BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - IV Computer Science & Engineering : WINTER: 2025
SUBJECT: COMPUTER GRAPHICS & MULTIMEDIA

Day : Thursday
Date : 27/11/2025

W-25583-2025

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N.B.
1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.

Q.1	Define raster scan system list their characteristics consider three different raster systems with resolutions of 640 × 480, 1280 × 1024 and 2560× 2048. What size frame buffer (in bytes) is needed for each of these systems to store 12 bits per pixel? How much storage (in bytes) is required for each system if 24 bits per pixel to be stored?	(10)
	OR	
Q.1	Explain DDA line drawing algorithm with its drawbacks.	(10)
Q.2	How the rotation of an object about the pivot point is performed?	(10)
	OR	
Q.2	Describe with neat diagram of processing the vertices of the polygon through the boundary clipping pipeline using Sutherland Hodgeman polygon clipping algorithm.	(10)
Q.3	Explain parallel projection and perspective projection.	(10)
	OR	
Q.3	Rotate a triangle ABC with vertices A (2,3,1) B(3,4,5) and C (5,6,7) about a line Y=2.	(10)
Q.4	Explain halftone pattern in detail.	(10)
	OR	
Q.4	Discuss about properties of light, interpret sources in detail.	(10)
Q.5	Explain multimedia system architecture a multimedia workstation environment. Also discuss multimedia application in detail.	(10)
	OR	
Q.5	List different multimedia file format and compare TIFF and RIFF file format.	(10)
Q.6	Explain in detail about the multimedia database.	(10)
	OR	
Q.6	Explain in detail Hypermedia document and Hyperspeech	(10)

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