**FINAL EXAM – Practice Quiz #1 KEY**

1. **A – Structure V is rough ER. It is studded with ribosomes. Ribosomes are protein factories that act as the site for Translation.**
2. **A – W represents smooth ER. Smooth ER is all about making steroid hormones and housing detoxification enzymes.**
3. **D – Mitochondria produce ATP. All those cells need ATP**
4. **A – This is an example of a Dehydration Synthesis reaction. H is pulled off of one molecule while OH is pulled off of the other.**
5. **B – This is glycerol. It will bond to fatty acids to form Triglycerides.**
6. **B – A nucleotide consists of a sugar, nitrogenous base and a phosphate group.**
7. **B – An amino acid binding to another amino acid to produce a dipeptide takes place at ribosomes.**
8. **B – A pH of 9 is more basic than a pH of 8.1.**
9. **B – Chloroplasts run photosynthesis which produce Glucose and Oxygen.**
10. **B – Glycerol is not made up out of glucose molecules**
11. **A – This is a sterol lipid, so it could be cholesterol, estrogen, progesterone, it can be converted into Testosterone.**
12. **C – "C to G with Three"**
13. **D – mRNA consists of codons**
14. **A – At time W DNA is being used to make mRNA which is Transcription.**
15. **C- Hydrochloric acid releases H+ ions to decrease pH from 6🡪5 🡪 4 🡪 3 🡪 2 etcC**
16. **D – The molecule is Cellulose, you can tell by looking at the bonding pattern. Right-side up, followed by upside down linkage.**
17. **C – Water acts as a "Universal Solvent", Lubricant in mucous and saliva etc, as a temperature regulator as it has a very high specific heat capacity so it can transport heat and drop it off at your skin when hot or keep it in your core when cold. But it is not a catalyst. Enzymes are organic catalysts, but they are proteins.**
18. **D – They will always have a higher ratio of Hydrogens to Carbons as they are fully saturated with as many Hydrogens as they can possibly carry.**
19. **B – Water molecules are polar (one end hogging more electrons, while the other end bears more of a positive vibe), but each H2O molecule has 10 protons and 10 electrons which means that each molecule is neutral (no overall charge)**

