

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF POSTGRADUATE DIPLOMA IN
EDUCATION**

PGDE 751: MATHEMATICS SUBJECT METHODS

STREAMS: PGDE (PART TIME) LIBIII

TIME: 2 HOURS

DAY/DATE: TUESDAY 04/12/2018

11.30 A.M. – 1.30 P.M.

INSTRUCTIONS:

- **Do not write on this paper.**
- **This paper consists of four questions**
- **Answer question ONE and any other TWO**

- Q1. (a) What is mathematics education? (2 marks)
- (b) Explain the hierarchy of objectives in the cognitive domain according to Bloom's Taxonomy. (10 marks)
- (c) Discuss the relevance of teaching aids in classroom instruction. (6 marks)
- (d) Explain why a mathematics syllabus review is important. (4 marks)
- (e) Discuss four objectives of teaching mathematics in the Kenyan secondary school. (8 marks)
- Q2. (a) In one of your teaching subject prepare a test specification grid for a test to contain items to be scored out of 30. (3 marks)
- (b) Use the specification table to prepare a test. (5 marks)
- (c) Show how the marks will be awarded on a marking scheme. (7 marks)
- Q3. (a) Explain four characteristics of a good teacher of mathematics. (4 marks)

(b) Discuss challenges faced by teachers of mathematics in secondary schools in Kenya. (4 marks)

(c) Expound on causes in poor standards of Mathematics achievement in secondary schools in Kenya. (5 marks)

Q4. (a) With reference to Mathematics syllabus for the form two students

(i) Suggest areas that require improvement. (5 marks)

(ii) Prepare a scheme of work for one of the topics within the form two mathematics syllabus. (10 marks)
