



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**UNIVERSITY VILLAGE, PLOT 91, CADASTRAL ZONE**  
**NNAMDI AZIKIWE EXPRESS WAY, JABI, ABUJA**  
**FACULTY OF HEALTH SCIENCES**  
**DEPARTMENT OF PUBLIC HEALTH SCIENCE**  
**2025\_2 EXAMINATIONS.**

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**COURSE TITLE: PRINCIPLES OF EPIDEMIOLOGY (PHS803)**

**COURSE UNITS: 2 Units**

**TIME ALLOWED: 2 Hours**

**TOTAL MARKS: 70 %**

**INSTRUCTION: Answer ALL Questions**

Q1. A. Define Maternal Mortality Rate in accordance to World Health Organisation definition and highlight its major causes. **(10Marks)**

B. Discuss the following types of Rate in Demography

- i. Crude Rate **(5 Marks)**
- ii. Specific Rate **(5Marks)**
- iii. Standardised Rate **(5Marks)**

Q2 A. Using Car head on collusion accident as an example, explain the Causal Pie model of disease transmission **(10 marks)**

Q2B. Surveillance is an important component of Epidemiology, Discuss this statement in relation to importance of Surveillance in Disease Control. **(6marks)**

Q2C. Screening is an important Process in Epidemiology, Define what Screening is and highlight its major uses. **(4 Marks)**

**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 Suleja, out of 140 Students in Godogo House 30 Developed Covid-17 while out of 220 students of Karibu 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 Godogo House**(2Marks)**
  - iii. calculate the risk of attack rate in Karibu House**(2Marks)**
  - iv. Calculate the Risk Ratio in Godogo House **(2marks)**
  - v. calculate the risk ratio in Karibu House **(2Marks)**
  - vi. explain the implication of your finding **(2Marks)**

C. Highlight the advantages of Experimental research **(5marks)**