference line with distance between the projectors as 20mm.

   Point A is 10 mm above HP and 25 mm in front VP.

   Point B is 10 mm above HP and on the VP.

   Point C is 25 mm below HP and 20 mm behind VP.

   Point D is 20 mm below HP and 20 mm in front of VP. (6M)

   b) A 100 mm long line AB is parallel to and 20 mm in front of VP. End A is 15 mm above HP while end B is 55 mm above HP. Draw the projections of the line and inclination of the line with HP. (6M)

4. A line *AB* 70 mm long has its end *A* 10 mm above H.P and 15 mm in front of V.P. Its front view and top view measures 50 mm and 60 mm respectively. Draw the projections of the line, determine its inclinations with H.P and V.P.

   (12M)

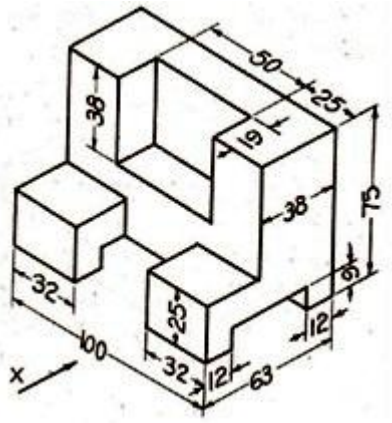
5. A hexagonal lamina of 24 mm side has its surface inclined at 30^0 to H.P. It's one side is parallel to H.P. and inclined at 45^0 to V.P. Draw its projections.

   (12M)

6. Draw the projections of a pentagonal pyramid having side of base 30 mm and length of axis 80 mm when it is resting on HP with a triangular face in VP. (12M)

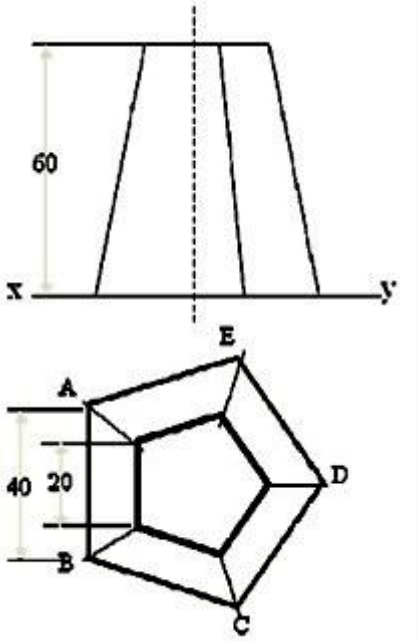
7. Pictorial view of an object is shown in Figure. Draw the following views.

   i) Front view ii) Top view iii) Left Side view (12M)



8. Draw the isometric view of the frustrum of the pentagonal pyramid whose projections are shown in the figure below

   (12M)



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