Extra Credit Quiz
Physics 105
25 November 2002

• 1. Uranium is created
   (a) in stars like our sun.
   (b) in the hot core of the Earth.
   (c) no, uranium was always there.
   ⇒ (d) in supernova explosions.
   (e) in the night kitchen.

• 2. Nuclear fusion is the process by which
   (a) a large nucleus breaks into 2 or more pieces.
   ⇒ (b) two nuclei come together to form a single nucleus.
   (c) two atoms form a molecule.
   (d) radioactive waste is cast in molten glass.
   (e) a hot new cuisine is created.

• 3. A fission chain reaction can be sustained by the isotope
   ⇒ (a) $^{235}\text{U}$ or $^{239}\text{Pu}$.
   (b) $^{238}\text{Pa}$ or $^{238}\text{Np}$.
   (c) $^{234}\text{Th}$ or $^{238}\text{U}$.
   (d) $^{239}\text{U}$ or $^{238}\text{Th}$.
   (e) $^{235}\text{U}$ or $^{239}\text{U}$.

• 4. The Manhattan Project occurred during
   (a) the War of 1812.
   (b) the Korean War.
   (c) the Vietnam War.
   (d) World War I.
   ⇒ (e) World War II.