

Roll No. ....

Total Pages : 3

**48253**

**BT-8/D-23**

**WEB AND INTERNET TECHNOLOGY**

**Paper : OE-CS-410A**

**Time : 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) What is the Internet, and how does it differ from the World Wide Web (WWW)? Explain the concept of a "network of networks" in the context of the Internet.  
(b) Define the following Internet-related terms: URL, IP address, DNS, ISP, HTTP, and Firewall.
2. Answer any *three* of the following in brief :
  - (a) Explain the concept of "online payment gateways" and their role in secure e-commerce transactions.
  - (b) Explain the difference between a web browser and a search engine. Provide examples of each.
  - (c) Explain the concept of Information Architecture (IA) in web design.
  - (d) List any two positive and any two negative societal impacts of the Internet.

## UNIT-II

3. Give a brief description of any *three* of the following :
- (a) Software requirements for setting up an internet connection.
  - (b) Steps involved in configuring a modem for a DSL internet connection,
  - (c) Comparison between wired and wireless communication media.
  - (d) Roles of servers, clients, and workstations in a network.
4. (a) Describe the structure of an HTML table, including the use of <table>, <tr>, <th>, and <td> elements. How do these elements work together to organize tabular data?
- (b) How does CSS enhance the presentation of HTML documents?

EXAMKIT

## UNIT-III

5. (a) What is Python, and what are the key features that make it a popular programming language for beginners and experienced developers alike?
- (b) Define data types in Python and provide examples of different data types, including integers, floats, strings, and booleans.



6. (a) Explain the concept of arrays (lists) in Python and how they can be used to store and manipulate collections of data. Provide examples of list operations.
- (b) Describe the characteristics and uses of strings, tuples, lists, and dictionaries in Python.

#### UNIT-IV

7. (a) Define inheritance in OOP and describe how it enables the creation of derived classes from base classes in Python.
- (b) Explain the purpose of exception handling in Python and the role of try, except, and finally blocks in managing errors.
8. Answer any *three* of the following in brief :
- (a) Explain the role of MySQLdb in Python for interacting with MySQL databases.
- (b) Describe the process of creating a new table in a MySQL database using Python and MySQLdb.
- (c) Define regular expressions and their significance in text processing.
- (d) Discuss the importance of file checks in Python and the various methods available to check if a file exists.