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| **DIT UNIVERSITY, DEHRADUN**   |  |  | | --- | --- | | **B.Tech.** | **: END TERM BACK PAPER EXAMINATION, ODD SEM 2023-24** | | | | | | | | | | | | | |
| **Roll No.** |  |  |  |  |  |  |  |  |  |  |  |  |
| **Subject Name: Advanced Java Programming** | | | | | | | | | | | | |

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| **Time: 3 Hours** | **Total Marks:100** |
| **Note:** All questions are compulsory. No student is allowed to leave the examination hall before the completion of the exam.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   |  |  |  | | --- | --- | --- | | **Q.1)** | **Attempt all Parts :** | | |  | (a) | Differentiate between awt and swings. What is difference between paint and repaint in Java? | |  | (b) | Explain ACID properties. What is JDBC API? | |  | (c) | Compare Array and Collection. What is map? | |  | (d) | **Compare connection-less and connection-oriented protocol. Explain the use of InetAddress class.** | |  |  | **[4 x5= 20]** | |  | | | | **Q.2)** | **Attempt all Parts :** | | |  | (a) | Explain Thread and Runnable. What is ThreadGroup? Write a code for thread priority. | |  | (b) | What is the purpose and use of UIManager in Swing? How can you make a Swing component transparent. | |  | (c) | **How Statement differs from PreparedStatement? What is ResultSet?** | |  | (d) | **Explain thread life cycle.** Compare wait() and sleep() method. | |  |  | **[4 x 5= 20]** | |  | | | | **Q.3)** | **Attempt any two parts :** | | |  | (a) | Write a java code for MouseListener and MouseMotionListener for mouse events. What are different Layout managers. | |  | (b) | **Explain applet life cycle. How applet differ from java applications? Write an applet code for graphics drawing.** | |  | (c) | **How to Create a User thread?** **What is thread priority?**  **What is Daemon Thread in Java and explain their properties?** How is the safety of a thread achieved? What is race-condition? | |  |  | **[2 x 10= 20]** | |  | | | | **Q.4)** | **Attempt any two parts :** | | |  | (a) | What are advantages of java bean? What are the different properties of a Java Bean? | |  | (b) | Explain life-cycle methods for a servlet? What is difference between Get and Post method? | |  | (c) | What are the JSP implicit objects? What is the difference between ServletContext and PageContext? | |  |  | **[2 x 10= 20]** | |  | | | | **Q.5)** | **Attempt any two parts :** | | |  | (a) | Explain the types of Enterprise Bean? Write down the steps for the creation of stateless EJB. List some key actors in persistence API. | |  | (b) | What are features of java Hashmap? Differentiate between Collection and Collections. Compare ArrayList and Vector. | |  | (c) | Write a java program to execute a query “select \* from T1”, (Where T1 is table) using JDBC. What are different JDBC drivers? | |  |  | **[2 x 10= 20]** | | **-----END OF PAPER ----** | | | | |