

DEPARTMENT OF GEOGRAPHY
SCHOOL OF SCIENCE AND SCIENCE EDUCATION
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
FIRST SEMESTER EXAMINATION 2009/2010 SESSION

COURSE CODE; GRY 313

COURSE TITLE – QUANTITATIVE STATISTICS FOR GEOGRAPHERS

TIME ALLOWED: 2Hrs 30 Minutes

INSTRUCTIONS: Answer Question ONE and any other three questions. The use of relevant diagrams and illustration will be rewarded.

1. Using the table below, attempt an analysis of the association between the mode of journey to work and income level using the chi- square

Transport	<5000	5000-6999	7000-8999	9000-above
Train	19	28	36	40
Car	12	13	45	48
Bus	31	20	11	6
Others	20	11	9	8

Alpha level= 0.05, (df) 9=16.92

2. a, what is sampling
b. using relevant examples differentiate between population and sampling
c. Explain the advantages of using sampling over population
3. A geographer came up with the following measurements after a field survey of an observed spatial distribution patterns with an area of 35cm².

0.10	0.4	0.06	0.61
0.8	0.3	0.30	0.70
0.7	0.6	0.7	0.79
0.7	0.7	0.4	0.62

Using nearest neighbor analysis technique

- A. calculate R_n using the above data
- b. using the result obtained in (a) represent with a diagram the spatial distribution pattern
- c. Explain the interpretation of the spatial pattern.

4. write short notes on any 3 of the following

- a. Time series analysis
- b. Parametric and non parametric test
- c. Discrete data
- d. Continuous data.

5. Explain the relevance of inductive and deductive reasoning in the development of methodology in geographical research.

6. The farmers in an hypothetical region have a choice between two crops that are significantly influenced by seasonal variability of rainfall. The table below reflects the yield of the crops in wet and dry years

Farmer's choice	Environmental	
	Wet	Dry
Rice	63	43
Guinea corn	28	58

- a. Determine the average yield
- b. Percentage of each of the crops to be grown.
- c. Comment on the validity of the Games theory in farmers' locational game choice and crop combination.