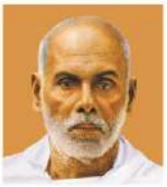
Sree Narayana Guru College
of Engineering & Technology
CHALAKKODE P.O., KOROM, PAYYANUR, KANNUR-670 307



BLOOM'S TAXONOMY IN QUESTION PAPERS AND SCHEME OF VALUATION

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

ASSIGNMENT	1	*Academic Year / Semester*	2022-23/01
Subject name with code	221TCE008 STRUCTURAL DYNAMICS	*Branch*	COMPUTER AIDED STRUCTURAL ENGG
Date of Issue	14/11/2022	*Date of submission*	

Q.No	*QUESTIONS*	*Marks*	*CO*	*Level*
1	A vibrating system consist of a mass 5kg, spring of stiffness 120N/m and a damper with a damping co-eff of 5 N-s/m. Determine. a) Damping factor b) Natural frequency & damped frequency c) Logarithmic decrement d) Ratio of 2 successive amplitudes e) No. of cycles after which the initial amplitude is reduced to 25%	10	1	3

CO - Course Outcome [CO]

CO 1: Model and analyse single-degree of freedom systems subjected to free vibration

LEVEL - Bloom's Taxonomy Level

Level 1: Remember
Level 2: Understand
Level 3: Apply

HOD

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ASSIGNMENT	1	*Academic Year / Semester*	2022-23/01
Subject name with code	221TCE008 STRUCTURAL DYNAMICS	*Branch*	Computer aided Structural Engg
Date of Issue	14/11/22	*Date of submission*	28/11/22

ANSWER SCHEME

Q.No		*Marks*
1.	Damping factor = 0.102.	2
	Natural frequency = 4.9 rad/sec	1
	Damped natural frequency = 4.87 rad/sec	1
	Logarithmic decrement = 0.64	2
	Ratio between 2 consecutive amplitudes $\frac{x_1}{x_2}$ = 1.896	2
	No. of cycles after 25% reduction = 2.166 ≈ 3 cycles	2

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ASSIGNMENT	2	*Academic Year / Semester*	2022-23/01
Subject name with code	221TCE008 STRUCTURAL DYNAMICS	*Branch*	COMPUTER AIDED STRUCTURAL ENGINEERING
Date of Issue	9/12/2022	*Date of submission*	

Q.No	*QUESTIONS*	*Marks*	*CO*	*Level*
1	Explain different types of vibration isolation in detail.	10	2	2

CO - Course Outcome [CO]

CO2 : Analyse SDOF systems subjected to different dynamic forces and understand the concept of vibration isolation

LEVEL - Bloom's Taxonomy Level

Level 1: Remember
Level 2: Understand
Level 3: Apply

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ASSIGNMENT	2	*Academic Year / Semester*	22-23/MTech-S1
Subject name with code	Structural dynamics 22ITCE0058	*Branch*	CAS - M.Tech
Date of Issue	9/12/22	*Date of submission*	16/12/22

ANSWER SCHEME

Q.No		*Marks*
1.	Vibration isolation - General	2
	Passive isolation (Explanation, methods, significance)	4
	Active isolation (Explanation, methods, significance)	4

9/12/22

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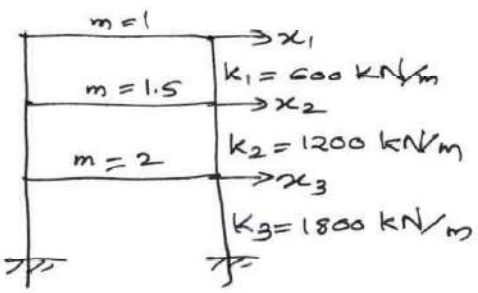
ASSIGNMENT	3	*Academic Year / Semester*	22-23/01
Subject name with code	STRUCTURAL DYNAMICS 221TCEC08	*Branch*	M tech CAS
Date of Issue	4/01/23	*Date of submission*	~~on~~ 11/01/23

Q.No	*QUESTIONS*	*Marks*	*CO*	*Level*
1	Determine the natural frequencies & mode shapes for the shear building 	10	3	3

CO - Course Outcome [CO]

CO 3: Perform dynamic analysis of MDOF systems

CO :

LEVEL - Bloom's Taxonomy Level

Level 1: Remember

Level 2: Understand

Level 3: Apply

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ASSIGNMENT	3	*Academic Year / Semester*	22-23/01
Subject name with code	STRUCTURAL DYNAMICS 221TCE008	*Branch*	MTech CAS
Date of Issue	4/01/23	*Date of submission*	11/01/23

ANSWER SCHEME

Q.No		*Marks*
1	Mass matrix	— 1
	Stiffness matrix	— 2
	Characteristic equation	
	Natural frequencies $\omega_1 = 14.5$ rad/s $\omega_2 = 31.1$ rad/s $\omega_3 = 46.1$ rad/s	— 4
	Modes (1) (2) (3) $\begin{Bmatrix} 1 \\ 0.644 \\ 0.3 \end{Bmatrix}$ $\begin{Bmatrix} 1 \\ -0.601 \\ -0.676 \end{Bmatrix}$ $\begin{Bmatrix} 1 \\ -2.57 \\ 2.47 \end{Bmatrix}$	— 3

10/01/23

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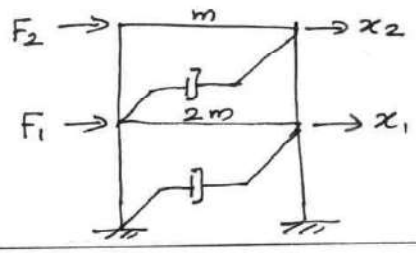
Assignment no.	4	*Academic Year / Semester*	2022-23 / 01
Subject name with code	STRUCTURAL DYNAMICS 221TCE008	*Branch*	M.TECH CAS
Date of Issue	18/01/23	*Date of submission*	25/01/23

Q.No	*QUESTIONS*	*Marks*	*CO*	*Level*
1	Find the damped vibration response of the 2-storey shear building due to harmonic excitation $\{P(t)\} = \begin{Bmatrix} P_0 \\ 0 \end{Bmatrix} \sin \omega t$ & $c = \sqrt{\frac{km}{200}}$ 	10	4	3

CO - Course Outcome [CO]

CO 4 : Perform the analysis of MDOF systems subjected to forced vibration

LEVEL - Bloom's Taxonomy Level

Level 1 : Remember

Level 2 : Understand

Level 3 : Apply

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Assignment no.	4	*Academic Year / Semester*	2022-23 /01
Subject name with code	STRUCTURAL DYNAMICS 221TCE008	*Branch*	M. TECH CAS
Date of Issue	18/01/23	*Date of submission*	25/01/23

ANSWER SCHEME

Q.No		Marks
1	Equation of motion & [M], [K], [C], matrices	1
	Solving the characteristic equation and finding the values of natural frequencies & mode shapes $\omega_1=\sqrt{\frac{k}{0.5m}}$ $\omega_2=\sqrt{\frac{2k}{m}}$ $\{\phi_1\}=\begin{Bmatrix}0.5\\1\end{Bmatrix}$ $\{\phi_2\}=\begin{Bmatrix}-1\\1\end{Bmatrix}$	3
	Formation of uncoupled matrices $[M^*]$, $[K^*]$, $[C^*]$, $\{P^*\}$	3
	Calculation of generalized coordinates $q(t)$	2
	Calculation of i)Displacement response $x(t)=\sum\{\phi\}q(t)$	1

18/01/23

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Assignment no.	5	*Academic Year / Semester*	2022-23 M TECH S1.
Subject name with code	STRUCTURAL DYNAMICS 22ITCE 008	*Branch*	M TECH CAS
Date of Issue	02/02/23	*Date of submission*	09/02/23

Q.No	*QUESTIONS*	*Marks*	*CO*	*Level*
1	Form the differential equation for axial vibration of rods	10	5	2

CO - Course Outcome [CO]

CO 5 : Perform the dynamic analysis of distributed parameter systems

LEVEL - Bloom's Taxonomy Level

Level 1 : Remember

Level 2 : Understand

Level 3 : Apply

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Assignment no.	5	*Academic Year / Semester*	2022-23/ 01
Subject name with code	STRUCTURAL DYNAMICS 22ITCE008	*Branch*	M TECH CAS
Date of Issue	02/02/23	*Date of submission*	09/02/23

ANSWER SCHEME

Q.No		*Marks*
1	Free body diagram — 3 Stress - strain - axial force relations. — 3 Differential eqn of motion from the free body diagram. — 3 General solution — 1	10

02/02/2023

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SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY,

Series Test	**1**	*Academic Year / Semester*	**2022-23 / S3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Exam	**08/11/2022**	*Duration*	**120 mins**
Starting time	**9:30AM**	*Max. Marks*	**50**

PART A **<MAX MARKS : 15>**

Q.No			*Marks*	*CO*	*Level*
1		Why the "main" method in Java is qualifies as public, static, void?	3	I	1
2		What is a class diagram? Sketch an UML class diagram for Online Movie Ticket Booking System.	3	I	1
3		How Array and Vector Class differ from each other in Java? Justify your answer.	3	II	1
4		List out the different datatypes in Java. Give example for each.	3	II	1
5		Define Package and Interface in java.	3	III	1

PART B **<MAX MARKS: 35>**

6	a	Show an UML Activity diagram for Food Ordering Systems which shows flows between the activity Order, Delivery, Food Item, Category, Payment.	6	I	2
	b	Outline an automated fire alarm system and bring out the difference between function oriented software design approaches and object oriented software design approach.	8	I	2
		OR			
7	a	Summarize the buzzwords of Java that defines the Java programming language.	5	I	2
	b	Demonstrate an interaction diagram for an order management system and differentiate the two types of interaction diagram based on it.	9	I	2
8		Extend the use of Looping statements in Java with examples.	14	II	2
		OR			
9	a	Interpret the role of 'super and 'final' keyword in context with inheritance in Java with appropriate example.	5	II	2

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	b	Explain in detail various operators in java with appropriate examples.	9	II	2
10		Illustrate a Java package named 'even package', with a class Even containing a static method that check whether a number is even or not, and returns that information. Import this package in another class and use to check a number is even or not.	7	III	2
		OR			
11		Elaborate the visibility of all Access Specifiers available in Java with respect to: same class, same package sub-class, same package non sub-class, different package sub-class, different package non sub-class.	7	III	2

CO - Course Outcome [CO]

CO I: To introduce basic concepts of object oriented design techniques and to understand the basis of java language.

CO II: To get thorough knowledge of java languages and to utilize the features of java like datatypes, operators, control statements etc and how to use the object oriented concepts -classes, objects, constructors, data hiding, inheritance and polymorphism.

CO III: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism, Input /Output Streams and Files in Java to develop programs

LEVEL - Bloom's Taxonomy Level

Level 1: REMEMBERING

Level 2: UNDERSTANDING

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Answer Key /Valuation Scheme

Series Test	**1(Scheme)**	*Academic Year / Semester*	**2022-23 / S3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Exam	8/11/2022	*Duration*	**120 mins**
Starting time	9:30 am	*Max. Marks*	**50**

PART A **<MAX MARKS : 15>**

Q.No		*Marks*	*CO*	*Level*
1	Why the "main" method in Java is qualifies as public, static, void. **Explanation for public, static, void keywords – 1 mark each**	3	I	1
2	What is a class diagram? Sketch an UML class diagram for Online Movie Ticket Booking System. **Class Diagram-1mark, Class diagram for banking system-2 marks.**	3	I	1
3	How Array and Vector Class differ from each other in Java? Justify your answer. **Any 3 points-3 marks.**	3	II	1
4	List out the different datatypes in Java. Give example for each. **Listing -1 mark, Example for each datatypes-2 marks.**	3	II	1
5	Define Package and Interface in java. **Definition -1.5 marks each**	3	III	1

PART B **<MAX MARKS: 35>**

6	a	Show an UML Activity diagram for Food Ordering Systems which shows flows between the activity Order, Delivery, Food Item, Category, Payment. **Activities -2.5 marks, Activity Diagram -3.5 marks.**	6	I	2
	b	Outline an automated fire alarm system and bring out the difference between function oriented software design approaches and object oriented software design approach. **Figure- 2 marks, Explanation and Difference-6 marks.**	8	I	2

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		OR			
7	a	Summarize the buzzwords of Java that defines the Java programming language. **Any 5 java buzzwords in detail -5 marks.**	5	I	2
	b	Demonstrate an interaction diagram for an order management system and differentiate the two types of interaction diagram based on it. **Diagram -3 marks, types-1mark, Explanation-5marks.**	9	I	2
8		Extend the use of Looping statements in Java with examples. **3 Loop statements with syntax/flowchart-6 marks, Example for each-8 marks**	14	II	2
		OR			
9	a	Interpret the role of 'super and 'final' keyword in context with inheritance in Java with appropriate example. **Explanation for each keyword -2 marks, Example for each -3 marks.**	5	II	2
	b	Explain in detail various operators in java with appropriate examples. **Listing – 1 mark, Explanation -4 marks ,Example–4marks.**	9	II	2
10		Illustrate a Java package named 'even package', with a class Even containing a static method that check whether a number is even or not, and returns that information. Import this package in another class and use to check a number is even or not. **Package creation- 2 marks, logic –1.5 marks, Program-3.5 marks.**	7	III	2
		OR			
11		Elaborate the visibility of all Access Specifiers available in Java with respect to: same class, same package sub-class, same package non sub-class, different package sub-class, different package non sub-class. **Table of Access Specifiers-7 marks.**	7	III	2

CO - Course Outcome [CO]

CO I: To introduce basic concepts of object oriented design techniques and to understand the basis of java language.

CO II: To get thorough knowledge of java languages and to utilize the features of java like datatypes, operators, control statements etc and how to use the object oriented concepts -classes, objects, constructors, data hiding, inheritance and polymorphism.

CO III: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism, Input /Output Streams and Files in Java to develop programs

LEVEL - Bloom's Taxonomy Level

Level 1: REMEMBERING

Level 2: UNDERSTANDING

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SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, [redacted]

Series Test	**2**	*Academic Year / Semester*	**2022-23 / S3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Exam	**13/12/2022**	*Duration*	**120 mins**
Starting time	**9:30AM**	*Max. Marks*	**50**

	PART A			**<MAX MARKS : 15>**
Q.No		*Marks*	*CO*	*Level*
1	Compare byte stream and character stream related classes in Java.	3	III	2
2	Show the life cycle of thread showing the different states and method involved in it.	3	IV	2
3	Contrast the difference between String and String Buffer class in Java with an example.	3	IV	2
4	Name any three Swing Layout Managers in java and point out their uses in GUI.	3	V	1
5	List out the features of Swing API.	3	V	1
	PART B			**<MAX MARKS: 35>**
6	Explain in detail exceptions and various exceptions handling keyword in Java with examples.	7	III	2
	OR			
7	Extend the features of files in java with appropriate file handling operations.	7	III	2
8	Summarize different string comparison methods of String class with appropriate examples.	14	IV	2
	OR			
9	Demonstrate the event handling mechanism in java using the Delegation Event Model with list of source events and corresponding event listener interfaces.	14	IV	2
10	Illustrate the steps to establish database connectivity in java with a sample code.	14	V	2
	OR			
11	Outline a java program to illustrate the use of JTextField, JFrame and JLabel.	14	V	2

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CO - Course Outcome [CO]

CO III: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism, Input / Output Streams and Files in Java to develop programs.

CO IV: To provide basic exposure for the application of programs in java using string handling mechanism, multithreading, collection framework and event handling mechanisms.

CO V: To impart the techniques creating GUI based applications and database connectivity.

LEVEL - Bloom's Taxonomy Level

Level 1: REMEMBERING

Level 2: UNDERSTANDING

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Valuation Scheme/Answer Key

Series Test	**2(Scheme)**	*Academic Year / Semester*	**2022-23 / S3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Exam	**13/12/2022**	*Duration*	**120 mins**
Starting time	**9:30AM**	*Max. Marks*	**50**

PART A				**<MAX MARKS : 15>**
Q.No		*Marks*	*CO*	*Level*
1	Compare byte stream and character stream related classes in Java. **Comparison 3 key points-3 marks.**	3	III	2
2	Show the life cycle of thread showing the different states and method involved in it. **Diagram-1.5marks, Explanation-1.5 marks**	3	IV	2
3	Contrast the difference between String and String Buffer class in Java with an example. **Comparison 3 key points-3 marks.**	3	IV	2
4	Name any three Swing Layout Managers in java and point out their uses in GUI. **Listing – 1.5 marks, Use-1.5 marks.**	3	V	1
5	List out the features of Swing API. **Any 6 Features – 3 marks.**	3	V	1
PART B				**<MAX MARKS: 35>**
6	Explain in detail exceptions and various exceptions handling keyword in Java with examples. **Definition-1 mark, Types-1 marks, Keywords & Its examples-5 marks.**	7	III	2
OR				
7	Extend the features of any two file handling operations in java with appropriate examples for each. **List out – 1 mark , Explanation – 3 marks each.**	7	III	2
8	Summarize different string comparison methods of String class with appropriate examples. **Methods with Syntax-4 marks. Example -10 marks each.**	14	IV	2
OR				
9	Demonstrate the event handling mechanism in java using the Delegation Event Model with list of source events and corresponding event listener interfaces.	14	IV	2

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	Definition-1.5 marks,Figure-1.5 marks,Explanation-6 marks, Source of events – 2.5 marks , Event Listener Interface-2.5marks.			
10	Illustrate the steps to establish database connectivity in java with a sample code. **Steps – 3 marks, Explanation-5 marks, Sample Code - 6 marks.**	14	V	2
	OR			
11	Outline a java program to illustrate the use of JTextField, JFrame and JLabel. **Syntax- 2 marks , Logic – 5marks ,Program-7 marks**	14	V	2

CO - Course Outcome [CO]

CO III: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism, Input / Output Streams and Files in Java to develop programs.

CO IV: To provide basic exposure for the application of programs in java using string handling mechanism, multithreading, collection framework and event handling mechanisms.

CO V: To impart the techniques creating GUI based applications and database connectivity.

LEVEL - Bloom's Taxonomy Level

Level 1: REMEMBERING

Level 2: UNDERSTANDING

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SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY,

Series Test	**RETEST**	*Academic Year/Semester*	**2022-23 / S3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Exam	**05/01/2023**	*Duration*	**120 mins**
Starting time	**9:30 AM**	*Max. Marks*	**50**

PART A		**<MAX MARKS : 15>**		
Q.No		*Marks*	*CO*	*Level*
1	Summarize the buzzwords of Java that defines the Java programming language.	3	I	2
2	Contrast the difference between checked exception and unchecked exception.	3	III	2
3	Define packages and interfaces.	3	II	1
4	Name any three Swing Layout Managers in java and point out their uses in GUI.	3	V	1
5	List out the features of Swing API.	3	V	1
PART B		**<MAX MARKS:35>**		
6	Outline an automated fire alarm system and bring out the difference between function oriented software design approaches and object oriented software design approach.	7	I	2
OR				
7	Show an UML interaction diagram for Food Ordering Systems which shows flows between the activity Order, Delivery, Food Item, Category, Payment.	7	I	2
8	Explain in detail exceptions and various exceptions handling keyword in Java with appropriate java programs.	14	III	2
OR				
9	Elaborate the visibility of all Access Specifiers available in Java with respect to: same class, same package sub-class, same package non sub-class, different package sub-class, different package non sub-class.	14	III	2
10	Illustrate the steps to establish database connectivity in java with a sample code.	14	V	2
OR				

11	Outline a java program to illustrate the use of JTextField, JFrame and JLabel.	14	V	2

CO - Course Outcome [CO]

CO I: To introduce basic concepts of object oriented design techniques and to understand the basis of java language.

CO III: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism, Input/ Output Streams and Files in Java to develop programs.

CO V: To impart the techniques creating GUI based applications and database connectivity.

LEVEL - Bloom's Taxonomy Level

Level 1:REMEMBERING

Level 2: UNDERSTANDING

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SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY,

VALUATION SCHEME/ANSWER KEY

Series Test	**RETEST(SCHEME)**	*Academic Year/Semester*	**2022-23 / S3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Exam	**05/01/2023**	*Duration*	**120 mins**
Starting time	**9:30AM**	*Max. Marks*	**50**

	PART A			**<MAX MARKS : 15>**
Q.No		*Marks*	*CO*	*Level*
1	List out the buzzwords of Java that defines the Java programming language. **List out all the buzzwords of java- 3 marks.**	3	I	2
2	Contrast the difference between checked exception and unchecked exception. **Difference – 3 marks.**	3	III	2
3	Define packages and interfaces. **Definition -1.5 marks each.**	3	III	1
4	Name any three Swing Layout Managers in java and point out their uses in GUI. **Listing – 1.5 marks, Use-1.5 marks.**	3	V	1
5	List out the features of Swing API. **Any 6 Features – 3 marks.**	3	V	1
	PART B			**<MAX MARKS: 35>**
6	Interpret an automated fire alarm system and bring out the difference between function oriented software design approaches and object oriented software design approach. **Figure- 2 marks, Explanation and Difference-5 marks.**	7	I	2
	OR			
7	Show an UML interaction diagram for Food Ordering Systems which shows flows between the activity Order, Delivery, Food Item, Category, Payment. **Figure- 2 marks, Explanation and Difference-5 marks.**	7	I	2
8	Explain in detail exceptions and various exceptions handling keyword in Java with appropriate java programs. **Definition-1 mark, Keywords & syntax -5 Its example java programs- 8 marks.**	14	III	2
	OR			
9	Elaborate the visibility of all Access Specifiers available in Java with respect to: same class, same package sub-class,	14	III	2

	same package non sub-class, different package sub-class, different package non sub-class. **Definition – 2 marks, Types – 1 mark, Explanation-4marks, Table of Access Specifiers-7 marks.**			
10	Illustrate the steps to establish database connectivity in java with a sample code. **Steps – 3 marks, Explanation-5 marks, Sample Code - 6 marks.**	14	V	2
	OR			
11	Outline a java program to illustrate the use of JTextField, JFrame and JLabel. **Syntax- 2 marks , Logic – 5marks ,Program-7 marks.**	14	V	2

CO - Course Outcome [CO]

CO I: To introduce basic concepts of object oriented design techniques and to understand the basis of java language.

CO III: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism, Input/ Output Streams and Files in Java to develop programs.

CO V: To impart the techniques creating GUI based applications and database connectivity.

LEVEL - Bloom's Taxonomy Level

Level 1:REMEMBERING

Level 2: UNDERSTANDING

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Tutorial	**1**	*Academic Year / Semester*	**2022-23/5**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	14/09/2022	*Date of submission*	29/09/2022

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Illustrate the following java program: 1. Check the given number is prime or not 2. Check the given number is odd or even 3. Check the given string is palindrome or not 4. Print Fibonacci series 5. Matrix Addition 6. Sum of elements in an array. 7. Print a pyramid series	35	I	2

CO - Course Outcome [CO]

CO 1: Implement programs in Java which use data types, operators, control statements, built in packages & interfaces, Input/output streams and Files.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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ANSWER KEY/VALUATION SCHEME

Tutorial	**1 (SCHEME)**	*Academic Year / Semester*	**2022-23/5**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	14/09/2022	*Date of submission*	29/09/2022

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Illustrate the following java program: 1. Check the given number is prime or not 2. Check the given number is odd or even 3. Check the given string is palindrome or not 4. Print Fibonacci series 5. Matrix Addition 6. Sum of elements in an array. 7. Print a pyramid series Each programs – 5 marks	35	I	2

CO - Course Outcome [CO]

CO 1: Implement programs in Java which use data types, operators, control statements, built in packages & interfaces, Input/output streams and Files.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Tutorial	**2**	*Academic Year / Semester*	**2022-23/5**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	1/10/2022	*Date of submission*	10/10/2022

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Illustrate the following UML diagram: 1. Use case for Movie Reservation System. 2. Use case for Online Music Player System. 3. Class diagram for a Library Management System. 4. Class diagram for Online Movie Ticket Booking. 5. Activity diagram for Food Ordering System.	25	I	2

CO - Course Outcome [CO]

CO 1: Implement programs in Java which use data types, operators, control statements, built in packages & interfaces, Input/output streams and Files.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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ANSWER KEY/VALUATION SCHEME

Tutorial	**2 (SCHEME)**	*Academic Year / Semester*	**2022-23/5**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	1/10/2022	*Date of submission*	10/10/2022

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Illustrate the following UML diagram: 1. Use case for Movie Reservation System. 2. Use case for Online Music Player System. 3. Class diagram for a Library Management System. 4. Class diagram for Online Movie Ticket Booking. 5. Activity diagram for Food Ordering System. **Diagram- 5 marks each**	25	I	2

CO - Course Outcome [CO]

CO 1: Implement programs in Java which use data types, operators, control statements, built in packages & interfaces, Input/output streams and Files.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Tutorial	**3**	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**07/10/2022**	*Date of submission*	**14/10/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Demonstrate the following control statements in Java: i. Decision Making /Selection Statements ii. Looping Statements iii. Jump Statements	10	2	2

CO - Course Outcome [CO]

CO 2 : To get thorough knowledge of java languages and to utilize the features of java like datatypes, operators, control statements etc and how to use the object oriented concepts - classes, objects ,constructors, data hiding, inheritance and polymorphism.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Answer key /Valuation Scheme

Tutorial	**3(Scheme)**	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**07/10/2022**	*Date of submission*	**14/10/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Demonstrate the following control statements in Java: i. Decision Making /Selection Statements ii. Looping Statements iii. Jump Statements **Syntax and Flowchart – 5 marks for each , Programming Example – 5 marks for each**	30	2	2

CO - Course Outcome [CO]

CO 2 : To get thorough knowledge of java languages and to utilize the features of java like datatypes, operators, control statements etc and how to use the object oriented concepts - classes, objects ,constructors, data hiding, inheritance and polymorphism.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Tutorial	4	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**17/10/2022**	*Date of submission*	**25/10/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Contrast the difference between Method overloading and Method Overriding.	5	2	2
2.	Define abstract class.	5	2	1
3.	Compare and contrast class and abstract class.	5	2	2

CO - Course Outcome [CO]

CO 2 : To get thorough knowledge of java languages and to utilize the features of java like datatypes, operators, control statements etc and how to use the object oriented concepts - classes, objects ,constructors, data hiding, inheritance and polymorphism.

LEVEL - Bloom's Taxonomy Level

Level 1: Remenmbering
Level 2: Understanding

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Answer Key/Valuation Scheme

Tutorial	4(Scheme)	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**17/10/2022**	*Date of submission*	**25/10/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Contrast the difference between Method overloading and Method Overriding. **Any 5 points – 5 marks**	5	2	2
2.	Define abstract class. **Definition -1 mark, Explanation – 4 marks**	5	2	1
3.	Compare and contrast class and abstract class. **Comparison – 5 marks**	5	2	2

CO - Course Outcome [CO]

CO 2 : To get thorough knowledge of java languages and to utilize the features of java like datatypes, operators, control statements etc and how to use the object oriented concepts - classes, objects ,constructors, data hiding, inheritance and polymorphism.

LEVEL - Bloom's Taxonomy Level

Level 1: Remenmbering
Level 2: Understanding

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Tutorial	5	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**31/10/2022**	*Date of submission*	**11/11/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Develop a java package named primepackage, with a class Prime containing a static method that check whether a number is prime or not and returns that information. Import this package in another class and use to check a number is prime or not.	5	3	3
2.	Illustrate a java package named "even" package with a class Even containing a static method to check whether a given number is even or not.	5	3	2
3.	Contrast the difference between packages and interface.	5	3	2

CO - Course Outcome [CO]

CO 3: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism , Input/ Output Streams and Files in Java to develop programs

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding
Level 3: Applying

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Answer Key / Valuation Scheme

Tutorial	5(Scheme)	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**31/10/2022**	*Date of submission*	**11/11/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Develop a java package named primepackage, with a class Prime containing a static method that check whether a number is prime or not and returns that information. Import this package in another class and use to check a number is prime or not. **Syntax and logic -2.5 mark , Program – 2.5 marks.**	5	3	3
2.	Illustrate a java package named "even" package with a class Even containing a static method to check whether a given number is even or not. **Syntax and logic -2.5 mark , Program – 2.5 marks.**	5	3	2
3.	Contrast the difference between packages and interface. **Any 5 points -5 marks.**	5	3	2

CO - Course Outcome [CO]

CO 3: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism , Input/ Output Streams and Files in Java to develop programs

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding
Level 3: Applying

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Tutorial	6	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**22/11/2022**	*Date of submission*	**30/11/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Explain in detail following file handling operations in java: i. Create a file ii. Get information of a file iii. Read from a file iv. Write to a file v. Delete a file	10	3	2

CO - Course Outcome [CO]

CO 3: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism , Input/ Output Streams and Files in Java to develop programs

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Valuation Key/ Answer Scheme

Tutorial	6(Scheme)	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**22/11/2022**	*Date of submission*	**30/11/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Explain in detail following file handling operations in java: i. Create a file ii. Get information of a file iii. Read from a file iv. Write to a file v. Delete a file **Each operation with simple java program – 10 marks.**	10	3	2

CO - Course Outcome [CO]

CO 3: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism , Input/ Output Streams and Files in Java to develop programs

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Tutorial	**7**	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**02/12/2022**	*Date of submission*	**15/12/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Illustrate different event classes and event listener interface in java.	10	4	2

CO - Course Outcome [CO]

CO 4: To provide basic exposure for the application of programs in java using multithreading, string handling mechanisms, collection framework and event handling mechanisms.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Valuation Key/ Answer Scheme

Tutorial	7(Scheme)	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**02/12/2022**	*Date of submission*	**15/12/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Illustrate different event classes and event listener interface in java. **List out the event class and event listener interface- 2 marks, Explanation – 8 marks.**	10	4	2

CO - Course Outcome [CO]

CO 4: To provide basic exposure for the application of programs in java using multithreading, string handling mechanisms, collection framework and event handling mechanisms.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Tutorial	**8**	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**12/12/2022**	*Date of submission*	**21/12/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Explain in detail different Swing layout managers in Java swing.	10	5	2

CO - Course Outcome [CO]

CO 5: To impart the techniques of creating GUI based applications and database connectivity.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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Valuation Key/ Answer Scheme

Tutorial	**8(Scheme)**	*Academic Year / Semester*	**2022-23/ 3**
Subject name with code	**CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA**	*Branch*	**CSE**
Date of Issue	**12/12/2022**	*Date of submission*	**21/12/2022**

Q.No	*QUESTIONS*	*Mark*	*CO*	*Level*
1.	Explain in detail different Swing layout managers in Java swing. **List out the Swing layout manager - 2 marks, Explanation with figures– 8 marks.**	10	5	2

CO - Course Outcome [CO]

CO 5: To impart the techniques of creating GUI based applications and database connectivity.

LEVEL - Bloom's Taxonomy Level

Level 2: Understanding

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