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21222

3 Hours / 70 Marks

Seat No.

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15 minutes extra for each hour

- Instructions* – (1) All Questions are *Compulsory*.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.
- (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.
- (6) Preferably write answer in sequential order.

Marks

- 1. Attempt any FIVE of the following: **10****
- a) List any four features of Android operating system.
- b) Define Dalvik Virtual Machine (DVM).
- c) List any four folders from directory structure of Android project and elaborate in one line.
- d) List any four attributes of check box.
- e) Draw diagram of activity life cycle.
- f) State syntax to display built in zoom control.
- g) Name two classes used to play audio and video in Android.

P.T.O.

- 2. Attempt any THREE of the following:** **12**
- a) Describe Android architecture with diagram.
 - b) Differentiate between DVM and JVM.
 - c) List and elaborate steps to deploy an Android application on Google play store.
 - d) Describe with example, how to create a simple database in SQLite (Assume suitable data).
- 3. Attempt any THREE of the following:** **12**
- a) Write down the steps to install and configure Android studio.
 - b) State syntax to create Text View and Image button with any two attributes of each.
 - c) Describe Android service life cycle along with diagram.
 - d) State and elaborate the syntax of required class and methods for Geocoding.
- 4. Attempt any THREE of the following:** **12**
- a) Explain with example, code to create GUI using absolute layout (Assume suitable data)
 - b) Write a program to demonstrate Date and Time picker.
 - c) Describe multimedia framework of Android with diagram.
 - d) Discuss developer console with at least four features.
 - e) Write a program to demonstrate declaring and using permissions with any relevant example.

5. Attempt any TWO of the following:**12**

- a) Write a program to convert temperature from celcius to farenhite and vice versa using Toggle button. (Design UI as per your choice. Write XML and java file)
- b) Write a program to capture an image using camera and display it.
- c) Develop and application to send and receive SMS (Design minimal UI as per your choice. Write XML, java and manifest file)

6. Attempt any TWO of the following:**12**

- a) Write a program to implement Android Activity Life Cycle. Use toast messages to display message through life cycle.
 - b) Develop an application to display Google map with user's current location.
 - c) Design UI using table layout to display buttons with 0 – 9 numbers on it. Even display submit and clear button. When user clicks on particular buttons and later when clicks on submit button, it should display the numbers clicked.
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