



# KNS INSTITUTE OF TECHNOLOGY

## DEPARTMENT OF CSE

### Question Bank for 1<sup>st</sup> IA Test

Academic Year (2021 – 2022)

Semester	VI <sup>th</sup>	Subject Code	18CS62	Subject Name	Computer Graphics	Date	05/05/22
Faculty	Shilpa S P						

#### Course Outcomes:

CO1: Knowledge about the computer graphics and visualization.

CO2: Explain Hardware and software open GL Primitive.

CO3: Implementation of algorithm for 2D graphics Primitives and attributes.

The following are the knowledge levels according to Bloom's taxonomy.

**L1 Remember**

**L2 Understand**

**L3 Apply**

**L4 Analyse**

**L5 Evaluate**

**L6 Create**

Q.NO	QUESTIONS	M	CO	Knowledge level
1	What is computer graphics? Explain the various applications of the computer graphics.	8	CO1	L1, L2
2	Write the difference between the Raster Scan and Random Scan display.	8	CO1	L1, L2
3	Explain the diagram of the different Cartesian reference frames are used in the process of constructing and displaying a Scene.	9	CO2	L1, L2
4	With necessary steps .Explain the Bresenham's line drawing algorithm. Consider the line from (5,5) to (13,9) .Use the Bresenham's algorithm to rasterize the line	9	CO3	L1, L2,L4,
5	Write the circle drawing algorithm. Given the circle radius r=10, solve the midpoint circle algorithm by determining positions along the circle octant in the first quadrant from x=0 to x=y.	9	CO3	L1, L2, L4
6	What is DDA? Explain the DDA algorithm with procedure and with an example.	8	CO3	L1, L2, L4
7	Explain the different open Gl primitive .Explain each primitive with an example.	8	CO2	L1, L2
8	List the major groups of API functions in open GL .With an example Explain any four of them.	9	CO1 CO2	L1, L2
9	Using the GLUT function .Explain in brief Display window management by setting the 400 by 300 and position (50,100)	9	CO1 CO2	L1, L2

10	Explain in brief a complete open GL Program with an example.	8		L1, L2
11	What is open GL .Write the different open GL points functions .Explain each point function with an example.	8		L1, L2
12	Explain a world coordinate reference frame in opn GL by specifying a two dimensional.	8	CO2	L1, L2
13	Define a)Bitmap b) Pixmap c) aspect ratio d) Frame buffer	8	CO2	L1,L2
14	With a neat diagram Explain in brief Random Scan display.	8	CO2	L1,L2
15	How do you classify the polygon? Explain the open GL polygon fill area Primitives.	9	CO2	L1,L2
16	Write a C Program to generate a Line Using DDA Algorithm?	8	CO3	L1,L2,L4
17	With a neat diagram Explain in brief Raster Scan display.	8	CO1,C O2	L1,L2
18	What are the advantages and disadvantages of DDA Algorithm?	8	CO1,C O2	L1,L2
19	Write a C Program to generate a Line using Bresenham's algorithm?	8	CO3	L1,L2,L4
20	Define a) World coordinates c) viewing coordinates b)Modeling coordinates d) Normalized coordinates	8	CO1,C O2	L1,L2

**Signature of the Staff In charge**

**Signature of H.O.D**