

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER– III EXAMINATION – SUMMER 2016

Subject Code: 630002

Date: 03-06-2016

Subject Name: Fundamentals of Java Programming

Time: 02.30p.m. To 05.00p.m.

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 the features of java in detail. Emphasis on why java is platform independent? **07**
- (b)** Explain various type conversion mechanisms available in Java. **07**
- Q.2 (a)** List the various elements that can be defined within a java class. Briefly explain each. **07**
- (b)** Explain the process of method binding and variable binding with example. **07**
- OR**
- (b)** Explain the process of creation and use of Arrays in java. Give Example. **07**
- Q.3 (a)** Explain the importance of interface. Differentiate it with abstract class. **07**
- (b)** Explain the process of creating and using user defined package in java. Give Example. **07**
- OR**
- Q.3 (a)** Differentiate between String and String Buffer Class. Explain any 3 methods of String class. **07**
- (b)** Give differences between Comparable and Comparator interface. Also give example. **07**
- Q.4 (a)** Give a list of available wrapper classes and explain any two in detail. **07**
- (b)** Explain exception handling mechanism of java with example. **07**
- OR**
- Q.4 (a)** Define enum type. Explain enum type with example. **07**
- (b)** Define custom exception. Differentiate between checked and unchecked exception (Reported and Unreported exception). **07**
- Q.5 (a)** Discuss how thread can be created and used in Java. Give example. **07**
- (b)** Explain piped stream and object stream. **07**
- OR**
- Q.5 (a)** Explain character stream class hierarchy. **07**
- (b)** Explain thread synchronization. **07**
