DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2017

NETWORK PROGRAMMING

[*Time* : 3 hours

(Maximum marks : 100)

Marks

PART — A

(Maximum marks : 10)

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

1. Define parameterized constructor.

2. Write the syntax for declaring a single dimensional array in java.

3. Define an applet.

4. Explain well known port.

5. State the concept of RMI.   (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Given a circle whose radius is 5.5 cm. Write a Java program to find the perimeter ($2\pi r$) of the circle using a constructor.

2. Explain the various access modifiers in java stating its relevance in java programming.

3. Write the syntax of try-catch-finally block in exception handling mechanism.

4. Write an applet program illustrating the event handling mechanism to find the factorial of a number using labels, text fields and buttons.

5. Explain the difference between absolute URL and relative URL.

6. Describe the various URL getter methods.

7. Draw the architecture of an RMI.   (5×6 = 30)

Marks

PART — C
(Maximum marks : 60)
(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

III (a) Explain the concept of classes, objects and methods in java.   8

(b) Describe the rules of naming packages in java.   7

OR

IV (a) Explain the various types of inheritance in Java.   8

(b) Distinguish between final class and abstract class.   7

UNIT — II

V (a) Write the different ways to implement synchronization.   8

(b) Write a java program to read the contents of file using FileInputStream.   7

OR

VI (a) Describe Exception and explain the different types of Exceptions.   8

(b) Compare Byte Stream Classes and Character Stream Classes.   7

UNIT — III

VII (a) Explain URL and identify the various components of a URL.   8

(b) Compare TCP/IP sockets and UDP sockets.   7

OR

VIII (a) Explain the various steps involved in creating a TCP/IP server program.   8

(b) Write the different constructors and its description of Datagram Socketclass.   7

UNIT — IV

IX (a) Explain the role of stub and skeleton in RMI.   8

(b) Write the various security features of java with respect to internet.   7

OR

X (a) Write an RMI program to add two numbers.   8

(b) Write the general steps to execute any RMI program.   7