

Information Technology - Arts (98)

Introduction

Government has to visualize Schools which will concentrate on a balanced development of students in intellectual, emotional and physical terms, with a view to developing a technology literate, creative, and critically thinking class of students to open the doors to the world of knowledge.

The curriculum has been devised to integrate a wide variety of knowledge, language, value elements and skills such as creative and critical thinking, personal, social, scientific, mathematical environmental and knowledge acquisition.

In order to execute these dreams we have to develop the relevant infrastructure. We should carry out a substantial reinvention and re-engineering of educational sector. Our existing curricula in educational institution in respect of computer courses have to be thoroughly revamped. Internet connectivity should be provided to all Schools. Recognized aided and unaided Educational Institutions should ensure that the entire student community, irrespective of subject chosen should become computer literate. IT should be the integral part of education system.

Objectives

The student should be able to

1. acquire basic knowledge of Computers.
2. acquire basic knowledge of Information Technology.
3. understand E-Commerce and related concepts.
4. understand concepts in Multimedia.
5. develop capabilities to access Information

using Internet.

6. learn the basic concepts of Computer Networking.
7. develop an understanding of principles based on visual environment.
8. acquire skills for creation of Basic Web Pages.
9. acquaint with basic techniques and knowledge required for computing applications.
10. get aware about cyber laws and ethics.

Std. XI

1 Introduction to Information Technology

- 1.1 Information Technology: Definition, Introduction, Information Systems, Software, Data
- 1.2 IT in Business, Industry, Home, Play, Education, Training, Science and Engineering.
- 1.3 Computers in Hiding

2 Office Suite

- 2.1 Word Processor- Microsoft Word and its main features
- 2.2 Spreadsheets – Microsoft Excel and its main features
- 2.3 Presentations – Microsoft PowerPoint

3 Multimedia

- 3.1 Multimedia-Definition, Communication, Components, Building Blocks, Scope, Uses, Application purposes
- 3.2 Overview of Computer Images
- 3.3 Digital Audio
- 3.4 Overview of Video
- 3.5 Flash – Overview and Introduction



- 3.6 Multimedia Design and Future Directions
- 4 Web Browsers, E-mail Clients and Messenger Utilities**
- 4.1 Overview, Working of the Internet and WWW
- 4.2 Role of Web Servers, Clients
- 4.3 Web Browsers and their use, Popular Web Browsers
- 4.4 E-Mail Servers and Protocols
- 4.5 E-mail Clients and Web Based Mail Access using Browser
- 4.6 Messenger Services and Clients
- 4.7 FTP
- 5 File and Disk Utilities**
- 5.1 Concept of Files and directories
- 5.2 File Archival, compression and encryption
- 5.3 Disc Tools (Windows 7) Error-Checking and Defragmentation
- 5.4 Computer Security
- 6 GIF Animator**
- 6.1 GIF Animation, Image Count, Looping and Repeat Count
- 6.2 Colour palettes and Image dither methods
- 6.3 Image Parameters
- 6.4 Image Transparency
- 7 Vector Graphics using CorelDraw**
- 7.1 Introduction
- 7.2 Tools and menus
- 7.3 Basic drawing working with text-basic
- 7.4 Page Layout
- 7.5 Printing
- 8 HTML**
- 8.1 Uses, Features, Properties and Limitations
- 8.2 Tags and Attributes, Basic Tags, Paragraph and Heading Tags, Comments
- 8.3 Ordered and Unordered Lists and Related Tags, Nested Lists
- 8.4 Anchor Tag and Hyperlinks in HTML
- 8.5 Division and Physical Style Tags, working with Fonts, font types, sizes and colours
- 8.6 Body background colour, text colour and hyperlink colours, Pre-formatting, Line Break and Horizontal Rules, Displaying special characters in HTML
- 8.7 Images in HTML, related tags and attributes, features of BMP, JPG and GIF Raster image formats
- 8.8 Tables in HTML and related tags
- 8.9 Marquee
- 8.10 Java Applets
- Std. XI - Practical List**
1. Identification of Computer Systems and understanding LAB setup.
 2. Exercise on Windows, Start Menu and Accessories.
 3. Creating Documents, page formatting, use of fonts and colour and printing using Word
 4. Mail merge and envelope printing using Word
 5. Study of Spreadsheet using Excel
 6. Create simple Presentation and Slideshow using PowerPoint
 7. Practical on simple Flash based animation
 8. Study of a Web Browser for browsing different websites
 9. Acquisition of e-mail ID on free web-based e-mail servers; sending and receiving emails with and without attachments.
 10. Study and use of search engines and



messengers.

11. Downloading and saving Web page content and images as files.
12. Creation of Compressed File Archives ZIP and RAR
13. Study of Disk Management Tools
14. Create a simple web page using basic HTML tags.
15. Creation of WEB page containing graphics and table.
16. Use of Hyperlinks on web pages.
17. Simple animation using GIF Animator Package
18. Creation of simple graphics using toolbox and menus in CorelDraw package.
19. Creation of a magazine cover using CorelDraw including title, subtitles, lead and sub-article info, coloured text, shapes etc, volume number and cost.

Std. XII

1 Web Publishing

- 1.1 HTML Page Frames
- 1.2 Image Mapping
- 1.3 Forms and Form Objects
- 1.4 Inserting Sound and Video
- 1.5 Use of Unicode and Indian Language Fonts
- 1.6 Cross-Browser Testing
- 1.7 Introduction to CSS
- 1.8 Web Server

2 Cyber Laws and Ethics

- 2.1 Moral, Ethics, and Law
- 2.2 Ethics Culture and ethics for computer users, professionals and business
- 2.3 Information Service
- 2.4 Code and guidelines of ethics
- 2.5 Introduction to cyber laws and IT Act

of India 2000

- 2.6 Digital Signature, Electronic Records-Attribution, acknowledgement and dispatch
- 2.7 Ten Commandments of Computing
- 2.8 Security, Privacy and Control
- 2.9 Intellectual Property Rights

3 E-Commerce

- 3.1 Electronic Commerce-Scope, Definition
- 3.2 Trade Cycle
- 3.3 Electronic markets-Usage, Advantages and Disadvantages, Future
- 3.4 Electronic Data Interchange-Definition, Benefits
- 3.5 Internet Commerce, e-Commerce in Perspective
- 3.6 EDI Security

4 Introduction to Networking

- 4.1 Communication and Network Technologies
- 4.2 Internet, Network Communication and Protocols
- 4.3 Transmission Media
Communication over Wires and Cables, Wireless Communication and Standards
- 4.4 Network Architecture
Relationships and Features
- 4.5 Cable Topologies
- 4.6 Network Hardware

5 DTP using Adobe InDesign

- 5.1 Document Setup and working environment
- 5.2 Creating Frames, Moving Objects, Selection Techniques
- 5.3 Working with Text
- 5.4 Character Settings
- 5.5 Paragraph Settings



- 5.6 Working with Images in InDesign
- 5.7 The Pages Panel
- 5.8 Working with tables
- 5.9 Exporting to PDF
- 6 Adobe Acrobat**
 - 6.1 Concept of PDF, applications, features, ability to embed images and fonts etc.
 - 6.2 Adobe PDF Writer Printer and PDF Conversion Settings
 - 6.3 The Adobe Acrobat Program, Features and Tools
 - 6.4 Document Security Options
- 10. Conversion between Audio File Formats (based on Std XI syllabus)
- 11. Image Conversion between Image file formats (based on Std XI syllabus)
- 12. Conversion between Video file formats (based on Std XI syllabus)
- 13. InDesign - use of tool box and creation of simple letterhead or identity card of your institute
- 14. InDesign – Design of a commercial color newspaper advertisement related to the exhibition of educational books in the size 2 columns x 10 cm.
- 15. Conversion of a Microsoft Word Document into PDF using Adobe PDF Printer (with and without Images)
- 16. Conversion of a Microsoft PowerPoint Presentation into PDF using Adobe PDF Printer (with and without Images)
- 17. Conversion of an Adobe InDesign Document into PDF (with and without Images)
- 18. Creation of a PDF document with bookmarks/links within the same document
- 19. Study of Standard Security Features within a PDF Document
- 20. Conversion of a CorelDraw Image into PDF

Practical List

1. Creation of a Website
 2. Creation of a Website with Frames and CSS
 3. Hyperlinks on a Web Page using Client Side Image Mapping
 4. Hyperlinks on a Web Page using Server Side Image Mapping
 5. Use of Audio and Animation on Web Pages
 6. Use of Video on Web Pages
 7. Creation and Publishing a Website using FTP
 8. Cross Browser Testing and Differences in Rendering
 9. Creation of Webpage in Devnagri Script (Marathi or Hindi) using UNICODE. Use MS-Word with BarahaIME and Save as html
- Note:** The practicals mentioned above must be strictly carried out by students as per Practical Slips prepared and printed by the Board for the Subject of Information Technology – Arts. Colleges must obtain a set of the slips from the Divisional Board Office.

