nAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF INFORMATICS

QUALIFICATION: BACHELOR OF INFORMATICS HONOURS (WEB INFORMATICS, BUSINESS INFORMATICS)	
COURSE: ENTERPRISE ARCHITECTURE	COURSE CODE: EAT810S
QUALIFICATION CODE: 08BIFH, 08BIHB	LEVEL: 8
SESSION: JUNE 2023	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 70

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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MODERATOR	Dr Michael Twum-Darko

INSTRUCTIONS
1.   Answer ALL the questions.
2.   Write clearly and neatly.
3.   Number the answers clearly.

PERMISSIBLE MATERIALS
None.

THIS QUESTION PAPER CONSISTS OF 5 PAGES

(Excluding this front page)

Section A: True and False Questions [10 marks]

1 mark for each question

1 Small companies can operate in the modern competitive environment without leveraging the support provided by information systems.

2 Various parameters of hardware equipment have been constantly growing at an exponential rate.

3 Firms that listen to their customers are more likely to be able to counteract the onslaught of potentially disruptive technologies.

4 The people aspect deals with Modifying attitudes and cultural prejudices regarding the new IT system.

5 The business capabilities of a modern organisation are often determined largely by the capabilities of its IT systems.

6 The people aspect encompasses all routine tasks, operating procedures and associated regulations, as well as information requirements, decision-making rights and the degree of autonomy of their performers.

7 The business capabilities of a modern organization are often determined largely by the capabilities of its IT systems.

8 Companies have a single center of power and decision-making accountable for all planning decisions.

9 Enterprise Architecture does not provide macro and micro views of how resources are to be leveraged.

10 Technical architecture has no influence on business architecture.

Section B: Multiple-Choice Questions   [10 Marks]

1 mark for each question

1. The people aspect of technology DOES NOT include the following:

   a. Roles and Skills
   b. Motivation and compensation
   c. Attitude and culture
   d. Routine Tasks and Operating Procedures

2. _____are concerned with tactical business and IT planning, carrying out particular business processes in business units, introducing specific local changes, making incremental improvements, implementing concrete IT systems.

   a. Tactical actors
   b. Business actors
   c. IT actors
   d. Strategic actors

3. Which statement best describes organisation use of IT systems to achieve operational excellence and cost leadership:

   a. IT systems can be used to fully automate operations, eliminate delays and deviations, avoid manual labor and achieve standardized, fine-tuned and predictable business processes.
   b. IT systems can be used to facilitate the design of new products, support teamwork, collaboration and creativity and provide unique, innovative products or services to the market.
   c. IT systems can be used to collect and store customer data, analyze customer needs and preferences, identify broad customer segments, target specific customer groups and even develop highly customized offers for particular customers.
   d. For the IT systems the larger the organization, the larger the presence of the EA roles and the more they approach EA from a business perspective.

4. An understanding of organizational structure is important during the process of Enterprise Architecture development because it

   a. Helps in understanding the stakeholders to gain their support and manage expectations of the EA program
   b. It reflects the current and the future views of the organization
   c. Represent the formal system of work roles that reflect how employees and managers interact with each other
   d. It reflects how applications are developed in the organization

5. The term enterprise means

   a. Higher level, strategic view of an entity
   b. An organisation with interlinked business units

c. A legal entity with culture and pattern of behaviours

d. A collection of business activities and supporting technologies

6. Which of the following is not true about Enterprise Architecture?

   a. Organising logic for business processes and IT Infrastructure reflecting the standardisation and integration of a company's operating model

   b. Is the analysis and documentation of an Enterprise in its current and future states from an integrated Strategy, Business, and Technology perspective

   c. Enterprise Architecture = Strategy + Business

   d. Is a Business issue

7. Which of the following is not an EA domain?

   a. Business Architecture
   b. Service-oriented Architecture
   c. Data Architecture
   d. Product Architecture

8. Most companies move into the _____ stage by creating a corporate CIO role or by endowing the incumbent CIO with the authority to mandate IT-related behaviours.

   a. Business Silos architecture
   b. Standardized Technology architecture
   c. Optimized Core Architecture
   d. Business Modularity architecture

9. _____identifies the types and methods of documentation to be used in each sub-architecture area, including strategic analyses, business plans, internal controls, security controls, and models of workflow, databases, systems, and networks.

   a. Standards
   b. Artefacts
   c. Methodology
   d. Frameworks

10. The role of IT in the _____ stage is to facilitate the achievement of company objectives by building reusable data and business process platforms.

    a. Business Silos architecture
    b. Standardized Technology architecture
    c. Optimized Core Architecture
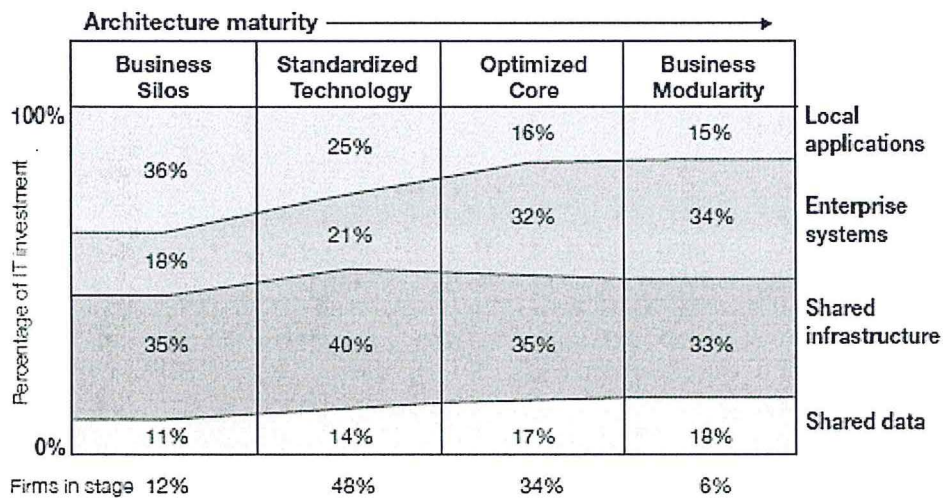   d. Business Modularity architecture

Section C: Structured Questions [50 marks]

Question 1: The integration model is associated with low process standardization and higher data integration. Briefly discuss the IT landscapes of an organisation that adopts the Integration Model. [5 marks]

Question 2: Mention any four problems associated with the business strategy as an inadequate basis for information systems planning. [4 marks]

Question 3: Explain why is it critical to assess and understand the culture of an organisation before the implementation of the EA program. [3 marks]

Question 4: With reference to the diagram below, discuss the utilization and IT investments in local applications as the organisations are advancing through the four architecture maturity stages. [8 marks]

Question 5: The productive use of information systems always requires consistent and coordinated changes in three broad organizational aspects. Briefly discuss the interconnection between the three (people, process and technology) aspects. [6 marks]

    a. People
    b. Process
    c. Technology

Question 6: Defend the statement: organisations are self-evolving entities. [5 marks]

Question 7: What role does Enterprise Architecture play as a communication medium between diverse business and IT stakeholders in organisations? [4 marks]

Question 8: In terms of their usage, differentiate between permanent Enterprise Architecture artefacts and temporary Enterprise Architecture artefacts. [6 marks]

Question 9: List the business enabling Enterprise Architecture domains and describe their purpose in more detail. [9 marks]

<p style="text-align:center">END</p>