



Academic Year: 2024-25

Course: Data Base Management System (DMS)

Semester: III

Institute Code: 0078

Program: Computer Technology

Course Code: 313302 Scheme: K

Class: SYCM-Mac

*******DMS Practice Questions*******

Unit No. 03: Interactive SQL and Performance Tunning

1. Explain any four string functions with example.
2. Describe date and time function.
3. Explain any four aggregate functions with their examples.
4. What is sequence? What are the various operations with respect to sequences?
5. Describe following terms: i) unique indexes ii) composite indexes.
6. Explain GROUP BY, ORDER BY clause of SQL with example.
7. Explain Having clause with example
8. What are synonyms? How to create and drop synonym?
9. State use of '%' character in string operations.
10. Explain views with example. How to create view? Give its syntax and explain its advantages.
11. What is OUTER JOIN? Explain in detail.
12. Define index. State its type.
13. Differentiate between view and index
14. Consider following schema: Depositor (Acc_no, Name, PAN, Balance)
Create a view on depositor having attributes (Acc_no, PAN) where balance is greater than 100000.
15. Consider the schema Customer (Cust-id, Cust_name, Cust_addr, Cust_city)
 - i) Create a sequence for Cust_id
 - ii) Create a view on Customer (Cust_id, Cust_name) where Cust_city is 'Pune'
16. Consider the following table employee (Emp_id, Emp_name, Emp_age)
 - i) Display details of employees whose age is less than 30.
 - ii) Display details of employees whose age is in between the range 30 to 60.
 - iii) Display total number of employee whose age is 60.
 - iv) Display names of employees whose name starts with 'S'.
 - v) Display details of employees whose name end with 'd'.
 - vi) Display details of employees whose age is greater than 50 and whose name contain 'e'.
17. Write SQL queries for following. Consider table stud (roll no, name, sub1, sub2, sub3)
 - i) Display names of student who got minimum mark in sub1.
 - ii) Display names of students who got above 40 marks in sub2.

- iii) Display count of Students failed in sub2.
- iv) Display average marks of sub1 of all students.

Unit No. 04: PL/SQL Programming

1. What are the various control structure statements used in PL/SQL?
2. Explain conditional control structure in PL/SQL.
3. Explain for loop in PL/SQL with example.
4. Explain while-loop in PL/SQL with example.
5. What are exceptions? What are Predefined exceptions and User defined exceptions? Explain its types.
6. What is cursor? Explain implicit and explicit cursor..
7. Write step by step syntax to create, open and close cursor in PL/SQL block.
8. Explain trigger with suitable example. List its types. How to create trigger? State any two advantages of trigger.
9. Draw the block structure of PL/SQL. List advantages of PL/SQL.
10. What statement is used in PL/SQL to display the output?
11. Explain GOTO statement with example.
12. Write a PL/SQL program, which accept the number from user. If user enters an odd number then exception invalid number is raised using user defined exception handling.
13. Write a PL/SQL program which handles divide by zero exception.
14. Write PL/SQL code to find greatest of three numbers.
15. Write PL/SQL procedure to calculate factorial of a give number.
16. Write PL/SQL program to print even or odd number

Unit No.05:Data Base Administration

1. Explain states of transaction with neat diagram
2. State and Explain ACID properties.
3. Enlist different database Users. Write function performed by each user.
4. Explain with suitable example how to create, alter, delete user.
5. Enlist & explain types of database privilege.
6. What is database backup? Explain with its types
7. Explain Roll Forward & Rollback recovery technique of Data Recovery.
8. Write a short note on- a) Data Warehouse b) Data lakes
9. Write a short note on- a) Data mining b) Big data c) Mongo DB d) DynamoDB