

Final Paper Summer 2020

Course Title: Database Systems

Instructor: Rimsha Khan

Total Marks: 50

NOTE: Understanding the paper is part of solving the paper so no questions will be entertained.

INSTRUCTIONS:

1. Write your names and IDs at top of each paper.
2. Write queries on MS Word. No tool required.
3. Convert word to pdf after uploading.

Q1: Perform Normalization upto 3rd Normal Form on the following table. (13marks)

Student_id	Student Name	Student Address	Course_ID	Course_Name	Grade
01	Fawad	Karachi	SE-01	AI	A
			SE-05	SQE	B
02	Waleed	Lahore	SE-02	DIP	C
03	Saira	Peshawar	SE-03	DB	A
			SE-04	SRE	B
04	Aiman	Karachi	SE-03	DB	C
05	Daniyal	Lahore	SE-01	AI	A
06	Emaan	Peshawar	SE-01	AI	B

Q2: Write SQL queries for the following DDL Statements

1. Write a query to create a table by the name Students which should have the following columns and restrictions: (Marks 10)

Column Name: ID Type: integer
Column Name: Student_Name Type: varchar
Column Name: DOB Type: DATE
Column Name: Age Type: Integer
Column Name: CGPA Type: float

Restrictions: ID should be the primary key. Student_Name should also be NOT NULL. Maximum value of age should be 30 years.

2. Write 2 SQL DML Queries to insert your data and your friend's data in this Table. (4 marks)
3. Which of the given attributes is a derived attribute and from which attribute it can be derived? (5 marks)

Q3: Consider you have the following 2 tables.

Canteen_Table

Product_ID	Product_Name	Category	Mfg_Date	Exp_Date	Unit Price
01	Dairy milk Chocolate	Junk	2, Aug 2019	2, Aug 2020	80 Rs
02	Lipton Tea bags	Not Junk	2 Jan 2019	2 Jan 2020	160 Rs
03	Kurkure	Junk	2 April 2019	2 April 2021	30 Rs
04	Shezan Juice	Junk	3 Aug 2019	3 Aug 2020	30 Rs
05	Chilli Milli Jelly	Junk	3 Jan 2018	3 Jan 2021	5 Rs
06	Olpers Milk	Not Junk	3 April 2018	3 April 2020	350 Rs

Order_Details

Order_Id	Product_ID	Unit Price	Quantity
01	02	160 Rs	1
01	06	350 Rs	1
02	01	80 Rs	2
02	03	30 Rs	2
02	05	5 Rs	2

1. Write SQL Query for finding/displaying product names and ids of products whose unit price is less than 50 Rs. (4 Marks)
2. Write SQL Query for displaying sorted names of product names with Alias name as Product_List_Sorted. (5 Marks)
3. Delete data from Order_Details whose quantity is less than 1. (4 marks)
4. Write SQL INNER JOIN query and its output on the given two tables. (5 marks)

*****Good Luck☺*****