



PAN AFRICA CHRISTIAN UNIVERSITY

BACHELORS OF ARTS IN COMMUNICATION

END OF SEMESTER EXAMINATION

DEPARTMENT: COMMUNICATION

COURSE CODE: COM 301 /CDC 313/ COU4113

**COURSE TITLE: COMMUNICATION STATISTICS/ SOCIAL
STATISTICS/ COUNSELLING STATISTICS**

EXAM DATE:

TIME:

INSTRUCTIONS

- Read all questions carefully before attempting.
- Answer any **Five** Questions.
- Write your **student number** on the answer booklet provided.

SECTION A – COMPULSORY (10 MARKS)

QUESTION ONE

Below is a grouped frequency distribution table below obtained by a social worker on the number of visits for some community work.

Number of visits	F
35 - 39	7
30 - 34	8
25 - 29	6
20 - 24	5
15 - 19	4
10 - 14	2
5 - 9	3

Required

Determine the following

- (i) Mean visits (3 Marks)
- (ii) Median visits (5 Marks)
- (iii) Mode visits (2 Marks)

SECTION B: CHOOSE ANY THREE QUESTIONS

QUESTION TWO

An insurance company has two claim assessors who must each give approval to customers who wish to log a claim for compensation. The manager currently has eight such customers and has asked each assessor to independently to rank the customers claim in order of merit. The ranking are shown below

Customer	A	B	C	D	E	F	G	H
Assessor 1 ranking	4	6	2	1	5	8	6	3
Assessor 2 ranking	4	8	1	3	7	4	6	2

Required

- a) Calculate the rank coefficient of correlation of the two sets of ranking (8 marks)
- b) Comment on each of the results. (2 Marks)

QUESTION THREE

Differentiate between the following with an example in each case

- i) Population and sample (3 Marks)
- ii) Descriptive and Inferential Statistics (4 Marks)
- iii) Primary and Secondary data (3 Marks)

QUESTION FOUR

In a sample with $\bar{X} = 90$ and $s = 12$, find the Z – score for each of the following X values

- i. $X = 95$ (2 Marks)
- ii. $X = 110$ (2 Marks)
- iii. $X = 60$ (2 Marks)
- iv. $X = 135$ (2 Marks)
- v. $X = 40$ (2 Marks)

QUESTION FIVE

- a) Outline FIVE functions of statistics in contemporary world. (5 Marks)
- b) Discuss the main limitations of statistics (5 Marks)

QUESTION SIX

. The table below relates to the number of units packaged by nine casual employees of Bidii limited company and the packaging time taken by each employee:

Number of units packaged	14	8	9	12	6	11	10	5	10
Time in seconds.	230	110	130	190	109	181	154	79	144

Required

- a) The regression equation between the packaging times against number of units packaged. (8 Marks)

b) The packaging time interval for 7 units

(2 Marks)