Total No. of Questions: 4

Enrollment No. EN21CS303029

Faculty of Engineering

Mid Sem I Examination September -2022

CS3CO32 Java Programming

Programme: B.Tech. Branch/Specialisation: All

Duration: 2 Hrs. **Maximum Marks: 40**

Q.1 i. The command javac is used to 1

a) debug a java program b) compile a java program

c) interpret a java program d) execute a java program

ii. Which of the following is not the Java primitive type 1

a) Byte b) Float c) Character d) Long double

iii. What is the output of this program? 1

```
class increment {
public static void main(String args[])
{
double var1 = 1 + 5;
double var2 = var1 / 4;
int var3 = 1 + 5;
int var4 = var3 / 4;
System.out.print(var2 + " " + var4);
} }
```

a)1 1 b) 0 1 c) 1.5 1 d) 1.5 1.0

iv. What is the output of this program? 1

```
class mainclass {
public static void main(String args[])
{
char a = 'B';
a++;
System.out.print((int)a);
}
}
```

67

a)66 b) 67 c) 65 d) 64

v. Which of the following declaration of the array contains error? 1

a) int a[ ]= int[10]; b) int [ ] b=new int[5];

c) float c[ ]= {1,2,3}; d) int d[ ] = {1, 2,3; int e[ ]; e=d;

vi. The concept of multiple inheritances is implemented in Java by 1
I. Extending two or more classes.
II. Extending one class and implementing one or more interfaces.
III. Implementing two or more interfaces.
a) Only (II) b) (I) and (II) c) (II) and (III) d) Only (I)

vii. A class can be declared as ..... if you do not want the 1
class to be sub-classed.
a) abstract b) final c) static d) super

viii. The ..... keyword is used to derive a class from a super- 1
class.
a) extend b) extends c) duplicate d) inherit

ix. Which component is responsible for converting bytecode into machine 1
specific code?
a) JVM b) JDK c) JIT d) JRE

x. A package is a collection of 1
a) classes b) interfaces c) editing tools d) classes and interfaces

Q.2 i. Explain JDK, JRE and JVM with a suitable diagram. 4
ii. Distinguish between C++ and Java. 6
OR iii. What are the features of Java? 6

Q.3 i. How to create a package? Explain with examples. 4
ii. Describe different java access specifiers/modifiers with examples. 6
OR iii. What is an interface? What are the similarities between interface and class? 6

Q.4 i. What is garbage collection in Java? 3
ii. How do we implement polymorphism in JAVA? Explain with example. 7
OR iii. What is inheritance? Explain types of inheritance with example. 7

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