

Subject Title: Intermediary Metabolism

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Year: II

Semester: IV

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Unit - I: Amino acid Metabolism**Essay Questions :**

1. Write about the general reactions of aminoacids?
2. Elucidate the steps involved in the urea cycle and its regulation?
3. Write briefly about the Metabolism of Aromatic amino acids?
4. Write briefly about the Metabolism of Branched chain amino acids?

Short Answer:

5. Metabolism of Glycine
6. Biosynthesis of creatinine
7. Phenylalanine
8. Albinism
9. Catabolism of carbon skeleton of aminoacids
10. Mapple syrup disease

Unit - II: Carbohydrate Metabolism**Essay Questions :**

11. Write in detail about the Light reaction of Photosynthesis?
12. Write briefly about the dark reactions of Photosynthesis?
13. Elucidate the steps involved in the HMP pathway & its importance?
14. Explain the metabolism of Glycogen?
15. Write in detail about the Gluconeogenesis?

Short Answers

10. Fate of pyruvate
11. Anaplerotic reactions
12. C₄ pathway
13. CAM plants

14. Anabolism & Catabolism

15. Pasteur effect

Unit - III: **Lipid Metabolism**

Essay Question

16. Write about the β - oxidation of fatty acids (Even & odd Chain)

17. Explain the Biosynthesis of Cholesterol and its regulation?

18. Explain the biosynthesis of Fatty acid synthesis?

Short Answers

19. Biosynthesis of Triacylglycerides

20. Ketogenesis

21. Lecithin Synthesis

Unit - IV: **Nucleic acid Metabolism**

Essay Questions

22. Write in detail about the synthesis of Purines and its regulation

23. Write in detail about the synthesis of Pyrimidines and its regulation

24. Biosynthesis and Degradation Heme

25. Write about the synthesis and catabolism of purines?

26. Write about the synthesis and catabolism of pyrimidines?

Short Questions

27. Gout

28. Lesch-Nyhan syndrome

29. Biosynthesis of Deoxynucleotide

30. Catabolism of Purines

31. Catabolism of Pyrimidines