BACHELOR OF COMPUTER APPLICATION
FOURTH SEMESTER (REPEAT)
PROGRAMMING WITH JAVA
BCA-401
[USE OMR SHEET FOR OBJECTIVE PART]

SET A

Duration: 3 hrs.

(**Objective**)

Full Marks: 70

Time: 30 mins.

Marks: 20

Choose the correct answer from the following:

1×20=20

1. Java is a...................... language.
   a. Weakly typed
   b. Strongly typed
   c. Moderate typed
   d. None of the above

2. toString() method is defined in:
   a. Java.lang.Object
   b. Java.lang.String
   c. Java.lang.util
   d. None of the above

3. Select the valid statement.
   a. char[ ] ch=new char[5];
   b. char[ ] ch=new char[ ];
   c. char[ ] ch=new char(5);
   d. char[ ] ch=new char( );

4. Sleeping thread can be revived by using the method:
   a. Suspend()
   b. Resume()
   c. Notify()
   d. None of the above

5. What will be the value of a[1] after execution of the following program?
   ```
   int[ ] a = {0,2,4,1,3};
   for(int i = 0; i < a.length; i++)
   {
       a[i] = a[(a[i] + 3) % a.length];
   }
   ```
   a. 0
   b. 2
   c. 4
   d. 1

6. The main method should be static for the reason:
   a. It can be accessed easily by the class loader
   b. It can be accessed by every method or variable without any hindrance
   c. It can be executed without creating any instance of the class
   d. None of the above

7. Which of these keywords is used to define packages in Java?
   a. pkg
   b. Pkg
   c. package
   d. Package

8. Which of these functions is called to display the output of an applet?
   a. display()
   b. paint()
   c. DisplayApplet()
   d. PaintApplet()

9. Which class cannot be sub classed (or extended) in java?
   a. Abstract class
   b. Final class
   c. Parent class
   d. Super class

10. In java............. can only test for equality, where as............ can evaluate any type of the Boolean expression.
    a. switch, if
    b. if, switch
    c. if, break
    d. continue, break

11. The new operator in java:
    a. Returns a pointer to a variable
    b. Creates a variable called new
    c. Tells compiler how much memory is available
    d. Create object and allocates memory

12. What does the AWT stands for?
    a. Application with types
    b. A web toolkit
    c. Absolutely wonderful toolkit
    d. Abstract windows toolkit

13. Which of the following represents the correct definition of interface?
    a. interface Shape { void draw() { } }
    b. interface Shape { void draw(); }
    c. interface Shape { void draw() } ;
    d. interface Shape { void draw() }

14. Which of the following methods can be executed more than once in the life cycle of an applet?
    a. init()
    b. start()
    c. destroy()
    d. stop()

15. Which among the following is the compulsory section of java program?
    a. Package statement
    b. Import statement
    c. Class declaration section
    d. Documentation section

16. Which of this access specifier must be used for class so that it can be inherited by another sub class?
    a. public
    b. private
    c. protected
    d. friend

17. The String method compareTo() returns:
    a. True
    b. False
    c. An int value
    d. 1

18. Which of the following is not supported by java?
    a. Global variable
    b. Abstraction
    c. Encapsulation
    d. Polymorphism

19. Java programs are:
    a. Platform-dependent
    b. Interpreter-dependent
    c. Platform-independent
    d. Interpreter-Independent

20. Suspend thread can be revived by using:
    a. start()
    b. resume()
    c. notify()
    d. yield()

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[Answer question no.1 & any four (4) from the rest]

1. Describe the complete life cycle of a thread with neat diagram.   10

2. a) List at least five major differences between C++ and Java.   4+3+3=10
    b) How Java is strongly associated with the Internet?
    c) What is the contribution of java to the World Wide Web?

3. a) What is token? List the various types of token supported by Java.   3+3+4=10
    b) Compares in terms of their functions, the following pairs of
       statements:
       i. While and do....while
       ii. Break and continue
    c) Write a program to find out sum of five numbers using command
       line arguments.

4. a) Define thread with example.   3+7=10
    b) Explain the different levels of access protection available in Java.

5. a) Describe different forms of inheritance with example.   4+4+2=10
    b) When do we declare a method or class final and a method or class
       abstract?
    c) Explain how an array is different from vector.

6. a) What is a package?   2+4+4=10
    b) Explain different java API packages.
    c) Given an example where interface can be used to support multiple
       inheritance. Develop a standalone Java program for the example.

7. a) What do you mean by method overloading and nesting of methods?   5+5=10
    Explain with a suitable example.
    b) Write a program to find out area of a rectangle and area of a circle
       using interface.

8. a) What is an applet?   2+3+5=10
    b) How do applets differ from application programs?
    c) Explain the life cycle of an applet with a neat diagram.

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