USN 21CSTE6042

## 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	
				ı	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	06 Marks	CO 1	L 1,2	
		Integers to String with a program example.				
	c.	Write about	10 Marks	CO 1	L 5	
		i)Gradle Fundamentals ii)TDD with Junit 5.				
	Or					
2	a.	Explain how type safety can be achieved in Collections	08 Marks	CO 1	L2	
		with an example.				
	b.	Design Java code snippet to demonstrate the following	12 Marks	CO 1	L5	
		i.foreach loop ii.Switch iii.dowhile				
3	a.	Explain how concurrency problems are overwhelmed in	10 marks	CO 2	L1,2	
		Collections with example.				
	b.	Design and implement a simple JDBC application	10 Marks	CO 2	L5	
		program.				
		Or				

4	a.	Write note on:	10 marks	CO 2	L2
		i.JDBC API Components ii.JDBC Statements			
	b.	Define Streams. List out the different StreamAPI	10 Marks	CO 2	L1,2
		Operations and explain with an example.			
5	a.	Define Hibernate and its architecture. Explain the	10 Marks	CO 3	L1,5
		properties of an Entities objects. Design and implement a			
		simple entity program for employee class.			
	b.	Demonstrate the concept of crud operations on data in	10 Marks	CO 3	L2
		JPA.			
	•	Or			
6	a.	Explain JPA Architecture and how it is related to ORM.	10 Marks	CO3	L3
	<b>b.</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>b.</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
	<b>'</b>	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	10 Marks	CO5	L2
		application and showcase the Model, View and			
		Controller part in it.			
	b.	Differentiate among Javascript and Node.js.	05 Marks	CO5	L1
	c.	Explain Angular JS Modules.	05 Marks	CO5	L2