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| **3.**  Which of the following would be a good candidate for magnetic storage?  A) a soft magnetic material B) copper C) aluminum D) electrically conductive plastic  **4.**  Radio waves travel through empty space  A) Faster than visible light B) Slower than visible light C) At the speed of visible light D) With only electric fields and not magnetic fields  **5.**  A tank circuit  A) switches energy stored between electric in the capacitor and magnetic in the resistor B) switches energy stored between electric in the inductor and magnetic in the capacitor C) switches energy stored between electric in the capacitor and magnetic in the inductor D) switches energy stored between electric in the capacitor and magnetic in the inductor  **6.**  The speed of light is roughly 300,000,000 m/s. A radio station has frequency 100 megahertz. What is the station’s wavelength?  A) 30,000,000,000 meters B) 3,000,000 meters C) 3.0 meters D) 0.33 meters  **7.**  If an electric field wave oscillates north and south, and the wave is traveling straight up, then what direction does the magnetic field wave oscillate?  A) East and west B) North and south C) Up and down D) It does not oscillate: this situation is impossible  **10.**  One way radio waves do not differ from visible light is that  A) There will never be a movie named “Visible Light”. B) Radio waves have less energy and travel slower than visible light C) Radio waves have less energy and travel faster than visible light D) Radio waves travel at the same speed as visible light    **11.** Electric fields come from  A) electric charge only B) electric charge or changing magnetic fields C) changing magnetic fields only D) electric charge or any magnetic field |