



0065138

K19U 2262

Reg. No. : .....

Name : .....

V Semester B.Sc. Degree (CBCSS- Reg./Sup./Imp.) Examination,  
November-2019  
(2014 Admn. Onwards)

Core Course in Microbiology (Elective)

5B 09 MCB: ENVIRONMENTAL MICROBIOLOGY

Time : 3 hours

Max. Marks : 40

**SECTION - A**

Answer all the four questions. (4x1=4)

1. Give an example for a synthetic non biodegradable polymer.
2. Give an example for an air borne viral infection.
3. Name a phosphate solubilising bacteria.
4. The microbial association in which one organism is benefited while the other remains unaffected is called \_\_\_\_\_.

**SECTION - B**

Answer very briefly on any seven questions out of ten. (7x2=14)

Comment on the following:

5. Trophic levels
6. Phosphate solubilization
7. Antagonism
8. Xenobiotics
9. Droplet nuclei
10. Bioremediation



11. Symbiosis
12. Heterocyst
13. Psychrophiles and psychrotrophs
14. Biofilm

### **SECTION - C**

Answer any four questions out of six briefly.

**(4x3=12)**

15. Nitrogen fixation
16. Air sampling methods.
17. Write briefly about the role of microbes in aquatic ecosystems.
18. Microbial degradation of poly chlorinated biphenyls and dioxins.
19. Discuss the negative interactions between microbial populations.
20. Sulphur cycle

### **SECTION - D**

Answer any two questions out of four.

**(2x5=10)**

21. Explain the steps in nitrogen cycle with emphasis on the microbes involved.
  22. Explain the process of microbial leaching and its importance.
  23. Discuss sources and factors influencing air microflora.
  24. Write about microbial degradation of hydrocarbons.
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