DEPARTMENT OF GEOGRAPHY

FEDERAL UNIVERSITY OF TECHNOLOGY MINNA

COURSE CODE; GRY 222:- SECOND SEMESTER EXAMINATION

COURSE TITTLE; ELEMENTARY STATISTICS FOR GEOGRAPHERS

INSTRUCTION; Answer question 1 (one) and any other three (3), questions

TIME: 2hrs:30min

1. The following data are the summary of responses of 100 primary school teacher to a questionnaire on factors that affect their teaching effectiveness.

S/N	FACTORS	STRONGLY AGREE (4)	AGREE (3)	DISAGREE (2)	STRONGLY DISAGREE (1)
1.	Large Class Size	50	10	30	10
2.	Students lack of interest in learning.	10	20	60	10
3.	Neglect of teachers by the government.	40	30	20	10
4.	Lack of interest by teachers.	70	10	5	15
5.	Inadequate Incentives For Teachers	80	10	5	5
6.	Social attitudes to teaching profession.	70	5	20	5

Using the data above:

a) Compute the teachers mean responses for each of the factors.
b) On the basis of the statistics obtained from (a) rank the factors in order in which they affect teacher effectiveness beginning with the one that has greatest influence.

c) Which of the factors identified by the researchers should not be considered as affecting primary school teachers' effectiveness? Justify your decision with appropriate reasons.

2. (a) Explain what you understand by sampling in statistics.

(b) Give a brief explanation of the following terms used in sample (I) sampling elements (ii) sampling unit. (iii) Sampling frame.

3. a) Differentiate between Null hypothesis and Alternative hypothesis.

b) Discuss the relevance of hypothesis formulation in research development.

4. At Federal University of Technology, Minna, grades are given the following numerical values.

A=5, B=4, C=3, D=2, E=1, R(Reference)=0, F (fail)=0.

Using the information below compute Bola's **grade point average** (GPA) in geography for a semester.

COURSE	GRADE	UNITS
Gry 222	56 C	2
Gry224	60 B	2
Gry 225	68 B	1
Gry 214	84 A	1
Gry 213	35 R	2
Gry217	24 F	2

5. Four residential buildings each were randomly selected in Maitumbi in Minna to determine room density. The following results were obtained. 7, 6, 11 and 16.

Using chi- square Test, examine whether the room density varies in size from one residential building to another. D F=3, Alpha level at 7.24.

6. A Well tabulated data could be present in chart, diagrams or graphs. Discuss with examples, how you can use any of these charts in data presentation.