

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (IT) (2011 Onwards) (Sem.–5)

**PROGRAMMING IN JAVA**

Subject Code : BTIT-502

Paper ID : [A2123]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

**SECTION-A**

**Q1 Answer briefly :**

- a. Give complete meaning of statement “*public static void main(String arg[])*”.
- b. What is a byte code?
- c. What is the difference between final and finally?
- d. What is dynamic method dispatch?
- e. Define socket.
- f. What is the functionality of using is alive ()?
- g. What are unchecked exceptions?
- h. Why do we need socket programming?
- i. What is difference between thread and a process?
- j. What is use of keyword throws?

## SECTION-B

2. Write programs to demonstrate the difference between method overloading and method overriding in Java.
3. Briefly explain the procedure of connecting front end application with any database using JDBC.
4. Explain about the applet and its life cycle.
5. Explain about interfaces. How they are different from the abstract classes?
6. Demonstrate the creation and handling of our own exception using any program.

## SECTION-C

7. Explain different string handling functions and their syntax in java language
8. Write a program in java to do the following :
  - a. To swap the two numbers without using the third variable.
  - b. Factorial of a number using recursion.
9. Write a short note on :
  - a. Finalize
  - b. I/O streams
  - c. Socket programming
  - d. Multiple catch with single try statement