



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

**FIRST YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN INFORMATION
TECHNOLOGY**

MAIN CAMPUS

CIT 114: SYSTEMS ANALYSIS AND DESIGN

Date: 14th June, 2017

Time: 12.00 - 3.00 pm

INSTRUCTIONS:

- Answer ALL questions in SECTION A and any other THREE from SECTION B
- Diagrams, where required, should be clearly drawn and labeled
- Use a NEW PAGE FOR EVERY QUESTION attempted, and indicate number on the space provided on the page of the answer sheet.
- Fasten together all loose answer sheets used.
- Mobile phones and PDAs are NOT allowed in the examination room.



Instructions: There are **THIRTEEN** (13) questions in this paper. Answer **ALL** questions in **PART A**, and any **THREE** (3) questions in **PART B**.

TIME: 3 HOURS

PART A: (40 MARKS)

QUESTIONS

1. Define the following terms:
 - a. System. (1 Marks)
 - b. Systems analysis. (1 Marks)
 - c. System design. (1 Marks)
 - d. Information System (1 Marks)
 - e. Open System (1 Marks)
2. State any five characteristics of an information system. (5 Marks)
3. Highlight any five functions of a system analyst. (5 Marks)
4. Describe three main types of information systems. (6 Marks)
5. Identify any five key stakeholders in a system development project. (5 Marks)
6. Give any five reasons for user involvement in system development. (5 Marks)
7. Highlight five stages of system development lifecycle (SDLC). (5 Marks)
8. Highlight the role requirement specification a given software development project. (4 Marks)

PART B: (60 MARKS)

9. Explain any five potential risks that could affect the outcome of a system development project. (20 Marks)
10. Describe the principal steps in the planning phase. What are the major deliverables? (20 Marks)
11. What is meant by the term *scalable*? What is its importance in architecture selection? (20 Marks)
12. List and describe the four primary functional components of a software application (20 Marks)

END