Time: 2 hour 30 minutes   Max. Marks: 80
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Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	In computer graphics, pictures or graphics objects are presented as a collection of discrete picture elements called_____
Option A:	Dots
Option B:	Coordinates
Option C:	Points
Option D:	Pixels
2.	Which of the following options is not correct according to the definition of Bresenham's line drawing algorithm?
Option A:	It gives exact line points.
Option B:	It is an incremental error algorithm.
Option C:	It gives a close approximation of points of line by determining n-dimensional raster that should be selected.
Option D:	None of the above
3.	The size of an object can be changed using _____.
Option A:	shear transformation
Option B:	scaling transformation
Option C:	reflection transformation
Option D:	parallel transformation
4.	Multimedia systems require hard real time scheduling
Option A:	To deliver the media files to the client
Option B:	To ensure critical task will be serviced within timing deadlines
Option C:	Security
Option D:	To minimize the delay
5.	What is Digital Image Processing?
Option A:	It's an application that alters digital videos
Option B:	It's a machine that allows altering digital images
Option C:	It's a system that manipulates digital medias
Option D:	It's a software that allows altering digital pictures
6.	Which one of the following is the characteristic of a multimedia system?
Option A:	high storage
Option B:	high data rates
Option C:	both high storage and high data rates
Option D:	None of the above
7.	A ____ file uses a much more complex technique.
Option A:	BMP
Option B:	GIF
Option C:	JPEG
Option D:	JPG

8.	Which of the following ports resembles the coordinates from the real-world system?
Option A:	View Port
Option B:	Universal Port
Option C:	Window Port
Option D:	None of the above
9.	In DDA line drawing algorithm, Δx or Δy, whichever is _____, is chosen as one raster unit.
Option A:	Larger
Option B:	1
Option C:	0
Option D:	Smaller
10.	Fractals deals with curves that are _____
Option A:	regularly irregular
Option B:	irregularly irregular
Option C:	irregularly regular
Option D:	regularly regular

Q2	Solve any Four out of Six 5 marks each
A	Compare Raster and Random scan techniques.
B	List & Explain Multimedia Elements.
C	Explain Mid-Point Circle Drawing algorithm.
D	Explain 3D transformation with suitable example for each.
E	What are different Aliasing and Antialiasing techniques? Explain any one technique in detail.
F	Explain Component Video, Composite Video and S-video.

Q3	Solve any Two Questions out of Three 10 marks each
A	List various Polygon Filling Algorithms and Explain Boundary fill algorithm in detail.
B	Explain Cohen Sutherland line clipping algorithms in detail.
C	Define compression technique and explain any one technique with example.

Q4.	Solve any Two Questions out of Three 10 marks each
A	State important properties of Bezier curves. How can a Bezier surface be generated from Bezier curves?
B	Describe Weiler –Atherton Polygon Clipping Algorithm.
C	Explain Shannon-Fano Algorithm for Data Compression with example.