



R22 Regulation

Subject code: 4E2AK

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech II Semester Regular/Supplementary Examinations, July 2025

COMPUTER AIDED ENGINEERING GRAPHICS

(ECE)

Maximum Marks: 60

Date: 11.07.2025

Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

| All the following questions carry equal marks (10X1M=10 Marks) | | Marks | CO | BTL |
|--|--|-------|----|-----|
| 1.a | Define Representative fraction. | 1M | 2 | I |
| b | What is function of "Trim " in Auto CAD. | 1M | 1 | I |
| c | What is auxillary plane? | 1M | 3 | I |
| d | Define orthographic projection. | 1M | 2 | I |
| e | What is meant by a regular solid. | 1M | 3 | I |
| f | What is apex of a cone. | 1M | 3 | I |
| g | Define development of surface. | 1M | 4 | I |
| h | What are the application of development of surfaces. | 1M | 4 | I |
| i | Define isometric scale. | 1M | 5 | I |
| j | What is isometric length. | 1M | 5 | I |

Part-B

| Answer All the following questions. (5X10M=50Marks) | | Marks | CO | BTL |
|---|--|-------|----|-----|
| 2 | Draw a diagonal scale of R.F=3/100, showing decimeters, meters, centimeters, and to measure up to 5 meters. Show the length of 3.69 meters on it. | 10M | 1 | III |
| OR | | | | |
| 3 | Construct a parabola when the distance of the focus from the directrix is 50 mm. Draw the normal and tangent at any point on curve. | 10M | 1 | III |
| 4 | A line AB, 75 mm long is inclined at 45 degrees to the H.P and 30 degrees to the V.P. Its end B is in the HP and 40mm in front of VP. Draw its projections. | 10M | 2 | III |
| OR | | | | |
| 5 | A thin rectangular plate of sides 60m x 30mm has its shorter side in the V.P and inclined at 30 degrees to the H.P. Project its top view if its front view is a square of 30mm long sides. | 10M | 2 | III |
| 6 | A square pyramid of 50 mm side of base 50mm length of axis is resting with one of its triangular faces on the H.P having a slant edge containing that face parallel to the V.P. Draw the projections of the pyramid. | 10M | 3 | III |

