**EXPERIMENT 1**

**ER DIAGRAM OF COLLEGE DATABASE**

**AIM:** Draw an ER diagram of a college database.

**Database:** A database is an organized collection of structured information, or data, typically stored electronically in a computer system.

**Entity:** An entity is an object or component of data. An entity is represented as rectangle in an ER diagram.

**Attribute:** An attribute describes the property of an entity. An attribute is represented as Oval in an ER diagram. There are four types of attributes:

**1.Key attribute:** A key attribute can uniquely identify an entity from an entity set. **2. Composite attribute:** An attribute that is a combination of other attributes is known as composite attribute.  
**3. Multivalued attribute:** An attribute that can hold multiple values is known as multivalued attribute.  
**4. Derived attribute:** A derived attribute is one whose value is dynamic and derived from another attribute.

**Relationship:** A relationship is represented by diamond shape in ER diagram, it shows the relationship among entities.

**Entity Set:** EntitySet is a collection or a group of 'entities' sharing exactly the 'same set of attributes. All entities can be distinctly identified in an entityset.

**Degree:** The number of an entity type that is connected to a relationship is the degree of that relationship.

**Cardinality:** cardinality refers to the uniqueness of data values contained in a particular column (attribute) of a database table.



