

Roll No. ....

Total No. of Page : 2

**BT-5/D11 : 7755**

**IT-355 : Network Programming**

Time : Three Hours

Maximum Marks : 100

**Note:-** Attempt any FIVE questions in all, selecting at least ONE question from each unit.

**UNIT - I**

- Q.1. a) What do you mean by abstraction and encapsulation? How are these implemented in Java? Explain with an example.
- b) What are default and parameterized constructors in Java? Explain with examples. Also discuss the process of automatic garbage collection in Java.
- Q.2 a) How can you create a string in Java? Explain with an example. Also discuss `toString()`, `charAt()` and `charArray()` string handling functions with examples.
- b) Explain the use of 'super' and 'final' keywords in the context of inheritance in Java.

**UNIT - II**

- Q.3 a) What is package in Java? Discuss the levels of access protection in a package.
- b) Explain the use of 'throw', 'throws' and 'finally' keywords in handling exceptions in Java.

- Q.4 a) How can you create a thread using Runnable interface? What is synchronization? How is it achieved in multithreading? Explain.
- b) How can you read numeric data from console and write into a file.

**UNIT - III**

- Q.5 a) What is Applet in Java? How can you pass parameters to an applet? Explain.
- b) What is ServerSockets class in Java? How is it different from Socket Class?
- Q.6 a) What is Window class? How can you set dimension of a window, set title of a window, hide and show a window? Explain.
- b) How can you connect a relational database using JDBC? Explain.

**UNIT - IV**

- Q.7 a) Explain Delegation Event Model of Java. How can you use it to handle mouse events?
- b) What are Adapter classes? List five Adapter classes and five Listener interfaces. Also, discuss two methods of MouseMotionAdapter class.
- Q.8 What do you understand by servlet? Write a detailed note on its life cycle.