C. U. SHAH UNIVERSITY
Summer Examination-2022

Subject Name : Computer Graphics

Subject Code : 4TE06CGR1   **Branch: B.Tech (CE)**

Semester: 6   **Date: 02/05/2022**   **Time: 02:30 To 05:30**   **Marks: 70**

Instructions:
  (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  (2) Instructions written on main answer book are strictly to be obeyed.
  (3) Draw neat diagrams and figures (if necessary) at right places.
  (4) Assume suitable data if needed.

Q-1	**Attempt the following questions:**	**(14)**
	a) Write full form of GUI	1
	b) Write full form of CAD	1
	c) What is Pixel?	1
	d) Enlist any two graphics input devices.	1
	e) Enlist any two graphics output devices.	1
	f) Write full form of BIOS.	1
	g) What is Computer Graphics?	1
	h) Write full form of DDA.	1
	i) State True or False.	1
	"Joystick is Input Device"	
	j) CRT stands For_____	1
	k) What is Random Scan?	1
	l) What is Raster Scan?	1
	m) Which function is used to check the color of a pixel?	1
	a) set pixel	
	b) get pixel	
	c) inquiry function	
	d) status function	
	n) What is Illumination?	1

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all questions	(14)
(A)	Explain any five applications of graphics in various fields.	10
(B)	Write a short note on Mouse	04
Q-3	Attempt all questions	(14)
(A)	Differentiate between Raster Scan and Random Scan	7
(B)	Explain DDA algorithm in brief.	7

Q-4		Attempt all questions	(14)
	(A)	Explain Bresenham's Line Drawing Algorithm in brief.	7
	(B)	Write a brief note on "CRT"	7

Q-5		Attempt all questions	(14)
	(A)	Enlist and Explain any two types of printers.	7
	(B)	Enlist and Explain types of scanners.	7

Q-6		Attempt all questions	(14)
	(A)	Explain Bresenham's Circle Drawing Algorithm in brief.	7
	(B)	Explain 2D Transformation with necessary Diagram.	7

Q-7		Attempt all questions	(14)
	(A)	Explain HSV color model and CMY Color model.	7
	(B)	Explain Window Port and View Port in brief.	7

Q-8		Attempt all questions	(14)
	(A)	What is refresh rate? How does refresh rate affects picture quality? Explain.	7
	(B)	Explain illumination Model in brief.	7