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ANNUAL EXAMINATION, 2022-23

COURSE NAME: PHARMA

YEAR: FIRST YEAR

BRANCH: M PHARM

SUBJECT: PHYTOCHEMISTRY

Time – 3 hours

Maximum marks- 75

Note: Attempt all parts.

PART A

(ATTEMPT ALL QUESTION)

(10x2=20)

1. What are the 4 steps of DNA finger printing?
2. Which technique are used for the study of intermediates in biosynthetic pathways.
3. What is the principle of tracer technique?
4. List the steps of drug discovery process.
5. Differentiate hit compound from lead compounds.
6. The region of electromagnetic spectrum for nuclear magnetic resonance is _____.
7. What are the advantages of Mass Spectrometry?

8. Which technique are mainly used for structural elucidation?

9. What are marker compounds.

10. Who found the method of extraction?

PART B

(QUESTION No.11 TO 13 ATTEMPT ANY 2)

(2x10=20)

11. Elaborate the biosynthetic pathways by isotopic tracer analysis.

12. Give the application of HPLC in the separation and discuss the role of HPTLC in the analysis of phytochemicals.

13. Inscribe the general methods of extraction of plant constituents and describe in detail one separation and isolation techniques used in plant analysis.

PART C

(QUESTION NO.14 TO 22 ATTEMPT ANY 7)

(7x5=35)

14. Give a record on the applications of NMR spectroscopy in the structure elucidation of natural products.

15. Justify how the secondary metabolites help in the study of Chemosystematics.

16. Elaborate the biosynthetic pathways leading to the formation of Digitoxin.

17. Explicate structural elucidation of Luteolin by spectral studies.

18. Provide a record on lead structure selection process in herbal drug discovery.

19. Give the application of GCMS and LCMS in the characterization of herbal extracts.
20. Shed a light on the basic metabolic pathways.
21. Write the biosynthetic pathways leading to the formation of Strychnine OR Glycyrrhizin.
22. Give Statement on supercritical fluid extraction technique and its applications.