

ER23-23T: Biochemistry and Clinical Pathology

5m:

1. Describe the beta oxidation of fatty acids.
2. Explain Hexose monophosphate shunt pathway and add a note on its metabolic significance.
3. Summarise ketogenesis.
4. Describe urea cycle and its metabolic disorders.
5. Explain any two disorders of lipid metabolism.
6. Discuss about gluconeogenesis.
7. Summarise glycogenolysis.
8. Describe catabolism of aminoacids.
9. Explain Jaundice and its types.
10. Explain Alkaptonuria and Phenylketonuria.
11. Describe transamination and deamination reactions with suitable examples.
12. Explain Embden Meyerhof pathway and write its significance.
13. Explain Hyperbilirubinemia and Jaundice
14. Define Oxidative Phosphorylation. What is the cellular site of Oxidative phosphorylation
15. Explain the process of glycogen breakdown pathway.
16. Describe the citric acid cycle with energetic.
17. Explain about glycogen storage diseases.
18. Fatty liver.
19. Electron transport chain.
20. Write down the reaction of  $\beta$ -oxidation.
21. Adenosine Triphosphate (ATP)
22. Diabetes mellitus.
23. Ketone bodies.
24. Describe formation of Ketone bodies.
25. Explain citric acid cycle pathway and add note on it metabolic significance.
26. Reactions of amino acid metabolism
27. Disorders of Lipid metabolism.

3m:

1. Define gluconeogenesis.
2. Define transamination.
3. Write the energetic for glycolysis pathway.
4. Diabetes Mellitus
5. Write the significance of ATP.
6. Hypercholesterolemia.
7. Ketone bodies.
8. Alkaptonuria.
9. Define metabolism.
10. What is the significance of HMP shunt?

11. Ketone bodies.
12. FMN.
13. Explain the coenzymes involving oxidation – reduction reaction.
14. Deamination.
15. Fatty liver.
16. cAMP.
17. Oxidative phosphorylation.
18. Ketosis.
19. Define gluconeogenesis and glycogenesis.
20. Define hyperbilirubinemia.
21. Phenylketonuria.
22. Hyperuricemia.
23. Glycolysis
24. ETC.
25. Significance of ATP & cyclic AMP.
26. Decarboxylation of aminoacid.
27. Anabolism
28. Lipolysis
29. Biological oxidation
30. Glycosuria
31. Hypolipoproteinemia

#### Water and electrolyte balance

5m:

1. Explain water balance in the body.
2. What are the effects of dehydration.
3. Discuss dietary electrolytes and water balance.
4. Electrolyte composition in body fluids.
5. Water turnover.

3m:

1. Oral rehydration therapy
2. Causes of dehydration
3. Functions of water in human body.
4. ICF
5. ECF