Life Processes

Physiology of Excretion

Anabolism: It includes metabolic process by which complex cellular compounds are synthesizedfrom simpler compounds.e.g., Photosynthesis

❖ Physiology of Excretion

Urine production and eliminations are one of the most important mechanisms of body homeostasis composition of blood is determined more by kidney function than by diet all body systems are directly or indirectly affected by kidney function kidney function is closely tied to circulatory system typically referred to as "excretory system" excretory wastes = metabolic wastes chemicals & toxins produced by cells during metabolism but we have several organs that serve an excretory function other than kidneys:

1. kidneys
2. skin sweat glands rid body of water, minerals, some nitrogenous wastes (ammonia)
3. lungs rid body of CO_2 from energy metabolism of cells
4. intestine in addition to getting rid of undigested food residue feces also contains some metabolic wastes as well; bile pigments, salts, calcium, some toxins

Photophosphorylation
It occurs during photosynthesis.
It occurs in the chloroplasts.
ATP is synthesized on the lamellae of the chloroplast.
It does not require oxygen but is related to photosystem-I and photosystem-II

Functions of Urinary System:

1. removal of metabolic wastes
2. elimination of toxins
3. elimination of excess nutrients
4. elimination of excess hormones
5. regulation of fluid volume
6. regulation of electrolytes

7. regulation of acid base balance

8. regulation of blood volume and pressure

9. erythropoiesis

10. calcium absorption

PHOTOSYNTHESIS

S.No.	Characters	Photosynthesis
1	Site	It takes place in green cells of plats.
2	Time	It occurs during day time
3	Energy	Stored
4	CO_2 and H_2O	Used up
5	Food and oxygen	Produced
6	Dry weight	Increased
7	Metabolism	Anabolic process