**Section A: Multiple Choice Questions (MCQs)**

1. Which of the following is a primary goal of data modelling in MySQL? a) Increase application speed b) Organize data logically c) Improve UI performance d) Minimize programming errors
2. Which type of relationship exists between a customer and orders in an e-commerce database? a) One-to-One b) One-to-Many c) Many-to-Many d) Many-to-One
3. What is normalization in database design? a) Process of duplicating data b) Process of optimizing indexing c) Process of organizing data to reduce redundancy d) Process of increasing data retrieval speed
4. Which normal form removes partial dependencies in a relational database? a) First Normal Form (1NF) b) Second Normal Form (2NF) c) Third Normal Form (3NF) d) Boyce-Codd Normal Form (BCNF)
5. What does a foreign key ensure in a relational database? a) Unique values in a column b) Referential integrity between tables c) Faster indexing d) None of the above
6. Which of the following is a characteristic of a primary key? a) It can have NULL values b) It must be unique c) It must be an integer d) It cannot be indexed
7. Which MySQL constraint ensures that a column does not accept duplicate values? a) FOREIGN KEY b) UNIQUE c) CHECK d) DEFAULT
8. Which of the following is not a valid MySQL data type? a) VARCHAR b) TEXT c) INTEGER d) CHARSET
9. What does the term "denormalization" mean in MySQL? a) Adding redundant data to improve performance b) Removing indexes to speed up queries c) Splitting tables into smaller tables d) Applying constraints to ensure integrity
10. Which of the following best defines a surrogate key? a) A natural key b) A foreign key c) A system-generated unique key d) A primary key based on business rules

**Section B: True/False Questions**

1. A composite key is made up of two or more columns.
2. MySQL does not support ENUM as a data type.
3. A star schema is commonly used in data warehousing.
4. Indexing always improves query performance.
5. An entity-relationship diagram (ERD) represents the logical structure of a database.

**Section C: Fill in the Blanks**

1. The process of ensuring that database changes maintain consistency is called \_\_\_\_\_\_\_\_\_\_\_.
2. The \_\_\_\_\_\_\_\_\_\_\_ key is used to uniquely identify a record in a table.
3. A \_\_\_\_\_\_\_\_\_\_\_ is a visual representation of entities and their relationships.
4. \_\_\_\_\_\_\_\_\_\_\_ constraint prevents NULL values in a column.
5. The \_\_\_\_\_\_\_\_\_\_\_ clause is used to retrieve unique values from a column in MySQL.