



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF HEALTH, SCIENCE AND TECHNOLOGY

INFORMATION SYSTEMS DEPARTMENT

EXAMINATION PAPER

COURSE CODE : MIS107
COURSE TITLE : Software Engineering
DURATION : 3 Hours
LEVEL : 1.2
DATE : 2022

07 IIII 2022

INSTRUCTIONS TO CANDIDATES:

1. Answer any four questions only.
2. Each question carries 25 Marks.

student they can borrow a maximum of 5 books each time they borrow books from the library. The system will allow a librarian to add a new book into the system each time the university purchase new books. Each time a member borrows a book from the library the librarian checks out the book from the library and when the member returns the book the librarian checks in the book into the library system. Staff members each time they borrow a book the loan period is for three months but for students the loan period is for 1 month. The members can use the system to reserve a book which they want from the library and they can also extend the loan with a further 1 month.

- i) Identify the business processes and rules for the new system. [4 marks]
- ii) Who are the stakeholders of the new system? [2 marks]
- iii) Come up with five functional requirements for the new system. [5 marks]
- iv) Invent two non-functional requirements together with their fit criteria. [4 marks]
- v) Come up with a use case diagram for the new library system proposed above. [10 marks]

Question 5

- a. What is the meaning of software maintenance? Give THREE different types of software maintenance [4 marks]
- b. What does a good software mean? How do we define a good software and what are the characteristics of a good software? [12 marks]
- c. Explain why programs which are developed using evolutionary development are likely to be difficult to maintain. [9 marks]

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