**Mini-quiz #30 Chemistry 1114 section 2 (Fong) 17 Nov 2014 3 pts A**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Note: c= speed of light =3\*108 m/s h=6.63\*10-34 Joule\*seconds (J\*s)**

**1) A wave is found to have a frequency,f, of 1000/s and a wavelength of 5\*10-4 m. What the**

**speed of the wave, v in /s?**

**v = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m/s**

**2) A photon has an energy of 3.980\*10-17 J. What is the wavelength, λ, of the photon in meters(m)?**

**λ= \_\_\_\_\_\_\_\_\_\_\_\_\_\_ m**

**3) DeBroglie theorized:**

**a) H atom is a series of circular electron orbits**

**b) Plum Pudding model of atom**

**c) matter has wave-like properties: mv=h/λ**

**d) E=mc2**

**4)Bohr theorized:**

**a) H atom is a series of circular electron orbits**

**b) Plum Pudding model of atom**

**c) matter has wave-like properties: mv=h/λ**

**d) E=mc2**

**Mini-quiz #30 Chemistry 1114 section 2 (Fong) 17 Nov 2014 3 pts B**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Note: c= speed of light =3\*108 m/s h=6.63\*10-34 Joule\*seconds (J\*s)**

**1) A wave is found to have a frequency,f, of 10000/s and a wavelength of 2\*10-4 m. What the**

**speed of the wave, v in /s?**

**v = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m/s**

**2) A photon has an energy of 1.989\*10-17 J. What is the wavelength, λ, of the photon in meters(m)?**

**λ= \_\_\_\_\_\_\_\_\_\_\_\_\_\_ m**

**3)Bohr theorized:**

**a) H atom is a series of circular electron orbits**

**b) Plum Pudding model of atom**

**c) matter has wave-like properties: mv=h/λ**

**d) E=mc2**

**4) DeBroglie theorized:**

**a) H atom is a series of circular electron orbits**

**b) Plum Pudding model of atom**

**c) matter has wave-like properties: mv=h/λ**

**d) E=mc2**