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Total No. of Pages : 02

Total No. of Questions : 22

B.Pharmacy (Sem.-7)

INSTRUMENTAL METHODS OF ANALYSIS -THEORY

Subject Code : BP-701T

M.Code : 78387

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains THREE questions carrying TEN marks each and student has to attempt any TWO questions.
3. SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.

SECTION-A

Write briefly :

- 1) What is an auxochrome?
- 2) What is a Bathochromic Shift?
- 3) What is triplet electronic state?
- 4) What are various wavelength ranges in IR spectroscopy?
- 5) What do you understand by Nephelometry?
- 6) What is R_f value?
- 7) Give names of detectors used in Gas Chromatography.
- 8) What is the principle of capillary electrophoresis?
- 9) What is derivatization?
- 10) Give two applications of Gel Chromatography.

SECTION-B

- 11) Explain principle, instrumentation and applications of High Performance Liquid Chromatography (HPLC).
- 12) Give principle and detailing of various components of double beam UV-visible spectrophotometer.
- 13) Write a detailed note on paper chromatography.

SECTION-C

- 14) Explain various electronic transitions taking place in UV spectroscopy.
- 15) Write a note on various factors affecting fluorescence.
- 16) Explain various sample handling techniques in IR spectroscopy.
- 17) Give principle and instrumentation of flame photometer.
- 18) Explain in brief the methodology involved in Thin Layer Chromatography.
- 19) Write a note on various columns used in gas chromatography.
- 20) Classify different ion-exchange resins and give applications of ion-exchange chromatography.
- 21) Write an exhaustive note on affinity chromatography.
- 22) Give principle and applications of atomic absorption spectroscopy.

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.