

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA– SEMESTER I- EXAMINATION –SUMMER-2024

Subject Code: 619402**Date: 06/06/2024****Subject Name: Object Oriented Programming in Java****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

Q.1	Answer following questions.	14
	<ol style="list-style-type: none"> 1. Justify Java is platform independent. 2. List primitive datatypes of java with its size and range. 3. Write syntax for creating and initializing an array. 4. List four Exception names in java. 5. Write code snippet showing simple inheritance. 6. Describe four methods of wrapper classes. 7. Describe generic class with example. 	
Q.2	(a) List and Explain Object Oriented programming concepts.	07
	(b) Define type casting and write reason for type casting. Explain its type using example.	07
	OR	
	(b) Describe Switch statement, for each loop and if else ladder with their syntax and example.	07
Q.3	(a) Explain constructor overloading concept with example.	07
	(b) Discuss static modifier and its use with different class component with example.	07
	OR	
	(a) Explain method overloading concept with example.	07
	(b) Discuss passing and returning objects as parameters with an example.	07
Q.4	(a) Define package and accessibility of class across different access modifiers. Describe steps to create package and access package with example.	07
	(b) Create and handle custom Exception in java.	07
	OR	
	(a) Explain java support multiple inheritance with example.	07
	(b) Differentiate following	
	1. Checked Exception and Unchecked Exception	04
	2. throw and throws keywords	03
Q.5	(a) Explain ArrayList and its methods and iterator with example.	07
	(b) Draw Thread life cycle and explain thread creation by extending Thread class.	07
	OR	
	(a) Explain methods of String class and StringBuffer class.	07
	(b) Explain Byte stream classes to read and write in java.	07
