

INDIAN SCHOOL AL WADI AL KABIR

Class: X Department: Computer Science

Worksheet -1 **Topic: Database concepts and Note: Answer Key** Introduction to MySQL Fill in the blanks: 1) The Column of a table are called attributes. 2) RDBMS stands for _Relational database management system_____. 3) A __Database_____ is a collection of tables. 4) use command is used to open a Database. 5) A table is a matrix with data. 6) SQL stands for <u>Structured Query Language</u>. 7) <u>show tables</u> command is used to list all the tables in a database. 8) Show databases command is used to list the available Databases in MySQL. 9) ____drop table____command is used to remove a table from MySQL. 10) _____desc____command is used to display the structure of a Table. Match the following: - (a) The rows of a table. 1. DROP 2. ALTER - (b) To display the structure of a Table. 3. FLOAT - (c) To list the available databases in MySQL. 4. DESC - (d) To remove a Table. - (e) To modify the structure of a Table. 5. TUPLE - (f) Numeric Data Type. 6. SHOW **Answer type Question** 1. What is relation? A table in MySQL is called Relation. It is a matrix with data. A table in a database looks like a simple spreadsheet. It consist of rows and column. 2. What is the difference between a tuple and an attribute? A row in a table is called Tuple. A row is a group of related data or a record regarding someone or something, for example the data of a student. It gives the complete information

A Column in a table is called an attribute. A column in a table contains data of one and the same kind, for example the column postcode.

- 3. Write any two advantages of using database Study From Handout.(any four)
- 4. What is SQL?

SQL is a data access language used to access and manipulate data stored in nearly all the data bases available currently. SQLstands for structured query language. SQL works with database programs like MySQL, MSAccess, DB2, MS SQL Server, Oracle, Sybase, etc.

5. Define: Database and DBMS

A database is a collection of <u>information</u> that is organized so that it can easily be accessed, managed, and updated.

A DBMS (Data Base Management System) refers to a software that is responsible for storing, maintaining and utilizing databases.

6. Define a row and column in a table Same as Question2

7. What are the different categories of SQL Commands?

Different categories of SQL Commands are

1. Data Definition Language(DDL)

Example: CREATE, ALTER, DROP etc.

2. Data Manipulation Language (DML)

Ex. SELECT..., INSERT..., DELETE..., UPDATE.... etc

3. Transaction Control Language (TCL)

Ex. COMMIT, ROLLBACK, SAVEPOINT etc.

4. Data Control Language (DCL)

Ex. GRANT, REVOKE etc.

8. List out the Numeric Data and character Data Types in MySql.

The different Numeric Data type are

INTEGER or INT

SMALLINT

 $FLOAT\ (M,D)$ or DECIMAL(M,D) or NUMERIC(M,D)

The Different Character Data Type are:

CHAR(Size)

VARCHAR(Size)

- 9. What is the difference between delete and drop command DELETE is DML command while DROP is a DDL command. Delete is used to delete rows from a table while DROP is used to remove the entire table from the database.
- 10. Sahil created a table in MySQL .later on he found that there should have been another column in the table. Which command should he use to add another column to the table. Alter table Command

SECTION D

1. List all possible attribute for a student entity .create a table named student based on it. The few student entities are grno,rollno,name,class etc create table student (grno integer(5),rollno integer(3),class char(12));

2. Create the table employee with following fields.

Field Name	Data type	Size
Empid	Integer	3
EmpName	Char	20
EmpDesg	Char	15

Create table employee

(Empid integer(3),EmpName char(20),EmpDesg char(15));

a) Write the SQL Query to Add a new Field EmpSalary with datatype decimal and size (7,2)

Alter table employee Add Empsalary decimal(7,2);

- b) Write the SQL Query to Display the Structure of the table. Desc employee;
- c) Write the SQL query to display all tables present in that database. Show tables:

- d) Write the SQL query to Drop the Table employee Drop table employee;
- 3. Create the table Hospital with following field.

Field Name	Data type	Size
Phno	Number	8
Name	Char	10
Age	Int	2
Department	Char	15
Charges	Decimal	7,2
Sex	Char	1

Create table hospital

(Phno number(8),Name char(10),Age int(2),Department char(15),charges Decimal(7,2),Sex char(1));

- a) Write the SQL query to Describe the structure of table.

 Desc hospital
- b) Write the SQL query to change the column "Name" as char(20)

Alter table Hospital Change column'name' 'name' char(20);

c) Write the SQL query to Add a column Dateofadm with data type date.

Alter table hospital Add dateofadm date;

d) Write the SQL query to Drop the column Department.

Alter table hospital Drop column department;