

**BACHELOR OF COMPUTER APPLICATION  
FOURTH SEMESTER  
PROGRAMMING WITH JAVA  
BCA-941 [IDMj]  
[USE OMR SHEET FOR OBJECTIVE PART]**

**SET  
A**

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

**(Objective)**

*Choose the correct answer from the following:*

*1 × 20 = 20*

- Which of the following is not a Java features?
  - Dynamic
  - Architecture Neutral
  - Use of pointers
  - Object-oriented
- Which of the following for loop declaration is not valid?
  - for ( int i = 99; )
  - for ( int i = 7; i <= 77; i += 7 )
  - for ( int i = 20; i >= 2; -i )
  - for ( int i = 2; i <= 20; i = 2\* i )
- Which package is a java library?
  - java.util package
  - java.util package
  - java.io package
  - All
- Which option is false about the *final* keyword?
  - A *final* method cannot be overridden
  - A *final* class can be compiled in its subclasses
  - A *final* class cannot extend other classes
  - A *final* method gives error
- Which keyword is used for accessing the features of a package?
  - package
  - import
  - extends
  - export
- What is the function having same name with class called?
  - Library function
  - User defined function
  - Constructor function
  - Overloading function
- Which statement is true about Java?
  - Java is a sequence-dependent programming language
  - Java is a code dependent programming language
  - Java is a platform-dependent programming language
  - Java is a platform-independent programming language
- What is missing in the statement void main (String args[])?
  - Public
  - Public static
  - Private
  - Private static
- What is the extension of java code files?
  - .js
  - .txt
  - .class
  - .java

10. What is the extension of compiled java classes?
  - a. .js
  - b. .txt
  - c. .class
  - d. .java
11. Which of these keywords is used to define a string data in Java?
  - a. String
  - b. Char[]
  - c. String[]
  - d. None
12. What is the numerical range of a integer data type in Java?
  - a. -2,147,483,647 to 2,147,483,647
  - b. 0 to 65535
  - c. 0 to 32767
  - d. -128 to 127
13. Select the valid statement.
  - a. char ch[]=new char(5)
  - b. char ch[]=new char[5]
  - c. char ch[]=new char()
  - d. char ch[]=new char[]
14. Select the valid statement to declare and initialize an array.
  - a. int[] A={}
  - b. int[] A={1,2,3}
  - c. int[] A=(1,2,3)
  - d. int[][] A={1,2,3}
15. Identify the correct restriction on static methods.
  - I. They must access only static data
  - II. They can only call other static methods.
  - III. They cannot refer to this or super.
  - a. I and II
  - b. II and III
  - c. I and III
  - d. All
16. Keyword to declare class variable?
  - a. final
  - b. static
  - c. abstract
  - d. volatile
17. Identify the default return type of a method where no return type is defined.
  - a. int
  - b. void
  - c. double
  - d. None
18. What is the use of javac command?
  - a. Execute
  - b. Compile
  - c. Interpret
  - d. Debug
19. JRE stands for.....
  - a. Java run ecosystem
  - b. JDK runtime Environment
  - c. Java Runtime Environment
  - d. None of these
20. What makes the Java platform independent?
  - a. Advanced programming language
  - b. It uses bytecode for execution
  - c. Class compilation
  - d. All of these

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**( Descriptive )**

Time : 2 hr. 30 mins.

Marks : 50

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

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| 1. a) What are the differences in C++ and Java?  | 5  |
| b) What are the differences in traditional and Java compiler?                                      | 5  |
| 2. a) What are the characteristics of final keyword?   | 5  |
| b) What are the characteristics of static keyword?   | 5  |
| 3. a) What are the parts of a java function?   | 5  |
| b) What is private, public and protected mean in object oriented programming ?                     | 5  |
| 4. a) What is a data type? Describe some java data types.  | 5  |
| b) What is a java array? How many ways are there to create arrays?                                 | 5  |
| 5. a) What are the characteristics of abstract keyword?  | 5  |
| b) Is the while loop and do while loop same? If no, show the respective flowcharts.                | 5  |
| 6. a) Draw the JVM architecture and explain in detail.   | 6  |
| b) Write a simple java program to print "helloworld".  | 4  |
| 7. a) In java, what is a byte code? How is it important for program execution?                     | 3  |
| b) What is switch case? Can we write a switch case using if-else as well? If yes, show by example. | 5  |
| c) How many types of functions are there in java?  | 2  |
| 8. Explain the various parts of the program and also explain the generate output of program.       | 10 |

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