



**UNIVERSITY VILLAGE, PLOT 91 CADASTRAL ZONE, NNAMDI AZIKIWE
EXPRESS WAY, JABI - ABUJA.
FACULTY OF SCIENCE
Department of Biological Science
2025_2 EXAMINATIONS.**

BIO 303: General Cytology

TIME: 2 Hours

CREDIT UNITS: 2

INSTRUCTION: Attempt THREE (3) questions in all. Question 1 is compulsory

1. Write explanatory notes on the following
 - a. The Secondary structure of Protein (6 marks)
 - b. Nature and function of Cholesterol (8 marks)
 - c. The Synthetic stage of a cell cycle (16 marks)

2. Discuss the role of cell specialization in typical organisms (20 marks)

3. Discuss the component and functions of the following cell lipids
 - a. Fatty Acids (10 marks)
 - b. Phospholipids (10 marks)

4. Write short notes on the principle, operation and application of the following:
 - a. Fluorescence in situ hybridization (FISH) (10 marks)
 - b. Array-Comparative Genomic Hybridization (10 marks)

- 5a. List seven (7) disadvantages of the Scanning Electron Microscope (7 marks)
- 5b. Discuss the principle, operation and application of the Scanning Electron Microscope (13 marks)