



MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

FACULTY OF ENGINEERING, APPLIED SCIENCES AND TECHNOLOGY

DEPARTMENT: COMPUTER SCIENCE AND INFORMATION SYSTEMS

MODULE: ENTERPRISE ARCHITECTURE

CODE: INSY413

SESSIONAL EXAMINATIONS
OCTOBER-2023

DURATION: 3 HOURS

EXAMINER: MR PT. DENHERE

INSTRUCTIONS

- 1. Answer Any four (4) questions*
- 2. Each question carries a Total of 25 marks*
- 3. Start a new question on a fresh page*
- 4. Total marks 100*

Additional material(s): None

Question One

- a) Explain the following terms as they relate to Enterprise Architecture engineering.
- i. Business Architecture [4 Marks]
 - ii. Application Architecture [4 Marks]
 - iii. Technology Architecture [4 Marks]
 - iv. Data Architecture [4 Marks]
- b) Briefly outline the role of SOA in Enterprise Digital Transformation initiatives. [9 Marks]

Question Two

Identify the four stages of Enterprise Architecture Maturity and discuss the various strategies that should be deployed in managing architecture transformation at the various stages of EA maturity. [25 Marks]

Question Three

Comparatively discuss the various frameworks in Enterprise Architecture development, identifying the various themes of each and clearly justify the one you would adopt as an Information Systems practitioner. [25 Marks]

Question Four

- a) Explain how agile EA engineering approach can be applied within an organization. [10 Marks]
- b) The visual studio enterprise architect (VSEA) is an all-inclusive development tool used in designing applications and XML Web services. Explain the functions in detail of the VSEA in EA engineering. [15 Marks]

Question Five

- a) Outline the process of creating Enterprise Architecture vision. [10 Marks]
- b) Discuss the contents of a “Target Architecture Report” based on the Architecture Building Blocks. [15 Marks]

Question Six

Evaluate the various enablers to EA interoperability in complex digital transformation initiatives and give examples where appropriate. [25 Marks]

END OF EXAMINATION