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Name............................

Reg. No............................

# FIFTH SEMESTER B.Sc. DEGREE (SUPPLEMENTARY/IMPROVEMENT) EXAMINATION, NOVEMBER 2016

## (UG—CCSS)

### Computer Science

### CS 5B 09—JAVA PROGRAMMING

(2012 Admission onwards)

Time : Three Hours
Maximum : 30 Weightage

## Part A

*This part consists of three branches of questions carrying equal weightage of 1.*
*Each bunch consists of four objective questions.*
*Answer all questions.*

1. The data or variables defined within a class are called ————.

    (a) Variable.
    (b) Instance variables.

    (c) Object.
    (d) Class variable.

2. Exception falls in the base class ————.

    (a) Throw.
    (b) Exception.

    (c) Thowable.
    (d) Exceptions.

3. Division by Zero is a type of ———— exception.

    (a) Array Index Out Of Bounds Exception.

    (b) Arithmetic Exception.

    (c) IO Exception.

    (d) Un caught Exception.

4. Consider the following declaration int $m = 18$, $n = 4$. The value of the expression $m/n + m\%n$ is ————.

    (a) 6.
    (b) 6.5.

    (c) 9.
    (d) 3.

5. ———— is generated after the successful compilation of the source code.

    (a) Object.
    (b) Bytecode.

    (c) Exception.
    (d) Error.

Turn over

6. The main advantage of Inheritance is ————.

    (a) Robustness.            (b) Reusability.

    (c) Readability.            (d) Reliability.

7. A ———— is a collection of classes.

    (a) Object.            (b) Package.

    (c) Method.            (d) Interface.

8. The methods of interface are ———— by default.

    (a) Static.            (b) Abstract.

    (c) Final.            (d) None of the above.

9. The first method called by an applet is ————.

    (a) init().            (b) paint().

    (c) update().            (d) draw().

10. The package that contains Color class is ————.

    (a) java.applet.            (b) java.awt.

    (c) java.graphics.            (d) java.lang.

11. What is an immutable object?

    (a) An immutable object can be changed once it is created.

    (b) An immutable object can't be changed once it is created.

    (c) An immutable object is an instance of an abstract class.

    (d) None of the above.

12. Which of the following methods can be used to change the size of a java.awt component object?

    (a) dimension().            (b) setSize().

    (c) area().            (d) size().

(12 × ¼ = 3 weightag

## Part B

*Answer all **nine** questions.*
*Each question carries weightage of 1.*

13. What are wrapper classes?

14. What are literals?

15. What is the purpose of import statement?

16. Give the syntax for declaring one dimensional and two dimensional arrays in Java.

17. What is Dynamic method dispatch ?

18. Which are the different ways of creating a Thread ?

19. What is synchronization ?

20. What is AWT ?

21. What is a Canvas ?

(9 × 1 = 9 weightage)

## Part C (Short Essay or Paragraph Questions)

*Answer any five questions.*
*Each question carries weightage of 2.*

22. With an example, explain enumeration in Java.

23. Briefly explain the JDBC components.

24. Explain interfaces with an example.

25. Explain the AWT controls Button and TextField with their constructors and examples.

26. Explain any three Color class constructors in Java.

27. Explain the working of *while* and *do., while* with syntax and example.

28. Explain List in Java with an example.

(5 × 2 = 10 weightage)

## Part D

*Answer any two questions.*
*Each question carries weightage of 4.*

29. Explain with diagram the life cycle of an Applet.

30. Explain the various Exception Handling mechanisms in Java.

31. Write a Package to find factorial of a number. Import the Package to find ncr.

(2 × 4 = 8 weightage)