



**PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF INFORMATICS

QUALIFICATION: Bachelor of Logistics and Supply Chain Management	
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SESSION: JUNE 2024	PAPER: PAPER 1
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS
<ol style="list-style-type: none">1. Answer ALL the questions.2. Read all the questions carefully before answering.3. Number the answers clearly

THIS QUESTION PAPER CONSISTS OF 7 PAGES (Including this front page)

SECTION A

MULTIPLE CHOICE QUESTIONS [20 Marks]

Answer all questions in this section.

1. Which of the following statements about Internet security vulnerabilities is *not* true?
 - A) Sharing files over a P2P network can expose information on a corporate computer to outsiders.
 - B) Large public networks, such as the Internet, are less vulnerable than internal networks.
 - C) Employees can pose a security threat.
 - D) Instant messaging can provide hackers access to an otherwise secure network.
 - E) Email attachments can serve as a springboard for malicious software.

2. When a cookie is created during a Web site visit, it is stored
 - A) On the visitor's computer.
 - B) On the ISP's computer.
 - C) In a Web directory.
 - D) On the Web site computer.
 - E) None of the above

3. What is one advantage of cloud computing?
 - A) Sustainability
 - B) Simplicity
 - C) Security
 - D) Privacy
 - E) None of the above

4. Which of the following refers to policies, procedures, and technical measures used to prevent unauthorized access, alteration, theft, or physical damage to information systems?
 - A) Security
 - B) Controls
 - C) Benchmarking
 - D) Algorithms
 - E) Identity management

5. Which of the following statements about wireless security is *not* true?
 - A) LANs using the 802.11 standard can be easily penetrated by outsiders.
 - B) Wi-Fi networks are susceptible to hacking by eavesdroppers.
 - C) War driving involves eavesdroppers driving by buildings or parking outside and trying to intercept a wireless network.
 - D) Intruders can force a user's NIC to associate with a rogue access point.
 - E) Bluetooth is the only wireless technology that is not susceptible to hacking by eavesdroppers.

6. The most relevant general software package for logisticians is _____.
 - A) Spreadsheets
 - B) Word processing
 - C) Presentation packages

- D) Email
 - E) Hansaworld
7. Which of the following is NOT an advantage of a Hybrid Cloud offering?
- A) Capital Cost saving
 - B) Self-Serve Access
 - C) No Maintenance
 - D) Increased security
 - E) All of the above
8. Which of the following statements about radio-frequency identification (RFID) is false?
- A) RFID only offers read capabilities
 - B) Walmart has been a major catalyst for RFID usage in logistics
 - C) RFID can store large quantities of data
 - D) RFID has helped to reduce the occurrence of inventory stock-outs
 - E) None of the above
9. Which of the following is not a potential benefit of transportation management systems (TMS)?
- A) Fewer stock-outs
 - B) Reduced fuel consumption
 - C) Decreased empty vehicle miles
 - D) Reduced transportation expenditures
 - E) None of the above
10. Why is it important for the IoT cloud to support various APIs?
- A) The API allows multiple development environments.
 - B) The API allows new technology to be developed
 - C) The API connects the device to different data services
 - D) THE API connects the device to its analytics
 - E) None of the above
11. The move of other banks (e.g. Bank Windhoek & Standard Bank) retail banking to use sms notifications after FNB unveiled its sms notification services illustrates the use of information systems to achieve which business objective?
- A) Improved efficiency
 - B) Customer and supplier intimacy
 - C) Survival
 - D) Competitive advantage
 - E) Improved decision making

12. The six important business objectives of information technology are new products, services, and business models; customer and supplier intimacy; survival; competitive advantage; operational excellence; and
- A) Improved flexibility.
 - B) Improved decision making.
 - C) Improved business practices.
 - D) Improved efficiency.
 - E) Improved business value.
13. Which of the following is *not* one of the six strategic business objectives that businesses are seeking to achieve when they invest in information systems?
- A) Operational excellence
 - B) Improved decision making
 - C) Improved community relations
 - D) Competitive advantage
 - E) Survival
14. Which of the following may lead to competitive advantage?
- 1. New products, services, and business models
 - 2. Charging less for superior products
 - 3. Responding to customers in real time
- A) 1 only
 - B) 1 and 2
 - C) 2 and 3
 - D) 1 and 3
 - E) 1, 2, and 3
15. The term "management information systems" designates a specific category of information systems serving
- A) Integrated data processing throughout the firm.
 - B) Transaction process reporting.
 - C) Employees with online access to historical records.
 - D) The information technology function.
 - E) Middle management functions.
16. Which of the following is *not* a true statement with respect to business processes?
- A) Every business can be seen as a collection of business processes.
 - B) Analyzing business processes can enable you to achieve a clear understanding of how a business actually works.
 - C) The performance of a business firm typically is not related to its business processes.
 - D) Business processes can be either a source of competitive strength or a liability.

E) A business process may involve a unique way in which work, information, and knowledge are coordinated within an organization.

17. Which of the following is not a business benefit of collaboration?

- A) Improved quality
- B) Improved financial performance
- C) Improved customer service
- D) Improved innovation
- E) Improved compliance with government regulations

18. What is the role of a controller in an IoT device?

- A) To collect and gather data from the physical environment
- B) To transport the data to the software-defined product
- C) To decipher the data received and make decisions
- D) To make the physical change necessary from sensor data
- E) All of the above

19. The four major competitive strategies are

- A) Low-cost leadership, substitute products and services, customers; and suppliers.
- B) Low-cost leadership, product differentiation, focus on market niche, and customer and supplier intimacy.
- C) New market entrants, substitute products and services, customers, and suppliers.
- D) Low-cost leadership, new market entrants, product differentiation, and focus on market niche.
- E) Customers, suppliers, new market entrants, and substitute products.

20. The Internet of things (IoT) is expected to drive value in the supply chain and logistics disciplines through enhanced customer interactions and _____.

- A) Improved order management techniques
- B) Faster transit times
- C) Reduced warehousing requirements
- D) Improvements in employee productivity
- E) None of the above

SECTION B**TRUE OR FALSE****[15 Marks]**

Answer all questions in this section.

1. Big Data refers to large amounts of near-real-time data collected through a variety of sources such as sensors and smart phones.
2. The Internet has emerged as the measuring stick for logistics information technology during the first decade of the twenty-first century.
3. A transaction processing system helps people work together by interacting and sharing information in many different forms.
4. Electronic data interchange (EDI) is an example of a logistics-related transaction processing system.
5. One prominent drawback to radio-frequency identification (RFID) involves privacy concerns.
6. Artificial intelligence refers to a computer-based discipline that leverages algorithms that can “learn” from data.
7. The attractiveness of enterprise resource planning (ERP) systems comes from their potential for lower costs as well as increased productivity and customer satisfaction.
8. The origin of enterprise resource planning (ERP) systems can be traced back to finance and manufacturing.
9. A logistics information system (LIS) begins with a logistics manager requesting information and ends with the manager receiving regular and customized reports.
10. Software viruses are viewed as the most important information technology issue that companies face today.
11. A hotel reservation system is a typical example of a management information system.
12. Information systems literacy describes the behavioral approach to information systems, whereas computer literacy describes the technical approach.
13. A transaction processing system is a computerized system that performs and records the daily routine transactions necessary to conduct business.
14. Cloud-based software allows for a great deal of customization.
15. Information systems play a critical role in information use and visibility during internal communications between many coworkers within an organization.

SECTION C

(65 MARKS)

Answer all questions in this section.

Question One

[30 marks]

- a) List any FIVE components of IT infrastructure as used in a Business Enterprise. **[15 marks]**
- b) Define the following terms. **[15 marks]**
 - i. Operating System **[3 marks]**
 - ii. Open- source Software **[3 marks]**
 - iii. Software Outsourcing **[3 marks]**
 - iv. Internet of Things **[3 marks]**
 - v. Big Data **[3 marks]**

Question Two

(25MARKS)

(a) According to Michael Porter, a firm can survive and succeed in the long run if it successfully develops strategies to confront the five competitive forces that shape the structure of competition in its industry such as; Rivalry of competitors within its industry, Threat of new entrants, Threat of substitutes, bargaining power of customers, Bargaining power of suppliers.

ABC Freight, a multinational logistics company engaged you as its IT consultant and you are required to present to its management how Information Technology can help ABC Freight to develop the following strategies. Write down your ideas for each of the strategies below.

- 1. Cost Leadership Strategy **[5 MARKS]**
- 2. Differentiation Strategy **[5 MARKS]**
- 3. Innovation Strategy **[5 MARKS]**
- 4. Growth Strategies **[5 MARKS]**
- 5. Alliance Strategies **[5 MARKS]**

Question Three

[10 marks]

- a) What is Cloud computing? **[2 marks]**
- b) Cloud Computing has offered increased data, integrated communication and real – time analytics to Logistics and Supply Chains. Name any Eight benefits of Cloud Computing **[8 marks]**

TOTAL MARKS 100