2019

Part – II

MICROBIOLOGY

(Honours)

Paper – V

(Practical)

Full Marks – 100

Time : 10 Hours

The figures in the right-hand margin indicate marks.
Candidates are required to give their answers in their own words as far as practicable.

Answer **all** questions.

1. Prepare a smear of the supplied bacterial culture sample and stained it properly for identification of capsule under light microscope. Draw the picture of your observation and comments on your result. 10

   [Work– 4; observation – 2; drawing – 2; comments – 2]

2. Enumerate the quantity of bacteria from the supplied water by pour plate method. Give the comments on your result. Write the procedure of the method. 20

   [Procedure – 3; Work – 4; Result – 8; Comments– 4]

3. Identify the bio-molecule through sequential test. Comments on your result. 10

   [Sequential test– 5; confirmatory test– 3; comment– 2]

P.T.O.

4. Identify the slides (A-D) of microbes focused under microscope. 4×2.5=10

   [Character – 1; correct identification – 1.5]

5. Determine the optimum pH of the supplied amylase and graphically represent your results. Give comments on your result. 10

   [Work – 4; result and graphical resentation – 4; comments – 4]

6. Estimate the quantity of protein (w/v) in the supplied sample by Lowry method. Write the principle of method. 10

   [Principle – 2; work – 3; calculation and result – 5 (on the basis of % of error)]

7. Calculate the standard error of mean from the supplied data (Data should be give separately to each student). 10

   [Tabulation – 3; calculation – 4; result– 3]

8. Laboratory note book. 10

9. Viva voce 10