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Total No. of Printed Pages: 1

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B. Sc. MLS (Semester – 3rd)
ANALYTICAL BIOCHEMISTRY
Subject Code: BMLS1317
Paper ID: 130512

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a) R_f value
- b) Beer's law
- c) Distribution coefficient
- d) IR spectroscopy
- e) Boltzmann equation
- f) Gas Chromatography
- g) Applications of flame photometry
- h) Mobile phase
- i) Gel electrophoresis
- j) Optical Density

Section – B

(5 marks each)

- Q2. Construction and working of colorimeter
- Q3. Clinical applications of photometry
- Q4. Different types of electrophoresis
- Q5. Applications of column chromatography
- Q6. Working and applications of ion-exchange chromatography

Section – C

(10 marks each)

- Q7. Describe the principle for working of a spectrophotometer and colorimeter and give the differences and similarities between spectrophotometer and colorimeter.
- Q8. Write a detailed note on construction and working of flame photometer
- Q9. Differentiate between HPLC and HPTLC and give principles for its working