TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN LOGISTICS & TRANSPORT MANAGEMENT

EIT 2103: ICT FOR LOGISTICS & TRANSPORT

END OF SEMESTER EXAMINATION
SERIES: AUGUST 2014
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*
This paper consists of **FIVE** questions.
Attempt question **ONE (Compulsory)** and any other **TWO** questions
Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

Question One (Compulsory)

a) Briefly describe any FOUR precautions to be taken in the computer lab. **(8 marks)**

b) Write short notes on the following generations of computers:
   (i) 1st Generation
   (ii) 2nd Generation
   (iii) 5th Generation **(6 marks)**

c) Clearly explain any FOUR functions of the operating system. **(8 marks)**

d) Briefly describe FOUR risks to equipment and workers in the computer laboratory. **(8 marks)**

Question Two

a) Explain the difference between parallel vs serial transfer of information. Give TWO examples of devices in each case. **(4 marks)**

b) State what is meant by each of the following and give an example of where each is used.
(4 marks)

   (i) MICR
   (ii) OCR

c) Use a well-labeled diagram to illustrate communication process between a moving truck, the ground office and the satellite. **(6 marks)**

d) Define a computer clearly. **(1 mark)**

Question Three

a) Explain the following mode of data communication:
   (i) Half duplex
   (ii) Simplex **(4 marks)**

b) Explain the difference between disk formatting and data compression. **(2 marks)**

c) Distinguish between multiprocessing and multiprogramming. State ONE advantage each.
(2 marks)
d) Define the term internet and give FOUR advantages and disadvantages of the internet.
(7 marks)

Question Four

a) Describe any THREE types of computer networks. **(6 marks)**

b) How can computers be used in the transport field? **(2 marks)**

c) Distinguish between primary memory and secondary memory **(2 marks)**

d) State THREE disadvantages of computer networking. **(3 marks)**

e) Explain the use of uninterruptible power supply unit (UPS) **(2 marks)**

Question Five

a) What does HTML stand for? **(1 mark)**

b) What do the following stand for:
    (i) DNS
    (ii) DHCP
    (iii) NIC
    (iv) VLAN
    (v) TCP/IP **(5 marks)**

c) Write down the steps in a system Bootup process. **(4 marks)**

d) Define E-commerce and explain any FIVE e-payments methods. **(5 marks)**