

Research topics in Biochemistry-1 for level 2 Clinical , 2nd semester, Pharm Students

Suggested by Prof Nabil Mohie

- 1. Classify enzymes according to their biological functions.**
- 2. Classify carbohydrates according to number of carbon atoms, number of sugar units, solubility and digestibility.**
- 3. Discuss different oxidative mechanisms for glucose.**
- 4. Briefly, show Metabolic Fates of Pyruvate, lactate and methanol.**
- 5. Show the clinical significances of fructose and galactose metabolism.**
- 6. Mention the Glucuronate Metabolism with its clinical significance.**
- 7. Define gluconeogenesis and enumerate its substrates, showing its relation to diabetes control.**
- 8. Discuss glucose kinesis, showing hormonal regulation of blood glucose levels, glucose storage sites, stressing on the role of insulin in these pathways.**
- 9. Write what you know about TCA Cycle.**
- 10. Summarize Pentose Phosphate Pathways , its significance and clinical utility.**
- 11. What are glycosaminoglycans, proteoglycans, and their clinical significance?**
- 12. What is Biological significance of lipids ?**
- 13. Classify lipids and fatty acids.**
- 14. Enumerate types fatty acids oxidation and its clinical value**
- 15. Write what you know about Phospholipids**
- 16. What are the Important clinical defects in lipid metabolism ?**
- 17. What are the Plasma lipoprotein types and functions and how can you separate them?**