



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD)
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Arrear Examination – November 2024
III Semester

Batch : 2022 Arrear
Major : Computer Science

Time: 3 Hours
Max. Marks: 100

21BCSC12 Programming in Java

Course Outcomes:

At the end of the course, students will:

- CO1. Apply the salient features of Java programming.
- CO2. Identify classes, objects, members of a class, and relationships among them to solve a specific problem.
- CO3. Develop client-side programming using Applet and AWT
- CO4. Implement packages to solve complex problems and apply exceptional handling mechanisms.
- CO5. Recall the principles and practice of object-oriented concepts in the construction of robust, maintainable programs.

Part A

Choose the correct answer

10 X 1 = 10

1. Which of the following options leads to the portability and security of Java? CO1K1
a. Bytecode is executed by JVM b. The applet makes the Java code secure and portable
c. Use of exception handling d. Dynamic binding between objects
2. This method cannot be overridden. CO1K2
a. Super b. Static c. Private d. final
3. Java method overloading implements the OOPS concept _____. CO2K1
a. Inheritance b. Polymorphism c. Encapsulation d. None
4. When is the object created with new keyword? CO2K2
a. Compile time b. Run time c. Depending on Code d. Any time
5. Which of the Java packages contains String Class? CO2K1
a. java.util b. java.lang c. java.awt d. java.applet
6. Number of primitive data types in Java are? CO2K2
a. 5 b. 6 c. 7 d. 8
7. Which of this keyword must be used to inherit a class? CO3K1
a. Super b. This c. Extent d. Extends
8. Which of these can be used to fully abstract a class from its implementation? CO4K2
a. objects b. packages c. interfaces d. none of the mentioned
9. When Exceptions does in java arises in code sequence? CO5K1
a. Run time b. Compilation Time c. can occur any time d. None of the mentioned
10. Which of these functions is called to display the output of an applet? CO5K1
a. display() b. paint() c. display Applet() d. PrintApplet()

Part B

Answer All Questions

5 x 6 = 30

Each answer should not exceed 400 words or two pages

- 11.a. Outline the features of Java. CO1K2
(or)
- 11.b. Explain break and Continue Statements in Java. CO1K2
- 12.a. Write a Java Program to implement Ascending order using a one-dimensional array. CO2K3
(or)

- 12.b. Explain method overloading with an example. CO2K2
- 13.a. Explain the use of Final keyword in Java with an example. CO3K2
- (or)
13. b. Explain Multilevel Inheritance in Java. CO3K3
- 14.a. Explain the concept of Package Hierarchy in Java. CO4K4
- (or)
- 14.b. Explain the concept of User Defined Exceptions. CO4K4
- 15.a.Explain the concept of Applet Life cycle. CO5K4
- (Or)
- 15.b Write a program on applets for moving a car using java. CO5K4

Part C

Answer All questions

5x12 = 60

Each answer should not exceed 800 words or four pages

- 16.a. Brief on object-oriented programming concepts. CO1K2
- (OR)
- 16.b. Explain the various Control statements supported by Java. CO1K4
- 17.a Elucidate Class and Object concepts in Java with an illustration.. CO2K2
- (OR)
17. b. Discuss String Buffer Class methods in Java. CO2K2
18. a What are Constructors? Explain the different types of Constructors CO3K2
- (OR)
18. b What is Method Overriding in Java? Explain with an example CO3K2
- 19.a.Present the importance using Packages in Java CO4K2
- (OR)
- 19.b. Writenotes on Interfaces in Java. CO4K2
- 20.a. Analyse the methods used for Exception Handling in Java Applications. CO5K2
- (OR)
- 20.b.Discuss the methods used for Event Handling in Java Applications. CO5K2
