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**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2017/2018 ACADEMIC YEAR THREE**

**SECOND SEMESTER EXAMINATION**

**SCHOOL OF EDUCATION AND SCOCIAL SCIENCES**

**FOR THE DEGREE OF BACHELOR OF EDUCATION (ARTS)**

**COURSE CODE: ECE 306**

**COURSE TITLE: MATHEMATICS ACTIVITIES**

**EXAMINATION DURATION: 3 HOURS**

**DATE: 09/04/18 TIME: 08.00-11.00 AM**

**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)**

1. Outline the five general objectives for early childhood development in Kenya **[5 marks]**
2. State any five aims of teaching and learning Mathematics **[5 marks]**
3. Define the following terms:
4. Learning **[3 marks]**
5. Heuristic learning **[2 marks]**
6. Explain what integration refers to in Early Childhood Development **[3 marks]**
7. State the five branches of Mathematics **[5 marks]**
8. List three expectations of a teacher who is investigating problems in both theoretical and real life contexts **[2 marks]**

**QUESTION TWO**

1. Outline the various records that preschool teachers need to keep and maintain  **[5 marks]**
2. Discuss why it is necessary to keep records **[10 marks]**

**QUESTION THREE**

Investigating patterns allows students to experience the excitement and satisfaction of mathematical discovery. Discuss **[15 marks]**

**QUESTION FOUR**

Discuss the importance of teaching mathematics in early years **[15 marks]**

**QUESTION FIVE**

Describe in detail, how you, as a teacher, can help your students to reach their full potential **[15 marks]**

**QUESTION SIX**

Discuss the position of the National Council of Teachers of Mathematics **[15 marks]**