ST JOSEPH ENGINEERING COLLEGE, MANGALURU

An Autonomous Institution

Semester MCA Degree (Autonomous) Examinations April-2022

USN: ☐☐☐☐☐☐☐☐☐☐

21MCA303

Duration: 3 Hrs   **Maximum Marks: 100**

Advances in Java

Note:
1. **Part-A** is mandatory.
2. Answer any five full questions from **Part-B** choosing at least one from each module.

Q.No.	Question	BL	CO	PO	Marks
	PART-A				
	(Shall contain 2 to 4 Mark short answer type questions covering entire syllabus for 20% of the maximum Marks)				
1	What is difference between Get and Post method?	1	1	2	2
2	What is Session Tracking?	1	1	2	2
3	What is JSP?	1	2	3	2
4	List out the various scope values of JSP action.	1	2	3	2
5	How can we handle the exceptions in JSP?	1	2	3	2
6	What do you mean by JavaBeans?	1	2	3	2
7	What is JDBC?	1	4	3	2
8	What is prepared statements?	1	4	3	2
9	When to use Enterprise Java Bean?	1	6	3	2
10	What is EJB?	1	6	3	2

PART-B

Q.No.		Question	BL	CO	PO	Marks
		Module-1				
1	a)	Explain briefly servlet architecture and life cycle method	1	1	2	8
	b)	Write a java servlet program which reads two parameters from a web page say value1 and value 2 which are the types of integers, and find the sum and product of the two values and return back the result in the web page	3	1	2	8
		OR				
2	a)	What are cookies? Write a java servlet program to using cookies to remember the user preference.	2	1	2	8
	b)	Explain briefly any five methods of HttpServletRequest. Illustrate with simple program	2	1	2	8
		Module-2				
3	a)	Write a JSP program to perform arithmetic operation using scriptlet, declaration and expression tag	2	2	3	8
	b)	Explain the need, benefits and advantages of JSP	1	2	3	8
		OR				

4	**a)**	Write a JSP Program to generate random numbers from 1 to 100.	2	2	3	8
	b)	Explain the different types of JSP elements	2	2	3	8

Module-3

5	**a)**	Illustrate JSP directive tag with example	2	2	3	8
	b)	Write a JSP Program to get student information through a HTML and create a JAVA Bean class, populate Bean and display the same information through another JSP	2	5	3	8

OR

6	**a)**	Explain the Bound and constrained properties for design pattern	1	3	2	8
	b)	Write a short notes on JAR file and Manifest file.	1	3	2	8

Module-4

7	**a)**	Mention and explain the built- in annotation in java	1	3	2	8
	b)	Explain the following with code snippet i) scrollable ResultSet ii) Batch update	2	4	3	8

OR

8	**a)**	Describe the various steps of JDBC with a code snippet.	2	4	3	8
	b)	Briefly explain the basic and advanced JDBC data types	1	4	3	8

Module-5

9	**a)**	What is session bean? Explain the types of session bean	1	6	4	8
	b)	Explain the container services provided by the component model of EJB	1	6	4	8

OR

10	**a)**	Describe the life cycle of message driven bean	2	6	4	8
	b)	With a neat diagram explain the life cycle and methods of stateless session bean	2	6	4	8