THE TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN ELECTRONIC ENGINEERING

EEE 2103: COMPUTER PROGRAMMING

END OF SEMESTER EXAMINATION
SERIES: AUGUST 2013
TIME: 2 HOURS

<u>**Instructions to Candidates:**</u>
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

Question One (Compulsory)

a) Define the following terms:
   (i) Programming
   (ii) Variable
   (iii) Constant
   (iv) Debugging
   (v) Syntax   **(5 marks)**

b) Explain any **THREE** characteristics of LANs   **(6 marks)**

c) State any **THREE** browsers in the market today.   **(3 marks)**

d) State any **THREE** qualities that may be considered to enable a field to be chosen as a primary key.
                                                                 (3 marks)

e) State the **TWO** ways that may be used to insert a primary key into a field.   **(3 marks)**

Question Two

a) Explain the functions of any **FOUR** database objects.   **(8 marks)**

b) Explain the process of creating a relationship in an Ms Access database.   **(4 marks)**

c) Explain any **THREE** advantages of structured programming methodology.   **(3 marks)**

d) Explain the following terms:
   (i) Source code
   (ii) Object code   **(5 marks)**

Question Three

a) Describe the following processing modes:
   (i) Time sharing
   (ii) Distributed
   (iii) Multi programming   **(8 marks)**

b) With aid of a diagram, explain the following programming constructs:
   (i) Selection
   (ii) Iteration/looping
   (iii) Sequential   **(8 marks)**

c) State and explain any **FOUR** factors that may influence the choice of a processing mode.
                                                                 (4 marks)

Question Four

a) What is presentation software?   **(2 marks)**

b) Outline the procedures for performing the following in Ms PowerPoint.   **(9 marks)**
   (i) Slide transition
   (ii) Custom animation

    (iii)   Animation schemes

c) State any **THREE** presentation programme in the market today. **(3 marks)**

d) Explain any **SIX** features of Ms PowerPoint that make users able to use it as presentation software.
(6 marks)

Question Five

a) Describe the following components of a network:
    (i)   Network interface card
    (ii)   Hub
    (iii)   Switch   **(9 marks)**

b) Compare and contrast the peer to peer network and client/server network. **(8 marks)**

c) Explain any **THREE** advantages of networking computers. **(3 marks)**