

57546



V SEMESTER B.Sc. EXAMINATION – MARCH/APRIL 2022

SCHEME: SEMESTER- CBCS

BIOCHEMISTRY

SEC – BIOCHEMICAL TECHNIQUES

062

Time: 02 Hours

Max Marks: 40

Instructions to Candidates: Answer any FIVE questions from PART-A and any THREE questions from PART-B.

PART- A

1. 5x2=10
- a) What is the principle of pH meter?
 - b) Define R_f value. Name any one colouring agent used in paper chromatography.
 - c) Give the principle of partition chromatography.
 - d) Mention any two application of GLC.
 - e) Define absorption maxima and molar extinction co-efficient.
 - f) Give the principle of density gradient centrifugation.
 - g) Mention any two applications of agarose gel electrophoresis.

PART- B

- 5x10=30
- 2. a) Discuss the safety aspects of laboratory instruments. 5
 - b) Give Henderson-Hasselbach equation. Explain the preparation of acidic buffers. 5
 - 3. a) Give the principle of 2D-Chromotography. 3
 - b) Write a short note on HPLC. 3
 - c) Explain the procedure of Gel filtration chromatography. 4
 - 4. a) Write principle and procedure of SDS-PAGE. 5
 - b) Explain the technique of TLC. 5
 - 5. a) Discuss the construction and applications of ultracentrifuge. 5
 - b) Give the principle and applications of NMR. 5
 - 6. a) Write the principle and application of UV-Visible spectroscopy. 5
 - b) Write a note on:
 - i) Lowry's principle for protein determination. 5
 - ii) Storage of solutions.

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