Karunya University

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – November / December 2008

Subject Title: BIOCHEMISTRY   **Time : 3 hours**
Subject Code: BC201   **Maximum Marks: 100**

Answer ALL questions
PART – A (10 x 1 = 10 MARKS)

1. A disaccharide linked by 1,4 glycosidic linkage is ------------------
2. Depot fats of mammalian cells comprise mostly of -------------------
3. What is Zwitter ion?
4. mRNA is complementary copy of a ---------------------------------
5. β oxidation of odd carbon fatty acid chain produces ----------------
6. The principal catabolic product of pyrimidines in human is -----------------------
7. In oxidative phosphorylation, one molecule of reduced Flavoprotein produces how many ATPs ------------
8. The pathway which in amphibolic in nature is --------------------------
9. Glycasaminoglycan are attached to extracellular Proteins to form ------------------
10. The informational carbohydrate is covalently joined to a Protein (or) lipid to form a --------------

PART – B (5 x 3 = 15 MARKS)

11. Define Mutarotation.
12. Differentiate Ribonucleic acids from deoxyribonucleic acids.
13. What are the elemental sources of purine?
14. Write the inhibitors of ETC.
15. What are complex carbohydrates and give examples.

PART – C (5 x 15 = 75 MARKS)

16. Describe in brief the structure and important properties of the following: (5+5+5)
    a.   Sucrose   b.   Glycogen   c.   Starch
    (OR)
17. What are phospholipids? Describe the classification and function of phospholipids.

18. Describe the Watson and Crick model of DNA
    (OR)
19. Give an account of the properties of amino acids and add a note on essential and non essential amino acids.

20. What is β oxidation? Enumerate the pathway for fatty acid oxidation.
    (OR)
21. Explain the salvage pathway of purines and pyrimidine.

22. Explain the steps involved in the process of disposal of ammonia in the body by Embden Hensleit pathway
    (OR)
23. Describe the electron transport chain reactions and its significance.

24. Enumerate the structure and functions of proteoglycans.
    (OR)
25. Give a detailed account on Mucopolysaccharides and its importance.