



**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**  
**2020\_1 EXAMINATIONS**

**COURSE TITLE: Research Methods in Public Health (PHS421)**

**UNITS: 3 Units**

**TIME ALLOWED: 2 Hours**

**Total Score: 70 %**

**INSTRUCTION: Answer all Questions**

**QUESTION 1 (20 marks)**

Calculate the sample size for a study on Corona virus epidemics in China, given that the prevalence rate of Corona virus is 5% and the allowable error is 10%. **(20 marks)**

**QUESTION 2 (15 marks)**

The research process consists of a series of related activities that must be followed to achieve a targeted purpose. Explain the following listed terms in the context of research process:

- 2a). Research problem **(5 marks)**
- 2b). Hypothesis **(5 marks)**
- 2c). Sampling design **(5 marks)**

**QUESTION 3 (20 marks)**

Within the context of Public Health research:

- 3a). State five (5) significance of public health research. **(10 marks)**
- 3b). Give five (5) major general objectives of the research. **(5 marks)**
- 3c). List five (5) techniques involved in defining a research problem. **(5 marks)**

**QUESTION 4 (15 marks)**

Clearly differentiate the following types of sampling procedure

- 4a). Simple random & Systematic sampling **(5 marks)**
- 4b). Cluster sampling and Stratified sampling **(5 marks)**
- 4c). Multiphase and Multistage sampling **(5 marks)**