2021

MICROBIOLOGY — HONOURS — PRACTICAL

Paper : DSE-B-3P

(Instrumentation and Biotechniques)

Full Marks : 30

The figures in the margin indicate full marks.

1. (a) Draw a ray diagram of Phase contrast microscopy.

   (b) Write down the procedure of TLC in a flowchart.

   (c) Calculate the R_f value of the given amino acids A and B.

      [Given   Sample front of A = 1·25 cm

                   Sample front of B = 3·1 cm

                   Solvent front   = 5 cm]   5+3+2

2. Plot absorbance vs. conc. of BSA solution and from the graph calculate the extinction coefficient.

   [Given :

Conc. of BSA	Absorbance of BSA
0·2 mg/ml	0·185
0·4 mg/ml	0·370
0·6 mg/ml	0·570
0·8 mg/ml	0·760

   Formula,

   $$\text{Slope } (m) = \frac{y_2 - y_1}{x_2 - x_1} .$$

   Pathlength $b = 1\,\text{cm}$]

                                                      6+3+1

3. Laboratory notebook and viva voce.   10