



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE & TECHNOLOGY

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
EDUCATION**

BACHELOR OF EDUCATION

**4TH YEAR 2ND SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR
OF EDUCATION (ARTS AND SCIENCE)**

MAIN CAMPUS- REGULAR

COURSE CODE: PSY 410

COURSE TITLE: TESTS AND MEASUREMENT

TIME: 2 HOURS

DECEMBER, 2017.

Question One

- a) Define the following terms
- i) Assessment (1marks)
 - ii) Reliability (1marks)
 - iii) Power test (1marks)
- b) Using a relevant example in each, distinguish between measurement and evaluation (4 marks)
- c) Briefly explain six functions of evaluation and assessment (6 marks)
- d) A Physics test was administered to a class of 8 students and after two weeks the same test was re-administered to the same group. The two scores were as follows:

Student No	1	2	3	4	5	6	7	8
Marks in Physics 1 st administration	65	68	52	36	71	43	61	20
Marks physics 2 nd administration	52	56	59	29	65	41	68	38

From the above data

- i) Use Pearson Product Moment Correlation to establish reliability coefficient of the test. (12marks)
- ii) Interpret the obtained reliability coefficient (1mark)
- iii) Explain the first two low levels/scales of measurement (4marks)

Question Two

- a) Explain five objectives of item analysis (10marks)
- b) Name and explain any FOUR types of validity (8marks)
- c) In a given test, the reliability of a half test was 0.8, what is the reliability of the full test (2marks)

Question Three

- a) Briefly explain the difference between item difficulty index and item discrimination index (4mks).
- b) Discuss FIVE factors affecting reliability of a test (10 marks).
- c) In a given multiple choice item test, the response to a particular question is as indicated in the table below:

A	B	C*	D
23	6	15	6

If the correct answer is “C”, calculate the item difficulty index for the test item.
Comment on the value obtained (4mks).

d) Explain the term distractor analysis (2mks)

Question Four

a) Discuss generalizability theory of measurement and evaluation (8marks)

b) List and explain six steps involved in test development (12marks)

Question five

Discuss the history of measurement and evaluation (20marks)



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COURSE CODE: PSY 410

COURSE TITLE: EDUCATIONAL TESTS AND MEASUREMENT

YEAR 4 SEMESTER 1

MAIN CAMPUS

LECTURER: Dr Aloka and Owino Joshua

0722-421696

COURSE OUTLINE

Contact Hours: 42

Credit Hours: 3

Prerequisite: None

Course Purpose

The purpose of the course is to introduce students to concepts of measurement, its historical and relevance in the education system and equip the learners with principles and practices for classroom assessment and evaluation perspectives of Human Growth and Development.

Expected Learning Outcomes

By the end of the course students will be able to:

1. Describe the History development of measurement and evaluation
2. Explain the role of measurement and evaluation in the education system
3. Apply the Theories of evaluation and measurement in the classroom situation
4. Apply the domains of educational objectives in developing objectives and tests
5. Construct and use different instruments of evaluation
6. Apply the basic statistical methods of evaluation and measurements for classroom testing and in research

Course Content

1. Overview of Measurement and evaluation
 - i. Definition and purposes of Measurement and evaluation

- ii. Importance and functions of tests in Education
- 2. Educational objectives
 - i. Educational objectives
 - ii. Bloom's Taxonomy of educational objectives
 - a. The affective domain
 - b. The psychomotor domain
 - c. The cognitive domain
- 3. Tests
 - i. Types of tests
 - ii. Tests dev/construction
 - iii. The administration and scoring tests
 - iv. Interpreting tests scores
- 4. Quality of tests
 - i. Reliability
 - ii. Validity
- 5. Item analysis
- 6. Scaling theory
- 7. Basic statistical methods of evaluation and measurement
 - i. Measures of central tendency
 - ii. Measures of dispersion
 - iii. Correlation
 - iv. Regression

Teaching Methods

- (a) Lectures
- (b) Group activities
- (c) Individual presentations
- (d) Tutorials

Teaching Materials

- (a) Over-head projectors
- (b) VCD

(c) Chalk/whiteboards

Assessment Methods

- (a) Continuous Assessment Tests- 30%
- (b) End of Semester Examination- 70%,
- (c) TOTAL= 100%