



MACHAKOS UNIVERSITY

University Examinations 2017/2018

SCHOOL OF HUMANITIES AND SOCIAL SCIENCE

DEPARTMENT OF SOCIAL SCIENCES

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR BACHELOR OF ARTS

APH 402: PHILOSOPHY OF THE NATURAL SCIENCES

DATE: 5/12/2017

TIME: 8:30 – 10:30 AM

INSTRUCTIONS.

Answer Question One and Any Other Two Questions

Question one

- a) 'Every scientist should receive a training in philosophy.' Do you agree? (6 marks)
- b) What, if Anything, Distinguishes Scientific Explanation? (8 marks)
- c) How was the study of nature before 1600 shaped by religious belief? (8 marks)
- d) Do different sciences need different philosophies of science? (8 marks)

QUESTION TWO (20 MARKS)

Either

- (a) Discuss the role of empirical observation in ancient Greek investigations of nature. (20 marks)

Or

- (b) Compare the methods and approaches of Plato's investigations of nature to those of Aristotle. (20 marks)

QUESTION THREE (20 MARKS)

What is Karl Popper up to with the theory of falsification?

QUESTION FOUR (20 MARKS)

is modern science the product of a Kuhnian revolution?

QUESTION FIVE (20 MARKS)

Either

- a) Explain the role of positive and negative heuristics in Lakatos' Scientific Research Programmes. (20 marks)

or

- b) Critically evaluate Feyerabend's view of science. (20 marks)