



Professional Masters in Information Technology (PMIT)
Institute of Information Technology
Jahangirnagar University

PMIT Final Examination (Fall: 2018)

Course Code: IT-6113
Marks: 60

Course Title: Mobile Application Development
Time: 3 Hours

Answer any **FIVE** questions

(All parts of a particular question must be answered consecutively)

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|------|--|---|
| 1(a) | What is Android ? Write some features of Android. | 4 |
| (b) | What are the different attributes/properties in Android? | 4 |
| (c) | Draw the Android architecture and write the main component used an Android application? | 4 |
| | | |
| 2(a) | Explain step by step how to send the data from one Activity to Another Activity in Android applications. | 5 |
| (b) | Define listener and handler with example. What is the difference between listener and handler? | 5 |
| (c) | Write about an Android Emulator or AVD with its features and limitations. | 2 |
| | | |
| 3(a) | Explain Eclipse IDE and Android Development Tools (ADT) Plug-in with their purpose in Android. | 5 |
| (b) | What's the difference between class, method and activity in android? | 3 |
| (c) | Make list of Android platform version, code name with their API level. | 4 |
| | | |
| 4(a) | What are the seven lifecycle methods of Android activity and what is their purpose? Explain with necessary code and diagram. | 7 |
| (b) | What is an Intent in Android? How many steps are in MainActivity to reach super Activity? | 3 |
| (c) | With example, show how to use putExtra() and getExtra() for string data. | 2 |
| | | |
| 5(a) | Explain ListView with example. | 5 |
| (b) | Define the Fragment. Draw the Fragment life cycle method of Android. | 5 |
| (c) | Define Dalvik Virtual Machine (DVM). | 2 |
| | | |
| 6(a) | Briefly explain different types of Adapter in Android. | 4 |
| (b) | What is SQLite? How does it differ from client-server database management systems? | 4 |
| (c) | Differentiate between the following terms (any four): | 4 |
| i. | Intent and Service | |
| ii. | Adapter and Receiver | |
| iii. | SnackBar and Toasts | |
| iv. | Widget and OpenGL | |
| v. | Fill_parent and Wrap_content | |
| vi. | LinearLayout and RelativeLayout | |

7(a) What is Toast in Android? Explain the following code(s):

i. `Toast toast= Toast.makeText(MainActivity.this, "Jahangirnagar University",
Toast.LENGTH_SHORT);
toast.setGravity(Gravity.CENTER,0,0);
toast.show();`

ii. `videoView= (VideoView) findViewById(R.id.videoViewId);
Uri uri=
Uri.parse("android.resource:///"+getPackageName()+"/"+R.raw.new_house);
videoView.setVideoURI(uri);
videoView.start();`

(b) Describe the following folders and files of Android.

- ☐ Widgets
 - ☐ TextView
 - ☐ Button
 - ☐ ToggleButton
 - ☒ CheckBox
 - ☐ RadioButton
 - ☐ CheckedTextView
- ☐ Custom - AppCompatActivity
 - ☐ CardView
 - ☐ GridLayout
 - ☐ RecyclerView
 - ☐ Toolbar

(c) Answer the following:

- i. Graphically explain Margin and Padding Attributes.
- ii. What are the different View and ViewGroup in Android?