

2013
MICROBIOLOGY — HONOURS — PRACTICAL

Seventh Paper

Full Marks – 100

The figures in the margin indicate full marks

(Under 1+1+1 System)

Unit - I

1. Write the principle of Isolation of industrially important enzyme. Determine the pH optima of amylase. Prepare buffers of different pH (at least four) for this experiment from the supplied material. Represent the protocol and results in tabular form only. 30

Or

Write the principle of pH optima of enzyme. Determine the pH optima of alkaline phosphatase. Prepare buffers of different pH (at least four) for this experiment from the supplied material. Represent the protocol and results in tabular form only. 30

2. Write the principle of enzyme inhibition.

Determine the effect of A and B on the supplied alkaline phosphatase. Interpret your result in terms of activation and inhibition of alkaline phosphatase. 20

Unit – II

3. Write the principle of protein estimation by Lowry method. Prepare a standard curve of the supplied sample. Find out the concentration of the unknown from the graph. Represent the protocol and results in tabular form only. 25

Or

Write the principle of hyperchromic shift of DNA. Determine the denaturation profile and melting temperature of the supplied DNA. 25

Or

Write the principle of phage titration. Determine the phage titre of the supplied sample. 25

4. Viva Voce. 15

5. Laboratory Note Book. 10