**Mini-quiz #29 Chemistry 1114 section 2 (Fong) 14 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) Given that the frequency, f, of a wave of light is 6\*1014, what is the wavelength, λ, of the light in**

 **meters (m) ?**

 **λ=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ meters (m)**

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

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

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

**3) A photon has a wavelength of 3.978\*10-6 m. What is the energy, E, of the photon in Joules (J)?**

 **E= \_\_\_\_\_\_\_\_\_\_\_\_\_\_ J**

**Mini-quiz #29 Chemistry 1114 section 2 (Fong) 14 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) Given that the wavelengh of a wave of light is 6\*10-5 m, what is the frequency, f, of the light in**

 **s-1 ?**

 **f=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ s\_1**

**2) A wave is found to have a frequency, f, of 10,000/s and a wavelength of 2\*10-5 m. What the**

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

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

**3) A photon has a wavelength of 9.945\*10-6 m. What is the energy, E, of the photon in Joules (J)?**

 **E= \_\_\_\_\_\_\_\_\_\_\_\_\_\_ J**