



L-Università
ta' Malta

MATSEC
Examinations Board



Examiners' Report
AM Information Technology
First Session 2025

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A. STATISTICAL INFORMATION

The total number of candidates who registered to sit for Advanced Information Technology was 37. Table 1 shows the distribution of grades for the Information Technology Advanced Matriculation 2025 first session of the examination.

GRADE	A	B	C	D	E	F	ABS	TOTAL
NUMBER	2	4	9	7	4	4	7	37
% OF TOTAL	5.4	10.8	24.3	18.9	10.8	10.8	18.9	100

Table 1: Distribution of grades for AM Information Technology 2025, First Session.

B. REMARKS ON THE WRITTEN EXAMINATION

Paper I – Section A

Question 1

This was a compulsory question focused on data capture methods. In general, candidates answered part (a) correctly. However, in part (b), some candidates listed data capture methods that were unrelated to the given scenario, such as OMR (Optical Mark Reader), which led to inappropriate responses in part (c), for example, suggesting its use for exam marking. On the other hand, the remaining candidates provided appropriate answers for parts (b) through (d). The final parts, (f) and (g), were also answered well by the majority. However, while many correctly defined the term IoT, some candidates' attempt to explain why it is beneficial within the given context was inadequate.

Question 2

This optional question focused on output devices, specifically monitors and printers. In part (a), candidates generally outlined their functions appropriately. Part (b) was also well answered, with most candidates able to describe how monitors and printers are used in specific situations. However, some candidates only addressed one of the devices, either the monitor or the printer, rather than both, as required. In part (c), several candidates demonstrated awareness of other output devices, though a few incorrectly mentioned items such as mobile phones or televisions, which are not considered output devices in this context. Parts (e) and (f) were answered correctly by most students. Some referred to "ink" instead of "inkjet," but these responses were still accepted as correct given the context.

Question 3

Almost all candidates chose this optional question, which focused on number base systems and conversions, and the majority performed exceptionally well, with many achieving full marks. The only area where a few candidates encountered some difficulty was in converting from hexadecimal to decimal.

Question 4

Only a small number of candidates opted for this question, which focused on Information Security strategy. Among those who attempted it, performance varied significantly. Some candidates did

exceptionally well, demonstrating a strong understanding of information security policies, the concept of an Information Security (IS) strategy, and how techniques such as SWOT analysis, resource assessment, and demand analysis can be applied to support IS objectives (parts (a) to (c)). In contrast, other responses showed little to no understanding of the topic and the attempt to define or explain the core concepts related to Information Security was poor.

Paper I – Section B

Question 1

This was a compulsory question on user support systems. Most candidates were able to define user support systems and explain their importance (parts (a) and (b)). However, many struggled with part (c), which required knowledge of the more technical aspects, resulting in incorrect responses. In part (d), candidates generally understood the concept of a help desk, though several incorrectly assumed it must be a physical location, which is not necessarily the case. Parts (e) and (f) were answered well by most, with candidates able to identify and describe different types of user support systems. In part (g), the majority of candidates were able to mention manuals that assist users, but some listed only two instead of the required three. Others described the manuals accurately but lacked the correct technical terminology.

Question 2

This question focused primarily on e-Government and e-Services. However, responses indicate that many candidates either lacked a clear understanding of these concepts or struggled to articulate them effectively. In parts (a) and (b), many candidates simply restated the question. For example, when asked to define an "admin-to-citizen" e-service, some responded with vague phrases like "a service from admin to citizen," without providing meaningful explanation. On a more positive note, most candidates were able to provide appropriate examples in part (c) and successfully describe an electronic identity and its uses in part (d).

Question 3

Only one candidate opted for this question, which focused on Distributed Ledger Technology (DLT). The candidate performed very well, demonstrating a solid understanding of what DLT is, its key applications, and relevant examples (parts (a) to (c)).

Question 4

This question focused on technological concepts related to design and manufacturing. Overall, most candidates demonstrated a good understanding and were able to answer the majority of the questions correctly. They were generally able to define key concepts, explain the role of experimentation and simulation, and provide examples of how statistical packages could be applied in the given scenario (parts (a) to (e)). Responses indicate that the only area where a few candidates experienced difficulty was in defining Computer-Aided Manufacturing (CAM) in part (a)(ii).

Paper II – Section A

Question 1

Most candidates performed well in this question. In part (a), the majority of candidates answered correctly, demonstrating familiarity with the topic. Similarly, part (b) was well handled by many candidates. However, part (c) proved more challenging, as several candidates confused the `` and `` tags, which affected the accuracy of their answers. In part (d), only portions of the question were answered correctly by most candidates, and a significant number failed to respond correctly at all. In contrast, part (e) was generally well answered, with most candidates providing the correct response. In part (f), while almost all candidates did not include a proper HTML comment tag, many described the use of a footer accurately and appropriately.

Question 2

In part (a), many candidates answered incorrectly. Performance in part (b) was better. However, parts c(i) and c(ii) posed significant difficulties; most candidates were unable to specify valid roles for a defragmenter and a compression utility, indicating a lack of understanding of their functions. Responses in part (d) showed weak performance, as most candidates offered definitions instead of concrete examples as required. Part (e) was better managed, with many candidates identifying appropriate evaluation criteria. In part (f), most candidates answered correctly, although a small number incorrectly listed invalid components of an operating system.

Question 3

In part (a), many candidates provided a solid definition of a domain name, but the attempt to relate it to the context of TechCo Solutions was inadequate. Part (b) was answered correctly by almost all candidates. However, in part (c), although candidates mentioned valid comparisons, they often did not provide adequate explanations to support their points. Part (d) was similarly well answered by the majority. In part (e), most responses included limited descriptions and lacked contextual application. Many candidates performed inadequately in part f(i), but performed well in part f(ii). In part (g), responses generally lacked depth, as candidates did not clearly explain how DNS redundancy helps ensure uninterrupted access.

Question 4

In part (a), nearly all candidates offered valid definitions of database normalisation. Part (b) was also answered correctly by almost all students, though many did not justify their answers adequately. In part (c), most candidates did not recognise that the table presented was not in Third Normal Form (3NF) and were unable to justify their conclusions. Part (d) was mostly well answered. However, part (e) posed challenges, as only a few candidates identified a valid issue associated with over-normalisation. In part (f), although the majority of candidates responded well, many candidates' attempt to apply their answers to the specific context provided in the scenario was inadequate.

Paper II – Section B

Question 1

In part (a)(i), many candidates did not describe the function of the given algorithm. However, part (ii) was generally answered correctly. In part (iii), most responses did not mention that the algorithm contained no errors. In part (iv), a fair number of candidates answered correctly, though others mistakenly inputted values instead of modifying the logic. Part (v) saw a few correct responses, while in part (vi), most candidates performed poorly. In part (vii), some candidates submitted valid answers, but in part (viii), many responses were invalid or incomplete. Part (ix) was well handled. In part (b), candidates performed well in subparts (i) through (iv). Part (v) yielded a range of responses; while many were accurate, there was noticeable variation in the quality and completeness of the responses. Part (c) focused on SQL query writing, where performance declined. In subpart (i), most candidates managed to provide a valid SQL query, though a few included semicolons after every clause, which rendered the statement syntactically incorrect. Part (ii) proved more challenging, with the majority submitting invalid answers. Parts (iii) and (iv) were also poorly answered.

Question 2

In part (a), while most candidates provided a valid definition, many did not explain how the concept applied to the given context. Part (b) was weakly answered, with most candidates submitting incorrect responses. In part (c), only a few candidates managed to correctly list all eight stages of the Systems Development Lifecycle. On a more positive note, parts (d) and (e) were well answered by almost all candidates. However, in part (f), many candidates did not provide accurate responses. In part (g), only a small number of candidates answered correctly.

Question 3

In part (a), most candidates provided a correct response. Part (b) was also answered well by many, although some ignored the contextual reference to a Candidate Management System. In part (c), most candidates successfully selected an appropriate programming language and gave a valid justification. However, part (d) saw only a few candidates providing accurate responses. In part (e), many candidates merely defined the type of translator without offering a valid justification tied to the scenario. In part (f), nearly all candidates did not describe real-world processes related to the provided programming paradigms, indicating a superficial understanding of practical applications.

Question 4

Most candidates performed poorly in part (a), with the majority not drawing a proper flowchart. Part (b) was answered correctly by almost all candidates, and part (c) also saw a high rate of correct responses. In part (d), only a few candidates submitted valid pseudocode as requested. Part (e) was more successful, with the majority suggesting appropriate validation methods. In part (f), many candidates provided both a valid answer and a sound justification.