

15 Lecture - CS403

Important Mcqs

1. **What is a relation in mathematics?**

- a) A set of ordered pairs
- b) A table with rows and columns
- c) A mathematical function
- d) A data type

Answer: a) A set of ordered pairs

What is a relation in a database?

- a) A set of ordered pairs
- b) A table with rows and columns
- c) A mathematical function
- d) A data type

Answer: b) A table with rows and columns

What is the purpose of domain and range in a relation?

- a) To specify the types of data that can be stored in a table
- b) To specify the primary key of a table
- c) To specify the columns of a table
- d) To specify the input and output values of a function

Answer: d) To specify the input and output values of a function

What is the cardinality of a relation?

- a) The number of rows in a table
- b) The number of columns in a table
- c) The number of ordered pairs in a relation
- d) The number of tables in a database

Answer: c) The number of ordered pairs in a relation

Which of the following mathematical concepts is used in database design?

- a) Set theory
- b) Geometry
- c) Trigonometry
- d) Calculus

Answer: a) Set theory

Which of the following is not a relational database management system?

- a) MySQL
- b) Oracle
- c) MongoDB
- d) PostgreSQL

Answer: c) MongoDB

What is the purpose of SQL?

- a) To design web pages

- b) To program software applications
- c) To manipulate data in a database
- d) To create computer graphics

Answer: c) To manipulate data in a database

What is a primary key in a table?

- a) A field that references the primary key of another table
- b) A unique identifier for a record in a table
- c) A virtual table in a database
- d) A field that is used to store text data

Answer: b) A unique identifier for a record in a table

What is the purpose of a foreign key in a table?

- a) To establish a relationship between two tables
- b) To restrict access to sensitive data
- c) To perform calculations on data in a table
- d) To store images or other media files

Answer: a) To establish a relationship between two tables

Which of the following is an advantage of using a database?

- a) Data redundancy
- b) Data inconsistency
- c) Improved data security
- d) Limited scalability

Answer: c) Improved data security