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**G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.**

**UG DEGREE END SEMESTER EXAMINATIONS - NOVEMBER 2024.**

(For those admitted in June 2023 and later)



**PROGRAMME AND BRANCH: B.Sc., INFORMATION TECHNOLOGY**

| SEM | CATEGORY   | COMPONENT | COURSE CODE | COURSE TITLE     |
|-----|------------|-----------|-------------|------------------|
| II  | PART - III | CORE - 3  | U23IT202    | JAVA PROGRAMMING |

**Date & Session: 05.11.2024/AN**

**Time : 3 hours**

**Maximum: 75 Marks**

| Course Outcome | Bloom's K-level | Q. No. | SECTION - A (10 X 1 = 10 Marks)<br>Answer <u>ALL</u> Questions.   |
|----------------|-----------------|--------|---|
| CO1            | K1              | 1.     | Which one of the following is not a Java feature?<br>a) Object-oriented    b) pointers    c) Garbage collection    d) Portable  |
| CO1            | K2              | 2.     | Select the correct statement about Truncation in Java.<br>a) Floating-point value assigned to a Floating type<br>b) Floating-point value assigned to an integer type<br>c) Integer value assigned to floating type<br>d) Integer value assigned to floating type                    |
| CO2            | K1              | 3.     | Which of the following is not a valid primitive data type in Java.<br>a) int    b) boolean    c) char    d) string  |
| CO2            | K2              | 4.     | Select the correct statement about final variable in Java.<br>a) It can be modified once initialized.<br>b) It must be initialized during declaration.<br>c) It can be re-assigned within a method.<br>d) It can hold a reference to a non-final object.                            |
| CO3            | K1              | 5.     | Which one of the following is false statement about runtime polymorphism in Java?<br>a) Method overriding    b) RMI    c) Method overloading    d) Virtual method calls   |
| CO3            | K2              | 6.     | Select the following statements about abstract methods is true.<br>a) An abstract method can have a body.<br>b) An abstract method cannot be overridden by subclasses.<br>c) An abstract method must be declared in an abstract class.<br>d) An abstract method can only be static. |
| CO4            | K1              | 7.     | Which of the following is the superclass of all exceptions in Java?<br>a) Throwable    b) Exception    c) Error    d) Runtime Exception   |
| CO4            | K2              | 8.     | Select the keyword used to implement an interface in Java.<br>a) implements    b) extends    c) abstract    d) interface  |
| CO5            | K1              | 9.     | Which JDBC component is used to execute SQL queries?<br>a) Connection    b) ResultSet    c) DriverManager    d) Statement   |
| CO5            | K2              | 10.    | Trace out the role of the service() method in a servlet.<br>a) It initializes the servlet.<br>b) It handles HTTP requests and sends responses.<br>c) It destroys the servlet.<br>d) It handles servlet configuration.   |

| Course Outcome | Bloom's K-level | Q. No. | <b>SECTION – B (5 X 5 = 25 Marks)</b><br><b>Answer <u>ALL</u> Questions choosing either (a) or (b)</b> |
|----------------|-----------------|--------|--|
| CO1            | K3              | 11a.   | Compute the factorial of 'n' numbers using java code.<br><b>(OR)</b>                                   |
| CO1            | K3              | 11b.   | Calculate the age of a person using java code.   |
| CO2            | K3              | 12a.   | Write a java program to create multidimensional array.<br><b>(OR)</b>                                  |
| CO2            | K3              | 12b.   | Write a java program to perform string operations.   |
| CO3            | K4              | 13a.   | Compare method overloading with method overriding.<br><b>(OR)</b>                                      |
| CO3            | K4              | 13b.   | Distinguish between static members and non-static members.   |
| CO4            | K4              | 14a.   | Infer how the interface is useful for multiple inheritance?<br><b>(OR)</b>                             |
| CO4            | K4              | 14b.   | Examine the uses of multithreaded programming in Java.   |
| CO5            | K5              | 15a.   | Interpret the functions of layout manager in Java.<br><b>(OR)</b>                                      |
| CO5            | K5              | 15b.   | Assess the usage of servlet API with examples.   |

| Course Outcome | Bloom's K-level | Q. No. | <b>SECTION – C (5 X 8 = 40 Marks)</b><br><b>Answer <u>ALL</u> Questions choosing either (a) or (b)</b> |
|----------------|-----------------|--------|--|
| CO1            | K3              | 16a.   | Illustrate the work flow of Java Virtual Machine.<br><b>(OR)</b>                                       |
| CO1            | K3              | 16b.   | Examine the features of Java with examples.  |
| CO2            | K4              | 17a.   | Classify the data types in java with examples.<br><b>(OR)</b>  |
| CO2            | K4              | 17b.   | Categorize the decision-making statements with examples.   |
| CO3            | K4              | 18a.   | Analyse the usage of parameterized constructor.<br><b>(OR)</b>   |
| CO3            | K4              | 18b.   | Examine the various inheritance in Java.   |
| CO4            | K5              | 19a.   | Assess the error handling mechanism in Java.<br><b>(OR)</b>  |
| CO4            | K5              | 19b.   | Interpret the usage of package in Java?  |
| CO5            | K5              | 20a.   | Prioritize the life cycle of servlet.<br><b>(OR)</b>   |
| CO5            | K5              | 20b.   | Write the importance of JDBC in Java.  |