



# Institute of Information Technology

Jahangirnagar University

Professional Masters in IT

1<sup>st</sup> Semester Final Examination- Spring 2022

Intake: Spring 2022, Fall 2021

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

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|-------|---|---|
| 1 (a) | Android is an OS, an open source and a platform - explain why?  | 4 |
| (b)   | Draw the Android architecture and write the main component used in an Android application.  | 4 |
| (c)   | i. What is for screen orientation in Android?<br>ii. Differentiate between: TextView and ScrollView                                 | 4 |
| 2 (a) | Make a list of Android features with their functions.   | 4 |
| (b)   | i. Explain Android Margin and Padding Attributes.<br>ii. What is for: i. android:textColor="#0832ca"<br>ii. android:textSize="30sp" | 4 |
| (c)   | i. How to call the method "MenuInflater.inflate()" for "menu"?<br>ii. What is the method to handle a menu item click events?        | 4 |
| 3 (a) | What is Open Handset Alliance (OHA) and what is its purpose?  | 4 |
| (b)   | Sketch the Android App/Project Folder Structure.  | 4 |
| (c)   | What are the main folders and files required to implement an application in android studio?   | 4 |
| 4 (a) | How many layers are in Android Architecture? Explain the roles and features of each layer.  | 4 |
| (b)   | What is for activity_main.xml file? Write necessary code for activity_main.xml file.  | 4 |
| (c)   | i. What are the two modes of UI and why they are for?<br>ii. Write the meaning of setProgress(0, 0, false).                         | 4 |
| 5 (a) | How many callback methods are in android? Explain their behavior at different stages in Android.                                    | 6 |
| (b)   | Sketch the entire, visible and foreground lifetimes of android activity or fragment transition during execution.                    | 6 |
| 6 (a) | Draw and explain Activity Lifecycle of Android (use necessary code and diagram).  | 4 |
| (b)   | How to create "menu" in Android, what are the different items of "menu"?  | 4 |
| (c)   | Which class, object and properties are used for notification? Write a sample code using these.                                      | 4 |
| 7 (a) | What is Android Layout? Briefly describe different types of Layout with respective diagram.   | 5 |
| (b)   | With example explain the following properties used in Layout: orientation, gravity, layout_weight, weightSum, alignParentRight.     | 5 |
| (c)   | What are the available animations used in Android?  | 2 |