

**Subject: Computer Graphics and Multimedia Systems**

**Branch: Information Technology**

**Class: TE**

**Semester: V**

**Marks: 80**

Q1. Attempt all Questions. Each question has 2 marks

20M

1	What is the primary use of clipping in computer graphics?
A	Copying
B	Zooming
C	adding graphics
D	removing objects and lines

2	The process of elimination of parts of a scene outside a window or a viewport is called
A	editing
B	cutting
C	plucking
D	clipping

3	B-spline curve :
A	Allows local control
B	Does not allows local control
C	Sometimes allows local control
D	allows only global control

4	Which is not a correct classification for knot vectors in the B-spline curve?
A	Uniform
B	Open uniform
C	Non uniform
D	Classic uniform

5	What is compression?
A	To compress something by pressing it very hardly
B	To minimize the time taken for a file to be downloaded
C	To reduce the size of data to save space
D	To convert one file to another Answer

6	Which of the following would not be suitable for Lossy Compression?
A	Speech
B	Video
C	Text
D	Image

7	Which of the following is not a part of the channel coding?
A	rectangular code
B	Checksum checking
C	Hamming code
D	Huffman code

8	Algorithm used for solving temporal probabilistic reasoning
A	Depth-first search
B	Depth markov model
C	Hidden markov model
D	Breadth-first search

9	Joysticks typically have a button on _____ that is used to select the option pointed by the cursor.
A	Bottom
B	Left
C	Right
D	Top

10	Vector graphics is composed of
A	Pixel
B	Path
C	Palette
D	points

Q2 Attempt any two questions out of three

20 Marks

A	Explain 2D transformation with suitable example for each.	10M
B	Explain Cohen Sutherland line clipping algorithm.	10M
c	List various polygon filling algorithm and explain boundary fill in detail.	10M

Q3 Attempt any two questions out of three

20 Marks

A	Explain Bresenham's line drawing algorithm. How it is different from DDA	10M
B	Find the Bézier curve given 4 control points (25,25)(45,40)(60,45) and (90,10) using the step size as 0.1	10M
c	Explain different applications of computer graphics and elaborate any one in detail	10M

Q4 Attempt any two questions out of three

20 Marks

A	Write short note on a. Ant aliasing Techniques b. Text Clipping	10M
B	Explain the various file formats used in multimedia system	10M
c	What is multimedia? Explain the objects involved in Multimedia system and describe various applications	10M