



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – CHEMISTRY

SIXTH SEMESTER – APRIL 2017

CH 6610- CHEMISTRY OF NATURAL PRODUCTS

Date: 20-04-2017
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART-A

Answer **ALL** Questions

(10x2=20 marks)

1. Draw the structure of nicotine.
2. What is Hoffmann exhaustive methylation?
3. State the special isoprene rule.
4. Give any two sources of vitamin-A.
5. What are anthocyanins? Give an example.
6. What are flavones? Give an example.
7. Write the structure of theophylline.
8. What happens when uric acid is treated with Con.HNO_3 ?
9. What are chromophores?
10. What are natural dyes? Give an example.

PART-B

Answer any **EIGHT** Questions

(8x5=40 marks)

11. Write the synthesis of papaverine.
12. What are alkaloids? Explain their classification with examples.
13. How will you convert Geranial to Nerol?
14. Write the synthesis of Citral.
15. What are carotenoids? Explain their general method of isolation.
16. Write a note on the biological importance of flavones.
17. Explain the Robinson's synthesis of cyanidine chloride.
18. Write the synthesis of caffeine.
19. What are steroids? Explain their classification with an example for each.
20. Write a note on the biological importance of purines.
21. Explain the colour and constitution of dyes.
22. Explain the classification of dyes with one example for each.

PART-C

Answer any **FOUR** Questions

(4x10=40 marks)

23. Elucidate the structure of piperine and write its synthesis.
24. (a) Write the synthesis of nicotine. **(5)**
(b) Establish the structure of menthol. **(5)**
25. Elucidate the structure of camphor and write its synthesis.
26. Elucidate the structure of quercetin and write its synthesis.
27. Write the synthesis of cholesterol.
28. Write the synthesis of the following. **(5+5)**
(a) Indigoitin (b) Alizarin
