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SEAT No.

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## SARDAR PATEL UNIVERSITY

## **BCA Examination**

5<sup>th</sup> Semester (CBCS) (Regular & NC) Wednesday, Date: 24<sup>th</sup> October, 2018

Session: Evening Time: 02:00 P.M. TO 05:00 PM

Subject Code: US05CBCA02	
Subject Title : Computer Graphics	Total Marks: 70

Q1,	Multipl	e Choice Questions. (Attempt a	all)		[10]
1.		application of computer buildings and circuit layouts.  . Computer Art		phics is used by designers to	
		: Entertainment		Presentation Graphics CAD	
2.		one of the following is the part of layed on the screen.			
		Magnetic coils	b.	Electrical coils	
	C.	Control Grid		Focusing system	
3.	is also known as calligraphic display .				
	a.	Raster scan	b.	Random scan	
	C.	Color display	d.	Plasma display	
4.	In Odd- line is	Even rule, the point is an odd number.	, if no	umber of edges crossed by the	
		Crossing through the vertex		Interior	
	C.	Exterior	d.	Both b and c	
5.	A Rotat	ion transformation moves the obj	ect a	along the path.	٠.
		Straight		Circular	
	C.	Arbitary	d.	Random	
6.	DDA is	an algorithm		·	
	a.	to draw a line	b.	to draw a polygon	
	C.	to clip a polygon	d.	to clip a line	
7.		v defines			
		What to display		Where to display	
	C,	Fized point	d.	Random point	
8.		SH, the default frame rate at whic per second.	h an	imation is played is	4.5
	a.	60	b.	12	
	C.	30	d.	25	
9.	The def	ault color of stage in FLASH is $\_$		• • •	
	a.	Blue	b.	Black ·	
	c.	White	d.	Yellow	
10.	animations are indicated by a black dot at the beginning keyframe; intermediate tweened frames have a black arrow with a light-blue background.				
	a.	Motion guide		Shape tween	
	C.	Frame by frame	d.	Motion tween	÷

22.	Answer the following short questions (Attempt any TEN)	[20]
1.	Explain shadow mask method in brief.	1~0]
2.	State advantages of DVST over Cathode Ray tubes.	
3.	What is horizontal and vertical retrace? In which scan technology it is used.	
4.	Differentiate between : serif and sans serif fonts.	
5.	What is inside-outside test? List various methods used for the same.	
6.	Draw and name the types of joins used when two line thick line segments intersect.	
7.	What is Scaling? Explain how does it differ from shear.	
8.	What is Clipping? List out all objects that can be clipped.	
9.	List all 2-D geometric transformations.	
10.	Define: i) Layer ii) Key Frame.	
11.	Explain frame-by-frame animation in brief.	
12.	Explain play and stop button in brief.	
Q3.a.	Explain applications of Computer Graphics in detail.	[06]
b.	Explain any one Flat Panel devices in brief.	[04]
	OR	[0.1]
Q3.a.	Explain construction and working of Cathode Ray Tubes with labeled diagram in detail.	[06]
b.	Explain any 2 graphics input devices in brief.	[04]
Q4.a.	Write steps for Bresenham line drawing algorithm.	[06]
b.	Explain Odd-Even rule in detail.	[04]
	OR	
Q4.a.	Write steps for Mid-Point circle generation algorithm.	[06]
b.	Explain procedure for Boundary fill algorithm using 4 connected approach.	[04]
Q5.a.	Explain Reflection transformation in detail with diagram.	[05]
b.	Explain Window-to-viewport transformation in detail.	[05]
	OR	
⊋5.a.	What is Geometric transformation? Explain translation transformation in detail with diagram.	[05]
b.	Explain concept of line clipping using Cohen-Sutherland line clipping procedure in detail.	[05]
Q6.	Explain Toolbox of flash in detail.	[10]
	OR	- "
Q6.	Explain following animations with example :	[10]
į	) Shape Tween ii) Motion Guide	

