



# MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2013/2014

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR FIRST SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE IN  
INFORMATION TECHNOLOGY

SIT 107: INTRODUCTION TO INFORMATION SYSTEMS

Date: 17/12/2014

Time: 8:30 – 10:30 am

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## INSTRUCTIONS:

Answer **question ONE** and any other **TWO** questions

### Question One (30 Marks)

- a) Define the following (4 marks)
  - i. Information System
  - ii. Computer
  - iii. Data
  - iv. Information
- b) Explain why information systems are so important today and how they are transforming organizations and management (10 marks)
- c) Discuss the three types of feasibility analysis organizations should use in the systems development process (6 marks)
- d) An information system depends on various resources, explain any five (10 marks)

### Question Two (20 Marks)

- a) With the aid of a diagram explain the types of information systems that can be found in an organization (8 marks)
- b) Compare the major input and output devices (6 marks)

- c) Differentiate the following: (6 marks)
- a. Systems analysis and systems design
  - b. Logical design and physical design
  - c. User perspective view and developer perspective view

**Question Three (20 Marks)**

- a) Identify the hardware components in a typical computer system (12 marks)
- b) Explain the four levels of decision making (8 marks)

**Question Four (20 Marks)**

- a) Why is the testing stage of systems development so important (2 marks)
- b) Name and describe the three stages of testing for an information system (6 marks)
- c) Name and distinguish between the two major software in a computer, giving an example of each (4 marks)
- d) Explain any four conversions that can be used in information systems development (8 marks)

**Question Five (20 marks)**

- a) Differentiate between Ethics and Law and explain why ethics and law are needed in computing (5 marks)
- b) Differentiate between Patent and Copy rights. How can someone give proper credit to intellectual property (4 marks)
- c) Define structured and unstructured decisions. Give three examples of each (5 marks)
- d) Powerful worldwide changes have been observed with the emergence of information systems. Explain any three of these changes (6 marks)