**Mid Term Exam Marks (100) - Time (75 Min)**

**Objective Part (30 Marks)**

**Multiple Choice Questions**

1. Flutter use language
2. Dart
3. Java
4. C++
5. Cobol

Answer: a

1. Embedder layer
2. Directly interact with user
3. is platform-specific
4. Compile code
5. Nothing at all

Answer: b

1. The first stable version of Flutter was developed in
2. 2017
3. 2016
4. 2018
5. 2015

Answer: c

1. Flutter Engine Layer take care of
2. Input/ouput, network request,
3. Platform transition
4. Convert dart language to machine language
5. a) and b)

Answer: a

1. Lib folder in flutter directory structure use for
2. Application specific control information
3. Dart code written using Flutter Framework
4. to manage Flutter packages
5. Auto-generated by Flutter to write Project description.

Answer: b

1. Dart Language was developed by Google in
2. 2001
3. 2011
4. 2015
5. 2017

Answer: b

1. Default var datatype is
2. Static
3. Dynamic
4. String
5. Int

Answer: b

1. Map is a part of Collection Library, it represent
2. A concept of Array with repeated input.
3. A set of values in key-value pair
4. A concept of Array with unique input.
5. None of all

Answer: a

1. In Dart, List can be
2. Growable Length
3. Final
4. Fixed Length
5. a & c

Answer: d

1. Syntax of Ternary Operator is
2. condition ? exprIfTrue : exprIfFalse
3. ? exprIfTrue : exprIfFalse condition
4. ? exprIfFalse: exprIfTrue: condition
5. exprIfFalse: exprIfTrue: condition ?

Answer: a

1. In Widget Tree, each Widget
2. nested inside each other
3. parallel to each other
4. horizontal to each other
5. none of all

Answer: a

1. Button and Text are invisible Widgets
2. True
3. False

Answer: b

1. Stateful Widgets are
2. Remain static throughout lifecycle
3. Immutable
4. Change the inner data during the widget lifecycle
5. Consist only build function

Answer: c

1. TextField is a multi-child widget
2. True
3. False

Answer: b

1. To access an image from assets, developer must update
2. pubspec.yaml
3. pubspec.lock
4. pubspec.md
5. pubspeck.lock

Answer: a

**Subjective Part (70 Marks)**

**Question No. 1:** (30 Marks)

Write the Answers of the following questions.

1. In Flutter widget lifecycle, write the name of stateful function. (3)
2. What is the purpose of Embedder layer in Flutter architecture? (3)
3. Why Flutter developer write code in stateful class? (3)
4. Why Flutter developer use pubspec.yaml? (3)
5. Write the difference between List and Set Objects. (3)
6. Write the difference between Interface and a normal class. (3)
7. Write the name of any 5 invisible Flutter Widgets. (3)
8. In stateful widget lifecycle, write about initState() method (3)
9. To decorate a Text widget, which text property is used? (3)
10. In dart, Why Anonymous function is used? (3)

Question No. 2: (20 Marks)

Suppose we have map that contains key structure like “Key11, Key12…” and number values from 10 to 50. Write a program in dart language which will print the location of value 35 in the Map.

Question No. 3: Draw the widget tree for the following figure (20)

