TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATIONS FOR DEGREE IN:
BACHELOR OF TECHNOLOGY IN MICROBIOLOGY & BIOTECHNOLOGY
(BTMB 13S)

EIT 4252: INFORMATION TECHNOLOGY II

END OF SEMESTER EXAMINATION
SERIES: APRIL 2015
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 (Compulsory)** and any other **TWO** questions
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One (Compulsory)

a) Define what office automation is stating the merits and demerits of automating an office.

                           (15 marks)

b) Describe how you would automate an office in your school mentoring the tools required for the process in terms of hardware and software **(15 marks)**

Question Two

a) Define the term office automation **(2 marks)**

b) Describe THREE merits and demerits of office automation **(5 marks)**

c) Identify THREE tools for automating an office **(3 marks)**

d) List FIVE backup devices used in office automation **(5marks)**

e) State FIVE application of computer graphics in industry **(5 marks)**

Question Three

a) Identify FOUR basic elements of computer communication system **(4 marks)**

b) State FOUR characteristics of a server computer **(4 marks)**

c) List FOUR softwares that the form program development environment **(4 marks)**

d) Describe FOUR types of network topologies **(8 marks)**

Question Four

a) Give the structure of a C program **(3 marks)**

b) Write a C program that asks the user for his name and age and prints the results **(5 marks)**

c) Distinguish between the following programming languages giving ONE advantage and ONE disadvantage for each **(6 marks)**
    (i) Assembly language
    (ii) High level
    (iii)   Machine language

d) Describe THREE control structures used in C. Give the syntax for each **(6 marks)**

Question Five

a) What is stepwise refinement **(2 marks)**

b) Describe the process of stepwise refinement **(4 marks)**

c) List FOUR advantages of stepwise refinement **(4 marks)**

d) Define the term data communication **(2 marks**

e) Identify FIVE forms of information carried by data communications **(5 marks)**

f) Distinguish between bounded media and unbounded media **(3 marks)**