

# 22617

**12425**

**03 Hours / 70 Marks**

Seat No. 

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- Instructions* – (1) All Questions are *Compulsory*.  
(2) Answer each next main Question on a new page.  
(3) Illustrate your answers with neat sketches wherever necessary.  
(4) Assume suitable data, if necessary.  
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

- 1. Attempt any FIVE of the following :** **10**
- a) Explain the android ecosystem.
  - b) Define Emulator.
  - c) Name two classes used to play audio and video in Android.
  - d) List any four folders from directory structure of Android project and elaborate in one line.
  - e) List types of permissions in android.
  - f) List attributes of radio button. (Any four)
  - g) Describe the process of getting the map API key.
- 2. Attempt any THREE of the following :** **12**
- a) Describe Android Architecture with diagram.
  - b) Explain relative layout with suitable example.
  - c) Design a student registration form.
  - d) Describe the steps for publishing android app.

P.T.O.

- 3. Attempt any THREE of the following :** **12**
- a) Difference between JVM and DVM any four point.
  - b) Describe sensors use in Android.
  - c) Develop a program to implement – List view of 6 item.
  - d) Explain importance of develop console in android application development.
- 4. Attempt any THREE of the following :** **12**
- a) Write a steps to install android studio.
  - b) List UI component explain any one with help of example.
  - c) Develop a program for providing bluetooth connectivity.
  - d) Explain Geocoding and reverse geocoding in android with example.
  - e) Explain service life cycle.
- 5. Attempt any TWO of the following :** **12**
- a) Develop the android application for student marksheets using table layout atleast five subject marks with total and percentage (Write both Java and xml code)
  - b) Develop an application to store student details like roll no, name, marks and retrieve student information using roll no. in SQLite database. (Write java and xml file)
  - c) Explain Grid view and image view with suitable example.
- 6. Attempt any TWO of the following :** **12**
- a) Explain date picker with suitable example.
  - b) Write a program to find the direction from user's current location to MSBTE, Bandra (Write only java and manifest file)
  - c) Develop an application to send SMS (Design minimal UI as per your choice. Write XML Java and manifest file)
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