

Name _____ Index No. _____ / _____

2501/101, 2503/101

2601/101, 2602/101, 2603/101

2705/101, 2707/101, 2709/101

ICT, COMMUNICATION SKILLS &
ENTREPRENEURSHIP EDUCATION

Oct./Nov. 2013

Time: 3 hours

Candidate's Signature _____

Date _____



THE KENYA NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN MECHANICAL ENGINEERING
(PRODUCTION)

DIPLOMA IN AUTOMOTIVE ENGINEERING
DIPLOMA IN ELECTRICAL & ELECTRONICS ENGINEERING (POWER);
(TELECOMMUNICATIONS); (INSTRUMENTATION).
DIPLOMA IN BUILDING
DIPLOMA IN CIVIL ENGINEERING
DIPLOMA IN ARCHITECTURE

ICT, COMMUNICATION SKILLS & ENTREPRENEURSHIP EDUCATION

3 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 **THREE** sections, **A, B and C**

Answer **FOUR** questions in section **A**, **TWO** questions in section **B** and **THREE** questions in section **C** in the spaces provided in this paper. All questions carry equal marks.

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

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1- 5		
B	6 -8		
C	9 - 12		
Total Score		100	

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.

SECTION A: ICT (40 marks)

Answer any **FOUR** questions in this section.

1. (a) Explain the functions of the following units found in the Central Processing Unit:
- The control unit;
 - the arithmetic unit.
- (4 marks)
- (b) Differentiate between RAM and ROM. (2 marks)
- (c) (i) Create the following spreadsheet and answer the questions that follow:

STUDENTS NAME	SUBJECT			Total
	Maths	English	Biology	
Main Anders	67	74	71	
Ana Truji	58	65	56	
Thomas Hardy	50	55	58	
Ann Devon	60	62	64	
Martin Suma	85	82	81	

- Enter formula for computing the total marks for each student.
 - Identify a formula that can be able to compute the highest marks for each subject. (2 marks)
- (ii) Outline the procedure that you would use to copy data from an existing spreadsheet worksheet to a new worksheet. (2 marks)
- (d) Differentiate between source document file and data document file used in word processing mail merge. (2 marks)
2. (a) Explain the term 'bit rate' as applied in file system. (2 marks)
- (b) A leading supermarket intends to link all its computers in different branches across the country. State **three** benefits the supermarket is likely to realise by taking such venture. (3 marks)

2501/101 2603/101
 2503/101 2705/101
 2601/101 2707/101
 2602/101 2709/101



- (c) Internet is increasingly being used by children in schools and homes. Lately it has found its way on the mobile phones which are also handy to the children. State **four** negative effects it is likely to impart on the children as a result of use. (2 marks)
- (d) Differentiate between the second generation and fourth generation computers. (2 marks)
- (e) Distinguish between cut command and cropping as used in desk top publishing. (2 marks)
3. (a) (i) Explain the following terms as used in computer networks:
- I) topogy;
II) main server. (2 marks)
- (ii) Data in a network travels from one computer to the other using laid down rules. Describe the following **two** ways in which computers communicate with one another in a network:
- I) point-to-point;
II) broadcast. (2 marks)
- (b) (i) Describe any **two** components (objects) in a database. (2 marks)
- (ii) KIET stream of companies is in an advanced stage of making their stock taking activities computerized. The company decided to use a database system to enter data using forms. Explain any **two** ways why they chose this method. (2 marks)
- (c) With the coming of the information age, many jobs have been replaced by computers or automated machines such as robots.
- (i) Explain **two** ways that the new age of computers information has affected the society. (2 marks)
- (ii) Describe **one** measure in which the trend in (i) can be counteracted to ensure that workforce is retained on productivity basis. (2 marks)
4. (a) Describe the following terminologies as used in Disk Operating System:
- (i) file;
(ii) pathname. (2 marks)

2501/101 2603/101
2503/101 2705/101
2601/101 2707/101
2602/101 2709/101



Turn over

- (b) (i) Define a computer virus;
(ii) Explain how a computer virus works. (6 marks)
- (c) Prevention of virus attacks may be achieved by the implementation of a security policy designed to protect data in computers.
Outline **seven** measures to ensure data security. (2 marks)
- (d) (i) Differentiate between Impact and Non-impact printers.
(ii) Describe **two** factors to be considered when selecting a printer. (3 marks)
5. (a) Explain **three** functions of Operating Systems. (1½ marks)
- (b) (i) Describe **four** ways used to align text document.
(ii) Discuss any **four** icons in a standard tool bar. (2 marks)
- (c) John Knocks was invited to present a topic on Technology Advancement to heads of schools management in Nairobi.
(i) Explain how he will design a master slide;
(ii) Demonstrate the procedure he will follow to design slide animation. (2 marks)
- (d) The need for interconnectivity to public institutions has been necessitated by emerging trends of Information Communication Technology:
Interlink Networking Company was contracted to install networking within the institutions. It decided to use Optic Fibre Cable.
(i) Explain **two** reasons for the choice of the cable.
(ii) With the aid of a labelled diagram explain how Optic Fibre Cable operates. (2½ marks)
- (e) Differentiate between Website and e-mail address. (2 marks)

2501/101
2503/101
2601/101
2602/101

2603/101
2705/101
2707/101
2709/101

SECTION B: COMMUNICATION SKILLS (30 marks)

Answer question 6 (compulsory) and any other ONE question from this section.

- 6 (a) Explain the meaning of the term decoding as used in the process of communication. (2 marks)
- (b) Explain two ways through which a communication officer in an organisation may encourage upward communication. (4 marks)
- (c) State three functions of business reports in an organisation. (3 marks)
- (d) Outline three guidelines that may be followed in developing a logical paragraph. (3 marks)
- (e) Identify four types of customers that may be encountered in the process of business. (2 marks)
- (f) Morris has been invited to his first job interview in a month's time. State four preparations that he should make to ensure success during the interview. (4 marks)
- (g) Explain two ways through which an employee would demonstrate etiquette during a face to face conversation with the manager. (2 marks)
7. (a) State three uses of computers in a large manufacturing firm. (3 marks)
- (b) The Staff Welfare Committee of Rehema Engineering Works Limited is planning to hold its monthly meeting in a week's time. As its secretary, draft a notice and agenda for circulation to members. (7 marks)
8. (a) Distinguish between internal and external communication as used in an organization. (4 marks)
- (b) Table 1 shows quantities of different products that were produced by Facet Limited during the year 2010. Present the information in form of a pie chart. (6 marks)

Table 1.

Production for Facet Limited for the year 2010

Product	Quantity in '000 tonnes
A	200
B	150
C	300
D	250

2501/101 2603/101
 2503/101 2705/101
 2601/101 2707/101
 2602/101 2709/101



Turn over

SECTION C: ENTREPRENEURSHIP EDUCATION (30 marks)

Answer any THREE questions from this section

9. (a) Explain the meaning of the term business idea as used in entrepreneurship. (2 marks)
- (b) Explain **four** characteristics of a good personnel policy of an organisation. (8 marks)
10. (a) Explain each of the following myths that are associated with entrepreneurship:
- (i) All entrepreneurs need money; (2 marks)
- (ii) Entrepreneurs are always inventors. (2 marks)
- (b) The management of Viema Limited is in the process of searching for a location for its new manufacturing plant. Outline **six** factors that may influence the choice of the location. (6 marks)
11. (a) Mapato Enterprises intends to develop a website to market its products. State **four** factors that should be considered to make the website effective. (4 marks)
- (b) Explain **three** cultural factors that may inhibit entrepreneurial development in a country. (6 marks)
12. (a) David is preparing a business plan for Wezo Manufacturing firm. State **four** contents that should be included in the production plan section of the plan. (4 marks)
- (b) Outline **six** benefits that an organisation may derive from engaging in Corporate Social Responsibility (CSR). (6 marks)

2501/101 2603/101
2503/101 2705/101
2601/101 2707/101
2602/101 2709/101