UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 4th Semester Examination, 2022

CC10-TEA SCIENCE

Time Allotted: 2 Hours   Full Marks: 40

The figures in the margin indicate full marks.

1.   Answer any *five* from the following: 1×5 = 5

 (a) What is Raman effect?

 (b) What is sedimentation coefficient?

 (c) What is SEM?

 (d) What is TLC?

 (e) What is chromophore?

 (f) What do you mean by P^H?

 (g) What is HPLC?

 (h) What do you mean by chemical shift?

2.   Answer any *three* from the following: 5×3 = 15

 (a) Briefly explain the principle of NMR.

 (b) With diagram explain the procedure of horizontal gel electrophoresis.

 (c) Write a short note on paper chromatography.

 (d) Give a brief account on the phase contrast microscopy.

 (e) Explain Beer-Lambert Law.

3.   Answer any *two* from the following: 10×2 = 20

 (a) Explain the principle and operation of spectrophotometer.

 (b) Explain the role of chromatography in biological sciences.

 (c) Write a detailed account on TEM.

 (d) With diagram explain the procedure for the separation of protein.

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