



'समानो मन्त्रः समितिः समानी'

UNIVERSITY OF NORTH BENGAL

B.Sc. Programme 6th Semester Examination, 2022

DSE1/2/3-P2-MICROBIOLOGY (DSE-3.1 & 4.1) (INSTRUCTION)

Time Allotted: 4 Hours

Full Marks: 20

INSTRUCTION TO THE EXAMINERS

**The question paper contains Paper-3.1 and Paper-4.1.
Candidates are required to answer any *one* from the *two* Papers
and they should mention it clearly on the Answer Book.**

PAPER-3.1

1. Supply the following: for replica plating.
 - (a) 1gm of soil sample (to be serially diluted in buffer pH7 upto 10^{-7}).
 - (b) Spread plate from 10^{-5} , 10^{-6} , 10^{-7} with 0.1 ml of diluted sample in NA plates.
 - (c) Provide 6 NA plates.
 - (d) Velvet cloth and funnel.
2. Provide 100mM CaCl_2 and *E. coli* strain; other necessary reagents and equipments.

PAPER-4.1

1. Supply the following:
 - (a) Sample A → Provide half of the students with *E. coli* and half with *B. subtilis*.
 - (b) Reagents for citrate utilization and Indole test (Kovac's reagent etc).
2. Provide the photographs of studied any one virus. (Sample B)

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