III YEAR – V SEMESTER
COURSE CODE: 7BCE5P1

CORE COURSE-XI–RELATIONAL DATABASE MANAGEMENT SYSTEMS LAB

The following concepts must be introduced to the students:

DDL Commands

- Create table, alter table, drop table

DML Commands

- Select, update, delete and insert statements
- Condition specification using Boolean and comparison operators (and, or,not,=,<>,>,<,>=,<=)
- Arithmetic operators and aggregate functions (Count, Sum, Avg, Min, Max)
- Multiple table queries (join on different and same tables)
- Nested select statements
- Set manipulation using (any, in, contains, all, not in, not contains, exists, not exists, union, intersect, minus, etc.)
- Categorization using group by……..having
- Arranging using order by

I. Create a table Student-master with the following fields client_no,name, address, city, state, pincode, remarks, bal_due with suitable data types.
   a. Create another table supplier_table from client_master. Select all the fields and rename client_no with supplier_no and name with supplier_name.
   b. Insert data into client_master
   c. Insert data into supplier_master from client_master.
   d. Delete the selected row in the client_master.

II. Create a table sales_order with s_order_no and product_no as primary key. Set other fields to store client number, delivery address, delivery date,order status.
   a. Add a new column for storing salesman number using ALTER Command.
   b. Set the s_order_no as foregin key as column constraints.
   c. Set the s_order_no as foreign key as table constraints.
   d. Enforce the integrity rules using CHECK.

III. Create a table student_master with the following fields name, regno, dept and year with suitable data types. Use Select command to do the following.
   a. Select the student's name column.
   b. Eliminate the duplicate entry in table.
   c. Sort the table in alphabetical order.
   d. Select all the Students of a particular department.

IV. Create a table sales_order_details with the s_order_no as primary key and with the following fields: product_no, description, qty_ordered, qty_disp,product_rate, profit_percent, sell_price, supplier_name.

a. Select each row and compute sell_price*.50 and sell_price*1.50 for each row selected.
b. Select product_no, profit_percent, Sell_price where profit_per is not between 10 and 20 both inclusive.
c. Select product_no, description, profit_percent, sell_price where profit_percent is not between 20 and 30.
d. Select the suppliername and product_no where suppliername has 'r' or 'h'as second character.

V. Create and use the following database schema to answer the given queries

EMPLOYEE			
DEFAULT			
Field	**Type**	**Null**	**Key**
Eno	Char(3)	No	Primary
Ename	Varchar(50)	No	
Job_type	Varchar(50)	No	
Manager	Char(3)	Yes	Foreign
Hiredate	Date	No	
Dno	Integer	Yes	Foreign
Commission	Decimal(10,2)	Yes	
Salary	Decimal(7,2)	No	

DEPARTMENT			
DEFAULT			
Field	Type	Null	Key
Dno	Integer	No	Primary
Dname	Varchar(50)	Yes	

Perform the following queries:

a. Query to display Employee Name, Job, Hire Date, Employee Number; for each employee with the Employee Number appearing first.
b. Query to display unique Jobs from the Employee Table.
c. Query to display the Employee Name concatenated by a Job separated by a comma.
d. Query to display all the data from the Employee Table. Separate each Column by a comma and name the said column as THE_OUTPUT.
e. Query to display the Employee Name and Salary of all the employees earning more than $2850.
f. Query to display Employee Name and Department Number for the Employee No= 7900.

g. Query to display Employee Name and Salary for all employees whose salary is not in the range of $1500 and $2850.
h. Query to display Employee Name and Department No. of all the employees in Dept. 10 and Dept 30 in the alphabetical order by name.
i. Query to display Name and Hire Date of every Employee who was hired in 1981.
j. Query to display Name and Job of all employees who don‘t have a current Manager.
k. Query to display the Name, Salary and Commission for all the employees who earn commission.
l. Sort the data in descending order of Salary and Commission.
m. Query to display Name of all the employees where the third letter of their name is _A‘.
n. Query to display Name of all employees either have two _R‘s or have two _A‘s in their name and are either in Dept. No=30 or their Manger‘s Employee No=7788.
o. Query to display Name, Salary and Commission for all employees whose Commission Amount is 14 greater than their Salary increased by 5%.
p. Query to display Name, Hire Date and Salary Review Date which is the 1st Monday after six months of employment.
q. Query to display Name and calculate the number of months between today and the date each employee was hired.
r. Query to display Name with the 1st letter capitalized and all other letter lower case and length of their name of all the employees whose name starts with _J‘, ‘A‘ and _M‘.
s. Query to display Name, Department Name and Department No for all the employees.
t. Query to display Unique Listing of all Jobs that are in Department # 30.
u. Query to display Name, Job, Department No. And Department Name for all the employees working at the Mumbai location.
v. Query to display Name, Dept No. And Salary of any employee whose department No. and salary matches both the department no. and the salary of any employee who earns a commission.
w. Query to display the Highest, Lowest, Sum and Average Salaries of all the employees
x. Query to display the Employee No. And Name for all employees who earn more than the average salary.
y. Query to display Employee Number and Name for all employees who work in a department with any employee whose name contains a _T‘.

VI. Create a table master_book to contain the information of magazine code, magazine name and publisher. Weekly/biweekly/monthly, price. Write PL/SQL block to perform insert, update and delete operations on the above table.

VII. Create a table to contain phone number, user name, address of the phone user. Write a function to search for a address using phone numbers.

VIII. Create a table stock to contain the item-code, item-name, current stock, date of last

purchase. Write a stored procedure to seek for an item using item-code and delete it, if the date of last purchase is before 1 year from the current date. If not, update the current stock.

IX. Create a table to store the salary details of the employees in a company. Declare the Cursor to contain employee number, employee name and net salary. Use Cursor to update the employee salaries.

X. Create a table to contain the information about the voters in a particular constituency. Write a proper trigger to update or delete a row in the table.

♣♣♣♣♣♣♣♣♣♣