Sea	nt No.:	Enrolment No		
		GUJARAT TECHNOLOGICAL UNIVERSITY ME – SEMESTER II (NEW) – • EXAMINATION – SUMMER 2016		
Su	bject		Date: 31/05/2016	
	•	Name: Database Management System		
	me:10 tructio	0:30 am to 01:00 pm Total Marks:	70	
1115	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)	With example explain various mapping cardinalities and total participation. Explain various operations in DDL, DML and DCL SQL	07 07	
Q.2	(a) (b)	Explain in detail duties of Database Administrator. Explain with example grouping of data with GROUP BY and HAVING clause. OR	07 07	
	(b)	Explain arithmetic operators in dbms with examples	07	
Q.3		Design database for university. Explain data requirements, entity sets, relationship sets for the same. Construct E-R diagram of university.	14	
		OR		
Q.3		Design database for banking enterprise. Explain data requirements, entity sets, relationship sets for the same. Construct E-R diagram of bank which provides different kinds of bank accounts and loans, and operates number of branches.	14	
Q.4		BOOK_MAST(book_code, book_name, isbn_no, tot_books, publisher, edition) ISSUE_RECEIPT(book_code, trans_type, trans_date) AUTHOR(book_code, author_name) Note: Transaction type can be 'I' for issue and 'R' for return Write sql queries for the following:	14	

- 1. Display list of books which are issued for more than 14 days.
- 2. Display list of all books with its edition wise details published by 'Oxford' publisher.
- 3. Gives publisher name for whom a author has written more than 3 books.
- 4. Display total number of books for the author named 'C.J.Date'.
- 5. Display name of books which are not issued.
- 6. Display total books which is return today.
- 7. Display author name who has publish same book for more than one edition.

OR

Q.4		Consider the following database schema:	14
		DEPT (dno, dname, dlocation)	
		EMPLOYEE (eno, ename, gender, city, dno, salary)	
		Write sql queries for the following:	
		1) Display the dept details of department 'ME'.	
		2) Display ename and salary of employees whose salary is greater than Rs. 12000.	
		3) Display the name of female employees whose dno is 20.	
		4) Display dname and ename of all employees.	
		5) Display the dno, dname, eno, ename of all employees whose dname is 'ME' and city is 'Mumbai'.	
		6) Find out gender wise total number of employees.	
		7) Display the name of employees who don't live in 'Mumbai' city.	
Q.5	(a)	Explain in detail LIKE, IN and NOT IN predicate with examples	09
	(b)	Compare BCNF and 3NF.	05
	()	OR	
Q.5	(a)	Explain in detail UNION, INTERSECT and MINUS	09
	()	CLAUSE with examples.	
	(b)	Explain different datatypes in sql.	05
