



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF EDUCATION
UNIVERSITY EXAMINATION FOR THE DIPLOMA IN SPECIAL NEEDS
2ND YEAR 2ND SEMESTER 2015/2016 ACADEMIC YEAR
MAIN CAMPUS REGULAR

COURSE CODE: ESN 2223

COURSE TITLE: MATHEMATICS AND MATHS DIFFICULTIES

EXAM VENUE:

STREAM:

DATE:

EXAM SESSION:

TIME: 2 HOURS

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 booklets to the invigilator while in the examination room.**

QN 1

(a) Define the following terms

- i. Dyscalculia
- ii. Dysgraphia

iii. Arithmetic (6 marks)

(b) Verify the fact that mathematics is very integral to a student of agriculture and Business Studies. (12 marks)

(c) Describe the first three developmental stages as given by Piaget (1972) with reference to mathematics (6mks)

d) List three concepts that the theory can help to develop among children with special needs? (6marks)

QN 2

a) Mathematics anxiety may result to mathematics difficulties among children. Briefly explain **three** causes of mathematics anxiety. (12marks)

b) Give **four** possible intervention measures to alleviate mathematics anxiety among the H.I children. (8marks)

QN 3:

a) Differentiate between formal and informal tests in the course of teaching. (4marks)

b) State two circumstances in which a teacher sets:

i) Informal test

ii) Formal test (8 marks)

c) After teaching, as a teacher you are expected to set a formal test to assess the performance of the learners. Explain any three considerations you make when setting such a test

(8 marks)

QN 4

864.6-48.15: The child worked out the question given as below this one vertically as shown below:-

$$\begin{array}{r} 8643.6 \\ - 48.152 \\ \hline 42.32.4 \end{array}$$

- a) Give any four skill areas of difficulties that this child had. (12 marks)
- b) You as a teacher , what corrective strategies would you follow to alleviate the child from his/her problem . (8 marks)

Qn 5

- a) State and explain any two mathematics difficulties that children with SNE may have when doing exams in standard eight. (8 marks)
- b) Compare and contrast the process of teaching mathematics in relation to Piaget's and Vygotsky's theories of learning. (12 marks)