CARIBBEAN EXAMINATIONS COUNCIL

CAPE® INFORMATION TECHNOLOGY UNIT 2

Subject Report

May-June 2025

CARIBBEAN EXAMINATIONS COUNCIL

REPORT ON CANDIDATES' WORK IN THE CARIBBEAN ADVANCED PROFICIENCY EXAMINATION

MAY-JUNE 2025

INFORMATION TECHNOLOGY
UNIT 2

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INTRODUCTION

This guide has been put together using candidate responses to the 2025 May-June examination in CAPE Information Technology. The report is set out according to the original design of the examination paper.

The examination comprised the following papers.

Paper 01 — Multiple Choice
Paper 02 — Structured Essay
Paper 031 — School-Based Assessment (SBA)
Paper 032 — Alternative to School-Based Assessment (Private Candidates)

In the 2025 Unit 2 examination, approximately 99.05 per cent of candidates obtained acceptable grades, Grades I to V compared with 96.44 per cent in 2024, 96.25 per cent in 2023, 95.74 per cent in 2022 and 94.88 per cent of candidates in 2021.

Performance resulted in 82.56 per cent of candidates achieving Grades I to III in 2025 compared with 65.58 per cent in 2024, 66.60 per cent in 2023, 64.29 per cent in 2022 and 58.24 per cent of candidates in 2021.

There was an increase in the performance in the Grade I band in 2025 with 31.67 per cent of candidates earning Grade I compared with 13.39 per cent in 2024, 14.50 per cent in 2023, 16.71 per cent in 2022 and 12.17 per cent of candidates in 2021.

PAPER 01 – MULTIPLE CHOICE

Paper 01 consists of 45 multiple choice questions which cover all the Modules of the Cape Information Technology Unit 2 Syllabus. The examination consisted of 15 questions from each of the following.

Module 1 — Information Management
Module 2 — Use of Information Technology Tools
Module 3 — Social, Organizational and Personal Issues

The maximum score obtained on this paper was 88 out of 90 marks and the mean score was 65.78 marks.

PAPER 02 – STRUCTURED ESSAY

Paper 02 consists of six compulsory questions with two questions from each module.

The maximum score obtained on this paper was 147 out of 150 marks and the mean score was 99.52 marks.

Question 1

Part (a) (i)

In answering this part of the question, a few candidates explained the accuracy of data with respect to its implementation in a database; this was not required. Candidates who scored well were those who were able to articulate at least one impact (negative or positive) of the bakery having accurate/inaccurate data in their orders.

Part (a) (ii)

Responses that were phrased *Patty would be able to properly prepare an order and consequently prevent delays in delivery* were worth full marks. Candidates who did such demonstrated the required understanding of how having timely data would impact the bakery. Candidates who explained their responses with respect to not having timely data also received full marks. Nevertheless, most candidates scored poorly on this question.

Part (b) (i)

This question required candidates to give an example of a field and an example of a file name. Most candidates were able to successfully identify the file name as being the same as the table name, that is, CAKEORDERS. However, regarding the field, some candidates gave values from the table as their example. Nevertheless, most candidates provided responses that were worth the full two marks.

Part (b) (ii)

This question tested candidates' mastery of writing SQL statements. Specifically, candidates were required to write the SQL statement that would insert a specific record into a given table. Some candidates wrote 'select or append SQL statements'; these candidates were not awarded any marks. Common mistakes included the following.

- Not sequencing the field names correctly with the data that was being inserted
- Not having a complete record for insertion because fields were missing

- Inserting values that already existed in the table, for example, the order number or the order item

Candidates were expected to write the following.
INSERT INTO CAKEORDERS (OrderNum, OrderItem, Date, Item, Quantity, CusName) VALUES (207, 207-1, 26-05-2025, Chocolate, 3, Mary Layne)

Part (c)

Generally, candidates scored four to five out of the six marks allotted for this question. A few candidates correctly provided the labelled data flow line to indicate the data for the bill that was generated. A common error was that of providing attributes for the entities in the DFD.

It is recommended that students get more practise with correctly labelling data flow lines with words/phrases that represent the data being passed.

Question 2

Part (a) (i)

Most candidates were able to score the full two marks for their attempts at this question. Although some candidates correctly gave *Book ID* as the foreign key, they were unsuccessful in identifying the Reservation file as the file in which the foreign key was found. Such candidates received one out of the two marks.

Part (a) (ii)

For this part, candidates' explanations regarding the purpose of the transaction file (Reservation file) were often vague. Candidates frequently failed to specify the precise nature of the data stored.

Candidates who received the mark for this question were able to phrase their responses with respect to the scenario that was given. Specifically, they were able to state that the transaction file's purpose was to either *update the master file* or *record the requests for reservation*.

It is recommended that teachers guide students in the examination of diverse real-world examples of master and transaction files so they can get a better understanding of them.

Part (a) (iii)

Several candidates seemed to have misunderstood this question. In their responses, they stated all the titles of books that were available from the master file. In other words, these candidates seemed not to have registered the "reserved" condition and so, they listed all books that were available without checking to see if those books were in the reservation table. Candidates who received the marks for this question are those who demonstrated understanding by using the transaction file to determine the two books that were available.

Part (b)

This question was challenging for many candidates, as the following mistakes were frequently made.

- Drawing a DFD when an ERD was required
- Incorrectly identifying and representing cardinality
- Missing primary keys or incorrectly representing primary keys on entities
- Using unsuitable names for the relationship between entities

Nevertheless, some candidates successfully gave the required entities, the relationship between them and the correct cardinality; such candidates received four marks. Candidates who scored the full six marks additionally gave correct primary keys for each entity.

It is recommended that students be given extensive practice activities in the drawing of ERD diagrams.

Part (c)

This question required candidates to discuss two advantages of using a web interface. Some candidates either provided vague explanations or rephrased their first advantage to make it a second one. Candidates who scored well for this question discussed a web interface as being *user-friendly* as well as being *able to provide remote access to the books*.

Candidates are reminded that they need to discuss their responses with respect to the given scenario**.**

Question 3

Part (a)

This question tested candidates' knowledge and application of information technology tools used for information gathering. Approximately 68 per cent of candidates provided an accurate response. The other 32 per cent received one of the two marks allotted for this question.

Candidates could have provided any one of the following ways the device could support Kodroy in monitoring his sleep pattern.

- Provide accurate data on sleep duration and quality
- Help him make informed decisions to improve this bedtime and sleep schedule
- Offer continuous monitoring of his sleep pattern via its tracking features
- Provide real-time feedback and insights for optimizing sleep habits
- Provide a convenient or stress-free process for gathering accurate information
- Consists of a user-friendly interface or customizable features to make monitoring easier

Part (b) (i)

This question required candidates to outline ways to identify the reliability of information. Only 28 per cent of candidates achieved full marks for this question. Approximately 54 per cent of candidates achieved two to three out of the four marks allotted for this question.

Criteria that could be used to determine the reliability of the information included the following.

- Accuracy of information — confirming citations or references used
- Author credibility — could the amount of data captured be verified by others?
- Author credentials — checking the author to determine if there could be any bias
- A peer-reviewed publication — was the article verified by others or did it make references to reputable sources?

Part (b) (ii)

This question required candidates to provide information based on data given. Approximately 55 per cent of candidates responded to this question accurately while 35 per cent received two of the three marks allotted. Approximately 10 per cent of candidates received zero or one mark.

Based on the information in the figure and the research from the online article, successful candidates would have given the following explanation.

- Kodroy's deep sleep is at 13%.
- That recorded deep sleep figure is higher than the acceptable range of 10–12% indicated in the article.
- Hence, Kodroy's deep sleep is adequate.

Part (c)

This question required candidates to identify the most appropriate formats used to present information. Approximately 36 per cent of candidates got full marks for this question while 32 per cent got two or three out of four marks, and 38 per cent of candidates got zero or one mark.

Candidates were asked to describe two types of formats in which the app can present the information to help Kodroy better understand his snoring habits. Suitable responses included the following.

- Sound (audio or recordings) so that he could hear the duration of his snoring over a period of the night
- A bar chart that could show how loud his snoring gets at night
- A graph to compare nightly snoring information (time and duration)
- Text that describes the snoring (loudness/pattern) and timeline (number of times during the sleep period)

Part (d)

This question required candidates to identify suitable information technology tools for communicating in the given circumstances. Approximately 63 per cent of candidates scored full marks. Information technology tools would have included email, mobile phone, website and smartwatch.

Question 4

Part (a)

Most candidates were able to identify the challenges associated with the manual system and scored full marks. However, those who scored lower were unable to clearly outline these challenges. Some candidates struggled to interpret and respond appropriately to examination key terms such as *outline* and *explain*. Instead of addressing what the question requires, many candidates simply listed definitions.

Part (b)

Most candidates were able to score full marks on this question. Those who scored low included data that was irrelevant to logging visitors. Examples of irrelevant data were 'date of birth' and multiple contact details.

Part (c) (i)

This question was satisfactorily done. Most candidates were able to identify a benefit and a challenge with using a software application to complete the task of managing visitor's access. Good responses included the following.

- Benefit: speed up the process for data capture and analysis
- Challenge: Training may be required; costly

Part (c) (ii)

This question was satisfactorily done. Most candidates were able to identify both a benefit and a challenge of using an electronic card system. However, those who scored lower appeared to lack a clear understanding of what an electronic card system is. Candidates could have mentioned the following in their responses.

- Electronic card systems manage access to physical spaces and therefore a benefit would be that entry to buildings is automated, speeding up access, allowing for tracking and providing added security by restricting access to various areas.

- Challenge with the electronic card systems would be that they can be lost or stolen, there may be insufficient cards for the volume of visitors at any one time and there would be the added task of coding a card for each visitor.

It would be helpful if teachers would incorporate real-world scenarios and examples when exploring various topics with students. Students should be encouraged to discuss how different activities are carried out in everyday life and identify the IT tools being used. They can then explore how these tools help simplify the tasks at hand. Additionally, students can be guided to compare different IT-based tools and evaluate their effectiveness.

Part (d)

Candidates' performance on this question was average. While some candidates were able to identify a decision that could be made based on the data in the visitors' log, very few were able to identify the data that would assist in making the decision. Some candidates appeared unsure of how to approach the question and often rambled about things unrelated. Accepted responses included the following.

- Data from logbook: Identify the most frequently visited departments
- Decision: To adequately staff departments

Question 5

Part (a) (i)

It seemed that a very limited number of candidates were familiar with the expected response for this part, that is, *the bring your own device (BYOD) policy*.

It would be useful if teachers gave students opportunities to discuss technology trends and topical/contemporary issues in computing.

Part (a) (ii)

Despite the fact that most candidates were unable to answer Part (a) (i), many candidates identified and described some of the key advantages and disadvantages of the kind of policy that would allow a person to use his/her personal devices for company business.

Part (b)

By their responses, candidates demonstrated that they had a good understanding about security measures that need to be put in place. Candidates readily discussed the following.

- Password protection so that unauthorized persons cannot access the device
- Installing antivirus software to protect from malware/viruses/spam
- Installation of VPN for secure access of the company's network remotely
- Partitioning of the device to separate personal information and files from corporate information and files
- Installing company software with activation licenses
- Updating the firewall configuration on the device to protect from malware, viruses and unauthorized access.

Part (c)

This was another question to which many candidates were able to respond satisfactorily. Candidates described several of the risks associated with an employee clicking on an email from an unknown sender. Candidates' respones included descriptions regarding phishing where information or identity can be compromised or stolen; security breaches which would mean a virus can be downloaded onto the device or a company's information can be stolen; ransomware which can compromise a company's network to the point where information can be withheld until a ransom is paid; and malware where devices other than that of the person who clicked could be affected, slowing down computer or network performance and increasing spam.

Question 6

Part (a) (i)

Most candidates answered this question reasonably well. Candidates were able to identify the benefits of using a robotic arm in the organization. These included the following.

- Requires less staff and manual labour
- Is cost effective, for example, reduction in salaries
- Leads to efficiency: increase in the speed of packaging since, for example, there would be no need for lunch or bathroom breaks
- Provides consistency in the process, as robots can repeat tasks the same way every time
- Can perform jobs safer, that is, with minimum work injuries or mishaps

Part (a) (ii)

Most candidates were able to identify at least one measure for keeping employees safe while working around the robotic arm. Measures included *providing training on the operation of the robotic arm; ensuring there is clear signage showing safe and unsafe zones around the robotic arm; and the use of protective equipment such as hats, gloves, railings around the robotic arm and associated equipment*.

Part (b) (i)

Candidates demonstrated a fair understanding of the purpose and use of a Chatbot, but many could not make two clear points to explain how it supports non-human interactions between customers and the company. Candidates were expected to indicate any two of the following.

- Chatbot is available for queries 24/7.
- Customers can get a transcript of the conversations.
- A ticket or a reference number is available to allow for follow-up.
- Chatbot can multitask with multiple persons simultaneously.

Part (b) (ii)

Most candidates did not demonstrate a good understanding of Interactive Voice Response (IVR) and could not provide suitable answers for this question. Candidates could have mentioned that IVR systems support non-human interactions between customers and the company through *the capability for customers to leave a message; self-service options that help customers find a particular department; guided searches that facilitate customers contact with staff by using names/extensions in a directory; and the capability for customers to resolve simple inquiries independently*.

Part (c)

Overall, this question was fairly well answered. Candidates were able to correctly identify two positive online interactions that Jan could receive as a social media influencer. However, they struggled slightly to identify two negative online interactions that Indira could receive as a customer service representative. Possible responses include the following.

- For Indira (negative online interactions)
  - Personal attacks from customers
  - Use of abusive and threatening language
  - Threats of physical abuse
  - Complaints about poor customer service or lack thereof
  - Frustration and dissatisfaction of problems not being resolved

- For Jan (positive online interactions)
  - Increase in followers
  - Positive or encouraging comments
  - Many people liking or resharing posts or pictures
  - Increase in popularity
  - Possible increase in revenue or potential clients or sponsorship

PAPER 031 – SCHOOL BASED ASSESSMENT (SBA)

The school-based assessment, which is a project-based activity, occurs during the student's course of study. Students obtain marks for the competence they develop and demonstrate in undertaking their school-based assessment assignments.

SBAs are marked out of 60. The maximum score obtained on Paper 031 was 60 out of 60 marks and the mean score was 48.97 marks.

PAPER 032 – ALTERNATIVE TO THE SCHOOL BASED ASSESSMENT

This paper is an alternative to Paper 031, SBA. Candidates are expected to respond to three project-based questions that are similar to the tasks that the school candidates have to complete and submit as their SBA project. Each question on P032 is worth 20 marks.

The maximum score obtained on this paper was 49 out of 60 marks and the mean score was 36.57 marks.