

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER III- EXAMINATION –SUMMER-2022

Subject Code: 2638601

Date: 09/06/2022

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.**

Q:- 1 (a) Do as Directed. **07**

1. Static variable cannot be used in non-static methods.(T/F)
2. What do you understand by Functional interface?
3. In java class inside class is known as?
4. Overloading of a constructor is not allowed in Java. (T/F)
5. _____ is super class of all classes in JAVA.
6. String is an immutable object in java. (T/F)
7. A _____ is a collection of classes and interfaces.

(b) Explain the features of java in detail. **07**

Q:-2 (a) 1. What is meant by interface? Explain with java code. **04**

2. Explain the uses of the keywords “throw” and “finally”. **03**

(b) What are Wrapper classes? Explain boxing and unboxing. **07**

OR

(b) 1. Differentiate String and StringBuffer classes. **04**

2. What is the difference between “Pass by value” and “Pass by reference” in java? **03**

Q:-3 (a) List out the important methods of “List” and “ListIterator” interfaces. **07**

(b) 1. What is the difference between “static” and “final” **04**

2. What are advantages of Set and List interface? **03**

OR

(a) Explain the use of instance variables, instance methods, constructor and initializer block with appropriate example. **07**

(b) What is Package? State the steps to create and import a User define package with required java program code. **07**

Q:-4 (a) What is Generic class ? Explain it with bounded type parameter. **07**

(b) 1. Explain what is a daemon thread. Give one example of a daemon thread. **04**

2. What are thread Priorities? Explain. **03**

OR

- (a) What is collection Framework? Discuss MAP interface with example. **07**
- (b) Define custom(user define)exception. Differentiate between checked and unchecked exception (Reported and Unreported exception). **07**
- Q:-5** (a) Explain InputStream class, OutputStream class, Reader class and Writer class with suitable java code **07**
- (b) What is the purpose of the wait(), notify(), and notifyAll() methods? Discuss life cycle of thread. **07**

OR

- (a) Explain Character Stream and Byte Stream. Also write program to copy content of one file to another file with using command line arguments. **07**
- (b) What is inner class? How can outer class reference be accessed inside inner class? Write the use of inner class using suitable example. **07**
