

Computer Applications (2024-25) CLASS X Code No. 165

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:

| 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 | 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) | | |