Bharati Vidyapeeth's
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MCA-FIRST SEMESTER, Model Question Paper-III

Paper Code: MCA - 109	**Subject: Java Programming**
Time: 3 Hours	**Maximum Marks: 75**

Note: Attempt FIVE questions in all. Question No. 1 is compulsory. Choose 1 question from each unit.

1.   Answer all the following questions briefly:-   2.5 x 10 = 25
     (a)   Give two major requirements of event listeners.   2.5
     (b)   Explain dynamic method dispatch.   2.5
     (c)   Elaborate what do you understand by Wrapper Classes.   2.5
     (d)   Discuss volatile in java.   2.5
     (e)   Justify the statement- *Finally block runs always*.   2.5
     (f)   Define adapter Classes.   2.5
     (g)   Give the uses of final keyword.   2.5
     (h)   Describe how does numeric promotion work.   2.5
     (i)   Elaborate what does the following statement display-   2.5
           String s=" six, "+3+3;
           System.out.println(s);
     (j)   Differentiate between String and String Buffer.   2.5

UNIT I

2.   (a)   Elaborate with proper diagram the JVM architecture. Explain the garbage   6.5
           collection model as well.
     (b)   Elaborate what are Interfaces? Write a program in java to explain the concept   6
           of multiple inheritances by using interfaces
3.   (a)   Differentiate between process and threads. What are the different stages in a   6.5
           thread life cycle that a thread goes through?
     (b)   Justify the use of Exception Handling Framework in Java Programming.   6
           Elaborate the different exception handling constructs available.

UNIT II

4.   (a)   Elaborate in detail the format of a .class file. Explain at length the significance   6
           of each field.
     (b)   Illustrate the different models of Event-Handling in java? Write a program to   6.5
           display the sum of two numbers of two textboxes within third textbox on
           clicking ADD button on the screen.
5.   (a)   Construct code snippets to connect a Java application to Oracle 12g Database.   6.5
           Elaborate in detail the steps involved.
     (b)   Elaborate in detail the collections hierarchy. Explain what the significance of   6
           individual collection class is.

UNIT III

6. (a) Illustrate what do you mean by RMI? Explain steps involved in developing an RMI object.   6.5

    (b) Write short notes on   6
    (1) Comparisons of Swing with AWT
    (2) JFC.

7. (a) Explain what are Swings. Also elaborate the advance controls of Swings.   12.5

UNIT IV

8. What is java bean? Explain its architecture and packing beans-the manifest and the .jar.   12.5

9. Illustrate in detail all models of JDBC architecture. Explain the drawbacks of each overcome in the next version.   12.5

*********** **Wish you Luck!** ***********