

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION (SSTE)
DEPARTMENT OF SCIENCE EDUCATION
SECOND SEMESTER 2015/2016 ACADEMIC SESSION EXAMINATION

COURSE TITLE: TEST, MEASUREMENT AND EVALUATION

COURSE CODE: EDU321 TEST (3) Units

TIME ALLOWED: 3 Hours

INSTRUCTION: Attempt four (4) questions in all.

SECTION A: Attempt all the questions in this section they carry equal marks

1. (a) What is 'measurement' in education? **(3 marks)**
(b) Itemize the types of measurement scales and state the one which is considered as the 'lowest form' and why? **(7 marks)**
(b) Using a frequency table, calculate the Mean (\bar{x}) from the scores obtained by Undergraduate students in EDU214 Test: 20, 28, 31, 40, 20, 32, 28, 31, 39, 18, 28, 30, 35, 39, and 15 **(5 marks)**
2. Supposing the following entries are the sample ages of 300 Level Chemistry students in the department of science education; 20, 20, 21, 22, 22, 21, 21, 20, 20, 20, 23, 23, 24, 23, 23, 20, 24, 65, 21, 22. (a). Re-arrange the entries of the data set. **(3 marks)**
(b). Identify the **outlier** of the data. **(1 mark)**
(c). Find the Mean, Median and Mode of the sampled ages. **(7 marks)**
(d). Hence, explain which of the measures of central tendency best describe a typical entry of this data set. **(4 marks)**
3. (a). State the **three** basic measures of variability, define any **one** and give an example. **(5 marks)**
(b). If a random sample was collected of children per household in a community and the

result was as follow: 1, 1, 1, 1, 3, 1, 3, 2, 4, 0

3, 2, 1, 5, 0, 1, 6, 3, 1, 3

1, 2, 0, 0, 3, 6, 6, 0, 1, 0

1, 1, 0, 3, 1, 0, 1, 1, 2, 2

1, 0, 0, 6, 1, 1, 2, 1, 2, 4