



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2013/2014**

**FOURTH YEAR SECOND SEMESTER EXAMINATIONS FOR THE  
DEGREE OF BACHELOR OF EDUCATION (ARTS) WITH  
INFORMATION TECHNOLOGY  
(MAIN CAMPUS)**

**APH 411: PHILOSOPHY OF SCIENCE**

*Date: 10<sup>th</sup> April, 2014*

*Time: 8.30 – 10.45am*

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**INSTRUCTIONS:**

- Answer ANY THREE questions.
- All questions carry equal marks.



## APH 411: PHILOSOPHY OF SCIENCE

Answer any **THREE** questions.  
All questions carry equal marks.

- 1 (a) State the nature of science as a body of knowledge, and institution, and a material constructive process.  
(b) Explain why science cannot be understood in terms of epistemology and logic only?
2. (a) Briefly assess the values of science; (b) Outline the distinguishing characteristics between scientific and unscientific explanations or spiritual.
- 3 Discuss the five criteria for the evaluation of the soundness of scientific hypotheses.
- 4 Using Sir Arthur Conan Doyle's Sherlock Holmes explain the seven steps that a "Detective as a Scientist" would have to go through.
- 5 Evaluate the outline of inductive procedure in terms of John Stuart Mill's five methods.
- 6 (a) Distinguish between crucial and ad hoc experiments.  
(b) In what way can classification also provide hypotheses?