

**U.G. 2nd Semester Examination - 2021****MICROBIOLOGY****[HONOURS]****Course Code : MB-H-CC-P-04****(Instrumentation and Biotechniques)****[PRACTICAL]**

Full Marks : 20

Time : 2 Hours

*The figures in the right-hand margin indicate marks.*Answer any **two** of the following:  $10 \times 2 = 20$ 

1. State the principle and brief methodology for the separation of amino acid mixtures by thin layer chromatography. 4+6
  2. Describe the principle and brief procedure separation of protein mixtures by Polyacrylamide Gel Electrophoresis. 4+6
  3. State the principle and brief methodology determination of  $\lambda_{\max}$  and extinction coefficient for an unknown sample. 4+6
  4. State the principle and brief methodology for the separation of a His-tag recombinant protein from cell lysate by ion exchange chromatography. 4+6
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