

Branch - BIOCHEMISTRY

BIOCHEMICAL TECHNIQUES

Time: Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 2 = 20)

- 1 What is Reference electrode?
- 2 Mention the application of buffer.
- 3 Define wavelength and wave number.
- 4 Define absorption spectra.
- 5 Mention the advantage of TLC.
- 6 Write a note on zonal rotors.
- 7 Define the term 'Retention time'.
- 8 What are primary fluors?
- 9 Define radioactivity.
- 10 Define sedimentation rate.

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Write a note on buffer system of blood.

OR

- b How is P^H measured using P^H meter?

- 12 a Discuss the Difference between spectrophotometer and colorimeter.

OR

- b Write a note on monochromators of spectrophotometer.

- 13 a Give an account on paper chromatography.

OR

- b Write a note on Detectors of Gas liquid chromatography.

- 14 a Give an account on different types of centrifuge.

OR

- b Write a note on agarose gel electrophoresis.

- 15 a Give a note on quenching and its types.

OR

- b Explain the various units of radio activity.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks* (3 x 10 = 30)

- 16 Write a note on the following

1. Hydrogen electrode 2. Calomel electrode

- 17 Enumerate the principle and application of flame photometry.

- 18 Give a detailed account on Gel permeation chromatography and its application.

- 19 Explain the major components and application of analytical ultracentrifuge.

- 20 Give a detailed account on liquid scintillation counter.