MOI UNIVERSITY

DEPARTMENT OF CURRICULUM, INSTRUCTION AND EDUCATIONAL MEDIA

REGULAR UNIVERSITY EXAMINATIONS

CAMPUSES: ELDORET WEST (40), YALA (30), KITALE (30)

DURATION: 3 HOURS

EDM 211: MATHEMATICS I

INSTRUCTIONS: Answer **ALL** questions in Section A and any other **TWO** questions from

Section B

SECTION A: Answer **ALL** questions in this Section.

1) State and explain the meaning of any **FIVE** objectives of Secondary School Mathematics in Kenya. (15 marks)

2) Prepare a lesson plan of a duration of 40 minutes on a Secondary School Mathematics topic and for a class of your choice. (15 marks)

SECTION B: Answer any **TWO** questions from this Section

3) (a) Briefly explain the meaning of **EACH** of the following terms:
   (i) Mathematical facts. (2 marks)
   (ii) Mathematical skills. (2 marks)
   (iii) Mathematical concepts. (2 marks)
   (iv) Mathematical principles. (2 marks)

   (b) Discuss the application of Jerome Bruner's general theorems in the teaching and learning of new mathematical concepts .(12 marks)

4) Generate a mathematical problem solving model comprising of **FIVE** stages and explain what the problem solver is expected to do at **EACH** stage. (20 marks)

5) (a) State any **FIVE** problems which are likely to be encountered in group work. (5 marks)
   (b) Discuss any **FIVE** characteristics of group work. (15 marks)