

1501/101
1503/101
1601/101
1602/101
INFORMATION COMMUNICATION
TECHNOLOGY
June/July 2012
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

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

INFORMATION COMMUNICATION TECHNOLOGY

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

Answer booklet;

Drawing instruments.

*Answer any **FIVE** of the **SEVEN** questions given in this paper.*

All questions carry equal marks.

Maximum marks for each part of a question are as indicated.

This paper consists of 4 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) State **three** characteristics of computers. (3 marks)
- (b) Describe the following with reference to computers:
- (i) data bus;
 - (ii) control bus;
 - (iii) address bus.
- (9 marks)
- (c) Explain **two** parameters considered to classify microprocessors. (6 marks)
- (d) Define the term "computer". (2 marks)
2. (a) Define the term "firmware" with reference to computers. (2 marks)
- (b) Describe the following computer softwares:
- (i) linker;
 - (ii) loader.
- (4 marks)
- (c) Outline the procedure for inserting an existing file into the body of a current document. (3 marks)
- (d) Describe the following peripheral device interfacing methods:
- (i) parallel interface;
 - (ii) universal serial bus interface;
 - (iii) serial interface.
- (7 marks)
- (e) Differentiate between a compact disk (CD) and a digital versatile disk (DVD) (4 marks)
3. (a) Define the term computer virus and explain the risks posed by viruses. (14 marks)
- (b) John is a computer analyst and would like to analyse data. The data is to be inserted in a table before analysis.
- Outline the procedure of creating the table in an MS Word program. (6 marks)

4. (a) Outline the procedure of editing a formula in excel. (4 marks)
- (b) Outline the procedure of printing charts in excel. (4 marks)
- (c) Table 1 shows marks scored by four students in an examination.
- (i) Write a formula to determine english marks if each student mark is 20% more than the mathematics mark.
- (ii) Write a formula to determine science marks if each student mark is 10% more than the mathematics mark and 20% less than the english mark.
- (iii) Write a formula to determine maximum, minimum, average and standard deviation of the total marks.

(8 marks)

Table 1

	A	B	C	D	E
1	Student Name	Maths	English	Science	Totals
2	John David	60			
3	Jane James	75			
4	Mike Daniel	90			
5	Annah Benard	80			

- (d) State **four** application areas for spreadsheets. (4 marks)
5. (a) State **three** advantages of batch processing. (3 marks)
- (b) Explain the following methods of data processing:
- (i) multi-tasking;
- (ii) distributed.
- (12 marks)
- (c) Outline the procedure of importing data from a database to a word processor. (5 marks)
6. (a) Define the term "Computer network". (2 marks)
- (b) Explain the following types of transmission media in LANs:
- (i) twisted pair;
- (ii) coaxial cable;
- (iii) optic fibre.
- (6 marks)

(c) With the aid of diagrams, describe the following LAN topologies:

- (i) bus;
- (ii) ring.

(12 marks)

7. (a) Outline the procedure of inserting a chart in power point presentation.

(5 marks)

(b) Outline the procedure of editing objects in power point.

(7 marks)

(c) Describe two positive effects of information communication technology to the society.

(8 marks)