



UNIVERSITY OF NORTH BENGAL
B.Sc. Honours Part-III Examination, 2021

MICROBIOLOGY

PAPER-IX

Full Marks: 80

ASSIGNMENT

The figures in the margin indicate full marks.

1. Answer any **four** of the following: 15×4 = 60
 - (a) Describe in detail nitrogen cycle and its microbiology with proper diagram. 15
 - (b) Describe the role of microbes in pesticides degradation. 15
 - (c) Give a detail account of construction and screening of cDNA libraries. 15
 - (d) Write short notes on: Biological Oxygen Demand, Trickle Filter and Eutrophication. 5×3 = 15
 - (e) Elaborate western blotting process and its limitations. 15
 - (f) Explain the properties of constructions of lambda vector. 15

2. Answer any **two** of the following: 10×2 = 20
 - (a) Give a detail account on bioplastics. 10
 - (b) Write short notes on: 5×2 = 10
 - (i) Mutualism
 - (ii) Commensalism
 - (c) Describe the process of DNA fingerprinting and its applications. 10

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