

National University of Computer and Emerging Sciences, Lahore Campus



Course:	Data Base (LAB)	Course Code:	CS-2005
Program:	BS (Computer Science)	Semester:	Spring 2023
Duration:	1 Hr 45 mins	Total Marks:	25
Quiz Date:	24-March-23	Weight	—
Section:	4B	Page(s):	2
Name		Roll No.	

Instruction/Notes:

1. Use SQL Management Server Studio for solving this paper.
2. For the QNO1, QNO2 & QNO3, paste all your SQL queries and screenshots of output in the same document.

Question NO 1: Consider the Company schema and solve the following. [4 * 4 = 16 Marks]

Part a) Write SQL queries.

1. Find the ID and name of department(s) with the highest average salary, ordered by average salary (in descending order).
2. Write a query to find the employees who work on the projects with number of hours more than the average hours an employee spent on a project.
3. Find the name of the department such that all the employees in that department are working on a project.
4. Find the name of the managers who are married but have no children. (That is, they have spouse information in the dependent table but no records for son or daughter)

Part b) Write a SQL command to create a view that list the SSN and name of the employee, along with the name of the department of the employee, name of his/her department manager and also list the name of the supervisor of the employee. **[5 Marks]**

Question NO 2: DDL commands [2*2 = 4 Marks]

- a) Alter the company schema and add a table that can store employee phone numbers. An employee can have more than one phone numbers and we wish to save all.
- b) Add a new table "Payroll" to company schema with the following attributes; payroll_id, salary and bonuses. Employee and Payroll has no relationship, make the SSN foreign key in payroll's table.
