



R18 Regulation

Subject code:2E7EF

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, November 2025

## COMPUTER GRAPHICS

(CSE)

Maximum Marks: 70

Date: 26.11.2025

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 (10X2M=20 Marks)		Marks	CO	BTL
1	Define computer Graphics and Applications?	2M	1	L1
2	Distinguish between Random And Raster Scand Display?	2M	1	L1
3	What is the Transformation?	2M	2	L1
4	Define Translation?	2M	2	L1
5	What are the various representation schemes used in three dimensional objects?	2M	3	L1
6	What is the use of control points?	2M	3	L1
7	What are subtractive colors?	2M	4	L1
8	Differentiate flat and smooth shading?	2M	4	L1
9	Define geometric fractal?	2M	5	L1
10	What is random fractal?	2M	5	L1

### Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Explain in detail video display devices.	10M	1	L2
OR				
12	Explain about Scan-line Polygon filling and boundary-fill and flood fill algorithms.	10M	1	L2
13	Explain the following basic two dimensional geometric Translation, scaling, rotation, reflection and shear transformations.	10M	2	L2
OR				
14	Explain in detail the Sutherland-Hodgeman clipping algorithm with an example.	10M	2	L2
15	Explain the following basic three dimensional object transformation.	10M	3	L2
OR				

16	Explain in detail the Polygon surfaces.	10M	3	L2
17	Explain Back face detection method.	10M	4	L2
	OR			
18	Explain the polygon rendering methods.	10M	4	L2
19	Design of animation steps for design of animation sequence.	10M	5	L2
	OR			
20	Explain about the general computer animation functions, and computer animation languages.	10M	5	L2