*R20 Regulation* *Subject code:3E1AE*

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

## B. Tech I Semester Supplementary Examinations, June 2026

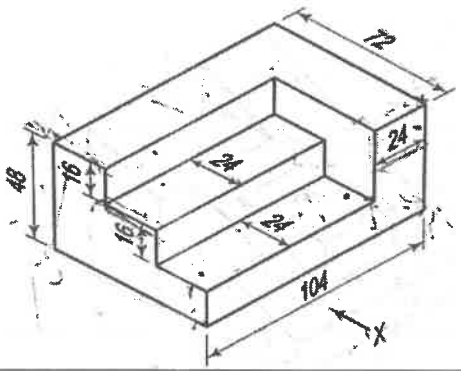
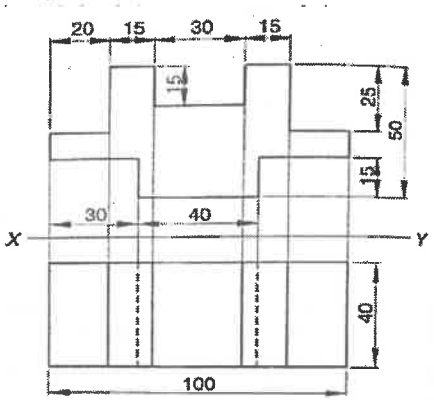
## ENGINEERING GRAPHICS

*(Common to CE, ME, CSE, CSE(AI&ML), CSE(DS) & IT)*

***Maximum Marks: 70*** Date: 25.06.2026 Duration: 3 hours

**Note:** **1. Consists of 10 questions. Answer any 5 questions**
**2. Each question carries equal marks**

| All the following questions carry equal marks (14X5M=70 Marks) | | Marks | CO | BTL |
|---|---|---|---|---|
| 1 | 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 | 14M | 1 | L1 |
| | OR | | | |
| 2 | A circle of 40 mm diameter rolls on a horizontal line for one revolution clockwise trace the path of the curve. Also draw tangent and normal to it at 40 mm from base line. | 14M | 1 | L1 |
| 3 | Line AB 75mm long makes $45^0$ inclinations with VP while its FV makes $55^0$.end A is 10 mm above HP and 15 mm in front of VP. If line is in 1st quadrant draw it's projections and find it's inclination with HP. | 14M | 2 | L1 |
| | OR | | | |
| 4 | A regular pentagonal plane of side 30 mm has its surface is inclined to H.P at $30^0$ and side inclined to V.P at $45^0$ draw its projections when on one of its side of pentagon is perpendicular to V.P. | 14M | 2 | L1 |
| 5 | A square pyramid of base side 35mm, axis height 70mm is resting on HP on one of its base corners with its axis inclined at 50° to HP and parallel to VP. Draw its projections when the base sides containing the resting corners are equally inclined to HP. | 14M | 3 | L1 |
| | OR | | | |
| 6 | A Hexagonal prism 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. | 14M | 3 | L1 |
| 7 | A cone of 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 bisecting axis. Draw its development. | 14M | 4 | L1 |
| | 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. | 14M | 4 | L1 |

| | | | | |
|---|---|---|---|---|
| 9 | Draw the front view, Left side view and top view of the given block   | 14M | 5 | L1 |
| | OR | | | |
| 10 | Draw an isometric diagram from given orthographic projection views shown in figure below.   | 14M | 5 | L1 |