Humanitarian ethics

3) The cell that normally has one nucleus isA- Chondrocytes because red blood cells do not contain nucleus and osteoclast and skeletal are multicellular cells which have more than one matrix. 8) A main function of proteinsC- Energy storage; The amino acid is taken away and transferred to an acceptor, then as an amino acid it is now a keto-acid that can be used to make glucose. They also take part in building muscle which in turn helps us burn fat. 10) Electron sharing is characteristic of what type of chemical boneC- Covalent Bond- They are formed when atoms share electrons , since electrons move fast they move effectively filling or emptying the outer shells of the atoms involved in the bond. 11) Transfer RNAA- Is attached to an amino acid- They carry the amino acids to the growing polypeptide. Each kind of TRNA carries at least one of the 20 amino acids.

13)The high concentration of potassium ions (k) inside cells is maintained byC- Active transport via the Na/Kpump- Active transport requires APT which works against concentration gradient, moves certain ions such as ??“ NA+, K+ and CA++. Na Kpumps brings Na out and K into the cell. 17) With regards to diffusionA) Act as channels for large molecules to cross the membraneThe rate of diffusion of a solute in water can be increased by heating the solution. 19) Organic Chemistry is the Chemistry ofA- Carbon Compounds- Carbon is one of the main elements as well as hydrogen, while nitrogen, oxygen, halogen, and sulfur are sparser. 21) Which organelle provides energy via cellular respirationB- Mitochondria- In the cytoplasm the mitochondria combine with oxygen to produce ATP and aerobic cellular respiration. It is able to grow and reproduce when needed. 22) If placed in a hypotonic solution, a Red Blood cell willB- Expand – A hypotonic solution is

one which has a lower concentration of solutes than the inside of the cell. So if a cell is placed in a hypotonic solution, water will pass from the solution into the cell by osmosis.

This will cause the cell to swell up and eventually burst which is called hemolysis23) The nuclear membrane reassembles during which phase of mitosisA- Telaphase ??“ Prophase in reverse which is new nuclear envelope forms around each group of chromatid and nucleon reforms, cell now has two nuclei27) In a plasma membrane, the middle portion isA- Hydrophobic ??“ The hydrophobic middle of the plasma membrane is a physical barrier to free diffusion. An example would be an ion and larger molecules. 31) The following are characteristics of Nucleic Acids EXCEPTB- RNA is found in the nucleus and the cytoplasm- RNA is transcribed in the nucleus, processed and then transported to the cytoplasm. The nucleotide sequence of RNA is encoded in genes in the DNA, and it is transcribed from the DNA by a complementary mechanism that is catalyzed by one of the RNA polymerase enzymes. 32) The nucleolusA- Assembles ribosome subunits- The nucleoulus is the nuclear subdomain that assembles ribosomal subunits in the eukaryotic cells. The nucleolus organizes regions of chromosomes and is the foundation for the nucleoulus. 33) The following statements about cellular respiration in the mitochondria are trueC- Lactic Acid is produced- The energy in glucose is used to produce ATP cells use ATP to supply their energy needs. Cellular respiration is therefore a process in which energy in glucose is transferred ATP in in respiration glucose is oxidized and thus releases energy, oxygen is reduced to from water.

The carbon atoms of sugar molecules are released as carbon dioxide. 34) A main function of nucleic acidsC- Energy Storage ??“ They store and transmit genetic material and use the information to direct the synthesis of new protein. 35) The microscopic field at low power measures 5 mm. If the lens is changed to the medium power lens the field will measureA- 5mm The field measure stays the same when switching low to high power36) The organelle that packages proteins for secretion outside the cell isC- Golgi Apparatus- The material is passed from level to level in the Golgi complex and is processed before it is contained in a section of membranes that gets pinched off and called a vesicle. 37) The following statements about Enzymes are true acceptD- They are consumed in the chemical reaction – Eenzymes??™ are the substances which affect the rate of reaction without taking part in the reaction but they do take part in the reaction but they are recovered as it is after the reaction so they are not consumed in reactions39) The largest organelle in a cellB- Mitochondria it is the largest in a non-nucleated cell. 40) What organelle will NOT be found in a cell in G0 phaseA- Centrosome- They are replaced by microtubules from a spindle on the surface of the nucleus and is then organized into a spindle by the chromosomes themselves after the nuclear membrane breaks down. 41) List 3 cellular organelles that have plasma membranesMitochondria, perisomes, and lysosomes.