



EAST AFRICAN SCHOOL OF AVIATION EXAMINATION

END-TERM EXAMINATION

SUBJECT: COMPUTER APPLICATIONS

STREAM: Y2 (TEP A\$E)

Duration: 3 Hrs

ENGINEERING SECTION

DAY/DATE: 18/3/2016

TIME: 2.00PM - 5.00PM

Instructions to Candidates:

1. This paper consists of **Three (3)** printed pages.
2. Attempt **All** Questions

Q1.

- a) Distinguish between a data bus and an address bus in a computer system. **(2 Marks)**
- b) Distinguish between volatile and non-volatile memory **(2 Marks)**
- c) What are the three main functions of an assembler in assembly language programming? **(3 Marks)**
- d) Give four advantages of high level language programming over assembly language programming? **(4 Marks)**
- e) Give three advantages of assembly language programming over machine language programming **(3 Marks)**

Q2.

- a) Give **four** reasons why the flash disk is replacing the floppy disk as a portable storage device? **(4 Marks)**
- b) What is cache memory and how is it different from primary memory? **(4 Marks)**
- c) Give three advantages that have resulted in the wide spread use of a universal serial bus?

(2 Marks)

Q3.

- a) Draw a block diagram to illustrate the **basic** organization of a Central Processing Unit and explain the functions of the various components. **(4 Marks)**
- b) With reference to a CPU, What does MIPS means? **(1 Marks)**
- c) RS-232 is a standard that applies to which type of computer communication? **(1 Marks)**

Q4.

- a) A computer memory package is described as DDR-2; SO-DIMM; SD-RAM. Explain “SD-RAM” in as far as the functionality of the memory module is concerned. **(3 Marks)**
- b) What is “DDR 1” as refers to computer memory **(2 Marks)**
- c) Distinguish between EPROM and EEPROM as applies to computers memory **(3 Marks)**
- d) Describe four essential characteristics of DRAM as applies to computers memory

(4 Marks)

Q5.

- a) Pick the correct choice for the Pentium I CPU. **(2 Marks)**
 - a) 16 bit ALU, 16 bit Bus; b) 32 bit ALU, 16 bit Bus; c) 8 bit ALU, 32 bit Bus;
 - d) 32 bit ALU 64 bit Bus; e) 32 bit ALU, 32 bit Bus
- b) Pick the correct choice for the highest binary number that can be referred to on a three position parallel switch block? **(1 Marks)**

- a) 7; b) 6; c) F; d) 1; e) None of the
above
- c) Which of the following is NOT a type of motherboard expansion slot?
(1 Marks)
- a) ISA; b) PCI; c) AGP; d) ATX
- d) Pick the correct choice for which of the following is NOT a type of RAM?
(1 Marks)
- a) SIMM; b) DIMM; c) ROM; d) SLIPP

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