Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER- II(Old course) • EXAMINATION (Remedial) - WINTER- 2015

Subject Code: 1720105 Subject Name: Object Oriented Methodology & Design Time:2:30 pm to 5:00 pm Instructions: Date: 11/12/ Total Marks		Code: 1720105 Date: 11/12/201	Date: 11/12/2015	
		70		
Histi		Attempt all questions. Make suitable assumptions wherever necessary.		
Q.1	(a)	What is modular design of software? Also discuss concepts of Cohesion and	07	
	(b)	Coupling. Answer following questions with respect to Constructors. a. What should be the name of constructor? b. Can we return value from constructor? c. At which time constructors are called?	07	
Q.2	(a)	How to ensure that there is only one object of Class can be made? Explain	07	
	(b)	relevant design pattern with suitable example. What do you mean by Object equality? How to check whether two objects are equal or not? Give proper example.	07	
	(b)	OR What is RTTI (Run Time Type Identification)? Explain concept of Reflection in java.	07	
Q.3	(a)	What is design pattern? What is need of Iterator pattern? Explain Iterator design pattern with class diagram.	07	
	(b)	Draw & write use case diagram for registering new user in library system. OR	07	
Q.3	(a) (b)	Give differences between Object Adapter and Class Adapter with example. Draw sequence diagram for adding book in library system.	07 07	
Q.4	(a) (b) (c)	Attempt any two. Draw state transition diagram for Microwave oven. Explain Liskovøs substitution principle Explain Factory design pattern with suitable example.	14	
Q.5	(a) (b) (c)	Attempt any two. Write a short note on MVC pattern. Write a short note in Type Inheritance. Write a java program to create Student class with name and age as members. When object of Student is printed, it should display name and age of object. As shown bellow. Student s=new Student(); System.out.println(s); //print student name & age	14	