

HP Board of School Education Dharamshala

Syllabus

Subject: Computer Science

Class: 10+1

UNIT - I

Fundamentals of Computer

Computer and its applications, Block Diagram of Computer, Generations of Computer, Concept of Memory (Primary and Secondary memory), Input & Output Devices, Concept of Software (System and Application software), Number System (Binary, Decimal), Conversion between binary and decimal number system.

UNIT - II

Digital Network Essentials

Internet Fundamentals, Information Technology and the Internet, Web Browsing, Multimedia on the Web, Web Search Engines, E-mail, Internet Security, Need of computer network, Data communication fundamentals- Analog and Digital signal transmission, Transmission Medias- Guided Media: Twisted pairs, Coaxial Cable, Optical fibers, Unguided transmission media: Radiowave, Microwave, Satellite, Wi-Fi. Network Classification- LAN, MAN, WAN, PAN.

UNIT-III

Desk Top Publishing (Elementary)

Concept of Desk Top Publishing, Application of DTP, Comparison of **DTP** with Word Processing, Introduction to Page maker, creating a new publication using Page maker, saving a file in Page maker, Various tools in PageMaker for designing pages, Master pages, headers, footers etc, and various printing options for a publication, Hands on with Page maker.

UNIT-IV

Digital Image Editing

Understanding Photoshop – Classification of Images (Bitmap, Vector Images), Image types, Image Size and Resolution, Creating a Digital College, Working with Files, Rulers and Guides, Changing Print Size of an Image, Tool box, Working with Colours, Selections, Shapes and Painting - Softening and Refining Selections, Saving, Loading, Deleting, Moving, Copying Pasting and Extracting Selections, Drawing with Pen Tool, Creating Brush-Filling and

Stroking Selection and Layers. Transforming and Typing, Rotating, Cropping, and Flipping Images.

UNIT-V

HTML Fundamentals

Introduction to web page Designing using HTML, creating saving an HTML document, Elements in HTML container and Empty elements, Designing web pages using the following elements : HTML, HEAD, TITLE, BODY (Attributes BACK GROUND, BGCOLOR, TEXT, LINK, ALINK, VLINK, LEFTMARGIN, TOPMARGIN), FONT (Attributes : COLOUR, SIZE FACE), BASEFONT (ATTRIBUTES : COLOUR, SIZE, FACE), CENTER, BR (Break, HR (Horizontal Rule Attributes, SIZE, WIDTH, ALIGN, NOSHADE, COLOUR), Comments, For comments H1.H6 (Heading), P (Paragraph) B (Bold), I (Italics), U (Underling), UL&OL (Unordered List & Ordered List), Attributes: Type, Start, L1 (List Item), Insertion of images using the element IMG Attributes :(SRC, WIDTH, HEIGHT, ALT, ALIGN). Internal and External Linking between Web pages; Significance of linking, A-Anchor element) attributes:(NAME, HREF, TITLE, ALT), Inserting Table in HTML (TD, TH, TR).

UNIT-VI

Advanced Web Publishing (JavaScript)

Networking Fundamentals- Introduction to Networking, Internetworking Servers, Need of Web Publishing, Web Languages, JavaScript Introduction, JavaScript Fundamentals-features of the JavaScript Language to design client-side, Variables, Data Types, Operators , Write JavaScript Programs, Control program flow (Conditional Statements and Looping Statements), Developing Interactive Forms and validation, the most popular applications of JavaScript, Cookies and JavaScript Security.

UNIT-VII

Multimedia Applications (Sound & Video Editing)

Sound editing - The nature of sound; Microphones and its types, their characteristics and application in film and television production, the sound track and sound editing, the sound mixing console, sound editing and languages dubbing, Video Editing, Editing types: linear and non-linear editing, Role of the editor and his relationship with the director, Video Cassette Recorder, Digital - Computer as a tool of editing using software - Windows Movie maker.

UNIT-VIII

Project Work
DISTRIBUTION OF TIME/PERIODS

| Module Code | Name of Unit | Theory Hours | Practical Hours | Total Hours |
|--------------------|---------------------------------------|---------------------|------------------------|--------------------|
| CS – 301 | Fundamentals of Computer | 12 | 10 | 22 |
| CS – 302 | Digital Network Essentials | 12 | 10 | 22 |
| CS – 303 | Desktop Publishing (Elementary) | 10 | 17 | 27 |
| CS – 304 | Digital Image Editing | 12 | 17 | 29 |
| CS – 305 | HTML Fundamentals | 12 | 24 | 36 |
| CS – 306 | Advanced Web Publishing (Java Script) | 16 | 30 | 46 |
| CS – 307 | Multimedia Applications | 10 | 16 | 26 |
| CS – 308 | On-Job Training/Project Work | 0 | 16 | 16 |
| Total | | 84 | 140 | 224 |

DISTRIBUTION OF MARKS

| Unit | Theory | Practical | INA | Total |
|--------------------|---------------|------------------|------------|--------------|
| I | 10 | - | - | 10 |
| II | 08 | - | - | 08 |
| III | 07 | 02 | - | 09 |
| IV | 07 | 02 | - | 09 |
| V | 10 | 05 | - | 15 |
| VI | 12 | 06 | - | 18 |
| VII | 06 | 02 | - | 08 |
| VIII(Project work) | - | 04 | - | 04 |
| Viva Voce | - | 04 | - | 04 |
| INA | - | - | 15 | 15 |
| TOTAL | 60 | 25 | 15 | 100 |

