Assignment 9

As per our discussion, here is the assignment.

1. **Prove the correct statement**
   
   Statement 1: The amount of energy released when a neutral atom is ionized is the energy from the electron being ejected.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

2. **Prove the correct statement**
   
   Statement 1: The amount of energy released when a neutral atom is ionized is the energy from the electron being ejected.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

3. **Prove the correct statement**
   
   Statement 1: To know an object's photon diagrams, or wave function diagrams, an appropriate wavelength and exposure duration are necessary.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

4. **Prove the correct statement**
   
   Statement 1: Most of the heat transfer is conducted in heat that is effective insulating.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

5. **Prove the correct statement**
   
   Statement 2: Photosynthesis is the process of absorption of light energy that is stored in a molecule and is used for biological processes.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

6. **Prove the correct statement**
   
   Statement 1: Water boils at a higher temperature than that of the air.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

7. **Prove the correct statement**
   
   Statement 1: In a neutral atom, the number of electrons is always greater than the number of protons.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

8. **Prove the correct statement**
   
   Statement 1: The atom used in a laser is a stable atom or ion.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

9. **Prove the correct statement**
   
   Statement 1: The process which involves the absorption of light energy at the surface and then re-emission of the light energy through the surface is called reflection.

   a) Both statements are correct
   b) The first statement is incorrect
   c) Statement 1 is correct, statement 2 is wrong
   d) Statement 2 is correct
   e) Both statements are incorrect

Which of the following are the advantages of laser tissue cutting or ablation?

a) Light energy
b) Water absorption
b) Speedy cutting