

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – CHEMISTRY

SIXTH SEMESTER – APRIL 2010

CH 6610/CH 6604 - CHEMISTRY OF NATURAL PRODUCTS

Date & Time: 20/04/2010 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

PART – A

Answer ALL the questions

(10 x 2 = 20marks)

1. What is Zeisel's method?
2. What is meant by Van Braun's method of degradation.
3. State isoprene rule.
4. Predict the product of the reaction sequence: citral $\xrightarrow[2) \text{CrO}_3]{1) \text{KMnO}_4}$ A.
5. What are antho cyanines?
6. Write down the Robinson's synthesis of cyandin chloride.
7. Write the structure of uric acid.
8. What are Purines?
9. What are cartenoids?
10. What are mordant dyes?

PART – B

Answer any EIGHT Questions

(8 x 5 = 40 marks)

11. How will you synthesis papaverine?
12. Predict the ozonolysis product of β -ionone.
13. What are flavones? Give an example.
14. Outline synthesis of citral.
15. Write the synthesis of flavones by Kostanecki synthesis.
16. Draw various possible conformations of menthol.
17. How is caffeine synthesised?
18. What are the functions of alkaloids?
19. Explain the nature and position of side chain in cholesterol.
20. Write the synthesis of Indigoitin.
21. Elucidate the structure of Alizarin.
22. Explain the biological importance of anthocyanins.

(P.T.O.)

PART – C

Answer any FOUR Questions

(4 x 10 = 40 marks)

23. Elucidate the structure of Nicotine.
24. Write the synthesis of Camphor.
25. Write the structural determination of Vitamin – A with a synthesis.
26. Elucidate the structure of cyanidinchloride.
27. Write the synthesis of oestrone.
28. a) What are flavones and flavonoids?
b) How are berpenes isolated?

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