

**FOUNDATION OF INFORMATION TECHNOLOGY (FIT)**  
**(CODE No. 165)**  
**(For Session 2018-19 only)**

**Learning Outcomes:**

- Understanding organization of a computer system and networking.
- Basic understanding of database design.
- Ability to work on office tools such as word processor, spreadsheet and presentation.
- Ability to apply knowledge and practice on office tools to develop IT applications.
- Ability to use Indian languages in developing an IT application.
- Ability to design HTML webpage.
- Appreciation/awareness of societal impacts of information technology in business. Public services, education, health etc.
- Awareness of basic information security issues.

**Job Opportunities:**

- Upon completion of this optional course on FIT at secondary level, one will be able to assist in IT-enabled office work.

**CLASS X****Theory: 40 Marks****Practical: 60 Marks**

Unit	Description	Marks	
		Theory	Practical
Unit I	Basics of Information Technology	10	-
Unit II	Information Processing Tools	25	30
Unit III	Societal Impacts of IT	05	-
Unit IV	IT Applications	-	30
	<b>Total</b>	<b>40</b>	<b>60</b>

**CLASS X : (THEORY)****Time: 2½hours****Marks : 40****Unit I: Basics of Information Technology**

**Internet:** World Wide Web, Web servers, Web Clients, Web sites, Web Pages, Web Browsers, Blogs, News groups, HTML, Web address, E-mail address, URL, HTTP, FTP, downloading and uploading files from remote site;

Services available on Internet: Information Retrieval, Locating sites using search engines and finding people on the net;

Web Services: Chat, email, Video Conferencing, e-Learning, e-Banking, e-Shopping, e-Reservation, e-Governance, e-Groups, Social Networking.

**Unit II: Information Processing Tools****Office Tools**

**Database Management Tool:** Basic Concepts and need for a database, Creating a database, DataTypes-Text, Number, Date, Time, Setting the Primary Key, Entering data into a

database, Inserting and deleting Fields, Inserting and deleting Records, Field Size, Default Value, Creating Query using Design view.

### **Information Representation Methods**

#### **Hyper Text Markup Language**

Introduction to Web Page Designing using HTML, Creating and saving an HTML document, accessing a web page using a web browser (Google Chrome, Internet Explorer, Mozilla Firefox, Opera, Apple Safari, Net scape Navigator);

**Elements in HTML:** Container and Empty elements, Designing web pages using the following elements:

HTML, HEAD, TITLE, BODY (Attributes: BACKGROUND, BGCOLOR, TEXT, LINK, ALINK, VLINK, LEFTMARGIN, TOPMARGIN), FONT(Attributes: COLOR, SIZE, FACE), BASEFONT(Attributes: COLOR, SIZE, FACE), CENTER, BR (Break), HR(Horizontal Rule, Attributes: SIZE, WIDTH, ALIGN, NOSHADE, COLOR) inserting comments, H1..H6 (Heading), P (Paragraph), B (Bold), I (Italics), U (Underline), UL & OL (Unordered List & Ordered List Attributes: TYPE, START), LI (List Item)

Insertion of images using the element IMG (Attributes: SRC, WIDTH, HEIGHT, ALT, ALIGN), Super Script SUP, Subscript SUB, Creating Table using the element TABLE (BACKGROUND, BGCOLOR, WIDTH, CELLSPACING, CELLPADDING, BORDER), TR, TH, TD, ROWSPAN, COLSPAN, Internal and External Linking between Web Pages:

Significance of linking, A - Anchor Element (Attributes: NAME, HREF, TITLE, MAILTO)

#### **XML (Extensible Markup Language)**

Introduction to XML, Difference between XML and HTML with respect to the following: Data separation, data sharing, document structure, tags, nesting of elements, attributes, values. XML Elements - Defining own tags in XML, root elements, child elements and their attributes; Comments in XML, White space and new line in XML, well formed XML documents, validating XML documents, XML Parser, Viewing XML documents in a web browser.

### **Unit III: Societal Impacts of IT**

Information Security: Virus, Worms, Trojans and Anti-Virus Software, Spyware, Malware, Spams, Data Backup and recovery tools and methods, Online Backups, Hacker and Cracker with regard to Computer Data and Applications, Social Networking Information security provisions in e-commerce, Benefits of ICT in Education, Healthcare, Governance, Virtual, School, emergence of Knowledge economy, Impact of ICT on Society: Knowledge based society, Infomania, Digital Unity and Digital Divide.

### **Unit IV: IT Applications**

Students are suggested to work on the following suggestive areas using Database Management Tool and HTML on topics implementing the tools/elements covered in the course.

#### **Domains:**

##### **Database Design:**

- Personal Data Record File
- School/Class Result Record
- Employee Payroll
- Stock Inventory
- Vehicle Parking Record File

##### **Webpage Design:**

- My Home Page
- My School

- My Family
- Personal Blog with Name, Photo, Areas of Interest, School, State, Country
- School Website - Infrastructure, Facilities, Uniform, Motto, School Pictures, Extra-Curricular Activities, Subject and Language Options
- Travel and Tourism
- Statistics on India - State wise Area, Population, Literacy (Enrolment in Primary, Middle, Secondary, Senior Secondary), Gender Ratio
- Environment (Save Energy) and Pollution (Global Warming)

**CLASS X : (Practical)**

**Time : 4 hours**

**Marks : 60**

**(A) HANDS ON EXPERIENCE**

**30 Marks**

**1. Database Design:\***

- Creating and entering data into a database
- Setting the primary key
- Inserting meaningful data and organising
- Creating Query with the same design view of the table.

**2. Webpage Designing \***

- Adding a title to webpage
- Formatting Text
- Adding Ordered/Unordered Lists
- Writing Text in Paragraphs
- Inserting Image
- Adding content in Tabular Form
- Adding Internal / External links.

The students are supposed to know the tools and style for designing domain specific web pages from real life applications and the topics mentioned in the syllabus.

**3. XML Assignment\***

Students to be asked to create an XML document on the lines of XML concepts covered in theory syllabus.

*\*Printouts of the document(s) should be attached with the answer sheet.*

**(B) IT APPLICATIONS REPORT FILE**

**15 Marks**

Students are supposed to make an IT Application Report File containing real life assignments using a Database Management Tool and HTML

- 5 Database Solutions
- 8 HTML source code along with browser view
- 2 XML Documents Source Code and View

**(C) IT Application project** using database and website design in a domain such as School Management, Public Services Computing, Business Computing.

**10 Marks**

**(D) VIVA VOCE**

**05 Marks**

Viva based on IT applications report file.