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SPECIALIZATION IN CYBER SECURITY (CS)
EXAMINATION : MAY- 2024
SEMESTER - IV
Sub: Java / Java Programming (BCA- 440-18/BCA-440-20/BCA-CS-440-20)

Date : 28/05/2024

Total Marks : 60

Time: 10.00 am to 12.30 pm

Instructions:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labeled diagrams wherever necessary.

Q.1. Fill in the blanks.

(5)

1. _____ component is used to compile, debug and execute the java programs.
a) JRE
b) JDK
c) JIT
d) JVM
2. _____ is not a Java feature.
a) Object-oriented
b) Portable
c) Dynamic and Extensible
d) Use of pointers
3. _____ environment variable is used to set the java path.
a) MAVEN_Path
b) JAVA
c) JAVA_HOME
d) JavaPATH
4. _____ is a type of polymorphism in Java Programming?
a) Multiple polymorphism
b) Execution time polymorphism
c) Compile time polymorphism
d) Multilevel polymorphism
5. A _____ is a collection of classes and interfaces.
a) Package
b) Collection
c) Inheritance
d) Array

Q.2.

(5)

1. JRE is responsible for converting Byte code to the machine-specific code.
2. Constructor overloading is not possible in Java.
3. @Override is a built-in annotation in java.
4. Multithreading in Java is a process of executing multiple threads simultaneously.
5. AWT stands for Advance window toolkit.

Q.3. Answer the following. (Solve any 5)

(10)

1. Why is Java a platform independent language?
2. What do you mean by Data Encapsulation?
3. What is the use of this keyword in java?
4. What is use of super keyword in Java?
5. List any four features of Java.
6. What is use of Scanner class in java.

Q. 4. Answer the following in detail. (Solve any 6) (30)

1. Explain any two access specifiers in Java with suitable example.
2. What is Exception? Explain try, catch with example.
3. Write Java program to check whether the given number is Armstrong or not.
4. Define Thread. Explain Thread life cycle in detail.
5. Define Inheritance. Explain why Java doesn't support Multiple inheritance with example.
6. What is constructor? Explain types of constructors in Java.
7. Write a Java program to accept array elements from user. Calculate the sum and average of array elements.

Q. 5. Answer the following in detail. (Solve any 1) (10)

1. What is Java Swing? Explain any four Swing components with example.
 2. Define Abstraction. Explain Abstract classes and Abstract methods with example.
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