

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-III • EXAMINATION – SUMMER- 2014

Subject Code: 630002

Date: 29-05-2014

Subject Name: Fundamentals of 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) 1. Explain any three features of Java. **03**
2. Discuss pass by value and pass by reference in Java with proper example. **04**
(b) 1. Describe any three methods of Pattern class. **03**
2. Explain the use of synchronized keyword with example. **04**
- Q.2** (a) Explain Event delegation model with proper example. **07**
(b) 1. What is thread? Differentiate between daemon and non-daemon threads. **03**
2. Discuss enum type with example. **04**
- OR**
- (b) 1. What is stream? Differentiate between Byte Stream and Character Stream. **03**
2. Explain the use of anonymous inner class with example. **04**
- Q.3** (a) 1. Differentiate between abstract classes and interfaces. **03**
2. Explain the use of finalize method with example. **04**
(b) What is exception handling? Discuss the uses of "try", "catch" and "finally" with example. **07**
- OR**
- Q.3** (a) What is JOptionPane? Discuss in brief the methods of JOptionPane for showing different kinds of Dialog. **07**
(b) What is Collection framework? Explain the methods of Iterator with example. **07**
- Q.4** (a) Explain the uses of static variables and methods with example. **07**
(b) What is Object class? Explain the hashCode(), equals() and toString() methods of Object class with example. **07**
- OR**
- Q.4** (a) Define type conversion. Explain the narrowing, widening and mixed conversion for numeric types with example. **07**
(b) What is method overriding? Explain the uses of this and super keyword with example. **07**
- Q.5** (a) Define Multi-threading. State two different ways for creating new thread of execution with appropriate code. **07**
(b) Make a frame that contains three scroll-bars for "Red", "Green" and "Blue" color. As user adjust the value in the scroll-bars, the background color of the frame is set according to the adjusted value. **07**
- OR**
- Q.5** (a) Write a program that copies all the content from one file to another. Pass the file names using command line argument. **07**
(b) What is Applet? Discuss in brief different attributes of Applet tag. **07**
