

# Flutter FAQ

1. "What is Flutter?" (Summer 2024, Summer 2023, Winter 2022, Winter 2023)
2. Create a Flutter program to display text centered:  
"Create a Flutter program to display a message 'All the Best for Your Exam' as text in the center of the screen" (Summer 2024)  
"Write a Flutter program to display 'Welcome to Flutter' at the center of the screen" (Summer 2023)  
"Create a Flutter program to display a heading titled 'My First Flutter app' and the text 'Hello Flutter' centered on the screen" (Winter 2022)
3. "Explain the difference between Stateless and Stateful Widgets in Flutter" (Summer 2024, Summer 2023, Winter 2022, Winter 2023)
4. "List the operators in Dart. Explain any two types of operators in Dart with examples" (Summer 2024, Summer 2023, Winter 2022)
5. "Explain InkWell and InkResponse gestures in Flutter with examples" (Summer 2024, Winter 2022)  
"Explain InkWell and GestureDetector in Flutter with examples" (Summer 2023, Winter 2023)
6. "Define Firebase and Cloud Firestore. Differentiate between SQL Server Database and Cloud Firestore" (Summer 2024, Winter 2022)  
"What is Firebase? Explain Firebase Authentication implementation" (Summer 2023)
7. "Explain GridView in Flutter" (Summer 2024, Winter 2023, Winter 2022)
8. "Explain Animation Controller with examples" (Summer 2024, Winter 2022)  
"Describe how you can implement animations in Flutter using AnimatedBuilder" (Summer 2023)
9. "Describe: Scaffold, AppBar, Container, Buttons" (Summer 2024)  
"Explain the basic/common widgets used in Flutter" (Winter 2022, Winter 2023)
10. "Explain form widgets in Flutter" (Summer 2024, Winter 2022)
11. "Write a detailed note on BottomNavigationBar" (Summer 2024)  
"Explain the purpose of the BottomNavigationBar" (Winter 2023)
12. "Explain Custom Scroll View using Slivers" (Summer 2024, Winter 2023)
13. "List the data types in Dart. Explain any two data types with examples" (Summer 2023, Winter 2022)

Here are additional important questions that could potentially be asked, based on the pattern and syllabus coverage:

1. "Explain the Flutter widget lifecycle methods. When are they called?"  
(Not directly asked but important concept)
2. "What is the purpose of Flutter's BuildContext? Explain with examples"  
(Core Flutter concept often referenced)
3. "Compare StatefulWidget's setState() vs Provider state management. When to use which?"  
(State management is important - Provider asked in Summer 2023)
4. "Explain Futures, async, await and Stream in Dart with examples"  
(Async programming covered in Winter 2022, fundamental concept)
5. "What are Keys in Flutter? Explain different types of Keys and their use cases"  
(Important Widget concept not directly asked yet)
6. "Explain the use of MediaQuery in Flutter for responsive design. Give examples"  
(Responsive design is crucial, not directly tested yet)
7. "Describe Flutter's build modes (Debug, Profile, Release). When to use each?"  
(Important development concept)
8. "What are mixins in Dart? Explain their usage with Flutter examples"  
(Dart concept not covered in previous papers)
9. "Explain error handling in Flutter using try-catch blocks and Error widgets"  
(Important practical concept)
10. "Describe the purpose and implementation of Theme in Flutter applications"  
(Styling concept not directly tested)
11. "What are extension methods in Dart? Show their practical use in Flutter"  
(Advanced Dart feature)
12. "Explain the difference between named and positional parameters in Dart"  
(Dart fundamentals not directly tested)
13. "Describe the purpose and implementation of Flutter packages. How to add custom packages?"  
(Package management is crucial)
14. "What is the difference between Container and SizedBox? When to use which?"  
(Common widget comparison)
15. "Explain the concept of inherited widgets in Flutter with examples"  
(Advanced widget concept)