

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (IT) (Sem.-5)
PROGRAMMING IN JAVA

Subject Code : BTIT503/18

M.Code : 78258

Date of Examination : 14-06-2024

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. Write briefly :

- a) What is JVM and what is its role in Java?
- b) What is the purpose of the import statement?
- c) What operator is used for concatenation in Java?
- d) What is typecasting in Java?
- e) Define TCP/IP.
- f) What is inheritance in Java?
- g) What is a package in Java?
- h) How do you handle an exception using try-catch blocks?
- i) How does the wait () method work?
- j) What does the super keyword do?

SECTION-B

2. Discuss the implications of using wrapper classes for primitive types in terms of performance and object management.
3. Explain the differences and uses of single-dimensional and multi-dimensional arrays in Java, including memory layout.
4. Discuss the principles of object-oriented programming as they pertain to classes in Java, including encapsulation, inheritance, and polymorphism.
5. Explain the concept of constructor overloading in Java and its benefits with practical examples.
6. Discuss Applet Tag. How we can pass parameters to HTML using Applet?

SECTION-C

7. Provide an in-depth analysis of the final keyword and its impact on inheritance, including final classes and methods.
8. Analyze the differences between implementing Runnable and extending Thread and provide guidelines on when to use each approach?
9. Explain the life cycle of a Thread with the help of an 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.