



KENYA METHODIST UNIVERSITY

END OF 1ST TRIMESTER 2010 EXAMINATIONS

FACULTY : **COMPUTING AND INFORMATICS**
DEPARTMENT : **COMPUTER INFORMATION SYSTEMS**
UNIT CODE : **CISY 303**
UNIT TITLE : **COMPUTER HARDWARE AND MAINTENANCE**
TIME : **2 HOURS**

Instructions:

- Answer question 1 and any other 2 questions.

Question 1 (30 marks)

- a) Describe a remedy for the following symptoms; (10 mks)
- There is no power light and you cannot hear the cooling fan running.
 - There is no power light, but you can hear the cooling fan running
 - The power light is on, but there is no apparent system activity.
 - The power light is on, but the system hangs during initialization
 - You see a message indicating a cross setup problem
 - You see no active light activity
 - The drive light remains on continuously
 - You see normal system activity, but there is no video
 - The system fails to boot, freezes during boot or freezes during operation for no apparent reasons.
 - The system fails to recognize a newly installed device
- b) Briefly describe the post process and indicate what performs this event. (5mks)
- c) With reference to hard disks compare EIDE and SATA (5 mks)
- d) Memory symptoms on computers are divided into four different categories. List the 4 categories. (4 mks)
- e) Write the following abbreviations in full and write short notes on each. (6 mks)
- FAT
 - NTFS
 - RAID

Question 2 (15 marks)

- a) Briefly describe the two important BIOS settings and information. (2 mks)
- b) Describe the most common ways that device drivers are installed on Windows PCs. (4 mks)

- c) List and describe the four types of resources in Device Manager. (8 mks)
- d) What is an active partition? (1 mk)

Question 3 (15 marks)

- a) Describe two types of ports. (2 mks)
- b) Define the following terms;
 - i) Dynamic disk (1 mk)
 - ii) Extended partition (2 mks)
 - iii) Logical drive (1 mk)
 - iv) EPROM (1 mk)
- c) There are four different types of power connectors inside a computer; 4 pin large, 4 pin small, 9 pin and 20 pin. Explain the difference between them in terms of ON WHICH MOTHERBOARD FACTOR they can be found OR which devices they provide power to. (4 mks)
- d) Justify why one would or would not update the BIOS. (4 mks)

Question 4 (15 marks)

- a) List the general rules for memory installation. (5 mks)
- b) Explain the factors to consider when attempting to purchase the highest quality hard-drive. (4 mks)
- c) Outline and differentiate the file systems used in Windows. (6 mks)