

**Computer Applications**  
**CLASS X (Code 165)**  
**(2023-24)**

**Learning Outcomes**

1. Ability to create a simple website
2. Ability to embed images, audio and video in an HTML page
3. Ability to use style sheets to beautify the web pages.
4. Ability to Interface a web site with a web server and record the details of a user's request.
5. Ability to follow basic cyber ethics
6. Ability to familiarize with network concepts.

**Distribution of Marks and Periods**

Unit No.	Unit Name	Marks	Periods	
			Theory	Practical
1.	Networking	15	17	05
2.	HTML	25	30	50
3.	Cyber ethics	10	08	10
4.	Practicals	50	-	-
	Total	100	55	65

**Unit 1: Networking**

- Internet: World Wide Web, web servers, web clients, web sites, web pages, web browsers, blogs, news groups, HTML, web address, e-mail address, downloading and uploading files from a remote site.
- Internet protocols: TCP/IP, SMTP, POP3, HTTP, HTTPS. Remote login and file transfer protocols: SSH, SFTP, FTP, SCP, TELNET, SMTP, TCP/IP.
- Services available on the internet: information retrieval, locating sites using search engines and finding people on the net;
- Web services: chat, email, video conferencing, e-Learning, e-Banking, eShopping, e-Reservation, e-Governance, e-Groups, social networking.
- Mobile technologies: SMS, MMS, 3G, 4G.

**Unit 2: HTML**

- Introduction to web page designing using HTML: create and save an HTML document, access a web page using a web browser.

- HTML tags: html, head, title, body, (attributes: text, background, bgcolor, link, vlink, alink), *br (break)*, *hr(horizontal rule)*, *inserting comments*, *h1..h6 (heading)*, *p (paragraph)*, *b (bold)*, *i (italics)*, *u (underline)*, *ul (unordered list)*, *ol (ordered list)*, and *li (list item)*. *Description lists: dl, dt and dd. Attributes of ol (start, type), ul (type)*.
- Font tags (attributes: face, size, color).
- Insert images: img (attributes: src, width, height, alt), sup (super script), sub (subscript).
- HTML Forms: Textbox, radio buttons, checkbox, password, list, combobox.
- Embed audio and video in a HTML page.
- Create a table using the tags: table, tr, th, td, rowspan, colspan
- Links: significance of linking, anchor element (attributes: href, mailto), targets.
- Cascading style sheets: colour, background-colour, border-style, margin, height, width, outline, font (family, style, size), align, float.

### **Unit 3: Cyber ethics**

- Netiquettes.
- Software licenses and the open source software movement.
- Intellectual property rights, plagiarism and digital property rights.
- Freedom of information and the digital divide.
- E-commerce: Privacy, fraud, secure data transmission.

### **4. Lab Exercises**

- Create static web pages.
- Use style sheets to enforce a format in an HTML page (CSS).
- Embed pictures, audio and videos in an HTML page.
- Add tables and frames in an HTML page.
- Decorate web pages using graphical elements.
- Create a website using several web pages. Students may use any open source or proprietary tool.
- Work with HTML forms: text box, radio buttons, checkbox, password, list, combo box.
- Write a blog using HTML pages discussing viruses, malware, spam and antiviruses
- Create a web page discussing plagiarism. List some reported cases of plagiarism and the consequent punishment meted out. Explain the nature of the punishment in different countries as per their IP laws.

**Breakup of marks for the practicals:**

<b>S. No.</b>	<b>Unit Name</b>	<b>Marks</b>
1.	Lab Test <b>(20 marks)</b>	
	HTML (design one web page based on a diagram)	20
2.	Report File + viva <b>(20 marks)</b>	
	Report file: At least 10 HTML pages	15
	Viva voce (based on the report file)	5
3.	Project (that uses most of the concepts that have been learnt) <b>(10 marks)</b>	
<b>Total (50 marks)</b>		