

(Corrected on 23.10.09)

FIFTH SEMESTER (MOP)

SR. NO.	SUBJECTS	STUDY SCHEME Hrs/Week		MARKS IN EVALUATION SCHEME										Total Marks of Int. & Ext.
				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT							
		Th	Pr	Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot			
5.1	English and Communication Skills -V	3	2	15	10	25	75	3	25	3	100	125		
5.2	Programming and Problem Solving through Visual Basic	4	4	15	10	25	75	3	50	3	125	150		
5.3	Stenography (English)-V	-	6	-	50	50	-	-	100	3	100	150		
5.4	Business Organizations and Environment	6	-	50	-	50	75	3	-	-	75	125		
5.5	Elective (Tying Hindi/Punjabi); Multimedia and Applications	-	6	-	50	50	-	-	100	3	100	150		
5.6	Business Laws	5	-	50	-	50	75	3	-	-	75	125		
# Student Centred Activities		-	4	-	50	50	-	-	-	-	-	50		
Total		18	22	130	170	300	300	-	275	-	575	875		

- There will be a compulsory industrial/educational tour for one week during this semester or after the semester

Will comprise of co-curricular activities like extension lectures, games, hobby clubs, including photography, seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities

5.5.3. ELECTIVE (MULTIMEDIA AND APPLICATIONS) (Revised on 23.10.09)

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Rationale

Multimedia is a new concept in the recent times. Now the digital technologies are being widely used in preparation of web pages, motion pictures, interactive presentations, animation etc., Multimedia has made a significant impact in the area of education and training, business presentations, public information access and many more. This course intends to introduce and expose multimedia technology and various factors and features of authoring software. It will also help in making the internet application richer in content and presentation.

Note:

1. *Theoretical instructions and demonstration should be dovetailed with the practical work in the multimedia laboratory for developing appropriate competencies in the use of multimedia.*
2. *There will not be any theory examination in this subject.*
3. *Since this is a practice based subject, it is suggested that teacher should first explain the theoretical background contents to the group/class. The same be followed by demonstration and practice of exercises by the students in the laboratory.*

DETAILED CONTENTS

I. Introduction:

Define multimedia, Explain brief history of multimedia, Elements of multimedia, Field applications of Multimedia and their importance,

Practicals:

Demonstrate the use of various multimedia elements such as text, graphics, video, audio and animation using any multimedia application.

II. Multimedia Hardware

Elements of multimedia system for development and for playback, Display card and Sound card, Components of multimedia systems such as Monitor, Mouse, Keyboard, Printer, Speaker, Microphone, Digital Camera, Scanner, Web Camera etc.

Practicals

Teacher to demonstrate and students to practice for:

- Identification of different components of multimedia computer
- Making connections and configuring various input/output devices like: scanners, Speaker, Microphone, Digital Camera, Web Camera etc.

I. Multimedia Software

Introduction to various multimedia software for content development and presentations for multimedia applications such as Adobe Photoshop, Adobe Premier, SoundForge, Power Point, Flash, Director, Authorware etc.

Practicals

Teacher to demonstrate and students to practice the installation of various drivers and players viz. Windows Media Player, Real Time, Quick Time Players etc.

IV. Multimedia Text

Designing text for multimedia, different fonts, Text effects using filters

Practicals

Teacher to demonstrate and students to practice editing text using Photoshop and application of different special effects and practice by students using different examples

V. Multimedia Graphics

Introduction to Raster and Vector images, different colour models, revolution of images 2-D and 3-D graphics. Different file format, images like .bmp, .jpg, .psd, .tif etc.

Practical

Teacher to demonstrate and students to practice:

- the use of scanners for scanning images and photographs.
- the use of digital camera for capturing digital images.
- the editing of various Raster and Vector images using Photoshop or Paint Shop-Pro softwares and explain resolution and colour modes using different images.

VI. Multimedia Audio

Introduction to Digital Audio Technology and different sound file formats

Practicals

Teacher to demonstrate and students to practice for:

- recording and playing digital audio using any sound recording device through different examples.
- editing of audio files using sound forge, soundHack etc.

VII. Multimedia Video

Introduction to digital video fundamentals, different video file formats, frame rate, image size and colour depth etc.

Practicals

Teacher to demonstrate and students to practice:

- Capturing digital video, editing it using software like Adobe Premier
- Embedding a video file in multimedia application

VIII Multimedia Animation

Define animation, Different animation techniques, Introduction to 2-D and 3-D Animation, Different file formats like .gif, .swf etc.

Practicals

Demonstration of basics of animation using software like Flash and Practice by students using different examples.

IX Multimedia Applications

Introduction to multimedia project designing concepts, story boarding techniques, project planning and costing techniques.

Introduction to multimedia authoring tool like Director/Authorware/powerpoint for integration and presentation of multimedia elements.

Practicals

Teacher to demonstrate and students to practice in:

- Designing of web page/site using various multimedia elements
- Preparing Multimedia presentation using Power point
- Developing any animated movie using flash

In addition to above the students must be made confident to:

- install and configure multimedia devices such as Scanner, Digital Camera and, web camera, Mike and speakers, Touch screen, Plotter and printers to the computer
- Transport audio and video files using various features of Director, Flash or Photo-shop
- Make multimedia presentations by combining Director, Flash, photo-shop such as department profile, lesson presentation, games and project presentation etc

INSTRUCTIONAL STRATEGY

Since this is a practice based subject, more emphasis should be given on students to do the work practically. The teacher should explain the concepts and features of multimedia while giving demonstration. The features of software packages viz. Photoshop, Flash and Director are to be first demonstrated in class using LCD projector before allowing students to practice on it.

RECOMMENDED BOOKS

1. Multimedia - An Introduction by Villiam Casanova and Molina: Prentice Hall of India, New Delhi
2. Multimedia Bible by Win Rosch
3. Multimedia Making it work by Baughan, Jay
4. Director and Lingo Bible by John and Nyquist and Rober Marlin, IDG Books India Pvt. Ltd.
5. Mastering Macro Media Director 5 by Feudnon, BPB Pub lication, New Delhi
6. Photo-shop for Windows Bible by Deke Maclelland, IDG Books India Pvt. Ltd: New Delhi
7. Multimedia Technology and Application by Hillman, Galgotia Publications, New Delhi
8. Flash 5 Bible by Rein Hardit, IDG Books India Ltd.
9. Flash 5 in easy steps by Vandome IDG Books Pvt. Ltd.