



MACHAKOS UNIVERSITY

University Examinations for 2016/2017

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

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

SIT 107: INTRODUCTION TO INFORMATION SYSTEMS

DATE: 30/5/2017

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

Answer Questions ONE and Any Other Two Questions

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) State any FIVE characteristics of a system (5 marks)
- b) State FIVE reasons for system theory study (5 marks)
- c) Explain any FIVE system functions (5 marks)
- d) Explain the following systems (5 marks)
 - i. Open system
 - ii. Closed system
 - iii. Deterministic system
 - iv. Probabilistic system
 - v. Cybernetic system
- e) Discuss the impact of Information Technology in business management. (10 marks)

QUESTION TWO (20 MARKS)

- a) Explain the challenges posed by use of Information Technology in managing business affairs of an organization. (10 marks)

- b) Define between the following Information System terms:
- i. Topology (2 marks)
 - ii. Digital Market (2 marks)
 - iii. MP3 (2 marks)
 - iv. Multimedia (2 marks)
 - v. Batch processing (2 marks)

QUESTION THREE (20 MARKS)

- a) Assess the likely causes of user-resistance to implementation of new information systems. (10 marks)
- b) Define the following terms: (10 marks)
- i. Entropy
 - ii. Synergy
 - iii. A sub system
 - iv. Interface
 - v. Decoupling

QUESTION FOUR (20 MARKS)

- a) Discuss **four** roles of knowledge management system (KMS) in an organization. (8 marks)
- b) Demonstrate understanding of factors necessitating the use of modern I.T. (10 marks)
- c) Explain **four** attributes of quality information. (2 marks)

QUESTION FIVE (20 MARKS)

- a) Evaluate management functions and type of decision made at each level of management (10 marks)
- b) Compare Artificial Intelligence and Natural intelligent. (6 marks)
- c) Describe any two categories of artificial intelligence (4 marks)