

Reg. No. _____

Karunya University

(Karunya Institute of Technology and Sciences)
(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – April/May 2010

Subject Title: **FOOD BIO-CHEMISTRY AND NUTRITION**
Subject Code: **BC204**

Time: **3 hours**
Maximum Marks: **100**

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

1. Give any two examples for high energy compounds.
2. Mention the significance of HMP shunt.
3. Name the rate limiting enzyme of cholesterol biosynthesis.
4. Define deamination.
5. Give the calorific values of carbohydrate and fat.
6. Write the common disorders observed in protein energy malnutrition.
7. Brief the term cirrhosis.
8. Name any two enzyme inhibitors.
9. Give the nature of insulin.
10. What are mutagens?

PART – B (5 x 3 = 15 MARKS)

11. Define glycolysis and mention the regulating enzyme of this pathway.
12. What are nucleotides? Write the structure of ATP and TTP.
13. Write the chemistry of cholesterol.
14. Brief the term lectins.
15. Mention the sign and symptoms of Alzheimer's disease.

PART – C (5 x 15 = 75 MARKS)

16. Discuss the TCA cycle and mention its significance.
(OR)
17. a. Illustrate the components of ETC. (7)
b. Write an account on urea cycle. (8)
18. Write the denovo synthesis of pyrimidine nucleotides.
(OR)
19. What is β oxidation? Calculate the energy released by the complete oxidation of palmitic acid.
20. Discuss the nutritional importance and nutritional value of proteins.
(OR)
21. Describe how will you measure the energy requirements of normal person?
22. Write a detailed note on anti nutritional factors.
(OR)
23. Explain the inborn errors of fat metabolism.
24. Discuss the nutrition status maintained in pregnancy.
(OR)
25. Write the nutrition maintenance followed in diabetic patients.