

Academic Year 2025-26

B. Tech. | Bsc. (Hons) Semester - V

Advance Flutter

Lab	Туре	Practical
1	A.	WAP to create a class Student with a method to display student details.
	A.	WAP implements the inheritance of a class to inherit properties and methods from another class.
	Α.	WAP for implementation of a method overriding.
	Α.	WAP to create abstract classes and methods to define child classes.
	A.	WAP creates a static variable and calls it from two different classes, observing the result.
2	A.	WAP to create a list with favorite and unfavorite options using a static list.
	Α.	WAP to design signup form with (Name, Email, Phone Number, Password, Confirm Password).
	Α.	WAP to greate a profile card with available widgets in Flutter
	A. B.	WAP to create a profile card with available widgets in Flutter. WAP to create a design like an e-commerce (Amazon, Flipkart) application dashboard.
	D.	to create a design like an e-commerce (Amazon, mpkare, application dashboard.
3	A.	WAP to perform CRUD operations with List <dynamic>.</dynamic>
	В.	WAP to do crud operation with Local database (TBL_USER(UID, Name, City, Gender)).
4	A.	WAP to show Dialog with title, AlertMessage, and buttons using Getx.
	A.	WAP to show SnackBar after clicking on a button using Getx.
	A.	WAP to show the BottomSheet dialog with a list of data in it.
	В.	WAP to show Custom Dialog with different themes using Getx.
	В.	WAP to show Custom SnackBar with different colors, and different locations after clicking on a button using Getx.
	В.	WAP to show custom bottom sheets with different heights and auto close.
5	Α.	WAP to Navigate between two screens using Get.to() & Get.back.
	A.	WAP to pass data between two screens using Get.to().
	A.	WAP to navigate between screens using a named route.
	В.	WAP to transit between two screens with different animations.
	В.	WAP to transit using GetMiddleware.
6	A.	WAP to create and use a basic GetX controller with non-reactive variables.
	A.	WAP to use Rx Variables with Obx() & Obs.
	A.	WAP to bind a TextField to a RxString and reflect real-time changes.
	В.	WAP to create a timer countdown using RxInt that updates every second.
	В.	WAP to Use RxBool to show/hide content.
7	A.	WAP to display the list in ListView using RXList.
	A.	WAP to display the favorite icon in it and change it based on changes on the RxListitem
		variable.
	A.	WAP to do CPUD operation using PVI istadynamics (PVI istadynamics)
	В.	WAP to do CRUD operation using RXList <dynamic> (RXList<map>).</map></dynamic>



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8	A. A.	WAP to do Basic Exception Handling Using Try-Catch (Divide by zero). WAP for Handling Specific Exceptions Using on Keyword e.g., FormatException, SocketException. WAP to Display Error Messages Using SnackBar/Dialog.
9	A. A. A. B.	WAP to create and initialize a local SQLite database using sqflite package (Student.db, TBL_Student). WAP to create a Student model class to map data between SQLite and Dart objects. WAP to list data and display in Listview using RXList. WAP to perform Create multiple tables and apply foreign key on it.
10	A. A. B. B.	WAP to insert student data into SQLite using GetX for state management. WAP to update and delete the data using Sqlite and update the list. WAP to Search or Filter SQLite Data Using GetX. WAP to Implement Lazy Loading (Pagination) from SQLite using GetX
11	A. A. B.	WAP to Fetch and Display Data from a REST API using GetX. WAP to Implement Loading, Success, and Error State in API Calls. WAP to Search API Integration with Real-time Filtering.
12	A. A. B.	WAP to POST, PUT data using API Getconnect. WAP to Delete data with dialog for alert using delete. WAP to create To-Do application with api.
13	A. A.	WAP to Handling Asynchronous Exceptions (Future-based). WAP to Creating and Using Custom Exceptions.
14	A. A.	WAP to create custom pub and publish it. WAP to use custom pub in application.
15	A. A. A. B.	WAP To demonstrate how to request and handle camera permission in a Flutter app using the permission_handler package. WAP to implement that requests storage permission to read/write files to the device. WAP to implement user's location after requesting the required location permissions. WAP to handling multiple permissions at once. WAP handling denied or permanently denied permissions.
16	A. A. A. B. B.	WAP to read data from a file stored in external storage. WAP to write data to file stored in external storage. WAP to delete file from external storage using code. WAP to download file from web and store in external storage. WAP to display message if same name file is already available in storage. WAP to display all files in available in external storage.
17	A. A. A. B.	WAP to display width and height of screen using media query. WAP to display text and background color based on width (if width > 700 ? Mobile : WEB). WAP to apply responsive padding using MediaQuery. WAP to change UI layout based on orientation.



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18	A. A. A. B.	WAP to build a responsive grid layout based on screen width. WAP to show different widgets on small and large screens. WAP to apply dynamic font size based on screen width. WAP to create a sidebar for tablet and bottom navigation for mobile. WAP to create responsive form layout based on orientation and size.
19	A. A. B.	Implement firebase configuration to your project. WAP to sign in using goole sign-in/sign-up. WAP to save google sign-in user data to fire-sorage.
20	A. A. B.	WAP to perform crud operation using firestore. WAP to upload and retrieve files using firebase storage. WAP to perform real-time data sync using firebase realtime database.
21	A. A. A. B.	WAP to implement firebase cloud messaging configuration to application. WAP to read firebase push notification data in application. WAP to configure application to handle push notification even if application is killed. WAP to read data from data payload and open particular page in application.
22	A. A. A. B.	WAP to configure google map in console. WAP to implement google map in application. WAP to place markers on google map and display tool tip on it. WAP to create application that displays different hotels with markers on google map.
23	A. A. A. B.	WAP to access location service from application and display latitude and longitude. WAP to place camera on google map with particular location and place initial zoom. WAP to display custom marker on google map. WAP to display address above the map on click of marker or place.
24	A. B.	WAP to display animated marker on google map. WAP to create application for capturing geotag photo.
25	A. A. B.	WAP to implement internationalization using getx. WAP to choose language from settings and set as default language (User can change language any time from settings). WAP to change screen direction based on language.
26	A. A. A.	WAP to display implicit animation. WAP to Use AnimatedContainer to animate size and color change on user interaction. WAP to apply animatedopacity and animated padding on the container.
27	A. A. A.	WAP to Implement Explicit Animations using AnimationController. WAP to trigger animation on button tap the widget will move from left to right. WAP to trigger animation on button tap and resize smoothly with the defined curve and duration.



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27	A.	WAP to implement draggable widget or object on the screen that reacts with bouncing or snapping effects in Flutter. WAP to trigger animation with move from one location to another location.
28	A. A. B.	 WAP to create a Flutter application that fetches and displays the device battery level by calling a native Android function using MethodChannel. WAP to access and display native device information such as the model name, OS version, and manufacturer using MethodChannel in Flutter. WAP to launch the native camera application using MethodChannel and return a confirmation or captured image path. WAP to Reading Device's Native Contacts Using MethodChannel.
29	A. A. A.	WAP to create a Flutter app that computes the nth Fibonacci number using recursion inside an isolate. The app allows users to input a number, sends the task to the isolate, and then displays the result when the isolate completes the task. WAP to implement a file picker to select a large text file. The file will be read in a separate isolate and then displayed on the screen. WAP to reads a large local JSON file (containing user profiles), sends it to compute() for parsing, and displays the list of users on the UI. WAP to runs a Timer.periodic() and sends current time or tick count every 5 seconds to the main isolate, which updates the screen or console.
30	A. A. B.	WAP to establish connection between client and server. WAP that establishes a real-time chat between two clients using Socket.IO. WAP that shows a "User is typing" indicator when another user starts typing in a chat box.