



TECHNICAL UNIVERISTY OF MOMBASA

# Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:  
BACHELOR OF SCIENCE IN MATHEMATICS & COMPUTER SCIENCE  
(BSMC)

**EIT 4101: INTRODUCTION TO INFORMATION TECHNOLOGY**

END OF SEMESTER EXAMINATION

**SERIES: DECEMBER 2013**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

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**Question One (Compulsory)**

- a) With the aid of a diagram discuss the elements of a basic computer system. **(6 marks)**
- b) Explain the functions of main memory in computer **(2 marks)**
- c) Discuss the applications of computer in various operations **(4 marks)**
- d) Distinguish between:  
(i) RAM and ROM  
(ii) Persistent and temporary storage  
(iii) ALU and CU **(6 marks)**
- e) Briefly discuss the different classification of software. **(8 marks)**
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f) Briefly explain any TWO secondary storage devices (4 marks)

### Question Two

- a) Explain the functions of the optical mark reader and state areas where it can be effectively applied. (4 marks)
- b) Explain reasons why a word processing application is important to an organization and state any two word processing software applications you would recommend for use. (8 marks)
- c) Briefly explain the following word processing features: (8 marks)
- (i) Mail merge
  - (ii) Headers and footers
  - (iii) Text alignment
  - (iv) Formatting

### Question Three

- a) State the functions which you would use to compute:
- (i) The average profit shown below
  - (ii) The values of the actual profit column
  - (iii) Bonus of 12Y. If Average Profit  $\geq 100$

Item	Production Cost	% Profit	Actual Profit
Erick	600	25%	150
Joe	535	18%	96.3
Anne	327	27%	88.29
Stella	760	22%	167.2
		Avg. Profit	125.45
		Bonus	?

- b) Briefly discuss features and functions of electronic spreadsheets (8 marks)
- c) Explain the purpose of the following as used in Microsoft Excel (6 marks)
- (i) Count IF
  - (ii) Today
  - (iii) PMT

### Question Four

- a) Explain how you would create a directory called Jane in the C: drive using the Microsoft Windows XP platform. (4 marks)
- b) State any THREE functions of any database management application of your choice. (6 marks)
- c) Explain the following as used in databases: (10 marks)
- (i) Primary key
  - (ii) Composite key
  - (iii) Relationship
  - (iv) Table
  - (v) Queues

### Question Five

- a) Briefly explain the components of a local area network. (6 marks)

b) Discuss any FIVE ethical and societal issues of ICT **(10 marks)**

c) Explain any FOUR collaboration tools available on the internet today. **(4 marks)**