Name: _____ Index No. _____

2920/101
INTRODUCTION TO ICT AND ETHICS
July 2013
Time: 3 hours

Candidate's Signature: _____

Date: _____

THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE I

INTRODUCTION TO ICT AND ETHICS

For Official Use Only

Question	1	2	3	4	5	6	7	8	Total Marks
Marks									

This paper consists of 12 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 over

1. (a) Outline **four** disadvantages of a *microfilm* output as used in data processing.
                                                                                    (4 marks)

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    (b) (i) Define the term *ethics* as used in Information Communication
              Technology.   (2 marks)

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         (ii) Outline **two** ways that could be used to enforce ethics in Information
               Communication Technology industry.   (2 marks)

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    (c) Jostling Company Ltd intends to incorporate the *cloud computing* technology
         in its operations. Explain **three** benefits that the company is likely to derive
         from this technology.   (6 marks)

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    (d) (i) Distinguish between *personal responsibility* and *corporate social
              responsibility* as used in ICT and ethics.   (4 marks)

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         (ii) The following is a list of storage devices:

- Hard disk
- DVD
- Diskette
- Compact disks

Classify them under either magnetic or optical devices. (2 marks)

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2. (a) Define each of the following terms as used in computer networks:

(i) extranet; (2 marks)

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(ii) intranet. (2 marks)

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(b) Distinguish between *peer-to-peer* and *client-server* as used in computer networks. (4 marks)

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(c) With the aid of an example in each case, explain how each of the following would affect the output of employees in an organization:

(i)   stress;   (3 marks)

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(ii)   emotions.   (3 marks)

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(d)   Kilimu Company intends to put in place measures to reduce strain on its computer users' eyes. Explain **three** such measures that the company could put in place.   (6 marks)

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3.   (a)   Outline **two** characteristics of the *second generation* computers.   (2 marks)

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(b)   Explain **two** likely causes of non-work related conflicts in an organization.   (4 marks)

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(c)   Kudu intends to acquire a printer using the *lease* method. Explain **three** circumstances that may have contributed to this method of acquisition.

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(d)   (i)   Gorges, an architect intends to acquire a hardcopy output device for his design work. Justifying your answer, state the most appropriate output device that he would choose.   (2 marks)

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(ii)   Cultic College intends to set up a computer laboratory for its students. Explain **three** factors that the college should consider when setting up the laboratory.   (6 marks)

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4. (a) (i) Explain the term *data bus* as used in Information Communication Technology. (2 marks)

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(ii) With the aid of an example, describe the term *procrastination* as used in time management. (4 marks)

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(b) Explain **two** roles of a *computer programmer* in an organization. (4 marks)

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(c) Distinguish between *super computer* and *main frame* computer as used in Information Communication Technology. (4marks)

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(d) June, a college counselor has noticed frequent quarrels among her colleagues in the staffroom. Explain **three** Conflict Management strategies that she should institute to reduce the levels of quarrelling. (6 marks)

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5. (a) Explain the contribution of each of the following persons to the development of computer technology:

    (i) Charles Babbage; (2 marks)

    (ii) Blaise Pascal. (2 marks)

   (b) Explain **two** advantages of *integrated software* to an organization. (4 marks)

   (c) An international bank intends to minimize environmental pollution that might result from its ICT equipment. Explain **three** strategies that the bank could adopt. (6 marks)

(d) With the aid of a diagram, describe a metropolitan area network. (6 marks)

6. (a) Outline **two** functions of an *Uninterruptible Power Supply* as used in a computer laboratory. (4 marks)

(b) Differentiate between *open architecture* and *closed architecture as used in* computers. (4 marks)

(c) Joy prefers a laser printer to a dot matrix printer for her personal use. Explain **three** reasons that may have influenced to her preference. (6 marks)

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(d) Cytec Company intends to purchase new computer RAM modules. Advice the procurement team on **three** factors that they should consider. (6 marks)

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7 (a) Outline **four** examples of _utility programs_ as used in computers. (2 marks)

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(b) (i) Distinguish between _preventive_ and _reactive_ conflict management techniques as used in ICT. (4 marks)

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(ii)   James, a matatu businessman intends to install a global positioning system (GPS) device in his cars. Explain to him **two** advantages he is likely to experience.   (4 marks)

(c)   Explain each of the following terms as used in computer software:

(i)   *off-the-shelf;*   (2 marks)

(ii)   *spreadsheet package.*   (2 marks)

(d) Kaputil Company has converted its manual data processing system to electronic method. Explain **three** ways in which the employees would be negatively affected by the conversion. (6 marks)

8. (a) Define each of the following terms as used in Information Communication Technology and ethics:

(i) copyright; (2 marks)

(ii) privacy (2 marks)

(b) Distinguish between *silent* and *automatic* software installation methods as used in Information Communication Technology. (4 marks)

(c)   Colon Company Ltd develops software for different companies. Explain **three** challenges the company is likely to face in trying to deal with intellectual property rights of the programmers.   (6 marks)

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(d)   Garter a counselor has been invited to Kiang College to talk to the students about causes of stress and how to manage them. Explain **three** causes of stress that he is likely to discuss.   (6 marks)

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