General Physiology

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Physiology

Physiology attempts to explain the physical and chemical factors that are responsible for the origin development and progression of life.

Homeostasis

Homeostasis means ‘Balance’ or ‘equillibrium’ maintain a static condition of internal environment of the body.

How different body system maintains homeostasis.

1. Respiratory system: Provides O2 for cells/removes CO2.
2. GIT system: Provides nutrition.
3. CVS system: Transporter or tissue exchanger.
4. Urinary system: Excreation of metabolic end products.

How different body system maintains homeostasis.

5. Endocrine system: Controlling system of hormones.
6. Musculoskeletal system: Facilitating the locomotion.
7. Nervous system: Controlling system of homeostasis.

Body fluid

Water of the body together with its dissolved solute is called body fluid. 60% of the total body weight.

Types of body fluid

1. Extracellular 20%:
   - Plasma 5%.
   - Interstitial fluid 15%.
   - Transcellular fluid.

2. Intracellular 40%.

Exocytosis

Extrusion of proteins from cell to the surrounding fluid is called exocytosis.

Endocytosis

Ingestion of nutrients and other substances from the surrounding fluid by the cell is called endocytosis.

Diffusion

Movement of molecules in a solution from a higher concentration to lower concentration is called diffusion.

Osmosis

Movement of solvent in a solution from a lower concentration to higher concentration is called osmosis.

Filtration

Process of separation of undissolved particles with the help of filtering force.

Action potential

An action potential is a rapid change in the membrane potential followed by a return to the resting membrane potential.

Stages of action potential

- Resting stage.
- Depolarization stage.
- Repolarization.
- Spike potential.
- Negative after potential.
- Positive after potential.

Membrane potential

The electrical potential difference across the membrane is called membrane potential.

Thank You……..That,s all.