## National University of Computer and Emerging Sciences, Lahore Campus

PARTIE SE EMERCINES SO LINGUIS SO	
EMERGINES ENERGY	

Course:
Program:
Out Date:
Due Date:
Section
Assignment:
Database Systems
BS (Computer Science)
02-Apr-2021
Fri 09-Apr-2021
BCS-4A & BCS-4B
2 (SQL)

Course Code:
Semester:
Total Marks:
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Page(s):

CS219
Spring 2021

Total Marks:
1

Instructions:

- This assignment is an individual assignment.
- Clearly mention any assumption you have made.
- Please upload your solution in PDF format with your 8 digit Roll No (19L-1234) as file name.

## **TOPIC: SQL Queries**

Consider the following database schema, primary keys (PKs) are underlined and foreign keys (FKs) are in italic font.

Product (productId, productName, packageWeight, pricePerUnit, amountInStore)

Customer (customerId, customerName, customerAddress, customerContactNo)

Production (productId, batchNo, unitsProduced, dateOfProduction, expiryDate)

Order (orderNo, customerId, productId, orderDate, unitsOrdered)

## Write SQL query statement to answer each of the following queries:

- 1. List all the product names with weight of unit between 0.2 to 1.5 kg in descending order of amount in store.
- 2. Give total number of packaging options available for 'Potato Fries'.
- **3.** List all the names of products and their total amount present in store having total amount present in store less than 1000 in descending order of their total amount present in store.
- 4. List total number of units produced in batch '1-1001'.
- **5.** List the batch no of production where total units produced are less than 2000.
- 6. List name and contact no of all the customers living in 'Model Town' and 'Gulberg'.
- 7. Give total number of customers living in 'Model Town' and 'Gulberg'.
- 8. List all the orders made in 2020.
- **9.** List customer id, product id and the total no of orders made by that customer for that product where total no of orders is greater than 2 ordered by total no of orders in descending order.
- **10.** Give the order no of the order with maximum units ordered.
- 11. List name, package Weight, units produced and batch no of all the products that are expired.
- 12. List names of all the products that were ordered on March 2021.
- 13. List the name of product and package weight that was most sold in 2020.
- **14.** List the names of top 3 customers that ordered most.
- 15. List names of all the customers that ordered more than 50 units of 'Chicken Cutlets' in 2020.
- **16.** List all the product name, package weights and their total units ordered.
- 17. List names of all the customers who made no order in 2021 but made order in 2020.
- **18.** List all the customer names that ordered 'Chicken Cutlets' of 5 kg package only once and ordered 'Chicken Cutlets' less than 5 kg package more than once.