****

**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2020/2021 ACADEMIC YEAR THREE**

**SECOND SEMESTER EXAMINATION**

**SCHOOL OF EDUCATION, ARTS AND SOCIAL SCIENCES**

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

**COURSE CODE: CIM 311**

**COURSE TITLE: SPECIAL METHODS IN MATHEMATICS**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 08/10/2021 TIME: 3.00-5.00 PM**

**INSTRUCTION TO CANDIDATES**

* **The examination has FIVE (5) questions**
* **Question ONE (1) is COMPULSORY**
* **Choose any other TWO (2) questions from the remaining FOUR (4) 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. The elements of a lesson plan as well as those of a scheme of work **(10 marks)**
2. Explain the interrelationship between a lesson plan, a scheme of work and a sy11abus. **(7 marks)**
3. Select a topic and prepare- a scheme of work**.                                                        (13 marks)**

**QUESTION 2**

1. Explain the characteristics of a well stated instructional objective. (**5 marks)**
2. Distinguish between cognitive, affective and psychomotor categories of objectives. (**15 marks)**

**QUESTION 3**

Discuss five teaching methods that can be used by Secondary mathematics teacher **(20 Marks)**

**QUESTION 4**

1. Compare Piaget’s and Brunner’s stages of cognitive development. (**15 marks**)
2. What are the implications of psychological theories to learning mathematics? (**5marks**)

**QUESTION 5**

1. Explain the importance of instructional materials in teaching mathematics (**5 marks**)
2. Identify and explain five appropriate teaching aid that you can used to teach the topic scale drawing (**15 marks**)