

BT-8/M-24

48253

WEB AND INTERNET TECHNOLOGY

Paper-OE-CS-410A

Time Allowed : 3 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) Discuss the Evolution of the Internet from its origins to its current state.
- (b) Describe the anatomy of the Internet, including its underlying infrastructure and components.
2. (a) Explore the applications of the Internet, with a focus on e-commerce.
- (b) Give an overview of the process of Designing effective navigation systems for Websites.

UNIT-II

3. (a) Discuss the Hardware and Software requirements for setting up an Internet connection. What factors should be considered when selecting a modem?

- (b) Define common terminology used in networking, including node, host, workstation, bandwidth, network administrator, and network security.
4. (a) Compare and contrast HTML5 with XHTML in terms of syntax and features.
- (b) Describe the basics of cascading style sheets (CSS) and their role in Web design.

UNIT-III

5. (a) Discuss the applications of Python in the information industry.
- (b) Describe the basic Data types available in Python.
6. (a) Explain functions and scoping in Python, including the definition and invocation of functions.
- (c) Describe the creation insertion and deletion of items in Python data structures.

UNIT-IV

7. (a) How are classes used to define abstract data types?
- (b) Discuss database operations using MySQL in Python, including connecting to a MySQL database, creating tables.

8. (a) How does exception handling allow Python programs to gracefully handle errors and exceptions at runtime?
- (b) Explore the use of regular expressions (REs) in Python for pattern matching and text processing.