



# MACHAKOS UNIVERSITY

University Examinations 2020/2021 Academic Year

SCHOOL OF EDUCATION

DEPARTMENT OF EDUCATIONAL COMMUNICATION TECHNOLOGY AND EARLY  
CHILDHOOD EDUCATION

FIRST YEAR FIRST SEMESTER EXAMINATION FOR  
MASTER OF EDUCATION (EDUCATIONAL COMMUNICATION TECHNOLOGY)  
ECT 834: APPLICATION OF MATHEMATICS IN DAILY LIFE

DATE: 14/8/2021

TIME: 8.30- 11.30 AM

B

---

## INSTRUCTIONS

- 1) Answer question ONE and any other TWO
- 2) Do not write on the question paper

### QUESTION ONE (20 MARKS)

- a) 'Mathematics is a language but sometimes, it is not'. Validate the statement with any five relevant examples (10 marks)
- b) 'Mathematics closely relates to Art'. Justify the statement with five examples (10 marks)

### QUESTION TWO (20 MARKS)

- a) Explain the importance of mathematics in our daily lives (10 marks)
- b) Outline the measures that mathematics educators can use to mitigate against the challenge of curriculum delivery brought up by Covid-19 pandemic (10 marks)

### QUESTION THREE (20 MARKS)

- a) Explain any five issues in mathematics education and for each, suggest ways of resolving the issues (10 marks)

- b) 'Conducting mathematics education research is a political and moral activity'. Use of five relevant examples to validate the statement (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) Explain any five areas in mathematics education where computer based learning can be used. (10 marks)
- b) Use relevant illustrations to explain any five advantages of computer based learning (10 marks)

**QUESTION FIVE (20 MARKS)**

- a) Explains the aims of teaching and learning mathematics in Kenyan secondary schools (10 marks)
- b) 'The hidden curriculum of schooling is a hindrance to the achievement of the basic aims of Mathematics education'. Explain any five capabilities concerning mathematics that learners need to develop in order to reduce the negative outcomes of the written curriculum (10 marks)