NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
MARCH/APRIL 2016 EXAMINATION

SCHOOL OF HEALTH SCIENCES

Course Code: HEM 707
Course Title: **Biostatistics**

Time: **1½ hours**
Instruction: **Answer all questions.**

QUESTION 1
a. GCE examination was taken by 56 students in YX Secondary School in 2014. Subjects taken and their scores are as given below. In a tabular format well labelled, present the frequency distribution of this examination. Show all workings, steps and methods. Each carry marks
                                                        (9½ marks)
i. English: 61%, 55%, 50%, 64%, 70%, 45%, 30%, 51%, 52%, 30%, 40%, 60%, 72%, 59%, 66%.
ii. Maths: 10%**,** 50%, 49%, 61%, 58%, 40%, 39%, 55%, **20%**, 48%, 70%, 64%, 55%, 57%.
iii. Physics: 70%, 64%, 55%, 57%, 20%, 48%, 57%, 28%, 10%.
iv. Biology: 75%, 60%, 67%, 67%, 50%, 48%, 44%.
v. Chemistry: 60%, 55%, 40%, 62%, 58%, 45%, 39%, 50%, 30%, 49%, 62%,

b. Using a well labelled table, calculate the mean, median, mode and range for each of the subject. Show all workings, steps and methods. Each carry marks   **(20½ marks**)

QUESTION 2
a. A researcher has one hundred and sixty pregnant women as a study population. She wants to select 40 pregnant women out of the total number for her study.   **(10 marks)**
   i.   What is the sample size?   **(1 mark)**
   ii. Name the easiest technique to be used.   **(1 mark)**
   iii. Describe the stepwise procedure to be adopted to get a representative sample. **(8 marks)**

b. Ten observations were made and the values were 80, 56, 70, 40, 45, 65, 75 and 80. If the standard deviation is 2.11, find coefficient of variation of observations. Show all workings.
(10 marks)

QUESTION 3
Discuss in details the constituents of a good report.   **(20 marks)**