



NATIONAL OPEN UNIVERSITY OF NIGERIA
 Plot 91, Cadastral Zone, Nnamdi Azikwe Express Way, Jabi, Abuja
Faculty of Education
2020_1 Semester

COURSE TITLE: STATISTICAL METHOD 1

COURSE CODE: EDU821

CREDIT UNIT(s): 3

TIME ALLOWED: 3 HOURS

INSTRUCTION: Answer question no. One (1) and any other three (3) questions

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Question 1

(a.) The following represents the size of 10 families sampled: 5,12,6,8,5,6,7,5,12,14. Using the data above Compute the following:

(i) Range _____

(ii) Mean _____

(iii) Mode _____

(iv) Median _____

(v) Variance _____

(vi) Standard Deviation _____

(b) (i) Differentiate between Nominal scale and Ordinal scale -

(ii) Which of the measurement scales (Nominal, Ordinal, Interval or Ratio) is being used in the concepts listed below:

S/N	CONCEPT	MEASUREMENT SCALE
1	Reaction Rate	
2	Educational level	
3	Zip Code	
4	Total score of students in TMA's for EDU821	

2. The following table provides data about the percentage of NOUN students in various centres across Nigeria who have free access to the Internet and their CGPA scores.

S/N	CENTRE	% of students having free meals	% of students scoring above 3.5 CGPA
1.	Uyo	14.4	54
2.	Enugu	7.2	64
3.	Abeokuta	27.5	44
4.	Abuja	33.8	32
5.	Kaduna	38.0	37
6.	Kano	15.9	68
7.	Bauchi	4.9	62

Calculate the Spearman's Rank Correlation between the two.

Question Three

The following frequency distributions of scores obtained by job applicants in a written aptitude test are as contained in the table below:

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

a. Using the table, find the following:

- (i) The class size of the distribution
- (ii) The upper limit of the class 30-34
- (iii) The lower limit of the class 50-54
- (iv) The class mark of the class 45-49
- (v) The lower class boundary of the class 55-59
- (vi) The relative frequency of the class 20-24 to 2 decimal places
- (vii) The cumulative frequency of the distribution

b. What is the probability that of the applicant picked scored either between 20 and 24 or 30 and 34?

Question Four

Given the raw scores; 45, 50, 80, 68, 10; Compute to two decimal places;

- (i) The Z-scores for each of the scores listed
- (ii) The T-scores for each of the scores listed

Question Five

The grouped data of scores of students in a terminal examination is given in the table below:

Score	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
Frequency	1	2	6	10	15	25	38	20	13	5

Using the table, find the following, compute using the assumed mean method,

- (i) The mean of the grouped data.