

DBMS LAB

Internals Qns & Ans

Prepared by

Flickson J



MAR IVANIOS COLLEGE (AUTONOMOUS)
THIRUVANANTHAPURAM

Reg. No.:...04.....

Name:.....

THIRD SEMESTER PRACTICAL EXAMINATION, DECEMBER 2023

AUCS34PII: DBMS LAB

Time: 3 Hours

Max. Marks: 80

Create the table and perform the following queries

PART – A

Create the following tables.

Studies(pname,splace,course,ccost), First three fields are varchar, last field number

Software(pname,title,devin,scost,dcost,sold) first three are varchar, last three number

Programmer(pname,dob,doj,sex,prof1,prof2,sal)

Legends: pname-programmer name,Splace-study place,Ccost-Course cost,Scost-
software cost, Dcost-development cost, Devin-developed in,Prof1,Prof2-
Proficiency

PART – B

1. Details of s/w developed by Rajesh
2. How many programmers studied at 'Pentsoft'?
3. How many ^{work} packages were developed in Oracle? ^{cost}
4. How many female programmers?
5. Display details of packages whose sales crossed 5000 mark.
6. Display the employee whose salary is between 5000 and 7500.
7. Display the programmers who are proficient in 'C'.
8. List the highest salary paid to the programmers.

```
SQL> CREATE TABLE studies (  
pname VARCHAR(30),  
splace VARCHAR(30),  
course VARCHAR(30),  
ccost INT);
```

```
SQL> CREATE TABLE software (  
pname VARCHAR(30),  
title VARCHAR(30),  
devin VARCHAR(30),  
scost INT,  
dcost INT,  
sold INT);
```

```
SQL> CREATE TABLE programmer (  
pname VARCHAR(30),  
dob DATE,  
doj DATE,  
sex CHAR(1),  
prof1 VARCHAR(30),  
prof2 VARCHAR(30),  
sal INT);
```

```
SQL> SELECT * FROM software WHERE pname='Rajesh';
```

```
SQL> SELECT COUNT(*) FROM studies WHERE splace='Pentasoftware';
```

```
SQL> SELECT COUNT(*) FROM software WHERE devin='Oracle';
```

```
SQL> SELECT COUNT(*) FROM programmer WHERE sex='F';
```

```
SQL> SELECT * FROM software WHERE scost>50000;
```

```
SQL> SELECT pname FROM programmer WHERE sal BETWEEN 5000 AND 7500;
```

```
SQL> SELECT * FROM programmer WHERE prof1 = 'C' OR prof2 = 'C';
```

```
SQL> SELECT MAX(sal) FROM programmer;
```



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THIRUVANANTHAPURAM

Reg. No.:.....CS..... Name:.....
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AUCS34PII: DBMS LAB

Time: 3 Hours

Max. Marks: 80

Create the table and perform the following queries

PART - A

Create the following table

Studies(pname,splace,course,ccost), First three fields are varchar, last field number

Software(pname,title,devin,scost,dcost,sold) first three are varchar, last three number

Programmer(pname,dob,doj,sex,prof1,prof2,sal)

Legends: pname-programmer name, Splace-study place, Ccost-Course cost, Scost-software cost, Dcost-development cost, Devin-developed in, Prof1-Proficiency

PART - B

1. Find the selling cost average for packages developed in Oracle.
2. Display the names, ages, and experiences of all programmers.
3. Display the names of those who have done the PGDCA course.
4. What is the highest no. of copies sold by a package?
5. Display the names and date of birth of all programmers born in April
6. Display the lowest course fee.
7. How many programmers have done the DCA course?

```
SQL> CREATE TABLE studies (  
pname VARCHAR(30),  
splace VARCHAR(30),  
course VARCHAR(30),  
ccost INT);
```

```
SQL> CREATE TABLE software (  
pname VARCHAR(30),  
title VARCHAR(30),  
devin VARCHAR(30),  
scost INT,  
dcost INT,  
sold INT);
```

```
SQL> CREATE TABLE programmer (  
pname VARCHAR(30),  
dob DATE,  
doj DATE,  
sex CHAR(1),  
prof1 VARCHAR(30),  
prof2 VARCHAR(30),  
sal INT);
```

```
SQL> SELECT AVG(scost) FROM software WHERE devin='Oracle';
```

```
SQL> SELECT pname, FLOOR(DATEDIFF(CURDATE(),dob)/365) AS age,  
FLOOR(DATEDIFF(CURDATE(),doj)/365) AS experience FROM programmer;
```

```
SQL> SELECT pname FROM studies WHERE course='PGDCA';
```

```
SQL> SELECT MAX(sold) FROM software;
```

```
SQL> SELECT pname, dob FROM programmer WHERE MONTH(dob)=4;
```

```
SQL> SELECT MIN(ccost) FROM studies;
```

```
SQL> SELECT COUNT(*) FROM studies WHERE course='DCA';
```




MAR IVANIOS COLLEGE (AUTONOMOUS)
THIRUVANANTHAPURAM

Reg. No.:.....20.....

Name:.....

THIRD SEMESTER PRACTICAL EXAMINATION, DECEMBER 2023

AUCS34PII: DBMS LAB

Time: 3 Hours

Max. Marks: 80

Create the table and perform the following queries

PART – A

Create the tables DEPT and EMP as described below.

DEPT

Column Name	Data Type	Description
DNO	Number	Department
DNAME	Varchar	Department Name
LOC	Varchar	Department Location

EMP

Column Name	Data Type	Description
Eno	Number	Employee number
Ename	Varchar	Emp name
Job	Varchar	Designation
Mgr	Number	Manager Empno
Hiredate	Date	Date of joining
Sal	Number	Basic salary
Comm.	Number	Commission
Deptno	Number	Department number

PART – B

1. Find the number of employees who work in deptno 20.
2. Display current date.
3. Display the names of all tables from current user.
4. Display the total number of employees working in the company.
5. Display the maximum salary from the employee table.
6. Display the names of employees in descending order of salary.
7. Display the names of employees in uppercase.
8. Display name of those employee who are getting the highest salary.
10. Give an increment of 10% salary whose salary is less than Rs. 1000

```
SQL> CREATE TABLE dept (  
  dno INT,  
  dname VARCHAR(30),  
  loc VARCHAR(30));
```

```
SQL> CREATE TABLE emp (  
  eno INT,  
  ename VARCHAR(30),  
  job VARCHAR(30),  
  mgr INT,  
  hiredate DATE,  
  sal INT,  
  comm INT,  
  deptno INT);
```

```
SQL> SELECT COUNT(*) FROM emp WHERE deptno=20;
```

```
SQL> SELECT CURDATE();
```

```
SQL> SHOW TABLES;
```

```
SQL> SELECT COUNT(*) FROM emp;
```

```
SQL> SELECT MAX(sal) FROM emp;
```

```
SQL> SELECT ename FROM emp ORDER BY sal DESC;
```

```
SQL> SELECT UPPER(ename) FROM emp;
```

```
SQL> SELECT ename FROM emp WHERE sal=(SELECT MAX(sal) FROM emp);
```

```
SQL> UPDATE emp SET sal=sal*1.1 WHERE sal<1000;
```



MAR IVANIOS COLLEGE (AUTONOMOUS)
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Reg. No.:.....14.....

Name:.....

THIRD SEMESTER PRACTICAL EXAMINATION, DECEMBER 2023
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Time: 3 Hours

Max. Marks: 80

Create the table and perform the following queries

PART - A

Column Name	Data Type	Description
Eno	Number	Employee number
Ename	Varchar	Emp name
Job	Varchar	Designation
Mgr	Number	Manager Empno
Hiredate	Date	Date of joining
Sal	Number	Basic salary
Comm.	Number	Commission
Deptno	Number	Department number

Table Name : emp

PART - B

1. Find the number of rows in the emp table.
2. Find the number of designations available.
3. Give the number of employees who earn a commission.
4. Find the total sal paid to employees department-wise.
5. Find the maximum sal paid to 'ANALYST'.
6. List the jobs and the number of employees in each job. The result should be in the descending order of the number of employees.
7. Find the number of months you have spent on earth.
8. List the total salary, maximum and minimum salary, and average salary of the employees jobwise for department 20 and display only those rows having an average salary > 1000.


```
SQL> CREATE TABLE emp (  
  eno INT,  
  ename VARCHAR(30),  
  job VARCHAR(30),  
  mgr INT,  
  hiredate DATE,  
  sal INT,  
  comm INT,  
  deptno INT);
```

```
SQL> SELECT COUNT(*) FROM emp;
```

```
SQL> SELECT COUNT(DISTINCT(job)) FROM emp;
```

```
SQL> SELECT COUNT(*) FROM emp WHERE comm IS NOT NULL;
```

```
SQL> SELECT SUM(sal), deptno FROM emp GROUP BY deptno;
```

```
SQL> SELECT MAX(sal) FROM emp WHERE job='ANALYST';
```

```
SQL> SELECT job, COUNT(*) FROM emp GROUP BY job ORDER BY COUNT(*) DESC;
```

```
SQL> SELECT DATEDIFF(CURDATE(), '1999-09-20')/30;
```

```
SQL> SELECT SUM(sal), MAX(sal), MIN(sal), AVG(sal) FROM emp WHERE deptno=20 GROUP BY job  
HAVING AVG(sal)>1000;
```



MAR IVANIOS COLLEGE (AUTONOMOUS)
THIRUVANANTHAPURAM

Reg. No.:.....21.....

Name:....KB.....

THIRD SEMESTER PRACTICAL EXAMINATION, DECEMBER 2023
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Time: 3 Hours

Max. Marks: 80

Create the table and perform the following queries

PART – A

Table name: Student(Regno primary key,sname,age,gender,qualification,dept)

Give datatypes suitably.

Provide Constraints:

- ✓ regno must be primary key.
- ✓ Age cannot be negative

PART – B

1. ~~X~~ Display the name of students with the first letter capitalized.
2. Display the number of students department-wise.
3. Find students whose age is less than the ages of students in the department 'IT'?
4. ~~X~~ Find the number of male students.
5. List the students with their names and qualification concatenated.
6. Find students whose name contains the string 'am' within it.
7. Perform any three aggregate operations on the table.

```
SQL> CREATE TABLE student (  
  regno INT PRIMARY KEY,  
  sname VARCHAR(30),  
  age INT CHECK(age>=0),  
  gender CHAR(1),  
  qualification VARCHAR(30),  
  dept VARCHAR(30));
```

```
SQL> SELECT CONCAT(UPPER(LEFT(sname,1)),LOWER(SUBSTRING(sname,2))) AS sname FROM  
student;
```

```
SQL> SELECT dept, COUNT(*) FROM student GROUP BY dept;
```

```
SQL> SELECT sname FROM student WHERE age<=(SELECT MIN(age) FROM student WHERE  
dept='IT');
```

```
SQL> SELECT COUNT(*) FROM student WHERE gender='M';
```

```
SQL> SELECT CONCAT(sname,'-',qualification) FROM student;
```

```
SQL> SELECT sname FROM student WHERE sname LIKE '%am%';
```

- SQL> SELECT COUNT(sname) FROM student;
- SQL> SELECT MAX(age) FROM student;
- SQL> SELECT AVG(age) FROM student;



MAR IVANIOS COLLEGE (AUTONOMOUS)
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Reg. No.:...227.....

Name:.....

THIRD SEMESTER PRACTICAL EXAMINATION, DECEMBER 2023

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Time: 3 Hours

Max. Marks: 80

Create the table and perform the following queries

PART – A

1. Create a table employee with employee no as primary key, name field not be left empty, salary greater than 2000, job field not to be left empty, deptno is foreign key taken from dept table.
2. Create a dept table with deptno as primary key and dept name as not null.

PART – B

1. Display the details of all employees.
2. Display the name and job of all employees.
3. Add Phno as a new field into the Employee table.
4. Modify the salary field by increasing its size.
5. Insert a record into the employee table with salary and date of joining as null values.
6. Increase all the employees' salary by Rs. 500
7. Delete the employees who are working as clerks.
8. Find the number of days left for your b'day?

```
SQL> CREATE TABLE dept (  
deptno INT PRIMARY KEY,  
deptname VARCHAR(30) NOT NULL);
```

```
SQL> CREATE TABLE employee (  
empno INT PRIMARY KEY,  
ename VARCHAR(30) NOT NULL,  
salary INT CHECK (salary > 2000),  
job VARCHAR(30),  
deptno INT,  
FOREIGN KEY (deptno) REFERENCES dept(deptno));
```

```
SQL> SELECT * FROM employee;
```

```
SQL> SELECT ename, job FROM employee;
```

```
SQL> ALTER TABLE employee ADD phno INT;
```

```
SQL> ALTER TABLE employee MODIFY salary BIGINT CHECK (salary > 2000);
```

- SQL> ALTER TABLE employee ADD doj DATE;
- SQL> INSERT INTO employee VALUES (1123, 'Flickson J', NULL, 'CEO', 1, NULL);

```
SQL> UPDATE employee SET salary=salary+500;
```

```
SQL> DELETE FROM employee WHERE job='CLERK';
```

```
SQL> SELECT DATEDIFF ('2024-02-20',CURDATE());
```




Keerthana

Forwarded

Create the table and perform the following queries

PART – A

Table name: Student(Regno primary key,sname,age,gender,dept)

Give datatypes suitably.

Provide Constraints:

- regno must be primary key.
- Age cannot be negative
- Gender must be either M/F

PART – B

1. Find the number of students in the department of IT.
2. Display students whose name starts with the letter 'A';
3. Count the number of male and female students in all departments.
4. Group the students on department wise and display the details only if their strength is greater than 5;
5. Display the constraints created for your table.
6. Create a copy of the same table as 'oldstudent'.
7. Find the number of distinct departments available.
8. Give the minimum and maximum age of the students.
9. Find to which department 'Smith' belongs to.

9:28 am

```
CREATE TABLE student (  
  regno INT PRIMARY KEY,  
  sname VARCHAR(30) NOT NULL,  
  age INT CHECK (age>=0),  
  gender CHAR(1) CHECK (gender IN ('M', 'F')),  
  dept VARCHAR(30));
```

```
SQL> SELECT COUNT(*) FROM student WHERE dept='IT';
```

```
SQL> SELECT * FROM student WHERE sname LIKE 'A%';
```

```
SQL> SELECT gender, COUNT(*) FROM student GROUP BY gender;
```

```
SQL> SELECT dept, COUNT(*) FROM student GROUP BY dept HAVING COUNT(*) > 5;
```

```
SQL> DESC student; (NOT CORRECT.. DON'T STUDY.. Sir told its removed)
```

```
SQL> CREATE TABLE oldstudent AS SELECT * FROM student;
```

```
SQL> SELECT COUNT(DISTINCT dept) FROM student;
```

```
SQL> SELECT MIN(age), MAX(age) FROM student;
```

```
SQL> SELECT dept FROM student WHERE sname='Smith';
```