

# Gandhi Institute of Engineering and Technology University, Odisha, Gunupur (GIET University)



B. Tech (Sixth Semester – Regular/Supplementary) Examinations, April 2025  
**21BCSOE36011/22BCSOE36011 – Android App Development using Kotlin**  
(CSE, CSE(AIML), CSE(DS))

Time: 3 hrs

Maximum: 70 Marks

**Answer ALL questions**  
(The figures in the right hand margin indicate marks)

**PART – A****(2 x 5 = 10 Marks)**Q.1. Answer **ALL** questions

- a. Demonstrate the use of elvis operator for null safety.
- b. Differentiate between a class and Data Class
- c. Explain Fragment in Android App.
- d. Explain the need of RecyclerView in Kotlin
- e. Explain the real time Database?

CO #	Blooms Level
CO 1	K2
CO 1	K3
CO 2	K2
CO 3	K3
CO 4	K2

**PART – B****(15 x 4 = 60 Marks)**Answer **all** the questions

2. a. Explain the key features of Kotlin.
  - b. Demonstrate Single inheritance in Kotlin with a suitable example.
- (OR)
- c. Explain the Object Oriented Concept supported in Kotlin.
  - d. Demonstrate Higher Order Function in Kotlin with a suitable Example.
- 3.a. Explain android Architecture with neat diagram .
  - b. Create an Android app in Kotlin where the user can input student details using EditText, select gender using RadioButton, and submit the form using a Button. When the user clicks the button, display the entered information in a TextView.

Marks	CO #	Blooms Level
8	CO1	K2
7	CO1	K3
8	CO1	K2
7	CO1	K3
8	CO1	K2
7	CO1	K4
8	CO1	K2
7	CO1	K4
15	CO1	K3

(OR)

- c. Explain the activity life cycle with callback functions in Android Application.
  - d. Create an app that lets users select their favourite programming language from a list and display the selection when a button is clicked.
- 4.a. Create an Android application using Kotlin that implements all types of menus with submenus.
- (OR)
- b. Explain different types of Intent and Create an Android application having Button to call the different types of Intents.
- 5.a. Design a simple Android app that stores user contact information (name, phone number, email) using SQLite.
  - b. Design an Android application where multiple user preferences (e.g., username, language, and notifications enabled) are saved using SharedPreferences.

(OR)

- c. Build an Android app that stores user feedback in Firebase's Realtime Database.
- d. Explain the process of storing data in SharedPreferences and retrieving it in another activity.

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