Q1. Write CREATE TABLE commands for the following table descriptions: [15]

CLIENT_MASTER		
CLIENTNO	vc2(6)	PK & Must start with 'C'
NAME	vc2(20)	NOT NULL
ADDRESS1	vc2(30)	
ADDRESS1	vc2(30)	
CITY	vc2(15)	
PINCODE	n(8)	
STATE	vc2(15)	
BALDUE	n (10,2)	

PRODUCT_MASTER		
PRODUCTNO	vc2(6)	PK & Must start with 'P'
DESCRIPTION	vc2(15)	NOT NULL
PROFITPERC	n(4,2)	NOT NULL
UNITMEASURE	vc2(10)	NOT NULL
QTYONHAND	n (8)	NOT NULL
REORDERLVL	n(8)	NOT NULL
SELLPRICE	n (8,2)	NOT NULL & can't be 0
COSTPRICE	n (8,2)	NOT NULL & can't be 0

SALESMAN_MASTER		
SALESMANNO	vc2(6)	PK & Must start with 'S'
SALESMANNAME	vc2(20)	NOT NULL
ADDRESS1	vc2(30)	NOT NULL
ADDRESS2	vc2(30)	
CITY	vc2(20)	
PINCODE	n(8)	
State	vc2(20)	
SALAMT	n(8,2)	NOT NULL & Can't be 0
TGTTOGET	n(6,2)	NOT NUL
YTDSALES	n(6,2)	NOT NULL
REMARKS	vc2(60)	

SALES_ORDER		
ORDERNO	vc2(6)	PK & Must start with 'O'
CLIENTNO	vc2(6)	FK to CLIENT_MASTER
ORDERDATE	date	
DELYADDR	vc2(25)	
SALESMANNO	vc2(6)	FK to SALESMAN_MASTER
DELYTYPE	char(1)	Check 'P' or 'F'
BILLEDYN	char(1)	Check 'Y' or 'N'
DELYDATE	date	
ORDERSTATUS	vc2(10)	Check 'In Process' or 'Fulfilled' or 'Backorder' or 'Cancelled'

SALES_ORDER_DETAILS		
ORDERNO	vc2(6)	FK to SALES_ORDER
PRODUCTNO	vc2(6)	FK to PRODUCT_MASTER
QTYORDERED	n(8)	
QTYDISP	n(8)	
PRODUCTRATE	n(10,2)	

Create Composite PRIMARY KEY of ORDERNO and PRODUCTNO

Sample Insert Commands

INSERT INTO Client_Master (ClientNo, Name, City, PinCode, State, BalDue) VALUES ('C00001', 'Ivan Bayross', 'Mumbai', 400054, 'Maharashtra', 15000);

INSERT INTO Product_Master VALUES ('P00001', 'T-Shirts', 5, 'Piece', 200, 50, 350, 250);

INSERT INTO Salesman_Master VALUES ('S00001', 'Aman', 'A/14', 'Worli', 'Mumbai', 400002, 'Maharashtra', 3000, 100, 50, 'Good');

INSERT INTO Sales_Order (OrderNo, OrderDate, ClientNo, DelyType, BilledYn, SalesmanNo, DelyDate, OrderStatus)
VALUES('O19001', '12-june-02', 'C00001', 'F', ' N', 'S00001', '20-july-02', 'In Process');

INSERT INTO Sales_Order_Details (OrderNo, ProductNo, QtyOrdered, QtyDisp, ProductRate) VALUES('O19001', 'P00001', 4, 4, 525);

Answer following queries with the help of above schema : [10]

1. Display the names of all the clients.
2. Display all the clients who are located in Mumbai.
3. Display all the products whose selling price is > 2000 and < 5000.
4. Display Name, City and State of Clients not in the state of Maharashtra.
5. Display all the information of client_no C0001 and C0002.
6. Change the selling price of '1.44 drive' to Rs. 1150.50.
7. Delete the record of client_no C0005.
8. Display the clients who stay in a city whose second letter is 'a'.
9. Count the number of products having price greater than or equal to 1500.
10. Display qtyordered, qtydisp and balancedqty (not in table).

Write Commands to do following [10]

1. Make Client_no as primary key in client_master.
2. Add a new column phone_no in the client_master table.
3. Add the not null constraint in the product_master table with the column description, profit percent, sell price and cost price.
4. Change size of name column to 60 in client_master table.
5. Remove pincode column from table.

Define in 1 or 2 lines and give one example also [10]

1. Recursive Relationship.
2. Composite key.
3. The 'like' operator with pattern matching.
4. Drop Table command.
5. Full Outer Join.

Write queries for following descriptions: (Joins) [10]

1. Find out the products, which have been sold to 'Ivan Bayross'.
2. Finding out the products and their quantities that will have to be delivered in the current month.
3. Listing the ProductNo and description of constantly sold (i.e. rapidly moving) products.
4. Finding the names of clients who have purchased 'Trousers'.
5. Listing the products and orders from customers who have ordered less than 5 units of 'Pull Overs'.

Write queries for following descriptions: (Subqueries) [12]

1. Finding the non-moving products i.e. products not being sold.
2. Finding the name and complete address for the customer who has placed Order number 'O19001'.
3. Finding the clients who have placed orders before the month of May'02.

Write Commands to do following [12]

1. Display system date as Saturday, February 11, 2012
2. Display Balance Due from Client master as $99,999.99
3. Display message as 'Salesman Aman sold goods of 50 while given target was 100.
4. Display your Age in Years

Write PL/SQL Blocks for following [21]

1. Write a PL/SQL block to check the given number is even or odd.
2. Write a PL/SQL block to pass an age as parameter in procedure and decide person can vote or not.
3. Create a trigger which is executed AFTER INSERT or UPDATE. Each time rows are inserted or updated, the values in ORDER_STATUS are replaced with respective values in table as stated below
   if total quantity ordered is equal to total quantity dispatched then order status must be 'Fulfilled'
   if total quantity dispatched is 0 then order status must be replaced with 'Backorder'
   otherwise order status must be replaced with 'In-Process'

✠ *Wish you a Good Luck* ✠