NATIONAL OPEN UNIVERSITY OF NIGERIA
UNIVERSITY VILLAGE, NNAMDI AZIKIWE EXPRESS WAY, JABI-ABUJA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PUBLIC HEALTH SCIENCE
2022_2 EXAMINATION

COURSE TITLE: PRINCIPLES OF EPIDEMIOLOGY 1
COURSE CODE: PHS803
CREDIT UNIT: 2 Units
TOTAL SCORE: 70 Marks
TIME ALLOWED: $1^1/_2$ Hours
INSTRUCTION: Answer All Question

Q1 a. Using HIV/AIDS as an example, explain the Causal Pie model of disease transmission **(10 marks)**
b. What are the Fundamental Assumptions of Epidemiology? **(4marks)**
c. Discuss the Importance of Epidemiology in Disease control **(6Marks)**

Q2. a What is Disease surveillance **2 Marks**

    b. In March 2020 the first case of Covid-19 Pandemic was reported in Nigeria, as a Public Health Officer, describe the basic surveillance steps that need to be undertaken to curtail the outbreak. (**16 Marks)**

    c. What are the disadvantages of case control studies **(7marks)**

Q3 a. Define Risk Ratio and explain the following **(2Marks)**

    i.   a risk ration greater than 1**(2Marks)**
    ii.   risk ratio equal to 1**(2Marks)**
    iii.   risk ratio less than 1**(2Marks)**

  b. In an outbreak of Corona virus infection in two Dormitories at Government College Saminaka, out of 140 Students in Panwasa House 30 Developed Covid-17 while out of 220 students of Makama House, only 8 developed Covid-19.

        i. draw out a two by two table for the general notation of the data**(2Marks)**
        ii. calculate the risk of attack rate in Panwasa House**(2Marks)**
        iii. calculate the risk of attack rate in Makama House**(2Marks)**
        iv. Calculate the Risk Ratio in Panwasa House **(2marks)**
        v. calculate the risk ratio in Makama House **(2Marks)**
        vi. explain the implication of your finding **(2Marks)**

  c. Highlight the advantages of Experimental research **(5Marks)**