



Reg. No. : .....  
Name : .....

K21U 4557

V Semester B.Sc. Degree CBCSS (OBE) Regular Examination, November 2021  
(2019 Admn. Only)  
**CORE COURSE IN MICROBIOLOGY**  
**5B09 MCB : Environmental Microbiology**

Time : 3 Hours

Max. Marks : 40  
Answer all questions. Each question carries 1 mark.

1. The conversion of nitrate to nitrous oxide and nitrogen gas is termed as (6x1=6)  
2. \_\_\_\_\_ is a bacterium known as superbug that could clean up oil spills.  
3. The causative agent of tuberculosis is  
4. Microbes found at the bottom of oceans are called  
5. The biological degradation of pollutants into non-toxic substances is known as  
6. \_\_\_\_\_ is a symbiotic relationship in which one species benefits while the other species (the host) is harmed.

PART - A

Answer any six questions. Each question carries 2 marks.

7. What is symbiont ?  
8. What is meant by eutrophication ?  
9. Describe the term "Antagonism".  
10. Explain Algal-fungal symbiosis with example.  
11. Why droplet nuclei are more infectious than droplet ? Explain.  
12. Discuss "Biomagnification".  
13. Describe about marine ecosystem.  
14. Concept of microbial corrosion.

PART - B

(6x2=12)



PART – C

Answer **any four** questions. **Each** question carries **3** marks.

**(4x3=12)**

15. Explain various steps involved in phosphorus cycle.
16. Briefly explain two major xenobiotic compounds.
17. Describe the factors affecting aquatic life.
18. Give brief notes on factors affecting bioleaching.
19. Give an example of negative microbe-microbe interaction.
20. Elaborate the term PCB's and why are they harmful ?

PART – D

Answer **any two** questions. **Each** question carries **5** marks.

**(2x5=10)**

21. Explain major steps in Nitrogen cycle and elaborate its importance.
  22. Discuss microbe-microbe interaction. With suitable example.
  23. Describe different types of microbiological sampling of air.
  24. What is bioremediation ? How does it help in controlling water pollution ?
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