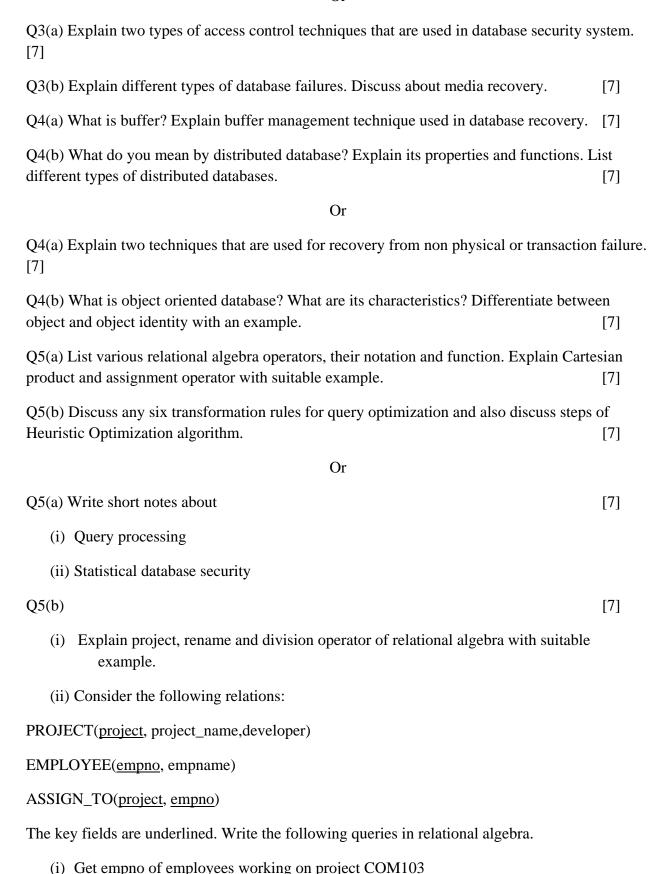
Seat No.:	Enrolment No.
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## GUJARAT TECHNOLOGICAL UNIVERSITY M.C.A.- SEMESTER – II • EXAMINATION – WINTER 2012

Subject code: 620006 Subject Name: Database Management System - II Time: 02:30 pm – 05:00 pm Instructions:		Date: 27-12-2012 Total Marks: 70		
Q1(a) V	Vha	at is concurrency control? Explain three main problems of	of concurrency co	ntrol. [7]
Q1(b) E		cuss query analysis, semantic analysis and query simplifition.	er stage of query	[7]
Q2(a) S	tat	e whether the following statements are TRUE or FALSE	, Justify.	[7]
(i) ]	Du	ring the query processing the syntax of the query is chec	ked by compiler.	
(ii)	Sh	adow paging technique maintains two page tables.		
(iii)	Se	rialisability describes the concurrent execution of severa	l transactions.	
(iv)	Ma	ndatory access control is based on the concept of access	rights.	
(v) ]	Paı	rallel database system has the disadvantage of skew prob	lem.	
(vi).	Au	thorization is the process by which a user's identity is ch	ecked.	
(vii)	)	Certification is a phase of optimistic methods for concu	rrency control.	
- ` '		at is two phase locking? Explain with schematic diagram sults in deadlock? Justify your answer with the help of an	-	ill two phase
		Or		
		ch data is recorded on the transaction log. Explain with ansaction.	an example. List o	different [7]
Q3(a) V security		at is threat in a database environment? Explain different sues.	threats and types	of database [7]
Q3(b) E	Ехр	lain four levels of transaction consistency. Discuss conce	ept of lock granul	arity. [7]



(ii) Find the employee numbers of employees who do not work on project COM105.