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|  | **ABES Engineering College, Ghaziabad**  **Department of Computer Science** |  |

**Session: 2023-24 Semester: 4th Section: A, B, C, D**

**Course Code: BCS 403 Course Name: Object Oriented Programming with Java**

**Assignment 1**

**Date of Assignment: 12.04.2024 Date of submission: 22.04.2024**

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| **S.No.** | **Question** | **KL, CO** |
| 1 | Explain the Memory storages available with JVM. | K2, CO1 |
| 2 | Explain the difference between JVM, JRE, and JDK. | K2, CO1 |
| 3 | Explain the difference between instance and local variables. | K2, CO1 |
| 4. | How is the creation of a String using new() is different from that of a literal? | K2, CO1 |
| 5. | Write a Java program to print the contents of a two-dimensional Boolean array where t represents true and f represents false.  Sample array: array = {{true, false, true},  {false, true, false}}; Expected Output : t f t f t f | K3, CO1 |
| 6 | Write a Java program that finds numbers greater than the average of an array.  Expected Output: Original Array: [1, 4, 17, 7, 25, 3, 100] The average of the said array is: 22.0 The numbers in the said array that are greater than the average are: 25 100 | K3, CO1 |
| 7 | Write a Java program to create a class called "Person" with a name and age attribute. Create two instances of the "Person" class, set their attributes using the constructor, and print their name and age. | K3, CO1 |
| 8 | Write a Java program to create a class called "Restaurant" with attributes for menu items, prices, and ratings, and methods to add and remove items, and to calculate average rating. | K3, CO1 |
| 9 | Why is the main method static in Java? | K3, CO1 |
| 10 | Explain the difference between compile time and run time polymorphism. | K2, CO1 |