**Bio EOC practice quiz 8 review**

1. **Which best explains why a bacterial cell is classified as a prokaryote?**
	1. **The presence of a nucleus**
	2. **The absence of a nucleus**
	3. **The presence of a cell wall**
	4. **The absence of a cell wall**
2. **In certain species of roses, white roses and red roses are incompletely dominant to each other. When a red rose and a white rose are crossed, a pink rose is produced. What is the probability of producing a white rose when a red rose is crossed with a pink rose?**
	1. **100%**
	2. **75%**
	3. **25%**
	4. **0%**
3. **Which best describes how enzymes function in the body?**
	1. **Enzymes are converted into products by the reactions they catalyze**
	2. **Enzymes lower the activation energy of reactions**
	3. **One enzyme can catalyze many different reactions**
	4. **An enzyme is used once and then destroyed by the cell**
4. **A student notices that the lettuce in a salad wilts soon after salt is added. Wilting most likely occurs because the lettuce cells**
	1. **Swell when exposed to salt**
	2. **Absorb the extra salt**
	3. **Release water in the presence of salt**
	4. **Lose oxygen when in contact with salt**
5. **In active transport, carrier proteins**
	1. **Move substance across the cell membrane without the use of ATP**
	2. **Move from low concentration to high concentration by diffusion**
	3. **Move small molecules through the cell membrane by osmosis**
	4. **Move substance from a low concentration to high concentration through the use of energy**
6. **Some microorganisms, such as yeast, produce energy in oxygen-free environments through the process of**
	1. **Mitosis**
	2. **Photosynthesis**
	3. **Aerobic respiration**
	4. **Anaerobic respiration**

****

1. **According to the pedigree, what is the mode of inheritance for this disorder?**
2. **Nonsex-linked dominant trait**
3. **Nonsex-linked recessive trait**
4. **Sex-linked trait carried on the Y chromosome**
5. **Sex-linked trait carried on the X chromosome**
6. **The main components of cell membranes are**
	1. **Lipids**
	2. **Proteins**
	3. **Nucleic acids**
	4. **Carbohydrates**

****

1. **In the human karyotype above, how many autosomes are present?**
	1. **22 c. 44**
	2. **23 d. 45**
2. **Generic drugs are copies that are the same as brand-name drugs in dosage, safety, strength, quality, and performance. Many people prefer generic drugs because they cost much less than their brand-name counterparts. Which best explains why pharmaceutical companies are able to sell generic drugs at a much lower cost than the brand-name drugs? (inquiry, technology, and engineering- connects to scientific method)**
	1. **Generic drugs do not have the initial costs of production and advertising**
	2. **Generic drugs do not have the approval of a government agency**
	3. **Generic drugs do not have to be tested on humans**
	4. **Generic drugs do not have to be packaged in childproof containers**

Answers

1. B
2. D
3. B
4. C
5. D
6. D
7. D
8. A
9. D
10. A