

2020

MICROBIOLOGY — HONOURS — PRACTICAL

Paper : CC-11P

(Food and Dairy Microbiology)

Full Marks : 30

*The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.*Answer *all* questions.

1. You are provided with two milk samples P and Q and a dye methylene blue. After methylene blue reduction assay, it was observed that, sample P has been decolorized within two hours and Q was not decolorized even after 8 hours. In this context, answer the followings :
- State the principle behind this test.
 - Write the procedure of your experiment in brief.
 - Interpret the result in tabular form commenting on the quality of the two milk samples provided.

3+2+5

2. You have isolated microorganisms from two banana samples collected from local market.

The following table represents your result :

Serial dilution from stock	No. of microbial colonies appeared on plates	
	Sample 1	Sample 2
10^{-5}	200	210
10^{-6}	40	58

Answer the followings :

- Give a flow diagram of the procedure.
 - Calculate average cfu/ml from the above table (assuming that 0.1 ml was taken for plating).
 - How do you obtain pure culture(s) of the above isolates?
3. Viva voce. 5
4. Laboratory Notebook. 5