Physiology 1	15
Spring 2015	

QUIZ #5

For the multiple choice questions, there is *one* and *only one* <u>best</u> answer. Use the back of the sheet if you need to complete answers.

- 1. Which one of these is true?
 - a. a centriole has two centrosomes
 - b. a centriole has one centrosome
 - c. centrosomes are located within the nucleus
 - d. centrosomes are microtubule-organizing centers for the cell
 - e. centrosomes help ribosomes in protein synthesis
- 2. Which of these cell structures is a location where ribosomal RNA (rRNA) is synthesized and ribosome proteins assembled to form the large and small ribosomal subunits?
 - a. plasma membrane
 - b. nucleolus
 - c. smooth endoplasmic reticulum
 - d. mitochondria
 - e. peroxisome
- 3. Which type of RNA actually encodes the polypeptide that will be synthesized during translation?
 - a. ribosomal RNA (rRNA)
 - b. messenger RNA (mRNA)
 - c. transfer RNA (tRNA)
 - d. chromosomal RNA (cRNA)
 - e. none of the above
- 4. Do EITHER (a) OR (b)
 - (a) The human genome is 30% adenine (A). What are the percentages for the other three bases C, G, and T
 - (b) Give one fact—any fact---EACH of (i) microfilaments, (ii) microtubules, and (iii) intermediate filaments?