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Total No. of Pages : 02

Total No. of Questions : 09

**B.Sc.(MLS) (Sem.-3)**  
**ANALYTICAL BIOCHEMISTRY**  
**Subject Code : BMLS302-18**  
**M.Code : 76631**  
**Date of Examination : 14-12-22**

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**1. Write briefly :**

- a) Define gel electrophoresis.
- b) What is the role of monochromator in UV spectrophotometer?
- c) What are Chromophores?
- d) Write down the application of atomic absorption spectroscopy.
- e) Discuss types of bending in IR vibrations.
- f) Discuss the principle of flame photometry.
- g) Give the application of Gel electrophoresis.
- h) What is shielding and deshielding in NMR?
- i) Enlist gases used in HPTLC.
- j) Enlist some adsorbents used in column chromatography?

### SECTION-B

2. Discuss the various deviations of beer's lambert law.
3. Discuss Mc Lafferty rearrangement.
4. Explain the instrumentation of Flame photometry.
5. Explain the instrumentation of Gel electrophoresis.
6. Write a short note on ion exchangers.

### SECTION-C

7. Give the principle of UV spectroscopy. Explain the instrumentation associated with UV visible spectroscopy.
8. Write a detailed note on Gel chromatography with its principle, application and advantages.
9. Define Chemical Shift. Discuss the factors affecting Chemical Shift.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**