

## BIOLOGY 40A PLACEMENT SAMPLE QUESTIONS

1. You need to know what 25% of 275 is. Which of the following equations will give you that information?
  - a.  $25 \times 275$
  - b.  $.25 \times 275$
  - c.  $25 \times 27.5$
  - d.  $275 / 25$
2. Magnesium has an atomic number of 12. How many electrons are in the outer shell of  $Mg^{++}$  ?
  - a. 2
  - b. 4
  - c. 8
  - d. 10
3. A molecule from which 2 hydrogen atoms have been removed has been
  - a. hydrolyzed
  - b. ionized
  - c. oxidized
  - d. reduced
4. One liter contains approximately the same volume as one:
  - a. cup
  - b. gallon
  - c. pint
  - d. quart
5. In the following oxidation-reduction reaction –  $2FeCl_2 + Cl_2 = 2FeCl_3$  - Iron (Fe) is
  - a. oxidized
  - b. reduced
6. In simple diffusion
  - a. the movement of the molecules is controlled by temperature and pressure
  - b. the direction of movement is random
  - c. the movement of molecules of one substance is independent of the movement of any other substance
  - d. the net movement is away from the region of highest concentration
  - e. all of the above

Answers:

- |      |      |
|------|------|
| 1. b | 4. c |
| 2. d | 5. a |
| 3. c | 6. e |