



RASHIDA IQBAL FINANCIAL AID ORGANIZATION

1ST YEAR PHYSIOLOGY GUIDELINES FOR 1ST MODULE

HOMEOSTASIS:

- ❖ *Difference between ECF and ICF.*
- ❖ *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.*
- ❖ *Death in hemorrhage*
- ❖ *Feed forward control*

CELL:

- ❖ *Types of proteins and examples. (Structural and functional proteins).*
- ❖ *Enumerate membranous and non-membranous organelles.*
- ❖ *Cell Membrane- Structure and function*
- ❖ *Integral and Peripheral proteins- Difference and functions.*
- ❖ *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.*
- ❖ *Ingestion by cell- Endocytosis. Mechanisms of pinocytosis and phagocytosis/ difference between pinocytosis and phagocytosis.*
- ❖ *Mechanism of exocytosis. (docking mechanism)*
- ❖ *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*

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.

TRANSPORT:

- ❖ *Difference between diffusion (passive) and active transport.*
- ❖ *Difference between simple and facilitated diffusion.*
- ❖ *Factors affecting simple and facilitated diffusion.*
- ❖ *Definitions of osmosis and osmotic pressure and values. (not much imp)*
- ❖ *Sodium potassium pump. (imp)*

- ❖ *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.

Recommended books: Guyton and lecture notes.

Remember us in your prayers.

All the best.

Regards.

Aimen Sami

2nd year- Publication Representative.

