

1. Let us assume a Multiplex Cinema Theatre with a capacity of 200 viewers per theatre and 4 theatres in all. It books tickets on either phone or at the counter where people come to buy tickets for any of the four movies.

Following tables are created to keep the booking details of customer.

Table: CUSTOMER

Booking_Code	Customer_Name	No_of_tkts	BClerk_Code
B001	Veer	4	BC005
B002	Milan	2	BC004
B003	Jahmu	3	BC003
B004	Michal	20	BC002
B005	Meera	5	BC001

Table: BCLERK

BClerk_Code	Name
BC001	Varsha
BC002	Richeal
BC003	Vineet
BC004	Payal
BC005	Nisha

Answer the following questions based on the above tables:

- I. Write a query to display the total number of ticket booked by booking Clerk 'Payal'. [2]
 - II. Write a query to display the name of the clerks with maximum number of tickets. [2]
 - III. Write the command to display customer name and booking clerk name both in lowercase. [2]
2. Write SQL commands for the statements (i) to (vi) and give output for SQL queries (vii) to (x) on the basis of the table shop.

Table : Shop

No.	Shop_name	Sale	Area	Cust_percentage	Rating	City
1	West side	250000	West	68.6	C	Delhi
2	Pantaloons	500000	South	81.8	A	Chennai
3	Sir's & Her's	300000	North	79.8	B	Amritsar
4	Sports King	380000	North	88.0	B	Baroda
5	Biswas stores	456000	East	92.0	A	Delhi
6	Big Bazaar	290000	South	66.7	A	Kolkata
7	Levis	230000	East	50.0	C	Jamshedpur
8	Peter England	428000	South	90.0	A	Chennai

- I. To display the name of all shops which are in Area South and sale more than average sales. [1]
- II. To display shop name and Customer Percentage of all the shops having cust_percentage more than 77 and less than 90. [1]
- III. To display Maximum and Minimum Sales made for each city in ascending order of city. [1]
- IV. To display the city along with sum of sale for each city. [1]
- V. Display total sales made for each city and each area. [1]
- VI. Display total no of sales made for same city other than Delhi. [1]
- VII. Select min(Sale) from SHOP where Sale>300000. [1/2]
- VIII. Select count(Distinct City) from Shop; [1/2]
- IX. Select Avg(Sale) from Shop where Area='South'; [1/2]
- X. Select Max(Cust_percentage), sum(Sale) from shop where Rating='C'; [1/2]

3. Write the SQL command to create the TEACHER table including its constraints. [2½]

Table : TEACHER

Column Name	Data Type	Size	Constraint
TNO	CHAR	4	PRIMARY KEY
TNAME	VARCHAR	20	NOT NULL
TADDRESS	VARCHAR	25	
SALARY	DOUBLE	7, 2	

4. Write the resulting output of the following: [1½]

- I. SELECT SUBSTR(TRIM(' informatics Practices is very useful subject'), 13, 17);
- II. SELECT ROUND(65467.60)+ROUND(1234.73, 2)
- III. SELECT ROUND(MOD(14*9,90/9));

5. In a database there are two tables 'Display' and 'Model' as shown below:

Display

DisplayID	DispName	DispHO	ContPerson
1	Titan	Okhla	C.B.Ajit
2	Maxima	Shahdra	V.P.Kohli
3	Ajanta	Najafgarh	R. Mehta

Model

ModelNo	DispID	ModelCost
T020	1	2000
M032	4	2500
M059	2	7000
A167	3	800
T024	1	1200

- I. Identify the foreign key column in the table model. [½]
- II. Check every value in DisplayID column and DispID column of both the tables.
Do you find any discrepancy? [½]
- III. What will be the degree and cardinality of cross join (Cartesian product) of these tables. [1]