

Roll No.....

**M. Sc. IT-10 (Master of Science in Information Technology)**  
**Fourth Semester Examination 2012**  
**MIT-4002**  
**Database Administration**

**Time : 3 Hrs**

**Max Marks : 60**

**Note: the question paper is divided in three sections – A, B and C. Answer the questions as per instructions given in each section.**

**Section-A**  
**(Long Answer's Questions)**

**Answer any two questions. Each question carries 15 marks.                      2 x 15 = 30**

1. a) Discuss architecture of a typical database system with the help of suitable diagram. Explain its components in detail.  
b) Explain different types of data independence.
2. a) Discuss different types of failures in oracle environment.  
b) Explain database backup and recovery strategies.
3. a) Discuss Oracle Net Stack Architecture.  
b) What are stored procedures? How do we accept arguments in stored procedures? Explain with the help of suitable example? How do we modify existing stored procedures?
4. a) How do we test backup and recovery plan?  
b) What is privilege management in Oracle? How do we grant and revoke privileges?

## Section-B

### (Short Answer's Questions)

**Answer any four questions. Each question carries 5 marks.**

**4 x 5 = 20**

1. Discuss roles and responsibilities of a Database Administrator.
2. What are different network design considerations in network administration?
3. Write short note on performance tuning.
4. What are views? Explain with the help of suitable example. Write syntax to create a view.
5. What is use of GROUP BY clause in SQL? Explain with the help of suitable example.
6. What is referential integrity? Differentiate between primary key and foreign key.
7. How constraint management is achieved in a typical RDBMS?
8. Discuss physical and logical storage structure.

## Section-C

### (Objective Type Questions)

**Answer all questions. Each question carries 01 mark.**

**10 x 1= 10**

**Choose the correct option**

1. \_\_\_\_\_ returns total number of records in a table
  - a. Unique
  - b. Distinct
  - c. Count
  - d. Max
2. \_\_\_\_\_ returns records of a table in descending order
  - a. Order By DESC

- b. Order By Decreasing
  - c. Order by Descending
  - d. Descending Order By
3. SQL stands for \_\_\_\_\_
- a. Simple query language
  - b. Structured query list
  - c. Structured query language
  - d. Systematic query language
4. To create a table \_\_\_\_\_ command is used
- a. Create table <Table-Name>
  - b. Create <Table-Name>
  - c. Create table name=<Table-Name>
  - d. Create def <Table-Name>
5. To modify an existing stored procedure following command is used
- a. Edit StoredProcedureName
  - b. Modify StoredProcedureName
  - c. Change StoredProcedureName
  - d. Alter StoredProcedureName

**Write True / False against the following**

- 1. Oracle is only a Database System (True / False)
- 2. Primary key can be a combination of multiple columns (True / False)
- 3. Foreign key ensures referential integrity (True / False)
- 4. DROP command is used to delete all the records of a table (True / False)
- 5. **Select count(\*) from Tablename** will return record count after eliminating duplicate values. (True / False)