

Explain the various ways in which a typical cell is adapted to its functions-KCSE Biology Essays

Has a cell membrane; with pores; that regulates substances entering and leaving the cell;

Cytoplasm; contain sugars and salts; for maintaining its osmotic pressure; also has a liquid medium; for all biochemical reactions;

Nucleus; contain chromosomes having hereditary material; and controls all the activities of the cell;

Ribosomes; are sites for protein synthesis;

Golgi bodies/apparatus; for secretion of hormones and enzymes; formation of lysosomes;

Lysosomes; contain lytic enzymes for breaking down worn-out organelles;

Secretory vesicles; formed from golgi apparatus for secreting substances;

Smooth endoplasmic reticulum; synthesizes and transports lipids;

Rough endoplasmic reticulum; transport proteins;

Nucleolus; controls the activities of the nucleus; produces ribosomes;

Mitochondria; form sites for energy production;

Centrioles; formation of cilia and flagella; forms spindle fibres used in cell division;

Plant sap vacuoles; store salts and other dissolved substances; controls osmotic pressure and turgidity of cells;

Food vacuoles involved in digestion of engulfed food;

Chloroplasts; form sites for photosynthesis in plant cells; Max. 20 mks