

CA9153 GRAPHICS AND MULTIMEDIA SYSTEMS

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UNIT I INTRODUCTION

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I/O devices – I/O primitives –Attributes of output primitives– DDA – Bresenham technique – Circle drawing algorithms – Interactive input methods.

UNIT II 2D GRAPHICS

9

2D Transformations – Window View port mapping – Clipping algorithms – polygons – Splines – Bezier curves – Basics.

UNIT III 3D GRAPHICS

12

3D concepts – Representations – 3D transformation - Projections – Hidden surface removal – Visualization and rendering – Color models – Textures .

UNIT IV OVERVIEW OF MULTIMEDIA

9

Multimedia Hardware & Software – Components of multimedia – Text, Image – Graphics – Audio – Video – Animation – Authoring – Multimedia Project development.

UNIT V MULTIMEDIA SYSTEMS AND APPLICATIONS

9

Multimedia Communication Systems – Database Systems – Synchronization issues – Presentation requirements – Applications – Video conferencing – Virtual reality – Interactive Video – Media on Demand.

TOTAL = 45

REFERENCES

1. Donald Hearn, M. Pauline Baker, "Computer Graphics – C Version", second edition, Pearson Education, 2004.
2. Ralf Steinmetz, Klara Steinmetz, "Multimedia Computing, Communications & Applications" Pearson education, 2004.
3. Tay Vaughan, "Multimedia Making It Work", McGraw Hill, 2002.
4. J. D. Foley, A. VanDam, S. K. Feiner, J. F. Hughes, "Computer Graphics Principles and Practice", Addison and Wesley Publications, 2002.
5. Drew, "Fundamental Of Multimedia ", Feurun, 2004.