



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

*Faculty of Engineering & Technology*

DEPARTMENT COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY – DICT 2K 9J/DICT 9M

**EIT 2311: MANAGEMENT INFORMATION SYSTEMS II**

END OF SEMESTER EXAMINATIONS

**SERIES: DECEMBER 2011**

**TIME: 2 HOURS**

### **Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions in **TWO** sections **A & B**

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

**SECTION A (COMPULSORY)**

**Question one (30 marks)**

- a) Describe any **four** Components of Database Systems (4 marks)
- b) Describe application controls in security (2 marks)
- c) Explain any three Causes of system maintenance (6 marks)
- d) Differentiate between the following (8 marks)
  - i) Sequential and Indexed sequential file organization
  - ii) Batch processing and parallel processing in data processing
- e) Explain the Problems of traditional file based approach (5 marks)
- f) Describe any **five** advantages of e-commerce (5 marks)

**SECTION B (ANSWER ANY TWO QUESTIONS)**

**Question Two 20marks**

Information systems are vulnerable to abuse, fraud and many other dangers especially when they are linked to the internet, with examples

- a) Differentiate between general controls from application controls (4 marks)
- b) Describe **five** general controls and three application controls (16 marks)

**Question Three 20marks**

Project management is usually an important activity during the development of new information systems. Project resources such as time, cost and personnel would be identified and their uses properly controlled.

**Required:**

- a) Explain the term 'critical path as used in project management. (4 marks)
- b) Describe the role of project management. (6 marks)
- c) Using a diagram develop a network diagram and determine the critical path from the following project development schedule. (10 marks)

**Preceding**

Activity	Activity	Duration
A	-	2
B	-	3
C	-	2
D	C	4

E	A	3
F	B	4
G	B	6
H	B	4
I	D and H	6
J	E and F	5

**Question Four      20marks**

Without proper consideration of the behaviour of people in the business organization setting even the best technically designed system is likely to fail.

**Required:**

- a) Analyze the most common reasons that may lead to resistance to the introduction of Management Information Systems and how an organization can overcome it. (12 marks)
- b) **Explain any two methods of procurement of a computer** and list two advantages for each method. (8 marks)

**Question Five      20marks**

- a) What reasons would you put forward for adopting a database as a basis for an information system? (8 marks)
- b) Describe a data model and using a diagram explain any three common database structures (8 marks)
- c) (i) What is multithreading as applied to a computer system? (2 marks)  
(ii) Differentiate a data warehouse and a data mart (2 marks)