A22 – 09014

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, APRIL – 2022

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 a final class?

2. List any two exceptions.

3. What is an Applet?

4. What is UDP?

5. What is skeleton?   (5 x 2 = 10)

PART-B
(Maximum Marks: **30**)

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

1. List any 6 string handling methods in Java.

2. Explain how to define in interface.

3. Explain Java's delegation event model.

4. Explain i) open Stream() ii) open Connection() methods in Java.

5. List any 3 of ByteStream and CharacterStream classes in Java.

6. List the steps to create a server program using TCP.

7. Explain

   i) lookup()   ii) rebind()   iii) RMI registry   (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 about the structure of Java program.   (8)

   (b) Explain the different steps of create a package.   (7)

<div align="center">**OR**</div>

IV. (a) Explain method overloading with the help of an example. (6)

(b) Write a Java Program to implement multilevel inheritance. The base class Student provides methods to read details of students. The class Marks in inherited from Student which possesses methods to accept and prints marks of student. Class Result is derived from class Marks which computes the total mark. (9)

<div align="center">**UNIT – II**</div>

V. (a) Explain how exception handling is done in Java with an example. (9)

(b) Explain any 3 Java Swing components. (6)

<div align="center">**OR**</div>

VI. (a) Explain the life cycle of a thread. (9)

(b) Write a Java program to copy the characters of one file to another file. (6)

<div align="center">**UNIT- III**</div>

VII. (a) Differentiate absolute and relative URL. (6)

(b) Write a Java program to implement client server communication using TCP. The client reads one number as input and sends it to the server, which is being displayed at the server. (9)

<div align="center">**OR**</div>

VIII. (a) Explain the format of URL, mention its components and list all the possible constructors of URL class. (9)

(b) Explain how to create a client server application using UDP. (6)

<div align="center">**UNIT - IV**</div>

IX. (a) Explain RMI architecture. (6)

(b) Describe the different steps to develop an RMI system. (9)

<div align="center">**OR**</div>

X. (a) Write a Java program to find out the factorial of a number by developing an RMI system. (9)

(b) Explain how security is provided in Java. (6)

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