R18 Regulation Subject Code:2E2AK

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech II Semester Supplementary Examinations, September 2023

Engineering Graphics
(Common to ECE and CSE)

Maximum Marks: 70 Date:27.09.2023 **Duration: 3 Hours**

Note: 1.Part A consists of 5 Units. Answer any one full question from each unit.
2. Each question carries 14 marks and may have a, b, c, d as sub questions.

Part-A

Answer All the following questions. (14MX 5=70Marks)

1 Construct a Ellipse if the Fixed point is at a distance of 65mm from fixed straight line trace the path of the curve. [14]

OR

2 A fixed point is at a distance of 60 mm from fixed straight line. Name the curve. Trace the path of the curve if e =1. [14]

3 A thin circular plate of diameter 60mm appears in the front view as an ellipse of major and minor axes 60mm and 40mm respectively. Draw its projections when one of the diameters is parallel to both the reference planes. [14]

OR

4 The top view of 75 mm long line measures 65 mm while it's front view measures 55 mm. Draw the projections of the straight line when one of the end is 25 mm above HP and 30mm in front of VP. [14]

5 A cylinder of base diameter 50mm and height 65mm whose axis is inclined 30^0 to HP and 45^0 to VP. Draw its projects. [14]

OR

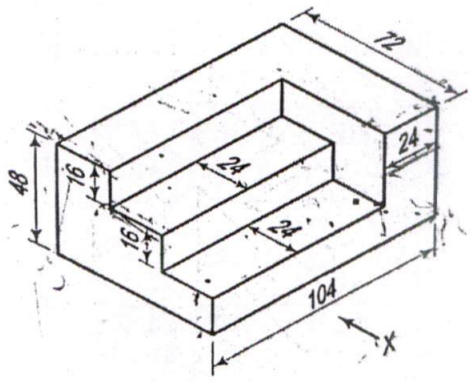
6 A Hexagonal prism of base side 30 mm and axis length 60 mm is inclined to H.P at 30° and its axis is inclined to V.P at 45° draw its projections. [14]

7 A hexagonal prism, edge of base 20 mm and axis 50 mm long, rests with its base on HP such that one of its rectangular faces is parallel to VP. It is cut by a plane perpendicular to VP, inclined at 45° to HP and passing through the right corner of the top face of the prism. Develop the lateral surface of the prism. [14]

OR

8 A cylinder base diameter 50 mm and axis length 60 mm is resting with its base on HP and it is cut by a section plane perpendicular to the V.P and inclined at 45° to the H.P and intersecting the axis at 15 mm from the top of the axis draw its development. [14]

9 Draw the front view, Left side view and top view of the given block. [14]



OR

10 Draw an isometric diagram from given orthographic projection views shown in figures. [14]