

THE APOLLO UNIVERSITY
Saketa, Chittoor, AP
AHS - IV Semester End Examination, June-2024
Paper-II-MLTT 3502-ANALYTICAL TECHNIQUES AND
INSTRUMENTATION – II

Time: 3 hours

Max. Marks: 60

Section –A (10x2=20 marks)
Answer all Questions with short notes

1. Column Chromatography
2. Paper Chromatography
3. Histogram
4. Coefficient variant
5. Uses of Fluorometry
6. Principle of Turbidimetry
7. cAMP
8. Thyroid hormones
9. Plasma osmolality
10. Chloride shift

Section –B (5X8=40 marks)
Answer all Questions either A or B with essay type answers

11. A) Describe the steps involved in the preparation and running of a chromatographic column in column chromatography.

OR

B) Compare and contrast gas chromatography (GC) and liquid chromatography (LC) in terms of principles, techniques, and applications.

12. A) Define Measures of central tendencies with examples and add a note on Mean Deviation.

OR

b) Define population and sample. Write an essay on types of sampling techniques.

Cont....

13. A) What is Fluorometry? Write the principle and applications of Fluorometry.

OR

B) What is Turbidimetry? Write the principle, and uses of turbidimetry.

14. A) Classify hormones based on mechanism of Action and add a note on Mechanism of group I hormones

OR

B) Elaborate the Second messenger system.

15. A) What is normal blood pH? Describe blood buffers for maintenance of blood Ph.

OR

B) Explain the regulation of electrolyte balance in the human body. Add a note on clinical abnormalities associated with electrolyte imbalance.
