QP Code: 403008 **Reg. No……**

Final Year B. Pharm (Ayurveda) Degree Supplementary Examinations September 2022

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. Explain in detail about Beers Lamberts Law and discuss about the deviations from Beers Lamberts Law.
2. Write the principle and applications of flame emission spectroscopy.

Short notes: **(10x5=50)**

3. Effect of solvent in absorption spectroscopy.
4. Sources of zone broadening in chromatography.
5. Explain the term singlet, triplet and quenching.
6. Explain the applications of NMR spectroscopy.
7. Explain the principle and working of DSC.
8. Explain about hollow cathode lamp in atomic absorption spectroscopy.
9. Electronic transitions in UV spectroscopy.
10. Explain about Gel chromatography.
11. Write about the preparation and development techniques in TLC.
12. Types of ions produced in Mass spectroscopy.

Answer briefly: **(10x3=30)**

13. Polarographic maxima.
14. Criteria for IR absorption.
15. Filters used in Colorimetry.
16. Write any two applications of Amperometric titrations.
17. Role of primary and secondary filters in Fluorimeter.
18. Chromophore and Auxochrome.
19. What are Stokes and Antistoke Fluorescence.
20. Define – Half wave potential and Diffusion current.
21. Define – Isobestic point and E1%1CM value.
22. Red and Blue shifts.

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