



Daffodil International University
Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Exam Examination, Summer 2021 @ DIU Blended Learning Center

Course Code: CSE311 (Evening), Course Title: Database management system

Level: 3 Term: 1 Section: PC-A(EVE)

Instructor: FTJ Modality: Open Book Exam

Date: Thursday 4 July, 2020 Time: 07:15-9:45PM

Two and half hours (2:30), Marks: 25

1. (a) Write the appropriate ER diagram for the following scenario.

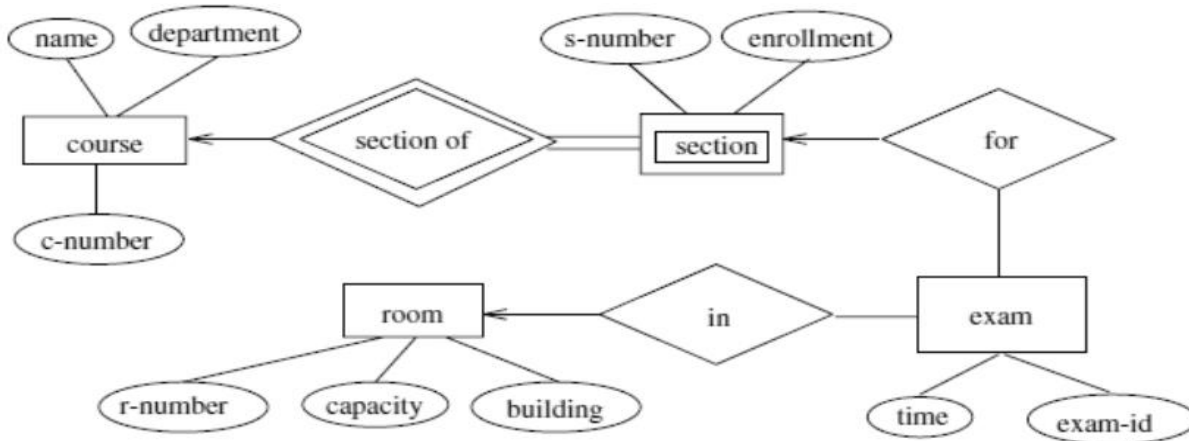
Total Marks: 8

Bangladesh Bank acts as the Central Bank of Bangladesh which was established on December 16, 1971 through the enactment of Bangladesh Bank Order 1972- President's Order No. 127 of 1972 (Amended in 2003). It maintains all the banks of Bangladesh. Banks are Identified by their name, their specific code and address of main office. Each Bank can have many branches. The customer of the Bank can identify a branch by-Branch name, Branch No and address. Customer of a bank register themselves by their name, ID, phone no and address. A customer can have multiple accounts in a bank. Their accounts are identified by A/CNo, A/C Type, Balance. Customers can even take loans. Loans are identified by Loan-ID, Loan-Type and amount. To take loan customers must choose a branch.

During this pandemic people are more biased to bank for money. Many banks provide online banking for easier access to the customer. For online banking a customer needs to download the online banking app and then register by their cardNo and Expire date and secret code. It is also possible to buy accessories from international market, donate money and so on.

(b) Write the schema for the following ER diagram.

Total Marks: 7



E-R diagram for exam scheduling.

2. (a) Consider the following schema and write SQL query

Total marks: 1+1+2+1

Student (Student_Id, Name, Address)

Mark (StudentID, Subject, HighestMark, LowestMark)

School (School_ID, Name)

1. Find the students name that are unique.
2. Find the first 3 highest number.
3. Find the details of student Name in Ascending order and address in descending order.
4. Write an SQL query to print details of Workers with DEPARTMENT name as “Admin”.

(b) Give a real-life example where the 3-tier architecture is used. Why data abstraction is used in DBMS

Total Marks: 5