

**BIO 320 - MICROBIAL ECOLOGY**

**TIME 2½ HOURS**

**CREDIT UNITS: 3**

**INSTRUCTION: Answer question ONE (1) and any other FOUR (4) questions**

1. Discuss the following
  - i. Succession of micro-organisms on cellophane film (10 marks)
  - ii. Colonization of sterile human hair (6 marks)
  - iii. Functions of soil Fungi (6 marks)
  
2. Describe the following types of microflora in aquatic environment
  - i. Microalgae (6 marks)
  - ii. Fungi (6 marks)
  
3. Discuss how the following components of aquatic environment provide special habitats to microbes
  - i. Lithogeneous (5 marks)
  - ii. Biogenous (7 marks)
  
4. Explain how the following factors affect microorganisms in aquatic habitat:
  - i. Hydrogen Ion Concentration (8 marks)
  - ii. Salinity (4 marks)
  
5. Expatiate on the following stages involved in the dispersion of air-borne particles and aerial microorganisms (12 marks):
  - i. Liberation and take –off into the air (4 marks)
  - ii. Dispersion in air current (4 marks)
  - iii. Deposition on surfaces (4 marks)
  
6. Write the major differences between biodeterioration and biodegradation (12 marks).