Revised Computer Applications

CLASS X (Code 165)

(2020-21)

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 webpages. 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:

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