

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION WITH IT

# 2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER 2016/2017 ACADEMIC YEAR KISH CAMPUS-PARTTIME

**COURSE CODE: SCS 203** 

COURSE TITLE: INFORMATION SYSTEM ANALYSIS AND DESIGN

**EXAM VENUE:** STREAM: (BBA-IT)

DATE: EXAM SESSION:

TIME: 2 HOURS

## **Instructions:**

1. Answer Question ONE (COMPULSORY) and ANY other 2 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 ONE (30 MARKS)**

- a) Define the term 'Information system' and highlight any three components of an information system.
   (5 Marks)
- b) Briefly describe the flat structure and give three reasons why they are important in organizations. (5 Marks
- c) Define prototyping and give three reasons why you may not recommend prototyping as a method for systems development. (5 Marks)
- d) Highlight some of the constraints a systems analyst is likely to encounter in new systems development. (5 Marks)
- e) Briefly discuss any five characteristics of the structured methods of systems development. (5 Marks)
- f) Define system theory. And explain the difference between 'Deterministic' and 'probabilistic' systems. (5 Marks)

### **QUESTION TWO (20 MARKS)**

- a) With a diagram, describe the hierarchical organization management structure and the type of information system required at each level, clearly bringing out the levels of management. (10 Marks)
- b) Define feedback and discuss the various types of feedback. (10 Marks)

#### **QUESTION THREE (20 MARKS)**

- a) When developing systems, there are key elements of system strategy that you must take into consideration. Candidly explain the three elements of systems strategy.

  (10 Marks)
- **b)** State and explain any five tasks that a system analyst undertakes in systems analysis. (10 Marks)

#### **QUESTION FOUR (20 MARKS)**

- a) Discuss the steps used in the Spiral model of software development, and state its advantages and disadvantages. (10 Marks)
- b) Explain why project management is a necessary stage of software development. State the activities undertaken in project management. (10 Marks)

#### **QUESTION FIVE (20 MARKS)**

- a) Describe five techniques and tools used during the analysis phase of systems development. (10 Marks)
- b) The feasibility report is the product of the feasibility study. Discuss the contents of the feasibility report. (10 Marks)