LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

SIXTH SEMESTER – **APRIL 2016**

CH 6610 - CHEMISTRY OF NATURAL PRODUCTS

Date: 21-04-2016 Dept. No. Max. : 100 Marks

Time: 09:00-12:00

SECTION – A

Answer ALL questions: **(10*2=20)**

1. Name the products obtained when piperine in hydrolysed.
2. What happens when 2-n-propylpiperidine in distilled with zinc dust followed by oxidation with KM_nO_4?
3. What are carotenoids?
4. How are citral and neral related to each other?
5. Draw the cis and trans forms of indigotin.
6. What are mordant dyes? Give examples.
7. Name the products obtained when flavone is fused with KOH.
8. How will you convert quercetin into cyanidin chloride.
9. What happens when cholesterol is distilled with selenium?
10. Name the hydrolysis products of uric acid.

SECTION – B

Answer any EIGHT questions: **(8*5=40)**

11. Describe the isolation of alkaloids from plant materials.
12. Outline the synthesis of Papaverine.
13. Name the products obtained when a) Menthol is oxidized with KM_nO_4
    b) Camphor is oxidized with HNO_3.
14. State isoprence rule. How are terpenes classified?
15. How is indigotin prepared on a large scale? Give its applications.
16. Establish the structure of alizarin and give its synthesis.
17. Write any one synthesis of flavone.
18. How will you arrive at the structure of cyanidin chloride.
19. How will you prove that Cholesterol is tetracyclic?
20. Discuss the structure of menthol.
21. Describe Robinson's synthesis of anthocyanidin.
22. How many methyl groups are present in caffeine and how will you prove it.

SECTION – C

Answer any FOUR questions: **(4*10=40)**

23. Establish the structure of piperine and give its synthesis.
24. Discuss the synthesis of vitamin A.
25. Explain the structure and synthesis of quercetin.
26. Outline the synthesis of oesterone.
27. Discuss the positions of double bond and hydroxyl group in cholesterol.
28. How are dyes classified on the basis of their mode of applications?

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