



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) ArrayElementOutOfBounds
(C) ArrayElementOutOfLimit
(D) ArraySizeOutOfBounds

- (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) `RandomFileMode`

- (18) Which layout manager allows placing components one after another as well as one on top of another ?
- (A) BorderLayout                      (B) GridLayout  
(C) BorderLayout                      (D) CardLayout
- (19) In Event Handling, sometimes we need only one or some methods of the interface in that Case, \_\_\_\_\_ are the best solution.
- (A) Inner class                      (B) Adapter class  
(C) Final class                      (D) Abstract class
- (20) The \_\_\_\_\_ method is called when your applet is to be terminated and needs to be removed from the memory.
- (A) destroy( )                      (B) remove( )  
(C) terminate( )                      (D) kill( )

**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.
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