

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

B.Sc. DEGREE EXAMINATION – ADVAN. ZOOLOGY & PLANT BIOLOGY&BIOTECH.

FOURTH SEMESTER – APRIL 2010

**CH 4204 / 4202 - CHEMISTRY FOR BIOLOGISTS - II**

Date & Time: 19/04/2010 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

**PART-A**

Answer **all** the questions

**(10×2= 20 Marks)**

1. What are fibrous proteins? Give an example.
2. Give equation for the action of heat on  $\alpha$  – aminoacid.
3. Write any two functions of wax.
4. Draw the structure of cholesterol.
5. Name the common bases present in DNA & RNA molecules.
6. What are mutations?
7. Define glycolysis.
8. Write the open structure of glucose.
9. What are mixed fertilizers?
10. How is lime – sulphur prepared?

**PART-B**

Answer any **eight** questions

**(8×5= 40 Marks)**

11. Explain the following terms a) iso electric point. b) de naturation of proteins.
12. Describe sanger's method for the sequential determination of amino acid.
13. What are enzymes? Give any four properties of enzymes.
14. Give an account of classification of lipids with suitable examples.
15. Write a note on rancidity of an oil.
16. Establish the bio synthesis of protein.
17. Describe the replication of DNA.
18. What is mutarotation? Explain it with the help of  $\alpha$ -D-glucose.
19. Draw TCA cycle for the oxidation of acetylCoA.
20. Explain the manufacturing process of the following: a) Urea and b)D.D.T.
21. What are alkaloids? Write the functions of alkaloids.
22. Write a note on oxidative phosphorylation.

