JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF EDUCATION

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR EDUCATION EARLY CHILDHOOD EDUCATION

2ND YEAR 2ND SEMESTER 2015/2016 ACADEMIC YEAR

KISUMU LEARNING CENTRE

COURSE CODE: EEC 3221

COURSE TITLE: MATHEMATICS ACTIVITIES

EXAM VENUE:

STREAM :(BEd.ECE/SNE)

DATE:

SESSION:

TIME:

Instructions:

1. Answer Question ONE (COMPULSORY) and ANY other 2 questions
2. Candidates are advised not to write on the question paper.
3. Candidates must hand in their answer booklets to the invigilator while in the examination room.

SECTION A

1 a) Define the following terms

      I.   Process
     II.   Concepts
    III.   Hypothesis
    IV.   Role counting   (8mks)

  b) State any six objectives of science and mathematics   (6mks)

  c) Explain five activities for teaching children about speed   (6mks)

  d) Describe at least six different activities that can help young children to develop the

    concept of number recognition   (6mks)

  e. state any two causes of air pollution in class   (4mks)

SECTION B

2 a) Analyze the following pre-number activities by developing activities for each category:

      I.   Sorting and grouping
     II.   Ordering and sequencing
    III.   Matching and pairing   (12mks

b) Highlight with relevant examples, computational activities that are introduced at pre-school level   (8mks)

3 a) Citing relevant examples, describe five characteristics of young children that make science a natural activity for them   (10mk)

 b) "Air is a difficult concept for young children to understand" explain the meaning of the above statement by developing activities destined for introducing children to the concept of air (10mks)

4 Discuss Jerome Brumer's contribution to science and mathematics learning in ECD

                           (20mks)

5 Develop activities for introducing children to the following concept areas:

      I.   Soil
     II.   Water
    III.   Electricity
    IV.   Animals   (20mks)