

Flutter

1. Which platforms does Flutter support for app deployment?

- ☐ (A) Android
- ☐ (B) iOS
- ☐ (C) Web
- ☐ (D) All of the above

2. What is the core building block of Flutter's architecture?

- ☐ (A) Widgets
- ☐ (B) Modules
- ☐ (C) Classes
- ☐ (D) Components

3. What is Dart primarily used for in Flutter?

- ☐ (A) User Interface design
- ☐ (B) Business Logic
- ☐ (C) Networking
- ☐ (D) Database operations

4. Which of the following are Dart data types?

- ☐ (A) int
- ☐ (B) double
- ☐ (C) String
- ☐ (D) bool
- ☐ (E) List

5. Which IDE is commonly used for Flutter development?

- ☐ (A) Visual Studio Code
- ☐ (B) IntelliJ IDEA
- ☐ (C) Android Studio
- ☐ (D) All of the answers
- ☐ (E) Eclipse

6. What is the purpose of async/await functions in Dart?

- ☐ (A) To handle asynchronous operations
- ☐ (B) To define classes
- ☐ (C) To create widgets
- ☐ (D) To manage databases

7. What is the primary purpose of the lib folder in a Flutter project?

- ☐ (A) Storing images
- ☐ (B) Managing dependencies
- ☐ (C) Organizing source code files
- ☐ (D) Defining routes

8. What is the purpose of the Widget Tree and Element Tree in Flutter?

- ☐ (A) Managing app state
- ☐ (B) Building the user interface
- ☐ (C) Handling exceptions
- ☐ (D) Defining routes

9. How do you handle asynchronous programming in Dart?

- ☐ (A) Using Future and FutureBuilder
- ☐ (B) Using Streams and StreamBuilder
- ☐ (C) Using async/await functions
- ☐ (D) All of the answers
- ☐ (E) None of the answers

10. What is a route in Flutter?

- ☐ (A) A widget
- ☐ (B) A screen or page
- ☐ (C) A function
- ☐ (D) An exception

11. How do you pass data between screens in Flutter?

- ☐ (A) Using global variables
- ☐ (B) Using constructor parameters
- ☐ (C) Using Navigator arguments
- ☐ (D) No of those answers

12. What is Shared Preferences used for in Flutter?

- ☐ (A) Managing app state
- ☐ (B) Storing small pieces of data persistently
- ☐ (C) Handling exceptions
- ☐ (D) Making HTTP requests

13. Which of the following is a local database solution in Flutter?

- ☐ (A) SQLite
- ☐ (B) Firebase
- ☐ (C) MongoDB
- ☐ (D) Cassandra

14. How does Dart handle null safety?

- ☐ (A) Using the ? operator
- ☐ (B) Using the ! operator
- ☐ (C) Using the ?? operator

15. What keyword is used to handle exceptions in Dart?

- ☐ (A) try
- ☐ (B) catch
- ☐ (C) throw
- ☐ (D) =>

16. How do you declare a single-line function in Dart?

- ☐ (A) Using braces {} for the function body
- ☐ (B) Using the => arrow
- ☐ (C) Using the function keyword
- ☐ (D) All of the above

17. What is the purpose of the async keyword in Dart functions?

- ☐ (A) To declare a function as asynchronous
- ☐ (B) To define a function as a stream
- ☐ (C) To handle exceptions
- ☐ (D) All of the above

18. How is a Future different from a regular value in Dart?

- ☐ (A) A Future represents a value that may not be available yet
- ☐ (B) A Future cannot be awaited
- ☐ (C) A Future is a primitive data type
- ☐ (D) A Future cannot be used in control flow

19. Choose the Dart code that declares a variable named `age` with the type integer.

- ☐ (A) `int age = 25;`
- ☐ (B) `age := 25;`
- ☐ (C) `var age = "25";`
- ☐ (D) `age = 25;`

20. Choose the Dart code that demonstrates proper null safety for a variable named `name`.

- ☐ (A) `String name = null;`
- ☐ (B) `String? name = "John";`
- ☐ (C) `String name = "John";`
- ☐ (D) `String? name = null;`

21. Identify the correct Dart code for handling an exception when dividing two numbers.

- ☐ (A)

```
try {  
    var result = num1 / num2;  
} catch (e) {  
    print("Error: $e");  
}
```
- ☐ (B)

```
var result = num1 / num2;  
if (result.isNaN) {  
    print("Error: Division by zero");  
}
```
- ☐ (C)

```
try {  
    var result = num1 ~/ num2;  
} on IntegerDivisionByZeroException {  
    print("Error: Division by zero");  
}
```
- ☐ (D)

```
var result = num1 / num2;  
throw Exception("Division by zero");
```

22. Choose the Dart code that defines a function named `sum` taking two parameters and returning their sum.

- ☐ (A)

```
int sum(int a, int b) {  
    return a * b;  
}
```
- ☐ (B)

```
int sum(int a, int b) => a + b;
```
- ☐ (C)

```
int sum(a, b) {  
    return a + b;  
}
```
- ☐ (D)

```
int sum(int a, int b) {  
    return a - b;  
}
```

23. Choose the Dart code that correctly defines an anonymous function assigned to the variable `square` that calculates the square of a given number.

- ☐ (A)

```
var square = (int x) => x * x;
```
- ☐ (B)

```
var square = (int x) {  
    return x * x;  
};
```
- ☐ (C)

```
Function square = (int x) => x * x;
```
- ☐ (D)

```
Function square = (int x) {  
    return x * x;  
};
```

24. Identify the Dart code that demonstrates a higher-order function.

- (A)**

```
int operate(int a, int b, Function operation) {  
    return operation(a, b);  
}
```
- (B)**

```
int operate(int a, int b, Function operation) {  
    return a + b;  
}
```
- (C)**

```
Function operate(int a, int b, Function operation) {  
    return operation(a, b);  
}
```
- (D)**

```
void operate(int a, int b, Function operation) {  
    operation(a, b);  
}
```

25. Choose the Dart code that correctly demonstrates the use of `async/await` for fetching data from an API.

- (A)**

```
Future<String> fetchData() {  
    return http.get("api.example.com/data");  
}  
  
// Usage:  
var data = await fetchData();
```
- (B)**

```
Future<String> fetchData() async {  
    return http.get("api.example.com/data");  
}  
  
// Usage:  
var data = fetchData();
```
- (C)**

```
Future<String> fetchData() {  
    return await http.get("api.example.com/data");  
}  
  
// Usage:  
var data = fetchData();
```
- (D)**

```
Future<String> fetchData() async {  
    return await http.get("api.example.com/data");  
}  
  
// Usage:  
var data = await fetchData();
```