

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER-III • EXAMINATION – WINTER 2016

Subject Code: 3630005

Date: 06/01/2017

Subject Name: Programming with Java

Time: 10:30 am - 01:00 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) Explain importance of Constructor. Discuss the overloading of methods and constructors with suitable java program code. **07**
- (b) What are the difference between static variable, static method and instance variable, non-static method? Explain with java program. **07**
- Q.2** (a) What are the access specifiers available in Java? Explain each of them and state which of these can be applied to members of a class and which can be applied to members of a package. **07**
- (b) What is Object class? Explain the hashCode(), equals() and toString() methods of Object class with example. **07**
- OR**
- (b) Describe methods of String, StringBuffer and StringBuilder classes with example. **07**
- Q.3** (a) Explain enum type with example of java program code. **07**
- (b) What is the difference between runtime errors and compile time errors? Explain using suitable example. Give the hierarchy of Exception. Also explain checked and unchecked exceptions. **07**
- OR**
- Q.3** (a) Differentiate Comparable and Comparator interfaces. Also give appropriate example. **07**
- (b) Describe the process of creating and using user defined package in java. Give Example. **07**
- Q.4** (a) What is collection framework? Discuss Map interface with example. **07**
- (b) Explain constructors and methods of formatter and scanner class with example. **07**
- OR**
- Q.4** (a) Explain File Class. When we are using "FilenameFilter" interface in application? Explain with code. **07**
- (b) What is Thread? How thread is created in Java? Explain with example. **07**
- Q.5** (a) List all wrapper classes and explain any two. **07**
- (b) Discuss FileOutputStream and FileInputStream class of java I/O with example. **07**
- OR**
- Q.5** (a) Discuss BufferedWriter and the BufferedReader class of java I/O with example. **07**
- (b) Write a program that copies all the content from one file to another. Pass the file names using command line argument. **07**
