



Course Code: ECN 205

Credit Units: 2

Course Title: Applied Statistics

Instructions: Answer any THREE questions

Time Allowed: 2 hours

Question One

- 1a). List Four Assumptions of Pearson Correlations 4 marks
- 1b). Briefly describe two types of statistics 6 marks
- 1c). Briefly explain the following: 10 marks
 - i. Qualitative data
 - ii. Quantitative data
 - iii. Categorical data
 - iv. Dependent variable
 - v. Independent variable

Question Two

- 2a). Calculate the harmonic mean of the following numbers: 12.1, 13.2, 13.7, 15.2, 17.1 10 marks
- 2b). Consider the monthly revenue for an optical service as follows; 3450, 3550, 3650, 3480, 3355 10 marks

Calculate the following;

- i. Population variance
- ii. Sample variance
- iii. Populations standard deviation
- iv. Sample standard deviation

Question Three

- 3a). Write a simple regression model and define the variables in the regression 4 marks
- 3b). List and explain with examples the types of scale of measurement 16 marks

Question Four

- 4) Find the value of the correlation coefficient from the table below: 20 marks

Age (X)	Sugar level (Y)
43	99
20	66
59	81
57	87
25	79

Question Five

- 5a) Highlight the advantages and disadvantages of sampling in statistics 10 Marks
- 5b) With the aid of examples, differentiate between probability and non-probability sampling 10 Marks