QP Code: 403008 Reg. No......

## Final Year B. Pharm (Ayurveda) Degree Regular/Supplementary Examinations April 2021

## Pharmaceutical Analysis II

Time: 3 hrs Total Marks: 100

Answer all questions to the point neatly and legibly
Do not leave any blank pages between answers
Indicate the question number correctly for the answer in the margin space

- Answer all parts of a single question together Leave sufficient space between answers
- Draw diagrams wherever necessary

Essays: (2x10=20)

- 1. Write the principle and applications of fluorimetry. Also explain the various factors influencing fluorescence intensity.
- 2. Discuss the principle and instrumentation of High Pressure Liquid Chromatography (HPLC).

Short notes: (10x5=50)

- 3. Explain the working of Hollow Cathode Lamp with the help of a neat diagram.
- 4. Instrumentation and applications of Thermogravimetry.
- 5. Principle and applications of capillary electrophoresis.
- 6. Enumerate various detectors used in Infra-Red Spectroscopy. Explain any one in detail.
- 7. Classify chromatography based on principle and mode of separation.
- 8. Explain various development techniques in Paper Chromatography.
- 9. Construction and working of dropping mercury electrode.
- 10. Explain different types of amperometric titration curves with examples.
- 11. Salient features of Good Laboratory Practises (GLP).
- 12. Describe the principle and applications of thin layer chromatography.

Answer briefly: (10x3=30)

- 13. Explain the theory of NMR Spectroscopy.
- 14. Define bathochromic shift and hypsochromic shift.
- 15. List out the Ionisation techniques used in mass spectroscopy.
- 16. Discuss the applications of Differential Scanning Calorimetry
- 17. Principle involved in atomic absorption spectroscopy.
- 18. Define chemical shift and list out the factors affecting chemical shift.
- 19. Pharmaceutical applications of Polarography.
- 20. Types of electronic transitions in UV Spectroscopy.
- 21. Working principle of nephelometer.
- 22. Various types of burners used in flame photometry.

\*\*\*\*\*\*