



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 (now MoE)
Re-accredited with 'A++' Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Arrear Examination – May 2025
III Semester

Batch : 2022 Arrear
Major : Computer Science

Time: 3 Hours
Max. Marks: 100

21BCSC12 Programming in Java

PART A

10 x 1 = 10

Choose the Correct Answer

Course Outcomes:

- 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

10 x 1 = 10

Choose the Correct Answer

1. Which of the following option leads to the portability and security of Java? CO1K1
a. Bytecode b. Applet c. Exception d. Package
2. Name the keyword that prevents a method from being overridden by subclasses. CO1K2
a. super b. private c. public d. final
3. Which of the following OOPS concept is implemented by Java method overloading ? CO2K1
a. Inheritance b. Polymorphism c. Encapsulation d. Abstraction
4. When is the object created with new keyword? CO2K2
a. Compile time b. Run time
c. Depending on Code d. Depending on Compiler
5. Which of the Java package contains String Class? CO2K1
a.java.util b. java.lang c. java.awt d. java.applet
6. How many primitive data types are there in Java? CO2K2
a. 5 b. 6 c. 7 d. 8
7. Which of the keywords 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. applets
9. What is the keyword of a statement using which an exception is handled? CO5K1
a. throw b. finally c. try d. catch
10. Which of these functions is called to display the output of an applet? CO5K1
a. display() b. paint() c. displayApplet() 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 the need of Java Virtual Machine. CO1K3
- 12.a. Write a Java Program to search for an element in an array of 'n' elements. CO2K4
(or)
- 12.b. Explain method overloading with an example. CO2K2

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|--------------------------------------------------------------------------------------|-------|
| 13.a. Write on access specifiers in Java. | CO3K2 |
| (or) | |
| 13. b. Explain Multilevel Inheritance in Java. | CO3K2 |
| 14.a. Present the Package Hierarchy in Java. | CO4K3 |
| (or) | |
| 14.b. Write a Java program to validate voter's eligibility using Exception Handling. | CO4K4 |
| 15.a. Explain the concept of Applet Life cycle. | CO5K3 |
| (or) | |
| 15.b Write on graphic programming in Java. | CO5K2 |

Part C

Answer All questions

5x12 = 60

Each answer should not exceed 800 words or four pages

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| 16.a. Brief on object-oriented programming concepts. | CO1K2 |
| (Or) | |
| 16.b. Explain the various Control statements supported by Java. | CO1K3 |
| 17.a Elucidate Class and Object concepts in Java with an illustration. | CO2K3 |
| (Or) | |
| 17. b. Discuss String Buffer Class and its 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 creation and usage of Packages in Java. | CO4K2 |
| (Or) | |
| 19. b. Write notes on Interfaces in Java. | CO4K2 |
| 20.a. Elaborate Exception handling mechanism in Java. | CO5K3 |
| (Or) | |
| 20.b. Discuss on Event Handling in Java Applications. | CO5K2 |
