Code: 19CS3T04 **R19** H.T.NO

VISHNU INSTITUTE OF TECHNOLOGY (AUTONOMOUS)

II B. Tech I Semester Regular Examinations, APRIL-2021

Object Oriented Programming through Java

(CSE&IT)

Time: 3 hours **Max. Marks: 60**

Note: 1. Answer all the 6 Questions
2. Each Question carries 10 Marks
3. Answer either **a or b** from each question

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1(a)	I	List and explain Java features, in detail.	L1	CO1	[5M]
	II	Explain the architecture of Java Virtual Machine with a neat diagram.	L2	CO1	[5M]
		(OR)			
1(b)	I	Demonstrate precedence rules and associativity with an example Java program.	L2	CO1	[5M]
	II	Write a program to demonstrate the String handling functions in java.	L3	CO1	[5M]
2(a)		What is class and object? Write and explain the concept of Method overloading with example program.	L3	CO2	[10M]
		(OR)			
2(b)	I	What is the importance of nested classes in java. Explain.	L3	CO2	[5M]
	II	What is a constructor and explain the types of constructors in Java.	L2	CO2	[5M]
3(a)		What is inheritance? Explain the types of inheritances each with example?	L1	CO3	[10M]
		(OR)			
3(b)	I	What are the uses of 'super' and 'final' keywords. Explain.	L1	CO3	[5M]
	II	What is the Thread life cycle? Explain.	L1	CO3	[5M]
4(a)		Write the need of exceptional handling. Illustrate the uses of 'try, catch, throw, throws and finally' in exception handling.	L2	CO4	[10M]
		(OR)			
4(b)	I	Write a Java program to read from file and print file data on the user screen.	L3	CO4	[5M]
	II	What is an Assertion in JAVA? Write JAVA program to illustrate the importance of assert statement.	L3	CO4	[5M]
5(a)		What is collection framework. Write the class heirarchy in collection framework.	L3	CO5	[10M]
		(OR)			
5(b)		How Array Lists are different from arrays in java. Write a java program to create and manage the elements in Array Lists.	L2	CO5	[10M]
6(a)	I	Write a java program to add, retrieve and delete elements in Array List.	L3	CO6	[5M]
	II	Write a program to create and display the linked lists.	L2	CO6	[5M]
		(OR)			
6(b)	I	What is mapping? Explain the mapping operations on Lists.	L2	CO6	[5M]
	II	Differentiate the priority queue and normal queue. Write a program to create priority queues.	L2	CO6	[5M]

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