

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS DEPARTMENT OF INFORMATION SYSTEMS AND TECHNOLOGY UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS

2^{ND} YEAR 1^{ST} SEMESTER 2017/2018 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: SCS 203

COURSE TITLE: INFORMATION SYSTEMS ANALYSIS AND DESIGN

EXAM VENUE: STREAM:

DATE: EXAM SESSION:

TIME:

INSTRUCTIONS

- 1. Answer Question 1 (Compulsory) and ANY other TWO questions
- 2. Candidates are advised not to write on the question paper
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room

QUESTION 1

a) Briefly explain your understanding of the following terms and concepts as applied Information systems analysis and design

i.	Input	(2 mks)
ii.	Information system	(2 mks)
iii.	Information systems analysis and design	(2 mks)
iv.	Information as a subset of Data	(2 mks)
v.	Structure analysis	(2 mks)

- b) Quality of information refers to its fitness for use or its reliability. State and explain any five characteristics features of information. (10 mks)
- c) Information system is an organized combination of resources and components that collects, transforms and disseminates information in an organization. State and explain any five information resources. (10 mks)

QUESTION 2.

- a) Mention six guidelines required for the development of new information systems (6 mks)
- b) Explain the advantages to an organization in having users involved in developing an information systems application (6 mks)
- c) List any four basic reasons for building a computerized information system in an organization.

 (4 mks)
- d) Differentiate between microcomputer systems and midrange computer systems as used in information systems analysis and design (4 mks)

QUESTION 3.

a) Define a Systems Analyst.

- (2 mks)
- b) Information technology can be used to implement a variety of competitive strategies. List and explain the three common strategies used in information technology. (9 mks)
- c) The main purpose of Information Systems is to support business operations and managerial decision making. Identify and explain three types of management support systems. (9 mks)

QUESTION 4.

- a) List four main skills of a system analyst and briefly explain each skill. (8 mks)
- b) In Information Systems analysis and design, the type of information required by the managers is directly related to the level of management and the amount of structure in the decision situation they face. Using a suitable diagram, explain the three levels of managerial controls.

(12 mks)

QUESTION 5.

- a) List four characteristics of a high performance system analysis and design team (4 mks)
- b) Discuss different phases in system development life cycle (10mks)
- c) An attacker with the right background and malicious intent has many ways to infiltrate internal company systems and network devices through the Internet connection. List any six security features that can be employed in an information system. (6 mks)