Lab Final Examination: Fall-2024
Course Code: CIS 222L (Batch: 17_B)
Course Title: Database Management System Lab
Date: 12/12/2024

Time: 1 Hour   **Total Marks: 40**

Consider a **University Enrollment System**.

Student ID	Student Name	Course ID	Course Name	Teacher	Department	Department Head
231-16-001	Fahim	CIS 222	DBMS	Mr. Mehedi	CIS	Md. Sarwar Hossain Mollah
231-16-001	Fahim	CIS122	DS	Mr. Himel	CIS	Md. Sarwar Hossain Mollah
231-16-002	Maruf	CIS 222	DBMS	Mr. Mehedi	CIS	Md. Sarwar Hossain Mollah
231-16-002	Maruf	CIS 131	CAO	Mr. Israfil	CSE	Dr. Sheak Rashed Haider Noori
231-16-003	Parvez	CIS 313	AI	Mr. Mizan	CSE	Dr. Sheak Rashed Haider Noori
231-16-004	Naim	IoT325	EDC	Mr. Nafees	SWE	Dr. Imran Mahmud

Final Structure After Normalization (Up to 3NF)

Table: Enrollment

Student ID	Student Name	Course ID
231-16-001	Fahim	CIS 222
231-16-001	Fahim	CIS122
231-16-002	Maruf	CIS 222
231-16-002	Maruf	CIS 131
231-16-003	Parvez	CIS 313
231-16-004	Naim	IoT325

Table: Departments

Department	Department Head
CIS	Md. Sarwar Hossain Mollah
CSE	Dr. Sheak Rashed Haider Noori
SWE	Dr. Imran Mahmud

Table: Courses

Course ID	Course Name	Teacher	Department
CIS 222	DBMS	Mr. Mehedi	CIS
CIS122	DS	Mr. Himel	CIS
CIS 131	CAO	Mr. Israfil	CSE
CIS 313	AI	Mr. Mizan	CSE
IoT325	EDC	Mr. Nafees	SWE

Task 1 – Basic Structure (16 Marks)

Q1. Create the table and insert data as per the normalized table mentioned above under the "University Enrollment System" database.

Task 2 –SQL Query (6×4=24 Marks)

Q2. Find the students whose names have 'r' as the third character.

Q3. Count the total number of students

Q4. Retrieve the number of courses taught by each teacher

Q5. Count the Number of Students Enrolled in Each Course

Q6. Find the Course with the Most Enrollments

Q7. Find students enrolled in courses with IDs starting with 'CIS'