

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.

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