



AAO-003-003407 Seat No. _____

B. C. A. (Sem. IV) (CBCS) Examination

April / May - 2016

Programming With Java

Faculty Code : 003

Subject Code : 003407

Time : $2\frac{1}{2}$ Hours]

[Total Marks : **70**

1 Attempt the following MCQs : **20**

- (1) _____ are instructions that are not for any specific CPU. Instead, they are designed to be interpreted by a JVM.
(A) Source Codes (B) Machine codes
(C) Object Codes (D) Byte Codes
- (2) The advantage of such a design is that the _____ class specifies what functionality is provided but not how that functionality is provided.
(A) abstract (B) final
(C) static (D) nested
- (3) To create an array of 7 integers which statement is correct ?
(A) int a[]=new int[7]; (B) int a[7]=new a[];
(C) int a[]=new a[7]; (D) int a[]=int new[7];
- (4) When an Object is no longer referenced by any variable, it then becomes eligible for _____.
(A) default collection (B) null collection
(C) garbage collection (D) zero collection

(5) What is the output of this program ?

```
class temp
{
    public static void main(String args[ ])
    {
        int x;
        x = 3;
        {
            int y = 4;
            System.out.print(x + " " + y);
        }
        System.out.println(x + " " + y);
    }
}
```

(A) Runtime Error (B) Compilation Error

(C) 3 4 3 4 (D) 3 4 3

(6) _____ is shared by all objects of its class and thus relates to the class itself.

(A) static variable (B) global variable

(C) local variable (D) register variable

(7) Which method is used to perform some actions when the object is to be destroyed ?

(A) final() (B) finalize()

(C) destroy() (D) action()

(8) When an array element is accessed beyond the array size, _____ exception is thrown.

(A) ArrayIndexOutOfBoundsException

(B) ArrayElementOutOfBoundsException

(C) ArrayElementOutOfRangeException

(D) ArraySizeOutOfBoundsException

(9) _____ Occurs when a class declares a method that has the same type signature as a Method declared by one of its super classes.

(A) Method Overloading (B) Method Overriding
(C) Inheritance (D) Encapsulation

(10) Which of the following statements is true ?

(A) A class can extend more than one class.
(B) A class can implement only one interface.
(C) A class can extend only one class and can implement only one interface.
(D) A class can extend only one class and can implement more than one interface.

(11) The syntax of delete() method in StringBuffer class is _____.

(A) delete (char ch) (B) delete (char ch, int a)
(C) delete (int a, int b) (D) delete (char ch1, char ch2)

(12) What is the output of this program ?

```
class temp
{
    public static void main(String args[])
    {
        Date d=new Date ();
        System.out.println(d);
    }
}
```

(A) It will print the whole current date and time
(B) It will print the current date
(C) Compilation Error
(D) Runtime Error

(13) To find the value associated with the specified key, _____ method is used.

(A) `getValue(Object key)` (B) `get(Object key)`
(C) `find(Object key)` (D) `Value(Object key)`

(14) If another thread attempts to execute a _____ static method for that same class, The JVM automatically causes that thread to wait until the first thread relinquishes the Lock.

(A) `serialize` (B) `systematic`
(C) `synchronized` (D) `locked`

(15) `AdjustmentListener` interface defines the _____ method that is invoked when an `Adjustment` event occurs.

(A) `adjustmentValueChanged(AdjustmentEvent e)`
(B) `adjustmentValueChange(AdjustmentEvent e)`
(C) `adjustmentTextChanged(AdjustmentEvent e)`
(D) `adjustmentValueStateChanged(AdjustmentEvent e)`

(16) The constructor for `JFrame` is _____.

(A) `JFrame(int w, int h)`
(B) `JFrame(String title, int w, int h)`
(C) `JFrame(String title)`
(D) `JFrame(String title, Dimensions d)`

(17) The _____ class allows you to write programs that can seek to any location in a file Read or write data at that point.

(A) Random Buffered File
(B) FileRandomAccessing
(C) RandomAccessFile
(D) Random FileMode

2 (A) Attempt the following questions : (any three) **6**

- (1) Explain Compiling and Executing basic Java Program.
- (2) What is use of JAVA IDE ?
- (3) Explain JVM.
- (4) Explain final class.
- (5) What is finalize() method ?
- (6) Explain FlowLayout manager.

(B) Attempt the following questions : (any three) 9

- (1) What is Class and Object ? Explain with its example.
- (2) Explain JList class with example.
- (3) Explain BufferedWriter class with example.
- (4) Explain Java Tokens.

(5) What is Method Overloading? Explain with its example.

(6) Discuss String class with its methods.

(C) Attempt the following questions : (any **two**) 10

(1) Explain creating and using user defined Package with Import statement.

(2) Explain Menus related different classes with suitable example.

(3) Explain Adapter class with its example.

(4) What is Thread ? Explain Thread life cycle.

(5) Explain Graphics class with its different methods.

3 (A) Attempt the following questions : (any **three**) 6

(1) Explain JLabel class with example.

(2) What is use of Layout Manager ?

(3) Explain 'continue' and 'break' statements with example.

(4) Explain Constructor with example.

(5) What is Applet ?

(6) Explain FileInputStream class with example.

(B) Attempt the following questions : (any **three**) 9

(1) Explain VarArgs concept with example.

(2) Explain BorderLayout manager with example.

(3) Explain Command Line Argument array.

(4) Discuss different Event Classes.

(5) Explain Exception Handling with try and catch block.

(6) Explain Hashtable class with its methods.

(C) Attempt the following questions : (any **two**) **10**

- (1) What is Array ? Explain One Dimensional and Jagged Array with example.
- (2) Explain Stream Tokenizer class with its constants, methods and give any Suitable example
- (3) What is Synchronization ? Discuss Synchronization with multiple Threads.
- (4) Explain StringBuffer class with its different methods and example.
- (5) Explain GridLayout and CardLayout with suitable example.
