



ASSOCIATION OF ACCOUNTING TECHNICIANS OF SRI LANKA

LEVEL II EXAMINATION - JANUARY 2026

(202) INFORMATION SYSTEMS IN DIGITAL ENVIRONMENT

• **Instructions to candidates** (Please Read Carefully):

(1) **Time Allowed:** Reading : 15 minutes.

Writing : 03 hours.

(2) **All questions should be answered.**

(3) **Answers** should be in the **medium** applied for, in the **booklets** provided.

(4) **State clearly assumptions** made by you, if any.

(5) **Action Verb Check List** with definitions is attached. Each question will begin with an **action verb** excluding OTQ's. Candidates should answer the questions based on the **definition** of the verb given in the Action Verb Check List.

(6) 100 Marks.

08-02-2026

Morning

[08.45 – 12.00]

No. of Pages : 08

No. of Questions : 07

SECTION A

Objective Test Questions (OTQs)

(Total 25 marks)

Question 01

Select the most correct answer for question No. 1.1 to 1.10. Write the number of the selected answer in your answer booklet with the number assigned to the question.

1.1 A report uses a simple language, clear headings, and well-labeled charts, making it easy for managers to interpret. Which one of the following characteristics of good information does this demonstrate?

(1) Relevance.

(2) Understandability.

(3) Completeness.

(4) Availability.

1.2 In today's digital world, mobile computing devices are used for many purposes beyond basic communication. Consider the following scenarios:

(a) Managers use mobile devices to track business performance, to join online meetings, to approve tasks while travelling and to manage projects through cloud tools.

(b) Students use mobile devices to take notes, to access online learning materials, to attend virtual classes and to work on group projects.

(c) Healthcare professionals use tablets to record patient data and to access health records.

Of the above, the best scenarios that illustrate the diverse purposes of the mobile computing devices are:

- | | |
|-------------------------------------|-------------------------------------|
| (1) (a) and (b) only. | (2) (b) and (c) only. |
| (3) (a) and (c) only. | (4) All of the above. |

1.3 Consider the following list of software and their main uses:

- (a)** Microsoft Word – used for creating and editing text documents.
- (b)** TurboTax – used for preparing tax returns.
- (c)** Microsoft Excel – used for calculations and data analysis in various domains.
- (d)** AutoCAD – used for designing real or virtual objects.

Of the above, the correct examples for application specific software are:

- | | |
|-------------------------------------|--|
| (1) (a) and (c) only. | (2) (b) and (d) only. |
| (3) (a) and (b) only. | (4) (b) , (c) and (d) only. |

1.4 A new organization that provides online services needs to purchase an internet connection. The company will frequently access to cloud-based storage services. Which one of the following is the most important factor to consider by the organization when selecting an internet connection?

- | | |
|--|--------------------------------|
| (1) Integrated voice and data service. | (2) Upload and download speed. |
| (3) Installation fee. | (4) All of the above. |

1.5 Which one of the following is **incorrect** with reference to different types of information systems used in organizations?

- (1) Transaction Processing Systems (TPS) handle day-to-day routine transactions such as sales, payroll, and inventory control.
- (2) Management Information Systems (MIS) provide regular and summarized reports to assist middle management in monitoring and decision-making.
- (3) Decision Support Systems (DSS) help top management to make unstructured strategic decisions using summarized dashboards and performance indicators.
- (4) Executive Information Systems (EIS) provide high-level summaries and critical information to support senior executives in long-term planning.

1.6 Which one of the following statements best describes the importance of the scalability feature for an information system?

- (1) It ensures that the system's data is protected from theft and loss.
- (2) It ensures that the system has the capacity to grow along with expanding data according to business requirements.
- (3) It ensures that the system is easy for all staff members to use.
- (4) It ensures that the system is compatible with other existing software.

1.7 A retail company wants to improve its business decisions using data analytics:

- First, it studies last year's sales data to understand trends and customers' preferences.
- Next, it uses statistical models to estimate future sales for the coming quarter.
- Finally, it uses optimization tools to determine the best pricing and inventory strategies to maximize profit.

Which one of the following correctly matches each stage with the type of analytics being applied?

- (1) Descriptive, Predictive, and Prescriptive analytics respectively.
- (2) Predictive, Descriptive, and Prescriptive analytics respectively.
- (3) Prescriptive, Predictive, and Descriptive analytics respectively.
- (4) Predictive, Prescriptive, and Descriptive analytics respectively.

1.8 Which one of the following is **not** an information security concept (principle) that IT team should use in protecting data?

- (1) Confidentiality.
- (2) Availability.
- (3) Integrity.
- (4) Complexity.

1.9 Assume that **Saman** accessed the accountant's computer without permission and altered financial statements' balances that the accountant was preparing. Which one of the following pieces of legislation can he be penalized under?

- (1) Electronic Transactions Act No 19 of 2006.
- (2) Computer Crimes Act No 24 of 2007.
- (3) Payment and Settlement Systems Act No 28 of 2005.
- (4) Intellectual Property Act No 36 of 2003.

1.10 A manufacturing company installs sensors on its production machines to monitor temperature, vibration, and operating speed in real time. The system automatically alerts technicians before a breakdown occurs.

Which one of the following is an example for this activity?

- (1) Artificial Intelligence (AI) used for customers' profiling.
- (2) Internet of Things (IoT) used for predictive maintenance.
- (3) Cloud Computing used for data backup.
- (4) Blockchain used for product authentication. (02 marks each, 20 marks)

*State whether each of the following statements from 1.11 to 1.15 is **True** or **False**. Write the answer (True/False) in your answer booklet with the number assigned to the question.*

- 1.11** Bitcoins are protected using an ingenious system of digital keys.
- 1.12** In an Enterprise Resource Planning (ERP) system, information systems do not integrate.
- 1.13** Information Systems (IS) audit focuses on assessing the controls and processes around information technology systems.
- 1.14** Privacy refers to the right of organizations to decide how individuals' personal data should be collected and used.
- 1.15** KIVA is an example for a rewards-based crowd funding model. (01 mark each, 05 marks)

_____ *End of Section A* _____

(Total 25marks)

SECTION B

(Total 50 marks)

Question 02

A private hospital in Colombo implemented a Health Information System (HIS) linking patient registration, diagnostics, pharmacy, and billing. The system provides real-time patients' data, instant results sharing, and analytical dashboards for management decision making. An online portal allows patients to manage doctor appointments and access lab reports and to improve efficiency, decision-making, and overall satisfaction of patients.

You are required to:

- (a) **Differentiate** data from information based on meaning with an example for each from the hospital's Health Information System. (04 marks)
 - (b) **Explain** what is meant by an "Information System". (03 marks)
 - (c) **List** three(03) examples of personal information that individuals can manage using computer-based systems such as Personal Information Management (PIM) software. (03 marks)
- (Total 10 marks)

Question 03

A medium-sized company plans to expand its operations by adopting digital technologies. The management intends to upgrade its IT infrastructure, to implement cloud-based business applications, to train employees to use new software for enhancing productivity and to gain a strategic advantage. The IT Manager has been asked to evaluate the company's current systems and recommend improvements that align with modern digital practices.

You are required to:

- (a) **Explain** what is meant by IT infrastructure. (02 marks)
 - (b) **Explain** three(03) ways how efficiency of an organization can be achieved using cloud computing. (06 marks)
 - (c) **List** two(02) reasons why software is important for improving a business's performance in an organization. (02 marks)
- (Total 10 marks)

Question 04

Masha Clothing is an apparel business that is struggling with operational chaos due to its rapid growth. Disorganized customers' information is leading to poor customers' service, while messy inventory management results in stock shortages, lost sales and poor coordination with suppliers. This results in issues with the loss of tracking accounts payables and accounts receivables. Business also faces issues in relation to employees' management and tasks involved in the sales functions. In order to solve this, the managers need new systems that can provide both regular, weekly sales reports and immediate alerts for critical issues such as low stock levels.

You are required to:

- (a) (i) **Explain** three(03) different types of Management Information Systems (MIS) that can be integrated into **Masha Clothing** to cater to the requirements of managers. (06 marks)
 - (ii) **State** two(02) types of reports that can be retrieved from the above-mentioned information systems. (02 marks)
 - (b) **State** two(02) advantages of E-commerce to customers of **Masha Clothing**. (02 marks)
- (Total 10 marks)

Question 05

Cakes & Bakes, a well-known confectionery shop, uses different social media platforms to run promotions to collect customers' information for a loyalty program and to recruit employees for its branches. Recently, a security threat compromised their accounts, leading to a data breach that exposed this sensitive customers' information.

You are required to:

- (a) **Identify** three(03) different social networking sites that **Cakes & Bakes** can use to run promotions. (03 marks)
 - (b) **State** three(03) positive impacts of using social media by **Cakes & Bakes**. (03 marks)
 - (c) **State** the difference between "Cyber Bullying" and "Hacking". (04 marks)
- (Total 10 marks)

Question 06

A leading pharmaceutical chain in Sri Lanka is undergoing a major digital transformation to stay competitive in the fast-changing market. The company is introducing AI-powered demand forecasting, IoT-based inventory monitoring and mobile payment solutions that allow customers to make cashless transactions through digital wallets and QR codes.

The management expects these innovations to improve customers' experience, to reduce operational costs and to strengthen its market position.

You are required to:

- (a) **Explain** two(02) ways how the driving forces of the 4th Industrial Revolution have influenced the company's decision to adopt such technologies. (03 marks)
 - (b) **Explain** two(02) innovations introduced to the Sri Lankan market that can be considered as disruptive technologies including how these innovations have transformed traditional business operations. (04 marks)
 - (c) **List** three(03) challenges that the company may face during the digital transformation in the 4th industrial revolution. (03 marks)
- (Total 10 marks)

End of Section B

SECTION C

(Total 25 marks)

Question 07

LankaTech (Pvt) Ltd. is a growing electronic equipment manufacturer that has recently begun transforming its operations into a Smart Factory. The company has implemented a smart web application integrated with a database system to connect key functions such as procurement, production, inventory management, finance, and human resources.

Through this system, real-time data is collected from smart sensors installed on production machines to monitor performance and to identify maintenance needs. Managers use dashboards and analytical tools to make data-driven decisions, while employees communicate and share information through internal digital platforms. The company automatically collects machines and production data for data mining activities.

The management of the company is currently evaluating the benefits of implementing an ERP system to strengthen live connections with their customers and suppliers. The company also aims to promote environmentally responsible practices through energy-efficient operations and digital documentation to reduce paper waste.

The management believes that adopting advanced information systems will enhance productivity, support better decision-making and improve overall sustainability.

You are required to:

- (a) **Explain** three(03) advantages of using Database Management System (DBMS) in **LankaTech (Pvt) Ltd.** to increase the efficiency and effectiveness of its business processes. (06 marks)
- (b) **List** four(04) advantages that could gain by **LankaTech (Pvt) Ltd.** by implementing an ERP system in the organization. (04 marks)
- (c) **Explain** what is meant by data mining and **List** three(03) data mining applications that can be used by **LankaTech (Pvt) Ltd.** (05 marks)
- (d) **State** three(03) business analytics tools that can be used by **LankaTech (Pvt) Ltd.** (03 marks)
- (e) **Explain** two(02) benefits that **LankaTech (Pvt) Ltd.** can obtain by introducing Green IT initiatives. (04 marks)
- (f) **State** three(03) advantages of using cloud computing by **LankaTech (Pvt) Ltd.** (03 marks)

(Total 25 marks)

End of Section C

ACTION VERBS CHECK LIST

Level of Competency	Description	Action Verbs	Verb Definitions
Knowledge (1)	Recall Facts and Basic Concepts.	Draw	Produce a picture or diagram.
		Relate	Establish logical or causal connections.
		State	Express details definitely or clearly.
		Identify	Recognize, establish or select after consideration.
		List	Write the connected items.

Level of Competency	Description	Action Verbs	Verb Definitions
Comprehension (2)	Explain & Elucidates Ideas and Information.	Recognize	Show validity or otherwise, using knowledge or contextual experience.
		Interpret	Translate into understandable or familiar terms.
		Describe	Write and communicate the key features.
		Explain	Make a clear description in detail using relevant facts.
		Define	Give the exact nature, scope or meaning.

Level of Competency	Description	Action Verbs	Verb Definitions
Application (3)	Use and Adapt Knowledge in New Situations.	Reconcile	Make consistent / compatible with another.
		Graph	Represent by graphs.
		Assess	Determine the value, nature, ability or quality.
		Solve	Find solutions through calculations and/or explanation.
		Prepare	Make or get ready for a particular purpose.
		Demonstrate	Prove or exhibit with examples.
		Calculate	Ascertain or reckon with mathematical computation.
		Apply	Put to practical use.

Level of Competency	Description	Action Verbs	Verb Definitions
Analysis (4)	Draw Connections Among Ideas and Solve Problems.	Communicate	Share or exchange information.
		Outline	Make a summary of significant features.
		Contrast	Examine to show differences.
		Compare	Examine to discover similarities.
		Discuss	Examine in detail by arguments.
		Differentiate	Constitute a difference that distinguishes something.
		Analyze	Examine in details to find the solution or outcome.