

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2019

NETWORK PROGRAMMING

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

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

1. Write the general format of a class in Java.
2. Name any four system packages.
3. Define applet.
4. State the concept of socket.
5. Define RMI.

(5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain the significant features of constructor in java programming.
2. State the various levels of visibility modifiers in Java.
3. Explain the different ways to implement synchronization.
4. An array contains set of seven numbers. Write a Java program to perform the division of any two numbers taken from the array illustrating Array Index out of Bounds Exception and Arithmetic Exception using multiple catch blocks.
5. Distinguish between absolute URL and Relative URL.
6. Using Inet Address Class write a java program segment to retrieve the IP address and host name of a computer in a network.
7. Write the various steps to develop an RMI System.

(5×6 = 30)

[P.T.O.]

PART — C

(Maximum marks : 60)

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

UNIT — I

- III (a) Explain the java program structure having different segments with the help of a simple java program. 8
- (b) Write a java program to find the area of a rectangle, square and a circle using method overloading. 7

OR

- IV (a) Explain the various types of Inheritance with their syntax. 8
- (b) Write a java program to sort a set of numbers by sending the object as a parameter. 7

UNIT — II

- V (a) Describe the various stages involved in the life cycle of a thread with a neat diagram. 8
- (b) Write a java program segment to change the name and set the priority of main thread as 10. 7

OR

- VI (a) Describe the various states that Java applet enters during its life cycle. 8
- (b) Explain the different Reader class methods and Writer class methods. 7

UNIT — III

- VII (a) Explain the different URL Constructors and list four URL getter methods. 8
- (b) Write a java program segment to read from a URL using openStream and openConnection methods. 7

OR

- VIII (a) Distinguish between TCP/IP Socket and UDP Socket. 8
- (b) Write the creation procedure for TCP server and client program. 7

UNIT — IV

- IX (a) Differentiate RMI and a Client-Server System. 8
- (b) Draw the diagram of general RMI architecture. 7

OR

- X Write a java RMI program to add two numbers specifying the different steps. 15