Duration: 2Hours   <u>**Max Marks: 60**</u>

Instructions:1) Figures to the right indicate Full Marks.
2)All Questions are compulsory, however there are internal choices.

Q.1. **Answer Any 5of the following**   **5 x 2 = 10**
- a) What is an Android Operating System? Give 1 example ofdevice that uses Android.
- b) List out common features of Android OS.
- c) What do you mean by externalizing resources?
- d) What are Spinners?
- e) Which methods in intents are used to pass data from one activity to another?
- f) What are the various types of persistent storage?
- g) Mention the permissions to be included in Menifest to use internet resources.

Q.2. **Answer the Following.**
A) Which are the different types of an android applications? Explain each one of them. **(5)**
B) Describe the different components of an android applications. **(5)**

<p align="center">OR</p>

C) Explain Android Architecture. **(5)**

Q.3. **Answer the Following.**
A) Write an XML code to define a linear layout and add the following components. **(5)**
    i. TextView
    ii. EditText
    iii. Button
    iv. Radio button
    v. Checkbox

B) How to set and get the text from android edittext? Write the code. **(5)**

<p align="center">OR</p>

C) Define Fragments. What is the importance of using it? **(5)**

Q.4. **Answer the Following.**
A) Define intents. What is the importance of using it? **(5)**
B) What is a Toast in Android? Give the syntax of defining a toast and also give one example of defining a toast. **(5)**

<p align="center">OR</p>

C) What are broadcast receivers? Describe three different ways of sending broadcasts. **(5)**

Q.5. Answer the Following.

A) Which method is used to read data from internal storage? Give the example code snippet.

(5)

B) Write the code snippet to store the data in shared preference file using an editor   (5)

OR

C) Give any 5 drawbacks of SQLite databases.   (5)

Q.6. Answer the Following.

A) Define alarms. How to set exact alarms?   (5)

B) What is a webview? Write the code snippet to show the remote URL content in webview.

(5)

OR

C) Write the steps to publish an android app on Google play store.   .   (5)