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Fourth Semester B.Sc. Degree Examination, August 2022

First Degree Programme under CBCSS

Chemistry

Complementary Course for Botany

CH 1431.3 : ORGANIC CHEMISTRY

(2013-2016 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions. **Each** question carries **1** mark.

1. What is the monomer of natural rubber?
2. The alkaloid present in tobacco is ————————.
3. Define saponification value of an oil.
4. Give the structure of conine.
5. The chemical name for vitamin-C is ————————.
6. Why malathion is preferred to other organo phosphorous pesticides?
7. Give the full form of DDT.
8. Explain the colour changes of phenolphthalein in acidic and basic media.

P.T.O.

9. What is aspirin chemically?

10. What is bathochromic shift?

(10 × 1 = 10 Marks)

## SECTION – B

Answer any **eight** questions. **Each** question carries **2** marks.

11. State and explain isoprene rule.

12. Mention the applications of vincridine.

13. Give the structure of nicotine and explain its properties.

14. What are essential oils?

15. Explain the classification of vitamins with examples.

16. Give one method of preparation of malachite green.

17. What is the significance of iodine value of acids?

18. What are herbicides? Give one example.

19. Give one method of synthesis of BHC.

20. Give two examples of anticancer compounds isolated from plants.

21. What are hypnotics? Give one example.

22. What are mordant dyes? Give one example.

(8 × 2 = 16 Marks)

## SECTION – C

Answer any **six** questions. **Each** question carries **4** marks.

23. Write a short note on classification of alkaloids.

24. Differentiate thermoplastics and thermosetting plastics.

25. What are terpenes? Give the structures of citral and geraniol.

26. What are antacids and analgesics?

27. Write a note on vitamin deficiency diseases.

28. Give one method of preparation of methyl orange and congo red.

29. Write a short note on sulpha drugs.

30. What are drugs? Discuss its classification.

31. Write a note on halogenated organic insecticides mentioning the disadvantages associated with them.

**(6 × 4 = 24 Marks)**

## SECTION – D

Answer any **two** questions. **Each** question carries **15** marks.

32. (a) Discuss the general methods of isolation and physiological action of alkaloids. (5 Marks)

(b) What are synthetic rubbers? Discuss its synthesis, properties and applications. (10 Marks)

33. Write short notes on

(a) Hormones and artificial hormones (7 Marks)

(b) Lipids and its classification and applications (8 Marks)

34. Write short notes on

(a) Theory of colour and constitution of dyes (8 Marks)

(b) Azo dyes (7 Marks)

35. (a) Write short note on antimalerial drugs. (5 Marks)

(b) What are insecticides? Discuss the classification of insecticides with examples. (10 Marks)

**(2 × 15 = 30 Marks)**

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