

BT-4/M-24

44152

INTERNET TECHNOLOGY AND
MANAGEMENT
PC-CS-204A

[Three Hours]

[Maximum Marks : 75]

Note : Attempt Five questions in all, selecting at least one question from each Unit. All questions carry equal marks.

Unit I

1. (a) Explain the concepts of Internet, Intranet, and Extranet, highlighting their differences and commonalities. 7
- (b) Elaborate the impact of the Internet on business culture and collaborative computing. How has the Internet transformed traditional business practices and facilitated global collaboration ? 8
2. (a) Describe the role of modems, communication software, and Internet tools in enabling access and interaction on the Internet. 7

- (b) With the advent of IPv6, what are the key advantages and challenges compared to its predecessor, IPv4 ? How does IPv6 address the growing demands of an increasingly interconnected world ? 8

Unit II

- 3/ (a) Explore the workings of search engines. How do search engines retrieve and present information from the vast expanse of the internet ? 8
- (b) Differentiate between directories, search engines, and meta-search engines in terms of their functionality and scope. How do these tools aid users in locating information on the World Wide Web ? 7
- 4/ Elaborated the protocols Telnet, FTP, HTTP, and Gopher, highlighting their respective functionalities and applications in internet communication. How do these protocols facilitate data transfer and resource access across networks ? 15

Unit III

5. (a) Discuss the role of MIME types in email communication and how they enable the transmission of various types of content, such as text, images, audio, and video. 7

- (b) Explain the concept of email management and the tools available for organizing, prioritizing, and archiving email messages. 8
6. (a) How can JavaScript be used to manipulate the Document Object Model (DOM) and respond to user interactions such as clicks and keyboard input? Provide examples of how event handling and DOM manipulation are implemented in JavaScript code. 8
- (b) What are scripting languages, and how do they differ from markup languages like HTML? 7

Unit IV

7. Compare and contrast popular web server software such as PWS, IIS, and Apache, highlighting their features, advantages, and typical use cases. How do these servers differ in terms of performance, scalability, and compatibility with different operating systems? 15
8. (a) Explain the concept of encryption schemes and their role in ensuring the confidentiality and integrity of web communication. What are the common encryption protocols used to secure web documents and transactions, and how do they function? 8
- (b) Describe the components and functionalities of firewalls and intrusion detection systems (IDS) in safeguarding web servers from unauthorized access and malicious activities. 7