**KIET GROUP OF INSTITUTIONS**

**Department Of Computer Applications**

**Database Management Systems (RCA 401)**

**Assignment- 2**

**Section – A**

**Q1. Objective questions:**

1. Differentiate between char and varchar.
2. Give the syntax of Select command with all possible clauses.
3. Give the concept of data independence.
4. Briefly differentiate among SQL, SQL+ and SQL Server.
5. How a need of data models can be defined? Justify.
6. Give the purpose of recursive relationship.

**Section – B**

**Attempt All the questions**

1. Define the terms relation, cardinality and relation degree with an example.
2. With syntax and examples, make a differentiation among drop, delete and truncate commands.
3. Based on abstraction levels, explain the architecture of DBMS.
4. Make a differentiation between DBMS and file system with different advantages and disadvantages of each other.
5. What are the types of attributes? With the proper example and notation, give the use of each type.
6. Give the SQL queries to design following related relations (Underlined are the Primary key attributes, in Assigned\_to relation both fields are the foreign key attributes separately associated with Project and Employee relation respectively) -

Project(proj\_no, proj\_name, chief\_architect) Assigned\_to(, *emp\_no*)

Employee(emp\_no, name)

1. List all the database users. Explain sophisticated users and specialized users.
2. A weak entity set can always be made into a strong entity set by adding to its attributes of its identifying entity set. Outline what sort of redundancy will result if do so?

**Section – C**

**Attempt All the questions**

1. Why the database system was introduced? How the Evolution of Database Systems was raised, give justification? Give the name of different DBMS software for different purposes.
2. Analyze the different needs to design an ERP for our institute. Based on the analysis give a proper ERD.
3. What are the different integrity constraints? Give the syntax and example how different constraints can be applied and deleted.