



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

**UNIVERSITY EXAMINATION FOR THE DEGREE IN BACHELOR OF BUSINESS
ADMINISTRATION**

2ND YEAR 1ST SEMESTER 2016/2017 ACADEMIC YEAR

MAIN CAMPUS (JAB)

COURSE CODE: SCS 203

COURSE TITLE: Information System Analysis & Design

EXAM VENUE: STREAM: BBA

DATE: EXAM SESSION: JAN-APRIL 2017

TIME: 2.00 HOURS

INSTRUCTIONS:

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**

Candidates must hand in their answer booklets to the invigilator while in the

QUESTION ONE.(30MARKS)

- a) What is information system analysis and design 3 marks
- b) Describe the major types of information systems applications 6marks
- c) Explain the meaning of Prototyping in information systems development 5marks
- d) Briefly give the advantages of Prototyping Model in system development 5marks
- e). Discuss the advantages and disadvantages of the following fact finding tools 5 marks
 - i. Questionnaires
 - ii. Interviewing
- b) Define data flow diagram 2marks
- c) Explain the components of a data flow diagram 4marks

QUESTION 2: {20 MARKS}

- a) There are two major types of requirements during systems development as listed below. Describe what they are? (8 Marks)
 - (i). Functional requirement.
 - (ii).Nonfunctional requirement.
- b) When the requirements of a system are incorrectly identified, certain challenges are encountered. Identify these challenges. (8 Marks)
- c) What does validation of requirements entails? (4 Marks)

QUESTION 3 (20MKS)

- a) Waterfall Model is one of the most widely used Software Development Process. It is widely used in the commercial development projects. In this iterative waterfall model Software Development process is divided into five phases. Explain these phases. { 10 marks }
- (b) Discuss the advantages and disadvantages of building systems using traditional systems Development Life Cycle (10marks)

QUESTION 4 {20 MARKS}:

- a) What are the steps to be followed when using general problem solving approach? (6 Marks)

- b) What do you understand by the term brainstorming? (2 Marks)
- c) Give *any four* guidelines used when conducting brainstorming session to gather facts. (4 Marks)
- d) Differentiate between data analysis and normalization. (8 Marks)

QUESTION 5:{20 MARKS}

- a) Joint Application Development (JAD) is one of the approaches in system development. What does it mean? and how is it conducted? (5 Marks)
- b) Prototyping approach is an iterative approach involving a close working relationship between the designers and the users. Discuss *any five* key benefits of prototyping approach. (10 Marks)
- c) Identify some of the skills required by any system analyst in order to perform their duties effectively. (5 Marks)