



TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:
BACHELOR OF TECHNOLOGY IN APPLIED CHEMISTRY
BACHELOR OF TECHNOLOGY IN MICROBIOLOGY &
BIOTECHNOLOGY
BACHELOR OF JOURNALISM & MASS COMMUNICAITON
(BTAC/BTMB/BJMC)

ECS 4101/ICS 2110: INFORMATION TECHNOLOGY I

EIT 4130: FUNDAMENTALS OF COMPUTING

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: OCTOBER 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 **THREE** printed pages

Question One (Compulsory)

a) Define the following words as used in DBMS:

- (i) Database
- (ii) Primary key
- (iii) Field
- (iv) Query
- (v) Relationship

(5 marks)

b) What is the importance of using database in our society

(5 marks)

- c) Describe the type of software giving an example of each (4 marks)
- d) List and explain THREE features of Ms Excel (6 marks)

Question Two

- a) What is a computer network? (2 marks)
- b) What are the advantages of using computer networks (5 marks)
- c) Differentiate between the following:
(i) Network and internet
(ii) Uploading and Downloading
(iii) Web and website
(iv) Internet Address and Email Address (8 marks)
- d) Ali would like to get connected to the internet, what benefits would he receive from using the internet? (5 marks)

Question Three

- a) Describe the difference types of computer generations (4 marks)
- b) Explain the advantages of using computers (6 marks)
- c) Define the term Application software (2 marks)
- d) List and explain FOUR types of Application Software (8 marks)

Question Four

- a) Identify and explain the two computer interfaces (4 marks)
- b) Describe the THREE categories of operating systems (6 marks)
- c) Explain the following features in word processing:
(i) Macros
(ii) Spell-check
(iii) Word-wrap
(iv) Thesaurus (4 marks)
- d) List down the THREE types of LAN topologies (3 marks)
- e) Explain THREE types of database objects (3 marks)

Question Five

- a) (i) Explain the function of a chart in Ms Excel.
(ii) Identify and explain TWO types of charts used in Ms Excel (5 marks)

b) The table below shows the salaries of employees working at XYZ company.

	A	B	C	D	E	F	G
1							
2	NAME	Hours	Hourly Rate	Salary	Tax	Net Salary	Allowance
3	Mohammed	43	500		3%	80	
4	Margaret	23	500		3%	73	
5	John	56	500		3%	84	
6	Mariam	12	500		3%	71	
7	Ken	63	500		3%		

Write a formula using cell names to compute the following expressions:

- (i) Find out the salary for all the employees in column D, given the formula: $\text{salary} = \text{Hours} * \text{Hourly Rate}$ **(5 marks)**
- (ii) Find out the net salary for each employee in column F, based on the following formula; $\text{Net salary} = \text{Salary} - (\text{Salary} * \text{Tax})$ **(5 marks)**
- (iii) Using IF function, find out the allowance in column G, given the following: "If Hours is less than 50, then Allowance is No, Otherwise Allowance is Yes" **(5 marks)**