

General

1. Fluidic Model of Cell membrane
2. Function of Organelles

Carbohydrate

3. Classification of carbohydrate
4. Reducing Sugar & it's Characteristic
5. Mucopolysaccharide (Glycosamino glycans)
6. Digestion & absorption of Carbohydrate
7. Lactose intolerance
8. Energy production of Glycolysis
9. Gluconeogenesis
10. Polyol pathway and it's significant
11. Diagnosis of Diabetes Mellitus
12. Metabolic alteration in Diabetes Mellitus
13. Acute and Chronic complication of Diabetes Mellitus
14. Biochemical explanation of Diabetic Ketoacidosis
15. Define and significant of Glycated (HbA1c) haemoglobin
16. Advance Glycated End product

Lipid

17. Type of Fatty acid
18. Function of Phospholipids
19. Rancidity of Fatty acid
20. Liposome & Micelle
21. Digestion and absorption of lipid
22. Eicosanoids
23. Formation of eicosanoids and explain its inhibitor with significance.
24. Risk factor for Atherosclerosis
25. Type and Function Lipoproteins
26. Type and function of Apo- lipoproteins

Protein and Amino acid

27. Essential – Semi Essential – Non Essential Aminoacid
28. Role & Significant of Amino acid
29. Type of Structure of Protein
30. Protein structural –functional relationship.
31. Define Protein Denaturation. Give It's significant & causative factor.
32. Fates of Tyrosine & Phenlyalanine & it's related disorder.
33. Biochemical explanation of Phenylketonuria.
34. Biochemical explanation of Albinism & Alkaptonuria.
35. Functional classification of protein.
36. Urea Cycle - Transport and Detoxification of Ammonia
37. Type & Structure of Haemoglobin
38. Haemoglobin degradation pathway .
39. Type and Cause of Jaundice.
40. Types , Causes and differentiation by serum and urine examination of Jaundice.
41. Molecular and Biochemical explanation for pathogenesis of Sickle cell disease
42. Molecular and Biochemical bases of Thalassemia.

Enzyme

43. Define Co-Enzyme ,Co-Factor & Iso-Enzyme. Give Example.
44. Diagnostic importance of isoenzyme
45. Write and Explain Factor affecting enzyme activity with example.
46. Type of Enzyme Inhibition. Explain with example.

Nutrition & Vitamin

47. Difference between Kwashiorkor & Marasmus
48. Factor affecting Basal Metabolic Rate
49. Clinical significance of Dietary fibre
50. Function of Vitamin A & it's related disorder

Molecular

51. Type and Watson & Crick Model of DNA
52. t-RNA.
53. Genetic codon
54. Effect and Type of Mutation with example.
55. Primary & Secondary cause of Hyperuricemia & Molecular Basis of Gout