19. Explain any four data types of DBMS. **(4)**

20. (a) Structure of a table "Orders" is given below. Suggest suitable data type of each column. **(4)**

Table : Orders

Order_ID	Order_date	Customer_ID	Amount
A_101	12/12/19	C3445	1200.00
A_202	11/09/19	C1245	3456.00
A_402	09/07/19	C2121	2312.00

(b) Consider the following table "Books".

BkID	BkName	Author	Qty	Price
B_101	Learning with Fun	Jacobins	5	355.00
B_103	How I Live Now	Meg Rosoff	4	400.00
B_104	I Capture the Castle	Dodie Smith	5	520.00
B_106	Mortal Engines	Philip Reeve	4	260.00
B_110	The Kite Rider	Geraldine McCaughrean	3	270.00

Write SQL queries to

(i) Display data of all books whose quantity is more than 3.

(ii) Display total amount of all books whose price is less than 500.

(Hint : Amount = Qty × Price)

19. Four data types of DBMS are as follows

(i) **Numeric Type** Numeric data types are used for describing numeric values for the field used in the table of a database. These data types can be used for storing information such as mobile number, roll number, statistical values etc.
e.g, Tinyint, SmallInt, Numeric etc.

(ii) **Binary Types** Binary data types are used for storing data in binary formats. Binary data types in a database can be used for storing photos, music files etc. e.g. Binary, VarBinary, LongVarBinary etc.

(iii) **Date Time** Date time data types are used for describing date and time values for the field used in the table of a database. These data types can be used for storing information such as date of birth, date of admission, date of product sale etc.

e.g. Date, Time, TimeStamp etc.

(iv) **Alphanumeric Type** Alphanumeric data type refers to data made up of letters and numbers. Usually symbols and spaces are also allowed. e.g. Long varchar, char, varchar etc.

20. (a)

Column's name	Data type
Order_ID	Varchar
Order_date	Date
Customer_ID	Varchar
Amount	Decimal

(b) (i)
```
SELECT * FROM Books WHERE Qty > 3;
```

(ii)
```
SELECT Qty*Price AS Amount FROM Books
WHERE Price < 500;
```

19. Consider the following table PRODUCT (4)

TABLE: PRODUCT

S_NO	P_Name	S_Name	Qty	Cost	City
S1	Biscuit	Priyagold	120	12.00	Delhi
S2	Bread	Britannia	200	25.00	Mumbai
S3	Chocolate	Cadbury	350	40.00	Mumbai
S4	Sauce	Kissan	400	45.00	Chennai

(i) How many fields and records are there in PRODUCT table?

(ii) Write SQL queries for the following:

(a) Display all Products whose Qty is between 100 and 400.

(b) Display S_Name, P_Name, Cost for all the Products whose Qty is less than 300.

(c) Display all the records alphabetically by S_Name.

Ans. (i) There are 6 fields and 4 records in the table PRODUCT.

(ii) (a) SELECT* FROM PRODUCT WHERE Qty BETWEEN 100 AND 400;

(b) SELECT S_Name, P_Name, Cost FROM PRODUCT WHERE Qty <300;

(c) SELECT * FROM PRODUCT ORDER BY S_Name;

other document.

19. Consider the following table: SHOPPE (4)

TABLE: SHOPPE

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

(i) How many fields and records are there in SHOPPE table?

(ii) Write SQL commands for the following :

(a) Display Id and SName of all the shops located in Nehru Place.

(b) Display the details alphabetically by SName.

(c) Display SName of shops whose Area is CP.

Ans. (i) There are 3 fields and 5 records in the table SHOPPE.

(ii) (a) SELECT Id, SName FROM SHOPPE WHERE Area= 'Nehru Place';

(b) SELECT * FROM SHOPPE ORDER BY SName;

(c) SELECT SName FROM SHOPPE WHERE Area='CP';

20. Your friend's father owns a restaurant. He manually enters the customers records in a register. You want to explain to him the

importance of creating a database in computer. Tell the advantages of using computerized database with the help of the following points: (4)

(a) Data redundancy

(b) Data inconsistency

(c) Confidentiality

(d) Sharing

Ans. (a) Data redundancy means duplication of data computerised database avoids duplication of data and ensures that there is only one instance of certain data.

(b) Data inconsistency helps, if a single database is used by multiple users then it ensures that the same data is present for all the users.

(c) The DBMS can ensure different views for the different users of the database. This keeps the confidentiality of the data safe.

(d) Different users can use the same database to access the data according to their needs. Hence, DBMS provides sharing of data and resources.