**Final Term Exam Marks (100) – Time (75 Minutes)**

**Objective Part (30 Marks)**

**MCQs (Each MCQ carry 2 marks)**

1. Padding vs Margin
2. Padding is inner space, whereas Margin is outer space
3. Padding is outer space, whereas Margin is inner space
4. Margin is the distance of a widget from its outer boundary whereas padding is the distance of a widget from its inner boundary.
5. None of all

Answer: a

1. Flutter divide the Gestures system into
2. Pointers & Gestures
3. Pointers & Tapping
4. Tapping & Gestures
5. Gestures & Touch

Answer: a

1. ListView.builder widget
2. Generate a ListView for static data
3. Generate a ListView for dynamic data
4. Generate data for ListView when List is scroll-up or scrool-down
5. Option b & c

Answer: d

1. What is true about LisTile Widget
2. It is a sub child of ListView Widget.
3. It is only sub child of GridView Widget
4. It displays data in horizontal form.
5. It displays data in vertical form.

Answer: a

1. Scaffold widget
2. It occupies only widgets space on screen
3. It occupies the whole screen.
4. It occupies only top appbar area.
5. It occupies only bottom screen to display widgets.

Answer: b

1. Drawer property of Scaffold draw
2. It is normally slider menu to display user information
3. It is normally tabbar to display tabs for different screens
4. It is normally actionbar display on the right side of the screen.
5. It is normally itembuilder widget on the right side of the screen.

Answer: a

1. Gesture includes
2. Panning
3. Pinch
4. Tap
5. All the options

Answer: d

1. In Flutter, all types of gestures handle by Widgets
2. GestureDirector
3. GesturePin
4. TabGesture
5. DirectorGesture

Answer: a

1. Flutter Developer can extend parent theme by
2. Theme.of.copyWith()
3. Theme.copyWith()
4. Theme.copyWith.of()
5. copyTheam()

Answer: a

1. In Tween animation
2. It is required to define start and endpoint of an animation.
3. It is a type of animation which allows you to make an app interaction feels realistic and interactive.
4. It provides a non-linear straight line of animation.
5. It provides movement of animation from one screen to another screen.

Answer: a

1. To navigate between two screens, Flutter provides
2. MaterialPageRoute class
3. NavigatePageRoute class
4. pageRoute class
5. MaterialPageScreen class

Answer: a

1. Navigator.push() is used to navigate
2. New page
3. New route
4. New Screen
5. All available options

Answer: d

1. Which is true about named route
2. In named route, we can move from one screen to another screen without any sequence
3. In named route, initialRoute defines which route the app should start with.
4. In named route, push() and pop() functions are not used.
5. All the given option

Answer: d

1. Firebase application developed by
2. Facebook
3. Google
4. Microsoft
5. Amazon

Answer: b

1. Cloud Messaging is a
2. Android based messaging tool
3. iOS based messaging tool
4. Cross-platform messaging tool
5. None of all

Answer: c

**Subjective Part (70 Marks)**

**Question-1 (5 x 3 Marks)**

Answer the following questions

1. Briefly explain each of the below-given questions.
2. Differentiate between stateful and stateless widgets. Which method of stateful widget notifies the changes in UI?
3. In order to use Firebase services, you need to connect your app to the Firebase console. You must write the steps to connect an Android app to the Firebase console.
4. Suppose in a StatefulWidget data is passed to it using the constructor. Describe how you can access this data in the subclass to assign this data to a Text widget.
5. Write the Dart code to Change the background color of a container upon the click/tap.

**Question-2**  Marks (10)

Identify and correct any of the errors from the below-given code. While correcting the code consider the following points. (3 Points)

You cannot add or remove any of the lines of code.

You cannot change the initialized value of the variable.

import 'package:flutter/material.dart';

void main() {

runApp(const MyApp());

}

class ExamTest extends StatelessWidget {

ExamTest({Key? key}) : super(key: key);

final List<String> colors = [Colors.red, Colors.green];

int examTest = 1;

String trick;

@override

Widget build(BuildContext context) {

examTest = "NTI";

trick = "DCS";

return Container();

}

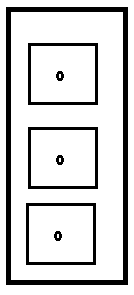
}

**Question-3**  Marks (20)

Create the app as given below. Suppose you have already added the image resources (named as d1, d2, d3, d4, d5, d6).

Set the background color of AppBar and Scaffold to orange. (1 Point)

2. Display 3 dice images (as given below). You must extract the one image along with all functionalities to a separate Widget class. This class must take a number as constructor argument and display the image with that number. For example, the argument is 3, it should display ‘d3’ image. Further the extracted Widget must be called 3 times to complete the given UI.

3. Clicking on each of the images randomly displays the dice images in place of each of the images.

**Question-4**  (Marks 25)

We have one button in UI, when I click it, it should add 5 values in list and it should show Total elements in list = 5. Then when I press button again, It should add five more elements in list and now the result will be shown as 10.

Please write the program for this.

|  |  |
| --- | --- |
| **Total Elements in List : 0**   |  | | --- | | **Add Five Elements To List** | |