

0009

National University of Computer and Emerging Sciences, Lahore Campus



Course: Data Base (Lab)
 Program: BS (Computer Science)
 Duration: 2.5 Hrs
 Quiz Date: 12-June-23
 Section: BCS-4E, BCS-4F, BCS-4G, BCS-4H,
 Name: BCS-4J, BSE-6A, BSE-6B [SLOT 1]

Course Code: CS-2005
 Semester: Spring 2023
 Total Marks: 55
 Weight: 40
 Page(s): 2
 Roll No. 211-5279

Instruction/Notes:

1. Use the schema and final exam from the folder: \\cactus1\Xeon\Spring 2023\Samman Ashraf\Database Lab Final.
2. Use of internet is not allowed.
3. **Submission Format:**
 - a. Make a folder with your Registration No and paste TWO files (Word & SQL) in it.
 - b. **Word File:** Queries should be pasted in this given file along with their screenshots of running queries (these are must otherwise marks will be deducted). Submit this word file named as (L13-4632.docx).
 - c. **SQL File:** It includes all your .sql queries of the given questions. (e.g; yourName.sql)
4. Submit your final paper in the given folder. \\cactus1\Xeon\Spring 2023\Samman Ashraf\Database Final Submissions\Your Section (e.g; ABC-4K).
5. Attempt all questions carefully. Your marking is Binary. Please Note 55 is Screenshots.

task

Use CompanyDB for the paperQuestion no 1:

[5 (1.5 SS) + 5 (1.5 SS) = 10 Marks]

- a) Write a SQL query to retrieve the total hours worked by employees in each department, along with the department name and the employee with the highest hours in each department.
- b) Write a SQL query which retrieves the names of employees and their corresponding department names for employees who have worked on all tasks in their department. (Nested Query)

Question no 2:

[7.5 (1.5 SS) + 7.5 (1.5 SS) = 15 Marks]

- a) Create a view named "EmployeeSummary" that displays the top 2 employee name, department name, and the total number of hours worked by each employee. Include only those employees who have worked at least 20 hours in total. Order the results in descending order of the total number of hours worked. Create a view named "EmployeeSummary" that displays the top 2 employee name, department name, and the total number of hours worked by each employee. Include only those employees who have worked at least 20 hours in total. Order the results in descending order of the total number of hours worked.
- b) Create a view "TimeEntrySummary" to get a summary of time entries by employee and task.

Question no 3:

[7.5 (1.5 SS) + 7.5 (1.5 SS)= 15 Marks] 0009

- a) Create a stored procedure named GetDepartmentTasks that accepts a department ID as a parameter and returns all the tasks associated with that department, along with the total number of employees assigned to each task.
- b) Create a stored procedure that calculates the average hours worked per task for a specific department:

Question no 4:

[7.5 (1.5 SS) + 7.5 (1.5 SS)= 15 Marks]

- a) Create a trigger that automatically updates the "updated_at" column of the "employees" table whenever a row is updated.
- b) Create a trigger that prevents the deletion of a department if there are employees associated with it.

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