

<b>Course Code</b>	: 2101CS402	<b>Date</b>	: 13-04-2024
<b>Course Name</b>	: Mobile Application Development using Flutter	<b>Duration</b>	: 150 Minutes
		<b>Total Marks</b>	: 70

**Instructions:**

1. Attempt all the questions.
2. Figures to the right indicates maximum marks.
3. Make suitable assumptions wherever necessary.

- Q.1 (A)** Write a dart program to check given number is prime or not. **4**
- (B)** Explain Null Aware (??) & Bang(!) operator in dart. **3**

**OR**

Explain nullable and non-nullable types in dart.

- (C)** Explain pubspec.yaml file. **7**

**OR**

Explain Flutter Architecture.

- Q.2 (A)** Compare Stateless & Statefull widget. **4**
- (B)** Explain Column widget with important attributes and examples. **3**

**OR**

Discuss navigation between pages with an example.

- (C)** Write a flutter code to design screen as given below. **7**

App bar		

**OR**

Write a flutter code to use Stack widget and show text upon an Image.

- Q.3**    **(A)**    Write a program to initialize SharedPreferences and read (Username,Password) To Text Widget in screen.    **4**
- (B)**    Explain Future Builder with example.    **3**

**OR**

Explain the use of Shared Preferences.

- (C)**    Write a flutter code to insert Student details (sid, sname, saddress, sdesignation) in SQLite database.    **7**

**OR**

Write a flutter code to list product information (pid, pname, pcategory, pprice) from SQLite database.

- Q.4**    **(A)**    Write a flutter code to list data from database into the List view (Ex: UserName).    **4**
- (B)**    Explain Rest-API with example.    **3**

**OR**

Write the difference between restfull & restless api.

- (C)**    Explain different type of request in flutter rest api.    **7**

**OR**

Write a flutter code to get student result based on Enrollment no. using Rest API.

- Q.5**    **(A)**    Write steps to connect physical device to personal computer for debug.    **4**
- (B)**    Explain permissions and how to declare it in Android & iOS.    **3**

**OR**

Explain Camera permission and usage in flutter with example.

- (C)**    Write steps to release app in PlayStore.    **7**

**OR**

Write steps to release app in AppStore.

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