Subject Code: RCCSIT8

COMPUTER GRAPHICS AND MULTIMEDIA

Unit I

Overview of graphics systems: Video display devices – Raster-scan systems – Random-scan systems – Graphics monitors and workstation – Input devices – Hard-copy devices – Graphics software.

Unit II

Output primitives: Points and lines – Line-drawing algorithms – DDA algorithm – Bresenham's line algorithm – Attributes of output primitives: Line attributes – Area-fill attributes – Character attributes – Bundled attributes.

Unit III

Two-dimensional Geometric transformations: Basic transformations – Matrix representations – Composite transformations – Other transformations.

Unit IV

Multimedia in Use: Introducing Multimedia for Today and Tommorrow – What is Multimedia – using Multimedia: Applications, Benefits and Problems – Technology: System Components – Multimedia Platforms.

Unit. V

Technology: Development Tools – Image – Audio – Video.

Text Books:

- 1. Computer Graphics C Version Second Edition, Donald Hearn and M.Pauline Baker, Pearson Education, 2006.
- 2. Multimedia in Practice: Technology and Practice. Judith Jeffcoate, Pearson Education, 2007.

Reference Books:

- 1. William M. Neuman, Robert R. Sprout, "Principles of interactive Computer Graphics", McGraw Hill International Edition.
- 2. Buford J. F Koegel, Multimedia Systems, Twelfth Indian Reprint, Pearson Education