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**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: 10/04/18 TIME: 3.00-6.00 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)**

1. Define the following terms;
2. Mathematics
3. Lesson plan
4. Scheme of work **[3 marks]**
5. Prepare a lesson plan you will use to teach recurring decimals **[15 marks]**
6. Discuss the contribution of Sofia Kovalevskaya to development of mathematics **[7 marks]**

**QUESTION TWO**

1. Discuss challenges encountered in the teaching of mathematics Kenyan Secondary Schools **[7 marks]**
2. How is mathematics relevant to the following fields **[8 marks]**
   1. Religion
   2. Physics

**QUESTION THREE**

1. Explain the objectives for teaching and learning of mathematics **[9 marks]**
2. Discuss factors to consider when preparing lesson plan  **[6 marks]**

**QUESTION FOUR**

1. Outline factors to be considered when choosing a teaching method  **[8 marks]**
2. Discuss how a mathematics teacher can enhance learner’s attitude towards the subjects **[7 marks]**

**QUESTION FIVE**

1. Outline how you would use problem solving method effectively in teaching of mathematics  **[8 marks]**
2. Discuss the limitation mathematics syllabus in Kenya **[7 marks]**

**QUESTION SIX**

Compare and contrast Piaget’s and Brunner’s of cognitive development **[15 marks]**