



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**  
**JULY 2017 EXAMINATION**

**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**

1. (a) List the factors affecting stomatal opening and closing. (4 marks)  
(b) Describe the sequences of plasmolysis. (5 marks)  
(c) Write short notes on the following nitrogenous waste products:  
(i) urea (4 marks)  
(ii) uric acid (4 marks)  
(d) In a tabular form, summarize the various processes through which terrestrial animals overcome the problems of water loss and water gains. (8 marks)
2. Give a detailed description of **ten (10)** functions of blood. (15 marks)
3. Physical factors influence the rate of water absorption in plants - Discuss. (15 marks)
4. (a) In a tabular form, distinguish between hormonal and Nervous Control Properties. (9 marks)  
(b) Write **short notes** on the following:  
i. Chorion (3 marks)  
ii. Allantois (3 marks)
5. (a) i. Outline the functions of the spinal cord. (3 marks)  
ii. Enumerate the functions of the mammalian kidney. (5 marks)  
(b) Briefly describe any four urinary disorders you know. (8 marks)