

National Institute of Technology Calicut
Department of Computer Science and Engineering
CS3095D DBMS Lab

Mid Term Test-1

Time : 60 minutes

Date: 14.09.2021

Marks : 08

Set	:	B
Topic	:	ER diagram and ER mapping

Questions

PART-A

(0.5 x 2 = 1 mark)

1. --- is used to represent the relationships of entity sets stored in a database.
2. A person, object, event or concept are examples of --- in ERD.

PART-B

(1 x 4 = 4 marks)

1. What is a super key? Explain with suitable example.
2. Among patient_id, age, name, doctor_name; which one can be a primary key. Justify your choice.
3. What is a ternary relationship? How is it represented in ERD?
4. Assume there exists a relationship ABLE_TO_USE between 'personnel' entity and 'machine' entity. What type of relationship is ABLE_TO_USE? Justify your answer.

PART-C

(1.5 x 2 = 3 marks)

1. Let Employee and Department be two entities in an E/R diagram with simple single-valued attributes. Works_in and Manages are two relationships between Employee and Department, where Manages is one-to-many and Works_in is many-to-many. Works_in and Manages do not have any attributes of their own.
What is the minimum number of tables required to represent this situation in the relational model?

2. Indicate the appropriate cardinality in this relationship. Justify your answer.



***** All the best *****