	Seat No.:	Enrolment No	
	GUJARAT TECHNOLOGICAL UNIVERSITY M. E SEMESTER – I • EXAMINATION – SUMMER • 2013		
	Subject code: 715103	Date: 06-06-2013	
	Subject Name: Object Oriented Progr	amming	
	Time: 10.30 am – 01.00 pm	Total Marks: 70	
	Instructions:		
2.	Attempt question 1, which is compulsory and a Make suitable assumptions wherever necessary Figures to the right hand indicate the marks.	· · · · · · · · · · · · · · · · · · ·	uestions.
Q. No.	. 1	[2 Marks * 10 =	20 Marks]
	What is data abstraction?	-	-
	Difference between finaløand finallyø		
	What are wrapper classes in Java? What is method overloading?		
	Give the difference between an interface and ar	n abstract class in Java	
	What is a friend function?	Tuosifuet etass in vu vu	
_	What is a stub class?		
	What is InetAddress? What is its use?		
	What are the need for class templates?		
3	What is nested class?		
Q. No.			
	Explain the features of JAVA. How Java is dif		5 Marks] 5 Marks]
	What are the rules of overloading operators?	Į-	Marks
Q. No.			C M11
	What is a constructor? What are its special prop How do we invoke a constructor?		6 Marks] 4 Marks]
		L	- Warks
Q. No.	What is the use of exceptional handling? Expla	oin the kaywords	
a.	used to handle exceptions in Java with the help		6 Marks]
b.	Define interface? What is the use of interface	<u>-</u>	4 Marks]
Q. No.	5	-	-
_	Write a java program to create :nøthreads whic	th run concurrently	
	i. extending Thread class		5 marks]
	ii. implementing Runnable interface	[5	5 marks]
Q. No.	. 6		
а	What is a nackage? How do we design a nackage	ge? How do we add a class or interfa	ce to a

What is a package? How do we design a package? How do we add a class or interface to a package? [10 Marks]

Q. No. 7

a. What are virtual functions? Explain with a suitable program.

[10 marks]

Q. No. 8

a. Explain the steps in implementing RMI Server & Client.

[10 Marks]

(OR)

b. Create a multithreaded application with 2 threads, which does concurrent push, pop operations on a stack. Check out for any concurrency issues (race conditions) and solve them using java

i. Synchronization, thread communication support.

[10 Marks]