

Quiz 4: Chap. 34

NAME: KEY

UM ID: _____

Clearly write the letter of the best choice in the space provided

1. C Visible light is made up of an oscillating
 - a. Electric field
 - b. Magnetic field
 - c. Electric and magnetic field
 - d. Light waves

2. B The difference between a radio wave and visible light is
 - a. The wavelength
 - b. The amplitude
 - c. The power
 - d. They are totally different kinds of waves

3. A The last 'piece of the puzzle' for the theory of electricity and magnetism and discovered by Maxwell was
 - a. displacement current
 - b. derivative current
 - c. derisive current
 - d. detergent current

4. B In a linearly polarized EM wave, the electric and magnetic field vectors at a particular instant in time are...
 - a. parallel to each other
 - b. perpendicular to each other
 - c. have no relationship for their orientation
 - d. must add to 0.

5. B The Poynting vector is oriented
 - a. parallel to both E and B
 - b. in the same direction the EM wave is propagating
 - c. parallel to E but perpendicular to B
 - d. parallel to B but perpendicular to E