



NATIONAL OPEN UNIVERSITY OF NIGERIA
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Sciences
Department of Pure and Applied Sciences
SEPTEMBER, 2020 EXAMINATION

COURSE CODE: BIO306

COURSE TITLE: GENERAL PHYSIOLOGY II

CREDIT: 2 Units

TIME ALLOWED: 2 Hours

INTRUCTION: Answer question ONE (1) and any other THREE (3) questions

1.
 - a. Define Osmotic pressure 2 Marks
 - b. Osmoregulation is important in the life of an animal. Discuss! 5 Marks
 - c. Briefly enumerate the major components of the circulatory system 4 Marks
 - d. Highlight the factors affecting evaporative water loss in terrestrial animals 5 Marks
 - e. List four (4) examples each of simple reflex and conditional reflex 4 Marks
 - f. Write a note on excretory products of plants 5 Marks

2.
 - a. What is the name and function of the hormone secreted by the placenta of human? 2 Marks
 - b. Highlight the significance of diffusion 7 Marks
 - c. State the functions of trophic hormones 6 Marks

3.
 - a. Give two examples of blood cells 2 Marks
 - b. State the factors that affect the rate of diffusion 6 Marks
 - c. Describe osmotic responses of freshwater invertebrates 7 Marks

4.
 - a. Define imbibition 1 Mark
 - b. Highlight any four (4) factors affecting Evaporative Water Loss in Animals 4 Marks
 - c. Give an account of transport of materials in plants 10 Marks

5.
 - a. What are semi-permeable membranes? 2 Marks
 - b. List any four (4) factors that affect the rate of imbibition 4 Marks
 - c. Highlight the functions of cerebral cortex 3 Marks
 - d. How did freshwater fish overcome reabsorption challenges? 6 Marks