

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF PHYSICAL SCIENCE
DEPARTMENT OF GEOGRAPHY
SECOND SEMESTER 2014/2015 SESSION UNDERGRADUATE EXAMINATION

COURSE CODE: **GRY 222**

COURSE TITLE: **Elementary Statistics for Geographers**

INSTRUCTION: Answer **FOUR** Questions in **ALL**; Question **ONE** and Three Others

TIME ALLOWED: **2HRS 30MINS**

1. The following shows the daily sales of a small scale establishment.
97.5, 102.65, 141.02, 174.68, 92.06, 172.21, 83.77, 104.44, 156.52, 106.34,
125.27, 127.72, 137.66, 83.66, 116.70, 136.79, 129.99, 149.59, 136.97, 124.31,
123.31, 123.23, 118.94, 132.67, 145.68, 125.41, 124.17, 91.70, 128.29, 81.24

From the data, compute:

- i. The Mean and median from the sales of the establishment
 - ii. the standard deviation and variance for the sales of the establishment
 - iii. Construct a frequency distribution for the sales during the period using five classes
 - iv. Calculate the mean for the grouped data.
 - v. Give the implications; when the value of a Z-score is located to the right or left.
2. Identify the steps involved in calculating the median in a grouped data
3. Give a concise description of a cross sectional and time series data.
4. By identifying the weaknesses and strength of cross sectional data types, explain how panel data can provide a desirable alternative
5. Discuss the characteristics of Numbers as desirable property in science; why are measurements based on numbers referred to as 'derived' measurements?
6. The table below is the performance of two students – Alex and Richard in the test of ten courses taken in one semester.

Course	A	B	C	D	E	F	G	H	I	J
Alex	8	8	9	12	10	8	12	14	15	17
Richard	7	7	8	8	9	8	9	9	6	4

Compute the standard deviation and Variance for the scores of the two students.