



# **MACHAKOS UNIVERSITY**

**University Examinations for 2019/2020 Academic Year**

**SCHOOL OF HUMANITIES AND SOCIAL SCIENCES**

**DEPARTMENT OF SOCIAL SCIENCES**

**FIRST YEAR SECOND SEMESTER EXAMINATION FOR**

**BACHELOR OF SCIENCE (ELECTRICAL AND ELECTRONICS ENGINEERING)**

**BACHELOR OF SCIENCE (MECHANICAL ENGINEERING)**

**BACHELOR OF SCIENCE (CIVIL ENGINEERING)**

**UCU 103: CRITICAL AND CREATIVE THINKING**

**DATE:**

**TIME:**

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

**QUESTION ONE (30 MARKS) (COMPULSORY)**

- a) Explain the following in detail; (10 marks)
- i. Reason assessment component
  - ii. Critical attitude or spirit component
- b) What is the meaning of FRISCO? (10 marks)
- c) Elaborate critical thinking account as critical inquiry (10 marks)

**QUESTION TWO (20 MARKS)**

Discuss Harvey Siegel's perspective regarding critical thinking and science education

**QUESTION THREE (20 MARKS)**

Discuss Paul Feyerabend notion of "farewell to reason"

**QUESTION FOUR (20 MARKS)**

"Historically science has been seen as apex of critical thinking influenced by philosophy." Using examples of key philosophers of science substantiate this claim

**QUESTION FIVE (20 MARKS)**

Basing yourself on Harvey Siegel, demonstrate the relevance of critical thinking either in democracy or religion or education