

## UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 4th Semester Examination, 2022

## CC9-MICROBIOLOGY (CC-9.1) (INSTRUCTION)

## ENVIRONMENTAL MICROBIOLOGY

Time Allotted: 4 Hours Full Marks: 20

## **INSTRUCTION TO EXAMINERS (Not for Students)**

- 1. Each student should be provided with
  - (i) Soil sample A from rhizosphere region. (1gm)
  - (ii) Three nutrient agar plates.
  - (iii) 7 serial dilution tubes containing sterile distilled water. Students need to spread plate sample from  $10^{-3}$ ,  $10^{-5}$  and  $10^{-7}$  dilutions.
  - (iv) Spreaders, lamp and other essential things required for carrying out experiment in aseptic condition (spread plate).Supply reagents for standard plate count.
- 2. Each student should be provided with
  - (i) Root nodules (Sample B)
  - (ii) Slides
  - (iii) Stains for gram staining (CV, Safranin, Iodine, Ethanol, etc)
  - (iv) Microscopes
  - (v) 70% alcohol, 0.5% Sodium hypochlorite and sterile distilled water for surface sterilization / Examiners can provide already surface sterilized nodules to students.

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