**Darshan UNIVERSITY**
योगः कर्मसु कौशलम्

**Darshan Institute of Engineering & Technology**
**B.Tech. | Sem-4 | Summer-2023**

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| **Course Code** | : 2101CS402 | **Date** | : | 12-04-2023 |
| **Course Name** | : Mobile Application Development using Flutter | **Duration** | : | 150 Minutes |
| | | **Total Marks** | : | 70 |

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

| | | | |
|---|---|---|---|
| **Q.1** | **(A)** | Explain if statement, conditional expression (??) in dart. | **4** |
| | **(B)** | Explain named and optional parameters with an example. | **3** |

<div align="center">OR</div>

Explain public and private access modifier in dart.

| | | | |
|---|---|---|---|
| | **(C)** | Explain Flutter Architecture in detail. | **7** |

<div align="center">OR</div>

Explain pubspec.yaml file.

| | | | |
|---|---|---|---|
| **Q.2** | **(A)** | Explain Scaffold widget with important attributes and examples. | **4** |
| | **(B)** | Explain setState() {} in flutter with an example. | **3** |

<div align="center">OR</div>

Compare between Stateless & Statefull widget.

| | | | |
|---|---|---|---|
| | **(C)** | Write a program to divide screen in 9 equal parts. | **7** |
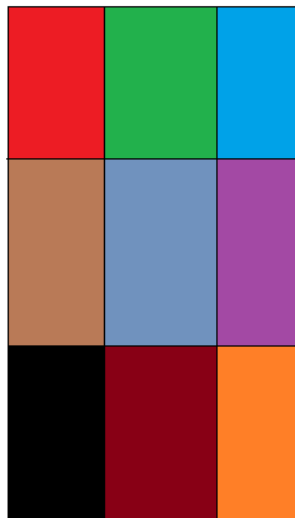


<div align="center">OR</div>

Write a dart code to find friends' details by their name using a dictionary.
(Create a local dictionary and search from it using Map & Model Class).

| Q.3 | (A) | Explain Future Builder with example. | 4 |
| | (B) | Explain the terms async and await with example. | 3 |

**OR**

Explain the use of Shared Preferences.

| | (C) | Write a program to display in list & update Employee details (eid, ename, eaddress, edesignation) in SQLite database. | 7 |

**OR**

Write a flutter code to place delete button in list page and on click delete button delete Employee Detail from table and refresh the page with updated data.

| Q.4 | (A) | What is json? Discuss how can you perform parsing using JSON in flutter application. | 4 |
| | (B) | Define Restfull-Api with different methods. | 3 |

**OR**

Define
1) Base URL
2) End Points
3) Query Parameter

| | (C) | Write a flutter code to call rest api (using Mock Api) with GET Method with HTTPClient library and display data in ListView.Builder. | 7 |

**OR**

Write a program to insert & update data ((eid, ename, eaddress, edesignation)) to web server using Api.

| Q.5 | (A) | Explain what is run window with its usage. | 4 |
| | (B) | Explain how to generate keystore and signed apk. | 3 |

**OR**

Explain what is permissions and how to declare permissions in Android & iOS.

| | (C) | Write steps to release app in Play Store. | 7 |

**OR**

Write steps to release app in App Store.

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