

FINAL EXAMINATION

Semester	:	JANUARY 2026 SEMESTER
Programme Name	:	DIPLOMA IN BUSINESS STUDIES DIPLOMA OF ACCOUNTANCY
Course Code & Name	:	DTIS4013 MANAGEMENT INFORMATION SYSTEM
Duration	:	3 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Please read the instructions given in the question paper **CAREFULLY**.
2. The question paper consists of **FOUR (4)** questions.
3. Answer **ALL** questions in the question paper.
4. Answers to the questions are to be written into the examination booklet.
5. Electronic dictionaries, lecture notes, files or any unauthorised materials except writing equipment are strictly prohibited.

This question paper must be submitted along with all used and/or unused rough papers and/ or graph papers (if any). Candidates are **NOT ALLOWED** to take any examination paper(s) used or unused out of the examination hall.

WARNING:

The Examination Board of Peninsula College Georgetown regards cheating as a very serious offence and will not hesitate to mete out the appropriate punitive actions according to the severity of the offence committed, and in the accordance with the clauses stipulated in the Students' Handbook, up to and including expulsion from Peninsula College Georgetown.

(This booklet contains 3 printed pages including this page)
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ALLOWED TO DO SO

Answer **ALL** questions on the separate sheet provided.

[100 marks]

- 1 A mid-sized manufacturing company, "Precision Tools Ltd.", produces industrial equipment. The company currently uses separate spreadsheets and manual records for sales, inventory, and payroll. Management finds it difficult to get a complete view of business performance. They have decided to implement a comprehensive Management Information System (MIS) to integrate their operations.
- a) List **THREE (3)** Levels of Pyramid System Model. (3 marks)
- b) Identify **THREE (3)** types of Pyramid System Model. (3 marks)
- c) State their decisions type for these **THREE (3)** levels. (3 marks)
- d) Analyse how continuous monitoring, maintenance, and regular evaluation of security controls could help MyMediHealth Clinic strengthen its cybersecurity posture and prevent future attacks. (3 marks)
- e) Identify and explain **FOUR (4)** components Information Technology Infrastructure support for MIS. (8 marks)
- f) Describe each of the **FIVE (5)** stages of SDLC such as Analysis, Design, Testing, Conversion, Maintenance with key activity and one modern tool or example that could be used. (5 marks)
- Total: [25 marks]
2. a) Describe **THREE (3)** IT infrastructure models – Traditional (On-Premises), Cloud-Based, and Hybrid – work together to support company business, using one example. (12 marks)
- b) Explain **TWO (2)** difference between Edge Computing and 5G. (8 marks)
- c) Discuss how following Bank Negara Malaysia's security guidelines supports MyFinance Bank's information security management. (5 marks)
- Total: [25 marks]

3. a) Describe the Internet of Things (IoT) transforms business operations in **THREE (3)** industries in manufacturing, retail and supply chain. (9 marks)
- b) Explain **FIVE (5)** ways telecommunication and internet technologies support Management Information Systems (MIS) in an organisation. (10 marks)
- c) Describe **THREE (3)** challenges faced by telecommunication providers today.
For each challenge, state one strategic approach to overcome it. (6 marks)
Total: [25 marks]
4. a) Describe the **FIVE (5)** key components of Artificial Intelligence (Machine Learning, Natural Language Processing, Computer Vision, Robotics, and Deep Learning) function and provide one example of how it contributes to decision-making in an organization. (10 marks)
- b) Explain **THREE (3)** benefits with challenges of using AI in decision-making. (6 marks)
- c) Explain **THREE (3)** core concepts of information security with an example. (6 marks)
- d) List **THREE (3)** common cybersecurity threats. (3 marks)
Total: [25 marks]

- END OF QUESTIONS -