



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

INSTITUTIONAL BASED PROGRAMME (IBP)

EXAMINATION FOR THE DEGREE OF MASTER OF EDUCATION

**ECT 533: CLASSROOM CLIMATE, RESOURCES AND THE SOCIAL
CONTEXT OF MATHEMATICS LEARNING**

DATE: Thursday, 2nd September, 2010

TIME: 9.00 a.m. – 12.00 p. m.

INSTRUCTIONS:

Answer **THREE** questions including question **ONE**.

1. a) According to Cotton 2001, Social injustice is prevalent in Mathematics Classroom and is perpetuated through Mathematics curriculum, pedagogy, assessment and learning environment. Discuss this assertion.

(15 marks)

 b) List all the qualities of a learner who you would define as **able** and then list all qualities for the child you would label as **less able**. By comparing these lists, discuss how you would work with pupils in a Mathematics lesson to develop those traits labeled as *less able* into traits you consider as *able*.

(15 marks)

2. a) What do you understand by the term pedagogy? Discuss how we actually teach Mathematics and identify the expectations that underpin teacher/pupil relationship.

 b) What are the social and cultural environments in our classrooms and how

can the individual student background be valued through Mathematics lessons.

(15 marks)

3. a) What is the role of instructional aids in the teaching and learning of Mathematics?
- b) Discuss the role of the Mathematics textbook and identify features that a good Mathematics textbook should have.

(15 marks)

4. “Language represents some form of culture and some aspects of language as is used in Mathematics, marginalize and exclude students from education”. Discuss this issue with respect to the following language aspects,

- 1) Diversity in home and school language
- 2) Classroom interaction and styles of language and
- 3) Language and context

(15 marks)

5. Discuss why so many girls give up Mathematics as soon as they are allowed to.
(Cite some related research findings)

How would you encourage girls to pursue Mathematics through classroom, department, and school activities?

(15 marks)