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Paper Code : OE-EE501B/OE-EEE501B Object Oriented Programming
UPID : 005525

Time Allotted : 3 Hours   *Full Marks :70*

The Figures in the margin indicate full marks.
Candidate are required to give their answers in their own words as far as practicable

Group-A (Very Short Answer Type Question)

1. Answer *any ten* of the following :   [1 x 10 = 10]

    (I)   Example of checked exception is _____.

    (II)   Name of default thread active in Java program is —.

    (III)   Which package is imported to use the Graphics class?

    (IV)   _____ are combinations of code and data that are treated as a single unit.

    (V)   _____ is the process of hiding the internal parts of an object implementation and allowing access to that object only through a defined interface.

    (VI)   A sub-class defining a method that has same signature and structure as that of a method in the parent class is called _____.

    (VII)   The default priority of a thread is _____.

    (VIII)   The method getCodeBase() of the Applet class returns an object of the type _.

    (IX)   Object oriented programming was motivated to address _____ major concerns in software development.

    (X)   The syntax of the argument passed to main method of any application in Java is_.

    (XI)   Programmers can't deal with_.

    (XII)   A thread can change its priority by calling the _ method.

Group-B (Short Answer Type Question)

Answer *any three* of the following :   [5 x 3 = 15]

2. What is the difference between an Abstract class and Interface? Explain when you are using Abstract classes.   [5]

3. Explain the difference between method overloading and method overriding with example   [5]

4. Differentiate between access modifiers and access specifiers. Give a brief idea about inbuilt packages in Java.   [5]

5. What is the role of synchronized keyword? In what situations we will use it?   [5]

6. What are the differences between multithreading and multiprocessing? Why synchronization is so important in real life?   [5]

Group-C (Long Answer Type Question)

Answer *any three* of the following :   [15 x 3 = 45]

7. (a) Can Applet have constructors? How do you pass parameters to the applet using HTML tags?   [5]

    (b) Differentiate between "java.applet.*" and "java.applet.Applet". How do you embed an Applet within HTML page?   [7]

    (c) What is the difference between stop() and destroy() methods?   [3]

8. (a) Differentiate between Java AWT and Swing.   [5]

    (b) Differentiate between Applet and JApplet.   [5]

    (c) Explain different types of Layouts.   [5]

9. (a) Explain Data Abstraction with example.   [4]

    (b) What is a native modifier?   [2]

    (c) What is the utility of super in JAVA?   [4]

    (d) Why static method can only refer other static members?   [2]

    (e) What is an abstract class? Explain its uses.   [3]

10. a) What are the advantages and disadvantages of using inner classes? If you compile a file containing inner class how many .class files are created and can we access them accessible in usual way?   [5+5+5]

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b) Can you define a class without name? What are different types of anonymous classes and do anonymous classes have constants?

c) Can anonymous class define method of its own? Can an anonymous can implement an interface and also extend a class at the same time?

11. (a) What is Object Persistence and Meta class? [4]

    (b) Write a JAVA program that implements an interface. [3]

    (c) What is constructor? What are the properties of the constructor? Write a program to show the use of constructor. [4]

    (d) What is inheritance? How many types of inheritances are available? Explain them with Diagram. [4]

*** END OF PAPER ***