# NATIONAL OPEN UNIVERSITY OF NIGERIA 

# 91Cadastral Zone, NnamdiAzikwe Expressway, Jabi, Abuja <br> FACULTY OF EDUCATION <br> SEMESTER EXAMINATION 2017_2 

## COURSE CODESED 421

CODE TITLE: CYCLES IN NATURE - BIOLOGICAL CYCLES
CREDIT UNIT: 2
Time: $\mathbf{2}$ hours
INSTRUCTION:ANSWER QUESTION ONE AND THREE OTHER QUESTIONS. QUESTION ONE IS COMPULSORY

## Question 1

a. Explain the four major transformations that atmospheric Nitrogen can undergo. (12 Marks)
b. State at least two (2) human activities that have significant impact on the Nitrogen cycle. (2 Marks)
c. List and discuss at least five (5) human activities that alter the Water cycle.(5 Marks)
d. Briefly discuss the essential features of the arid climate.(6 Marks)

## 25marks

## Question 2

a. Briefly explain the Carbon cycle. (10 Marks)
b. Discuss at least three (3) human activities that lead to increase of Carbon dioxide in the atmosphere.(3 Marks)
c. Give two (2) reasons why it is important for one to know his/her biorhythm cycle. (2 Marks)
15marks

## Question 3

a. What is Atmospheric Chemistry? (3 Marks)
b. Explain the three (3) central elements in Atmospheric Chemistry.(9 Marks)
c. List the main features of Plate tectonics. (3 Marks)

## 15marks

## Question 4

a. Explain the meaning of Karst (2 Marks)
b. Briefly discuss the Karst cycle of erosion (9 Marks)
c. List the conditions necessary for full development of Karst topography (4 Marks)

## 15marks

## Question 5

a. Briefly explain what you understand by Ocean Waves (2 Marks)
c. Describe the materials used for the manufacture of Canoe . (10 Marks)

15marks

