

NAME: JIBRAN
 ID: 14472
 DEPARTMENT: BS(CS)
 SEMESTER: 4th
 SUBJECT: DATABASE SYSTEM

Q(1)

| Student - Id | Student - Name | Student - Address | Course Id | Course Name | Grade |
|--------------|----------------|-------------------|-----------|-------------|-------|
| 01 | Fawad | Karachi | SE-01 | AI | A |
| 01 | Fawad | Karachi | SE-05 | SQE | B |
| 02 | Waleed | Lahore | SE-02 | DIP | C |
| 03 | Saira | Peshawar | SE-03 | DB | A |
| 03 | Saira | Peshawar | SE-04 | SRE | B |
| 04 | Aiman | Karachi | SE-03 | DB | C |
| 05 | Daniyal | Lahore | SE-01 | AI | A |
| 06 | Imaan | Peshawar | SE-01 | AI | B |

2ND FORM OF NORMALIZATION

| Student | | | Course | | |
|------------|--------------|-----------------|-----------|-------------|-------|
| Student Id | Student Name | Student Address | Course Id | Course Name | Grade |
| 01 | Fawad | Karachi | SE-01 | AI | A |
| 01 | Fawad | Karachi | SE-05 | SQE | B |
| 02 | Waleed | Lahore | SE-02 | DIP | C |
| 03 | Saira | Peshawar | SE-03 | DB | A |
| 04 | Aiman | Karachi | SE-04 | SRE | B |
| 05 | Daniyal | Lahore | SE-03 | DB | C |
| 06 | Imaan | Peshawar | SE-01 | AI | A |
| 03 | Saira | Peshawar | SE-01 | AI | B |

GRADE

Student-Id

Course - Id

Grade

01

SE-01

A

01

SE-05

B

02

SE-02

C

03

SE-03

A

03

SE-04

B

04

SE-03

C

05

SE-01

A

06

SE-01

B

3rd Normal form:

Grade

Course - Id

Grade

SE-01

A

SE-05

B

SE-02

C

SE-03

A

SE-04

B

SE-03

C

SE-01

A

SE-01

B

Q(2)

Create database Gallery

create table movies

```
(
  id int not null primary key,
  Movie - name varchar(50) not null,
  Genre varchar(50),
  Year int check (year between 0 & 2020),
  Rating int check (Rating between 0 & 10),
)
```

select * from movies.

Q(3)

create table students_data

```
(
  student_id int not null primary key,
  student_name varchar(50) not null,
  age int,
  CGPA float,
)
```

insert into students_data values (01, 'Jibrin', 21, 3.7)

insert into students_data values (03, 'Khan', 22, 2.2)

insert into students_data values (02, 'Ali', 22, 2.7)

select * from students_data

delete from student_data where CGPA < 3

select * from student_data.

(4)

Q(4)

(i) Select product-name, product-Id
from canteen-table
where unit price < 50

(ii) select product-name, category,
product-Id from canteen-table
where product-Id IN (01, 03, 02).
ORDER By Product-Id, Product-name

*

select canteen-table, Product-Id
As Id
canteen-table. Product-name As
name from canteen-table.
where Product-Id = 'home furnishings'

| Category | Not | column name |
|----------|-----|-------------|
| junk | | 4 |
| Not junk | | 2 |

Q(4) part (iv)

Select canteen-table, Product-Id,
Product-name, Order-Id
From canteen-table, left outer join
ORDER-T ON canteen-table, Product-Id
= Order-Details, Product-Id

| Product-Id | Product-name | unit-price | Order-Details |
|------------|-------------------------|------------|---------------|
| 01 | Dairy milk chocolate | 80 Rs | 02 |
| 02 | Lipton tea Bags | 160 Rs | 01 |
| 03 | Koolhaire | 30 Rs | 02 |
| 04 | Sheran juice | 30 Rs | |
| 05 | Chilli milk jelly | 50 Rs | |
| 06 | Olperis Milk | 350 Rs | 01 |