

Subject: Multimedia

(BSC-CS-SY)

Unit –I

1. Introduction

1.1 Definition of Multimedia elements

1.2 Multimedia Elements

1.3 Multimedia Applications

1.4 Global structure of Multimedia

Unit –II

2. Data Compression

2.1 Storage space

2.2 Coding requirements

2.3 Basic compression techniques (Run length& Huffman encoding)

2.4 Introduction to following compression techniques: JPEG, MPEG

Unit –III

3. Optical Storage Media & Retrieval Technologies

3.1 Basic Technology

3.2 Video Disk & other WORMS

3.3 CD-ROM and Multimedia Highway

3.4 DVD- ROM

Unit –IV

4. Sound / Audio

4.1 Basic Concept of Sound

4.2 MIDI

4.3 Digital audio

4.4 Audio file formats

Unit –V

5. Image And Graphics

5.1 Making Still Images : BITMAPS , Vector Drawing

5.2 Colors

5.3 Image Formats

5.4 Graphics Formats

5.5 Image File Formats: BMP, JPEG, TIFF, PNG.

Unit –VI

6. Video& Animation

6.1 Basic concepts (Using Video)

6.2 Broadcast Video Standards

6.3 Television (Conventional systems, Enhanced definition systems, High Definition system)

6.4 Computer based Animation