NATIONAL OPEN UNIVERSITY OF NIGERIA

FACULTY OF AGRICULTURAL SCIENCES

CROP AND SOIL SCIENCES DEPARTMENT

EXAMINATION: 2021_1 POP EXAMINATION 7836

COURSE CODE: AGR 302

COURSE TITLE: AGRICULTURAL STATISTICS AND DATA PROCESSING

INSTRUCTIONS: ANSWER FOUR (3) QUESTIONS. QUESTION 1 IS COMPULSORY AND ANY OTHER TWO (2) QUESTIONS

QUESTIONS

1 Differentiate between:

i. Discrete and Continuous variable ii. Population and sample iii. Experiment and outcomes iv. Median and mode (10 marks)

b. Classify the following variables (Continuous and Discrete):

i) Weight of broiler chicken at 8 weeks ii) Sex of day hold pullet chicks

iii) Pollens in cattle (whether a cow or bull has or does not have horn)

iv) Number of egg produced by chickens v) Body length of goat

vi) Number of parities of a cow or goat or sheep vii) Litter size viii) Litter weight

ix) Staff strength on the poultry farm x) Milk yield (10 marks)

c. Complete the table of probability below (when two coins are tossed):

Number of tails	Sequential event	Probability
0		
1		
2		
Total		

(10 marks)

2 Explain Binomial Distribution (10 marks)

b. The following is the distribution of heights of plants of a particular crop.

Height (inches)	35-39	40-44	45-49	50-54	55-59	60-64
No. of plants	12	20	15	29	9	3

Draw the (i) Histogram (ii) Frequency curve (10 marks)

3 Define standard deviation, range and mean deviation of a set of frequency and state one (1) merit of each. (10 marks)

b. Find the 'mean deviation and mode' for the following grouped distribution.

Class	3-7	7-11	11-15	15-19	19-23	23-27
Frequency	5	7	13	31	18	4

(10 marks)

4 State five (5) properties of a Normal Curve (5 marks)

b. Solve the following:

i. 15!

ii. 10!

iii. 7! (15 marks)