1. What does RDBMS stand for?

Real-time Database Management System

Remote Database Management System

Random Database Management System

Relational Database Management System

1. What is normalization in database design?

The process of encrypting data

The process of backing up data

The process of creating indexes

The process of organizing data to reduce redundancy

1. Which SQL command is used to create a relationship between two tables?

UPDATE TABLE

INSERT INTO

CREATE TABLE

ALTER TABLE

1. Which of the following is a type of constraint in a relational database?

FOREIGN KEY

PRIMARY KEY

UNIQUE

All the above

1. What is a one-to-many relationship in a database?

Many records in a table are related to one record in another table

One record in a table is related to one record in another table

Many records in a table are related to many records in another table

One record in a table is related to many records in another table

1. In Agile Scrum, what is the purpose of a retrospective meeting?

To reflect on the past sprint and improve processes

To demonstrate the completed work to stakeholders

To plan the next sprint

To review the product backlog

1. In a relational database, what is a primary key?

A field that uniquely identifies each record in a table

A field used to store binary data

A field that can have duplicate values

A field used to link two tables together

1. Which of the following is a type of database management system?

All of the above

Relational

Hierarchical

Network

1. What is the purpose of the SQL JOIN clause?

To sort records in ascending or descending order

To create a new table

To filter records based on a condition

To combine rows from two or more tables based on a related column

1. Which of the following is a valid SQL data type?

All of the above

VARCHAR

DATE

INTEGER

1. In Waterfall methodology, which phase comes after the design phase?

Requirements gathering

Testing

Maintenance

Implementation

1. In Agile Scrum, who is responsible for maximizing the value of the product?

Project Manager

Development Team

Product Owner

Scrum Master

1. Which SQL command is used to add a foreign key constraint to a table?

INSERT INTO

ALTER TABLE

CREATE TABLE

UPDATE TABLE

1. In Agile Scrum, what is the role of the development team?

To define the product vision

To manage the project timeline

To remove impediments

To develop and deliver the product increment

1. Which of the following is a key principle of Agile Scrum?

Fixed scope

Iterative development

Sequential phases

Detailed upfront planning

1. Which of the following best describes the Waterfall model?

Iterative and incremental

Collaborative and cross-functional

Sequential and linear

Flexible and adaptive

1. What is normalization in database design?

The process of organizing data to reduce redundancy

The process of creating indexes

The process of backing up data

The process of encrypting data

1. How would you model the relationship between doctors, patients, and appointments in this scenario?

One-to-Many relationship between doctors and patients, and many-to-many relationship between patients and appointments

Many-to-Many relationship between doctors and patients, and many-to-many relationship between patients and appointments

One-to-One relationship between doctors and patients, and one-to-many relationship between patients and appointments

Many-to-Many relationship between doctors and patients, and one-to-many relationship between patients and appointments.

1. What is a one-to-one relationship in a database?

Many records in a table are related to one record in another table

Many records in a table are related to many records in another table

One record in a table is related to one record in another table

One record in a table is related to many records in another table

1. In Agile Scrum, what is a sprint?

A meeting to discuss project progress

A long-term project plan

A phase in the Waterfall model

A short, time-boxed period for development

1. Which of the following is a characteristic of a relational database?

Data is stored in a hierarchical structure

Data is stored in a flat file

Data is stored in a key-value pair

Data is stored in tables

1. What is the purpose of an index in a database?

To store large text data

To improve the speed of data retrieval

To link two tables together

To ensure data integrity

1. In Agile Scrum, what is a product backlog?

A list of tasks for the current sprint

A list of completed tasks

A list of all desired work on the project

A list of impediments

1. Which role in Agile Scrum is responsible for removing impediments faced by the team?

Product Owner

Scrum Master

Development Team

Stakeholder

1. Which SQL statement is used to retrieve data from a database?

INSERT

UPDATE

SELECT

DELETE

1. In a university database, each student can enroll in multiple courses, and each course can have multiple students. How would you model this relationship?

Many-to-Many.

Self-referencing

One-to-One

One-to-Many

1. Which of the following is a characteristic of the Waterfall model?

Fixed phases

Iterative development

Cross-functional teams

Continuous feedback

1. Which of the following is a NoSQL database?

Oracle

MongoDB

MySQL

PostgreSQL

1. Which of the following is a type of join in SQL?

OUTER JOIN

All of the above

INNER JOIN

LEFT JOIN

1. What is the main advantage of using the Waterfall model?

Clear documentation and structure

Rapid development cycles

Flexibility to changes

Continuous feedback

1. What is a primary key in a database?

A field used to store large text

A field that links two tables

A field that can have duplicate values

A unique identifier for each record

1. What is a foreign key in a relational database?

A key that links two tables together

A key that is used to encrypt data

A key that is used to sort data

A key that uniquely identifies a record in a table

1. In the Waterfall model, when is testing performed?

After the implementation phase

During the requirements phase

Before the design phase

Throughout the project

1. What is the main focus of Agile Scrum?

Detailed documentation

Following a strict plan

Customer collaboration

Long-term contracts

1. What is the purpose of the SQL WHERE clause?

To filter records based on a specified condition

To sort records in ascending or descending order

To group records that have the same values

To join two tables together

1. Which of the following is a role in Agile Scrum?

Scrum Master

Business Analyst

Project Manager

Quality Assurance

1. Which of the following ceremonies is not part of Agile Scrum?

Sprint Planning

Sprint Review

Daily Stand-up

Project kick-off

1. What is a database schema?

A command to retrieve data

A blueprint or architecture of how data is organized in a database

A type of database management system

A collection of tables

1. What is the purpose of the GROUP BY clause in SQL?

To group records that have the same values in specified columns

To join two tables together

To sort records in ascending or descending order

To filter records based on a condition

1. Which SQL command is used to create a new table in a database?

SELECT TABLE

INSERT INTO

UPDATE TABLE

CREATE TABLE

1. What does SQL stand for?

Simple Query Language

Sequential Query Language

Standard Query Language

Structured Query Language

1. What is the purpose of a composite key in a database?

To store large text data

To link two tables together

To sort data in a table

To uniquely identify a record using multiple fields.

1. What is a foreign key used for in table relationships?

To link two tables together

To sort data in a table

To store large text data

To uniquely identify each record in a table

1. Which of the following is a characteristic of a relational database?

Data is stored in tables

Data is stored in a flat file

Data is stored in a key-value pair

Data is stored in a hierarchical structure

1. What is referential integrity in a database?

Ensuring that all tables are normalized

Ensuring that all data is backed up

Ensuring that all data is encrypted

Ensuring that all foreign key values have corresponding primary key values