

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA INTEGRATED– SEMESTER-III EXAMINATION –SUMMER-2020****Subject Code:2638601****Date:04-11-2020****Subject Name: Object Oriented Programming in JAVA (OOPJ)****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.**

- Q.1 (a) Do as Directed: 07**
- a. _____ is the base class of all classes in java.
 - b. If we want to restrict the class from creating an object, we need to make class _____ in java.
 - c. _____ is the default priority of Thread in java
 - d. _____ method is called by the garbage collector just before deallocation of an instance
 - e. final can be used to prevent method from being overloaded.[T/F] (With Reason)
 - f. The size of character data-type is 1 byte in java. [T/F] (With Reason)
 - g. What is Identifier in java?
- (b) Differentiate between:**
- i. String v/s StringBuffer **04**
 - ii. Method Overloading v/s Method Overriding **03**
- Q.2 (a) Explain Java Buzzwords in detail. 07**
- (b) Explain constructor and this keyword in java by giving a suitable example. 07**
- OR**
- (b) Explain Garbage Collection and Varargs in java by giving a suitable example. 07**
- Q.3 (a) Explain static and super keyword by giving a suitable example. 07**
- (b) What is Inheritance? List out various types of Inheritance supported by java. 07**
Explain any two by giving a suitable example.
- OR**
- Q.3 (a) Explain Access modifiers of java in detail by giving a suitable example. 07**
- (b) Why do you require interface in java? Explain interface in java by giving a suitable example. 07**
- Q.4 (a) Explain Packages in java by giving a suitable example. 07**
- (b) Why Generics is required in java. Explain Generics by giving a suitable example. 07**
- OR**
- Q.4 (a) Explain the concept of Exception Handling in java by giving a suitable example. 07**
- (b) Explain the importance of Collection Framework in java by giving a suitable example. 07**
- Q.5 (a) What is Thread? Explain Life-cycle of Thread in detail. 07**
- (b) Write a program in java to Create, modify, write and read operations on a text file also count the availability of text lines in a particular file. 07**

OR

- Q.5** (a) Explain Wrapper classes in java by giving a suitable example. **07**
- (b) Write a small application in Java to develop Banking Application in which user deposits the amount Rs 1000.00 and then start withdrawing of Rs 400.00, Rs 300.00 and it throws exception "Not Sufficient Fund" when user withdraws Rs. 500 thereafter. **07**
