Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER I
SESSION 2022/2023

COURSE NAME	:	MOBILE COMPUTING
COURSE CODE	:	DAT 20503
PROGRAMME CODE	:	DAT
EXAMINATION DATE	:	FEBRUARY 2023
DURATION	:	2 HOURS 30 MINUTES
INSTRUCTIONS	:	1. ANSWER ALL QUESTIONS
		2. THIS FINAL EXAMINATION IS CONDUCTED VIA **CLOSED BOOK.**
		3. STUDENTS ARE **PROHIBITED** TO CONSULT THEIR OWN MATERIAL OR ANY EXTERNAL RESOURCES DURING THE EXAMINATION CONDUCTED VIA CLOSED BOOK '

THIS QUESTION PAPER CONSISTS OF **SIX (6)** PAGES

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SECTION A

Identify whether each of the following statements is TRUE or FALSE.

Q1 Bluetooth relies on long-range radio frequency and can communicate within a distance.

(1 mark)

Q2 MANET can create a highly dynamic network environment in terms of topology, packet routing, and service provision and consumption.

(1 mark)

Q3 Corresponding node defines the mobile node's current position or user.

(1 mark)

Q4 Internet Based Mobile Ad hoc Networks (iMANET) helps to link non-fixed nodes.

(1 mark)

Q5 Mobile Internet Protocol allows users to move from one network to another with the same IP address.

(1 mark)

Q6 Mobile software allows smartphones, personal computers, and other devices to run applications and programs.

(1 mark)

Q7 With m-Commerce, a computer in which a user must find a location with an internet connection.

(1 mark)

Q8 Mobile healthcare is one of the examples in e-commerce.

(1 mark)

Q9 Earlier mobile devices usually provide 4 to 16 MB of static RAM.

(1 mark)

Q10 Stream data processing is where network communications are more frequent on mobile terminals than on desktop computers.

(1 mark)

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SECTION B

Answer all questions.

Q11 (a) Explain Bluetooth technology with an example.

(3 marks)

(b) Discuss the advantages and disadvantages.

(8 marks)

(c) Define mobile internet protocol.

(1 mark)

(d) Name **TWO (2)** components in the mobile internet protocol.

(2 marks)

(e) Sketch the architecture of mobile internet protocol.

(6 marks)

(f) Explain Bluetooth technology specifications.

(10 marks)

Q12 (a) Discuss **FOUR (4)** advantages of M-commerce.

(8 marks)

(b) Explain the characteristics of mobile processors.

(6 marks)

(c) Define mobile software.

(2 marks)

(d) In your opinion, discuss how the technology evolvement enhance the use of mobile commerce with examples.

(4 marks)

(e) Name **FOUR (4)** categories in mobile hardware.

(4 marks)

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(f) In your own words, explain **TWO (2)** types of mobile commerce applications you use.

(6 marks)

Q13 (a) Name **TWO (2)** ways to do if the apps are not responding in the emulator.

(2 marks)

(b) Refer to **Figure Q13 (b)**, and identify the layout provided in the user interface.

(4 marks)

(c) Refer to **Figure Q13 (c)**, state how to create an intent page.

(1 mark)

(d) Refer to **Figure Q13 (d)**, and write code for the given calculator app.

(20 marks)

(e) Name **ONE (1)** wireless security issue.

(1 mark)

(f) Discuss **ONE (1)** recent trend in mobile computing technologies.

(2 marks)

-END OF QUESTIONS-

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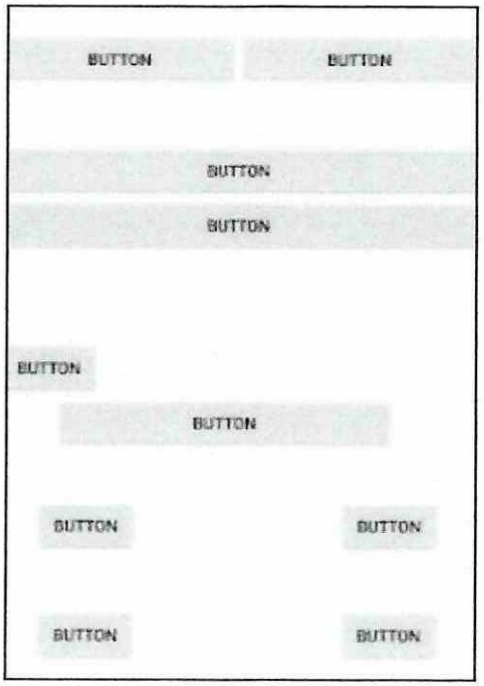

Figure Q13 (b)

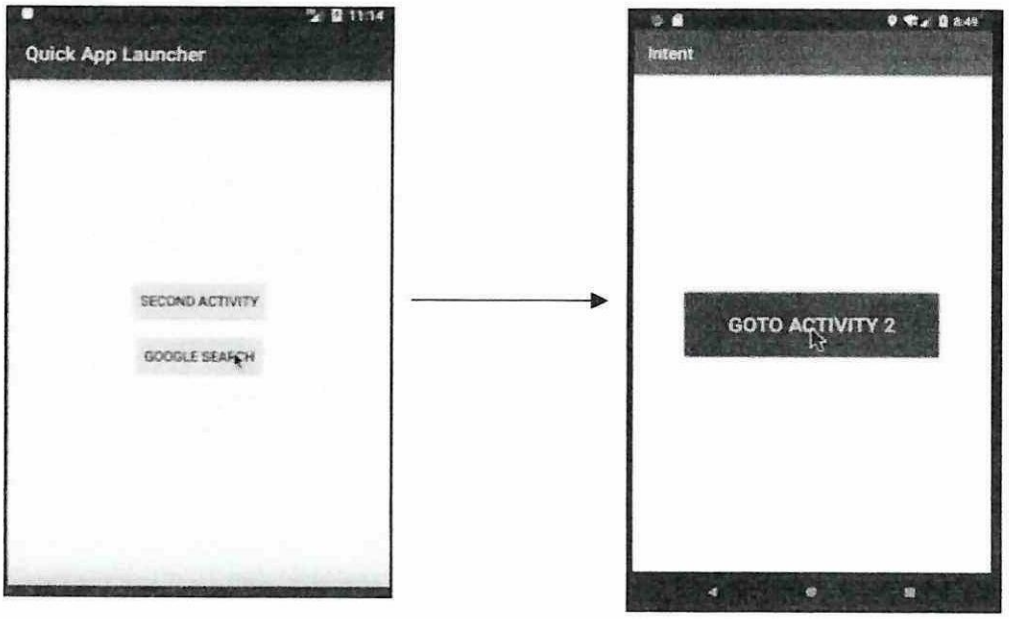

Figure Q13 (c)

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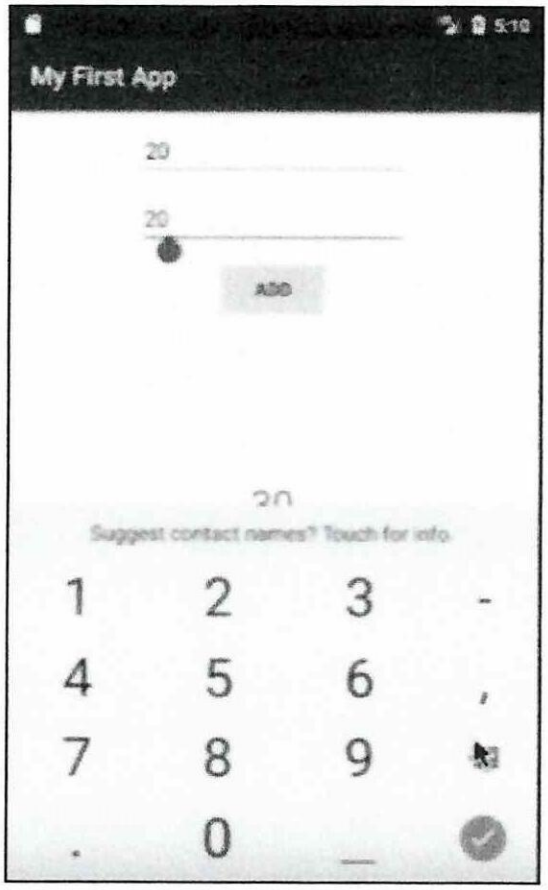

Figure Q13 (d)

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