

Q.1 Explain the difference between Stateless and Stateful widgets with examples.

Ans=>**Stateless Widget**

- UI **doesn't change** once built.
- Used for **static screens**.

Stateful Widget

- UI **can change** during runtime (on click, input, etc.).
- Used for **dynamic screens**.

Q2. Describe the widget lifecycle and how state is managed in Stateful widgets.

Ans=>**createState()** → Widget created, state object made.

initState() → First time init, runs once.

build() → UI build on screen.

setState() → Called when data changes → rebuild UI.

dispose() → Cleanup (controllers, listeners).

Q.3. List and describe five common Flutter layout widgets (e.g., Container, Column, Row).

Ans =>**Container** → Box for styling (padding, margin, color, size).

Row → Arrange widgets **horizontally**.

Column → Arrange widgets **vertically**.

Stack → Place widgets **on top of each other**.

Expanded → Take **available space** inside Row/Column.