



NATIONAL OPEN UNIVERSITY OF NIGERIA
UNIVERSITY VILLAGE, NNAMDI AZIKIWE EXPRESS WAY, JABI, ABUJA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PUBLIC HEALTH
2025_2 EXAMINATIONS

PROGRAMME: MSc. PUBLIC HEALTH

COURSE CODE: PHS813

COURSE TITLE – BIOSTATISTICS AND APPLICATIONS

CREDIT UNITS: 3

TIME ALLOWED: 3 HOURS

ATTEMPT ALL QUESTIONS

SCORE = 70 MARKS

1. Hypotheses testing may not be free from errors due to a number of reasons students must be conversant with.
 - a. Explain the types or error that can occur while testing Hypotheses (10 marks)
 - b. Mention any 4 sampling distribution methods that you know (10 marks)

2. The steps in prevalence value for hypothesis testing cannot be underestimated for a beginner student of statistics
 - a. Explain the five steps in using the P-Value approach for hypothesis testing (10 marks)
 - b. Mention the significance level (α) and its role in the process (5 marks)

3. A postgraduate course registration consists of 10 different elective courses out of which candidates are to register 7 courses. In how many ways can each candidate make a selection if
 - a. There is no compulsory course. (6 marks)
 - b. The first 5 courses are compulsory. (5 marks)
 - c. At least 4 out of the first 5 courses are compulsory (6 marks)

4. Briefly explain the following terms:
 - i. Bernoulli Distribution
 - ii. Binomial Distribution
 - iii. Poisson Distribution (6 marks each)

(Total = 70 Marks)