

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA Integrated - SEMESTER-III • EXAMINATION – WINTER • 2014

Subject Code: 4430601**Date: 28-11-2014****Subject Name: Java Programming****Time: 02:30 pm - 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)**
- (i) Discuss Portability as feature of Java. **02**
 - (ii) What is Data Abstraction and Encapsulation in Java? **02**
 - (iii) Give difference between the variables of primitive data types and reference data types. **03**
- (b)**
- (i) Give difference between initializer block and class initializer block. **02**
 - (ii) Explain the use of keyword static. **03**
 - (iii) What is constructor? Discuss the use of it. **02**
- Q.2 (a)**
- (i) Explain method overriding. **04**
 - (ii) How multiple inheritance is supported by Java? **03**
- (b)** Explain package with access specifiers. **07**
- OR**
- (b)** Explain wrapper classes and boxing and unboxing conversions. **07**
- Q.3 (a)** Explain Inner classes and Anonymous classes. **07**
- (b)** Discuss varargs and the Formatter class. **07**
- OR**
- Q.3 (a)** What is Exception? Explain exception handling by creating custom exception classes. **07**
- (b)** Explain Collection interface. **07**
- Q.4 (a)** Write a java program that will write 10 numbers in text file and also read from that file to print that 10 numbers on the screen using byte stream based classes. **07**
- (b)** Explain two different ways of creating a new thread of execution. **07**
- OR**
- Q.4 (a)** Explain File class with five important methods. **07**
- (b)** Explain the properties of Thread instance. **07**
- Q.5 (a)** Explain ActionEvent class. **07**
- (b)** What is an Applet? Explain life cycle of an applet in detail. **07**
- OR**
- Q.5 (a)** Explain JOptionPane class. **07**
- (b)** What is Layout manager? Explain BorderLayout and FlowLayout in detail. **07**
