

Subject of biochemistry C course for second year student

I General protein metabolism

- 1 General catabolic pathway of amino acids .
- 2 Ammonia intoxication
- 3- Urea cycle
- 4- Digestion and absorption of protein

II. Amino acids share in Putrefaction and detoxication

- 1 Important of detoxification and Putrefaction
- 2 Amino acid participate in elimination toxic compounds
- 3- Site of occurrence of putrefaction
- 4- Site of occurrence of detoxification

III Synthesis of amino acid

- 1 Glycine
- 2 Serine
- 3 Glutamic acid
- 4- Cysteine and cystine

IV Catabolic pathway and disorders of amino acid

- 1- Glycine
- 2- Phenyl alanine
- 3- Tryptophan
- 4- Histidine

V- The mechanism of metabolic pathway of (glucogenic and ketogenic and mixed) of these amino acids

- 1- Phenyl alanine , tyrosine
- 2- Tryptophan
- 3- Sulphur containing amino acid
- 4- Branched chain amino acid

VI Blood

- 1- Blood Buffering system
- 2- Glycolytic pathway in RBCs
- 3- Separation of plasma protein
- 4- Types and role of plasma protein

VII **Biological compounds synthesized from the following**

- 1- Tyrosine & phenyl alanine
- 2- Tryptophan
- 3- Glutamic acid
- 4- Sulphur containing a.a

VIII **Urine**

- 1- Normal constituent of urine
- 2- Abnormal constituent of urine
- 3- Kidney function test
- 4- Urine formation , collection , and urine preservation

IX- **Mineral metabolism**

- 1- Classification of trace element
- 2- Classification of major element
- 3- Deficiency of trace element
Deficiency of major element

X **Nucleoprotein metabolism**

- 1- Purine , pyrimidine synthesis
- 2- Purine , pyrimidine catabolism
- 3- Disorders of purine
- 4- Disorders of pyrimidine