TED (15) – 5152

(REVISION — 2015)

Reg. No. .....

Signature .....

# DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2018

## 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. Define Java Virtual Machine.
2. State the method of accessing a user defined package to a java source file.
3. State any four java swing packages.
4. Name any four methods of URL class.
5. Define remote interface in RMI (5×2 = 10)

### PART — B

(Maximum marks : 30)

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

1. Illustrate how an interface can be inherited by another interface using an example.
2. Write a java program to sort a set of numbers in ascending order which are stored in an array using array initialization.
3. Draw the life cycle of a thread showing the various states.
4. Explain MouseListener interface and MouseMotionListener interface and write the various methods of these interfaces.
5. Distinguish between open stream and open connection URL constructors.
6. Explain the various constructors of DatagramSocket and DatagramPacket.
7. Write the procedure to run any RMI based program. (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) Describe the structure of a java program with an example. 8

(b) Explain how polymorphism can be implemented in java with an example. 7

OR

IV (a) Explain how constructor can be overloaded with a suitable example. 8

(b) Write a program to demonstrate how objects can be passed as arguments. 7

### UNIT — II

V (a) Write the different ways of creating threads and also the general syntax of thread creation. 8

(b) Create three java threads with a delay of 1000 milliseconds between the threads while executing the program. 7

OR

VI (a) Describe the classification of stream classes in java. 8

(b) Write a java program to read the name of a student and marks scored in five subjects and display the average marks. 7

### UNIT — III

VII (a) Describe the three different protocols of TCP/IP suite used in client-server communication. 8

(b) State the various URL constructors and its syntax. 7

OR

VIII (a) Write a client-server program to send and receive messages using tcp socket. 8

(b) Write the different methods of DatagramSocket class and DatagramPacket class and its description. 7

### UNIT — IV

IX (a) Explain the steps for developing an RMI system. 8

(b) Distinguish between stub and skeleton. 7

OR

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

(b) Describe the importance of serialization in RMI. 7