



**OFFICE OF THE DEPUTY PRINCIPAL  
ACADEMICS, RESEARCH AND STUDENT AFFAIRS**

---

**UNIVERSITY EXAMINATIONS  
2020/2021 ACADEMIC YEAR**

**THIRD YEAR SECOND SEMESTER REGULAR MAIN  
EXAMINATION**

**FOR THE DEGREE OF BACHELOR OF  
EDUCATION**

**COURSE CODE: PSY 311**

**COURSE TITLE: EDUCATION MEASUREMENT AND  
EVALUATION**

**DATE: 13<sup>TH</sup> JULY, 2021**

**TIME: 8.00 A M---11.00 AM**

**INSTRUCTION TO CANDIDATES**

- SEE INSIDE

**THIS PAPER CONSISTS OF 4 PRINTED PAGES**

**PLEASE TURN OVER**

**PSY 311: MEASUREMENT AND EVALUATION**

**STREAM: BED**

**DURATION: 3 HOURS**

**INSTRUCTIONS TO CANDIDATES**

- i. Answer Question ONE and any other Two
- ii. Do not write on the question paper

**Question One**

- a) Define the following terms as used in educational measurement and evaluation (4 marks)
  - i) Measurement
  - ii) Assessment
- b) Explain TWO limitations of range as a measure of variation. (2marks)
- c) Explain FOUR scales of measurement (8marks)
- d) Highlight TWO characteristics of the normal curve (4marks)
- e) Prepare a test matrix in your area of specialization. Show the cognitive domain to test and the number of items to be set from each cognitive domain. (12marks)

**Question Two**

The following scores were obtained from a chemistry test

83 79 81 75 86 7382

85 72 80 66 7871 80

78 69 81 7480 86 79

62 63 9289 76 75 93

77 7570 76 73 67 65

8358 85 70 83 60 68

- a) Using a class of 5 points, construct a histogram (5marks)
- b) Calculate
  - i) The mean (3marks)
  - ii) The median (4marks)
  - iii) The standard deviation (8marks)

**Question Three**

- a) Define the term test as used in educational measurements (1 mark)
- b) List TWO types of tests (2marks)
- c) State TWO steps you will take to reduce bias in essay items. (2marks)

- d) Describe the following types of validity
  - i) Content Validity (2 marks)
  - ii) Criterion Validity (4 marks)
  - iii) Construct validity (3 marks)
- e) List SIX purposes of measurement and evaluation in education (6 marks)

**Question Four**

- a) Explain SIX differences between norm referenced and criterion referenced assessments (12marks)
- b) Citing examples. distinguish between formative and summative evaluations (4 marks)
- c) State THREE advantages of multiple-choice items in educational testing. (3 marks)
- d) Name TWO extrinsic factors that affect test reliability (1marks)

**Question Five**

a) The following scores were obtained by 6 students of Education in CIT 360 and PSY 311 in second semester examinations last academic year

CIT 360	PSY 311
45	50
50	49
25	30
10	11
15	11
12	10

- i) Compute the Spearman Rank Order Correlation Coefficient (rho or P) and comment on it (4 marks)
  - ii) Using Pearson Product Moment of Correlation Coefficient (r<sub>xy</sub>) determine whether the tests were internally consistent or not (5 marks)
  - iii) In your own opinion, do students who score 400 marks and above in KCPE and join secondary school get B+ and above in KCSE. Comment (4 marks)
- b) You intend to construct a test at the end of term using multiple choice items. Explain ways you will consider when constructing multiple choice questions for secondary school students (7 marks)

\*\*\*\*\*