D.K.M.COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1.

III B.Sc Biochemistry

Semester : VI

Tile of the paper: Intermediary Metabolism

Subject Code : 15CBC6B

SEC-A (2 MARKS)

1. Define catabolism
2. Define anabolism
3. What is Amphibolism
4. State the component of ETC
5. Define p/o ratio
6. What are uncouplers of oxidative phosphorylation
7. What is oxidative phosphorylation
8. Define glycolysis
9. State the difference between aerobic and anaerobic glycolysis
10. What is limit dextrin
11. What is glycogenesis
12. What is cori cycle
13. Define glycogenesis
14. What is anaerobic glycolysis
15. What are the rate limiting enzymes in glycolysis
16. What are ketone bodies?
17. What are unsaturated fatty acids?
18. Give two examples for saturated fatty acid
19. Write the structure of cholesterol
20. What are phospholipids? Give examples
21. Give the structure of lecithin
22. What is transamination
23. What is the end product of protein metabolism

24. Define oxidative deamination
25. What is non oxidative deamination
26. What is the significance of urea cycle
27. What are nucleotides
28. What is a nucleoside
29. What are deoxyribonuleotides
30. what are ureotelic and uricotelic animals

SEC-B (5 MARKS)

1. Explain the component of ETC
2. Explain chemiosmotic theory of oxidative phoshorylation
3. Explain the structure of ATP synthase
4. Give an account on inhibitors of ETC
5. Explain the synthesis of glycogen from glucose
6. Give an account on energetic of glycolysis
7. Give an account on glycogenolysis
8. Explain the amphibolic nature of TCA cycle
9. Give an account on cori cycle and its significance
10. Give an account on energeties of glycolysis
11. Explain the biosynthesis of ketone bodies
12. Explain the biosynthesis of sphingomyelin
13. Write short note on triglycerides
14. Explain the reactions of urea cycle
15. Explain transamination reaction
16. Give an account on decarboxylation of aminoacids
17. Give an account on oxidative and nonoxidative deamination
18. Explain the salvage pathway of purine nucleotides
19. Explain the degradation of purine nucleotide
20. Explain the degradation of pyrimidine nucleotides

10 MARKS

1. Explain the component and reactions at ETC
2. Explain the theories of oxidative phosphorylation
3. Explain the pathway of glycolysis and add a note on its regulation
4. Explain the reaction of TCA cycle
5. Explain gluconeogenesis in detail
6. Explain the pathway of cholesterol biosynthesis and its regulation
7. Explain the biosynthesis of fatty acid
8. Explain the following
    a. Transamination (5)
    b. Deamination(3)
    c. Decarboxylation (2)
9. Explain the biosynthesis of purine nucleotides
10. Explain the pathway of pyrimidine nucleotides biosynthesis