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Answer to the question no 2(a):

Data definition language (DDL) refers to the set of SQL commands that can create and manipulate the structures of a database. Common DDL statements include:

- CREATE (generates a new table)
- ALTER (alters table)
- DROP (removes a table from the database)

Schemas of (Q1. a) are:

Students (Name, id, CGPA, Course-code)

Teachers (Name, short-code, id, department)

Courses (<u>Course-code</u>, title, id, student's department)

1) CREATE

The CREATE statement is used to create a table.

Create table students (name varchar(20), id int(10) PRIMARY KEY, CGPA float(4.0), course_code varchar(10) FOREIGN KEY REFERENCES COURSE(course_code));

Create teachers (name varchar(20), short_code varchar(10) PRIMARY KEY, id int(10) FOREIGN KEY REFERENCES students(id), department varchar(10));

Create table courses (course_code varchar(10) PRIMARY KEY, title varchar(20), id int(10) FOREIGN KEY REFERENCES students(id));

2) ALTER

The ALTER TABLE statement is used to add, delete, or modify columns in an existing table.

Add Column: To add a new column.

Now if we want to add a new column phn_number . Then it will be like this:

Alter Table students ADD phn number int(11);

Alter Table teachers ADD phn_number int(11);

Alter Table courses ADD phn_number int(11);

Drop Column: To delete a column in a table.

Now if we want to delete a column phn_number. Then it will be blike this:

Alter Table students DROP column phn_number;

Alter Table teachers DROP column phn_number;

Alter Table courses DROP column phn_number;

3) DROP

The DROP statement is used to drop/delete a table.

Drop table students;

Drop table teachers;

Drop table courses;