POORNIMA UNIVERSITY, JAIPUR
END SEMESTER EXAMINATION, 2023-2024 EVEN SEMESTER

BCA (Gen) II () - IV (Main/Back) End Semester Examination, April 2024
BCACCA4103: Advance Java Programming

Time: 3 Hours   **Total Marks:** 60   **Min. Passing Marks:** 21/24/27   **Question Paper ID:** 000725

Instructions: Attempt all five questions. There is an internal choice either (a or b) in Q1 to Q5. Marks of each question or its parts are indicated against each question/part. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Bloom Level(BL): 1-Remembering, 2-Understanding, 3-Applying, 4-Analysing, 5-Evaluating, 6-Creating

Use of following supporting material is permitted during examination for this subject: Nil

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			Marks	BL	CO
Q1.	**(a)**	(i) What is a servlet in Java? Explain the lifecycle of a servlet with Syntax? **(6 Marks)** (ii)What is Difference Between Generic and HttpServlet? **(6 Marks)**	**12**	**2**	**1**
		(OR)			
	(b)	(i) What is session Management and session Tracking? Discuss the various techniques for session tracking in web applications. **(6 Marks)** (ii) Explain the concept of servlet filtering. What is its use? Explain its life cycle with syntax? **(6 Marks)**			
Q2.	**(a)**	(i) What is a JSP (JavaServer Pages)? Describe the life cycle of a JSP? Define Jsp scripting elements with example? **(6 Marks)** (ii) What are JSP implicit objects, and how are they used? **(6 Marks)**	**Marks** **12**	**BL** **2**	**CO** **2**
		(OR)			
	(b)	(i) What is a JavaBean?Explain the characteristics of a Java Bean.?Create te a Bean class with name Student Bean with variable id,name,section? **(6 Marks)** (ii) Write a jsp program with a Html page name Login,html and retrieve a parameter and convert parameter in upper case? **(6 Marks)**			
Q3.	**(a)**	(i) What is JavaServer Faces (JSF)?Describe the architecture of a JSF application.Explain the lifecycle of a JSF page. **(6 Marks)** (ii) What is Managed Bean?What are different way of config Managed Bean? **(6Marks)**	**Marks** **12**	**BL** **1**	**CO** **3**
		(OR)			
	(b)	Create a Login form by using JSF UI Component ,Managed Bean and Reterive its parameter? **(12 Marks)**			
Q4.	**(a)**	(i) What is Hibernate? Describe the architecture of Hibernate and its key components.**(6 Marks)** (ii) What is Hibernate Query Language (HQL), and how is it used for querying? **(6 Marks)**	**Marks** **12**	**BL** **1**	**CO** **4**
		(OR)			
	(b)	Write a program to insert a record in table using Hibernate ? **(12 Marks)** Create Bean (i) Student bean Java class (ii) demo.java			
Q5.	**(a)**	(i) What is the Spring Framework what are advantage of the Spring Framework? **(6 Marks)** (ii) Explain the concept of Inversion of Control (IoC) and Dependency Injection (DI) in Spring. **(6 Marks)**	**Marks** **12**	**BL** **1**	**CO** **5**
		(OR)			
	(b)	Discuss the Spring MVC (Model-View-Controller) architecture and its components? Explain the role of the Model, View, and Controller in a Spring MVC application. **(12 Marks)**			

End of Question Paper