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

Code No: ME1501 **GEC-R14**

I B. Tech I Semester Supplementary Examinations, November 2017

ENGINEERING DRAWING

(Common to 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

5 × 12 = 60M

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

   b) The actual length of 600 m is represented by 30 cm on a drawing. Construct vernier scaleto read up to 400 m (6M)

2. a) Construct a conic when the distance of its focus from the directrix is equal to 50 mm and its eccentricity is 3/4. Draw a tangent at any point on the curve. (12M)

3. a) Draw the orthographic projections of the following points.

   i) Point T is in H.P and 30 mm. is behind VP.

   ii) Point U is in V.P. and 40 mm. below HP.

   iii) Point V is 20 mm behind V.P. and 35 mm. above H.P. (6M)

   b) A line AB 40 mm long is parallel to V.P. and inclined at an angle of 30^0 to HP. The end A is 15 mm above HP and 20 mm in front of V.P. Draw the projections of the line (6M)

4. a) A line AB, 90 mm long, is inclined at 30^0 to the H.P. Its end A is 12 mm above the H.P. and 20 mm in front of the V.P. Its front view measures 65 mm. Draw the top view of AB and determine its inclination with the V.P. (12M)

5. a) A semi circular plate of 80 mm diameter has its straight edge on VP and inclined at 30^0 to HP while the surface of the plate is inclined at 45^0 to VP. Draw the projections of the plate. (12M)

6. a) Draw the projections of a pentagonal prism of 40 mm side and axis 60 mm long when it is lying on HP on a corner of its base with its axis inclined at 45^0 to HP and parallel to VP. (8M)

   b) Draw the projections of a cylinder of diameter 60 mm and height 75 mm with its base rests on VP (4M)

7. a) Draw the isometric view of frustrum of hexagonal pyramid of base side 40 mm and height 60 mm and the edge of top surface is 20 mm length when the axis is vertical. (12M)

8. Draw the front view , top view and right side view of the diagram as shown below: (12M)