2021
(March)

COMPUTER SCIENCE
(Honours)

(Database Management System)
(CS-301 P)

(Practical)

Marks: 19
Time: 2 hours

The figures in the margins indicate full marks for the questions

Answer any **one** question

1. Create the following rent database. All the **underlined** fields are the primary key of the respective table:

Table Name: Branch (1)

Field Name	*Description*
BranchNo	Integer, primary key
BranchName	String, cannot be null
City	String, cannot be null
Pincode	Integer

Table Name: Staff (2)

Field Name	*Description*
StaffNo	Integer, primary key
FName	String, cannot be null
LName	String
Position	String, post held by staff
Gender	Char
Salary	Floating-point
BranchNo	Integer, reference BranchNo of Branch on delete cascade

Table Name: Clients (1)

Field Name	*Description*
ClientNo	Integer, primary key
FName	String cannot be null
LName	String
PhoneNo	String

Table Name: PropertyForRent (2)

Field Name	*Description*
PropertyNo	Integer, primary key
City	String, default ‘Shillong’
Pincode	Integer
Rooms	Integer, it is the number of rooms
Rent	Integer, it is the amount
BranchNo	Integer, reference BranchNo of Branch
ClientNo	Integer, reference ClientNo of Client

Use SQL statements based on the above tables:

(i) To insert some appropriate valid values into all the tables (4)
(ii) To display all the branches details along with their staff. (2)
(iii) To find all the staff whose salary is greater than the average salary of all staff members irrespective of branch (2)
(iv) To display staff details which includes salary as "Old Salary" and "New Salary" which is a 10% increase in the old salary (2)
(v) A view to display the total number of rented property of a client along with the total rent paid by the client for all those properties. (3)

2. Create the following jobs database. All the **underlined** fields are the primary key of the respective table. (2 × 3 = 6)

Table Name: Freelancers

Field Name	*Description*
WorkerId	Integer**,** Primary key
Firstname	String, cannot be null
Lastname	String
City	String
Phoneno	String
Skill	String, job-description like Coding, photography, etc., cannot be null

Table Name: Clients

Field Name	*Description*
ClientId	Integer**,** Primary key
Firstname	String, cannot be null
Lastname	String
City	String, default Shillong
Phoneno	String

Table Name: HiredJobs

Field Name	*Description*
WorkerId	Integer, key that reference Workerid of Freelancher
ClientId	Integer, key that reference Clientid of Client
Startdate	Date, key field
Enddate	Date
Payment	Floating-point

Use SQL statements based on the above tables:

(i) Insert some appropriate valid values into the tables (3)
(ii) To display the highest payment, lowest payment and their difference from the payment of hired jobs. (1)
(iii) To display all the freelancer details along with the hired jobs details. (3)
(iv) To display the clients from Shillong who have given jobs that start in January 2021. (3)
(v) A view to display the total number of jobs of each freelancer along with the total amount received for all those jobs. (3)

Instructions for online submission:

Save file name as UniversityRollNo_ComputerScience_CS301P.sql. Send the SQL file which has all the SQL commands and queries to CS Third Semester Google classroom.