

Term End Examination - December, 2016
Diploma in Computer Applications
DCA-05: RDBMS AND MY SQL (2015 Syllabus)

Time - 3 hours

Full Mark - 100

Answer any four questions from Group - 'A', any two questions from Group - 'B' and any three questions from Group - 'C'

Group 'A'

Mark: 5 × 4= 20

(Answer any four questions each within 100 words)

Q. No. 1

- (a) Outline the advantages of Database Management Systems over the File Oriented Systems.
- (b) Define RDBMS? Give two examples of popular RDBMS software.
- (c) Write a short note on SQL Injection.
- (d) What is SQL? What operations can be performed using SQL?
- (e) Differentiate between the WHERE clause and HAVING clause?
- (f) What are aggregate functions? Explain any two aggregate functions.
- (g) Define Normalization. Name different types of normal forms.

Group 'B'

Mark: 10 × 2= 20

(Answer any two questions each within 250 words)

Q. No. 2

- (a) What is a view? What are the benefits of using views?
- (b) Define and explain First Normal Form and 2nd Normal Form with an example.
- (c) Explain different types of constraints in SQL with examples.
- (d) List the rules for creating a table. How can you create a table?
- (e) Create table DEPT with the following columns and constraints.

Column name	Data type	Size	Constraint
DEPTNO	NUMBER	2	PRIMARY KEY
DNAME	VARCHAR2	10	UNIQUE + NOT NULL
LOCATION	VARCHAR2	10	UNIQUE + NOT NULL

Group 'C'

Mark: 20 × 3= 60

(Answer any three questions each within 500 words)

Q.No3. List and explain the common data types in SQL.

4. Discuss different categories of SQL commands with proper format.

5. What is MYSQL? Write its functions and features.

6. Consider the following relations.

EMP (ENO, ENAME, JOIN_DATE, SALARY, DNO)

DEPT (DNO, DNAME, CITY)

Express the following using SQL queries.

a) Find names of employees who work in a dept. in Delhi.

b) Find name of employee who earns highest salary in 'MARKETING' department.

7. What is a join? Explain the various categories of joins that can be used to join two tables?

8. Write the SQL statement to create a table EMPLOYEE with the following columns and constraints.

Column name	Data type	Size	Constraint
EMPNO	CHAR	4	PRIMARY KEY
ENAME	VARCHAR2	10	NOT NULL
JOB	VARCHAR2	10	
MGR	CHAR	4	
HIREDATE	TIMESTAMP		NOT NULL
GENDER	CHAR	1	'M' OR 'F' ONLY
SAL	NUMBER	8,2	DEFAULT 0
COMM	NUMBER	8,2	DEFAULT 0
DEPTNO	NUMBER	2	FOREIGN KEY REFERRING TO DEPTNO of DEPT table