

## Section 1: Basics of Data Modeling (Q1–10)

1. **What is the purpose of data modeling?**
  - a) Design a website layout
  - b) Define data structures logically and physically
  - c) Write complex queries
  - d) Compress data

✓ Answer: b
2. **Which model represents high-level business concepts?**
  - a) Logical Model
  - b) Conceptual Model
  - c) Physical Model
  - d) Data Warehouse

✓ Answer: b
3. **Which of the following is NOT a type of data model?**
  - a) Logical
  - b) Physical
  - c) Behavioral
  - d) Conceptual

✓ Answer: c
4. **In a relational model, a "table" is also called a:**
  - a) Tuple
  - b) Entity
  - c) Attribute
  - d) Relation

✓ Answer: d
5. **What is a surrogate key?**
  - a) A primary key from another table
  - b) A natural key
  - c) A system-generated unique identifier
  - d) A composite key

✓ Answer: c
6. **Which of the following is true about primary keys?**
  - a) Can contain nulls
  - b) Must be unique
  - c) Can have duplicate values
  - d) Not required in a table

✓ Answer: b
7. **Which type of data model is used for database implementation?**
  - a) Logical
  - b) Conceptual
  - c) Physical
  - d) Unified Modeling

✓ Answer: c
8. **An attribute that uniquely identifies a record is called:**
  - a) Foreign key
  - b) Candidate key
  - c) Composite key

d) Partial key

✓ **Answer:** b

9. **Which data model defines tables, columns, data types, and indexes?**

a) Conceptual

b) Logical

c) Physical

d) Analytical

✓ **Answer:** c

10. **Which modeling approach focuses on how data is stored in the database?**

a) Logical

b) Conceptual

c) Physical

d) Semantic

✓ **Answer:** c