Darshan Institute of Engineering & Technology

B.Tech. | Sem-4 | Winter-2024

Course Code	: 2101CS402	**Date**	:	19-11-2024
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 nullable and non-nullable types in dart.	**4**
	(B)	Explain if statement, conditional expression (??) in dart.	**3**

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

Explain private and public access modifiers in dart.

	(C)	Explain the advantages of using Flutter.	**7**

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

Explain named and optional parameters with an example.

Q.2	**(A)**	Explain Scaffold widget with its attributes and example.	**4**
	(B)	Explain Row widget with important attributes and examples.	**3**

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

Explain Container class with attributes in flutter with an example.

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

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

Write a program to display text above image in flutter.

Q.3	**(A)**	What is shared preference? Write a sample code to store user details.	**4**
	(B)	Explain Future Builder with example.	**3**

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

Explain the terms async and await with example.

	(C)	Explain insert operation in sqlite database with example.	**7**

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

Explain update operation in sqlite database with example.

Q.4 **(A)** What is json? Explain in detail. **4**

(B) Write 1) Base URL 2) End Points 3) Query Parameter. **3**

OR

Write the difference between restfull & restless api.

(C) Write a program to display data ((eid, ename, eaddress, edesignation)) from web server using Api. **7**

OR

Write a program to display data ((eid, ename, eaddress, edesignation)) from web server using Api.

Q.5 **(A)** What is keystore? Explain its importance. **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.

***