

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, APRIL - 2024**

NETWORK PROGRAMMING

[Maximum marks: 100]

[Time: 3 Hours]

PART – A

Maximum marks: 10

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

1. Define Object.
2. What is JVM?
3. What is Applet?
4. State the format of URL.
5. What is RMI?

(5 x 2 = 10)

PART – B

Maximum marks: 30

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

1. What is Constructor? Explain with example constructor overloading.
2. Explain the different Visibility controls in java.
3. Explain the Life cycle of a Thread.
4. Discuss the Exception handling mechanism in Java.
5. Distinguish between absolute URL and relative URL.
6. Explain the steps in creation of an RMI Application.
7. Differentiate between TCP and UDP Socket creation.

(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) What is Method overloading? Explain with example. (6)
- (b) Explain the concept of Interface. Write a java program to create an interface to find the sum of 3 numbers and also write its implementation. (9)

OR

- IV.** (a) Explain how an object can be passed as argument with example. (10)
(b) Write the features of Java. (5)

UNIT - II

- V.** (a) With suitable examples explain the different methods of thread creation. (10)
(b) Write a program in Java to generate and catch `ArrayIndexOutOfBoundsException`. (5)

OR

- VI.** (a) Write a java program that creates two threads where the first thread prints positive numbers (from 1 to 10) and another thread prints negative numbers (from -1 to -10). (10)
(b) Describe the Life cycle of an Applet. (5)

UNIT - III

- VII.** Discuss about the creation of TCP Sockets. Distinguish between client sockets and server sockets with examples for each. (15)

OR

- VIII.** (a) What is URL? Explain the format of URL by stating it with suitable example. (9)
(b) Discuss about the concept of Sockets. (6)

UNIT - IV

- IX.** Write an RMI Application with all its steps to find the Factorial of a number. (15)

OR

- X.** (a) State and Explain the concept of RMI. (6)
(b) Explain the Architecture of RMI. (9)
