

**National Open University Of Nigeria**

**Plot 91, Cadastral Zone, NnamdiAzikiwe Expressway, Jabi - Abuja**

**Faculty of Sciences**

**JANUARY / FEBRUARY, 2018 EXAMINATIONS**

**COURSE CODE: BIO306**

**COURSE TITLE: GENERAL PHYSIOLOGY II**

**CREDIT UNITS: 2**

**TIME ALLOWED: 2 Hours**

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

1a. Give an account of the nature and functions of hormones. (7 marks)

b. Differentiate between transpiration and evaporation. (7 marks)

c. Outline the significance of the following:

(i) diffusion (5 marks)

(ii) osmosis (6 marks)

2a. Enumerate the need for osmoregulation in animals. (5 marks)

b. Give a detailed description of how the following are transported in plants.

(i) water (5 marks)

(ii) food materials (5 marks**)**

3a. Outline the common defects of the eye. (3 marks)

b. Describe the mechanism of hearing (4 marks)

c. Describe the relationship between osmotic equilibrium and ionic composition of marine

animals. (8 marks).

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

examples(15 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)