QP CODE: 303008 Reg. No......

## Third Professional B. Pharm (Ayurveda) Degree Supplementary Examinations September 2022

## **Chemistry of Natural products**

Time: 3 Hours 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

Essays: (2x10=20)

1. Describe about general methods of structural determination and add a note on chemical tests for alkaloids.

2. Explain the structure elucidation of any one of tropane alkaloids.

Short notes: (10x5=50)

- 3. Structural formula, uses and synthesis of progestrone.
- 4. Classify vitamins and chemical nature of ascorbic acid.
- 5. Industrial applications of enzymes.
- 6. Discuss the constitution of riboflavin.
- 7. Pharmaceutical importance of carbohydrates.
- 8. What is mutarotation and mention the cyclic structure of glucose.
- 9. Synthesis of Benzestrol.
- 10. Explain cellulose derivatives.
- 11. Discuss the structure activity relationship of corticosteroid analogues.
- 12. Define, classify terpenoids and explain about isoprene rule.

Answer briefly: (10x3=30)

- 13. Importance of glycone part with their SAR.
- 14. The physiological role of vitamin D.
- 15. Medicinal importance of theobromine.
- 16. Classify peptides.
- 17. Mention uses of caffeine and theophylline.
- 18. Name any three synthetic steroids used as oral contraceptives and mention its structures.
- 19. Chemistry of lanosterol.
- 20. Application of hydroxy propyl methyl cellulose.
- 21. Synthesis of cortisone.
- 22. Chemistry of amylase.

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