LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc.DEGREE EXAMINATION – **CHEMISTRY**

SIXTH SEMESTER – APRIL 2019

CH 6616- CHEMISTRY OF NATURAL PRODUCTS

Date: 08-04-2019 Time: 09:00-12:00

$\mathbf{PART} - \mathbf{A}$

Answer all the questions:

- 1. Draw the structure of papaverine.
- 2. How will you classify alkaloids?
- 3. What are terpenoids?
- 4. State "Isoprene rule".
- 5. Give two biological importance of flavones.
- 6. Give the structure of cyanidin chloride.
- 7. Draw the structure of uric acid.
- 8. What are purines ? Give their structure.
- 9. Draw the structure of alizarin.
- 10. What are vat dyes?

PART – B

Answer any eight questions:

- 11. Explain the biological significance of coniine.
- 12. Write the synthesis of nicotine.
- 13. Outline the synthesis of vitamin-A.
- 14. Explain the general methods of determining the structure of terpenoids.
- 15. How is citralsynthesized?Give its uses.
- 16. Elucidate the structure of xanthine.
- 17. Explain Robinson synthesis of anthocyanin.
- 18. Explain the synthesis of caffeine.
- 19. Write short notes on the structure and determination of Quercetin
- 20. Write a note on spectral properties of steroids.
- 21. Write a short note on a) chromophores b) auxochromes.
- 22. How are dyes classified? Explain.

(8 X 5 = 40 marks)



Max.: 100 Marks

(10 x 2 = 20 marks)

Dept. No.

PART – C Answer any four questions: (4 X 10= 40 marks) 23. a) Explain the general methods of structural elucidation of alkaloids. (7) b) Draw the structure of piperine and explain its biological significance. (3) 24. Explain the synthesis of Menthol and Geraniol. (5) 25. a) Write a note on the geometrical isomerism exhibited by carotenoids. (5) b) How is -carotene synthesized? 26. Elucidate the structure of flavones and flavanoids. 27. Explain the biosynthesis of cholesterol. 28. a) Explain the different methods of isolation and purification of natural dyes. (5) b) Write the structural elucidation of indigoitin with equations. (5)
