

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, APRIL - 2025**

NETWORK PROGRAMMING

[Maximum Marks: **100**]

[Time: **3 Hours**]

PART-A

[Maximum Marks: **10**]

I. (Answer ***all*** questions in one or two sentences. Each question carries **2** marks)

1. What is meant by byte code?
2. Define package.
3. What is meant by thread?
4. Define socket.
5. Define Remote object.

(5 x 2 = 10)

PART-B

[Maximum Marks: **30**]

II. (Answer ***any five*** of the following questions. Each question carries **6** marks)

1. Write short note on constructors.
2. Distinguish final class and abstract class with example.
3. Explain the concept of streams in java.
4. Write an applet program to find sum of natural numbers up to a given limit.
5. Write short note on Socket and ServerSocket classes in java.
6. Distinguish between absolute URL and Relative URL.
7. Explain the general RMI architecture with diagram.

(5 x 6 = 30)

PART-C

[Maximum Marks: **60**]

(Answer ***one*** full question from each Unit. Each full question carries **15** marks)

UNIT – I

- III. a. Explain the structure of a java program with an example. (8)
- b. Create a class called **Student** that has *name*, *age* and *studentId* as instance variables. Add a constructor that initializes these variables and a method called ***displayInfo()*** that prints details of the student. (7)

OR

- IV. a. Explain visibility modifiers in java. (8)
- b. Explain method overloading with example. (7)

UNIT – II

- V. a. With example, explain how to create a thread in java. (8)
b. Illustrate try-catch-statements and finally clause in exception handling. (7)

OR

- VI. a. Explain Life cycle of a thread with a neat diagram. (8)
b. Define swing. Write short note on the following swing components.
(i) JButton (ii) JText Field (iii) JComboBox (7)

UNIT- III

- VII. a. Explain the different URL Constructors. (8)
b. Differentiate TCP socket and UDP sockets. (7)

OR

- VIII. a. Explain the components of URL. (8)
b. Write the steps for creating server client program with TCP. (7)

UNIT - IV

- IX. a. Explain stub and skeleton in RMI. (8)
b. Write short note on security in java. (7)

OR

- X. Write an RMI program to add two numbers. (15)
