Seat No: _____   Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech / Int. B.Tech Winter 2024 - 25 Examination

Semester: 5 & 9   Date: 15/11/2024
Subject Code: 203105372   Time: 02:00 pm to 04:30 pm
Subject Name: Enterprise Programming   Total Marks: 60

Instructions:

1. This question paper comprises of two sections. Write answer of both the sections in separate answer books.

2. From Section I, **Q.1 is compulsory, attempt any THREE from Q. 2 to Q. 5**

3. From Section II, **Q.6 is compulsory, attempt any THREE from Q. 7 to Q. 10**

4. Make suitable assumptions wherever necessary.

5. Start new question on new page.

	Section-A (30 Marks)				
Q.1	**Objective Type Questions** - (State, Define, List, etc) (All are compulsory and each of two marks)	**(6)**	**CO**	**PO**	**Bloom's Taxonomy**
	1. State the directive used to import classes, interfaces, or packages in a JSP page.		2	1	**Remember**
	2. Define the default embedded server in Spring Boot.		2	1	**Remember**
	3. List the tag used to map a URL pattern to a servlet in the web.xml file.		2	1	**Remember**
Q.2	**Answer the following questions.**				
	A) Explain hibernate DTD Schema (DTD) and its importance in hibernate.cfg.xml documents.	**(2)**	2	5	**Understand**
	B) Explain the Spring IoC Container and its role in Spring applications	**(6)**	2	5	**Understand**
Q.3	**Answer the following questions.**				
	A) What is Seevlet container ? What tasks does a servlet container perform usually?	**(2)**	1	2	**Understand**
	B) Explain the mapping strategies used in Hibernate.	**(6)**	2	5	**Understand**
Q.4	**Answer the following questions.**				
	A) What is session tracking ? Explain the various techniques with an example	**(2)**	1	2	**Understand**
	B) What are Spring's Stereotype Annotations, and how do they help in component scanning?	**(6)**	2	5	**Understand**
Q.5	**Answer the following questions.**				
	A) What are the JSP lifecycle phases?	**(2)**	1	1	**Remember**
	B) What is RowSet interface and explain its types?	**(6)**	2	5	**Understand**

Section-B (30 Marks)					
Q.6	**Objective Type Questions** - (State, Define, List, etc) (All are compulsory and each of two marks)	**(6)**			
	1.State the first method called when a servlet is initialized.		**1**	**1**	**Remember**
	2. Define the role of SessionFactory in Hibernate.		**2**	**5**	**Remember**
	3. List the packages that form the basis for Spring Framework's IoC container		**2**	**1**	**Remember**
Q.7	**Answer the following questions.**				
	A) Compare Hibernate Query Language (HQL) and SQL.	**(2)**	**2**	**2**	**Analyze**
	B) How can you define beans using annotation-based configuration in your application's component classes in Spring?	**(6)**	**2**	**3**	**Apply**
Q.8	**Answer the following questions.**				
	A) What is Dependency Injection in Spring, and how does it differ from traditional object creation?	**(2)**	**2**	**2**	**Understand**
	B) Describe Hibernate project structure	**(6)**	**2**	**5**	**Understand**
Q.9	**Answer the following questions.**				
	A) Explain Hibernate Criteria Query Language (HCQL).	**(2)**	**2**	**5**	**Understand**
	B) What are primary goals of spring boot framework	**(6)**	**2**	**11**	**Understand**
Q.10	**Answer the following questions.**				
	A) What are Spring Beans, and how are they managed by the Spring IoC Container?	**(2)**	**2**	**5**	**Understand**
	B) What is Hibernate and how does it simplify database interactions in Java applications?	**(6)**	**2**	**5**	**Understand**