

**AJ-123**

April-2016

**B.C.A., Sem.-IV****CC-210 : Core Java**

e : 3 Hours]

[Max. Marks : 70

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

**OR**

7 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. (4)

OR

Discuss in detail the concept of inheritance in Java. How is multiple inheritance implemented in Java ? (5)

(c) Answer the following :

- (i) Differentiate between : Interface and Abstract Class
- (ii) What is method overriding ?

OR

Answer the following :

- (i) What are static methods ? Why main( ) method is a static method in Java ?
- (ii) Explain the 'finally' block of exception handling.

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 :

- (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] (14)

- Also (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 \_\_\_\_\_.
- nce (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.