- (i) Printed Pages: 3 Roll No.
- (ii) Questions : 14 Sub. Code : 0 8 8 4 Exam. Code : 0 0 2 4

Bachelor of Business Administration 4th Semester 1059

DATABASE MANAGEMENT SYSTEM Paper-BBA-226

Time Allowed: 3 Hours]

[Maximum Marks: 80

SECTION-A

(Attempt any four questions)

- 1. Explain three Tier architecture of DBMS.
- 2. What are the differences between DDL and DML commands?
- 3. Explain basic operations of Relational Calculus.
- Explain difference between Security and Integrity.
- 5. Explain the use of Grant and Revoke command with syntax and example.
- 6. Explain features of RDBMS.

 $4 \times 5 = 20$

SECTION-B

(Attempt any two questions)

7. (a) Difference between Database and File Oriented System.

7

(b) What are the various advantages and disadvantages of DBMS?

8

8.	(a)	Explain Client Server Architecture in detail.	7
di	(b)	What are the various operations that can be done on Relatio	nal
1		Algebra?	8
9.	Exp	Explain Hierarchical, Network and Relational model in detail.	
			15
10.	(a)	Explain difference between Relational Calculus and Relation	nal
		Algebra.	7
	(b)	What are the basic operations of Relational Calculus?	8
		SECTION-C	
		(Attempt any two questions)	
11.	What is Normalization? Explain first, second and third normal		
	forn	n in detail.	15
12.	(a)	What are the various threats to the database in	an
	. We fire	organisation?	7
	(b)	Discuss Database Failures and Recovery techniques in deta	il.
			8
13.	(a)	What is Database Integrity? Explain various integrity rule	es.
			7
	(b)	Discuss various data types that are used in Oracle wi	th
		example.	8

14. Consider the following table:

Student (Student_Name, Rollno, Age, Marks, Subject)
Write the SQL statements for the following:

- (a) List the Students whose name starts with alphabet 'S' and age is 20.
- (b) Find the name of the student who has scored highest marks.
- (c) Find the students who are studying the same Subject.

 $5 \times 3 = 15$