



UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2023/2024**

- COURSE NAME : INTRODUCTION TO COMPUTER
COURSE CODE : DAG11102
PROGRAMME CODE : DAG
EXAMINATION DATE : JANUARY / FEBRUARY 2024
DURATION : 2 HOURS
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 **THREE (3)** PAGES

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- Q1** Computer network has become more important than ever, allowing seamless connection between various different devices.
- (a) Describe network protocol. (4 marks)
 - (b) List the **TWO (2)** networking models representing network operations. (2 marks)
 - (c) Explain the differences between the models listed in **Q1 (b)**. (6 marks)
 - (d) Compare **THREE (3)** different physical transmission media. (6 marks)
- Q2** Technological advancements have made it possible for computers that once occupy an entire room to be carried around in our pockets and even wear them.
- (a) List **FOUR (4)** different mobile devices. (4 marks)
 - (b) Compare **THREE (3)** different mobile operating systems. (6 marks)
 - (c) MYapps Sdn Bhd wanted to develop a mobile application for an Android-powered smartphone. Choose **TWO (2)** suitable integrated development environments (IDE) that meet their needs. (2 marks)
 - (d) TikTok is one of the top mobile applications nowadays. Determine **FOUR (4)** positive and **FOUR (4)** negative impacts of TikTok. You can relate the impact to education, business, health, society and politics. (8 marks)
- Q3** The ability to produce mobile devices at a lower cost and its widespread public adoption have increased the popularity of augmented reality (AR) and virtual reality (VR).
- (a) Differentiate AR and VR. (4 marks)
 - (b) Explain how AR can contribute to the preservation and virtual reconstruction of historic sites such as Bandar Hilir in Malacca and Lembah Bujang in Kedah. Provide specific examples of the use of AR and explain their impact on both the conservation efforts and visitor experiences. (8 marks)

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Q4 The internet of things (IoT) and big data have been becoming increasingly important as big companies begin to incorporate them into their day-to-day operations.

(a) Describe the IoT and give **TWO (2)** examples. (4 marks)

(b) Explain the **THREE (3)** main properties of big data. (6 marks)

(c) Explain how the IoT can enhance agricultural practices for increased efficiency and productivity. Provide specific examples of IoT applications and describe the practical impact on tasks such as monitoring, irrigation, and crop management. (8 marks)

Q5 Computer security have been a very important aspect in the past few decades due to the increase of unethical use of technologies related to computers.

(a) Define computer security. (2 marks)

(b) Describe the computer security risks we face today. (4 marks)

(c) Compare the **FOUR (4)** types of cyber-crime. (8 marks)

(d) Ransomware attacks such as WannaCry have been very concerning.

Describe **THREE (3)** measures each individual should take to prevent such an attack. (6 marks)

(e) In the past few years, customer data of Malaysian organisations have been breached.

Describe **THREE (3)** measures these organisations should take to address this issue and **THREE (3)** actions individual customers should take to minimise the impact on privacy. (12 marks)

– END OF QUESTIONS –

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