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| **Annotations JavaBeans** | | |
|  | Define Java annotation. When are they used? | 5 |
|  | Describe the working of built-in annotations in java. | 10 |
|  | Write a short notes on   * 1. @Documented   2. @Target annotation   3. Custom annotation   4. @Retention   5. @Inherited | 5 each |
|  | Mention the purpose of introspection in java. | 4 |
|  | How are customizer and persistence associated with property editors? | 6 |
|  | Why are the property editors used? | 3 |
| **JDBC** | | |
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|  | How does the JDBC application work? | 05 |
|  | Explain the various types of JDBC drivers. | 10 |
|  | Explain the JDBC process steps in detail. | 10 |
|  | Explain the types of statement objects in JDBC with an example. | 10 |
|  | Briefly describe the situations where you should use prepared statement. | 04 |
|  | When we use executeQuery(), executeUpdate(), executeBatch() methods? | 8 |
|  | Write a short notes on:   * Data types in SQL * SQL 3 data types * ResultSet * Statement Object * PreparedStatment Object * CallableStatment Object | each 5 |
|  | Write a JAVA Program to insert data into Student DATA BASE and retrieve info based on particular queries |  |
| **Enterprises Java Beans** | | |
|  | What are the different types of enterprise java beans? Explain. | 10 |
|  | Types of session bean |  |
|  | What are the types of Message Driven Bean? |  |
|  | Design an EJB application that demonstrate working of Session Bean with appropriate business logic. | 10 |
|  | Design an EJB application that demonstrate working of MessageDriven Bean with appropriate business logic. | 10 |
|  | Design an EJB application that demonstrate working of Persistence Bean with appropriate business logic. | 10 |
|  | Read all types of Session Bean life cycle. |  |
|  | What are the characteristics of good software | 6 |
|  | Write a brief note on the following:   1. Instance pooling/caching 2. Transactions 3. Security 4. Timers |  |