



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

FOURTH SEMESTER – APRIL 2017

CH 4204- CHEMISTRY FOR BIOLOGISTS - II

Date: 06-05-2017
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

Part-A

Answer ALL questions.

(10 x 2= 20)

1. What are holo and apoenzymes?
2. What is isoelectric point?
3. Write a note on rancidification.
4. What are lipoproteins?
5. Draw the structure of Adenine and Guanine.
6. What are the different types of RNA? Mention their functions.
7. Write the importance of any two monosaccharides.
8. What are epimers? Give example.
9. What are NPK fertilizers?
10. How is ATP synthesized from ADP?

Part-B

Answer any EIGHT questions.

(8 x 5= 40)

11. How are enzymes classified? Give an example for each.
12. Discuss the α -helical structure of secondary protein.
13. Explain the mechanism of enzyme action.
14. Discuss the following i) Cephalins ii) Plasmalogens
15. Write the differences between DNA and RNA.
16. Write a brief note on genetic engineering.
17. Discuss the replication of DNA.
18. Write a note on catabolism and anabolism.
19. Explain the first five steps in the process of conversion of glucose to pyruvic acid.
20. Draw the Fisher and Haworth structure of D-glucose.
21. What is DDT? Write down the preparation of DDT and its use.
22. How is urea manufactured?

Part-C

Answer any FOUR questions.

(4 x 10= 40)

23. Discuss any two methods to determine the N-terminal sequence of amino acid.
24. Explain the steps involved in biosynthesis of cholesterol.
25. Draw and explain the double helical structure of DNA.
26. Explain the overall process of citric acid cycle.
27. How are terpenes classified? Discuss the structure and occurrence of any three terpenes.
- 28 a. Write briefly about the following herbicides a) 2,4-D b) 2,4,5-T
b. How is BHC prepared? Mention its uses.

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