

GUJARAT TECHNOLOGICAL UNIVERSITY**M.E –IIst SEMESTER–EXAMINATION – JULY- 2012****Subject code: 1720109****Date: 14/07/2012****Subject Name: Object Oriented Programming****Time: 10:30 am – 13:00 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 the following terms: **07**

1. Inheritance
2. Polymorphism
3. Garbage Collection

(b) What are the functions of the following keywords? **07**

1. super
2. static
3. this
4. transient
5. throws
6. volatile
7. synchronized

Q.2 (a) Differentiate the following terms : **07**

1. final, finally and finalized()
2. equals() and ==

(b) **07**

1. Explain narrowing and widening conversion
2. Explain wait() , notify() and notifyAll() methods
3. Explain Alive () and join() methods

OR

(b) **07**

1. What is abstract method?
2. Explain instance of operator
3. Explain access modifiers

Q.3 (a) **07**

1. What is constructor?
2. What do you mean by constructor overloading?
3. Write a program to find maximum between two numbers using method overloading

(b) **07**

1. What is interface?
2. What do you mean by method overriding?
3. Create an interface Calculator and define the following two methods in it
int add(int a, int b);
int subtract(int a, int b);
implement these methods in class Normal_Calculator

OR

Q.3 (a) What is Applet? Write a program to draw rectangle, oval, arc line, rectangle with rounded corners using an applet **07**

(b) What is AWT? Explain delegation event model and draw class hierarchy for Panel and Frame **07**

Q.4 (a) What is the difference between Text field and Text area? Demonstrate **07**

- getCodeBase() and getDocumentBase() with the help of program
- (b) What is chatAt() method of String class? Explain FileReader with the help of program **07**

OR

- Q.4** (a) What do you mean by Exception? What is the difference between checked and unchecked exception? Explain chained Exception **07**

- Q.4** (b) What is substring () method of String class? Write a program to copy text file **07**

- Q.5** (a)
1. What is thread? **07**
 2. What is the basic difference between string and stringbuffer object?
 3. What is an inner class?
 4. What is the base class for Error and Exception?
 5. What is NullPointerException?
 6. Explain the usage of java packages

- (b) What is an Event? Explain any three String operations **07**

OR

- Q.5** (a)
1. What is Math class? **07**
 2. What is ternary operator?
 3. Why is java known as a platform independent language?
 4. What are wrapper classes?
 5. What is the difference between yielding and sleeping?
 6. Give the difference between paint () and repaint() method

- (b) What is an array? What do you mean by truncation? Write a program to sort an integer array **07**
