

# INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

(Code No. 166)

(For Session 2018-19 only)

## Learning Outcomes:

1. Ability to develop a basic know how of one's computer system.
2. Ability to use Internet and its services.
3. Ability to efficiently work on Image editing tools.
4. Ability to design a website using HTML.
5. Ability to design Online forms using HTML.
6. Ability to apply style sheets using CSS.
7. Ability to recognize security threats and take preventive measures.

## COURSE STRUCTURE

### Class X

**Theory: 40 Marks**

**Practical: 60 Marks**

Unit	Name of the Unit	Marks	
		Theory	Practical
Unit I	Computer Components and Interconnection	5	-
Unit II	Advance GIMP	10	20
Unit III	Advanced HTML	20	40
Unit IV	Network Security	5	-
	<b>Total</b>	<b>40</b>	<b>60</b>

### Class-X

#### Theory Paper

**Duration : 2½ hours**

**Marks : 40**

#### Unit I: Computer Components and Interconnection

**Marks: 5**

Computer System and its definition, Hardware, Basic components of a Computer System, Input Unit, Central processing Unit/CPU, Output unit and functions, Memory, types of memory, Primary Memory, RAM (Random Access Memory), ROM(Read Only Memory), SECONDARY MEMORY, Binary digit, concept of bit and bytes, Types of computers (Analog, Digital, Hybrid), characteristics of computers, types of software (System Software, Application Software, Utility Softwares, classification of Programming Languages Ports and Cables)

#### Unit II: Advance GIMP

**Marks: 10**

Toolbox-Move tool, Alignment tool, Scale tool, Shear tool, Perspective tool, Flip tool, Blend tool, Blur/Sharpen tool, Smudge tool, Dodge / Burn tool Painting in GIMP-Pencil and paintbrush tool

Operations on Layers (Adding new layers, Renaming a Layer, Deleting a Layer, Merging a Layer, Scaling a layer, Duplicating a Layer)

Masking-Introduction and example, editing a mask

#### Unit III: Advanced HTML

**Marks: 20**

Representing data in Tabular forms, Concept of Table

Attributes <table> ..</table> ,<TR>..</TR>, <TD>..</TD>TH, Attributes: Colspan, ROWSPAN Properties: Align, width, Border, Color, Bgcolor, background, <CAPTION> tag

Working with frames, frame attributes (<frameset..> ), Attributes of <frameset>; Rows, Cols, Border, Frameborder, Framespacing.

Frameset element and its attribute (Src, Scrolling, Noresize), target attribute in anchor tag.

### **Working with HTML Forms**

Introduction and explanation of forms, Tags and attributes used in Form, <Form>..</ Form> INPUT tag and its attributes (Name, Size, Maxlength, Type)

Fields displayed by type attribute, (Text Box Field, Radio Buttons, Check boxes, command Button, Drop down Box , TEXTAREA and SELECT)

### **DHTML & CSS**

Introduction to DHTML, Features and uses of DHTML, Components of DHTML, Cascading style sheet, Advantages and Limitations of CSS,

Methods of applying CSS to an HTML document: In-line (the attribute style) and Internal (the tag style), External (link to style sheet), creating and saving cascading style sheets

Introduction and familiarization of Font: Font-Family, Style, Size, Variant, Weight; Text and Background properties; Colour properties - Text Indent, Align, Decorating, Spacing, Transform, Text alignment, decoration and transformation, Foreground and Background colour, Image and Repeat

Use of margin and margin properties, Concept of padding and Border ; Padding and Border Properties

Absolute and Relative Positioning

### **Unit IV: Network Security**

**Marks: 5**

Concepts: Cyber Law, Cyber Crime, Fire wall, Cookies, Hackers and Crackers

Open Source Software, Free ware, Shareware, Licensing scheme, Copywriting, GPL(General Public Licence), Licensed software, Copyright software, refrain from copyright violation and piracy etc.

### **Class X**

### **PRACTICAL WORK**

Duration: 4 hours

**Marks : 60**

*Design of a Practical Question Paper*

Instructions on the basis of syllabus, distribution of marks and conduction of practical examination have been provided.

The examiner is advised to set the question paper according to the prescribed curriculum and distribution of marks.

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

**30 marks**

GIMP 10 marks

ADVANCED HTML 20 marks

#### **(B) IT Application Report File**

**15 Marks**

Students are supposed to make a IT Application Report File Containing Real life assignments/ presentations using GIMP and Advanced HTML.

- At least 5 Activities related to Advance GIMP
- At least 10 webpages covering the concepts covered such as Tables, Frames, Forms, DHTML and CSS.

#### **(C) Project Work**

**10 Marks**

Developing a website on a topic integrating all the concepts covered using advance GIMP and advanced HTML.

#### **(D) Viva Voice**

**5 Marks**

### Suggested Activities

1. Find out and make a list of the types of memory available in the market and their storing capacity. Also find out, about the various utility and application software(s) used, and share this information through social networking sites. Create a document/spreadsheet/form through Office Web Apps e.g. google docs/sky drive and share it with your friends.
2. Create a collage from the pictures of any recent event held in school.
3. Design a digital poster for any state of your choice in India depicting their tourist spots and thus promoting tourism.
4. Collect and import few pictures or images of important monuments (tourist spots). Add layers and place a picture in each layer. Merge layers and edit layers and use mask to selectively colour the images.
5. Create a website for a Computer Hardware firm. The firm deals in various output units and various types of memory. Collect information about various brands of printers, scanners, memory etc. available in market. Show the various product details in tabular form on each web page.
6. Create following online forms:
  - a) Adhaar Card
  - b) Railway Reservation form
7. Using HTML design a web site for your school.
8. Using HTML design a web site providing information about Open source, free ware, licensed software(s).
9. Collect information of Cyber Laws and create a web site.

**Note:** Activities mentioned above are only suggestive. Teachers should encourage children to innovate.