United College of Engineering and Research, Prayagraj

Database Management System (KCS-501) <u>Assignment-1</u>

| S. No. | Question | Type of CO | Bloom's Level |
|--------|---|---------------|------------------|
| 1 | Define DBMS? List Database system Applications. | CO1 | L1 |
| 2 | Explain Database Administrator's responsibilities. | CO1 | L2 |
| 3 | Compare Generalization, Specialization and aggregation with suitable examples. | CO1 | L2 |
| 4 | Define Key. Explain various types of keys. | CO1 | L2 |
| 5 | Differentiate between a File processing system and a DBMS. | CO1 | L4 |
| 6 | Explain the differences between Logical and Physical data independence | CO1 | L2 |
| 7 | A company database needs to store information about employees (identified by ssn, with salary and phone as attributes), departments (identified by dno, with dname and budget as attributes), and children of employees (with name and age as attributes). Employees work in departments; each department is managed by an employee; a child must be identified uniquely by name when the parent (who is an employee; assume that only one parent works for the company) is known. We are not interested in information about a child once the parent leaves the company. Design an ER diagram that captures this information | CO1 | L6 |
| 8 | Although you always wanted to be an artist, you ended up being an expert on databases because you love to cook data and you somehow confused database with data baste. Your old love is still there, however, so you set up a database company, ArtBase, that builds a product for art galleries. The core of this product is a database with a schema that captures all the information that galleries need to maintain. Galleries keep information about artists, their | CO1 | L6 |

| | names (which are unique), birthplaces, age, and style of art. For each piece of | | |
|----|---|-----|----|
| | artwork, the artist, the year it was made, its unique title, its type of art (e.g., | | |
| | painting, lithograph, sculpture, photograph), and its price must be stored. | | |
| | Pieces of artwork are also classified into groups of various kinds, for example, | | |
| | portraits, still lifes, works by Picasso, or works of the 19th century; a given | | |
| | piece may belong to more than one group. Each group is identified by a name | | |
| | (like those just given) that describes the group. Finally, galleries keep | | |
| | information about customers. For each customer, galleries keep that person's | | |
| | unique name, address, total amount of dollars spent in the gallery (very | | |
| | important!), and the artists and groups of art that the customer tends to like. | | |
| | Design the ER diagram for the database | | |
| | | | |
| 9 | Discuss three level of abstractions or schemas architecture of DBMS. | CO1 | L2 |
| 10 | Explain the difference between a weak and a strong entity set with example. | CO1 | L2 |



