

**BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)**  
**B. Tech. Sem - IV Computer Science & Engineering : WINTER : 2023**  
**SUBJECT : COMPUTER GRAPHICS & MULTIMEDIA**

Day : Wednesday

Time : 02:30 PM-05:30 PM

Date : 22-11-2023

**W-25583-2023**

Max. Marks : 60

**N.B.**

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

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- Q.1** Explain CRT with diagram. Also distinguish between raster scan display system and random scan display system (10)
- OR**
- Q.1** Explain DDA line drawing algorithm with its drawbacks. Rasterize line for (5, 7) to (10, 15) on raster screen using DDA line drawing algorithm. (10)
- Q.2** Explain Cohen – Sutherland line clipping algorithm with example (10)
- OR**
- Q.2** Describe basic 2 D transformation with homogeneous matrix. Rotate point A (2, 4) in 2 D plane by angle  $90^\circ$ . (10)
- Q.3** Explain parallel projection and perspective projection in detail. (10)
- OR**
- Q.3** Write note on Bezier curve. (10)
- Q.4** Explain diffuse illumination with Lambert's model. (10)
- OR**
- Q.4** Explain Halftone pattern in detail. (10)
- Q.5** Explain in detail applications of multimedia. (10)
- OR**
- Q.5** Explain different image file format. (10)
- Q.6** Illustrate distributed multimedia system. Explain the various types of database replication techniques used in handling very large, distributed database. (10)
- OR**
- Q.6** Explain Hypermedia document and fuzzy logic. (10)
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