CHAPTER - 5
STRUCTURED QUERY LANGUAGE

Question 1:
Write queries for (i) to (iv) and find ouputs for SQL queries (v) to (viii), which are based on the tables.

Table :
VEHICLE

VCODE	VEHICLETYPE	PERKM
V01	VOLVO BUS	150
V02	AC DELUXE BUS	125
V03	ORDINARY BUS	80
V05	SUV	30
V04	CAR	18

Table : TRAVEL

CNO	CNAME	TRAVELDATE	KM	VCODE	NOP
101	K. Niwal	2015-12-13	200	V01	32
103	Fredrick Sym	2016-03-21	120	V03	45
105	Hitesh Jain	2016-04-23	450	V02	42
102	Ravi Anish	2016-01-13	80	V02	40
107	John Malina	2015-02-10	65	V04	2
104	Sahanubhuti	2016-01-28	90	V05	4
106	Ramesh Jaya	2016-04-06	100	V01	25

Note:

- PERKS is Freight Charges per kilometer.
- Km is kilometers Travelled
- NOP is number of passangers travelled in vechicle.

1. To display CNO, CNAME, TRAVELDATE from the table TRAVEL in descending order of CNO.
2. To display the CNAME of all customers from the table TRAVEL who are travelling by vechicle with code Vo_1 or Vo_2
3. To display the CNO and CNAME of those customers from the table TRAVEL who travelled between '2015-1231' and '2015-05-01'.

4. To display all the details from table TRAVEL for the customers, who have travel distacne more than 120 KM in ascending order of NOE
5. SELECT COUNT (*), VCODE FROM TRAVEL GROUP BY VCODE HAVING COUNT (*) > 1;
6. SELECT DISTINCT VCODE FROM TRAVEL :
7. SELECT A.VCODE, CNAME, VEHICLETYPE FROM TRAVEL A, VEHICLE B WHERE A. VCODE = B. VCODE and KM < 90;
8. SELECT CNAME, KM*PERKM FROM TRAVEL A, VEHICLE B WHERE A.VCODE = B.VCODE AND A. VCODE 'V05';

Answer:

(iii)	SELECT CNO, CNAME from TRAVEL WHERE TRAVELDATE > = '2015-05-01' AND TRAVEL-DATE < == '2015-12-31' ; **OR** SELECT CNO, CNAME from TRAVEL WHERE TRAVELDATE BETWEEN '2015-05-01' AND '2015-12-31' ; **OR** SELECT CNO, CNAME FROM TRAVEL WHERE TRAVELDATE < = '2015–12–31' AND TRAVEL-DATE > = '2015-05-01' ; **OR** SELECT CNO, CNAME from TRAVEL WHERE TRAVELDATE BETWEEN '2015-12-31' AND '2015-05-01' ; **(½ Mark for correct SELECT)** **(½ Mark for correct Where Cluase)**
(iv)	SELECT * FROM TRAVEL WHERE KM > 120 ORDER BY NOP; **(½ Mark for correct SELECT)** **(½ Mark for correct WHERE clause)**
(v)	**COUNT (*) VCODE** 2 V01 2 V02 **(½ Mark for correct output)**
(vi)	**DISTINCT VCODE** V01 V02 V03 V04 V05 **(½ Mark for correct output)**
(vii)	**VCODE CNAME VEHICLETYPE** V02 Ravi Anish AC DELUXE BUS V04 John Malina CAR **(½ Mark for correct output)**
(viii)	**CNAME KM*PERKM** Sahanubhuti 2700 **(½ Mark for correct output)**

(i)	SELECT CNO, CNAME, TRAVELDATE FROM TRAVEL ORDER BY CNO DESC ; **(½ Mark for SELECT CNO, CNAME, TRAVELDATE FROM TRAVEL)** **(½ Mark for ORDER BY CNO DESC)**
(ii)	SELECT CNAME FROM TRAVEL WHERE VCODE = 'V01' OR VCODE ='V02' ;' **OR** SELECT CNAME FROM TRAVEL VCODE IN ('V01' , 'V02') ; **(½ Mark for correct SELECT)** **(½ Mark for correct clause)**

Question 2:

Consider the following tables SCHOOL and ADMIN and answer this question :
Give the output the following SQL queries :

1. Select Designation Count (*) From Admin Group By Designation Having Count (*) <2;
2. SELECT max (EXPERIENCE) FROM SCHOOL;
3. SELECT TEACHER FROM SCHOOL WHERE EXPERIENCE >12 ORDER BY TEACHER;
4. SELECT COUNT (*), GENDER FROM ADMIN GROUP BY GENDER;

TABLE: SCHOOL

CODE	TEACHER	SUBJECT	DOJ	PERIODS	EXPERIENCE
1001	RAVI SHANKAR	ENGLISH	12/3/2000	24	10
1009	PRIYA RAI	PHYSICS	03/09/1998	26	12
1203	LIS ANAND	ENGLISH	09/04/2000	27	5
1045	YASHRAJ	MATHS	24/8/2000	24	15
1123	GANAN	PHYSICS	16/7/1999	28	3
1167	HARISH B	CHEMISTRY	19/10/1999	27	5
1215	UMESH	PHYSICS	11/05/1998	22	16

TABLE: ADMIN

CODE	GENDER	DESIGNATION
1001	MALE	VICE PRINCIPAL
1009	FEMALE	COORDINATOR
1203	FEMALE	COORDINATOR
1045	MALE	HOD
1123	MALE	SENIOR TEACHER
1167	MALE	SENIOR TEACHER
1215	MALE	HOD

Answer:

(i)

VICE PRINCIPAL	01

(ii)

16

(iii)

UMESH
YASH RAJ

(iv)

5 MALE
2 FEMALE

Question 3:

Write SQL qureries for (i) to (iv) and find outputs for SQL queries (v) to (viii), which are based on the tables TRANSPORT and TRIE

TABLE: TRANSPORT

TCODE	TTYPE	PERKM
103	ORDINARY BUS	90
105	SUV	40
104	CAR	20
103	ORDINARY BUS	90
101	VOLVO BUS	160
102	AC DELUXE BUS	140

Note:

- PERKS is Freight Charages per kilometer
- TTYPE is Transport Vehicle Type

TABLE: TRIP

NO	NAME	TDATE	KM	TCODE	NOP
11	Tanish Khan	2015-12-13	200	101	32
13	Danish Sahai	2016-06-21	100	103	45
15	Ram Kumar	2016-02-23	350	102	42
12	Fen Shen	2016-01-13	90	102	40
17	Aan Kumar	2015-02-10	75	104	2
14	Veena	2016-06-28	80	105	4
16	Rajpal Kirti	2016-06-06	200	101	25

Note:

- NO is Driver Number
- KM is Kilometer travelled
- NOP is number of travellers travelled in vehicle
- TDATE is Trip Date

1. To display NO, NAME, TDATE from the table TRIP in descending order of NO.
2. To display the NAME of the drivers from the table TRIP who are traveling by transport vehicle with code 101 or 103.
3. To display the NO and NAME of those drivers from the table TRIP who travelled between '2015-02-10' and '2015-04-01'.
4. To display all the details from table TRIP in which the distance travelled is more than 100 KM in ascending order of NOP
5. SELECT COUNT (*), TCODE From TRIP
   GROUP BY TCODE HAVNING COUnT (*) > 1;
6. SELECT DISTINCT TCODE from TRIP;
7. SELECT A.TCODE, NAME, TTYPE
   FROM TRIP A, TRANSPORT B
   WHERE A. TCODE = B. TCODE AND KM < 90;
8. SELECT NAME, KM *PERKM
   FROM TRIP A, TRANSPORT B
   WHERE A. TCODE = B. TCODE AND A. TCODE = 105′;

Answer:

1. SELECT NO, NAME, TDATE FROM TRIP ORDER BY NO;
2. SELECT NAME FROM TRIP
   WHERE TCODE = 101 OR TCODE = 103;

3. SELECT NO AND NAME FROM TRIP
   WHERE ‘2015-02-10’ < TDATE < ‘2015-04-01’;
4. SELECT NO, NAME, TDATE, KM, TCODE FROM TRIP
   WHERE KM >100 ORDER BY NOP;
5. TO DISPLAY THE MORE THAN ONE COUNT OF TCODE FROM THE TABLE TRIP
6. TO DISPALY SEPERATE TCODE OF TABLE TRIP
7. TO DISPAY THE NAME AND CODE OF THOSE TRANS PORTERS, WHO HAVE TRAVELLED MORE THAN 90 KMS.
8. TO DISPLAY THE NAME AND EXPENDITARE OF A TRANSPORTER WHO HAVE TCODE AS 105.

Question 4:
Write SQL query to add a column total price with datatype numeric and size 10, 2 in a table product.

Answer:
ALTER TABLE PRODUCT ADD TOTAL PRICE NUMBER (10,2).

Question 5:
Sonal needs to display name of teachers, who have “0” as the third character in their name. She wrote the following query.
SELECT NAME FROM TEACHER WHERE NAME = “$$0?”;
But the query is’nt producing the result. Identify the problem.

Answer:
The wildcards are incorrect. The corrected query is SELECT NAME FROM TEACHER WHERE NAME LIKE ‘_ _0%’.

Question 6:
Deepika wants to remove all rows from the table BANK. But he needs to maintain the structure of the table. Which command is used to implement the same?

Answer:
DELETE FROM BANK.

Question 7:
While creating table ‘customer’, Rahul forgot to add column ‘price’. Which command is used to add new column in the table. Write the command to implement the same.

Answer:
ALTER TABLE CUSTOMER ADD PRICE NUMBER (10, 2).

Question 8:
What is the use of wildcard

Answer:
The wildcard operators are used with the LIKE operator to search a value similar to a specific pattern in a column. There are 2 wildcard operators.
% – represents 0,1 or many characters – – represents a single number or character

Question 9:
Differentiate between DELETE and DROP table commands ?

Answer:
DELETE command is used to remove infor¬mation from a particular row or rows. If used without condition, it will delete all row information but not the structure of the table. It is a DML command.
DROP table command is used to remove the entire structure of the table and information. It is a DDL command

Long Answer Type Questions

Question 1:
Write SQL commands for the queries (i) to (iv) and output for (v) & (viii) based on a table COMPANY and CUSTOMER.

COMPANY

CID	NAME	CITY	PRODUCTNAME
111	SONY	DELHI	TV
222	NOKIA	MUMBAI	MOBILE
333	ONIDA	DELHI	TV
444	SONY	MUMBAI	MOBILE
555	BLACKBERRY	MADRAS	MOBILE
666	DELL	DELHI	LAPTOP

CUSTOMER

CUSTID	NAME	PRICE	QTY	CID
101	ROHAN SHARMA	70,000	20	222
102	DEEPAK KUMAR	50,000	10	666
103	MOHAN KUMAR	30,000	5	111
104	SAHIL BANSAL	35,000	3	333
105	NEHA SONI	25,000	7	444
106	SONAL AGGARWAL	20,000	5	333
107	ARUN SINGH	50,000	15	666

1. To display those company name which are having prize less than 30000.
2. To display the name of the companies in reverse alphabetical order.
3. To increase the prize by 1000 for those customer whose name starts with „S?

4. To add one more column totalprice with decimal] 10,2) to the table customer
5. SELECT COUNT(*) , CITY FROM COMPANY GROUP BY CITY;
6. SELECT MIN(PRICE), MAX(PRICE) FROM CUSTOMER WHERE QTY>10;
7. SELECT AVG(QTY) FROM CUSTOMER WHERE NAME LIKE “%r%;
8. SELECT PRODUCTNAME,CITY, PRICE
   FROM COMPANY, CUSTOMER WHERE
   COMPANY. CID=CUSTOMER.CID AND
   PRODUCTNAME=”MOBILE”;

Answer:

1. SELECT NAME FROM COMPANY WHERE COMPANY.CID=CUSTOMER. CID AND
   PRICE < 30000;
2. SELECT NAME FROM COMPANY ORDER BY NAME DESC;
3. UPDATE CUSTOMER
   SET PRICE = PRICE + 1000
   WHERE NAME LIKE ‘S%’;
4. ALTER TABLE CUSTOMER
   ADD TOTALPRICE DECIMAL(10,2);
5.

3	DELHI
2	MUMBAI
1	MADRAS

6. 50000,70000
7. 11
8.

MOBILE	MUMBAI	70000
MOBILE	MUMBAI	25000

Question 2:

Consider the following tables SCHOOL and ADMIN and answer this question :

Table : SCHOOL

CODE	TEACHER NAME	SUBJECT	DOJ	PERIODS	EXPERIENCE
1001	Ravi Shankar	English	12/3/2000	24	10
1009	Priya Rai	Physics	03/09/1998	26	12
1203	Lisa Anand	English	09/04/2000	27	5
1045	Yashraj	Maths	24/08/2000	24	15
1123	Ganan	Physics	16/07/1999	28	3
1167	Harish B	Chemistry	19/10/1999	27	5
1215	Umesh	Physics	11/05/1998	22	16

Table: Admin

Code	Gender	Designation
1001	Male	Vice Principla
1009	Female	Co-ordinator
1203	Female	Co-ordinator
1045	Male	HOD
1123	Male	Senior Teacher
1167	Male	Senior Teacher
1215	Male	HOD

Write SQL statements for the following:

1. To display TEACHERNAME, PERIODS of all teachers whose periods are more than 25.
2. To display all the information from the table SCHOOL in descending order of experience.
3. To display DESIGNATION without dupli¬cate entries from the table ADMIN.
4. To display TEACHERNAME, CODE and corresponding DESIGNATION from tables SCHOOL and ADMIN of Male teachers.

Answer:

1. SELECT TEACHERNAME, PERIODS
   FROM SCHOOL WHERE PERIODS>25:
2. SELECT * FROM SCHOOL;
3. SELECT DISTINCT DESIGNATION FROM ADMIN;
4. SELECT TEACHERNAME.CODE
   DESIGNATION FROM
   SCHOOL.CODE = ADMIN.CODE
   WHERE GENDER = MALE;

Question 3:

Write SQL commands for the queries (i) to (iv) and output for (v) to (viii) based on the tables Watches' and Sale given below.

Watches

Watchid	Watch_Name	Price	Type	Qty_Store
W001	High Time	10000	Unisex	100
W002	Life Time	15000	Ladies	150
W003	Wave	20000	Gents	200
W004	High Fashion	7000	Unisex	250
W004	Golden Time	25000	Gents	100

Sale

Watchid	Qty_Sold	Quarter
W001	10	1
W003	5	1
W002	20	2
W003	10	2
W001	15	3
W002	20	3
W005	10	3
W003	15	4

1. TO DISPLAY ALL THE DETAILS OF THOSE WATCHES WHOSE NAME ENDS WITH 'TIME'
2. TO DISPLAY WATCH'S NAME AND PRICE OF THOSE WATCHES WHICH HAVE PRICE RANGE IN BE-TWEEN 5000-15000.
3. TO DISPLAY TOTAL QUANTITY IN STORE OF UNISEX TYPE WATCHES.
4. TO DISPLAY WATCH NAME AND THEIR QUANTITY SOLD IN FIRST QUARTER;
5. SELECT MAX (PRICE), MIN(QTY_STORE) FROM WATCHES;
6. SELECT QUARTER, SUM(QTY SOLD) FROM SALE GROUP BY QUARTER;
7. SELECT WATCH_NAME, PRICE, TYPE FROM WATCHES W, SALE S WHERE W. WAT£H1D!=S.WATCHID; (viii) SELECT WATCH_NAME, QTYSTORE, SUM (QTY_SOLD), QTY_STORESUM (QTYSOLD) "STOCK" FROM WATCHES W, SALE S WHERE W. WATCHID = S.WATCHID GROUP BY S.WATCHID;

Answer:

1. SELECT * FROM WATCHES WHERE WATCH_NAME LIKE '%TIME'
   (Vi mark for SELECT query) (Vi mark for where clause)

2. SELECT WATCH_NAME, PRICE WATCH WHERE PRICE BETWEEN 5000 AND 15000;
   (Vi mark for SELECT query) (Vz mark for where clause)
3. SELECT SUM (QTY STORE) FROM WATCHES WHERE TYPE LIKE 'UNISEX';
   (Vz mark for SELECT query) (Vi mark for where clause)
4. SELECT WATCHNAME, QTY SOLD FROM WATCHES W,SALE S WHERE W. WATCHID = S. WATCHID
   AND QUARTER = 1;

(v)

max (price)	min(qty_store)
25000	100

3	45
4	15

(½ mark for correct o
(½ mark for correct ou

(vi)

quarter	sum(qty_sold)
1	15
2	30

(vii)

watch_name	price	type
HighFashion	7000	Unisex

(½ mark for correct ou

(viii)

watch_name	qty_store	qty_sold	Stock
HighTime	100	25	75
LifeTime	150	40	110
Wave	200	30	170
Golden time	100	10	90

Question 4:

Answer the questions (a) and (b) on the basis of the following tables SHOP and ACCESSORIES.

Table: SHOP

Id	SName	Area
S001	ABC computronics	CP
S002	All Infotech Media	GK II
S003	Tech Shop	CP
S004	Geeks Tecno Soft	Nehru Place
S005	Hitech Tech Store	Nehru Place

Table: ACCESSORIES

No	Name	Price	Id
A01	Mother Board	12000	S01
A02	Hard Disk	5000	S01
A03	Keyboard	500	S02
A04	Mouse	300	S01
A05	Mother Board	13000	S02
A06	Keyboard	400	S03
A07	LCD	6000	S04
T08	LCD	5500	S05
T09	Mouse	350	S05
T10	Hard Disk	4500	S03

(a) Write the SQL queries:

1. To display Name and Price of all the Accessories in ascending order of their Price.
2. To display Id and SName of all Shop located in Nehru Place.
3. To display Minimum and Maximum Price of each Name of Accessories.
4. To display Name, Price of all Accessories and their respective SName where they are available.

(b) Write the output of the following SQL

1. SELECT DISTINCT NAME FROM ACCESSORIES WHERE PRICE> =5000;
2. SELECT AREA, COUNT(*) FROM SHOPPE GROUP BY AREA;
3. SELECT COUNT (DISTINCT AREA) FROM SHOPPE;
4. SELECT NAME, PRICE*0.05 DISCOUNT FROM ACCESSORIES WHERE SNO IN (‘$S0_2$‘,$S0_3$‘);

Answer:
(a)

1. SELECT Name, Price FROM ACCESSORIES ORDER BY Price Asc;
2. SELECT ID SName FROM SHOP WHERE Area=”Nehru Place”;
3. SELECT Name, max (Price); min(Price) FROM ACCESSORIES, Group By Name;
4. SELECT Name,price, Sname FROM ACCESSORIES, SHOP WHERE SHOE ID=ACCESSORIES.ID;

(b)

(i) **Name**

Mother Board

Hard Disk

LCD

(ii)

Area	**count**
CP	2
GK II	1
Nehru Place	2

(iii) **count(Distinct Area)**

3

(iv)

Name	**DISCOUNT**
Keyboard	25
Motherboard	650
Keyboard	20
Harddisk	225

Question 5:

Write SQL queries for:

Table: Applicants

ID	Name	Course	Phone
1	Ravi	BCA	4210716
2	Rita	MBA	215611
3	Sunil	MCA	321157
4	Kumar	BCA	512771

Table: Courses

Name	Duration	Fee
MBA	2 year	40,000
MCA	3 year	70,000
BCA	3 year	20,000

1. To display name, fee, gender, joinyear about the applicants, who have joined before 2010.
2. To display names of applicants, who are playing fee more than 30000.
3. To display names of all applicants in ascending order of their joinyear.
4. To display the year and the total number of applicants joined in each YEAR from the table APPLICANTS.

5. To display the C_ID (i.e., CourseID) and the number of applicants registered in the course from the APPLICANTS and table.
6. To display the applicant's name with their respective course's name from the tables APPLICANTS and COURSES.
7. Give the output of following SQL statements:
    - SELECT Name, Joinyear FROM APPLICANTS
      WHERE GENDER='F' and C_ID='A02';
    - SELECT MIN (Joinyear) FROM
      APPLICANTS
      WHERE Gender='m';
    - SELECT AVG (Fee) FROM APPLICANTS
      WHERE C_ID='A0T OR C_ID='A05';
    - SELECT SUM- (Fee), C_ID FROM C_ ID
      GROUP BY C_ID
      HAVING COUNT(*)=2;

Answer:

1. SELECT NAME,FEE,GENDER,JOINYEAR
   FROM APPLICANTS
   WHERE J OINYE AR <2010
2. SELECT NAME FROM APPLICANTS WHERE FEE >30000
3. SELECT NAME FROM APPLICANTS ORDERBY JOINYEAR ASC
4. SELECT YEAR, COUNT]*) FROM
   APPLICANTS GROUP BY YEAR;
5. SELECT C_ID, COUNT]*) FROM
   APPLICANTS, COURSES GROUP BY ID
   WHERE APPLICANTS.C_ID=COURSES. C_ID
6. SELECT NAME,COURSE FROM
   APPLICANTS, COURSES
   WHERE APPLICANTS. C_ID=COURSES. C_ID
    - Avisha 2009
    - 2009
    - 67
    - 55000 A01

Question 6:

Write SQL queries for (a) to (g) and write the output for the SQL queries mentioned

shown in (hi) to (h4) parts on the basis of table ITEMS and TRADERS :

Table: ITEMS

CODE	INAME	QTY	PRICE	COMPANY	TCODE
1001	DIGITAL PAD 12i	120	11000	XENITA	T01
1006	LED SCREEN 40	70	38000	SANTORA	T02
1004	CAR GPS SYSTEM	50	21500	GEOKNOW	T01
1003	DIGITAL CAMERA 12X	160	8000	DIGICLICK	T02
1005	PEN DRIVE 32 GB	600	1200	STOREHOME	T03

Table: TRADERS

TCode	TName	City
T01	ELECTRONIC SALES	MUMBAI
T03	BUSY STORE CORP	DELHI
T02	DISP HOUSE INC	CHENNAI

1. To display the details of all the items in ascending order of item names (i.e., INAME).
2. To display item name and price of all those items, whose price is in the range of 10000 and 22000 (both values inclusive).
3. To display the number of items, which are traded by each trader. The expected output of this query should be:
4. To display the price, item name and quantity (i.e., qty) of those items which have quantity more than 150.
5. To display the names of those traders, who are either from DELHI or from MUMBAI.
6. To display the names of the companies and the names of the items in descending order of company names.
7. Obtain the outputs of the following SQL queries based on the data given in tables ITEMS and TRADERS above.
   - SELECT MAX (PRICE), MIN (PRICE) FROM ITEMS;
   - SELECT PRICE*QTY
     FROM ITEMS WHERE CODE-1004;
   - SELECT DISTINCT TCODE FROM ITEMS;
   - SELECT INAME, TNAME FROM ITEMS I, TRADERS T WHERE I.TCODE=T.TCODE AND QTY< 100;

Answer:

1. SELECT INAME FROM ITEMS ORDER BY
   INAME ASC;
2. SELECT INAME, PRICE FROM ITEMS WHERE PRICE => 10000 AND PRICE =< 22000; (c) SELECT TCODE, COUNT (CODE) FROM ITEMS GROUP BY TCODE;
3. SELECT PRICE, INAME, QTY FROM ITEMS WHERE (QTY> 150);

4. SELECT TNAME FROM TRADERS WHERE (CITY = “DELHI”) OR (CITY = “MUMBAI”)
5. SELECT COMPANY, INAME FROM ITEMS
   ORDER BY COMPANY DESC;
6. (hi) 38000
   1200
   (h2)1075000
   (h3)T01
   T02
   TO3
   (h4) LED SCREEN 40 DISP HOUSE INC CAR GPS SYSTEM ELECTRONICS SALES

Question 7:

Write SQL queries for (a) to (f) and write the outputs for the SQL queries mentioned shown in (gl) to (g4) parts on the basis of tables PRODUCTS and SUPPLIERS

Table: PRODUCTS

PID	PNAME	QTY	PRICE	COMPANY	SUPCODE
101	DIGITAL CAMERA 14X	120	12000	RENBIX	SO1
102	DIGITAL PAD 11i	100	22000	DIGI POP	S02
104	PEN DRIVE 16 GB	500	1100	STOREKING	SO1
106	LED SCREEN 32	70	28000	DISPEXPERTS	S02
105	CAR GPS SYSTEM	60	12000	MOVEON	S03

Table: SUPPLIERS

SUPCODE	SNAME	CITY
SO1	GET ALL INC	KOLKATA
SO3	EASY MARKET CORP	DELHI
S02	DIGI BUSY GROUP	CHENNAI

1. To display the details of all the products in ascending order of product names (i.e., PNAME).
2. To display product name and price of all those products, whose price is in the range of 10000 and 15000 (both values inclusive).
3. To display the number of products, which are supplied by each suplier. i.e., the expected output should be;
   - S01 2
   - S02 2
   - S03 1

4. To display the price, product name and quantity (i.e., qty) of those products which have quantity more thhn 100.
5. To display the names of those suppliers, who are either from DELHI or from CHENNAI.
6. To display the name of the companies and the name of the products in descending order of company names.
7. Obtain the outputs of the following SQL queries based on the data given in tables PRODUCTS and SUPPLIERS above.
    - SELECT DISTINCT SUPCODE FROM PRODUCTS;
    - SELEC MAX (PRICE), MIN (PRICE) FROM PRODUCTS;
    - SELECT PRICE*QTY
      FROM PRODUCTS WHERE PID = 104; (g4)
    - SELECT PNAME, SNAME
      FROM PRODUCTS P, SUPPLIERS S WHERE E SUPCODE = S. SUPCODE
      AND QTY>100;

Answer:

1. SELECT * FROM PRODUCTS ORDER BY PNAME ASC;
2. SELECT PNAME, PRICE FROM PRODUCTS WHERE ((PRICE => 10000) AND (PRICE = < 15000));
3. SELECT SUPCODE, COUNT (PID) FROM PRODUCTS GROUP BY SUPCODE;
4. SELECT PRICE, PNAME, QTY FROM PRODUCTS WHERE (QTY > 100);
5. SELECT SNAME FROM SUPPLIERS WHERE ((CITY = “DELHI”) OR (CITY = “CHENNAI”));
6. SELECT COMPANY, PNAME FROM PRO-DUCTS ORDER BY COMPANY DESC; 4
7. SOI1
   (gl)s02
   $s0_3$
   (g2) 28000
   1100
   (g3) 550000
   (g4) PNAME SNAME Vi
   DIGITAL CAMERA 14 X GETALL INC
   PENDRIVE16 GB GETALL INC

Question 8:

Consider the following tables CARDEN and CUSTOMER and answer (b) and (c) parts

of this question:

Table : CARDEN

Ccode	CarName	Make	Colour	Capacity	Charges
501	A-Star	Suzuki	RED	3	14
503	Indigo	Tata	SILVER	3	12
502	Innova	Toyota	WHITE	7	15
509	SX4	Suzuki	SILVER	4	14
510	C Class	Mercedes	RED	4	35

Table : CUSTOMER

Code	Cname	Ccode
1001	Hernant Sahu	501
1002	Raj Lal	509
1003	Feroza Shah	503
1004	Ketan Dhal	502

1. Give a suitable example of a table with sample data and illustrate Primary and Alternate Keys in it.
2. Write SQL commands for the following statements:
   - To display the names of all the silver coloured cars.
   - To display names of car, make and capacity of cars in descending order of their sitting capacity.
   - To display the highest charges at which a vehicle can be hired from CARDEN.
   - To display the customer name and the corresponding name of the cars hired by them.
3. Give the output of the following SQL queries:
   - SELECT COUNT(DISTINCT Make) FROM CARDEN;
   - SELECT MAX(Charges), MIN (Charges) FROM CARDEN;
   - SELECT COUNTS), Make FROM CARDEN;

Answer:

1. Primary Key of CARDEN = Ccode CARDEN
   Alternate Key = CarName:
   Primary key of Customer = Code
   Alternate Key of Customer = Cname 2
2. SELECT CarName From CARDEN
   WHERE Color = “SILVER”;
3. SELECT CarName, Make, Capacity From
   CARDEN ORDER BY Capacity DESC;
4. SELECT MAX(Charges) Frm CARDEN;
5. ELECT Cname, CarName From
   CARDEN, CUSTOMER WHERE
   CARDEN. Ccode = CUSTOMER. Ccode;

6. (i) 4
   (ii) MAX(Charges) MIN (Charges)
   35 112
   (iii) 5
   (iv) SX4
   C Class

Question 9:

Consider the following tables CABHUB and CUSTOMER and answer (b) and (c) parts of this question :

Table : CABHUB

Vcode	VehicleName	Make	Colour	Capacity	Charges
100	Innova	Toyota	WHITE	7	15
102	SX4	Suzuki	BLUE	4	14
104	C Class	Mercedes	RED	4	35
105	A-Star	Suzuki	WHITE	3	14
108	Indigo	Tata	SILVER	3	12

Table : CUSTOMER

Ccode	Cname	Vcode
1	Hemant Sahu	101
2	Raj Lal	108
3	Feroza Shah	105
4	Ketan Dhal	104

1. Give a suitable example of a table with sample data and illustrate Primary and Candidate Keys in it.
2. Write SQL commands for the following statements:
   - To display the names of all the white coloured vehicles.
   - To display name of vehicle name and capacity of vehicles in ascending order of their sitting capacity.
   - To display the highest charges at which a vehicle can be hired from CABHUB.
   - To display the customer name and the corresponding name of the vehicle hired by them.
3. Give the output of the following SQL queries :
   - SELECT COUNT(DISTINCT Make) FROM CABHUB;
   - SELECT MAX(Charges), MIN(Charges)
   - FROM CABHUB;
   - SELECT COUNT (*) Make FROM CABHUB;
   - SELECT Vehicle FROM CABHUB WHERE Capacity=4;

Answer:

1. Primary key of CABHUB = Vcode alternate key of CABHUB = Vehicle Name. Primary key of Customer = Ccode Alternate Key of CUSTOMER = Cname.
2. (i) SELECT VehicleName FROM CABHUB
WHERE Colour = “WHITE”;
3. SELECT VehicleName, capacity From CABHUB ORDER BY Capacity ASC;
4. SELECT MAX(Charges) FROM CABHUB;
5. SELECT Cname,VehicleName FROM CABHUB, CUSTOMER WHERE CUSTOMER. Vcode=CABHUB. Vcode;
6. (i) 4
(ii) MAX(Charges) MIN (Charges)
35 12
(iii) 5
(iv) SX4
C Class

Question 10:
Consider the following tables EMPLOYEE and DEPARTMENT and answer (a) and (b) parts of this question.

Table : EMPLOYEE

TCode	TName	DepCde	Salary	Age	JoinDate
15	Sameer Sharma	123	75000	39	01-Apr-2007
21	Ragvinder K	101	86000	29	11-Nov-2005
34	Rama Gupta	119	52500	43	03-Mar-2010
46	C R Menon	103	67000	38	12-Jul-2004
77	Mohan Kumar	103	63000	55	25-Nov-2000
81	Rajesh Kumar	119	74500	48	11-Dec-2008
89	Sanjeev P	101	92600	54	12-Jan-2009
93	Pragya Jain	123	32000	29	05-Aug-2006

Table: DEPARTMENT

DepCde	DepName	DepHead
101	ACCOUNTS	Rajiv Kumar
103	HR	P K Singh
119	IT	Yogesh Kumar
123	RESEARCH	Ajay Dutta

1. **Write SQL commands for the following statements:**
   - To display all DepName along with the DepCde in descending order of DepCde.

- To display the average age of Employees in DepCde as 103.
- To display the name of DepHead of the Employee named “Sanjeev P”
- To display the details of all employees who has joined before 2007 from EMPLOYEE table.

2. **Give the output of the following SQL queries:**
   - SELECT COUNT (DISTINCT DepCde) FROM EMPLOYEE;
   - SELECT MAX(JoinDate), MIN (JointDate) FROM EMPLOYEE;
   - SELECT TName, DepHead FROM EMPLOYEE E, DEPARTMENT D WHERE E.DepCde = D.DepCde;
   - SELECT COUNT (*) FROM EMPLOYEE WHERE Salary > 60000 AND Age > 30;

Answer:

(a)

1. SELECT DEPNAME, DEPARTME-NT. DepCde FROM EMPLOYEE, DEPART MENT WHERE EMPLOYEE. DepCDE= DEPARTMENT. DepCde Order by DepCde DESC;
2. Select AVG (Age) from EMPLOYEE WHERE DepCde=”103″;
3. SELECT DeptHead FROM DEPART MENT WHERE Employee. TName= “Sanjeev P” AND EMPLOYEE. DepCde = DEPARTMENT. DepCde;
4. SELECT * from EMPLOYEE WHERE joinDate<’01-JAN-2007′;

(b) (i) $\frac{\text{COUNT(DISTINCT DepCde)}}{4}$

(ii) $\frac{\text{Max (JoinDate)}}{\text{03 - Mar - 2010}}$ $\frac{\text{Min (JoinDate)}}{\text{12 - Jul - 2004}}$

(iii)

TName	DepHead
Sameer Sharma	Ajay Dutta
Raguvindra K	Rajiv Kumar
Rama Gupta	Yogesh Kumar
C R Menon	P K Singh
Rajesh Kumar	Yogesh Kumar
Sanjeev P	Rajiv Kumar
Pragya Jain	Ajay Dutta

(iv) 5 2

Question 11:

Consider the following tables WORKER and PAYLEVEL and answer (a) and (b) parts of this question:

Table: WORKER

ECODE	NAME	DESIGN	PLEVEL	DOJ	DOB
11	Radhe Shyam	Supervisor	P001	13-Sep-2004	23-Aug-1981
12	Chander Nath	Operator	P003	22-Feb-2010	12-Jul-1987
13	Fizza	Operator	P003	14-Jun-2009	14-Oct-1983
15	Ameen Ahmed	Mechanic	P002	21-Aug-2006	13-Mar-1984
18	Sanya	Clerk	P002	19-Dec-2005	09-Jun-1983

Table : PAYLEVEL

PLEVEL	PAY	ALLOWANCE
P001	26000	12000
P002	22000	10000
P003	12000	6000

(a) Write SQL commands for the following statements:

1. To display the name of all Workers in descending order of DOB.
2. To display NAME and DESIGN of those Workers, whose PLEVEL is either P001 or
3. To display the content of all the workers table, whose DOB is in between ’19-JAN-1984′ and ’18-JAN-1987′.
4. To add a new row with the following:
   19, ‘DayaKishore’, ‘Operator’, ‘P003′, ’19- Sep-2008’, ‘ll-Jul-1984’

(b) Give the output of the following SQL queries :

1. SELECT COUNT (PLEVEL), PLEVEL FROM WORKER GROUP BY PLEVEL;
2. SELECT MAX(DOB), MIN(DOJ) FROM WORKER;
3. SELECT Name,PAY FROM WORKER
   W,PAYLEVEL P WHERE W.LEVEL=
   P.PLEVEL AND W.ECODE<13;
4. SELECT PLEVEL, PAYLEVEL
   WHERE PLEVEL=”POO3″;

Answer:

(a)

1. SELECT NAME FROM WORKER
   ORDER BY DOBDESC;
2. SELECT NAME, DESIGN FROM WORKER WHERE PLEVEL=”POOO1″ OR PLEVEL=”POO2″;
3. SELECT * FROM WORKER WHERE
   DOB BETWEEN ’19-JAN-1984 AND ’18-JAN-1987′;
4. INSERT INTO WORKER VALUES (19,”DayaKISHORE”, “oPERATOR”, “P0003”,’19-Sep-2008′,’11-Jul-1984′)’

(b)

(i)

count (PLEVEL)	PLEVEL
1	P001
2	P002
2	P003

(ii)

Max (DOB)	Min (DOJ)
12-Jul-1987	13-Sep-2004

(iii)

Name	Pay
Radhe Shyam	26000
Chander Nath	12000

(iv)

Plevel	Pay
P003	18000

Question 12:

Consider the following tables EMPLOYEE and SALGRADE and answer (b) and (c) parts of this question:

Table : EMPLOYEE

ECODE	NAME	DESIGN	SGRADE	DOJ	DOB
101	Abdul Ahmad	EXECUTIVE	S03	23-Mar-2003	13-Jan-1980
102	Ravi Chander	HEAD-IT	S02	12-Feb-2010	22-Jul-1987
103	John Ken	RECEPTIONIST	S03	24-Jun-2009	24-Feb-1983
105	NazarAmeen	GM	S02	11-Aug-2006	03-Mar-1984
108	Priyam Sen	CEO	S0I	29-Dec-2004	19-Jan-1982

Table : SALGRADE

SGRADE	SALARY	HRA
S01	56000	18000
S02	32000	12000
S03	24000	8000

(a) What do you understand by Selection and Projection operations in relational algebra ?
(b) Write SQL commands for the following statements :

1. To display the details of all EMPLOYEES in descending order of DOJ.
2. To display NAME and DESIGN of those EMPLOYEES, whose SAL-GRADE is either S02 or S03.
3. TO display the content Of all the EMPLOYEES table, whose DOJ is in between ’09-Feb-2006′ and ’08-Aug-2009′.
4. To add a new row with the following:
   109, ‘HarishRoy’, ‘HEAD-IT’, ‘SOX, ’09-Sep-2007′, ’21-Apr-1983’

(c) Give the output of the following SQL queries :

1. SELECT COUNT(SGRADE), SGRADE
   FROM EMPLOYEE GROUP BY
   SGRADE;
2. SELECT MIN(DOB), MAX(DOJ) FROM EMPLOYEE;
3. SELECT NAME, SALARY FROM
   EMPLOYEE E, SAL-GRADE S WHERE
   E.SGRADE= S.SGRADE AND E.ECODE<103′;
4. SELECT SGRADE, SALARY +HRA FROM SALGRADE WHERE SGRADE =SGRADE=’S02;’

Answer:

Projection(ff): In relational algebra, a projection is a unary operafion. The result of such projecion is defined as the set obtained when the components Of the tuple R are restriceted to the set {a_1……a_n}. It discards (or excludes) the other attributes.
Selection(σ): In relational algebra, a selection
is a unary operation written as $\pi_{a\theta b}$(R) or $\sigma_{a\theta v}$ (R) where:

1. a and b are attribute names.
2. p is a binary operation in the set.
3. v is a value constant.
4. R is a relation.

The selection (R) selects all those tuples in R for which 9 holds between the a and the b

(b)

1. SELECT FROM EMPLOYEE ORDER BY DOJ DESC;
2. SELECT NAME, DESIGN FROM EMPLOYEE WHERE SGRADE – “S02” OR SGRADE = “SO3;
3. SELECT * FROM EMPLOYEE WHERE DOJ BETWEEN ’09-FEB-2006′ AND ’08-AUG -200%
4. INSERT INTO EMPLOYEE VALUES(109, “HARSH RAY”, “HEAD-IT.S02”, ’09-SEP-
   2007′, ’21-APR-1983′);

(c) **(i)**

COUNT	SGRADE
2	S03
2	S02
1	S0I

(ii)

Min	Max
13-Jan-1980	22-Jul-1987

(iii)

Name	Salary
Abdul Ahmad	24000
Ravi Chander	32000

(iv)

SGRADE	SALARY
S02	44000

Question 13:

Consider the following tables GAMES and PLAYER and answer (b) and (c) parts of this question :

Table: GAMES

GCode	Game Name	Type	Number	Prize Money	Schedule Date
101	Carom Board	Indoor	2	5000	23-Jan-2004
102	Badminton	Outdoor	2	12000	12-Dec-2003
103	Table Tennis	Indoor	4	8000	14-Feb-2004
105	Chess	Indoor	2	9000	0l-Jan-2004
108	Lawn Tennis	Outdoor	4	25000	19-Mar-2004

Table: PLAYER

PCode	Name	GCode
1	Nabi Ahmad	101
2	Ravi Sahai	108
3	Jatin	101
4	Nazneen	103

(a)What do you understand by primary key and candidate keys ?
(b)Write SQL commands for the following statements:

1. To display the name of all GAMES with their GCodes.
2. To display details of those GAMES which are having PrizeMoney more than 7000.
3. To display the content of the GAMES table in ascending order of Schedule Date.
4. To display sum of PrizeMoney for each type of GAMES.

(c) Give the output of the following SQL queries:

1. SELECT COUNT(DISTINCT Number) FROM GAMES;
2. SELECT MAX(ScheduleDate), MIN(Sche- duleDate) FROM GAMES
3. SELECT Name, GameName FROM GAMES G, PLAYER P
   WHERE (G.Gcode=PGcode AND G.Pri- zeMoney>10000);
4. SELECT DISTINCT Geode FROM PLAYER;

Answer:

(a) An attribute or set of attributes which are used to identify a tuple uniquely is known as a primary key. If a table has more than one such attributes which identify a tuple uniquely than all such attributes are known as candidate keys.

(b)

1. SELECT GameName, GCode FROM GAMES;
2. SELECT * FROM Games WHERE PrizeMoney >7000;
3. SELECT * FROM Games ORDER BY ScheduleDate;
4. SELECT SUM(Pnzemoney) FROM Games GROUPBY Type;

(c)

1. 2
2. 19-Mar-2004 12-Dec-2003
3. Ravi Sahai Lawn Tennis
4. 101 108 103

Question 14:

Consider the following tables ACTIVITY and COACH and answer (a) and (b) parts of this question :

Table : ACTIVITY

ACode	ActivityName	Stadium	Participants Num	PrizeMoney	ScheduleDate
1001	Relay 100 × 4	Star Annex	16	10000	23-Jan-2004
1002	High Jump	Star Annex	10	12000	12-Dec-2003
1003	Shot Put	Super Power	12	8000	14-Feb-2004
1005	Long Jump	Star Annex	12	9000	01-Jan-2004
1008	Discuss Throw	Super Power	10	15000	19-Mar-2004

Table : COACH

PCode	Name	ACode
1	Ahmad Hussain	1001
2	Ravinder	1008
3	Janila	1001
4	Naaz	1003

(a) Write SQL commands for the following statements:

1. To display the names of all activities with their Acodes in descending order.
2. To display sum of PrizeMoney for the Activities played in each of the Stadium separately.
3. To display the coach's name and acodes in ascending order of Acode from the table Coach.
4. To display the content of the Activity table whose schedule date earlier than 01-01-2004 in ascending order of Participants Num.

(b) Give the output of the following SQL queries:

1. SELECT COUNT (DISTINCT Participants Num) FROM ACTIVITY;
2. SELECT MAX (Schedule Date), Min (Schedule Date) FROM ACTIVITY;
3. SELECT Name, Activity Name FROM ACTIVITY A, COACH C WHERE A.Acode=C.Acode AND A.Parti- cipants Num=10;
4. SELECT DISTINCT Acode FROM COACH;

Answer:

(a)

1. SELECT Acodes, ActivityName FROM ACTIVITY ORDER BY ACode DESC;
2. SELECT SUM(PrizeMoney) FROM ACTIVITY GROUP BY Stadium;
3. SELECT Name, Acode FROM COACH ORDER BY Acode;
4. SELECT * FROM ACTIVITY WHERE SchduleDate < '01-Jan-2004' ORDER BY ParticipantsNum;

(b)

1. 3
2. 12-Dec-2003 19-Mar-2004
3. Ravinder Discuss Throw
4. 1001
   1008
   1003

Question 15:

Consider the following tables RESORT and OWNEDBY and answer (a) and (b) parts of this question:

Table : RESORT

RCODE	PLACE	RENT	TYPE	STARTDATE
R001	GOA	15000	5 STAR	12-Jan-02
R002	HIMACHAL	9000	4 STAR	20-Dec-07
R003	KERALA	12500	5 STAR	10-Mar-06
R004	HIMACHAL	10500	2 STAR	25-Nov-05
R005	GUJARAT	8000	4 STAR	01-Jan-03
R006	GOA	18000	7 STAR	30-Mar-08
R007	ORISSA	7500	2 STAR	12-Apr-99
R008	KERALA	11000	5 STAR	03-Mar-03
R009	HIMACHAL	9000	2 STAR	15-Oct-08
R010	GOA	13000	5 STAR	12-APR-06

Table : OWNEDBY

Place	Owner
GOA	RAJ RESORTS
KERALA	KTDC
HIMACHAL	HTDC
GUJARAT	MAHINDRA RESORTS
ORISSA	OTDC

(a)Write SQL commands for the following statements:

1. To display the RCODE and PLACE of all ‘5 STAR’ resorts in the alphabetical order of the place from table RESORT.
2. To display the maximum and minimum rent for each type of resort from table RESORT.
3. To display the details of all resorts which are started after 31-DEC-05 from table RESORT.
4. Display the OWNER of all ‘5 STAR’ resorts from tables RESORT and OWNEDBY.

(b)Give output for the following SQL queries:

1. SELECT MIN(RENT) FROM RESORT Where PLACE = ‘KERALA’;
2. SELECT TYPE, START DATE FROM RESORT Where TYPE ‘2 STAR’ ORDERBY STARTDATE,
3. SELECT PLACE, OWNER FROM OWNEDBY Where PLACE LIKE “%A”;
4. SELECT RCODE, RENT FROM RESORT, OWNEDBY WHERE (RESORT PLACE= OWNEDBY. PLACE AND TYPE = ‘3 STAR’);

Answer:

(a)

1. SELECT RCODE, PLACE FROM RESORT mere TYPE = “5 STAR” ORDER BY PLACE;
2. SELECr MAX (RENT), MIN (RENT) FROM RESORT GROUP BY TYPE;
3. SELECT FROM RESORT WHERE OSWAAL (BSE Question Bank. COMPUTER SCIENCE – PYTHON, STARTDATE > ’31-DEC-05′;
4. SELECT OWNER FROM RESOR OWNEDBY B WHERE (A.TYPE START’ AND A.PLACE B.PLACE);

(b)

(i) 11000

(ii)

Type	Start date
2 STAR	12-APR-99
2 STAR	25-NOV-05
2 STAR	15-OCT-08

(iii)

PLACE	ONWER
GOA	RAJ RESORTS
KERALA	KTDC
ORISSA	OTDC

(iv) NULL

Question 16:

Consider the following tables STORE and SUPPLIERS and answer (a) and (b) parts of this question:

Table : STORE

ItemNo	Item	Scode	Qty	Rate	LastBuy
2005	Sharpener Classic	23	60	8	31-Jun-09
2003	Ball Pen 0.25	22	50	25	01-Feb-10
2002	Gel Pen Premium	21	150	12	24-Feb-10
2006	Gel Pen Classic	21	250	20	11-Mar-09
2001	Eraser Small	22	220	6	19-Jan-09
2004	Eraser Big	22	110	8	02-Dec-09
2009	Ball Pen 0.5	21	180	18	03-Nov-09

Table : SUPPLIERS

Scode	Sname
21	Premium Stationers
23	Soft Plastics
22	Tetra Supply

(a) Write SQL commands for the following statements:

1. To display details of all the items in the STORE table in ascending order of LastBuy.
2. To display ItemNo and Item name of those items from STORE table whose Rate is more than 15 Rupees.
3. To display the details of those items whose supplier code (Scode) is 22 or Quantity in Store (Qty) is more than 110 from the table Store.
4. To display minimum Rate of items for each supplier individually as per Scode from the table STORE.

(b) Give the output of the following SQL queries:

1. SELECT COUNT(DISTINCT Scode) FROM STORE;
2. SELECT Rate* Qty FROM STORE WHERE ItemNo=2004;
3. SELECT Item, Sname FROM STORE S, Suppliers P
4. WHERE S.Scode=PScode AND ItemNo=2006;
5. SELECT MAX(LastBuy) FROM STORE;

Answer:

(a)

1. SELECT * FROM STORE ORDER BY LastBuy ASC;
2. SELECT ItemNo, Item FROM STORE WHERE Rate > 15;
3. SELECT * FROM STORE WHERE (Scode = '22' OR Qty >'110');
4. SELECT Sname, MIN(Rate) FROM STORE, SUPPLIERS WHERE STORE. Scode = SUPPLIERS.Scode GROUP BY Sname;

(b)

1. 3
2. 880
3. **Item** **Sname**
   Gel Pen Classic Premium Stationers
4. 24-Feb-10

Question 17:

Consider the following tables STOCK and DEALERS and answer (a) and (b) parts of this question:

Table : STOCK

ItemNo	Item	Dcode	Qty	UnitPrice	StockDate
5005	Ball Pen 0.5	102	100	16	31-Mar-10
5003	Ball Pen 0.25	102	150	20	01-Jan-10
5002	Gel Pen Premium	101	125	14	14-Feb-10
5006	Gel Pen Classic	101	200	22	01-Jan-09
5001	Eraser Small	102	210	5	19-Mar-09
5004	Eraser Big	102	60	10	12-Dec-09
5009	Sharpener Classic	103	160	8	23-Jan-09

Table : DEALERS

Dcode	Dname
101	Reliable Stationers
103	Classic Plastics
102	Clear Deals

(a)Write SQL commands for the following statements:

1. To display the details of all Items in the STOCK table in ascending order of StockDate.
2. To display ItemNo and Item name of those items from STOCK table whose UnitPrice is more than Rupees 10.
3. To display the details of those items whose dealer code (Dcode) is 102 or quantity in STOCK (Qty) is more than 100 from the table Stock.

4. To display maximum UnitPrice of items for each dealer individually as per Dcode from the table STOCK.

(b)Give the output of the following SQL queries:

1. SELECT COUNT(DISTINCT Dcode)
   FROM STOCK;
2. SELECT Qty* UnitPrice FROM STOCK WHERE ItemNo=5006;
3. SELECT Item, Dname FROM STOCK S, Dealers D WHERE S.Dcode=D.Dcode AND ItemNo = 5004;
4. SELECT MIN (StockDate) FROM STOCK;

Answer:

(a)

1. SELECT*FROM STOCK ORDER BY StockDate;
2. SELECT Item No, Item FROM STOCK WHERE UnitPrice >10;
3. SELECT *FROM DEALERS, STOCK
   WHERE (DEALERS.Dcode=”102″OR STOCK.Qty >100 and DEALERS. DCODE = STOCK.DCODE);
4. SELECT MAX (Unitprice) FROM DEALERS, STOCK ORDER BY STOCK. Dcode WHERE DEALERS.Dcode = STOCK.Dcode;

(b)

1. 3
2. 4400
3. **Item** **Dname**
   Eraser Big Clear Deals
4. 01-Jan-09