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Q1.

The major levels of organization in the body, from the simplest to the most complex are: atoms, molecules, organelles, cells, tissues, organs, organ systems, and the human organism.

Part B.

Positive feedback is a process in which the end products of an action cause more of that action to occur in a feedback loop. This amplifies the original action. It is contrasted with negative feedback, which is when the end results of an action inhibit that action from continuing to occur.

Q2.

All cells have a plasma membrane, ribosomes, cytoplasm, and DNA. The plasma membrane, or cell membrane, is the phospholipid layer that surrounds the cell and protects it from the outside environment. Ribosomes are the non-membrane bound organelles where proteins are made, a process called protein synthesis

Endoplasmic.

The reticulum (ER) is a membranous organelle that shares part of its membrane with that of the nucleus. Some portions of the ER, known as the rough ER, are studded with ribosomes and are involved with protein manufacture. The rest of the organelle is referred to as the smooth ER and serves to produce vital lipids (fats).

Ribosomes

Ribosomes are the protein factories of the cell. Composed of two subunits, they can be found floating freely in the cell's cytoplasm or embedded within the endoplasmic reticulum. Using the templates and instructions provided by two different types of RNA, ribosomes synthesize a variety of proteins that are essential to the survival of the

Golgi apparatus

is composed of folded membranes. It searches the protein's amino acid sequences for specialized "codes" and modifies them accordingly. These processed proteins are then stored in the Golgi or packed in vesicles to be shipped elsewhere in the cell.

nucleus is a large organelle that stores the cell's DNA (deoxyribonucleic acid). The nucleus controls all of the cell's activities, such as growth and metabolism, using the DNA's genetic information. Within the nucleus is a smaller structure called the nucleolus,

Q3.

Digestion is the process of mechanically and enzymatically breaking down food into substances for absorption into the bloodstream. Food contains three macronutrients that require digestion before they can be absorbed: fats, carbohydrates, and proteins.

Digestion, sequence by which food is broken down and chemically converted so that it can be absorbed by the cells of an organism and used to maintain vital bodily functions.