# AJ-123

**April-2016**

**B.C.A., Sem.-IV**

**CC-210 : Core Java**

**Time : 3 Hours]**            **[Max. Marks : 70**

1. (a) State and explain the features of Java.    **7**

   **OR**

   State and explain the different types of operators in Java.

   (b) Answer the following :

   (i) What is meant by constructor ? Also explain constructor overloading.    **4**

   (ii) Differentiate between : Java Applications and Java Applets.    **3**

   **OR**

   Answer the following :

   (i) Discuss : InputDialog and ConfirmDialog boxes of JOptionPane class.    **4**

   (ii) State and explain any three data types in Java in brief.    **3**

2. (a) Explain the different looping statements in Java giving suitable example.    **7**

   **OR**

   What is Arrays class in Java ? Explain all the methods of Arrays class in detail.

   (b) Answer the following :

   (i) Explain the Integer and Double wrapper classes in Java.    **4**

   (ii) Explain the insert( ) and setCharAt( ) methods.    **3**

   **OR**

   Answer the following :

   (i) Explain the significance of string class in Java ? Also explain any two methods of String class.    **4**

   (ii) How can we create arrays of strings ? Explain giving suitable examples.    **3**

3. (a) What is an exception ? How is Exception handling implemented in Java ? Also explain the advantages of exception handling. **7**

**OR**

Discuss in detail the concept of inheritance in Java. How is multiple inheritance implemented in Java ?

(b) Answer the following :

(i) Differentiate between : Interface and Abstract Class **4**

(ii) What is method overriding ? **3**

**OR**

Answer the following :

(i) What are static methods ? Why main( ) method is a static method in Java ? **4**

(ii) Explain the 'finally' block of exception handling. **3**

4. (a) What is a Thread ? Explain the thread life cycle. **7**

**OR**

What is a Package ? What are the advantages of using a Package ? State and explain any four built-in-packages in Java.

(b) Answer the following :

(i) Write a short note on : Thread Priorities. **4**

(ii) Explain : The import statement. **3**

**OR**

Answer the following :

(i) Explain : The applet tag. **4**

(ii) Explain any two methods of Graphics class. **3**

5. Do as directed : **14**

(1) The Java compiler converts the source code into a binary program of _____.

(2) In Java, the value of 4+7*4+5, will be _____.

(3) Show MessageDialog is a JOptionPane method that can get input from the user. [True/False]

(4) _____ method returns true if the argument is a letter and false otherwise.

(5) The method that determines whether two String objects are equivalent, regardless of Case, is _____.

(6) By using wrapper classes, we can convert a primitive data type into object type. [True/False]

(7) The default value of Boolean type variable is always false. [True/False]

(8) The constructor of a derived class can access the constructor of its base class by using the reserved word _____.

(9) An abstract class can be declared as final. [True/False]

(10) Errors and RuntimeExceptions are _____ exceptions.

(11) If a constructor includes a call to the constructor of the base class, then the call must be the first action in the constructor.[True/False]

(12) The _____ package is used for network communication.

(13) A dead thread can be restarted. [True/False]

(14) _____ method is used to draw an open ended polygon.

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