Code No: R201224 **R20** SET - 1

I B. Tech II Semester Regular/Supplementary Examinations, AUGUST- 2022

ENGINEERING DRAWING

(Com. to Mining, Agri. E, Pharm E)

Time: 3 hours Max. Marks: 70

Answer any five Questions one Question from Each Unit
All Questions Carry Equal Marks

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UNIT-I

1. a) Draw an ellipse having the major axis of 100 mm and the minor axis of 60 mm. (7M)

   b) The actual length of 500 m is represented by a line of 15 cm on a drawing. Construct a vernier scale to read up to 600 m. Mark on it a length of 568 m. (7M)

Or

2. Draw a hyperbola when the distance between its focus and directrix is 50 mm and eccentricity is 3/2. Also draw the tangent and normal at a point 25 mm from the directrix. (14M)

UNIT-II

3. The TV of a line CD measures 80 mm and makes an angle 55^0 with XY. End C is in VP and the HT of line is 25 mm above XY. The line is inclined at 30^0 to the HP. Draw the projections of line CD. Determine its true length, true inclination with VP and VT. (14M)

Or

4. a) Draw the projections of the following points on a common reference line. (7M)
   (a) P 35 mm behind the VP and 20 mm below the HP.
   (b) Q 40 mm infront the VP and 30 mm above the HP.
   (c) R 50 mm behind the VP and 15 mm above the HP.
   (d) S 40 mm below the HP and in the VP.
   (e) T 30 mm infront of the VP and 50 mm below the HP.

   b) Line AB is 55 mm long and it is 25^0 & 45^0 inclined to HP & VP respectively. End A is 15 mm above HP and 15 mm in front of VP. Draw projections. Line is in 1st quadrant. (7M)

UNIT-III

5. Semi-circular plate of 80 mm diameter has its straight edge on VP and inclined at 30° to HP, while the surface of the plate is inclined at 45° to VP. Draw the projections of the plate. (14M)

Or

6. A regular hexagon of 40mm has a corner in the HP. Its surface is inclined at 45^0 to the HP and the top view of the diagonal through the corner which is in the HP makes an angle of 60^0 with the VP. Draw its projections.9 (14M)

UNIT-IV

7. Draw the projections of a cone, base 75 mm diameter and axis 100 mm long, lying on the ground on one of its generators with the axis parallel to the VP. Assuming the cone to be resting on its base on the ground, draw its projections. (14M)

Or
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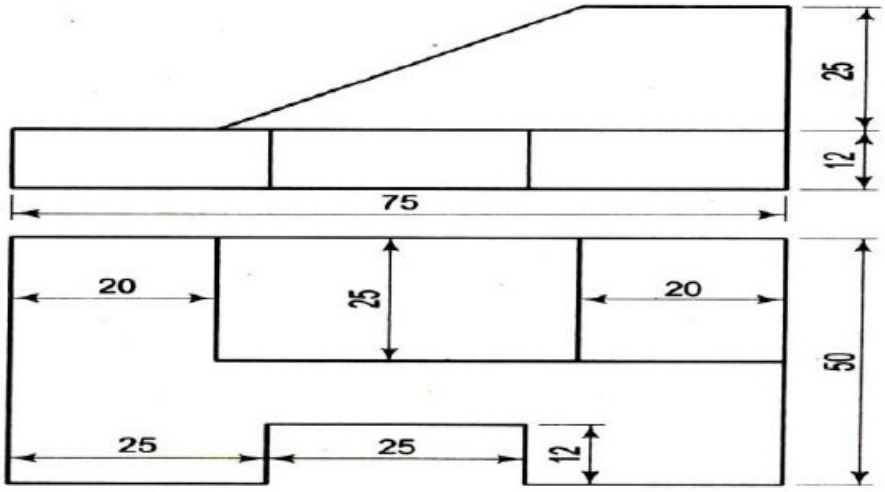
8. Draw the projections of hexagonal pyramid of base 25 mm and height 60 mm long, has an edge of its base on the ground. Its axis is inclined at 30^0 to the ground and parallel to the V.P. Draw its projections. (14M)

UNIT-V

9. Draw the isometric view of given casting as shown in figure below. All dimensions are in mm. (14M)



Or

10. Draw the a) Front view b) Side view from the left c) Top view as shown in figure below. All dimensions are in mm. (14M)