



Institute of Information Technology

Jahangirnagar University

Professional Masters in IT

1st Trimester Final Examination, Fall 2019 [Intake: Fall 2019 & Summer 2019]

Duration: 3 Hours

Full Marks: 60

Course Code: PMIT – 6113

Course Title: Mobile Application Development

Do not write anything on the question paper.

There are 7 (Seven) questions. Answer any 5 (Five) of them.

Figures in the right margin indicate marks.

- 1 (a) Define Mobile Platform and write some examples of good platform and some features of WAP. 4
- (b) Make list of Android platform version, code name with their API level. 4
- (c) What is for Android Manifest.xml? What information contain Manifest.xml and R.java files? 4
- 2 (a) What is a “bundle” and “gradle” in Android application? Differentiate between them. 3
- (b) What are the different types of “Menu” used in Android? Write the meaning of the following: 3

Element	Description
<menu>	
<item>	
<group>	

- (c) Interpret the following android code line by line. 6

1. @Override

```
public boolean onCreateOptionsMenu(Menu menu) {  
    getMenuInflater().inflate(R.menu.options_menu, menu);  
    return true;  
}
```

2. @Override

```
public void onInit(int status) {  
    if (status == TextToSpeech.SUCCESS) {  
        int result = textToSpeech.setLanguage(Locale.US);  
        String text = speakText.getText().toString();  
        textToSpeech.speak(text,  
        TextToSpeech.QUEUE_FLUSH, null, null);  
    }  
}
```

3. android:interpolator="@android:anim/linear_interpolator">

```
<alpha  
    android:duration="2000"  
    android:fromAlpha="1.0"  
    android:toAlpha="0.1" >  
</alpha>
```


- 3 (a) How many types of Intent – explain with necessary codes and graph? 4
- (b) What are the different components and actions that are useful to perform by Intent? 4
- (c) Differentiate between Implicit Intent and Explicit Intent. 4
- 4 (a) What is Android Layout? Briefly describe different types of Layout with respective diagram. 4
- (b) Make a comparison table among different types of layout. 4
- (c) With example explain the following properties used in Layout: orientation, gravity, layout_weight, weightSum, alignParentRight 4
- 5 (a) Write the necessary XML and Java codes for designing a simple calculator. 4
- (b) What is listener? Write down some common listener events in Android. 4
- (c) What's the difference between class, method and activity in android? 4
- 6 (a) What is for Content Provider in Android and what are different steps to creating a Content Provider? Explain their functionality with diagram. 4
- (b) What is for Fragment? Draw the Fragment life cycle method of Android. 4
- (c) Define listener and handler with example. What is the difference between listener and handler? 4
- 7 (a) Draw and explain Activity Lifecycle of Android (use necessary code and diagram). 4
- (b) Sketch the entire, visible and foreground lifetimes of android activity or fragment transition during execution. 4
- (c) How many callback methods are in android? Explain their behavior at different stages in Android. 4