



PAC INSTITUTE OF TECHNOLOGY AND SOCIAL STUDIES JANUARY – APRIL 2025 ASSESSMENT

FORMATIVE ASSESSMENT

Qualification / Course : COMPUTER PROGRAMMING LEVEL 6

Unit of Competency : DEVELOP MOBILE APPLICATION

WRITTEN ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO THE CANDIDATE:

- 1. Read all the instructions carefully before attempting the questions.*
- 2. This paper consists of two sections, A & B.*
- 3. You are allowed 2 Hours to Answer the questions.*
- 4. Marks for each question are indicated in brackets.*
- 5. Write your responses in the Separate Answer booklet provided.*
- 6. Do not write anything on this question paper.*

SECTION A: (40 MARKS)

*Answer **ALL** questions in this section.*

1. State **Two** mobile operating systems that exist in the market. (2 marks)
2. Identify any **four** mobile application development platforms. (4 marks)
3. Explain **two** mobile application development approaches. (4 marks)
4. State **three** reasons for mobile application development. (3 marks)
5. Briefly **explain** your understanding of Mobile Application Architecture? (2 marks)
6. Mention any **three** mobile application development frameworks. (3 marks)
7. Explain the term **mobile development lifecycle**. (3 marks)
8. Explain **TWO** reasons why mobile applications have become popular in the society today. (4 Marks)
9. Identify **two** key principles of mobile application design? (4 marks)
10. Define **user interface design** in mobile applications. (4 marks)
11. In Mobile App Development, what is the purpose of the **AndroidManifest.XML** file?
(4 marks)
12. Mobile development IDEs combine developer tools under one GUI. Identify **three** typical features of such IDEs. (3 Marks)

SECTION B: (60 MARKS)

Answer any **THREE** questions in this section.

11. Mobile application architecture consists of multiple components that work together to ensure the app functions efficiently and meets user expectations.
- a. Describe **THREE** different components of mobile application architecture and explain their significance in app development. (6 marks)
 - b. Providing examples, **explain** how mobile application development frameworks aid in the development process. Provide examples. (8 marks)
 - c. Describe **THREE** reasons why you would advise a user to run the application on mobile device as opposed to desktop computer. (6 Marks)
12. You are hired to develop a mobile application for XYZ company;
- a. Outline **FIVE** steps you would use in developing the mobile application from design to building a debug APK. (10 marks)
 - b. Explain **FOUR** importance of testing the mobile application developed. Include various testing techniques and debugging procedures. (8 marks)
 - c. Identify any **TWO** mobile application navigation patterns you would use. (2 marks)
13. Publishing a mobile application on an app store can significantly impact its success and visibility.
- a. **Describe** the process of publishing a mobile application on an application store and discuss different monetization strategies. (10 marks)
 - b. Explain **THREE** limitations of Android in mobile application development. (6 Marks)
 - c. **Differentiate** between activity and service as used in mobile application. (4 Marks)
14. Usability is an integral part of mobile application development;
- a. Discuss **THREE** practices to overcome mobile usability issues. (6 marks)
 - b. Discuss **THREE** reasons why a business would prefer to build a mobile application than other types of software. (6 marks)
 - c. Discuss **FOUR** security risks that businesses experience on using mobile applications. (8 Marks)