The state and the state of the

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF APPLIED SCIENCE COMPUTER SCIENCE DEPARTMENT DECEMBER EXAMINATIONS 2004

SUBJECT: STRUCTURED SYSTEMS ANALYSIS AND DESIGN

CODE: SCS2104

INSTRUCTION TO CANDIDATES

Answer all questions in sections A

Answer any **two** questions in section B.

Total Marks 100.

Time: 3 hours

Section A.

QUESTION ONE

- a) What is the purpose of the SPMP? List all the components of SPMP. [15]
- b) What are the strengths and weaknesses of the waterfall model? [10]
- c) What is meant by SSADM? How does it seek to improve the quality of software products? [10]
- d) What is the difference between JSP and JSD? [5]
- e) YSM, STRADIS, and Information Engineering are some of the structured tools, which are used for systems analysis and design. Describe the major features of these methods. [10]

QUESTION TWO

Draw and describe a waterfall model. Why is this model very popular with software houses? Compare and contrast the model with rapid prototyping

[20]

Section B

QUESTION THREE

Discuss in detail all the phases of the JSD, giving examples were possible.

[15]

QUESTION FOUR

POLA is tainted as a solution to security concerns of processes. Explain the concept using the following key terms: Authentication and Authorization.

[15]

QUESTION FIVE

Draw the DFD and ERD for an e-commerce system. The system should allow consumer to view products advertised on web pages, place orders, and pay for them using either credit card or e-money.

END OF QUESTION PAPER

GOOD LUCK!