

Dr. Babasaheb Ambedkar Open University
Term End Examination January – 2026

Course	: MCA	Date	: 23/02/2026
Subject Code	: MCA-303	Time	: 03:00pm to 05:15pm
Subject Name	: Cross Platform Application Development	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Explain Flutter widgets in detail.
2. Discuss the need for state management and explain any one approach used to manage state in Flutter applications.
3. Explain navigation and routing in Flutter.
4. Explain how APIs are integrated in Flutter applications.
5. Discuss different methods of local data storage in Flutter.

Section B

Answer the following (Attempt any four) (20)

1. Describe the key features and advantages of Flutter for cross-platform development.
2. What makes Flutter a strong choice for UI development?
3. Explain StatelessWidget and StatefulWidget with suitable examples.
4. What are the challenges in deploying Flutter applications on multiple platforms?
5. Explain best practices for improving UI and rendering performance.
6. What are Flutter plugins? Why are they required?

Section C

Part – A (Multiple Choice Questions)

(10)

- 1 Cross-platform application development allows developers to:
A Write different code for each platform
B Use a single codebase for multiple platforms
C Develop only web applications
D Avoid UI design
- 2 Dart is primarily used in Flutter for:
A Database management
B UI rendering and application logic
C Network security
D Hardware control
- 3 Which command is used to check Flutter installation and setup?
A flutter doctor
B flutter install
C flutter check
D flutter setup
- 4 Everything in Flutter is a:
A Class
B Package
C Widget
D Method
- 5 Which widget is commonly used to arrange children vertically?
A Row
B ListView
C Stack
D Column
- 6 State management is required in Flutter to:
A Handle UI updates efficiently
B Reduce application size
C Improve hardware performance
D Manage files

- 7 Which method is used to navigate to a new screen?
A Navigator.push() B Navigator.start()
C Navigator.open() D Navigator.load()
- 8 API responses are usually parsed in Flutter using:
A XML B CSV
C JSON D HTML
- 9 Which Flutter plugin is used for simple key-value storage?
A Firebase B SQLite
C Hive D SharedPreferences
- 10 Flutter applications are compiled to:
A Bytecode only B Native machine code
C Java code D JavaScript only

Part – B (Do as Directed)

(10)

State whether the following statements are true or false

- 1 Cross-platform application development allows deployment on multiple platforms using a single codebase.
- 2 Dart supports both object-oriented and asynchronous programming.
- 3 Flutter desktop applications support only Windows platform.
- 4 Integration testing checks only the UI appearance of an application.
- 5 Custom widgets help improve code reusability and maintainability.
- 6 Frequent unnecessary widget rebuilds improve application performance.
- 7 Flutter supports deployment on mobile, web, and desktop platforms.
- 8 Firebase can only be used for Android applications.
- 9 SharedPreferences is used to store simple key-value pairs locally in Flutter.
- 10 API calls in Flutter are always synchronous by default.
