**ALUPE UNIVERSITY COLLEGE**

*...Bastion of Knowledge....*

P.O.Box 845-50400 Busia(K)
principal@auc.ac.ke
Tel: +254 741 217 185
+254 736 044 469
*off Busia-Malaba road*

**OFFICE OF THE DEPUTY PRINCIPAL**
**ACADEMICS, STUDENT AFFAIRS AND RESEARCH**

# UNIVERSITY EXAMINATIONS

# 2017/2018 ACADEMIC YEAR

### FIRST YEAR FIRST SEMESTER EXAMINATION

**FOR THE DEGREE OF BACHELOR**

**OF SCIENCE IN COMP. SCIENCE/**

**APPLIED STATISTICS WITH COMPUTING**

**SCHOOL:** SCIENCE

**COURSE CODE:** COM 110

**COURSE TITLE:** INTRODUCTION TO

COMPUTERS AND COMPUTING

**DATE:** 14th December, 2017 **TIME:** 9.00am-12.00pm

**INSTRUCTION TO CANDIDATES :** SEE INSIDE

**THIS PAPER CONSISTS OF 20 PRINTED PAGES**

**PLEASE TURN OVER**

For examiner's Use Only

| Question | I.E | E.E |
|----------|-----|-----|
|          |     |     |
|          |     |     |
|          |     |     |
|          |     |     |
|          |     |     |
| CAT      |     |     |
| EXAM     |     |     |
| TOTAL    |     |     |

Insert the numbers of the questions you have answered in the order done

|   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |   |   |   |   |   |   |

Student Admission No.............................Exam Card No......................Signature............

## INSTRUCTIONS TO CANDIDATES

1. Write your **Admission Number**, **Exam Card Number** and **Sign** in the spaces provided at the bottom of each page of the Examination Booklet. DO NOT write your name anywhere in this booklet.

2. Write on both sides of the pages.

3. All rough work must be done in the Answer sheets and crossed through.

4. If supplementary pages are used, they must be fastened all together at the end of this Booklet. Supplementary pages should be used only after all the leaves in the booklet have been exhausted.

5. It is a serious examination offence to cheat or to have unauthorized materials including **MOBILE PHONES** (whether on or off) in the examination venue.

6. In no circumstances must Answer Booklet used or unused, be removed from the examination room by a candidate.

7. The Booklet is for **Examination use only** in a designated examination room. Unauthorized possession of the Answer sheets by a student or any other person constitutes an examination irregularity calling for stiff disciplinary action.

8. Do not pluck any page from this Booklet. Any extra/unused answer sheets should be returned to the **Examination Office.**

9. Candidates who come to examination room 30 minutes late will not be allowed to sit for the exam.

10. Candidates will not be allowed to leave the exam room once the exam commences.

11. Candidates are advised that importance is attached by examiners to accuracy and clarity of expression.

12. Committing any form of irregularity is prohibited and shall attract severe disciplinary action in accordance with Alupe University College Examination Regulations.

Student Admission No……………………………Exam Card No…………………….Signature…………

**INSTRUCTIONS**

> ➤ *Attempt all QUESTION in section A (compulsory) and any other THREE questions in section B*
> ➤ *Please start each question on a new page clearly indicating the question number and complete the question grid on your answer booklet*

**SECTION A (24 MARKS) COMPULSORY**

**QUESTION ONE (12 Marks)**

(a) Definition of the following

(i) Hardware      (ii) Software      (iii) Storage      (iv) Information processing Cycle

(v) user                                                                                (5 Marks)

(b) State five (5) online services provide by the internet                (5Marks)

(c) Differentiate between multimedia and multimedia applications         (2 Marks)

**QUESTION TWO (12 Marks)**

(a) Explain the role of the BIOS Power On Self Test during the booting process    (4Marks)

(b) List 8 unique features of e commerce                                    (4 Marks)

**SECTION B (36 MARKS) ATTEMPT ANY THREE QUESTIONS**

**QUESTION THREE (12 Marks)**

(a) Describe the type of computers available in the market              (6Marks)

(b) Outline six Potential Limitations on the Growth of B2C E-commerce      (6 Marks)

**QUESTION FOUR (12 Marks)**

(a) Determine the number of bytes that can be found in a kilobyte, megabyte, gigabyte and
   terabyte respectively                                                  (4 marks)

(b) List five (5) considerations when choosing a network topology         (5 marks)

(c) Computers handle data in its digital form and yet they usually transmit it using analog signals.
   Explain how this is made possible                                      (3 Marks)

Student Admission No...........................Exam Card No.....................Signature............

## QUESTION FIVE (12 Marks)

Discuss six factors that affect the processing speed of a microcomputer system  (12 Marks)

## QUESTION SIX (12 Marks)

(a) List the four main functions of BIOS  (4 Marks)

(b) Differentiate between  a serial port and a parallel port  (4 Marks)

(c) Distinguish between the following pairs of acronyms

(i) IP address and ISP  (2 Marks)

(ii) Email Spam and Filters (2 Marks)

## QUESTION SEVEN (12 MARKS)

Discuss the six (6) guiding principles to selecting software packages  (12Marks)

Student Admission No...............................Exam Card No.....................Signature............