

PAPER – VIII – ELECTIVE – I - MULTIMEDIA SYSTEMS AND DESIGN

UNIT – I

Introduction – Definition – Multimedia Hardware – Multimedia Software – Multimedia Networking – Multimedia Applications – Multimedia Environments – Multimedia Computer Components – Multimedia Standards – Multimedia PC.

UNIT – II

Multimedia Information Systems: Limitations in workstation operating systems. Middleware System Services Architecture: Goals of Multimedia System Services – Multimedia System Services Architecture – Text : Elements of Text – Using Text in Multimedia Applications – Graphics: Element of Graphics – Images and color – Graphics file and Application formats – Obtaining images for Multimedia use – Using Graphics on multimedia applications.

UNIT – III

Digital Audio Representation and Processing: Uses of Audio in Computer Applications – Digital Representations of sound – Transmission of Digital Sound – Digital Audio Signal Processing, Video Technology: Raster Scanning Principles – Sensors for TV Cameras – Color fundamentals – Color Video – Digital Video and Image Compression: Evaluating Compression System – Video Compression techniques – JPEG Image compression standard – MPEG motion Video compression standard.

UNIT – IV

Multimedia Communications Systems: Applications Network Services –Network Protocols.

Multimedia Conferencing : Teleconferencing Systems – Requirements for Multimedia communications – Multimedia Conferencing Architecture.

UNIT –V

Multimedia and Internet : Internet – Client / Server technology – Communications protocol – Internet addressing – Internet functions – HTML and Web Authoring. Multimedia Development Team: Team approach – Assembling multimedia production Team – multimedia Development Process: Multimedia Project – Structured Multimedia development – Casting multimedia project.

Text Books:

1. For Unit I :Tay Vaughan, “Multimedia making it work”, 4th Edition Tata McGraw Hill Edition, 2000.
2. For Units II, III, IV: John F.Koegel Buferd, “Multimedia Systems”, Published by Addison Wesley Longman, 3rd Edition year 2000.
3. For Unit V: David Hillman, ‘Multimedia Technology and Applications’, Galgotia Publications Pvt.Ltd., Year 1998.

Reference Book:

Fred. T.Hofstetter: “Multimedia Literacy”, McGraw Hill, 1995.