SRINIVAS UNIVERSITY
INSTITUTE OF COMPUTER SCIENCE AND INFORMATION SCIENCES
Second Semester MCA Examination
Subject Name: Advanced Java

Question Bank: Part - A (5x1=5) Part – B (5x7=35) Part – C (1x10=10) Total Marks:50

Unit-I: JDBC: Introduction to JDBC, JDBC Driver types, JDBC database connections, JDBC Statements, PreparedStatement, CallableStatement, ResultSet, JDBC data types, transactions, Batch Processing, Stored Procedure

Part - A

1. What is Core Java?
2. What is Advanced Java?
3. Define JVM.
4. What is full form of JDBC?
5. Thin JDBC driver is called as _____
6. What is JDBC Statements?
7. Define batch processing.
8. What is Stored Procedure in SQL?

Part - B

1. Explain the difference between Core java vs Advanced java
2. What are the Advanced Java applications?
3. Define JDBC Concept with example.
4. Explain the JDBC driver types with example.
5. Explain the JDBC data types.
6. Explain the properties of transaction managements
7. Explain the Advantage of Transaction Managements
8. Describe the JDBC Statement, CallableStatement, and PreparedStatement
9. Explain the Batch Processing in JDBC with example.

Part - C

1. Explain the components of JDBC with neat diagram
2. Write a java program to access the MySql database
3. Explain the steps to create a JDBC Database Connection

Unit-2: Servlet: Servlet structure, Life Cycle of a Servlet, Using Tomcat for Servlet Development, The Servlet API, Handling Client Request: Form data, Handling client HTTP request and server HTTP Response, HTTP status codes, Handling Cookies, Session tracking, Database Access

Part - A

1. What is servlet?
2. List out the two package used for servlet creation
3. Why use the session tracking in web application?
4. What is HTTP?
5. What is RMI?
6. What is CORBA?
7. What is XML?
8. What is CGI?
9. What is Web server?
10. What is Browser?
11. What is Cookies?

Part - B

1. What are the advantages of servlets?
2. Explain the Servlets perform of major tasks
3. Explain the life cycle of a Servlet.
4. Explain the Servlet directory structure
5. Explain types of session techniques.
6. Explain the Database Access in servlet

Part - C

1. Explain the javax.servlet and javax.servlet.http packages of importance in web application
2. Write a Servlet program to link with HTML program
3. Explain benefits of Using Cookies in Servlets
4. Write a Servlet program to display the how many times visited the website counting using with Cookies

Unit-3: JSP: Overview of JSP Technology, Need of JSP, Advantages of JSP, Life Cycle of JSP Page, JSP Processing, JSP Application Design with MVC, Setting Up the JSP Environment, JSP Directives, JSP Action, JSP Implicit Objects, JSP Form Processing, JSP Session and Cookies Handling, JSP Session Tracking JSP Database Access, JSP Standard Tag Libraries, JSP Custom Tag, JSP Expression Language, JSP Exception Handling

Part - A

1. What is JSP?
2. What is MVC?
3. What is ASP?
4. What is Model Layer?
5. What is View Layer?
6. What is Controller Layer?
7. What is Implicit Objects?

Part - B

1. What are the advantages of JSP?
2. Explain the life cycle of a JSP.
3. Explain the JSP processing.
4. Explain types of JSP Implicit Objects
5. Explain the JSP form processing.
6. Explain the JSP Database access with example
7. Define JSP Standard Tag Libraries and Custom Tag
8. Define JSP expression Language
9. Define JSP Exception handling with example

Part - C

1. What are the steps to execute JSP page?
2. Explain the MVC Architecture in JSP.
3. Explain the JSP Session and Cookies Handling in JSP

Unit -4: Hibernate Introduction, Hibernate Configuration, Hibernate Concepts, Hibernate O-R Mapping, Manipulating and Querying, Hibernate Query Language, Criteria Queries, Native SQL, Transaction and Concurrency

Part - A

1. What is Hibernate?
2. What is ORM?
3. What is HQL?
4. Define advantage of HQL
5. What is Criteria queries?
6. Define Native SQL.
7. What is Java Persistence?

Part - B

1. Write short notes about the Hibernate concepts.
2. Explain the Hibernate O-R mapping process.
3. What are the Hibernate Advantages?
4. Explain the Hibernate Architecture
5. Explain the advantage of using native SQL queries in Hibernate
6. Explain the Transaction Interface in Hibernate

Part - C

1. Explain the Hibernate configuration approaches details.
2. How do create web application using hibernate?
3. Explain the Hibernate Mapping Types

UNIT- 5 Spring Framework: Spring Basics, Spring Container, Spring AOP, Spring Data Access, Spring O-R/mapping, Spring Transaction Management, Spring Remoting and Enterprise Services, Spring Web MVC Framework, Securing Spring Application.

Part - A

1. What is spring?
2. What is POJO?
3. What is IoC?
4. What is AOP?
5. What is Spring Security?
6. What is java beans?
7. What is Dependency Injection?

Part - B

1. Explain the application of Spring
2. Write short notes about the AOP Terminologies.
3. Write short notes about the Spring ORM technique.
4. Explain the Programmatic vs Declarative Transactions

5. Describe the Spring Remoting technologies
6. Explain the Spring Enterprise Services.
7. Explain the Spring Web MVC Framework design
8. What are the benefits of using Spring Security Application?

Part - C

1. Explain the Spring Framework components.
2. Explain the details of Spring Container types