

[Time:2.30 Hrs]

[ Marks:75 ]

Please check whether you have got the right question paper.

- N.B:
1. All question are compulsory.
  2. Figures to the right indicate full marks.

- Q.1 Attempt any four of the following: 20**
- A Explain features of Android.
  - B Describe steps to install android studio.
  - C How to create android project?
  - D Explain gradle in detail.
  - E Write a short note on Android Virtual Device.
  - F Explain android services with its state.
- Q.2 Attempt any four of the following: 20**
- A Discuss types of menus used in Android.
  - B Discuss types of menus used in Android.
  - C Differentiate between styles and themes.
  - D Write a note on RecyclerView.
  - E What drawables and also explain its types?
  - F Explain material design with its things.
- Q.3 Attempt any four of the following: 20**
- A What is the difference between the `getSharedPreferences()` and `getPreferences()` methods?
  - B Write different steps to publish app on google play store.
  - C Define Firebase Database. List its advantages and disadvantages.
  - D Explain performance, security and transactions of Android.
  - E Name the method that enables you to obtain the path of the external storage of an Android device.
  - F Explain loaders.
- Q.4 Attempt any three of the following: 15**
- A Write a note on Broadcast receiver and content provider.
  - B Explain Android UI controls.
  - C Write a note on screen navigation.
  - D What is the permission you need to declare when writing files to external storage?
  - E Explain Content Providers.
  - F Define SQLite Database. List its advantages and disadvantages

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