CBCS SCHEME

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BIS402

Fourth Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025
Advance Java

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	What is collection framework? Explain the methods define by the collection interface.	7	L2	CO1
	b.	Implement a java program to demonstrate creating an ArrayList, adding elements, removing elements, sorting elements of ArrayList.	8	L4	CO1
	c.	Demonstrate with an example how accessing a collection Via an Iterator can be done.	5	L2	CO1
		OR			
Q.2	a.	Explain the following map classes : (i) HashMap (ii) TreeMap.	8	L2	CO1
	b.	Explain ArrayList class and explain the following methods : (i) binarysearch (ii) Copy (iii) equals (iv) fill	8	L2	CO1
	c.	Explain legacy classes.	4	L2	CO1
		Module – 2			
Q.3	a.	What is string in Java? Implement a Java program to illustrate the use of any four constructors of string class.	8	L3	CO2
	b.	Explain the following stringBuffer methods with an example : (i) insert (ii) append (iii) replace (iv) substring.	8	L2	CO2
	c.	Differentiate between equals ( ) and = = with respect to string comparison.	4	L2	CO2
		OR			
Q.4	a.	Explain the following string buffer class with examples : (i) Capacity (ii) Reverse (iii) CharAt ( ) (iv) deleteCharAt ( )	8	L2	CO2
	b.	Implement a java program to remove duplicate characters from a given string and display the resultant string.	8	L3	CO2
	c.	How CompareTo ( ) method differs from CompareToIgnoreCase ( ) method?	4	L2	CO2
		Module – 3			
Q.5	a.	What are differences between swing and AWT? Why Swing components are called light weight component?	8	L2	CO3
	b.	Explain the following with suitable code : JButton, JLable, JTextField, JCombobox.	12	L2	CO3
		OR			
Q.6	a.	Explain the paint package in swings.	6	L2	CO3

	b.	Create a swing application having two buttons named alpha and beta. When either of buttons pressed, it should display "alpha pressed" and "beta pressed" respectively.	10	L4	CO3
	c.	Write short note on MVC connection.	4	L2	CO3
		Module – 4			
Q.7	a.	Explain the life cycle of Servlet.	4	L2	CO4
	b.	Describe the core interfaces that are provided in Javax, Servlet, http package.	8	L2	CO4
	c.	Implement a Servlet program to display the name, USN and total marks by accepting student detail.	8	L3	CO4
		OR			
Q.8	a.	What is JSP? Explain the various types of JSPtags with examples.	10	L2	CO4
	b.	What are cookies? How cookies are handled in JSP? Write a JSP program to create and read cookie.	10	L3	CO4
		Module – 5			
Q.9	a.	What are database drives? Explain the different JDBC driver types.	6	L2	CO5
	b.	Describe the various steps of JDBC with code snippets.	10	L2	CO5
	c.	Write any two syntax of established a connection to a database.	4	L2	CO5
		OR			
Q.10	a.	Describe the following concepts : (i) Scrollable Resultset (ii) Callable statement. (iii) Transaction processing (iv) Updatable Resultset.	10	L2	CO5
	b.	What is connection pooling? Explain connection pooling with code snippets.	6	L2	CO5
	c.	Explain different kinds of exceptions in Database.	4	L2	CO5

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