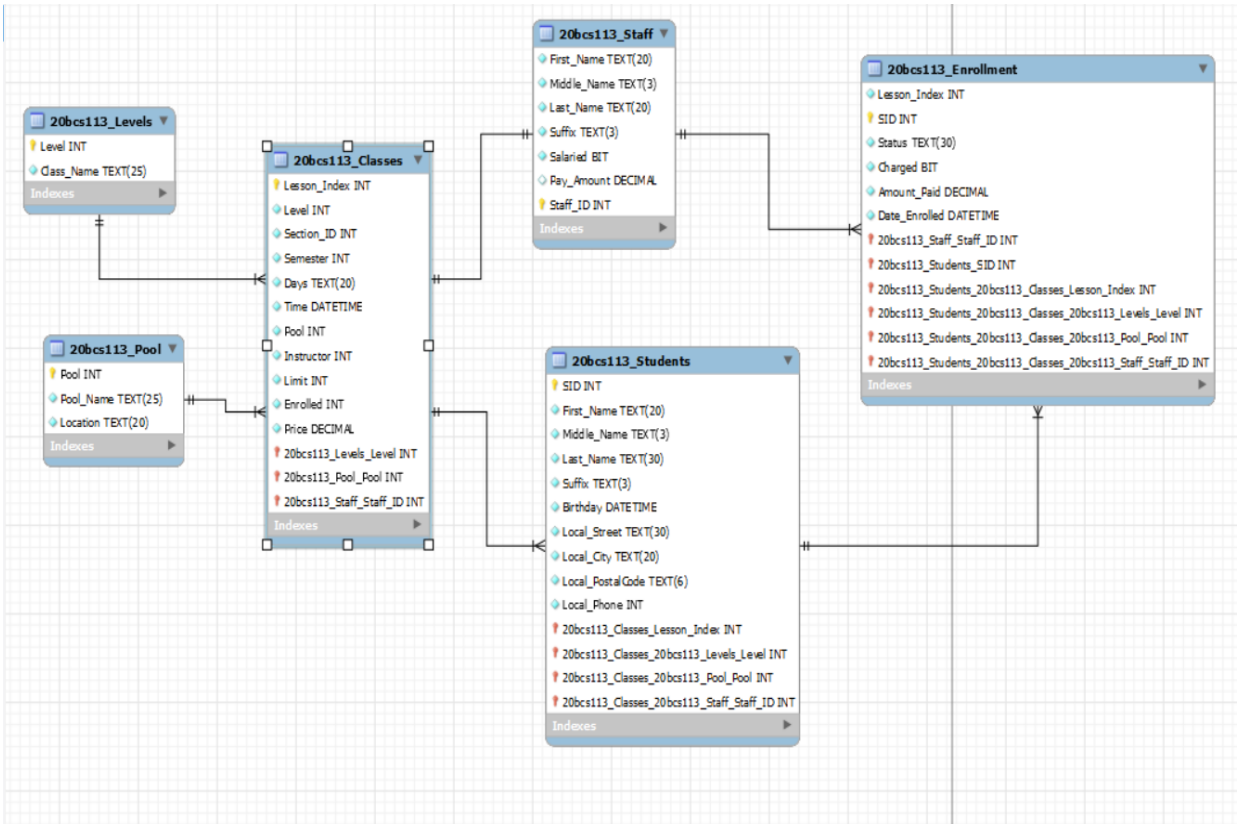
Name: Rohan Singh
Reg. No: 20bcs113
Subject: DBMS

Q1.



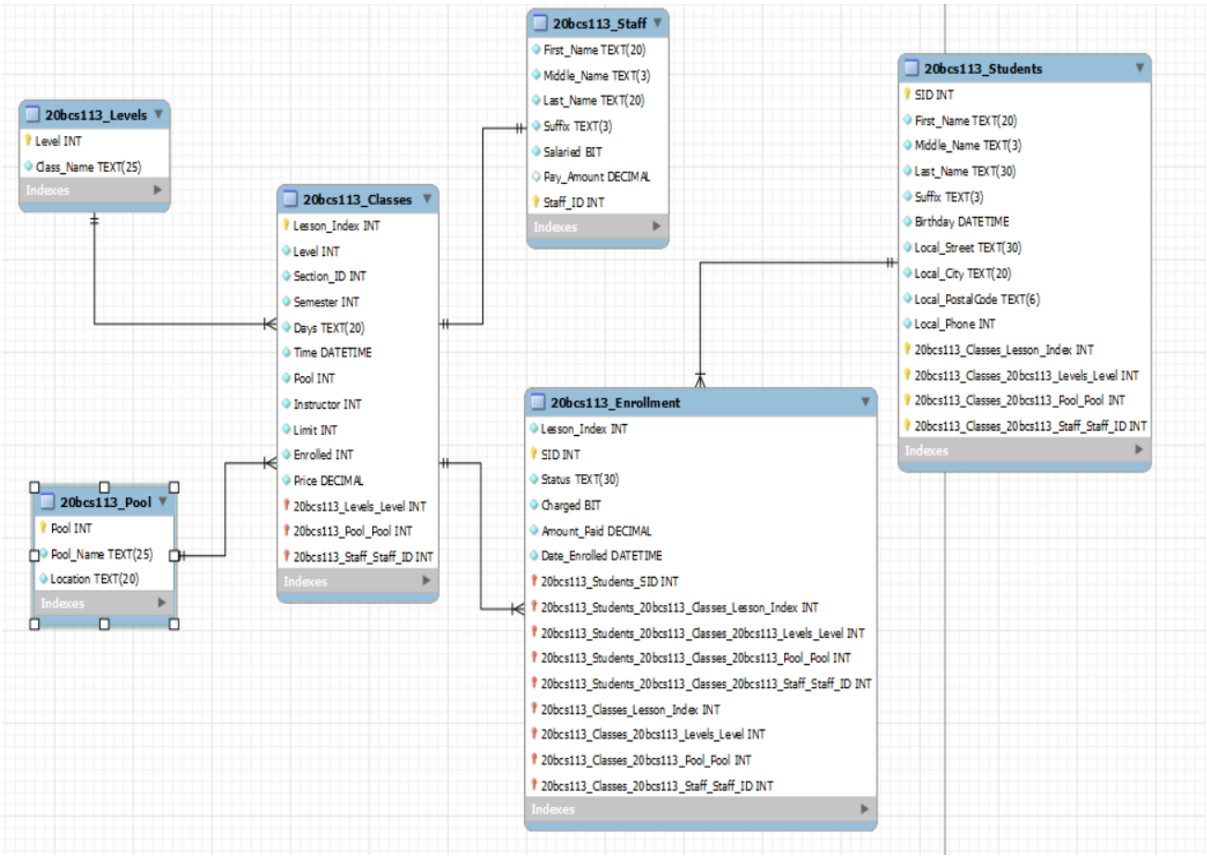
Schema:

20BCS113_Levels (Level, Class_Name)
20BCS113_Pool (Pool, Pool_Name, Location)
20BCS113_Staff (Staff, First_Name, Middle_Name, Last_Name, Suffix, Salaried, Pay_Amount)
20BCS113_Classes (Lesson_Index, Level, Pool, Instructor, Section_ID, Days, Time, Limit, Enrolled, Price)
20BCS113_Enrollment (Lesson_Index, SID, Status, Charged, Amount_Paid, Date_Enrolled)
20BCS113_Students (SID, First_Name, Middle_Name, Last_Name, Suffix, Birthday, Local_Street, Loca_lCity, Local_PostalCode, Loca_lPhone)

Q2. Degree and Cardinality

20bcs113_Levels	Mandatory 1 - Mandatory Many	20bcs113_Classes
20bcs113_Pool	Mandatory 1 - Optional Many	20bcs113_Classes
20bcs113_Classes	Mandatory 1 - Mandatory Many	20bcs113_Enrollment
20bcs113_Enrollment	Mandatory Many - Mandatory 1	20bcs113_Students
20bcs113_Enrollment	Optional Many – Optional 1	20bcs113_Staffs

Q3. Data Model



Q4.

20bcs113_Enrollment is a weak entity. It's an associative entity because it doesn't have a primary key, and it's actually a weak entity. We can't make it a powerful entity because you add a primary key and defeat its purpose acts as an m: n relationship (associative entity) between the class table and the student table.

Q5.

There is no data redundancy in this scheme. We can say because there are no equal dates Attributes that exist in two separate tables.