Practical List: 05	Enrollment No.:		Name:
Problem Definition			

After the activation of database "UTU", create following tables using appropriate constraints and Insert following data in the tables as described below:

Table Name: tblDealer

DCODE	DNAME
101	Reliable Stationers
103	Classic Plastics
102	Clear Deals
104	Krishna Cosmetik
105	Surbhi Collection

Table Name: tblItem

ID	NAME	MANUFACTURER	PRICE	QTY	STOCKDATE	DCODE
TP01	Talcom Powder	Persona	40	45	11-02-18	104
FW05	Face Wash	Attitude	45	55	15-04-18	105
BS01	Bath Soap	Persona	55	80	11-02-18	104
SH06	Shampoo	Patanjali	12	50	05-01-17	105
FW12	Face Wash	Loreal	95	45	05-01-16	105
S5005	Ball Pen 0.5	Nataraj Classic	16	100	31-03-10	102
S5003	Ball Pen 0.25	Nataraj Classic	20	150	01-01-10	102
S5002	Gel Pen Premium	Pilot Juice	14	125	14-02-10	101
S5006	Gel Pen Classic	Pilot Juice	22	200	01-01-10	101
S5001	Eraser Small	Apsara	15	210	19-03-09	102
S5004	Eraser Big	Apsara	10	60	12-12-09	102
S5009	Sharper Classic	Nataraj Classic	18	160	23-01-09	103

Table Name: tblClient

ID	FNAME	CITY	ITEMID
01	Krishna	Surat	FW05
06	Nayan	Navsari	S5009
12	Aesha	Surat	SH06
15	Krunal	Navsari	S5005
16	Dhruvin	Vapi	TP01
20	Dhvani	Bardoli	BS01
24	Drashti	Valsad	FW12
25	Manan	Surat	S5003

30	Shyam	Bardoli	FW05
31	Bhavik	Surat	FW12
35	Naman	Mumbai	S5009
36	Urja	Baroda	S5003
42	Raj	Valsad	BS01
43	Kush	Baroda	S5006
45	Shrey	Anand	TP01

Consider the above tables and perform the following operations:

1. Display only the name and price of items, whose manufacturer is "Persona".
2. Count the total number of manufacturers.
3. Display all the client's details, whose names starts from "Dh".
4. Display the items details of all different types of pens.
5. Display only the name and price of product along with quantity, whose price is more than 80.
6. Show only the item and its price of those items, whose unit price is less equal to 20.
7. Display the details of those items, whose dealer code is 102 or quantity is more than 100.
8. Show the details of items, whose quantity is in the range of 50 to 100.
9. Increase the price of items by 10.
10. Decrease the quantity of items by 30.
11. Update the price of items by increasing 15%.
12. Find the maximum and minimum price of item in a single query.
13. Calculate the average of item price.
14. Calculate the total amount of items and find the average of it.
15. Display all item names and its price in following format:
    Talcom Powder price is 40.
16. Display all item names and its stock date in following format:
    The Ball Pen 0.5 stock date is 2010-03-31.
17. Arrange all the client's details according to the item in ascending order.
18. Display details of all stock items in decreasing order of StockDate.
19. Display only the names with cities of clients, whose city is not SURAT, VAPI and VALSAD using "NOT IN" operator.
20. Show all the details for clients in upper case.
21. Display all the items in capital letters.
22. Display only the item names with its length.
23. Show all the manufacturers of items in small letters.
24. Add a column named "GENDER" of datatype "char" and size "1" immediately after client name.
25. Set the gender of all clients.
26. Count the total number of dealers from item table.
27. Remove all the space from both the side of dealer name.
28. Add a column named "LOCATION" of datatype "varchar" and size "15" in dealer's table.
29. Set the location of dealer "Clear Deals" as 'Mumbai'.
30. Check whether any location of any dealer is NULL.
31. Remove the LOCATION column from the dealer's table.
32. Count total number of clients from different cities.
33. Count total number of male clients from different cities.
34. Count total number of clients from "Mumbai" city.

35. Find total items of manufacturers.
36. Display the maximum price of items for each dealer individually as per DCODE from the item table.
37. Find the total amount price of items for the date "01-01-2010".
38. Extend the stockdate of items by two months.
39. Remove the details of those clients, whose city is "Bardoli".
40. Truncate all the records from all the tables.

Objective(s)	To specify conditions in an SQL statement and to serve as conjunctions for multiple conditions in a statement, using types of operators, grouping data, aggregate functions, character functions and date functions.
Pre-requisites	Mathematics for Computer Applications
Duration for Completion	7 Hours
PEO(s) to be achieved	To provide quality practical skill of tools and technologies to solve industry problems.
PO(s) to be achieved	Ability to use the techniques, skills and modern tools as necessary for software development.
CO(s) to be achieved	CO7: Use data definition and manipulation statements over one or more tables using SQL to store and retrieve data.
Solution must contain	Query and output screen shots
Nature of submission	Handwritten
References for solving the problem	--

Post Laboratory questions	1. List all the numeric functions and write its use in one line.
	 2. State the difference between CEIL() and FLOOR() with proper example.
	 3. List at least fifteen character functions supported in Oracle and MySQL.
	 4. Write at least two difference between LTRIM() and LPAD() with example.
	 5. Write at least two difference between RTRIM() and RPAD() with example.
	 6. List at least seven date functions. Write its proper usage, syntax and example.
	 7. Write the queries to format dates in following formats:
	    a. 06-01-2018
	    b. 06 Jan 18
	    c. 06 Jan 2018

Assessment	
Faculty Signature and Date	