

VII-S-B.Pharm.-Pap-BP701T-(IMA)

2021

Time :As in Programme

Full Marks : 75

The figures in the right-hand margin indicate marks.

*Answer **all** questions.*

1. Answer all questions.
 - a) Define frequency and transmittance. [2]
 - b) What is lambda Max? [2]
 - c) What are difference applications of fluorimetry? [2]
 - d) What is wave number? [2]
 - e) What are the requirements of IR spectroscopy? [2]
 - f) What are the functions of flame in flame emission spectroscopy? [2]
 - g) What is the basic principle of atomic absorption spectroscopy? [2]
 - h) What is signal to noise ratio? [2]
 - i) What is gradient elution? [2]
 - j) What is paper adsorption chromatography? [2]

(Turn Over)

2. Answer any two out of three.

- i. Explain different types of electrophoresis and mention their applications. [10]
- ii. Explain the principle column used in gas chromatography and applications of GC. [10]
- iii. Explain principle, instrumentation and application of UV-visible spectroscopy. [10]

3. Answer any seven out of nine.

- a. What are different factors affecting fluorescence intensity. [5]
- b. Give the principle of IR spectroscopy. [5]
- c. Give the classification of various vibration modes in polyatomic molecule. [5]
- d. Mention various limitations of flame photometry. [5]
- e. Why do too high or too low temperatures are not favourable for atomic absorption. [5]
- f. Define nephelometry, mention various applications. [5]
- g. What is activation of adsorbents? [5]
- h. What is edge effect, Explain? [5]
- i. What is derivatisation in HPLC? [5]

