



ZIMBABWE EZEKIEL GUTI UNIVERSITY

**FACULTY OF SCIENCE, TECHNOLOGY, AGRICULTURE AND FOOD
SYSTEMS DEVELOPMENT**

INFORMATION SYSTEMS DEPARTMENT

EXAMINATION PAPER

COURSE CODE : BIS122
COURSE TITLE : Software Engineering
DURATION : 3 Hours
LEVEL : L2
DATE : 2025

22 SEP 2025

INSTRUCTIONS TO CANDIDATES:

1. Answer all the questions.
2. Each question carries 25 Marks.

Question 1

- a. Define the software development life cycle (SDLC). Describe each phase and its significance. [12 marks]
- b. Compare and contrast Agile and Waterfall methodologies. Discuss their advantages and disadvantages. [13 marks]

Question 2

- a. Why does prototyping so essential as part of user interface design process? [10 marks]
- b. What are the key components of project management? Explain the importance of scope, time, and cost management. [15 marks]

Question 3

- a. Discuss the role of a project manager in software development. What skills are essential for effective project management? [15 marks]
- b. Explain the significance of project planning in software engineering. What are the main activities involved in project planning? [10 marks]

Question 4

- a. What is the importance of quality assurance in software projects? How can it be integrated into the software process? [15 marks]
- b. Differentiate between functional and non-functional requirements. Provide examples of each. [10 marks]

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