

GARISSA UNIVERSITY

UNIVERSITY EXAMINATION 2017/2018 ACADEMIC YEAR **TWO SECOND** SEMESTER EXAMINATION

SCHOOL OF EDUCATION, ARTS AND SOCIAL SCIENCES

FOR THE DEGREE OF BACHELOR OF EDUCATION (ARTS)

COURSE CODE: EDM 211

COURSE TITLE: SPECIAL METHODS IN MATHEMATICS

EXAMINATION DURATION: 3 HOURS

DATE: 16/04/18 TIME: 09.00-12.00 PM

INSTRUCTION TO CANDIDATES

- The examination has SIX (6) questions
- Question ONE (1) is COMPULSORY
- Choose any other THREE (3) questions from the remaining FIVE (5) questions
- Use sketch diagrams to illustrate your answer whenever necessary
- Do not carry mobile phones or any other written materials in examination room
- Do not write on this paper

This paper consists of TWO (2) printed pages

please turn over

QUESTION ONE (COMPULSORY)

- (a) Define the following terms;
 - i. Mathematics
 - ii. Lesson plan

iii. Scheme of work [3 marks]

(b) Prepare a lesson plan you will use to teach recurring decimals [15 marks]

(c) Discuss the contribution of Sofia Kovalevsky to development of mathematics [7 marks]

QUESTION TWO

(a) Discuss challenges encountered in the teaching of mathematics Kenyan Secondary Schools.

[7 marks]

(b) How is mathematics relevant to the following fields

[8 marks]

- i. Religion
- ii. Physics

QUESTION THREE

(a) Explain the objectives for teaching and learning of mathematics [9 marks]

(b) Discuss factors to consider when preparing lesson plan [6 marks]

QUESTION FOUR

(a) Outline factors to be considered when choosing a teaching method [8 marks]

(b) Discuss how a mathematics teacher can enhance learner's attitude towards the subjects [7 marks]

QUESTION FIVE

(a) Outline how you would use problem solving method effectively in teaching of mathematics

[8 marks]

(b) Discuss the limitation mathematics syllabus in Kenya

[7 marks]

QUESTION SIX

Compare and contrast Piaget's and Brunner's of cognitive development

[15 marks]