

## FULL EXAM: NoSQL, MongoDB & General Concepts

---

### SECTION A — MULTIPLE CHOICE (MCQs)

---

1. Which of the following best describes NoSQL databases?

- A. Strictly relational
- B. Schema-less and flexible
- C. Limited to text data only
- D. Only used for small applications

Correct answer: B

2. Which NoSQL type is MongoDB?

- A. Key–value
- B. Document
- C. Graph
- D. Column-family

Correct answer: B

3. Which data type represents nested documents in MongoDB?

- A. Array
- B. String
- C. Embedded Document
- D. Regular Expression

Correct answer: C

4. ObjectId in MongoDB is used for:

- A. Sorting data
- B. Creating schemas
- C. Unique identification of documents

D. Storing arrays

Correct answer: C

5. Which of the following is a high-precision data type in MongoDB?

- A. Double
- B. Decimal128
- C. Integer
- D. Boolean

Correct answer: B

6. Which widget allows UI to update in Flutter?

- A. Stateless
- B. Stateful
- C. Column
- D. Row

Correct answer: B

7. What does the Expanded widget do in Flutter?

- A. Creates margins
- B. Divides space flexibly
- C. Adds animation
- D. Draws UI shapes

Correct answer: B

8. Which NoSQL type is best for highly connected data?

- A. Graph
- B. Column
- C. Document
- D. Key-value

Correct answer: A

9. In a blockchain transaction, the private key is used to:

- A. Mine blocks
- B. Sign the transaction
- C. Store crypto
- D. Broadcast the transaction

Correct answer: B

10. Which MongoDB data type stores true/false?

- A. String
- B. Boolean
- C. Binary
- D. Null

Correct answer: B

---

## SECTION B — MATCHING

---

Match each item to its correct description:

- 1. ObjectId
  - A. Stores nested documents
  - B. Unique document identifier
- 2. Array
  - C. Stores multiple values in a list
  - D. Stores raw binary content
- 3. Binary Data
  - E. Tracks order of operations
- 4. Embedded Document
  - A. Stores nested documents
  - B. Unique document identifier
- 5. Timestamp
  - C. Stores multiple values in a list
  - D. Stores raw binary content

Correct Answers:

1 ■ B

2 ■ C

3 ■ D

4 ■ A

5 ■ E

---

## SECTION C — OPEN■ENDED QUESTIONS

---

1. Explain the difference between Stateful and Stateless widgets in Flutter.

Answer:

Stateless widgets do not change during runtime, while Stateful widgets can rebuild when their internal state changes.

2. What is widget composition in Flutter?

Answer:

It is combining small reusable widgets to build complex UIs.

3. Explain the purpose of a balance sheet.

Answer:

A balance sheet shows the financial position of a business using assets, liabilities, and equity.

4. Describe how a blockchain transaction works.

Answer:

A transaction is created, signed with a private key, broadcast to the network, validated by nodes, added to a block, and stored on the chain.

5. List any five MongoDB data types with examples.

Answer:

`String`, `Integer`, `Boolean`, `Array`, `ObjectId` — examples included in the exam content.

---

END OF DOCUMENT