**Database Systems Lab**

**(BSCS F18 Morning)**

**Lab 06 version 1**

**Instructions:**

• You must complete all tasks individually. Absolutely **NO** collaboration is allowed.

• Any traces of plagiarism/cheating would result in an “F” grade in this course.

• Late submissions will **NOT** be accepted, in any case.

• Please use the Format of your answers as sample shared to you.

**Submission Procedure:**

• You are also required to submit .docx (Microsoft Word) file.

* Name of your file should be **YourRollNumber\_Lab\_Number**

e.g. BCSF18M00X\_Lab\_6.

• The file should contain the question, the query and the clear screen short of output after running the query.

• You have to submit your lab file to:

* **MCSF19M002@PUCIT.EDU.PK**

• The subject of the email should be **YourRollNumber\_LabVersion#**. e.g. BCSF18M00X\_Version1.

• **Submission Deadline: 29 OCT till 5:00 pm**

**Task 1**

Find those employees whose salary is less than average salary.

**Task 2**

Find THE 3rd minimum Salary.

**Task 3**

Find The Union Of Department Number 10 And Department Number 30.

**Task 4**

Find the 2nd maximum salary.

**Task 5**

Find All Employees With Either The Same job As 'Jones' Or Salary Greater Than Or Equal To Ford, Order By Job And Salary

**Task 6**

Find the least experienced employee..

**Task 7**

Count all employees who were hired before 22-mar-83

**Task 8**

Find Average And Sum Of The Salaries Of Each Job Excluding The Job Of Smith.

**Task 9**

List those employees who joined before 1985 working under the mgr whose number

is starting with 7 but Should not have a 9

**Task 10**

Find All Employees In Department Number 20 Whose Jobs Are The Same As The Employees Job In The Sales Department.

**Task 11**

Find All Employees Who Earn More Than The Average Salary Of Employees In Their Own Department And Sort By Department No.

**Task 12**

Find All Employees Who Earn More Than Any Employee In Department 30.

**Task 13**

Get the minimum salaries of each department using subquery.

**Task 14**

Get the maximum, minimum, average and sum of salaries of each employee but make sure to use subquery for each operation.

**Task 15**

List the mgrs who are senior to KING and junior to SMITH.

**Task 16**

Write a query in SQL to display the name of manager who is supervising 2 or more employees.

**Task 17**

Find the 2nd maximum salary of each department.

**Task 18**

Display the employee name, department number, and job title for all employees whose department location is New York.

**Task 19**

Find the 2nd minimum salary of each job

**Task 20**

The following query throws an error. Choose the correct reason for the error as given in the options.

SELECT empno, ename

FROM emp

WHERE comm= (SELECT min(comm)

FROM emp

GROUP BY deptno);

1. The GROUP BY clause is not required in the sub-query
2. A function cannot be used in a sub-query SELECT statement
3. The single row sub-query gives multiple records
4. The use of "=" operator is invalid; an IN operator will work correctly