



# **MACHAKOS UNIVERSITY**

University Examinations for 2020/2021 Academic Year

**FIRST YEAR SECOND SEMESTER EXAMINATION FOR**  
**BACHELOR OF SCIENCE (TELECOMMUNICATION AND INFORMATION TECHNOLOGY)**  
**BACHELOR OF SCIENCE (ELECTRICAL AND ELECTRONICS ENGINEERING)**  
**BACHELOR OF SCIENCE (MATHEMATICS AND COMPUTER SCIENCE)**  
**BACHELOR OF SCIENCE (APPLIED PHYSICS AND TECHNOLOGY)**  
**BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)**  
**BACHELOR OF SCIENCE (MECHANICAL ENGINEERING)**  
**BACHELOR OF ARTS (COUNSELLING PSYCHOLOGY)**  
**BACHELOR OF ARTS (GENDER & DEVELOPMENT)**  
**BACHELOR OF ARTS (PUBLIC ADMINISTRATION)**  
**BACHELOR OF SCIENCE (ACTUARIAL SCIENCE)**  
**BACHELOR OF SCIENCE (APPLIED CHEMISTRY)**  
**BACHELOR OF SCIENCE (COMPUTER SCIENCE)**  
**BACHELOR OF SCIENCE (CIVIL ENGINEERING)**  
**BACHELOR OF ECONOMICS AND STATISTICS**  
**BACHELOR OF SCIENCE (FASHION DESIGN)**  
**BACHELOR OF SCIENCE (PUBLIC HEALTH)**  
**BACHELOR OF ECONOMICS AND FINANCE**  
**BACHELOR OF SCIENCE (MATHEMATICS)**  
**BACHELOR OF SCIENCE (BIOLOGY)**  
**BACHELOR OF ECONOMICS**  
**BACHELOR OF COMMERCE**  
**BACHELOR OF ARTS**  
**UCU 103: INTRODUCTION TO CRITICAL AND CREATIVE THINKING**

**DATE:**

**TIME:**

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**INTRUCTIONS: Answer QUESTION ONE and any other TWO QUESTIONS**

### QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain any four characteristic features of a critical thinker. (8 marks)
- b) Briefly distinguish between philosophy in general and technical sense and then show the relationship between two branches of the latter and critical thinking. (12 marks)
- c) Demonstrate four ways in which critical and creative thinking are of value in education. Explain your answer with relevant examples. (12 marks)

### QUESTION TWO (20 MARKS)

- a) Identify any three intellectual virtues while demonstrating how each of them promotes societal transformation. (12 marks)
- b) Briefly explain any four standards upon which you would determine the worthiness or unworthiness of any given thought or philosophy. (8 marks)

### QUESTION THREE (20 MARKS)

- a) Demonstrate briefly how each the following factors prevent people from thinking critically and creatively
  - i) Ego-centrism (3 marks)
  - ii) socio-centrism (3 marks)
  - iii) Propaganda (3 marks)
  - iv) Authoritarianism (3 marks)
- b) By the help of a well labeled diagram explain the standard form of argument. (8 marks)

### QUESTION FOUR (20 MARKS)

- a) Distinguish between the following
  - i) The ordinary sense of argument and logical sense of argument. (4 marks)
  - ii) Deductive and inductive argument. (4 marks)
  - iii) Cogent and sound argument. (4 marks)
- b) Explain the meaning of 'argument analysis' while stating five indicator terms that will help you identify the two main components of argument. (8 marks)

### QUESTION FIVE (20 MARKS)

- a) With reference to John Stuart Mill's essay '*on liberty*' explain the role of individuality in both the personal and societal development. (14 marks)
- b) Outline the logic of rational and ethical decision making. (6 marks)