

## NATIONAL OPEN UNIVERSITY OF NIGERIA UNIVERSITY VILLAGE, PLOT 91 CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI - ABUJA. FACULTY OF SCIENCE September, 2020 EXAMINATION

**BIO** BIO 304 **COURSE TITLE**: GENERAL ECOLOGY **TIME: 2 HOURS CREDIT UNITS: 2 INSTRUCTION: Answer FOUR questions in all .Question 1 is compulsory** 

1a	What is the significance of primary productivity?	(5 marks)	
1b	Identify the functional components of a named ecosystem, and describe how they interact to form environmental system. (15 marks)		t
1c	What are the two forms of energy readily available for living organisms (5 marks)		
2a	Outline the fundamental steps in the operation of the	ecosystem (5 marks)	
2b	Write short notes on each of the following		
i	Primary Succession	(4 marks)	
ii	Secondary Succession	(3 marks)	
iii	Climax vegetation	(3 marks)	
3a	What is primary productivity ?	(4 marks)	
3b	List and explain the different life processes taking place within the eco-system		
		(11 marks)	

4. Briefly, explain each of the following components of the ecosystem

a. Producers (Autotrophic components), (5 marks)

b. Consumers, and (5 marks)

c. Decomposers or reducers and transformers (5 marks)

5a Describe the unidirectional energy flow in eco-system (12 marks)
5b Define the different types of population regulation factors, giving clear examples in each case. (3 marks)