

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE- SEMESTER-IV (NEW) EXAMINATION – WINTER 2020**

**Subject Code:3140705****Date:24/02/2021****Subject Name:Object Oriented Programming -I****Time:02:30 PM TO 04:30 PM****Total Marks:56****Instructions:**

1. Attempt any **FOUR** questions out of **EIGHT** questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

<b>Q.1</b>	(a)	What is the difference between oop and procedural oriented language?	<b>03</b>
	(b)	Explain type-conversion in java.	<b>04</b>
	(c)	Explain class and object with respect to java.	<b>07</b>
<b>Q.2</b>	(a)	Difference between Nested if and multi-way if statements.	<b>03</b>
	(b)	What is constructor overloading?	<b>04</b>
	(c)	What are the data-types and operators available in Java?	<b>07</b>
<b>Q.3</b>	(a)	Explain access modifiers with Example.	<b>03</b>
	(b)	Explain following keywords 1) Static 2) Super	<b>04</b>
	(c)	Differentiate between final, finally and finalize. What will happen if we make class and method as final?	<b>07</b>
<b>Q.4</b>	(a)	Explain abstract class with example.	<b>03</b>
	(b)	Explain Primitive data type and wrapper class data types.	<b>04</b>
	(c)	Write a program to rise and handle divide by zero exception.	<b>07</b>
<b>Q.5</b>	(a)	Explain mouse and key event handler in JavaFX.	<b>03</b>
	(b)	Explain following controls 1) text-Area 2) scrollbar 3) checkbox 4) combo-box	<b>04</b>
	(c)	Write a method for computing $x^y$ doing repetitive multiplication. X and y are of type integer and are to be given as command line arguments. Raise and handle exception(s) for invalid values of x and y.	<b>07</b>
<b>Q.6</b>	(a)	Explain following classes in JavaFX. 1) Color class 2) font class 3) Image and image view class	<b>03</b>
	(b)	What is Exception? Demonstrate how you can handle different types of exception separately.	<b>04</b>
	(c)	List and explain available type of constructors in java with example.	<b>07</b>
<b>Q.7</b>	(a)	Differentiate Text I/O and Binary I/O.	<b>03</b>
	(b)	Explain usage of class FileInputStream and FileOutputStream by giving an example.	<b>04</b>
	(c)	Explain Comparable and Cloneable interface.	<b>07</b>
<b>Q.8</b>	(a)	What is Collection? Explain list, stack, queue classes.	<b>03</b>
	(b)	How to access object via reference variable? Explain with example.	<b>04</b>
	(c)	What do you understand by thread? Describe the complete life cycle of thread.	<b>07</b>

\*\*\*\*\*