



**Central Board of Secondary Education**

(An autonomous Organisation under the Union Ministry of Human Resource Development,  
Govt. of India)

'Shiksha Sadan', 17-Rouse Avenue, New Delhi - 110 002

**CBSE/Circular/EO(SD)/2010/**

**Circular No. 20**

**5<sup>th</sup> May, 2010**

**All the Heads of the**

**CBSE affiliated schools**

***Subject:*** Updated termwise syllabi in *FIT and Home Science at Secondary level.*

Dear Principal,

In continuation with the Board's office Circular No. 12/10 dated 23/03/2010 on updated syllabus in the main subjects at Secondary school level ( Classes 9 and 10) for the year 2010 – 11, please find updated syllabi termwise for **Foundation of Information Technology ( FIT ) and Home Science** for the session 2010-11 as given in Annexure 1 and 2.

This may be informed to all concerned.

**Yours faithfully,**

**(C. GURUMURTHY)  
DIRECTOR(ACADEMIC)**

**Copy to :**

1. The Commissioner, Kendriya Vidyalaya Sangathan, 18-Institutional Area, Shaheed Jeet Singh Marg, New Delhi-110 016.
2. The Commissioner, Navodaya Vidyalaya Samiti, A-28, Kailash Colony, New Delhi.
3. The Director of Education, Directorate of Education, Govt. of NCT of Delhi, Old Secretariat, Delhi-110 054.
4. The Director of Public Instructions (Schools), Union Territory Secretariat, Sector 9, Chandigarh-160 017.
5. The Director of Education, Govt. of Sikkim, Gangtok, Sikkim – 737 101.
6. The Director of School Education, Govt. of Arunachal Pradesh, Itanagar-791 111
7. The Director of Education, Govt. of A&N Islands, Port Blair-744 101.
8. The Secretary, Central Tibetan School Administration, ESSESS Plaza, Community Centre, Sector 3, Rohini, Delhi-110 085.
9. All the Regional Officers of CBSE with the request to send this circular to all the Heads of the affiliated schools of the Board in their respective regions.
10. The Education Officers/AEOs of the Academic Branch, CBSE.
11. The Joint Secretary (IT) with the request to put this circular on the CBSE website.
12. The Library and Information Officer, CBSE
13. EO to Chairman, CBSE
14. PA to CE, CBSE
15. PA to Secretary, CBSE
16. PA to Director (Acad.)
17. PA to HOD (AIEEE)
18. PA to HOD (Edusat)
19. PRO, CBSE

**DIRECTOR(ACADEMIC)**

## Annexure - 1

### Foundation of Information Technology CODE NO. 165

#### Learning Objectives:

##### General

1. To familiarize with basics of IT
2. To develop basic skills of using tools for information representation and processing.
3. To use Information Processing tools for enhancing productivity and quality.

##### Specific

1. Cognitive domain: Knowledge and understanding.  
To develop basic understanding of IT tools.
2. Psychomotor domain: Skills  
To develop skills in using Information Processing tools
3. Affective domain: Personality traits  
To develop habit of team work, structure presentation and abide by ethical principles of computing

#### General Instructions

1. The units specified for each term shall be assessed through Formative Assessments and Summative Assessments.
2. In each term, there will be two Formative Assessments (FA1, FA2 in first term and FA3, FA4 in the second term), each carrying 10% weightage.
3. The Summative Assessment in the first term (SA1) will carry 20% weightage and the Summative Assessment in the second term (SA2) will carry 40% weightage.
4. Hands-on skills and projects will carry 40% of the 10% weightage in every Formative Assessment.
5. Assessment of Practical Skills through MCQ will carry 20% weightage in every term end summative assessment.

**COURSE STRUCTURE  
CLASS IX**

**TERM I**

**3 Hours**

**80 Marks**

<b>Unit</b>	<b>Description</b>	<b>Theory</b>
1	Basics of Information Technology	17
2	Information Processing Tools	38
3	IT Applications	25
	<b>Total</b>	<b>80</b>

**Term I (Theory)**

**Unit I: Basics of Information Technology**

Convergence of technologies - Computer, Communication and Content Technologies.

**Computing Technology**

Computer System: Characteristics of a computer, components of a computers system - CPU, Memory, Storage Devices and I/O Devices

Memory - Primary (RAM & ROM) and Secondary Memory;

Units of Memory - Byte, Kilobyte, Megabyte, Gigabyte, Terabyte

I/O Devices - Keyboard, Mouse, Printer, Joystick, Scanner, Microphone, OCR, MICR, Light Pen, Barcode Reader, Digital Camera, Speaker, Plotter;

Storage Devices - Hard Disk, CD ROM, DVD, Blu Ray, Pen/Flash Drive, Memory Stick;

Types of Software: System Software (Operating System), Application Software (General purpose application software - Word Processing, Spreadsheet, Presentation, Database Management; Specific purpose application software - Accounting Management, Reservation System, HR Management, Attendance System, Payroll System, School Inventory Control System, Billing System) and Utility Software (Disk/Folder/Files Management, Virus Scanner/Cleaner, Encryption/Decryption Tools),

**Unit II: Information Processing Tools**

Operating System - Basic concepts of Operating System and its functions (MS Windows, GNU Linux, Unix)

Introduction to Windows: Using Mouse and moving icons on the screen, Task Bar, Different types of menu and menu selection, running an application, Setting system date and time; viewing files, folders and directories, creating and renaming of files and folders, Opening and Closing of Windows, Minimise, Restore and Maximise forms of windows, Basic components of a GUI Window: Desktop, Frame, Title Bar, Menu Bar, Status Bar, Scroll Bars (Horizontal and Vertical), Using right button of the Mouse, Creating Shortcut, Basic Tools: Text Editor, Painting Tool, Calculator

### *Office Tools*

#### **Word Processing Tool:**

Introduction to a Word Processor, Creating and Saving a document, Editing and Formatting a Document: Text Style (**B**, *I*, U), Font Type, Size, changing color, alignment of text; Formatting paragraphs with line or paragraph spacing; adding headers and footers, numbering pages, using grammar and spell check utilities, using subscript and superscript, inserting symbols, Print Preview, Printing a document.

Inserting Clipart and Pictures, Page Setting, Bullets and Numbering, Borders and Shading, Format Painter/Paintbrush, Find and Replace, Inserting Tables: inserting, deleting- rows and columns, merging cells, splitting cells.

### **Unit III: IT Applications**

Students are suggested to work on the following areas using Word Processing, Presentation and Spreadsheet Tools.

#### **Domains:**

Documentation:

- Report Writing
- Multi-Lingual Greeting card
- Poster making

#### **(A) HANDS ON EXPERIENCE**

##### **1. Working on Operating System:**

To test some of the following basic system operations on file / folder(s):

- Create
- Rename

- Copy / Cut / Paste
- Delete
- Commands related to Text Editor / Drawing Tool
- Using Clipboard

## 2. Word Processing\*

A document is required to be created for testing the following areas:

- Editing and formatting text and paragraph
- Page and paragraph setup
- Inserting pictures and images

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

### **(B) IT APPLICATION REPORT FILE**

Students are supposed to make an IT Application Report File Containing Real life assignments using Word Processing Tool on 4 topics (Report Making, Poster Making, Invitation Cards, Letter/Application writing)

### **(C) VIVA VOCE**

The questions can be asked from any portion of the syllabus covered during Term I of Class IX

TERM II

3 Hours

80 Marks

Unit	Description	Theory
1	Basics of Information Technology	4
2	Information Processing Tools	27
3	IT Applications	36
4	Societal impacts of IT	13
	Total	80

### Term II (Theory)

#### Unit I: Basics of Information Technology

##### Communication Technology

Computer Networking - LAN, MAN, WAN, Internet, Interspace

Wired Networking Technology examples Co-axial Cable, Ethernet Cable, Optical Fiber

Wireless Networking Technology examples Bluetooth, Infrared and WiFi

##### Content Technology

Data, Information and Multimedia (Picture/Image, Audio, Video, Animation)

#### Unit II: Information Processing Tools

##### *Office Tools*

##### Presentation Tool:

Introduction to Presentation Graphics, Understanding the concept of Slide Shows, Basic elements of a slide, Different types of Slide Layouts, Creating and saving a Presentation, Different views of a slide: Normal view, Slide Sorter view and Slide Show, Editing and Formatting a slide: Adding Titles, Subtitles, Text, Background, Watermark; Headers and Footers, Numbering Slides;

Inserting pictures from files, Animating pictures and Text with Sound Effects, Timing Text box, Pictures and Slides, Rehearse Timings, Ungrouping and Grouping pictures from Clipart.

##### Spreadsheet Tool:

Introduction to Spreadsheets, Concept of Worksheets and Workbooks, Creating and Saving a worksheet, Working with a spreadsheet: entering numbers, text, date/time, series using AutoFill, Editing and formatting a worksheet including

changing colour, size, font, alignment of text, Inserting or Deleting cells, rows and columns, Formulae-Entering a formula in a cell, using operators(+,-,\*,/) in formulae, Relative referencing, Absolute referencing and mixed referencing, Printing a worksheet.

Use simple Statistical functions: SUM(), AVERAGE(), MAX(), MIN(), IF()(without compound statements); Inserting tables in worksheet, Embedding Charts of various types: Line, Pie, Scatter, Bar and Area in a worksheet.

### **Word Processing Tool:**

Using auto-format, Mail Merge, Using simple mathematical expressions, track changes

### **Unit III: IT Applications**

Students are suggested to work on the following areas using Word Processing, Presentation and Spreadsheet Tools.

#### **Domains:**

Documentation:

- Mail-Merge Formal/Informal letter

Presentation:

- School Magazine
- Environment (Save Energy) and Pollution (Global Warming)
- Product Advertisement
- Science & Social Science topic from the course
- Trends in Wireless Computing

Analysis Reporting:

- School/Class Result with student-wise and subject-wise marks
- Cricket Score Record
- Weather Forecasting Report

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

Plagiarism, Privacy, Security and Integrity of Information; Intellectual Property Rights, Careers in IT



## **(A) HANDS ON EXPERIENCE**

### **1. Presentation**

A presentation is required to be created with 4 slides for testing the following areas:

- Editing and formatting slides
- Inserting pictures and sounds
- Animating pictures and text with sound effects

### **2. Spreadsheet\***

A spreadsheet is required to be created for testing the following areas:

- Formatting cells and data
- Functions & formulae (Relative, absolute and Mixed reference)
- Charts

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

## **(B) IT APPLICATION REPORT FILE**

Students are supposed to make an IT Application Report File Containing Real life assignments/presentations using Presentation Tool and Spreadsheet Tools

- 4 presentations
- 4 spreadsheets with graphs/charts
- 1 word processing document along with mail merge feature

## **(C) VIVA VOCE**

The questions can be asked from any portion of the syllabus covered during Term II of Class IX

**COURSE STRUCTURE  
CLASS X**

**TERM I**

**3 Hours**

**80 Marks**

Unit	Description	Theory
1	Basics of Information Technology	25
2	Information Processing Tools	30
3	IT Applications	25
		<b>80</b>

**Term I (Theory)**

**Unit I: Basics of Information Technology**

Internet: World Wide Web, Web servers, Web sites, Web Pages, Web Browsers, Blogs, Newsgroups, HTML, Web address, Email address, URL, HTTP;

Services available on Internet: Information Retrieval, Locating sites using search engines and finding people on the net, FTP, Downloading and Uploading files from or two remote site;

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

**Unit II: Information Processing Tools**

**Office Tools**

Database Management Tool :

Basic Concepts and need for a database, Creating a database, Setting the Primary Key, Entering data into a database, Inserting and deleting Fields, Inserting and deleting Records, Data Validation: Field Size, Default Value, Validation Rule, Validation Text, Required, Allow Zero Length.

**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 (Internet Explorer, Mozilla Firefox, Opera, Apple Safari, Netscape Navigator, Google Chrome);

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), COMMENTS, ! for comments, H1..H6 (Heading), P (Paragraph), B (Bold), I (Italics), U (Underline), UL & OL (Unordered List & Ordered List Attributes: TYPE, START), LI (List Item),

### Unit III: IT Applications

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

Domains:

Business Computing

- Personal Data Management System
- School/Class Result with student-wise and subject-wise marks
- Employee Payroll (Computation of monthly salary)
- Stock Inventory (Purchase and issue records)

#### (A) HANDS ON EXPERIENCE

##### 1. Business Computing Problem: \*

A business-computing problem is required to be solved using Database Management Tool (Open Office) for testing the following aspects of database.

Creating and entering data into a database

- Setting the primary key
- Data Validation

##### 2. Web Page Designing \*

A problem on Web Page designing (Minimum 2 pages) to be given for testing in the following:

- Adding a title to webpage
- Formatting Text
- Adding Ordered/Unordered Lists
- Writing Text in Paragraphs

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.

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

**(B) IT Application Report File**

Students are supposed to make an IT Application Report File Containing Real life assignments using a Database Management Tool and HTML on topics from the domain:

Must have print outs of the following:

- 4 Database Solutions from Business Computing
- 4 HTML source code along with browser view

**(C) VIVA VOCE**

The questions can be asked from any portion of the syllabus covered during Term I.

TERM II

3 Hours

80 Marks

Unit	Description	Theory
2	Information Processing Tools	30
3	IT Applications	33
4	Societal impacts of IT	17
	Total	80

### Term II (Theory)

#### Unit II: Information Processing Tools

##### Information Representation Methods

##### Hyper Text Markup Language

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

Internal and External Linking between Web Pages: Significance of linking, A - Anchor Element (Attributes: NAME, HREF, TITLE, ALT)

##### XML

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: IT Applications

Students are suggested to work on the following areas using HTML on topics implementing the elements covered in the course.

Domains:

##### *Website Designing*

- 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
- Indian Statistics - State wise Area, Population, Literacy (Enrolment in Primary, Middle, Secondary, Senior Secondary), Gender Ratio,
- Environment (Save Energy) and Pollution (Global Warming)

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

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

Information security provisions in e-commerce

#### **(A) HANDS ON EXPERIENCE**

##### **1. Web Page Designing \***

A problem on Web Page designing (Minimum 2 pages) to be given for testing in the following:

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

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.

##### **2. 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 Application Report File**

Students are supposed to make a IT Application Report File Containing Real life assignments on HTML and XML on topics from the domain:

- 4 HTML source code along with browser view
- 2 XML Documents

**(C) VIVA VOCE**

The questions can be asked from any portion of the syllabus covered during Term II.

## Annexure – 2

### HOME SCIENCE CODE NO. 064

#### General instructions

1. The units specified for each term shall be assessed through both Formative and Summative Assessments
2. In each term, there will be two Formative Assessments, each carrying 10% weightage.
3. The Summative Assessment in the I term will carry 20% weightage and the Summative Assessment in the II term will carry 40% weightage.
4. Hands-on practical skills and projects will necessarily be assessed through formative assessments.

#### COURSE STRUCTURE CLASS IX

**1 TERM**

**3 Hours**

**80 Marks**

UNITS	MARKS
I Concept and Scope of Home Science	06
II Family -A Unit of Society	18
III Food and its Relation to Health	18
IV Methods of Cooking	20
V Function of Home	18
<b>Grand Total</b>	<b>80</b>

#### **Unit I Concept and Scope of Home Science**

**6 marks**

- i) Concept and Scope of Home Science

#### **Unit II Family –A Unit of Society**

**18 marks**

- i) Types of family-nuclear and joint (advantages and disadvantages)
- ii) Size of family –small and large families (advantages and disadvantages)
- iii) Reasons for change in family types
- iv) Stages of family –beginning, expanding and contracting

#### **Unit III Food and its Relation to Health**

**18 marks**

- i) Definition of food, health, nutrition, nutrients and balanced food
- ii) Functions of food-
  - a) Physiological- body building, energy giving, protective and regulating
  - b) Social
  - c) Psychological
- iii) Inter relationship between food and health

#### **Unit IV Methods of cooking**

**20 marks**



Boiling, steaming, pressure cooking, frying, roasting and baking- brief description of each and suitability for foods.

**Unit V Function of Home**

**18 marks**

- i) Protective function
  - ii) Social function
- [ Characteristics of functional house-security, lighting, ventilation, ventilation, sanitation, disposal of wastes ( water, garbage, human excreta ) ]

**PRACTICALS**

1. Observe your own family for type and size. Record the activities of all family members on any one day.
2. Prepare snacks /dishes using different methods of cooking. Evaluate and record taste, texture and colour of food.
3. Study your own house for light, ventilation, disposal of waste and surroundings. Record your observations.
4. File work.

<b>11TERM</b>	<b>3 Hours</b>	<b>80 marks</b>
<b>UNITS</b>		<b>Marks</b>
VI Safety in the House		30
VII Fabrics Available in the Market		30
VIII Selection of Clothes		20
<b>Total</b>		<b>80</b>

**Unit VI Safety in the House**

**30 marks**

- i) Preservation of accidents at home-cuts, falls, buns, electric shock, poisoning, safe use of fuels
- ii) Management of emergencies-first aid for cuts, fractures, burns, electric shock, poisoning and bites ( snake, dog)

**Unit VII Fabrics Available in the Market**

**30 marks**

- i) Definition of fibre and yarn.
- ii) Classification of fibre on the basis of origin and length.
- iii) Characteristics of fibres-length ,strength, absorbency, heat conductivity ,elasticity ,effect of heat, moth and mildew, acids and alkalis.
- iv) Yarn making(drawing and twisting; spinning)
- v)Construction of fabric-weaving, knitting, fetting.

**Unit VIII Selection of Clothes**

**20 marks**

Factors effecting selection of clothes

- i) fabric related factors(characteristics of fibres, construction)
- ii) person related factors(age, occupation, occasion, fashion, figure, comfort)
- iii)other factors-climate and cost

### **PRACTICALS**

1. Study your house for measures of safety against accidents and give suggestions for improvement..
  2. Practice giving first aid for cuts ,burns, ,bites., electric shock, fractures,
  3. Practice dressings for wounds on hand, elbow, finger, wrists and ankle,
  4. Collect samples of fabrics available in the market and present a comparative picture on the basis of cost (optional), durability, appearance and suitability.
  5. Identification of fabric – physical appearance and burning tests..
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**COURSE STRUCTURE  
CLASS X**

<b>1TERM</b>	<b>3 Hours</b>	<b>80 MARKS</b>
<b>UNITS</b>		<b>MARKS</b>
I Principles of Growth and Development of Child		18
II Play		17
III. Nutrients		23
IV Meal Planning:		12
V Food Hygiene & Methods of Storage of Food		10
<b>Total</b>		<b>80</b>

**Unit 1: Principles of Growth and Development of Child: 18 marks**

Growth and development of children between birth to 3 years. Important milestones in physical ,motor, social ,emotional and language development of children ;physical ,social and emotional needs of children.

**Unit II: Play : 17 marks**

Meaning ,need and types of play in children between birth and 3 years ; characteristics of play- active, passive, natural, serious and exploratory ,Play materials for children- Characteristics of play material.

**Unit III: Nutrients : 23 marks**

Functions ,sources and deficiency of Carbohydrates, Proteins,Fats Minerals-Iron ,Calcium and Iodine and Vitamins –Vitamin A,B1,B2,Vitamin C and Vitamin D.Loss of nutrients during cooking ,conservation and enhancement of nutrients.

**Unit IV Meal Planning: 12 marks**

Concept ,need and factors affecting meal planning –age, sex, climate, occupation, physical needs, number of family members, economic status of family, availability of food, family traditions, likes and dislike and occasion; Food Groups (Basic :5 suggested by ICMR) ;Use of food groups in planning balanced diet ,food allowances suggested by ICMR.

**Unit V Food hygiene and method of storage of food. 10 marks**

Rules of hygienic handling of food, Method of storage of perishable, semi-perishable and non perishable foods.

**PRACTICALS**

1. Observe and record physical and motor characteristics of a child at any given stage between 0-3 years of age.

2. Observe play activities of children between 1-3 years of age .Record their interests and characteristics.
3. Make a suitable play object for a child between 0-3 years.
4. Prepare dishes using methods for enhancement of nutrients.

## **II TERM**

**3 Hours**

**80 Marks**

<b>UNITS</b>	<b>MARKS</b>
VI Resources Available to Family:	11
VII Money Management	10
VIII Consumer Education	15
IX Care of Clothes	31
X Quality Check of Apparel	13
<b>Total</b>	<b>80</b>

### **Unit VI: Resources available to family:**

**11 marks**

Types of resources- Human (energy, time, knowledge and skill) Non –Human (money, material goods and community resources) general characteristics of resources, wise use of resources personal and shared.

### **Unit VII: Money Management:**

**10 marks**

Family income and expenditure and importance of saving and investment.

### **Unit VIII: Consumer Education:**

**15 marks**

Consumer rights and responsibilities, consumer problems, malpractices of traders-price variation, poor quality, adulteration, faulty weights and measures, non-availability of goods, misleading information, lack of standardized products, misleading advertisements, aids to help consumers –standardization marks, labels, packages, advertisements, pamphlets and leaflets.

### **Unit IX Care of Clothes:**

**31 marks**

Cleaning and finishing agents used in everyday care of clothes in the homes: stain removal (precautions and methods) laundering and storage of cotton, silk, wool and synthetics.

### **Unit X Quality check of apparel :**

**13 marks**

Workmanship of ready made, tailor made garment, reading of labels on clothes.

**PRACTICAL**

1. Prepare useful household items from recycled waste materials.
  2. List any five malpractices you have observed in the market.
  3. Practice basic stitches-tacking, running, hemming and back stitch.
  4. Remove common stains-curry, paint, ball pen ink, lipstick rust, tea and coffee.
  5. Launder and finish cotton, silk, wool and synthetic articles.
  6. Evaluate workmanship of a stitched garment.
  7. Prepare a care label for a ready made garment
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