

BOWEN UNIVERSITY IWO
COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE
PURE AND APPLIED BIOLOGY PROGRAMME
2022/2023 FIRST SEMESTER EXAMINATIONS
BLY 205: INTRODUCTORY PHYSIOLOGY

Instruction: Answer question ONE and any two others

Time: 2hrs 20min

1. (a) (i) List the main macromolecules in cells *(2 marks)*
(ii) Mention 2 (two) biological molecules that are present in the following cellular structures *(8 marks)*

(i) Chromatin	(iii) Ribosome
(ii) Plasma membrane	(iv) Mitochondria
- (b) Highlight five excretory products in plants and their uses to humans. *(10 Marks)*
- (c) Describe briefly the process of reproduction in animals *(10 marks)*

2. (a) Give 3 (three) functions of lipids in a cell *(6 marks)*
- (b) (i) what is a polysaccharide? *(2 marks)*
(ii) write short notes on 2 (two) examples of polysaccharides *(6 marks)*
- (c) Describe the fundamental structure of the amino acid. *(6 marks)*

3. Write extensively on the main organs of transportation in plants, describing their structures and general characteristics. *(20 Marks)*

4. Write short note on the following organs in animals
 - i. Stomach *(5 marks)*
 - ii. Lungs *(5 marks)*
 - iii. Heart *(5 marks)*
 - iv. Small intestine *(5 marks)*

5. (a) List and explain the different types of gemination in plants *(10 marks)*
- (b) (i) What are cofactors? *(2 marks)*
(ii) List and explain any four (4) types of Enzymes *(8 marks)*