Total Pages : 3

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 terminologies used in networking, including node, host, workstation, bandwidth, network administrator, and network security.

4. (a) Compare and constrast 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.