FBQ1: Active transport is the transportation of some molecules through the cell membrane powered by from the cell's reserves. Answer: Energy
FBQ2: is the movement of ions or molecules from regions of higher concentration to regions of lower concentration. Answer: Diffusion
FBQ3: The diffusion of water across a cell membrane from an area of low solute concentration to an area of high solute concentration is called Answer: Osmosis
FBQ4: Liposomes are circular pockets that are enclosed by a Answer: Lipid layer
FBQ5: Protein within the cell membrane normally transport chemicals and across the membrane. Answer: Information
FBQ6: The biological membranes can be considered as a two-dimensional liquid where all lipid and protein molecules diffuse more or less easily, according to the model Answer: fluid mosaic
FBQ7: Proteins that are transported by the endoplasmic reticulum and from there throughout the cell are marked with an address tag called a Answer: Signal sequence
FBQ8: The movement of substances across the membrane can be, occurring without the input of cellular energy. Answer: Passive
FBQ9: The of a polarized cell is the surface of the plasma membrane that forms its basal and lateral surfaces. Answer: basolateral membrane
FBQ10: proteins interact widely with hydrocarbon chains of membrane lipids and can be released by agents that compete for the same nonpolar interactions. Answer: Integral
FBQ11: Antigens are present on cell membrane because they are receptors that aid cell to cell Answer: Communication
FBQ12: signal sequence of amino acids directs proteins to the endoplasmic reticulum, which inserts the proteins into a lipid bilayer. Answer: N-terminus
FBQ13: permeability refers to the ease with which molecules hook unto it. Answer: Membrane

FBQ14: Homeoviscous adaptation is the ability of some organisms to regulate the fluidity of their cell membranes by altering Answer: Lipid composition
FBQ15: is the science that describes how organisms function and survive in continually changing environments. Answer: Physiology
FBQ16: Lipid rafts and caveolae are examples of cholesterol-enriched in the cell membrane. Answer: Microdomains
FBQ17: Paired cylindrical structures located near the nucleus, which play an important role in cell division are referred to as Answer: Centrioles
FBQ18: The is an elaboration of the plasma membrane; a sort of rosette of ruffled membrane intruding into the cell. Not all prokaryotic cells have it. Answer: Mesosome
FBQ19: The is an important feature in all cells, especially epithelia with microvilli. Answer: Glycocalyx
FBQ20: The cell membrane consists of three classes of Answer: lipidsamphipathic
FBQ21: The cell membrane is selectively to ions and organic molecules and controls the movement of substances in and out of cells. Answer: Permeable
FBQ22: A is the basic structural and functional units of living things. Answer: Cell
FBQ23: Exocytosis is the process of removing waste materials from Answer: Cells
FBQ24: Peripheral proteins are proteins that are bounded to the membrane by electrostatic interactions and with the hydrophilic phospholipid heads. Answer: Hydrogen bonding
FBQ25: The cytoskeleton provides a scaffolding for membrane to anchor to, as well as forming organelles that extend from the cell. Answer: Proteins
FBQ26: With the following proportions of lipids: 3% phosphotidyl-serine, 3% sphingomyelin, 10% cholesterol and 55% phosphotidyl choline. The membrane discussed is Answer: rat liver nuclear membrane

FBQ27: The cell membrane serves as the attachment surface for the extracellular, and cell wall and intracellular cytoskeleton. Answer: Glycocalyx
FBQ28:are circular pockets that are enclosed by a lipid bilayer. Answer: Lipid vesicles Liposomes
FBQ29: The cytoskeleton is found underlying the cell membrane in the cytoplasm and provides a for membrane proteins to anchor to, as well as forming organelles that extend from the cell. Answer: Scaffolding
FBQ30: The lipid bilayers of the cell membrane have very low for ions and most polar molecules. Answer: Permeability
FBQ31: Crystals of calcium oxalate or silicon dioxide in plants, granules of energy-storage materials such as starch, glycogen, or polyhydroxybutyrate are all Answer: cytoplamic inclusions
FBQ32: In gram-negative bacteria, the region outside the plasma membrane but inside the outer membrane is the Answer: Periplasm
FBQ33: The molecules of phospholipid in the cell membrane form a Answer: phospholipid bilayer
FBQ34: Pores and gates are examples of Answer: transmembrane protein complexes
FBQ35: membrane has the following mineral composition; 8% Carbohydrate, 43% lipid and 49% protein. Answer: human erythrocyte plasma
MCQ1: DNA of the nucleus with its associated proteins are collectively referred to as
Answer: chromatin
MCQ2: Prokaryotic genetic material is organized in a simple circular DNA molecule in the
MCQ3: Retroviruses have as their genetic material. Answer: RNA
MCQ4: Foreign DNA can be artificially introduced into the cell by a process called
Answer: transfection

MCQ5: Flattened stacks of membrane usually found in a series of five to eight in golgi apparatus are known as Answer: Cisternae
MCQ6: Depending on the enzymatic needs of a cell, massive changes can occur in the protein content without any noticeable changes. Answer: structural
MCQ7: Which of the following is a step in gluconeogenesis? . Answer: Conversion of glucose-6-phosphate to glucose
MCQ8: Which of the following is not an integral membrane protein? Answer: phosphproteins
MCQ9: Small particles of insoluble substances suspended in the cytosol are known as cytoplasmic Answer: inclusions
MCQ10: The following are an amphipathic lipid exceptAnswer: Glycerines
MCQ11: Mitochondrial and chloroplast DNA are similar to Prokaryotic DNA in following ways except Answer: Mitochonria have their own DNA duplicated in the nucleus in similar manner with prokaryotic DNA
MCQ12: Which of the following may have played a role in the transition from prokaryotes to eukaryotes? Answer: Sex as the stereotyped choreography of meiosis and syngamy
MCQ13: Major differences between prokaryotic and eucaryotic cells are that Answer: prokaryotic cells lack a nucleus and membranous organelles while eukaryotic cells contain a membrane-bound nucleus and numerous membrane-enclosed organelles
MCQ14: Which of the following is not correct about lipids of a typical cell? Answer: Lipids form about 3% of the dry mass of a typical cell.
MCQ15: Steroids include the following except Answer: progesterone
MCQ16: The Golgi will use a xylose link to polymerize onto proteins to form Answer: glycosaminoglycans; proteoglycan
MCQ17: Which of the following models states that the vesicles fuse to each other at the cis face of the Golgi apparatus and are essentially pushed along as new vesicles fuse together behind them? Answer: Cisternal maturation

MCQ18: Ribosomes classified as ribozymes because they: . Answer: are classified as ribozymes because the ribosomal RNA seems to be most important for the peptidyl transferase activity that links amino acids together
MCQ19: Paired cylindrical structures located near the nucleus, which play an important role in cell division are known as Answer: Centrioles
MCQ20: The following are the primary functions of the golgi apparatus except Answer: delivery of nucleotide sugars from the cytosol
MCQ21: Which of the following is not correct about the lipid layer of the cell membrane? Answer: Lipid bilayers have very high permeability for ions and most polar molecules.
MCQ22: Apical membrane is evidenced in the following polarized cells except Answer: basolateral cells
MCQ23: Integral membrane protein can be found in the following except Answer: pits
MCQ24: Which of the following molecule types would pass through the cell membrane more easily? Answer: Electrically neutral, small molecules
MCQ25: Cell membrane has both and portions Answer: protein and phospholipid
MCQ26: The following are basic types of tissue in the body except Answer: Head
MCQ27: Which of the following are not molecules and macromolecular assemblies exported from the nucleus? Answer: histones
MCQ28: Major systems in the human body include the following except Answer: bony
MCQ29: Levels of cellular organization together with the resultant tissues-organs-and-systems form the Answer: physiological processes
MCQ30: Prokaryotic cells have no while eukaryotic cells have Answer: nuclei, true nuclei
MCQ31: Which of the following is not a theory about the origin of small molecules? Answer: Small molecules are not divisible
MCQ32: Mitochondria generate the cell's energy via

Answer: oxidative phosphorylation

MCQ33: The microtubules of are cell is produced by _____.

Answer: Peroxisome

MCQ34: What is the function of the contractile vacuole?

Answer: For osmoregulation; to pump water out of the cell if there is too much water

MCQ35: Which of the following molecules would pass through the phospholipid bilayer

