

QUESTION 1 (10 MARKS)

	Question	Answer
1.1	Corrective controls discover the occurrence of adverse events, such as operational inefficiency	False
1.2	SWOT analysis entails an analysis of strengths, weaknesses, opportunities and threats	True
1.3	Computer-aided Software Engineering (CASE) is an example of end-user development	False
1.4	The internet is a private facility consisting of a small number of computers linked together	False
1.5	Microsoft Windows is an open source operating system	False
1.6	Computers built between 1958 and 1964 are classified as second-generation computers	True
1.7	A closed system is a system that is completely isolated from the environment in which it operates	True
1.8	Information is a non-vital resource that may assist users in performing their duties in the business environment	False
1.9	The first King Report on Corporate Governance for South Africa was launched in 1994	True
1.10	Encryption is used to verify that the user of an ID is the owner of the ID	False

QUESTION 2 (10 MARKS)

A1	The process of changing data into a form that can read by the intended receiver	B14	Encryption
A2	Translates high-level language programmes into machine code instructions	B6	Compiler
A3	An organisation contracts out the information function to a third party at a fixed fee	B9	Outsourcing
A4	A stage in the project's lifecycle	B20	Maturity
A5	A private network that is contained within the organisation	B1	Intranet
A6	Translates each source code instruction, one at a time, into machine code and executes it	B8	Interpreter
A7	Software normally included with the operating system and consists of programmes for routine, repetitive instructions	B19	Utility software
A8	Includes all software that utilises the information system to solve the specific data processing needs of users	B10	Application software
A9	Consists of two (or more) components that combine to achieve a common goal	B18	System
A10	Conversion of data into information	B2	Data conversion

QUESTION 3 (11 MARKS)

3.1 (6 MARKS)

- Target setting level – where managers decide on targets or objectives in response to environmental demands.
- Operations level – where the organization converts the inputs into outputs through activities and processes
- Monitoring level – where the actual outputs are measured and compared with the targets (as set during the target-setting level) to determine whether these outputs (produced by the system) are still according to plan.

3.2 (3 MARKS)

- The current and previous years' financial results to determine the profitability of the organisation
- Predictions of the organisation's future performance based on the current strategies.
- Alternative strategies to reach the objectives, as well as predictions of the effect of each of these strategies on the organisation's future performance
- The effect of the changing environment on the performance or future existence of the organisation.

3.3 (2 MARKS)

A general system is a set of two or more components that serve a common purpose and interact to achieve a common goal. It consists of subsystems or elements that perform specific functions supporting the larger system.

QUESTION 4 (10 MARKS)

4.1 (2 MARKS)

- Arithmetic logic unit (ALU)
- Control unit

4.2 (3 MARKS)

- Random access memory (RAM)
- Read-only memory (ROM)
- Cache memory

4.3 (5 MARKS)

- High speed of processing
- Large volumes of transactions
- Improved quality
- Effective communication
- Low cost of processing information

- High complexity of calculations

QUESTION 5 (12 MARKS)

5.1 (7 MARKS)

- Processor task management
- Memory management
- Device management
- File management
- Application program interface (API)
- User interface (UI)
- Network capabilities

5.2 (5 MARKS)

- Anti-virus and anti-spam software
- Back-up utilities
- Data compression software
- Disk compression utilities
- File managers
- Network utilities

QUESTION 6 (9 MARKS)

6.1 (5 MARKS) (any 5)

- Microwave transmission
- Satellite transmission
- Cellular telephones
- Global positioning systems
- Cordless computer devices

6.2 (4 MARKS)

- Speed of transmission
- Effective rate of transmission
- Direction of transmission
- Mode of transmission

QUESTION 7 (11 MARKS)

7.1 (6 MARKS) (any 3)

- Changes in technology – new technology can lead to new production processes or communication methods by using new and better equipment, which will affect the information system.

- Changes in decision-making policies – for example decision to centralise decision-making and information systems, or to decentralise decision-making and information systems, will lead to a need to replace, change, or improve the existing information systems
- Changes in the needs and demands of users and stakeholders – to improve decision-making, the needs of different users of the information change continually
- Changes in the business environment – organisations need to stay competitive in an environment where the impact of an increasingly global market is enormous
- Changes in the nature of the organisation – changes in the activities of the organisation, for example more production lines or changes in production lines
- Changes to maintain the competitive advantage – a constant flow of new ideas and changes are necessary to stay ahead of competition
- Changes to improve performance and productivity – re-design of business processes and information system in order to improve performance and productivity of the organisation

7.2 (5 MARKS)

- System performance criteria
- Key decision analysis
- system framework
- information flows
- database design
- controls and authorities
- build proposals

QUESTION 8 (8 MARKS)

8.1 (5 MARKS) (any 5)

- business objectives
- critical success factors
- key performance indicators
- information systems needs
- the human resource requirements
- cost benefit analysis and funding assessment

8.2 (3 MARKS) (any 3)

- purchase
- leasing
- renting
- outsourcing

QUESTION 9 (9 MARK)

9.1 (1 MARK)

Computer crime includes a wide range of illegal activities in which a computer and or network are used as a tool to commit crime or where a computer and/ or a network are the target of crime.

9.2 (2 MARKS)

- Phishing – uses email messages that appear to come from legitimate businesses with which one might well have had dealing. The phishing email asks for verification of certain information, such as account numbers and passwords, allegedly for auditing purpose.
- Pharming – is an attack with aim of redirecting a web site’s traffic to an alternate and illegitimate website. Pharming can be conducted either by changing the host’s file on a victim’s computer or by DNS server “poisoning”.

9.3 (6 MARKS) (any 6)

- Errors and omissions
- Fraud and theft
- Disgruntled employees
- Physical and infrastructure threats
- Malicious hackers
- Industrial espionage
- Malicious code

QUESTION 10 (10 MARKS)

10.1 (4 MARKS)

- It is the exchange of digital information between parties.
- It is enabled by technology
- It is mediated by technology
- It includes all electronically based intra- and inter-organisational activities

10.2 (6 MARKS) (any 3)

- Business-to-business (B2B) – for example a wholesaler sells to a retailer
- Business- to-consumer (B2C) – UNISA students can purchase books by using www.kalahari.net or www.vanschaik.com
- Consumer-to-consumer (C2C) –Gumtree and Junkmail are examples of C2C websites
- Consumer- to-business (C2B) – a consumer post his request for a product or service online, indicating the details for the product or service, that is, amount available, delivery dates and other specifications
- E-government – for example SARS e-filing (www.sarsefiling.co.za) to file tax returns, SA citizens can verify their marital status and ID status by using Department of Home Affairs website (www.home-affairs.gov.za)

Total 100 marks