NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF INFORMATICS

QUALIFICATION: Bachelor of Logistics and Supply Chain Management	
QUALIFICATION CODE: 07BLSC	**LEVEL:** 6
COURSE CODE: ITL611S	**COURSE NAME:** Information Technology in Logistics
SESSION: JULY 2024	**PAPER:** PAPER 1
DURATION: 3 HOURS	**MARKS:** 100

SECOND OPPORTUNITY/SUPPLEMENTARY EXAMINATION QUESTION PAPER	
EXAMINER(S)	**Mr Admire Kachepa**
MODERATOR:	**Mr Nkululeko Mthembo**

INSTRUCTIONS
1. Answer ALL the questions. 2. When writing, take the following into account: The style should inform than impress, paragraphs set out according to ideas or issues and paragraphs flowing in a logical order. 3. Information should be brief and accurate. 4. Please ensure that your writing is **legible, neat, and presentable**

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. Warehouse management systems (WMS) represent an example of what general type of information management system?
   A) Communication System
   B) Transaction Processing System
   C) Decision Support System
   D) Office Automation System
   E) Microsoft Office Suite

2. The origins of contemporary enterprise resource planning (ERP) system can be traced back to logistics and _____.
   A) Manufacturing
   B) Marketing
   C) Purchasing
   D) Finance
   E) Advertising

3. _____ has been identified as the biggest information technology challenge that companies face today
   A) Software viruses
   B) Information Security
   C) The cost of technology
   D) Employee resistance
   E) Company politic

4. Which of the following would a manager use to determine the impact on production schedule if sales doubled in the next quarter?
   A) MIS
   B) TPS
   C) ESS
   D) DSS
   E) CRM

5. The logistics network most likely consists of
   A) PRODUCTION layouts
   B) internal and external flow management
   C) auto identification technologies
   D) production and warehouse facilities
   E) None of the above

6. 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.

7. Today's ERP systems focus on
   A) providing real-time information within the enterprise
   B) Facilitating collaboration efforts to improve quality management practices within the enterprise.
   C) Improving the value of information found in legacy systems.
   D) Facilitating collaboration efforts among trading partners.
   E) None of the above

8. RFID tags placed on case-packs and pallets within the distribution center can play a vital role in
   A) controlling the flow of goods in a TMS
   B) controlling the flow of goods in a WMS
   C) controlling the flow of goods in a RMS
   D) controlling the flow of goods in a YMS
   E) All of the above

9. RFID is not really a new technology, but it is being hailed as an emerging technology for
   A) Tracking products as they move along the supply chain.
   B) Connecting workers with the firm's system while out of the office.
   C) Automating direct product data exchange between the key supply chain partners.
   D) Smart BPM systems.
   E) All of the above

10. Automated decision systems involves the use of
   A) Rule-based expert systems to make decisions.
   B) RFID-based systems to make the day-to-day decisions.
   C) GDS-based systems to make tactical transportation decisions.
   D) Day-to-day decisions using generic rules.
   E) All of the above

11. Information systems play a critical role in today's firms, and the most common enabler is
   A) the use of email
   B) The use of cell phones and other telecommunication devices.
   C) ERP systems.
   D) Micro Soft systems.
   E) None of the above

12. Using numerous computers to inundate and overwhelm the network from numerous launch points is called a(n) _____ attack.
   A) DDoS
   B) DoS
   C) SQL injection
   D) Phishing
   E) Botnet

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 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.

15. 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

16. The term *management information systems* refers to 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.

17. Warehouse management systems (WMS) represent an example of what general type of information management system?
    A) Communication System
    B) Transaction Processing System
    C) Decision Support System
    D) Office Automation System
    E) Microsoft Office Suite

18. 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

19. The origins of contemporary enterprise resource planning (ERP) system can be traced back to logistics and _____.
    A) Manufacturing
    B) Marketing
    C) Purchasing
    D) Finance
    E) Advertising

20. Which of the following would a manager use to determine the impact on production schedule if sales doubled in the next quarter?
    A) MIS
    B) TPS
    C) ESS
    D) DSS
    E) CRM

SECTION B

TRUE OR FALSE **[15 Marks]**

State True/ False

Answer all questions in this section.

1. Managing and coordinating the functional views of processes within a network of supply chain partners leads to successful CRM.
2. In general, CRM processes manage the firm's customer base so that customers remain satisfied and continue to purchase goods and services.
3. Transportation companies that have implemented global positioning systems (GPS) have reported increased worker productivity, reduced operating costs, and improved customer relations.
4. CRM software applications can create significant competitive advantage for the company and its trading partners.
5. One prominent drawback to radio-frequency identification (RFID) involves privacy concerns.
6. Emerging technologies play a vital supporting role in customer service performance since this function is also involves in moving, storing, and distributing products in response to a customer order.
7. Studies have shown that ERP system failures are often the result of poor training.
8. The Internet is the primary transaction medium for cloud-based software.
9. Many of the ERP suppliers want their product to become the foundation of firms' planning system infrastructures, by making the ERP system a decentralized repository for business systems.
10. The Internet of things (IoT) is expected to drive value in the supply chain and logistics disciplines through faster transit times and enhanced customer interactions.
11. Purchasing may also use RFID to informally collect general information on price, design, timing, and/or other terms the firm is interested in obtaining.

12. Enterprise software applications increase the accessibility of information and can add value to internal as well as external process integration and can reduce the gaps found in people-oriented factors in supply chain management.
13. A computer worm is a program that can copy itself to other computers on the network.
14. Radio-frequency identification (RFID) is the most popular automatic identification system currently in use.
15. Warehouse management also includes the control of all inventories, such as raw materials, work-in-process, and finished goods when not in use.

SECTION C **[65 MARKS]**

Answer all questions in this section.

QUESTION ONE **[25 Marks]**

Michael E. Porter was the first to introduce the concept of value chain.

A) What is the main purpose of Porter's value chain model? **[10 Marks]**
B) Name and Explain the FIVE primary activities of a value chain? **[15 Marks]**

QUESTION 2 **(25 MARKS)**

Read the scenario below and answer the following questions:

Barcode and Radio Frequency Identification (RFID) are two examples of most commonly used Automatic Identification and Data Capture systems in the logistics and supply chain management around the globe.

1. Identify and explain three main components of RFID **[9 Marks]**
2. State and explain two different types of barcodes **[6 Marks]**
3. Discuss FIVE benefits of RFID over barcodes. **[10 Marks]**

QUESTION THREE **[15 Marks]**

Business Process Automation (BPA) focuses on automating workflows such as document approval, data capture, sending and receiving information within an organization.

1. Name the THREE categories of BPA tools in Logistics **[3 Marks]**
2. What is Big Data? **[2 Marks]**
3. Name and explain any FIVE characteristics of Big Data **[10 Marks]**

TOTAL MARKS 100