



004544 -1ajj

CS-20

MK-171

003-003402

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

April / May - 2012

CS - 20 : Programming with Java

(New Course)

Faculty Code : 003

Subject Code : 003402

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

[Total Marks : 70 26

**Instruction:**

- (1) There are 3 Questions.
- (2) All are compulsory.
- (3) Answer of both Section in main answers sheet
- (4) Mention your options clearly

**Section -I**

Q- 1 Attempt the following MCQ's:

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- 1) Java was first developed in \_\_\_\_\_.  
a. 1990  
b. 1991  
c. 1993  
d. 1996
- 2) Full form of JDK is \_\_\_\_\_.  
a. Java Development Kit  
b. Java Definition Kit  
c. Java Data Kit  
d. None of these
- 3) Maximum value of byte is \_\_\_\_\_.  
a. 16  
b. 8  
c. 127  
d. None of these
- 4) The implicit type conversion of int data type can be done to \_\_\_\_\_ data type.  
a. byte  
b. char  
c. short  
d. long
- 5) The instanceof operator returns a \_\_\_\_\_ value.  
a. boolean  
b. char  
c. int  
d. byte

- 6) AWT Controls are in \_\_\_\_\_ package.  
a. java.applet                      b. java.awt  
c. java.applet.awt                d. java.util
- 7) Method overloading is a way by which java achieves \_\_\_\_\_.  
a. Inheritance                      b. Polymorphism  
c. Encapsulation                  d. Data hiding
- 8) super keyword can be used to \_\_\_\_\_.  
a. call super class constructor    b. access super class' members  
c. both a and b                    d. None of these
- 9) When a method has same name and same type signature as a method in super class, then this method is said to be \_\_\_\_\_.  
a. Overloaded                      b. Duplicate  
c. Overridden                      d. Abstract
- 10) When a class declared as final, then \_\_\_\_\_.  
a. It can not be inherited        b. It must be inherited.  
c. Its object can not be created   d. None of these
- 11) All the methods of interface are \_\_\_\_\_ by default  
a. abstract                          b. static  
c. final                              d. All of these
- 12) An interface can extends another interface.  
a. true                                b. false  
c. partially true                    d. None of these
- 13) If an exception is generated in try block, then it is caught in \_\_\_\_\_.  
a. finally                            b. throw  
c. throws                            d. caught *catch*
- 14) Which package is imported implicitly?  
a. java.applet                      b. java.util  
c. java.lang                        d. java.io
- 15) In java a thread can be crated by \_\_\_\_\_.  
a. Extending Thread class        b. Implementing Runnable interface  
c. Both a and b                    d. None of these
- 16) To kill a thread at any stage \_\_\_\_\_ method is used.  
a. kill()                              b. stop()  
c. destroy()                        d. dead()
- 17) The \_\_\_\_\_ method returns the size of a file in bytes.  
a. size()                              b. fileSize()  
c. length()                          d. fileLength()

- 18) Which method is called first by an applet?  
 a. start() b. run()  
 c. init() d. paint()
- 19) The \_\_\_\_\_ class is the super class of all the event classes.  
 a. AWTEvent b. EventObject  
 c. ActionEvent d. KeyEvent
- 20) To arrange components as rows and columns \_\_\_\_\_ layout manager is used.  
 a. CardLayout b. BorderLayout  
 c. BoxLayout d. GridLayout

## Section II

### 2 Attempt the following:

(a) Write any three out of six:

- (i) What is OOP? Explain OOP Principles.
- (ii) Explain Java features.
- (iii) Explain components of JDK.
- (iv) Explain data types of Java.
- (v) Explain operator precedence with example.
- (vi) Explain method overloading with example.

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(b) Write any three out of six:

- (i) What is constructor? Explain constructor overloading.
- (ii) Explain static keyword with example.
- (iii) Explain final keyword.
- (iv) Explain garbage collection and finalize() method.
- (v) Explain various access specifiers available in Java.
- (vi) Explain method overriding with meaningful example.

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(c) Write any two out five:

- (i) Explain abstract class and methods with example
- (ii) How can define a package? Explain with example.
- (iii) What is interface? Explain role of interface.
- (iv) What is an exception in Java? Explain exception handling mechanism in Java.
- (v) Explain any four methods of String class with example.

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### 3. Attempt the following:

(a) Write any three out of six:

- (i) Explain wrapper classes.
- (ii) Explain Math class with any five methods.
- (iii) Explain difference between Array and Vector.

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- ✓(iv) Explain synchronization and deadlock.
- ✓(v) What is Stream in Java?
- (vi) Explain StreamTokenizer class with example.

(b) Write any three out of six:

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- ✓(i) Explain Thread life cycle with state diagram.
- ✓(ii) Explain any three methods of Graphics class
- ✓(iii) Explain event delegation model.
- ✓(iv) Explain difference between Applet and Swing.
- (v) Explain List class with example.
- (vi) Explain difference between CharacterStream and ByteStream.

(c) Write any two out five:

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- (i) Explain difference between String and StringBuffer
- (ii) Explain any three methods of Date class with example.
- (iii) Explain Runnable Interface with example.
- (iv) What is use of Layout Manager? Explain GridBagLayout.
- (v) Explain keywords: native, volatile and transient.