

**National Open University of Nigeria**

**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**

**Faculty of Sciences**

**Department of Pure and Applied Sciences**

**NOVEMBER, 2018 EXAMINATIONS**

**COURSE CODE: BIO306**

**COURSE TITLE: GENERAL PHYSIOLOGY II**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**INSTRUCTION:** **Answer Question ONE (1) and any other THREE (3) Questions**

1a. Outline the functions of the mammalian kidney (5 marks)

b. List the three common eye defects (3 marks)

c. Describe the mechanism of hearing (4 marks)

d. Distinguish between osmoconformers and osmoregulators (3 marks)

e. Enumerate the significance of the following:

(i) diffusion (5 marks)

(ii) osmosis (5 marks)

2. Reflex response is applied in various ways in our daily activities. Discuss using

relevant examples (15 marks)

3a. Define the term osmoregulation (2 marks)

b. Enumerate the factors affecting imbibition (5 marks)

c. Describe the relationship between osmotic equilibrium and ionic composition in

marine animals. (8 marks)

4a. Give an account of the nature and functions of hormones. (7 marks)

b. Briefly describe any four urinary disorders. (8 marks)

5a. Define the term guttation. (3 marks)

b. Give a detailed account of the perception of body balance (6 marks)

c. Write short notes on the following:

(i) Chorion (3 marks)

(ii) Allantois (3 marks)