1501/101, 1503/101
1601/101, 1602/101
INFORMATION COMMUNICATION
TECHNOLOGY AND
ENTREPRENEURSHIP EDUCATION
June/July 2013
Time: 3 hours

Index No. _____/____
Candidate's Signature: _____
Date: _____

THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN MECHANICAL ENGINEERING
(PRODUCTION OPTION)
CRAFT CERTIFICATE IN AUTOMOTIVE ENGINEERING
CRAFT CERTIFICATE IN ELECTRICAL & ELECTRONICS ENGINEERING
(POWER OPTION)
(TELECOMMUNICATION OPTION)
MODULE I

INFORMATION COMMUNICATION TECHNOLOGY AND
ENTREPRENEURSHIP EDUCATION

3 hours

INSTRUCTIONS TO CANDIDATES

Write your name and index number in the spaces provided above.
Sign and write the date of the examination in the spaces provided above.
You should have drawing instruments for this examination.
This paper consists of TWO sections; A and B.
Answer any SIX questions in section A, and any FOUR questions in section B at page 15. Each section is to be answered on its separate space as provided.
All questions carry equal marks.
Maximum marks for each part of a question are indicated.
Candidates should answer the questions in English.

For Examiner's Use Only

SECTION A

Question	1	2	3	4	5	6	7	TOTAL
Marks								

SECTION B

Question	8	9	10	11	12	13	TOTAL
Marks							

GRAND TOTAL

This paper consists of 20 printed pages.

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

Turn (

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Examinations			
Security	0	2	0
Transport	0	2	0
Nursery	63	2	126
Central stores	0	2	0
Finance	107	2	214
Design	162	2	324
Agriculture	1,460	2	2920
Diplomatic	600	2	1200
Library	696	2	1392
Attachment	550	2	1100
Electrical	135	2	270
Administration	406	2	812
sports	334	2	668
Administration (Environment)	0	2	0
Guidance	0	2	0
	10	2	20

Figure 1

(ii) Explain **two** types of data entered in the program giving suitable examples for each case.   (2 mark

(iii) Describe the procedure that displays formulas applied in the document.
                                                                          (1 marl

(b) Explain each of the following as applied in the internet:

   (i) spamming;

   (ii) website;

   (iii) file transfer protocol.

                                                                          (3 mark

(c) James is a clerk at Umoja Company. A client comes to register institutions with him. Before he can accept registration of a new centre, he uses the computer to confirm that no similar centre name exists in their file documents. Explain the most suitable technique to apply.

                                                                          (2 mark

3. (a) (i) List any **four** events in the booting process in order of their occurrences.
(2 marks)

(iii) Explain the purpose of the booting process.
(1 mark)

(b) Outline **four** mitigating factors that a government may put in place to reduce the effects of cyber crime.
(2 marks)

(c) (i) ABC company has requested its customers to pay for their services via mobile phone. Describe **three** advantages the company would enjoy.
$(1\frac{1}{2}$ marks)

(ii) List **three** limitations of the technology in c(i)
$(1\frac{1}{2}$ marks)

(d) Differentiate between the following terms as used in desktop publishing programs:

Sharp edges line and soft edge line message conveyed in a graphic design.
(2 marks)

4. (a) The structure chart in figure 2, shows the classification of software. Use it to answer the questions that follow:
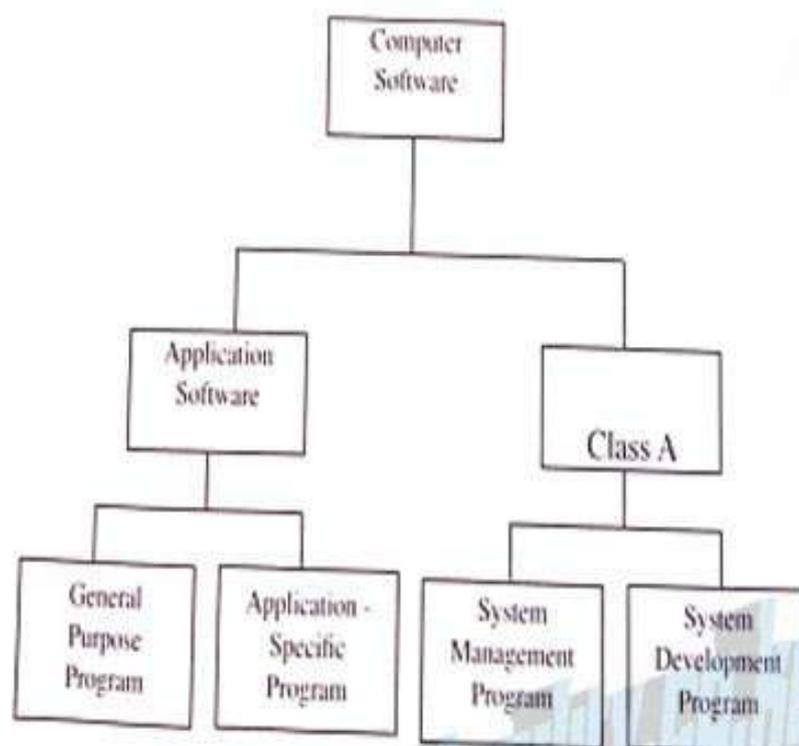

Fig. 2

(i) Identify class A component
(1 mark)

(ii) Using suitable examples describe **two** functions of class A programs

(iii) Distinguish between system management and system development program giving one example in each case

(2 marks)

(b) Explain the function of "what if" analysis features in spreadsheet Programs.

(1 mark)

(c) Explain the following principles of design in DTP:

(i) visual balance;
(ii) proximity;
(iii) alignment;
(iv) repeating elements.

(4 marks)

5. (a) (i) Outline **two** uses of utility programs in computers. (1 mark)

(ii) Using an example in each case, explain **two** applications of utility programs.
(2 marks)

(b) (i) Outline **two** vulnerabilities that result in threats to data security.
(2 marks)

(ii) Suggest the measures taken to minimize each threat in b (i). (2 marks)

(c) Murewa has five new computers that he wishes to set up in his organisation which consists of three branches, such that two are near, but the third is far away. The branches need to communicate with the head office constantly and rapidly.

(i) Suggest a suitable technique to manage the Company. (1 mark

(ii) Using an example in each case, explain **two** advantages of the technique.
(2 marks

(a) Explain the following features of Desktop publishing:

(i) WYSIWYG; (1 marl

(ii) one application of Desktop publishing; (1 mar

(iii) kerning (1 mar

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(ii) Using suitable examples describe **two** functions of class A programs

(iii) Distinguish between system management and system development program giving one example in each case

(2 marks)

(2 marks)

(b) Explain the function of "what if" analysis features in spreadsheet Programs.

(1 mark)

(c) Explain the following principles of design in DTP:

(i) visual balance;
(ii) proximity;
(iii) alignment;
(iv) repeating elements.

(4 marks)

5. (a) (i) Outline **two** uses of utility programs in computers. (1 mark)

(ii) Using an example in each case, explain **two** applications of utility programs.

(2 marks)

(b) (i) Outline **two** vulnerabilities that result in threats to data security.

(2 marks)

(ii) Suggest the measures taken to minimize each threat in b (i). (2 marks)

(c) Murewa has five new computers that he wishes to set up in his organisation which consists of three branches, such that two are near, but the third is far away. The branches need to communicate with the head office constantly and rapidly.

(i) Suggest a suitable technique to manage the Company. (1 mark

(ii) Using an example in each case, explain **two** advantages of the technique.

(2 marks

6. (a) Explain the following features of Desktop publishing:

(i) WYSIWYG; (1 marl

(ii) one application of Desktop publishing; (1 mar

(iii) kerning (1 mar

(b)   Outline the function of each of the following windows commands:

    (i)   CHKDSK;

    (ii)   ATTRIB;

    (iii) ECHO. $(1\frac{1}{2}$ marks)

(c)   Figure 3 shows an extract from a DTP Program. Use it to answer the questions that
    follow.

                                                      $(1\frac{1}{2}$ marks)
    (i)   Identify the parts labelled I-III

                                                      (1 mark)
    (ii)   Explain the parts labelled A and B

Figure 3

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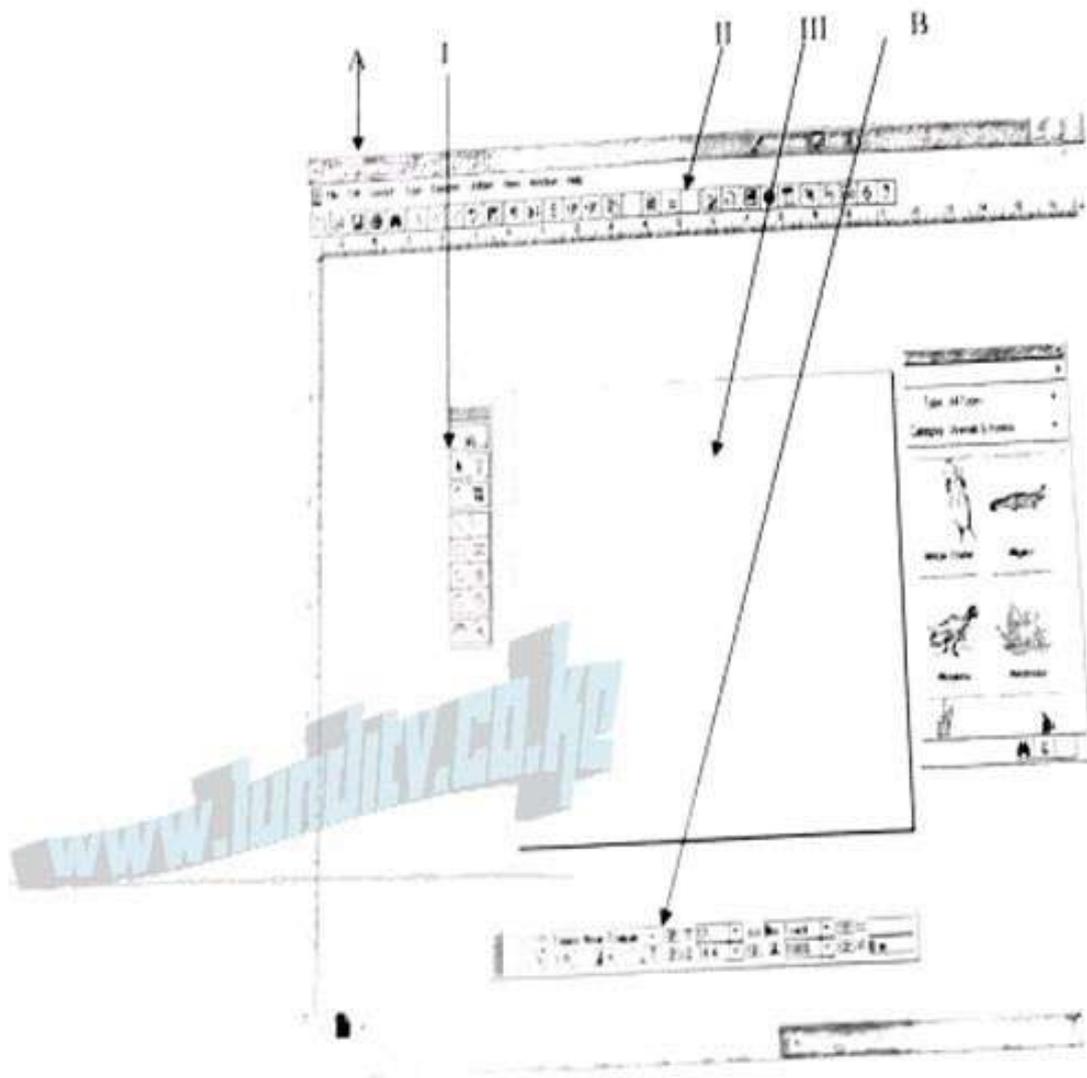
(d) (i) Joyce is a student at KK college. She wishes to buy a storage device to keep her academic work. Identify **three** characteristics that she needs to consider before purchasing it.

$(1\frac{1}{2}$ marks)

(ii) Advise Joyce on any **two** available types of VDU $(1\frac{1}{2}$ marks)

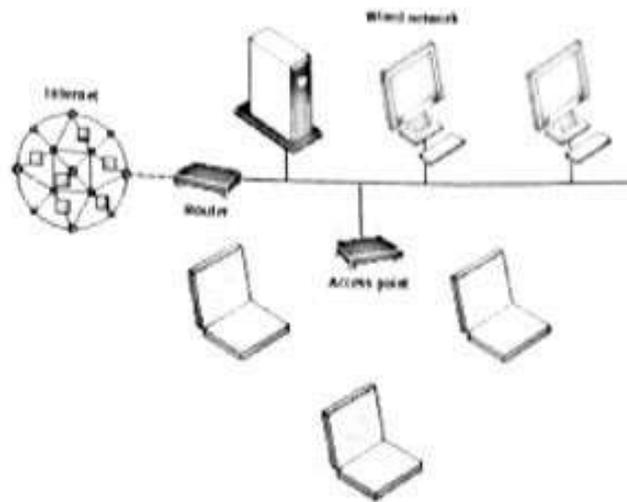7. (a) Figure 4 shows an extract of a network model. Use it to answer the questions that follow:

Figure 4

(i) Identify **two** types of topologies used in the network (1 mark)

(ii) Explain the function of the router in the network (1 mark)

(iii) Describe the role of the Access point in the network (1 mark)

(iv) Outline **two** advantages of the technology applied in the model. (1 mark)

(b) (i) Describe the configuration management as applied in ICT. (2 marks)

(ii) Distinguish between the terms "mobile computing" and "M-commerce".

(2 marks)

(c) With the aid of a diagram explain the concept of interactive computer graphics.

(2 marks)

SECTION B: ENTREPRENEURSHIP EDUCATION (40 marks)

Answer any FOUR questions in this section

8. (a) List **four** sources of business ideas for an entrepreneur. (4 marks)

   (b) State **six** myths that are associated with entrepreneurship. (6 marks)

9. (a) List **four** characteristics of an entrepreneur. (4 marks)

   (b) Explain **three** factors that have led to slow growth of the entrepreneurial culture in developing countries. (6 marks)

10. (a) Booth would like to start a small enterprise. Explain five challenges he may encounter when starting the enterprise. (5 marks)

    (b) Highlight **five** benefits of Information Communication Technology (ICT) to a small enterprise. (5 marks)

11. Explain factors to consider when choosing an appropriate form of business ownership. (10 marks)

12. (a) State **four** components of a business plan. (4 marks)

    (b) List **six** ways in which enterpreneurship contribute to National Development. (6 marks)

13. (a) Explain **three** reasons that make it necessary for enterprise to engage in social responsibility. (6 marks)

    (b) List **four** marketing activities that an enterpreneur may engage in when running a small enterprise. (4 marks)

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(b)   Explain **three** factors that have led to slow growth of the entrepreneurial culture
      in developing countries.   (6 mark

(a)   Booth would like to start a small enterprise. Explain **five** challenges he may encounter
      when starting the enterprise.   (5 mark

(b)   Highlight **five** benefits of Information Communication Technology (ICT) to a small
      enterprise.   (5 mar

Explain factors to consider when choosing an appropriate form of business ownership.
                                                                                     (10 m:

                                                                                     (4 m

(a)   State **four** components of a business plan.

(b)   List **six** ways in which enterpreneurship contribute to National Development.
                                                                                     (6 r

(a)   Explain **three** reasons that make it necessary for enterprise to engage in social
      responsibility.   (6

(b)   List **four** marketing activities that an enterpreneur may engage in when running
      enterprise.   (4