



UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 4th Semester Examination, 2021

CC9-MICROBIOLOGY

ENVIRONMENTAL MICROBIOLOGY

Full Marks: 40

ASSIGNMENT

The figures in the margin indicate full marks.

Answer any four of the following

10×4 = 40

1. Describe the Nitrogen cycle with the help of suitable diagram. State the microbes involved in this cycle. 7+3
2. Explain the working principle of activated sludge process. Explain sludge volume index. 7+3
3. Describe the degradation of n-alkane by terminal and sub-terminal pathway highlighting the role of plasmid and genomic DNA. 10
4. Compare and contrast with suitable examples between commensalism and amensalism. 10
5. Discuss the use of indicator organisms and how they are enumerated. Describe the physical and chemical methods used for drinking water purification. 4+6
6. Describe in detail the biodegradation mechanism of systemic herbicide 2-4-D. 10

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