

**Total No. of Questions: 09**

**B.Tech (IT) (2011 Onwards) (Sem. – 5)**

**PROGRAMMING IN JAVA**

**M Code: 70595**

**Subject Code: BTIT-502**

**Paper ID: [A2123]**

**Time: 3 Hrs.**

**Max. Marks: 60**

**INSTRUCTIONS 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 have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

**SECTION A**

1. a) What is the meaning of first line of java program “public static void main (String args[])?  
b) JVM is a platform dependent (T/F). Justify your answer.  
c) What is the use of “this” keyword?  
d) What is a Wrapper Class?  
e) What is use of final keyword?  
f) Define run time Exception.  
g) Difference between application and applet.  
h) Define type casting.  
i) What is difference between interface and abstract class?  
j) What is meaning of final class?

### SECTION B

2. Write programs to demonstrate the difference between method overloading and method overriding in Java?
3. Explain Multithreading. Demonstrate with the help of example that how we set priorities in threads.
4. Write a program to implement the Factorial of a number using recursion in Java?
5. What is string handling? Write a program to append two strings in java.
6. What is inheritance? Demonstrate the use of Super keyword in inheritance with the help of example.

### SECTION C

7. Explain in detail that makes java the most popular, preferable language over the years.
8. What is exception handling? How multiple exceptions are caught in a single program? WAP to demonstrate the use of custom exception.
9. Write Short note on
  - a) Thread synchronization
  - b) Socket programming
  - c) JIT Compilation
  - d) Applets