



**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  
2023\_1 POP EXAMINATION**

**COURSE TITLE: PUBLIC HEALTH MICROBIOLOGY**

**COURSE CODE: PHS818**

**COURSE UNITS: 2 Units**

**TIME ALLOWED: 1½ Hours**

**TOTAL MARKS: 70%**

**INSTRUCTION: Answer all the Questions**

**QUESTION 1      25marks**

Q1a. Graphically describe the relationship between Archaea and Eukaryotes linking them to Eubacteria Kingdom. (20marks)

1b. Pili are synonymous to Fimbriae. Based on this statement of fact, briefly explain the word Fimbriae. (5marks)

**QUESTION 2      25marks**

Q2a. Brucella genus is described as a Zoonosis, gram negative and non-motile coccobacilli. Discuss the genus under:

(I) Epidemiology (10 Marks)

(ii) Pathogenesis (5marks)

(iii) Highlights five ways of contracting Brucella infection (5marks)

b. Write short note on the Prevention and treatment of Plague (5 Marks)

**QUESTION 3      20marks**

Q3a. Write short notes on

(i) Salmonellosis. (5Marks)

(ii) Enteropathogenic E.coli (EPEC) (5marks)

(iii) Helicobacter pylori (H.pylori) (5marks)

b. Briefly describe Yersinia pseudotuberculosis (5 Marks)