



(Knowledge for Development)

KIBABII UNIVERSITY COLLEGE

**A CONSTITUENT COLLEGE OF
MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY**

UNIVERSITY EXAMINATIONS

2014/2015 ACADEMIC YEAR

THIRD YEAR SECOND SEMESTER

MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF COMMERCE

COURSE CODE: CSC 222/BCO 354

COURSE TITLE: BUSINESS SYSTEM ANALYSIS AND DESIGN

DATE:

TIME:

INSTRUCTIONS TO CANDIDATES

Answer Question One in Section A and Any other TWO (2) Questions in Section B

TIME: 2 Hours

This Paper Consists of 3 printed pages Please Turn Over. ►

Question one (30 marks)

- a. Give any four characteristics of a system 4 marks
- b. Explain what a prototype is and describe how it can be used in Requirements gathering. 6 marks
- c. What are the advantages of prototyping? 3 marks
- d. What is meant by a stakeholder? 3 marks
- e. State and briefly explain the symbols used for data flow diagram drawing. 6 marks
- f. Give two examples of non-functional requirements, and for each suggest a measure that could be used to test whether a system satisfies the requirement. 4 marks
- g. Define at least FOUR elements of a system. 4 marks

Question two (20 marks)

- a. Data flow diagrams are the most commonly used way of documenting the process of current and required systems. Define and give the components of the DFDs. 10 marks
- b. Describe the main steps in the prototyping cycle. 10 marks

Question three (20 marks)

- a. Discuss three types of systems giving the opposite of the types you discuss. 9 marks
- b. Using a diagram explain four elements of a feedback of a open system. 8 marks
- c. Define the following term as used in systems theory.
 - i. Decomposition and how does it assist a system analyst? 3 marks

Question four (20 marks)

- a. List and explain the different classes of information system. 6 marks
- b. An important aspect of systems analysis is the fact finding stage depending on the circumstances and the system being studied. Describe THREE methods of fact finding that can be used giving two circumstances in which each may be suitable. 6 marks
- c. With the help of a diagram show and explain the stages of a system development life cycle (SDLC) 8 marks

Question five (20 marks)

- a. Describe the role and responsibilities of the Business Analyst. 5 marks
- b. Identify the stages of the system development life cycle that a Business analyst would typically be involved in. 5 marks
- c. Identify and explain levels of system testing. 6 marks
- d. Outline any FOUR functions of project management 4 marks