



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY UNDERGRADUATE EXAMINATIONS
4TH YEAR 2ND SEMESTER 2016/2017 ACADEMIC YEAR
MAIN CAMPUS

COURSE CODE: SCS 437

COURSE TITLE: INFORMATION SYSTEMS APPLICATIONS

EXAM VENUE: STREAM: SMAS

DATE: EXAM SESSION:

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**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

Question One (30 Marks)

1. Information systems are more than computers? Discuss (8 marks)
2. Using examples and diagrams where possible, discuss two actuarial information systems that are used in the following sectors of the economy (16 marks)
 - a. Insurance
 - b. Security
 - c. Banking
 - d. Betting
3. Explain with examples types of knowledge with respect to outcome in decision making process (6 marks)

Question Two (20 Marks)

1. Describe a simple model of problem solving that you can use to help you understand and solve business problems using information systems (4 marks)
2. Discuss the key similarities and differences between EACH of the following pairs of information systems related concepts:
 - a. Enterprise Resource Planning (ERP) data repository and Data Mart. (4 marks)
 - b. Decision Support System (DSS) and Group Decision Support System (GDSS). (4 marks)
 - c. Data mining tool and On-Line Analytical Processing (OLAP) tool. (4 marks)
 - d. Software as a Service (SaaS) and virtual organisation. (4 marks)

Question Three (20 Marks)

1. Describe THREE levels of management, and explain the differing information requirements at each level. (9 marks)
2. With the aid of suitable examples, describe the ways in which the Internet can enable MIS provision. (11 marks)

Question Four (20 Marks)

A law firm wishes to develop a knowledge-based system for use by its customers. Competing law firms only provide telephone or face-to-face advice. The law firm would be responsible for entering the knowledge data and for answering any queries beyond the scope of the new knowledge-based system.

The law firm broadly agrees with this approach but is concerned that its reputation could suffer if the knowledge-based system gave the wrong advice.

As an independent consultant brought in to advise the law firm,

- 1) Describe knowledge-based systems and explain how such systems could be implemented. (10 marks)
- 2) Explain how the knowledge-based system should be tested. (10 marks)

Question Five (20 Marks)

- 1) Explain how the internet has changed competitive forces and competitive advantage (10 marks)
- 2) How has globalization increased opportunities' for business firms (10 marks)