JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL INFORMATICS AND INNOVATIVE SYSTEMS

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION

2ND YEAR 2ND SEMESTER 2013/2014 ACADEMIC YEAR

CENTRE: KISUMU

COURSE CODE: SCS 3111

COURSE TITLE: COMPUTER ORGANIZATION APPLICATION

EXAM VENUE: AH   **STREAM: Dip. Linux Engineering**

DATE: 4/12/2013   **EXAM SESSION: 9.00 – 11.00 AM**

TIME: 2 HOURS

Instructions:

1. Answer question 1 (Compulsory) and ANY other 2 questions.
2. Candidates are advised not to write on the question paper.
3. Candidates must hand in their answer booklets to the invigilator while in the examination room.

DATE: DECEMBER 2013
TIME: 2 HOURS

INSTRUCTIONS:

      i.   **This paper contains five (5) questions.**

      ii.   **Question ONE is Compulsory and any other TWO questions**

      iii.   **Answer the questions on the booklet provided**

      iv.   **Mobile Phones are not allowed in exams room**

Question One (COMPULSORY- 30 Marks)

a. State and explain 5 basic operation performed by any computer system
     [5mks]
b. using a diagram represent the processor and memory architecture of a computer
     [10mks]
c. state and explain 5 characteristic of a PCs computer
     [5mks]
d. explain five important factors you would consider when purchasing a computer
     [10 mks]

Question two

a. Explain the following type of computer processor technologies
     [6mks]
     i.   CISC processor
     ii.   RISC processor
     iii.   EPIC processor

b. Define the following terms in the context of disk storage
   [6mks]
   i. Access time
   ii. Seek time
   iii. Latency-

c. list and explain the key properties used to characterize and evaluate storage unit of computer system
   [8mks]

Question three

a. Differentiate between the following terms as used in computer system and organization
   [4mks]
   i. Impact and non impact printer
   ii. Analog computers and digital computer

b. Explain the logical parts of a computer diagrammatically
   [10mks]

c. Explain three application areas of computers in the following areas, health, transport and education
   [6mks]

Question four

a. Describe the generation of computers
   [10mks]

b. Different between the following giving any similarities or difference between then
   [8mks]
   i. MICR and OCR
   ii. Serial and parallel port
   iii. BMP and JPG
   iv. RAM and ROM.

c. describe the full names of the following acronyms
   [2mks]
   i. DAT
   ii. RAID

Question Five

a. Define the following number system
   [8mks]
   i. Binary
   ii. Decimal
   iii. Octal
   iv. Hexadecimal

b. Convert the following
   [8mks]

      i.   2710 to binary
     ii.   10011012 to decimal
    iii.   21610 to octal
    iv.   4510 to binary

c. Explain the following technologies used in computer system and organization
      [4mks]
      i.   Expansion card
     ii.   MODEM