DURATION: - 2½ hrs   74103424   MARKS:- 75

Note: - (1) All questions are compulsory.
       (2) Figures to the right indicate full marks
       (3) Answer to each question must being on a new page

Q.1)   **Attempt any Three of the following**   **15M**
1)   Explain Java Virtual Machine.   CO1-U
2)   Write a java program to display first n elements of Fibonacci Series.   CO1-A
3)   Explain Access modifier.   CO1-R
4)   Write features of Java.
5)   Explain Precedence and Associativity of operators in Java.   CO1-R
6)   Write a java program to create a class and implement a default overloaded and copy constructor.   CO1-A

Q.2)   **Attempt any Three of the following**   **15M**
1)   What is inheritance? Explain types of inheritance.   CO2-RU
2)   Write difference between overloading method and overriding method.   CO2-A
3)   What is interface? Give the appropriate example.   CO2-RA
4)   Write a short note on polymorphism.   CO2-U
5)   Write a java program to create a class and implement the concepts of method overloading.   CO2-A
6)   Write difference between an Abstract class and interface.   CO2-A

Q.3)   **Attempt any Three of the following**   **15M**
1)   Write a short note on Exception Handling.   CO3-U
2)   What is multithreading? Explain extending thread.   CO3-R/U
3)   What is package? Write advantages of package.   CO3-R
4)   Explain Thread life cycle.   CO3-U
5)   Write a java program to raise built in exceptions and raise them as per the requirements.   CO3-A
6)   Write a java program that has two threads one of the thread displays the odd numbers from 1 to 10 While the other displays even numbers from 1 to 10.   CO3-A

Q.4)   **Attempt any Three of the following**   **15M**
1)   What is swing? Explain the features of swing components.   CO4-RU
2)   Describe the three types of text controls in swing.   CO4-R
3)   Enlist the event listeners.   CO4-R
4)   Explain Frame and their methods with example.   CO4-RU
5)   Describe the layout and layout managers.   CO4-R
6)   Write a java program to demonstrating flow layout manager.   CO4-A

     15M

Q.5)   **Attempt any Three of the following**

1)   What is JDBC? Explain JDBC Architecture.   CO5-RU
2)   Explain types of JDBC driver.   CO5-U
3)   Write a short note on driver manager class.   CO5-R
4)   Discuss various methods of Result set interface.   CO5-R
5)   Write a java program to insert on record of information into the   CO5-A
database table named (depttable) by accepting the details from
the user using prepared statement.
6)   Explain statement interface along with its method.   CO5-U

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