# MASENO UNIVERSITY

## UNIVERSITY EXAMINATIONS 2013/2014

FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF ARTS WITH INFORMATION TECHNOLOGY

(MAIN CAMPUS)

## APH 102: INTRODUCTION TO LOGIC

*Date: 25th November, 2013* *Time: 11.00 a.m. - 1.00 p.m.*

**INSTRUCTIONS:**

- **Answer ANY THREE questions.**

**FIRST YEAR FIRST SEMESTER**

**MASENO - REGULAR**

**APH 102: INTRODUCTION TO LOGIC**

**INSTRUCTIONS: Answer ANY THREE questions! Each question carries 23 and 1/3 marks.**

1. (a) Define logic and demonstrate its main focus!

(b) With concrete examples, define the following terms: (i) argument; (ii) premises; and (iii) conclusions.

(c) How do statements or propositions differ from other sentences such as commands or directives, exclamations, and questions? Discuss by giving examples!

2. (a) State the entities that the concepts of truth and validity are characteristics of respectively!

(b) Use 7 concrete examples to illustrate how arguments can be valid or invalid regardless of whether their premises and conclusions are known to be actually true or false?

(c) Why is it that there is no example of a valid argument with all its premises true and its conclusion false?

3. (a) What is a fallacy?

(b) With concrete examples, define at least three fallacies or relevance!

(c) With relevant examples define at least two fallacies of ambiguity!

4. (a) Define a categorical proposition!

(b) Define the four types of standard form categorical propositions (SFCPs) and use Venn diagrams to illustrate them.

(c) Illustrate the difference between the following terms! (i) quality; (ii) quantity; (iii) and distribution?

5. (a) Define the relationship of SFCPs that are (i) contraries and (ii) contradictories, and (iii) sub-contraries while using concrete examples to illustrate!

(b) Explain the difference between superaltern and subaltern!

(c) Draw the traditional square of opposition and indicate its characteristics!

6. (a) Define a standard form categorical syllogism (SFCS) by way of an example!

(b) Define and illustrate the form and figure of a SFCS!

(c) Define and explain the six rules on formal fallacies in SFCSs!