



UNIVERSITY OF MORATUWA
Faculty of Information Technology

Bachelor of Information Technology (BIT)
Level 2 – Semester 2 Examination

ITE 2152 - MOBILE APPLICATION DEVELOPMENT

Time Allowed: 3 hours

September 2020

INSTRUCTIONS TO CANDIDATES

1. This paper contains 4 questions on 3 Pages.
2. The total marks obtainable for this examination is 100. The marks assigned for each question & sections thereof are included in square brackets.
3. This examination accounts for 60% of the module assessment.
4. This is a closed book examination.
5. Calculators are not allowed.
6. Answer **All** questions.

ADDITIONAL MATERIAL

None

Continued...

Question 1

- (a) (i) What is the importance of mobile application development in business environment? Briefly explain.
 (ii) Describe three (03) important features of Android Operating System.
 (iii) Briefly explain the importance of Android Software Development Kit (SDK).
 (iv) Describe the difference between mobile web and mobile application.
 (v) Briefly explain the importance of WAP in mobile technology.

[5 x 3 Marks]

- (b) Explain the Android Operating System architecture with a suitable diagram.

[10 Marks]

Question 2

- (a) (i) Briefly explain about the five (05) types of Android devices in the market.
 (ii) What do you mean by Android Virtual Devices (AVD)? Briefly explain.
 (iii) What are the tools need to be installed for preparing Android application development? Briefly explain.

[3 x 5 Marks]

- (b) (i) Write down XML source code and Android source code for the followings
 a. Standard *Button* element
 b. Standard *Check Box* element

[2 x 5 Marks]

Question 03

- (a) Describe the functionality of Android *Intent* with a suitable example.
 (b) You can use SQLite database as offline storage in mobile application development. Write down the base class for instantiating your SQLite instance in your Android app.
 (c) (i) Describe the *Layouts* available to you in Android environment.

[5 Marks]

[5 Marks]

[3 Marks]

Continued...

(ii) Write down the XML content to get the following output.



Fig. Q3. Mobile Interface

[12 Marks]

Question 04

Describe the functionalities of the following elements with suitable XML source code examples.

- (a) `<animation-list>`
- (b) `<gradient>`
- (c) `<stroke>`
- (d) `<padding>` and `<size>`
- (e) `<shape>` and `<solid>`

[5 x 5 Marks]

----- END OF PAPER -----

