



# K.S. INSTITUTE OF TECHNOLOGY, BANGALORE - 560109

## I SESSIONAL TEST QUESTION PAPER 2020 - 21 EVEN SEMESTER

SET A

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**Degree** : B.E  
**Branch** : Computer science & Engg  
**Course Title** : Computer Graphics & Visualization  
**Duration** : 90 Minutes

**Semester:** VI A&B  
**Course Code:** 18CS62  
**Date :** 24.05.2021  
**Max Marks :** 30

**Note: Answer ONE full question from each part.**

Q No.	Question	Marks	CO mapping	K-Level
<b>PART-A</b>				
1(a)	<b>Identify</b> the applications of Computer Graphics and Compare Raster scan, Random scan displays.	6	C01	K3 (Applying)
(b)	<b>Explain</b> Bresenham's line drawing algorithm and digitise the line end points (20,10) and (30,18) using the same algorithm.	6	C01	K3 (Applying)
(c)	<b>Explain</b> DDA algorithm with an example	6	C01	K3 (Applying)
<b>OR</b>				
2(a)	<b>Build and Explain</b> the Basic Design of CRT and working of Electron gun	6	C01	K3 (Applying)
(b)	<b>Applying</b> Midpoint Algorithm, digitise the circle for first quadrant with radius(r)=10	6	C01	K3 (Applying)
(c)	<b>Develop</b> an OPENGL program to draw a LINE and RECTANGLE	6	C01	K3 (Applying)
<b>PART-B</b>				
3(a)	<b>Apply</b> the illustrations of the basic 2-d geometric transformations used in computer graphics.	6	C02	K3 (Applying)
(b)	<b>Illustrate</b> with neat diagram, the two algorithms for identifying interior area of a plane figure.	6	C02	K3 (Applying)
<b>OR</b>				
4(a)	<b>Brief</b> any SIX OPENGL output primitive functions and Polygon fill area functions	6	C02	K3 (Applying)
(b)	<b>Illustrate</b> with neat diagram, the General Scan line Polygon Fill Algorithm.	6	C02	K3 (Applying)

Semester	Section	Name of the faculty	E-Mail
6	A	Dr Dayananda R B	dayanandarb@ksit.edu.in
6	B	Mrs. Sougandhika Narayan	sougandhikanarayan@ksit.edu.in