EMMAWELL MICROBIOLOGY, 2024.OCT.

ABIA STATE UNIVERSITY UTURU

FACULTY OF MEDICAL LABORATORY SCIENCES

DEPARTMENT OF MEDICAL MICROBIOLOGY

2023/2024 SESSION FIRST SEMESTER EXAMINATION   8th OOCTOBER 2024

COURSE: MMB 541   MEDICAL MYCOLOGY   TIME: 2HRS

INSTRUCTIONS: ANSWER ALL QUESTIONS

1. Write briefly on the virulent factors of fungi

2. Write on the body's defense mechanisms against fungal infections.

3. The laboratory diagnosis of fungal infections is based on the demonstration and subsequent culture of fungal elements from infected tissue. Discuss using a named subcutaneous mycosis

4. Write briefly on the following giving two examples of each

   a. Dimorphic fungi
   b. Mycotoxins
   c. Dermatiaceous fungi
   d. Opportunistic mycoses
   e. Reagents used in the laboratory diagnosis of mycoses

ABIA STATE UNIVERSITY, UTURU
DEPARTMENT OF MEDICAL LABORATORY SCIENCE
FINAL YEAR FRST SEMESTER EXAMINATION (2023/2024)
COURSE TITLE: RESEARCH METHODOLOGY
COURSE CODE: MLS 511
DATE: 7/10/2024

ANSWER ALL QUESTIONS

TIME ALLOWED: 2 HOURS

1. a) Define the term Research Methodology.
   b) Explain the essential processes in the conduct of a good research work.

20marks

2. In an analytical study in Isuochi, on the valuation of serum electrolytes among Grave's disease sufferers, (Emenike *et al* 2024) posited the Population Proportion of positive characteristics of the disorder at 65%. Consider that the population studies has a two-sided standard normal distribution and confidence level was set at 5%. Calculate the sample size for a similar study to be carried out in your locality using the simple formular.

$$n = \frac{Z^2 Pq}{d^2} \quad \text{where}$$

n = sample size
Z = degree of confidence of a two sided normal curve
P = population proportion
Q = expected sample proportion (1-P)

10marks

3. Briefly discuss the under listed terms
   a) Cluster sampling techniques
   b) Convenience sampling techniques
   c) Case control study design
   d) Cross-sectional study design

20marks

4. Write short note on the under listed statistical tools
   a) Chi square
   b) Test of association
   c) ANOVA
   d) Student T test

20marks