2920/202A
COMPUTER APPLICATIONS II (Theory)
Paper 1
November 2013
Time: 2 hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY
MODULE II

COMPUTER APPLICATIONS II (Theory)

Paper 1

2 hours

INSTRUCTIONS TO CANDIDATES

*Write your **name** and **index number** in the spaces provided above.*
***Sign** and write the **date of examination** in the spaces provided above.*
*This paper consists of **SIX** questions.*
*Answer any **FOUR** questions on the spaces provided in this question paper.*
Candidates should answer the questions in English

For Examiners Use Only.

Question	1	2	3	4	5	6	Total Score
Candidate's Score							

This paper consists of 7 printed pages.

Candidates should check the question paper to ascertain that all the
pages are printed as indicated and that no questions are missing.

© 2013 The Kenya National Examinations Council.   **Turn over**

1. (a) Describe the concept of *going concern* as used in accounting. (2 marks)

_____

_____

_____

_____

    (b) State **three** elements of *vector data* as used in GIS. (3 marks)

_____

_____

_____

    (c) Arthur intends to procure a computer to be used for a Turing test during an artificial
         intelligence practice session. Explain **three** properties that the computer should possess.
         (6 marks)

_____

_____

_____

_____

_____

_____

_____

    (d) Explain **two** sources of spatial data in GIS. (4 marks)

_____

_____

_____

_____

2. (a) Define the term *geo-statistics* as used in GIS. (2 marks)

_____

_____

    (b) Abel intends to identify the shortest distance between four towns in his county using a search
         method. Outline **three** factors that he should consider when choosing a search method in
         artificial intelligence. (3 marks)

_____

_____

_____

_____

_____

_____

(c) With the aid of sketches, describe the following types of dimensions as used in CAD applications: (6 marks)

(i) aligned;

_____

_____

_____

_____

(ii) baseline;

_____

_____

_____

_____

(d) Differentiate between *asset value* and *liability balances* as used in accounting programs. (4 marks)

_____

_____

_____

3. (a) Cora prepares accounting information for her business using various financial statements. Outline **three** uses of this information to her business enterprise. (3 marks)

_____

_____

_____

_____

_____

(b) Describe *three* components of *logic* as used in artificial intelligence. (6 marks)

_____

_____

_____

_____

_____

(c) Rachel a researcher was investigating the spread of cholera in her county and she used raster data to describe the phenomena. Outline **three** advantages of using this type of data.

(6 marks)

_____

_____

_____

_____

_____

_____

4. (a) Outline **four** disadvantages of expert systems. (4 marks)

_____

_____

_____

_____

_____

_____

_____

(b) Differentiate between *model space* and *paper space* as used in CAD applications. (4 marks)

_____

_____

_____

_____

_____

(c) The following transactions were drawn from the books of accounts of Muse and Company. Post these transactions to the relevant ledger accounts and balance off the accounts:

2/5/2010	Owner started business with shs 60,000 cash;
3/5/2010	Received shs 40,000 cash as bank loan;
4/5/2010	Bought goods worth shs 10,000 and paid in cash;
7/5/2010	Deposited part of the cash in hand shs 12,000 to the business bank account;
8/5/2010	Withdrew shs 10,000 cash from the business for personal use;
10/5/2010	Bought furniture worth shs 5,000 and paid in cash;
11/5/2010	Bought stock worth shs 8,000 and paid by cash.

(7 marks)

_____

_____

_____

_____

_____

5

Turn over

5.   (a)   State **two** types of *grip tools* used in CAD applications.   (2 marks)

   (b)   Alex was advised to use a trial balance in his business. Outline **three** functions of this statement to his business.   (3 marks)

   (c)   Differentiate between *inductive* and *deductive* reasoning as used in artificial intelligence.   (4 marks)

   (d)   Joyce an architect prefers using the *blocks* feature in CAD programs for her drawings. Outline **three** reasons for this preference.   (6 marks)

6.   (a)   Outline **three** applications of machine learning in the banking industry.   (3 marks)

   (b)   Define the term *fuzzy logic* as used in artificial intelligence.   (2 marks)

(c)   Keith used the following accounts when preparing a company file in an accounting application. Describe the functions of each of these accounts as used in accounting applications.

(i)   equity;   (2 marks)

_____

(ii) accounts receivable;   (2 marks)

_____

(iii) non-posting account.   (2 marks)

_____

(d)   Figure 1 shows a diagram that a teacher drew during a CAD lesson. He instructed the students to come up with a rectangular array with the following properties:

Rows: 3;

Columns: 4;

Angle of array: 90.

Figure 1

Draw a sketch to represent this array.   (4 marks)