National University of Computer & Emerging Sciences, Karachi
FALL 2021 CS-Department
MID Examination
Paper I
1st November 2021, 01:30 PM – 03:00 PM

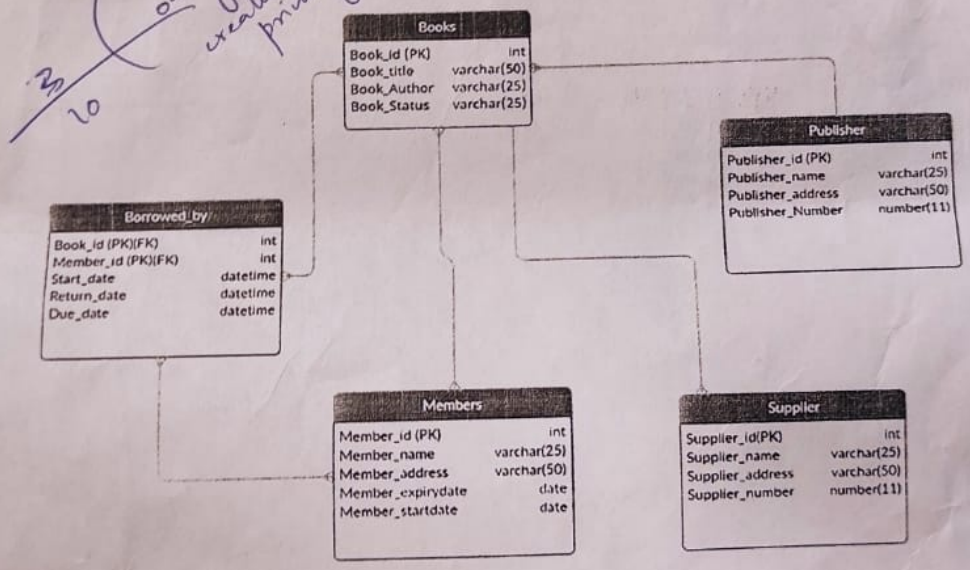
Course Code: CL 2005	Course Name: Database System Lab
Instructor Name / Names: Erum Shaheen,Mafaza Mohi	
Student Roll No: M. Bassam	Section No: BSCS-5H

Instructions:

- Return the question paper.
- Read each question completely before answering it. There are **2 questions and 2 pages.**
- In case of any ambiguity, you may make assumption. But your assumption should not contradict any statement in the question paper.

Time: 90 minutes. **Max Marks:** 25 points

Question 1: **10 Marks**



a. Create a complete DDL from the above logically designed database.
b. Apply constraints, as mentioned in the diagram, constraints name must be meaningful.
c. Keeping in mind the logical design, create foreign keys in each table where required.
d. Insert 5 records in each table, foreign key constraints must strictly be followed while record insertion.
e. Write a query to drop constraint of table **BOOKS** and **MEMBERS**.

Question 2: **15 Marks**

1. Show full name of those employees whose name starts with A and ends with n.
2. Show all employees' last three letters of last name
3. Display First_Name, job_id, salary of all the employees whose job is "ACCOUNTANT". Keeping this in mind that Accountant may be in capital, small or combination of small capital characters in the table.
4. Display the Employee_ID, First_Name , salary of employees. In that, the highest paid employee should display first and lowest paid should display last.
5. Write a query to display the employee Id, job name, job id, department id number of days worked in for all those jobs in department 90.
6. Generate new names of the employees by combining the first 3 characters of the First_Name and last 3 characters of the Email.
7. Write a query to List the department names and get the count of employees working in each department
8. Write a query to display the first name, salary, phone number, hire date and department Id for those employees whose department is located in the city Toronto.
9. Display employee's full name along with the total number of years in the department.
10. Display the Manager_ID and the salary of the lowest paid employee of that manager. Exclude anyone whose manager is not known. Exclude any groups where the minimum salary is 2000. Sort the output is descending order of the salary.
11. Display employee's full name along with the total number of years in the department.
12. Write a query to display the country name, city, and number of those departments where at least 3 employees are working.
13. Display the Department_Name and average salary of those departments whose average salary is greater than 2500.
14. Write a query to display those employees who contain in last a letter y to their last name and also display their last name, department name, salary, manager id, and city.
15. Write a query in SQL to display all the information of those employees who did not have any job in the past.

6.5 + 0.5 / 15