B. E. Degree (Autonomous) Sixth Semester End Examination (SEE),

JAVA FULL STACK DEVELOPMENT

(Model Question Paper –III)

Time: [3 Hours]   **[Maximum Marks: 100]**

Note   Answer ANY ONE from Question No. 1 and 2
          Answer ANY ONE from Question No. 3 and 4
          Answer ANY ONE from Question No. 5 and 6
          Answer ANY ONE from Question No. 7 and 8
          Answer ANY ONE from Question No. 9 and 10

Q.NO		Answer Five Full Questions	Marks	CO'S	Bloom's Level
1	a.	Explain the concepts of Object Orientation.	04 Marks	CO 1	L 1,2
	b.	What is String Parsing in Java? Explain parsing of Integers to String with a program example.	06 Marks	CO 1	L 1,2
	c.	Write about i)Gradle Fundamentals ii)TDD with Junit 5.	10 Marks	CO 1	L 5
		Or			
2	a.	Explain how type safety can be achieved in Collections with an example.	08 Marks	CO 1	L2
	b.	Design Java code snippet to demonstrate the following i.foreach loop ii.Switch iii.dowhile	12 Marks	CO 1	L5
3	a.	Explain how concurrency problems are overwhelmed in Collections with example.	10 marks	CO 2	L1,2
	b.	Design and implement a simple JDBC application program.	10 Marks	CO 2	L5
		Or			

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4	a.	Write note on: i.JDBC API Components ii.JDBC Statements	10 marks	CO 2	L2
	b.	Define Streams. List out the different StreamAPI Operations and explain with an example.	10 Marks	CO 2	L1,2
5	a.	Define Hibernate and its architecture. Explain the properties of an Entities objects. Design and implement a simple entity program for employee class.	10 Marks	CO 3	L1,5
	b.	Demonstrate the concept of crud operations on data in JPA.	10 Marks	CO 3	L2
		Or			
6	a.	Explain JPA Architecture and how it is related to ORM.	10 Marks	CO3	L3
	b.	Explain the purpose of EntityManager in JPA.	05 Marks	CO3	L2
	c.	List some of JPA query methods and write about them.	05 Marks	CO3	L2
7	a.	Explain Spring Framework Architecture in detail.	10Marks	CO4	L1,5
	b.	Explain some of the most used Spring Boot annotations with an example.	06 Marks	CO4	L1,2
	c.	List out the difference between Spring Boot and Spring MVC.	04 Marks	CO4	L1
		Or			
8	a.	Design and implement simple spring boot program to print "WELCOME TO SPRING BOOT".	10 Marks	CO4	L5
	b.	Explain Bean Lifecycle in Spring Framework.	10Marks	CO4	L2
9	a.	Define Angular JS. Explain features of Angular JS.	10 Marks	CO5	L1,2
	b.	Explain the following Angular JS Directives with an example:	10 Marks	CO5	L1,2

		i. ng-app ii. ng-init			
		Or			
10	a.	Design the code for simple "Hello World" Angular JS application and showcase the Model, View and Controller part in it.	10 Marks	CO5	L2
	b.	Differentiate among Javascript and Node.js.	05 Marks	CO5	L1
	c.	Explain Angular JS Modules.	05 Marks	CO5	L2