 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **ZOOLOGY**

SECOND SEMESTER – **APRIL 2012**

# ZO 2816 - BIOCHEMISTRY

Date : 21-04-2012 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**Part A**

**Answer All the questions: (10×2=20 Marks)**

1. What are cytochromes?
2. Write a note on the amphoteric nature of proteins.
3. Comment on the following: (i) Isomerization (ii) Tautomerization.
4. What is called line Weaker Burk equation?
5. What is V-Max?
6. Differentiate LDL from HDL.
7. What is chemi-osmotic hypothesis?
8. Comment on auto oxidation.
9. Write a note on Zimmermann reaction.
10. What are anti oxidants?

**Part B**

**Answer any Four questions: (4×10=40 Marks)**

1. Bring out the biochemistry of co-enzymes.
2. Explain the reaction characteristics of proteins.
3. Describe the process of catabolism of amino acids.
4. Bring out the biosynthetic pathways of cholesterol and bile.
5. Explain the process and importance of electron transport chain.
6. Describe the different biosynthetic pathways of nucleotides.

**Part C**

**Answer any TWO questions: (2×20=40 Marks)**

1. Form an essay on the structure and reaction characteristics of carbohydrates.
2. Discuss enzyme kinetics? Add a note on its importance.
3. Form an essay on the biosynthesis of amino acids.
4. Discuss the biochemistry of transport across membrane.

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