



NATIONAL OPEN UNIVERSITY OF NIGERIA
National Open University Of Nigeria
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science
JULY 2017 EXAMINATION

COURSE TITLE: MICROBIAL ECOLOGY
COURSE CODE: BIO 320 (3 CREDIT UNITS)
TIME ALLOWED: 2 ½ HOURS

INSTRUCTION: ANSWER FIVE QUESTIONS: QUESTION 1 AND ANY FOUR QUESTIONS

1. (a. List the major factors affecting microbial growth in soil. Discuss any two of them. **15 marks**
(b). List any four factors of aquatic environment **2 marks**
(c). Mention any two groups of microorganisms in the aquatic environment. **2 marks**
(d). Give three limitations of the Rossi-Cholodny slide method of isolation of soil microorganisms **3 marks**
2. Discuss the practical application of aeromicrobiology **12 marks**
3. (a). Give six different forms of interaction and co-existence of microorganisms in common habitats **3 marks**
(b). Describe some morphological adaptations of micro-organisms in the water environment. **9 marks**
4. a. What are the advantages and disadvantages of soil plate method of isolation of soil microorganisms? **7 marks**
b. Define salt wedge and explain its influence on marine organisms? **3 marks**
5. Discuss factors that affect the concentration of microorganisms in the atmosphere. **12 marks**
6. Distinguish very clearly between biodegradation and biodeterioration. **12 marks**