



RASHIDA IQBAL FINANCIAL AID
ORGANIZATION

PHYSIOLOGY GUIDELINES FOR
FOUNDATION MODULE

RIFAO
RAWALPINDI MEDICAL UNIVERSITY

HOMEOSTASIS:-

- ❖ Difference between ECF and ICF. *** (imp for mcq & seqs. Values of ECF & ICF are important for mcqs)
- ❖ Definition of Homeostasis with suitable example.
- ❖ Examples of control systems.
- ❖ Gain of a control system and its examples (BP and Temperature regulation).
- ❖ Negative feedback and examples.
- ❖ Positive feedback and examples.
- ❖ Vicious cycle**** (imp for seqs, draw figure 1.4 as well)
- ❖ Feed forward control

CELL:-

- ❖ Types of proteins and examples. (Structural and functional proteins).
- ❖ Enumerate membranous and non-membranous organelles. ***
- ❖ Cell Membrane- Structure and function.**** (Do figure 2.3, imp for seq)
- ❖ Integral and Peripheral proteins- Difference and functions.**** (imp for seq, to be done from lecture notes)
- ❖ Glycocalyx- Definition and functions. (imp)
- ❖ Endoplasmic reticulum- Differences between RER and SER and their individual functions. (imp)
- ❖ Lysosomes vs Peroxisomes and their functions. ***
- ❖ Functions of all organelles are important for seqs and mcqs.
- ❖ Cytoskeleton, its types & individual functions.*****
- ❖ Vaults & proteasomes. (Can be done from Sherwood/lecture notes)
- ❖ Docking mechanism along with its diagram.***** (from Sherwood/lecture notes)
- ❖ Ingestion by cell- Endocytosis. Mechanisms of pinocytosis and phagocytosis/ difference between pinocytosis and phagocytosis.
- ❖ Specific functions of ER and Golgi complex. (imp for mcqs and seqs)
- ❖ Give a read to movements to grab basic concept. (not much imp)
- ❖ ATP uses and examples
- ❖ Mechanism of amoeboid & ciliary movement.**

GENETICS:

If you have done this in biochemistry properly then you don't really need to go through this. Seqs don't really come from this chapter. However you must have knowledge in case of mcqs for which, if you have done, biochemistry is sufficient.

- ❖ Types of RNA.****

TRANSPORT:

- ❖ Definitions of Diffusion, simple & facilitated diffusion. ****
- ❖ Difference between diffusion (passive) and active transport.
- ❖ Difference between simple and facilitated diffusion. ****
- ❖ Factors affecting simple and facilitated diffusion.
- ❖ Gating of protein channels. Ligand gating as well as voltage gating. **
- ❖ Definition of Nernst potential & its equation. **
- ❖ Definitions of osmosis and osmotic pressure and values. (Not much imp) difference between osmolarity & osmolality.
- ❖ Sodium potassium pump & its mechanism of action. *****(do diagram as well. To be done from lecture notes)
- ❖ Types of active transport in detail- Their differences (imp), mechanisms, examples. *****
- ❖ Differences between cotransport and counter transport with examples. *****

Note: Draw diagrams with seqs that you find easy if you have time. This helps in securing more marks.

Remember RIFAO team in your prayers.

Regards,

Laraib Fatima,

RIFAO publications representative,

Batch 46.

This document was made on 10th April
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