

EXAMINER'S REPORT**LEVEL II EXAMINATION - JULY 2025****(202) INFORMATION SYSTEMS IN DIGITAL ENVIRONMENT**

This paper examines the overall aspects of Information Technology with additional focus on new technological developments and trends in Information and Communication Technology. It should also be noted that answering this question paper requires a broad understanding of the ethical, social and legal environments that affect information systems. This question paper consisted of three parts **A**, **B** and **C**. Furthermore, answering all the questions was mandatory.

General Observations from the evaluation process have been summarized as follows:

Section A**Question No. 01**

These multiple questions tested the overall knowledge of the respective subject areas in Information system in Digital Environment. The majority of candidates responded to this question and scored a mark above average level.

A weakness was observed in answering Questions **1.4** and **1.7**, as most of the candidates failed to select the correct responses in these multiple-choice questions. A slight drop in marks was observed in Question No. **1.12**, which required candidates to identify whether the given statement was true or false, indicating a lack of careful reading or conceptual clarity in this area.

Section B**Question No. 02**

- (a) It was required to explain two differences between data and information.

Most of candidates demonstrated a clear understanding of the distinction between data and information. Satisfactory performance level was observed for this question.

- (b) The question was asked to explain ways how ICT tools assist in analyzing data to support informed decision making in modern organizations. Average number of candidates explained ways such as facilitating data collection and storage, enabling data analysis, supporting decision making processes, automating repetitive tasks, enhancing communication, enhanced data processing and analysis and improved data visualization and communication.

Some candidates have listed ways in which ICT tools assist in data analysis. But they failed to provide adequate explanations, as the candidates have not sufficient knowledge in this area.

- (c) The majority of candidates failed to provide an accurate definition of Business Process Re-engineering. Several responses were incomplete, lacking the essential explanation “that it involves the fundamental rethinking and radical redesigning of business processes to achieve dramatic improvements in performance”.

Question No. 03

- (a) This question required candidates to list two general-purpose software and two application-specific software relevant to the scenario involving **SwiftMove**. Average number of candidates were unable to clearly distinguish between general-purpose and application-specific software, indicating a gap in understanding of basic software classifications.
- (b) This part was asked to explain reasons why **Swiftmove** wants to upgrade its mobile devices. The majority of candidates answered clearly and demonstrated a sound understanding of the topic by highlighting key reasons such as real-time tracking and visibility, improved communication, enhanced efficiency and productivity, data collection and analysis, customer engagement and satisfaction, cost reduction, competitive advantage, and scalability.
- (c) More than average number of candidates have a sound knowledge on cloud computing and its disadvantages to fulfill the given requirements.

Question No. 04

- (a) It was requested to explain the difference between data analysis and business intelligence. Average number of candidates have correctly explained the difference and scored full marks.
- (b) Candidates have successfully identified the advantages of using an Office Automation system. Most of the candidates identified key points such as faster processing, reduced manual effort and errors, enhanced process visibility, improved decision-making, streamlined office functions, and efficient digitization and storage of data for future use.
- (c) Most of the candidates successfully stated the benefits of a Business Intelligence program and scored above-average marks, showing a solid understanding of its role in enhancing organizational decision-making and performance.

Question No. 05

- (a) Candidates were asked to identify the negative impacts of social media and social networks. Most of the candidates provided accurate answers by mentioning issues such as hacking, cyberbullying, loss of reputation, spread of misinformation, social isolation, decreased privacy, self-esteem concerns, comparison and envy, cyberstalking and harassment, among other relevant impacts. Overall, most candidates showed satisfactory knowledge about the topic.
- (b) This question required candidates to explain the information security concepts of “Integrity” and “Availability”. While many candidates performed well in part (b)(ii) by accurately explaining Availability, a significant number of candidates struggled with explaining the concept of Integrity. As a result, only a few candidates were able to score full marks for this whole question.
- (c) This question required candidates to explain two factors influencing both data centers and desktop computers to adopt green computing. While some candidates were able to identify relevant points, but many struggled to provide complete explanations and therefore did not score full marks.

Question No. 06

- (a) This question requested to explain ways how Sri Lankan businesses can gain competitive advantages by adopting to emerging technologies such as AI driven applications developed by **Innovate Lanka**. Most of the candidates have attempted this question and scored more than average mark. They clearly explained key advantages such as strategic advantage, differentiations, innovation, data driven decision making, supply chain optimization, predictive maintenance, automation, streamlined operations, predictive analytics, content creations, targeted advertising, optimized marketing campaigns, recommendation systems, and enhanced customer experience.
- (b) An average number of candidates scored full marks for this part of the question, which tested knowledge on the advantages of using crowdfunding.
- (c) This question required candidates to state two possible risks associated with crowdfunding. As it was a straightforward question that did not demand deep analytical thinking, a higher percentage of candidates were able to score well. Most of the candidates have correctly stated risks such as potential cybersecurity breaches, fraud, platform collapse, inherent political and commercial risks, and reputational damage.

Section C

Question No. 07

This was a case-study question covered a broad range of topics including mobile devices, communication software, information systems security, E commerce, information security threats, steps of improving security. It required candidates to apply their knowledge in a practical scenario, encouraging cross-topic integration. Most candidates made a reasonable attempt, with performance varying based on their ability to connect topics effectively.

- (a) Most of the candidates showed a good understanding of mobile devices relevant to **Greenway**, resulting in satisfactory performance on this question. The devices included Laptops, Notebooks, smart phones, tablets, ultra mobile PC, PDA, E traders, handling gaming consoles, portable media players, fitness trackers, VR headsets.
- (b) Most candidates successfully identified the benefits Greenway could gain by introducing communication software for all employees. This part of the question was well understood and effectively answered by an above-average number of candidates.
- (c) Majority of the candidates struggled to provide answers for **part (c)**, which required them to explain three types of information systems excluding office automation systems that could be used by **Greenway**. This was likely due to a lack of understanding in applying theoretical knowledge to the context of the case study.
- (d) Advantages of using e-commerce to **Greenway** were well answered by the majority of candidates.
- (e) Most of the candidates successfully identified intentional or malicious information security threats that could target Greenway's systems, including malware, spyware, keystroke loggers, backdoor access, phishing, targeted scams, intentional misuse, and denial-of-service attacks. Although most candidates were able to identify potential security breaches, more than average of the candidates struggled to correctly explain steps that can be taken to improve information security.

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Hints to Improve the Performance:

- (1)** Entire syllabus should be thoroughly studied.
- (2)** Candidates should read the question carefully and should not write unnecessary/ irrelevant explanations and details when a direct answer is expected from the question.
- (3)** Refer study text, books, articles, magazines and other reading materials in relation to Information Technology.
- (4)** It is important to present the theoretical concepts and practical knowledge relating to information technology in an organized manner and quote examples wherever necessary, when writing answers.
- (5)** Make sure that the handwriting is legible and properly numbered the answers.
- (6)** Follow the instructions given in the exam paper.
- (7)** Study the Past Papers / Pilot Papers and Answers to improve your knowledge.
- (8)** Practice the effective time management.
- (9)** Check twice whether the answers were numbered properly before submitting the answer scripts.
- (10)** Face the exam with a good preparation and with the utmost hope of passing the exam.

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