Name: _____ Index No. _____/_____

2920/202A
COMPUTER APPLICATIONS II (Theory)
Paper 1
November 2015
Time: 2 hours

Candidate's Signature _____

Date: _____

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.*
*Answer any **FOUR** of the following **SIX** questions in the spaces provided in the question paper.*
All questions carry equal marks.
Candidates should answer the questions in English.

For Examiner's Use Only

Question No.	1	2	3	4	5	6	TOTAL SCORE
Candidate's score							

This paper consists of 8 printed pages.
Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

1. (a) Explain each of the following terms used in a CAD program:

(i) Ortho; (2 marks)

(ii) Offset; (2 marks)

(iii) Polygon. (2 marks)

(b) Explain the term *layers* as used in Geographical Information System. (2 marks)

(c) Categorise each of the following assets as *current assets* and *fixed assets* as used in accounting: (4 marks)

Bank balance, buildings, Cash, furniture, land, Money owed by credit customers, Stock, Vehicles

(d) Figure 1 shows first angle orthographic view of a 3-dimensional block. Use it to answer the question that follows.

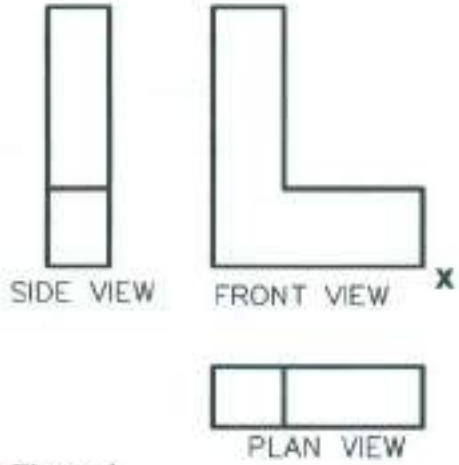
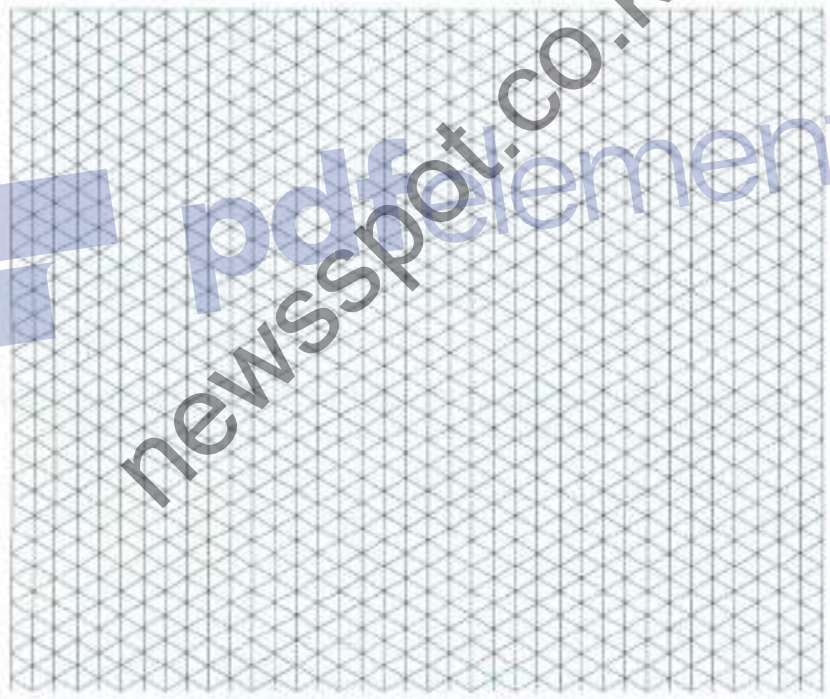


Figure 1

Sketch an isometric drawing of the object on the grid provided below taking the point X as the lowest point in the drawing. (3 marks)



2 (a) Company XYZ made the following transactions:

- Borrowed a loan of Ksh.500,000 to start a business
- Obtained Ksh.150,000 in cash from proceeds of sales.
- Paid out Ksh.240,000 in form of salaries.
- purchased Ksh.660,000 worth of machinery in cash.
- purchased a track valued at Ksh.1,500,000 by paying Ksh.300,000 in cash and getting a loan for the remainder
- paid rent of Ksh.80,000 and advertising of Ksh.50,000 in cash

Determine the value of company'sassets, liability and equity. (6 marks)

(b) List **four** commands which could be used to draw line objects which are not straight in a CAD program. (2 marks)

(c) Mokwa Company deals with export of vegetables and fruits. The company leases a warehouse at the airport in order to manage large volume of goods.

(i) Outline **three** factors that would determine the cost of their inventory at the warehouse. (3 marks)

(ii) Outline **two** reasons for the need to control the inventory at the warehouse. (4 marks)

3. (a) Peter drew two square models of the same dimension in a CAD program. He used a *Line tool* in one and a *Polyline tool* in the other. State the difference between the two drawings. (2 marks)

(b) (i) List **four** programming languages used to develop AI. (2 marks)

(ii) A hospital intends to use AI applications in the treatment process of patients. Outline **three** ways in which the application could be used in the hospital. (3 marks)

(c) A company has acquired accounting software and the finance officer in the company intends to setup a company profile in the software. Outline the steps that the finance officer would follow during the setup. (4 marks)

(d) Derrick an engineering student designed a geometry using a CAD program. When he printed the work, the drawing could not fit on the paper. Explain **two** ways in which he could solve the problem. (4 marks)

4. (a) Outline **three** roles of a bookkeeper in a business organisation: (3 marks)

(b) In the recent past, self-driving cars have made entry on public roads. Explain **two** challenges of implementing this technology. (4 marks)

(c) Outline **four** advantages for using vector data model to store spatial data in a geographical system. (4 marks)

(d) Samson intends to use speech recognition software to dictate his notes in his home desktop computer.

(i) State **two** hardware and software requirements in the computer. (2 marks)

(ii) Outline **two** challenges that he may face when using the system. (2 marks)

5. (a) Explain the meaning of the term *associative hatching* as used in a CAD program. (2 marks)

(b) With the aid of a diagram, describe the main parts of an expert system. (7 marks)

(c) Differentiate between a *GIS generated* map and a *hard-copy* map. (4 marks)

(d) Outline **two** benefits of using a computerised payroll system. (2 marks)

6. (a) (i) The following is a list of commands used in computer software. Identify those that belong to accounting software. (1 mark)
Architecture, Company, Debug, Employees, Encoding, Macro, Run, Team, Test

(ii) Differentiate between *accounting* and *book keeping* as used in accounting management. (4 marks)

(b) State **two** differences between *Singleline text* and *Multiline text* is used in a CAD application. (4 marks)

(c) An anti-crime officer would like to use GIS to quickly study causes of burglaries in a section of a city. Explain **two** ways in which the application can assist in solving the menace. (6 marks)

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