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
M.Code : 70595

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)   Use of wrapper class.

b)   Java tokens.

c)   String buffer.

d)   Limitations of Java programming language.

e)   Layout manager.

f)   Socket.

g)   Difference between throw and throws.

h)   This pointer.

i)   List the different stages in the life cycles of a thread.

j)   What are applets?

SECTION-B

2. Explain Java garbage collection mechanism.

3. How packages are created and accessed in Java. Briefly explain the naming convention in packages?

4. Explain the steps involved in creating and executing a java program.

5. Write a Java code that generates custom exception if any value from its command line arguments is negative.

6. Explain the life cycle of applet.

SECTION-C

7. Write a program in Java to find n^{th} prime number where n is any integer and should be taken as input from the user.

8. Explain the difference between method overriding and method overloading with the help of suitable example.

9. What is multithreading in Java? Explain the inter thread communication with the help of suitable example.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.