D 70226 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCBCSS—UG)

Computer Science

BCS 5B 08—JAVA PROGRAMMING

(2017 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *questions.*
Each question carries 1 *mark.*

1. What is Boolean type in Java ?
2. What is JVM ?
3. What is variable ?
4. What is the difference between *m*++ and ++*m* statements in Java ?
5. What are the two sections in class definition ?
6. What is exception ?
7. What is Applet ?
8. What is stream class ?
9. What is File class ?
10. What is the use of import statement in Java ?

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 3 *marks.*

11. List the basic principles of Object Orientation ?
12. Explain the structure and function of ***if..else*** statement with example.
13. Explain how exceptions are implemented in Java.
14. Explain the life cycle of an Applet.
15. What is Layout manager in AWT ? Explain.

(5 × 3 = 15 marks)

Turn over

Part C

Answer any **five** *questions.*
Each question carries 5 *marks.*

16. Explain how data and methods are organized in an object oriented program with suitable illustration.

17. Explain structure and function ***for*** statement in Java with examples.

18. Give an account on dynamic method dispatch in Java.

19. Discuss the different levels of access protection available in Java.

20. Write java program to add two matrices using operator overloading.

21. Discuss the steps involved in developing and running a local applet.

22. Write a note on Java API packages.

23. Explain the structure of AWT.

(5 × 5 = 25 marks)

Part D

Answer any **three** *questions.*
Each question carries 10 *marks.*

24. Describe the different forms of inheritance with examples.

25. What are constructors ? How they are invoked in Java ? Also explain the different types of constructors.

26. Write an applet program that receives three numeric values as input from the user and then displays the largest of the three on the screen.

27. Explain the different steps in JDBC for connecting any database as back-end of Java program.

28. Describe the life cycle of a thread.

(3 × 10 = 30 marks)

D 70222 (Pages : 4) Name.....

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FIFTH SEMESTER B.A./B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCBCSS—UG)

Computer Science

BCS 5B 09—JAVA PROGRAMMING

(2014 Admissions)

Time : Three Hours Maximum : 80 Marks

Part A

Answer **all** *questions.*

Each question carries 1 *mark.*

1. ———— is the mechanism that binds together code and the data it manipulates, and keeps both safe from outside interference and misuse.

2. What will be the output of the following Java Code ?

```
public static void main (String args[])
{
int i = 20 ;
int j = 55 ;
int i = 0 ;
z = i<j ?i : j ;
System.out.println("The value assigned is" + z) ;
}
```

3. ———— is a mechanism for naming and visibility control of a class and its content.

   (A) Object. (B) Packages.

   (C) Interfaces. (D) None of the above.

4. While using threads which of the following is incorrect ?

   (A) Invoke the Run method.

   (B) Implement Runnable interface.

   (C) Extend from Thread class.

   (D) Call the start method.

Turn over

5. What is the output of the following program ?

```
public class Question {
public static void main(String args[])
{
String s1 = "abc" ;
String s2 = "def" ;
String s3 = s1.concat(s2.toUpperCase() ) ;
System. out.println(s1 + s2 + s3) ;
}
}
```

(A) abcdefabcdef. (B) abcabcDEFDEF.

(C) abcdefabcDEF. (D) None of the above.

6. The ———— interface is implemented by classes that control the way in which their objects are serialized

7. When an applet begins, the AWT calls ———— method first

(A) init(). (B) Start().

(C) paint(). (D) destroy().

8. A ———— is used to separate the hierarchy of the class while declaring an Import statement.

9. Which method is used to set the text of a Label object ?

(A) SetText(). (B) SetLabel().

(C) SetTextLabel(). (D) SetLabelText().

10. What is the name of the interface that can be used to define a class that can execute within its own thread ?

(A) Run. (B) Runnable.

(C) Threadable. (D) Executable.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 2 *marks.*

11. Explain the primitive data types in Java.
12. Differentiate between method overloading and overriding.
13. What is a thread ?
14. What is JDBC ?
15. Define adapter classes.

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*
Each question carries 4 *marks.*

16. Explain the structure and function of while loop construct with example.
17. Explain the salient features of Java.
18. What is type casting ? Why it is required in programming ?
19. Write a short note on StringBuffer class.
20. Explain the steps in Java for obtaining a list of IP address that are assigned to the network interface.
21. Write java program to add two time objects using operator overloading.
22. Discuss the steps involved in developing and running a local applet.
23. Explain the structure of AWT.

(5 × 4 = 20 marks)

Part D

Answer any **five** *questions.*
Each question carries 8 *marks.*

24. Explain the basic concept of object oriented programming.
25. What are constructors ? How they are invoked in Java ? Also explain the different types of constructors.

26. Write a java program to create an applet which displays number from 1 to 100 in a rectangle.

27. Explain the different steps in JDBC for connecting any database as back-end of Java program.

28. Describe the various forms of interfaces.

29. Explain the different steps in writing to a URL connection in Java.

30. Explain the life cycle of a thread.

31. Mention the list of commonly used containers while designing GUI using AWT. Also explain any *one* of the containers with an example.

(5 × 8 = 40 marks)