

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E –Ist SEMESTER–EXAMINATION – JULY- 2012

Subject code: 715103N

Date: 09/07/2012

Subject Name: Object Oriented Programming

Time: 2:30 pm – 05:00 pm

Total Marks: 70

Instructions:

1. Attempt question 1, which is compulsory and answer any five from the rest of the questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right hand indicate the marks.

Q. No. 1

[2 Marks X 10 = 20 Marks]

- a. Write the differences between object oriented programming and procedure oriented programming.
- b. What are the two ways of creating a thread?
- c. What is a stub class? Explain briefly.
- d. Explain briefly how thread priority can be controlled in java.
- e. What do you mean by super keyword? Explain briefly.
- f. What is the difference between throw and throws statement
- g. What is inner class? Illustrate with an example.
- h. What is garbage collection? Explain in short.
- i. List out the two uses of “this” keyword.
- j. Write the differences between class and interface in JAVA?

Q. No. 2

- a. Explain the features of JAVA. How Java is different from C++. [5 Marks]
- b. Explain the concept of multidimensional arrays in JAVA [5 Marks]

Q. No. 3

- a. List out any four members of Object class and explain their use in brief. [4 Marks]
- b. Explain the following with example
(1) Default constructor (2) Parameterized constructor (3) Copy constructor [6 Marks]

Q. No. 4

- a. What is the use of exceptional handling? Explain the keywords used to handle exceptions in Java with the help of an example. [6 Marks]
- b. Define interface. What is the use of interface? [4 Marks]

Q. No. 5

- a. Discuss briefly about the TCP, UDP & URL [6 Marks]
- b. What is InetAddress? How to create an InetAddress? Write its use. [4 Marks]

Q. No. 6

- a. Define multithreading. Give an example of application that needs multi-threading. [5 Marks]
- b. What is method overloading? Can you define two methods that have same name but different parameter types? Can you define two methods in a class that have identical method names and parameter profile with different return value types or different modifier? [5 Marks]

Q. No. 7

Define sockets. Use socket programming to design a client/server application that takes the password as input and checks whether it is correct. The program should print the appropriate message.

[10 Marks]

Q. No. 8

- a. Discuss in detail the memory management in java with respect to variables of primitive type, reference types and user defined objects. [10 Marks]
