CORE COURSE –III - FUNDAMENTALS OF MULTIMEDIA TECHNOLOGY

Objective: *To teach students about various tools & technologies that provide audio, video data handling capabilities to a computer.*

UNIT-I

Introduction to Multimedia – Multimedia Authoring and Tools – Graphics and Image Data Representations - Color in Image and Video.

UNIT-II

Fundamental Concepts in Video – Basics of Digital Audio - Lossless Compression Algorithms.

UNIT-III

Lossy Compression Algorithms - Image Compression Standards - Basic video compression techniques.

UNIT-IV

MPEG Video Coding (MPEG-1 and 2) - Basic Audio Compression techniques - MPEG Audio Compression.

UNIT-V

Computer and Multimedia Networks- Multimedia network communications and applications – Content based Retrieval in Digital Libraries.

TEXT BOOK:

1. **Ze-Nian Li and Mark S. Drew** , Fundamentals of Multimedia , Pearson education/Prentice Hall of India, First Edition,2006, (ISBN 81-7758-823-0) **[Unit-1 :(**Chapters 1,2,3,4); **Unit-2** : (Chapters 5,6,7); **Unit-3 (**Chapters 8,9,10); **Unit-4 (**Chapters 11, 13);**Unit-5 (**Chapters 15,16,18)**]**