

Information Technology - Commerce (99)

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. Basic Database Concepts**
 - 6.1 Definition of Database and database program
 - 6.2 Tables, Rows/Records, Columns/Fields, Differences between database and spreadsheet
 - 6.3 Relational abilities and meaning of Relational Database
 - 6.4 Basic Concepts of database and RDBMS
 - 6.5 Constraints to ensure data quality
 - 6.6 Database Administration, Software Development, Business Analysis
 - 6.7 SQL, History and Command Categories
 - 7 Overview of Tally**
 - 7.1 Advantages of computerized accounting
 - 7.2 Introduction to Tally and its features.
 - 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. Creating simple database, table, forms and reports using Access.
18. Generating simple queries and verifying results. (Access).
19. Study of TALLY Package (GATEWAY)

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 Data Management using Access



- 5.1 Microsoft Access and its main features, Database Concepts
 - 5.2 Opening existing Databases
 - 5.3 Working with Tables
 - 5.4 Introduction to Forms and working with forms
 - 5.5 Table Relationships (one-to-one and many-to-many) Queries, Query types, creation of Query manually as well as using wizard, calculations using queries
 - 5.6 Introduction to Reports and working with Reports
- 6 Tally**
- 6.1 Creating and configuring Company Menus related to Accounts
 - 6.2 Working with Groups and Ledgers
 - 6.3 Study of Cost centers and Vouchers
 - 6.4 Printing Purchase orders, Sales orders and Invoice
 - 6.5 Study of Trial Balance, Balance Sheet and Profit and Loss Account

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

