



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY
SCHOOL OF EDUCATION
UNIVERSITY EXAMINATION FOR THE DIPLOMA IN SPECIAL NEEDS
EDUCATION
YEAR 2 SEMESTER 1 2018/2019 ACADEMIC YEAR
REGULAR MAIN CAMPUS**

COURSE CODE: ESN2217

COURSE TITLE: SCIENCE AND AGRICULTURE

EXAM VENUE

SREAM

DATE

EXAM SESSION

TIME

Instructions

- 1. Answer question one (compulsory) and any other 2 questions**
- 2. Candidate 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.**

QUESTION ONE

Explain the meanings of each of the following terms

- a) Science (2marks)
- b) Astronomy (2marks)
- c) comet (2marks)
- d) Hygiene (2marks)
- e) Matter (2marks)
- f) Solubility (2marks)
- g) Soil texture (2marks)
- h) Disease (2marks)
- i) Sanitation (2 marks)
- j) Give two none communicable diseases (2marks)
- k) State two differences between boiling and evaporation. (2marks)
- l) State any two characteristics of plants (2marks)
- m) Give any two biotic components of the environment (2marks)
- n) Name any two constellations (2marks)
- o) List down any **two** physical properties of soil. (2marks)

QUESTION TWO

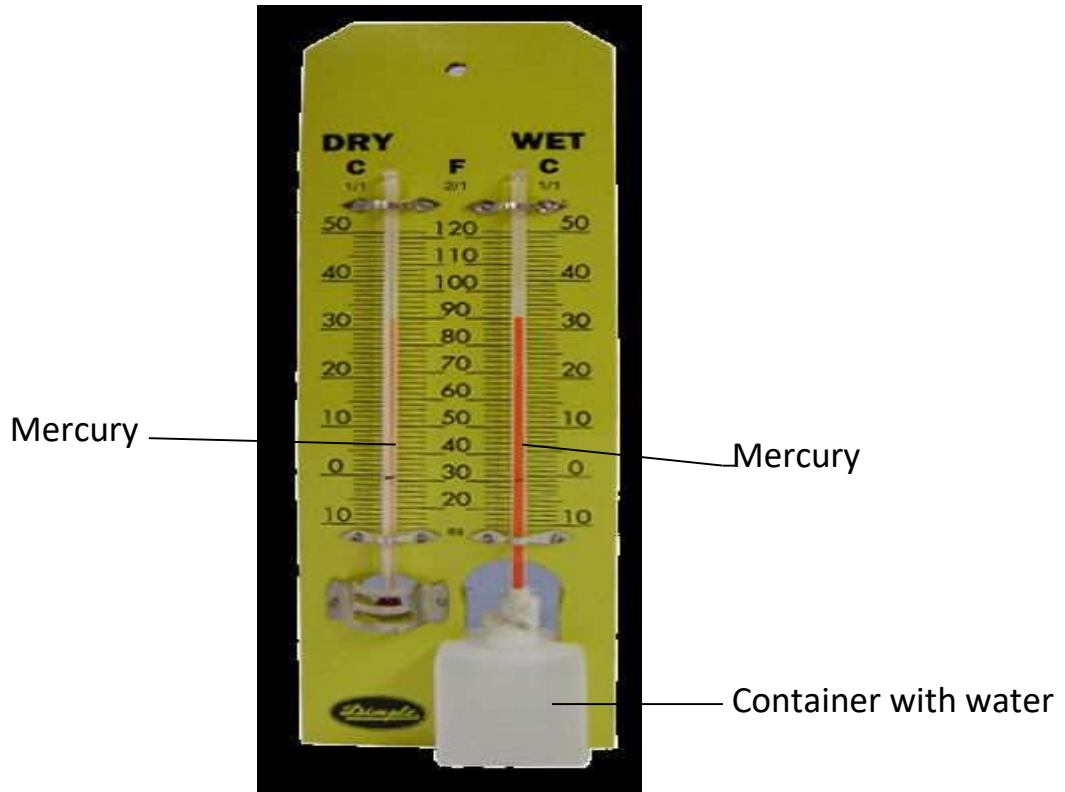
- a) List and describe any five tenets/characteristics of the nature of science (10 marks)
- b) By giving examples in each case, state the two types of reasoning (4 marks)
- c) List the steps involved in scientific problem solving process (3 marks)

QUESTION THREE

a) Below is a useful instrument.



- i. Name the instrument. (1 mark)
 - ii. Which elements of weather can be measured by the instrument above? (2 marks)
- b) Explain how the instrument is designed to measure the aspects named in (ii) above. (6 marks)
- c) The picture below shows a weather instrument



- (i) Name the instrument (1 mark)
- (ii) What aspect of weather does it measure? (1Mark)
- (iii) Describe how the instrument works to measure the weather element in (c ii) above (6 marks)
- (iv) State two weather conditions that cannot be taught in lower Primary Classes (2 marks)
- (v) State the features that make difference between the two thermometers (1 mark)

QUESTION FOUR

- a) Describe the differences in characteristics between top soil and sub soil (10 marks)
- b) Discuss the farming activities that encourage soil erosion. (10 marks)

QUESTION FIVE

- a) By use of well labelled diagrams, explain how you can demonstrate that different liquids expand and contract at different rates. (10 marks)
- b)
 - (i) By giving reasons explain why ice floats in water. (4marks)
 - (ii) State and explain the uses of air pressure (6 marks)