

Seat No. : _____

ZC-122
April-2014
B.C.A., Sem.-IV
CC-210 CORE JAVA

Time : 3 Hours]

[Max. Marks : 70

1. (A) Explain the following terms : **8**

- (1) Bytecode
- (2) Type casting
- (3) Static Keyword
- (4) Polymorphism

OR

Explain the following terms :

- (1) Wrapper class
- (2) Constant
- (3) Finalize Function
- (4) Switch Keyword

(B) Explain the characteristics of Java language. **6**

OR

Explain Java architecture with figure.

2. (A) Answer the following questions : **8**

- (1) List Methods of graphical dialog boxes of JOptionPane.
- (2) Differentiate between Method vs. Constructor.
- (3) Differentiate between Applet vs. Application.
- (4) How StringBuffer is better than String ?

OR

Answer the following questions :

- (1) Explain Logical operators.
- (2) Differentiate between equals vs. (==).
- (3) Differentiate between Abstract vs. Final.
- (4) Explain Java comments.

(B) Write short note on Looping statements with examples. **6**

OR

Write short note on different types of Java arrays with examples.

3. (A) Answer the following questions : **8**

- (1) Explain different states of Thread life cycle with figure.
- (2) What is package ? What are their types ? Why we need package ? Explain with example.

OR

Answer the following questions :

- (1) What is interface ? What are its characteristics ? Why we need it ? Give example.
- (2) What is exception ? What are their types ? Explain exception handling mechanism with example.

(B) Describe following functions : **6**

- (1) drawRect()
- (2) showStatus()
- (3) fillPolygon()

OR

Describe following functions :

- (1) drawString()
- (2) join()
- (3) sleep()

4. (A) Do as directed : **8**

- (1) Explain Thread priorities.
- (2) Give example of creating owned checked exception
- (3) Define keywords : (1) Try (2) Catch
- (4) Applet class hierarchy

OR

Do as directed :

- (1) List any five attributes of <APPLET> tag.
- (2) Identify functions: getDocumentBase() and getCodeBase().
- (3) ArithmeticException class hierarchy
- (4) What do you mean by abstract functions ?

(B) Answer the following questions :

6

- (1) What is inheritance ? What is “extends” keyword does ? List advantages of using Inheritance.
- (2) What are the access modifiers in Java language ? What do you mean by default modifier ?

OR

Answer the following questions :

- (1) What is interface ? What is “implements” keyword does ? List advantages of using Interface.
- (2) Explain different functions of Applet life cycle.

5. Fill in the blanks :

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- (1) The command to execute a compiled Java application is _____
 - (a) exec
 - (b) javac
 - (c) appletviewer
 - (d) java
- (2) An instance of class is a(n) _____.
 - (a) Method
 - (b) Constructor
 - (c) Object
 - (d) Bytecode
- (3) The value 983.47 can be held by a variable of type _____.
 - (a) double
 - (b) float
 - (c) int
 - (d) All of above
- (4) `Int Z = 97 >> 3`. The value of Z is _____.
 - (a) 94
 - (b) 79
 - (c) 13
 - (d) 12
- (5) To convert “977” into integer value, _____ function is used.
 - (a) `toInteger()`
 - (b) `parseInt()`
 - (c) `parseInt()`
 - (d) `toIntValue()`
- (6) The super keyword references _____.
 - (a) To Local class
 - (b) To Parent class
 - (c) To Child class
 - (d) To Object class
- (7) To count elements in array, _____ is used.
 - (a) Capacity
 - (b) Size
 - (c) Length
 - (d) Elements
- (8) _____ is a valid declaration of six boolean elements array
 - (a) `boolean b[] = new boolean[6]`
 - (b) `boolean b[6]`
 - (c) `boolean b = new boolean[6]`
 - (d) `boolean [] b = new boolean(6)`

- (9) _____ block handles the thrown exception.
- (a) Finally (c) Throw
(b) Catch (d) Throws
- (10) The code within a finally block executes when the try block _____.
- (a) Identifies one or more exception
(b) Does not identify any exception
(c) Identify any runtime exceptions
(d) All of above
- (11) Abstract class does not have _____.
- (a) Instantiate Object (c) Child class
(b) Parent class (d) Constructors
- (12) A Thread is created by implementing _____ interface.
- (a) Runnable (c) Throwable
(b) Thread (d) ThreadRunner
- (13) To draw rectangle using Graphics in Applet, _____ package is required.
- (a) Java.net (c) Java.util
(b) Java.applet (d) Java.awt
- (14) To draw circle in applet, _____ function is used.
- (a) drawOval() (c) drawCircle()
(b) drawRoundRectangle() (d) drawEclipse()
- _____