



(Knowledge for Development)

KIBABII UNIVERSITY

(KIBU)

**UNIVERSITY EXAMINATIONS
2021 / 2022 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR TWO SEMESTER ONE EXAMINATIONS**

**FOR THE DEGREE OF
BACHELORS OF SCIENCE
(INFORMATION TECHNOLOGY)**

COURSE CODE: BIT 215

COURSE TITLE: SYSTEMS ANALYSIS AND DESIGN

DATE: 24/01/2022

TIME: 2.00 P.M. – 4.00 P.M

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS) [COMPULSORY]

- a. Describe the unique role of *systems analysts* in the development of information systems. [2 Marks]
- b. (i) Explain why information systems (IS) are essential in organizations. [2 Marks]
(ii) Explain the difference between front-office information systems and back-office information systems. [2 Marks]
- c. Describe two cross lifecycle activities that overlap multiple system development phases. [4 Marks]
- d. Differentiate between PERT and Gantt charts as project management tools. [2 Marks]
- e. It is important to find out how the end users and managers feel about the problem solution that the system analyst has identified. Discuss. [3 Marks]
- f. Identify the five tasks that are done in the scope definition phase. [5 Marks]
- g. Describe two benefits of using JRP as a fact -finding technique. [4 Marks]
- h. A *relationship* is a natural business association between entities. Identify the relationship between student and lecturer. [2 Marks]
- i. Explain any two reasons why many information systems projects fail. [4 Marks]

QUESTION TWO (20 MARKS)

The following are the four classical phases in the Systems Development Life Cycle (SDLC). For each phase identify **TWO** deliverables, briefly describe each of these deliverables and identify the techniques used to produce it. [20 Marks]

- a. Requirements identification
- b. Analysis
- c. Design
- d. Implementation

QUESTION THREE (20 MARKS)

- a. For each letter of the **PIECES** framework, use Kibabii University Health Centre scenario to create a problem that a system analyst might discover in the obsolete information system. [10 Marks]
- b. Describe the waterfall method of systems development and briefly explain why this method is less popular now than it used to be. [10 Marks]

QUESTION FOUR (20 MARKS)

- a. Describe the eight major activities in the project management life cycle. [16 Marks]
- b. i. "Many new systems analysts fail to effectively analyze problems". Justify [2 Marks]
ii. Suggest what new systems analysts can do to become more effective. [2 Marks]

QUESTION FIVE (20 MARKS)

- a. Describe the five phases of systems analysis. [10 Marks]
- b. Explain the importance of conducting the requirements discovery process. [2 Marks]
- c. Discuss any two possible consequences of failing to identify system requirements correctly and completely. [6 Marks]
- d. Explain the difference between logical and physical models. [2 Marks]