

AIM:

- Introduce students to the different media used in multimedia systems and their design issues.

OBJECTIVES:

- Students will be able to handle all multimedia components efficiently.
- Students will be able to develop Integrated, Collaborative multimedia systems

UNIT I MULTIMEDIA ELEMENTS 9

Introduction – Definitions – Applications – Elements - Text – Image/Graphics
Audio – video – Animation.

UNIT II DATA AND FILE FORMATS 9

Compression Techniques – Lossless, Lossy – JPEG, MPEG, GIF, TIFF, RIFF- H.261,
H.262, H.263 -File formats - Display Technologies (Output) – Input

UNIT III MULTIMEDIA AUTHORIZING 9

Authoring tools - Inserting media elements on the Web Pages - Programming audio,
Video, Image using Java - open gl.

UNIT IV MULTIMEDIA STORAGE AND MANAGEMENT 9

Storage and Retrieval and presentation-Synchronization Issues - Multimedia
Operating Systems and Multimedia databases – Hypertext - Hypermedia
Architectures.

UNIT V MULTIMEDIA NETWORKS 9

Protocol - QOS Issues - RTP, RTCP, RTSP, SIP, Multimedia over ATM Networks -
Media on demand –ITV - STB Broad cast Schemes for VoD Buffer Management -
Multimedia over wireless networks.

TOTAL= 45 PERIODS**TEXT BOOKS:**

1. Ralf Steinmetz and Klara, "Multimedia Computing, Communications and Applications", Pearson Education, 2004.
2. K.Andleigh, Kiran Thakrar , "Multimedia Systems Design", PHI, 2007.

REFERENCES:

1. Ze Nian Li, S. Drew, "Fundamentals of Multimedia" , PHI,2006.
2. Fred Halsall, "Multimedia Communications- Applications, Networks, Protocols and Standards" , Pearson Education, 2007.