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| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **Course:** | **Advanced Programming** | **Course Code:** | **CS433** |
| **Program:** | **BS(Computer Science)** | **Semester:** | **Fall 2018** |
| **Duration:** | **30 Minutes** | **Total Marks:** | **10** |
| **Paper Date:** | **18-Sep-18** | **Weight** | **3.3 %** |
| **Section:** | **A** | **Page(s):** | **2** |
| **Quiz:** | **1** |  |  |
| **Instruction/Notes:** | Attempt the quiz on the question paper and write concise answers. | | | |

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| **Marks** |  |
| **Total** | 10 |

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| 1. JVM is a\an ---------.   (A) compiler (B) assembler  (C) debugger (D) interpreter | 1. What will be the output of the code given below?   **int** value = 128;  value = value>>3;  System.*out*.println(value);  **a. 64 b. 32**  **c. 16 d. 4** |
| 1. What will be the final value of b?   **byte** a = 18;  **byte** b = 13;  b = a+b\*10;  **a. 310 b. runtime error**  **c. 148 d. compile time error** | 1. What will be the final value of c?   **byte** a = 19;  **byte** b = 20;  int c = a+b/3;  **a. 13 b. 25.67**  **c. error d. 25** |
| 1. What will be the output of the following program? If there is any error fix the code.   interface MyInterface {  final void method1();  void method2();  }  class MainClass implements MyInterface {  void method1() {}  public static void main(String args[]) {  System.out.println("I am here…");  }  } | 1. Which is of the following is **not true** for JVM ?   **a.** JVM reads Byte Code and generates Machine Code. **b.** JVM is a virtual Machine that acts as a intermediary between Java Application and Host Operating System. **c.** JVM reads Source Code and generates Byte Code. **d.** JVM acts as a translator that translates different Machine code ( on the basis of Host Machine ) for a common Byte Code. |

**Q7.** Given the code below, and making no other changes, which access modifiers (public, protected or private) can legally be placed before myMethod() on line 3? If line 3 is left as it is, which keywords can legally be placed before myMethod on line 8?

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| 1. class House  2. {  3. void myMethod() {}  4. }  5.  6. class Apartment extends House  7. {  8. void myMethod() {}  9. } |

**A.** private or nothing (i.e. leaving it as it is) on line 3. Nothing (i.e. leaving it as it is) or protected or public on line 8.

**B.** public or protected on line 3. private or nothing (i.e. leaving it as it is) on line 8.

**C.** nothing (i.e. leaving it as it is) or protected or public on line 3. private or nothing (i.e. leaving it as it is) on line 8.

**D.** None of the above

**Q8.** What will be the output?

public class TestClass {

public static void main(String[] args) {

String str = "fast-nu";

String str2 = "fast-nu";

String str3 = new String("lahore");

String str4 = new String("lahore");

System.out.println(st3 == str4+ “, ”+str.equals(str2)+”, ”+str.compareTo(“fast-NU Lahore”) );

} }

**Q9.** Write a Java program to check if a String contains another String. You need to write a function to search for the existence of a string (target) in another string (source). The function takes two strings as the input and returns the index where the second string is found. If the target string cannot be found, then return -1.  (2 marks)