

## Question Bank (I scheme)

Name of Subject: Database Management (DMA)

Unit Test: II

Subject Code: 22416

Course: IF4I

Semester: IV

### Chapter 3-Advance features of SQL ( 10 marks)

#### 2 Marks

1. Define View and write the syntax for creating view.
2. Describe Synonyms with example.
3. Define Index and list its types.
4. Define sequence and write the syntax for creating sequence

#### 4 Marks

1. Consider following schema: Employee (emp\_id, emp\_name, job, hiredate, salary, comm, deptno)  
Write SQL commands for following statements:
  - i. Create view emp\_vu20 that contains details of employees in deptno 20
  - ii. Display employee details from view emp\_vu20 whose salary is greater than 50,000
  - iii. Delete view named as emp\_vu20
2. Write SQL Commands to perform following operations on Sequence.
  - i. Create a sequence with following specifications.
    - Name : DB\_SEQ
    - Starting Value : 1
    - Maximum Value : 10
    - Increment By: 2
  - ii. Modify a sequence named DB\_SEQ with following specifications.
    - Increment By: 3
    - Maximum Value : 20
  - iii. Remove a sequence DB\_SEQ from database
3. Write SQL Statement to perform following operation.
  - i. Create Synonym for Hotel table to HM.
  - ii. Create an Index on Hotel Table, use H\_id as index attribute.

### Chapter 4-PL/SQL Programming ( 10 marks)

#### 2 Marks

1. Write PL/SQL program to display square of any number.
2. Write PL/SQL program which handles divide by zero exception.
3. Define Trigger and write the syntax for creating trigger.
4. Compare Function and Procedure(Any 2 Points)

#### **4 Marks**

1. Explain block structure of PL/SQL. List advantages of PL/SQL.
2. Explain conditional control structures of PL/SQL.
3. Define Cursor. Write step by step syntax to declare, open, fetch and close cursor in PL/SQL block.
4. Explain Exception Handling in PL/SQL.
5. Write PL/SQL program to find factorial of user defined number.
6. Write PL/SQL code for following
  - i. Write a function circle\_area to find area of circle, use radius as input parameter
  - ii. Write a procedure to count number of employee in department, use dept\_no as input parameter

#### **Chapter 5-Database Security and Transaction Processing ( 2 marks)**

#### **2 Marks**

1. Define Database Security. Give its Importance.
2. Draw and explain State diagram of Transaction.
3. Enlist types of Database Failures.
4. Write SQL Commands for following statements.
  - i. Create user Jack having password as 'MSBTE@123'.
  - ii. Assign create and update privileges to 'Jack'.
  - iii. Remove Update privileges from 'Jack'.

#### **4 Marks**

1. What is Transaction? Explain ACID properties of transaction.
2. Describe Grant and Revoke command with syntax and example.
3. Explain Lock based concurrency control.
4. List causes of database failures. State any two importance of Backup.