NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SCHOOL OF EDUCATION
SEPTEMBER/OCTOBER 2015 EXAMINATION

COURSE CODE: EDU821 (3 units)
COURSE TITLE: EDUCATIONAL STATISTICS
TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE QUESTIONS.

1.   (a) (i) Discuss THREE categories of statistics.   (3 marks)
          (ii) Explain THREE errors in measurement   (3 marks)
          (iii)   Estimate the sum of squares of the following scores: 21, 37 and 68.
(4 marks)
          (b)   Using

EDA844	70	25	56	65	42	10	68	80	50	45
EDU821	75	40	60	70	88	30	72	60	90	60

          Estimate Spearman Rank Order correlation coefficient between EDA844 and EDU821 scores. Interpret your answer.
                    (10 marks)

      (c)   Draw a schematic diagram to show relationships among the following terms: variables, discrete data, continuous data, quantitative, interval, ratio, parametric, ordinal, qualitative, nominal and non-parametric   (5 marks)

2.   (a)   Draw up a frequency distribution table of these scores
                92   82   45   60   82   37
                16   42   16   45   60   72
                77   81   92   60   65   37
                88   42   45   16   60   25
                60   25   81   45   43   89
      Therefore, calculate (i)   range   (ii) mode   (iii) Mean   (9 marks)
          (b)   Briefly discuss FOUR types of measurement scales   (6 marks)

3. (a) Scores of 100 ODL students in a Research Methods course are presented as

60-64	55-59	50-54	45-49	40-44	35-39	30-34	25-29	20 -24	15 -19
2	2	6	8	12	14	24	12	16	4

Find the median of the groups of scores.
(10 marks)
(b) Give FIVE measures of dispersion (5 marks)

4. (a) First TMA scores of 55 Masters students of school of education are presented as follows:

TMA scores	9	10	12	13	14	15	16	17	18	19
F	1	2	3	5	9	15	10	5	3	2

Find the (i) variance (ii) standard deviation of the scores (9 marks)

(b) Draw THREE types of skewness andthe enumerate the positions of mean, median and mode on each
(6 marks)

5. (a) Five students A, B, C, D, and E obtained 45, 60, 10, 89, and 52 scores respectively in a test. Calculate the z and T scores of each student if the mean is 51.2 and standard deviation is 25.47.

(11 marks)

(b) Discuss any TWO causes of variability of correlation coefficient
(4 marks)