



**EAST AFRICAN SCHOOL OF AVIATION  
EXAMINATION**

**ENGINEERING SECTION**

**END-TERM EXAMINATION**

**SUBJECT: COMPUTER APPLICATIONS**

**STREAM: Y2 ( TEP A\$E )**

**Duration: 3 Hrs**

**DAY/DATE: : XX/04/2016**

**TIME: XXXXXXXXXXXXX**

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**Instructions to Candidates:**

1. This paper consists of **two** (2) 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

\*\*\*\*\*END\*\*\*\*\*