R20 Regulation **Subject code: 3E2AQ**

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech II Semester Supplementary Examinations, September 2023

Engineering Graphics

(ECE)

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 scale of 1:40 to read meters, decimeters and centimeters and long enough to measure up to 6m. Mark a distance of 4.76m on it. [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 Hexagonal Plane of side 30mm has its surface inclined to VP at 30° and one of its sides inclined to HP at 45°. Draw its projections when one of the sides is perpendicular to HP. [14]

OR

4 A line CD measuring 80mm is inclined at 30^0 to HP and 45^0 to VP. The point C is 20mm above HP and 30mm in front of VP. Draw its projects. [14]

5 Draw the projections of a cylinder, base 30 mm diameter and axis 40 mm long, resting with a point of its base circle on HP such that the axis is making an angle of 30^0 with HP and parallel to VP. [14]

OR

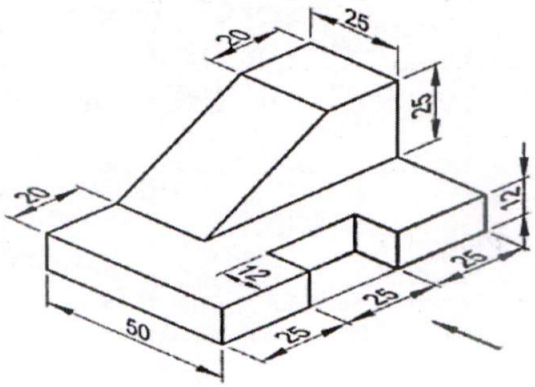
6 A Hexagonal pyramid of base side 30 mm and axis length 60 mm is inclined to H.P at 30^0 and its axis is inclined to V.P at 45^0 draw its projections. [14]

7 A cylinder of base diameter 50mm and height 65mm rests on its base on HP. It is cut by a plane perpendicular to VP and inclined at 30° to HP and meets the axis at a distance 30mm from the base. Draw the front view, sectional top view. [14]

OR

8 A square pyramid of base side 25 mm and altitude 50 mm rests on it base on the HP with two sides of the base parallel to the VP. It is cut by a plane bisecting the axis and inclined a 30° to the base. Draw the development of the lateral surfaces of the lower part of the cut pyramid. [14]

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



OR

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