BIOB10 – Sample Questions for Midterm Exam

1. What is true about carbon and nitrogen from the environment?

    a. They are easily used by all organisms living in that environment.
    b. They can be ingested and absorbed by cells for direct use in biomolecules.
    c. They are not necessary for life because they are inorganic.
    d. They must be fixed into organic molecules to be utilized by cells.
    e. They can only be found near volcanic vents in the earth's crust.

2. Which structure is exclusively found in eukaryotic cells?

    a. Plasma membrane
    b. Cell wall
    c. Chromosome
    d. Ribosome
    e. Lysosome

3. Mitochondria and chloroplasts are thought to have evolved from free-living aerobic bacteria that were engulfed by an ancestral anaerobic cell and established a mutually beneficial (symbiotic) relationship with it. Which statement about these organelles is NOT true?

    a. They are similar in size to small bacteria.