



**ELIZADE UNIVERSITY,  
ILARA-MOKIN, NIGERIA**

**FACULTY: BASIC & APPLIED SCIENCES**

**DEPARTMENT: BIOLOGICAL SCIENCES**

**SECOND SEMESTER EXAMINATION**

**2017/2018 ACADEMIC SESSION**

**COURSE CODE: BIO 208**

**COURSE TITLE: CELL BIOLOGY AND HISTOLOGY**

**DURATION: 2 HOURS**

**HOD's SIGNATURE**

**NAME:.....**

**MAT. No:.....**

**INSTRUCTIONS  
ATTEMPT ANY THREE QUESTIONS**

1a. Compare and contrast plant and animal cells.

b. What are the contribution(s) of the following Scientists to the study of cell.

- i. Robert Hooke
- ii. Henri Milne-Edwards
- iii. Anton Van Leeuwenhoek
- iv. Franz Bauer
- v. Keith Porter
- vi. Rudolf Virchow
- vii. Theodore schwann
- viii. Matthias Schleiden

2a. List two functions of each of the followings:

- i. Xylem
- ii. Parenchyma
- iii. Collenchyma
- iv. Sclerenchyma
- v. Phloem
- vi. Cork
- vii. Epidermis

b. Briefly discuss “ stem cells”.

3a. List and explain the steps involved in cell histological processes.

b. What are the functions of the following organelles in the cell:

- i. Mitochondrion
- ii. Smooth Endoplasmic Reticulum
- iii. Ribosomes
- iv. Protoplast

4a. Draw and label a Plant cell

b. List and discuss five types of proteins that you have studied with example(s) where necessary.

5a. Draw and label an Animal cell

b. Write briefly on the followings:

- i. Polysaccharide
- ii. Eukaryotic and Prokaryotic cells
- iii. Types of RNA
- iv. Lysosome
- v. Apical Meristem