



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY**

**SCHOOL OF EDUCATION**

**UNIVERSITY EXAMINATION FOR THE DIPLOMA IN EDUCATION  
(SPECIAL NEEDS EDUCATION)**

**2<sup>nd</sup> YEAR 2<sup>nd</sup> SEMESTER 2020 ACADEMIC YEAR**

**MAIN CAMPUS REGULAR**

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**COURSE CODE: ESN 2223**

**COURSE TITLE: SPECIFIC METHODS OF TEACHING SCIENCE**

**EXAM VENUE:**

**STREAM: (DIP SNE)**

**DATE:**

**EXAM SESSION:**

**TIME:2 HOURS.**

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**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 booklet to the invigilator while in the examination room**

**Q1. (a)** Explain the following terms as used in teaching primary science

(i) Excursions (2 marks)

(ii) Exploratory learning (2 marks)

**b)** Generate *two* types of questions from the topic “Human Teeth” (2 marks)

**c)** Explain *two* factors to consider when presenting a science lesson to learners with visual

Impairments (4 marks)

(d) Examine *three* strategies of involving learners with Special Needs in questioning (3marks)

(e) Explain any *two* characteristics of a good science test for learners with special needs  
(4 marks)

(f) Outline any *four* materials your learners would need to carry out an experiment “Separating mixture by evaporation” (4 marks)

(g) (4 marks)

(h) List *two* learning activities which can be applied when teaching the Sub topic “Friction” to class six learners (2 marks)

(i) State two ways of assessing learners with visual challenges in a science lesson  
(2 marks)

(j) Outline three things that are involved in preparation of a scheme of work for learners with special needs (3 marks)

**Q2**

(a) Explain five objectives of teaching primary science (10 marks)

(b) Analyze five resources which aid in the achievement of the above objectives (10 marks)

**Q3.**

(a) Draw a one-week science scheme of work for standard five and from the scheme, extract one lesson plan (15 marks)

b) Identify five strategies you would use to involve learners with Special Needs in a science lesson (5 marks)

**Q4**

(a) Discuss the major components of Individualized Education Programme (IEP) (15 marks)

(b) Enumerate five related services that can be offered to Special Needs learners in Individualized Education Programme (I.E.P.) (5marks)

**Q5. .**

Discuss any five methods of teaching science that would be suitable for learners with different special needs (20 marks)