National Open University of **Nigeria**
14/16 Ahmadu Bello Way, Victoria Island, Lagos.

School of Science and Technology

Course code: DAM363

Course title: Economic statistics

Credit unit: 2 credit units

Time Allowed: 2 ½ Hours

Instruction: Answer question one (1) and any three (3) questions.   Each question carries 17.5 marks.

1. The weight of a group of students in training class is given below:

       65   40   60   46   51   55   59   63   68   53   35

       47   53   42   63   67   62   64   70   37   56   57

       43   56   48   51   58   63   65   39   49   64   62

       53   59   63   50   48   72   67   56   61   64   61

       56   52   49   62   41   58   53   69   36   59   63

(a) Prepare a group frequency table with class interval 35-39,40-44, 45-49; etc
(b) Calculate:
   i.   The Mean
   ii. The Mean Deviation
   Iii. The Standard Deviation   (17.5 marks)

2a. Define statistics   (3.5 marks)
2b. Explain the following
   I.   Cluster Sampling
   II.   Stratified Sampling
   III.   Judgment Sampling
   IV.   Quota Sampling   (14 marks)

3a. List and explain the two types of variables   (5 marks)
3b. Define the following terms:
      i.   Data
      ii.   Information
      iii. Population
      iv.   Sample
      v.   Variable   (12 ½ marks)

4a. List and explain the nature of statistic errors   (6 marks)
4b. Below is a table that shows distribution of cars and respective speed, use the table to calculate
   i.   Mean
   ii.   Mean deviation

Speed	10-20	20-30	30-40	40-50	50-60
Frequency	32	38	63	29	38

(11 ½ marks)

5a. List the advantages and disadvantages of median   (15 marks)

5b. Define mode with an example   (2 ½ marks)

6a. Define dispersion   (4 marks)

6b. List 5 disadvantages of mode   (7 ½ marks)

6c. List 4 disadvantages of range   (6 marks)