PRN:		Course Code :	UCA403

000697

Second Year **BCA** End Semester Examination Winter 2024

Core Java

Day and Date: Wed 27 Nov 2024 Max Marks: **100**

Time : 02:00PM To 05:00PM Duration: **03** hrs

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	Define the term "inheritance" in object-oriented programming. Explain its types.	08	L1	CO1
	b)	Explain the concept of "overloading" in Java with example.	08	L1	CO1
		OR			
	b)	Explain the purpose of constructors in Java with Example.	08	L2	CO1
Q.2		**Attempt the following**			
	a)	Explain the concept of user-defined packages in Java with examples.	08	L2	CO2
	b)	How do access specifiers public, private, and protected differ in their usage?	08	L2	CO2
		OR			
	b)	Write java program to accept n strings. Sort names in ascending order.	08	L3	CO2
Q.3		**Attempt any two from the following**			
	a)	Write a Java program that demonstrates the use of a try-catch-finally block for exception.	08	L3	CO2
	b)	Explain the concept of synchronization in Java multi-threading and provide an example.	08	L3	CO2
	c)	Describe the life cycle of a thread in Java.	08	L2	CO2
Q.4		**Attempt any two from the following**			
	a)	Describe the purpose of a RandomAccessFile in Java I/O with example.	08	L2	CO3
	b)	What is the purpose of character-oriented streams in Java I/O?	08	L1	CO3
	c)	Explain concept of socket concept in detail.	08	L3	CO3
Q.5		**Attempt any Two of the following**			
	a)	Describe the characteristics of the Collection Framework in Java.	09	L2	CO4
	b)	Define Character-oriented stream with the help of example.	09	L4	CO4
	c)	Explain the purpose of the util package interfaces in the Java Collection Framework.	09	L3	CO4

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Q.6	**Attempt any Two of the following**				
	a)	Analyze the concept of anonymous inner classes in Java and provide an example.	09	L4	CO4
	b)	Explain the concept of static inner classes in Java and provide an example.	09	L3	CO4
	c)	Explain the concept of layouts in AWT and provide examples of commonly used.	09	L2	CO4

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Backlog