B C A DEGREE END SEMESTER EXAMINATION - OCT. 2020 : JANUARY 2021

SEMESTER 3 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY

COURSE : **19U3CRBCA11 : PROGRAMMING IN JAVA**

(Common for Regular - 2019 Admission & Supplementary 2018/2017/2016 Admissions)

Time : Three Hours   Max. Marks: 75

PART A
Answer All (1 mark each)

1.   Define encapsulation.
2.   Write short notes on boolean data type.
3.   Define recursive function.
4.   What is a class attribute?
5.   What is the base class of all classes?
6.   How does put a method inside an interface?
7.   Why does volatile keyword use in Java
8.   Define thread
9.   Expand JDBC.
10. Define JDBC DriverManager class.

(1 x 10 = 10)

PART B
Answer any 8 (2 marks each)

11. Explain switch statement in java?
12. Java is platform independent. Why?
13. Write a recursive program to find factorial of a number?
14. Define garbage collection
15. What are the advantages of a java package?
16. What is Number Format Exception?
17. Differentiate between File reader and File writer.
18. Explain the born state of an Applet.
19. Why should we close database connections in Java?
20. Is it possible to connect to multiple databases using a single statement?

(2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. a) Discuss the Role of JVM
     b) Explain Garbage collection in Java
22. Explain different types of constructors in Java.
23. Write a program to show the concept of method overloading in java.
24. Write a program to illustrate ArrayIndexOutOfBoundsException.
25. Explain the creation of userdefined exception.
26. Differentiate between sleep() and yield() methods.
27. Explain type 2 JDBC driver.

(5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Explain different control loops and conditional branching constraints in java with example.

29. Explain more about the following:
    a) static
    b) abstract
    c) final
    d) super

30. Explain different Exception handling mechanisms in Java

31. Write a program with a listener which handles the events of a text field.

(12 x 2 = 24)