



Seat No. \_\_\_\_\_

00160



**F8X-003-3081001**  
**M. Sc. (IT & CA) (Sem. I)**  
**(CBCS) (W.E.F. 2022) Examination**

**December - 2022**

**Application Development Using**  
**Advance Java**

**Faculty Code : 003**

**Subject Code : 3081001**

**Time : 2½ Hours / Total Marks : 70**

- 1 (a) Answer the following : 4
- (1) What is Spring?
  - (2) Give a full form of CI.
  - (3) What is use of IoC container?
  - (4) What is advices?
- (b) Answer any one in brief : 2
- (1) What is set collection?
  - (2) What is list collection?
- (c) Answer any one in detail : 3
- (1) Explain architecture of Spring framework.
  - (2) Explain factory methods.
- (d) Answer any one : 5
- (1) Write a note on Constructor based DI with list collection.
  - (2) Write a note on Constructor based DI with inheriting bean.
- 2 (a) Answer the following : 4
- (1) Full form of RMI.
  - (2) Full form of JPA.
  - (3) Full form of JMS.
  - (4) Full form of SPEL.

- (b) Answer any one in brief : 2  
 (1) Explain operators in SPEL.  
 (2) Explain spring with JPA.
- (c) Answer any one in detail : 3  
 (1) Explain Spring with RMI.  
 (2) Explain Httplnvoker, Burlap.
- (d) Answer any one : 5  
 (1) Write a program to insert a record in the Student table (sid, sname, city) using JDBCTemplate.  
 (2) Write a note on ResultSetExtractor with suitable example.
- 3 (a) Answer the following : 4  
 (1) What is dialects?  
 (2) What is struts?  
 (3) Full form of JAXB.  
 (4) What is castor?
- (b) Answer any one in brief : 2  
 (1) What is the use log4j file?  
 (2) What is generator class in hibernate?
- (c) Answer any one in detail : 3  
 (1) Explain hibernate annotation with suitable example.  
 (2) Explain architecture of Hibernate Framework.
- (d) Answer any one : 5  
 (1) Write a program to insert a record (stud\_id, stud\_name, city) using Hibernate application with Annotation.  
 (2) Write a program to insert a record (stud\_id, stud\_name, city) using Hibernate application with XML.
- 4 (a) Answer the following : 4  
 (1) Explain Bidirectional.  
 (2) Which class is used in Table per Hierarchy?  
 (3) Which class is used in Table per Subclass?  
 (4) What is Collection mapping?

- (b) Answer any one in brief : 2  
(1) Explain Bag Collection.  
(2) Explain Lazy Collection.
- (c) Answer any one in detail : 3  
(1) Explain mapping set.  
(2) Explain mapping map.
- (d) Answer any one : 5  
(1) Write a program of Table per Concrete inheritance with annotation.  
(2) Write a program of Table per Hierarchy inheritance without annotation.
- 5 (a) Answer the following : 4  
(1) Full form of HCQL.  
(2) First level caching is not enabled by default. True or False  
(3) What is Component Mapping?  
(4) Which method of session is used to create criteria?
- (b) Answer any one in brief : 2  
(1) Define : named query.  
(2) How many types of association mapping are possible in Hibernate? And list out.
- (c) Answer any one in detail : 3  
(1) Explain First level cache and Second level cache.  
(2) Difference between HQL and HCQL.
- (d) Answer any one : 5  
(1) Write a note on one to one mapping using foreign key.  
(2) Write a program to execute the hibernate and struts.
-