

M.Sc.(IT & CA) Semester - 1 (CBCS) Examination
OCT/NOV-2025 (AS PER SYLLABUS YEAR JUNE-2018)
APPLICATION DEVELOPMENT USING ADVANCE JAVA(CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1(A) Answer the Followings (03)
- 1] What is JDBC?
 - 2] What is the role of DriverManager in database connection ?
 - 3] AOP stands for _____.
- Que.1(B) Attempt Any Two (06)
- 1] Briefly explain the role of IoC container in Spring Framework.
 - 2] Explain types of Factory Method.
 - 3] Explain SI Dependent Object.
 - 4] Differentiate Constructor Injection and Setter Injection.
- Que.1(C) Attempt Any One (05)
- 1] Explain Spring Architecture in detail.
 - 2] Explain key features of Spring Framework.
- Que.2(A) Answer the Followings (03)
- 1] What is Spring JdbcTemplate ?
 - 2] Which package includes JdbcTemplate Class ?
 - 3] What is SpEL ?
- Que.2(B) Attempt Any Two (06)
- 1] Briefly explain Burlap.
 - 2] How HTTP invoker is better than RMI ?
 - 3] What is the use of Hessian in Spring ?
 - 4] Explain PreparedStatement with JdbcTemplate class.
- Que.2(C) Attempt Any One (05)
- 1] Write a note on various remote technologies supported by Spring Framework.
 - 2] Explain variables in SpEL with suitable example.
- Que.3(A) Answer the Followings (03)
- 1] What is the full name of JAXB ?
 - 2] What is Xstream ?
 - 3] What is ORM ?
- Que.3(B) Attempt Any Two (06)
- 1] Explain various annotations used in Hibernate.
 - 2] List-out various Generator classes of Hibernate.
 - 3] Explain Castor in Spring Framework.
 - 4] Write steps to create Hibernate Application in Eclipse IDE.
- Que.3(C) Attempt Any One (05)
- 1] Explain Hibernate architecture.
 - 2] Discuss advantages of Hibernate framework in detail.
- Que.4(A) Answer the Followings (03)
- 1] What is inheritance mapping?
 - 2] What is Table per Hierarchy inheritance mapping?
 - 3] What is Table per Subclass inheritance mapping?

- Que.4(B) Attempt Any Two (06)
- 1] What is Collection Mapping in Hibernate?
 - 2] Explain <key> element of Collection mapping file.
 - 3] Explain structure of xml mapping file with example.
 - 4] Explain Mapping Set in collection Mapping.
- Que.4(C) Attempt Any One (05)
- 1] Explain Hibernate inheritance mapping in detail.
 - 2] Explain One-to-Many mapping with Mapping Set.
- Que.5(A) Answer the Followings (03)
- 1] What is Primary Key?
 - 2] What is Foreign Key?
 - 3] HQL stands for _____.
- Que.5(B) Attempt Any Two (06)
- 1] Define First Level Cache and Second Level Cache.
 - 2] Explain Transaction Management in brief.
 - 3] What is HQL? Explain advantages of it.
 - 4] Explain Hibernate Named Query using annotation.
- Que.5(C) Attempt Any One (05)
- 1] What is Component Mapping? Discuss in detail.
 - 2] Explain various methods of Transaction interface in detail.
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