Bio 100 – Chapter 5 Quiz

1-4) Please match the main components found in a cellular membrane to their definitions/examples.

Phospholipid bilayer \_\_\_\_\_\_\_ A. Peripheral membrane proteins

Transmembrane Proteins \_\_\_\_\_\_\_\_ B. Glycoproteins and glycolipids

Interior protein network \_\_\_\_\_\_\_\_ C. Integral membrane proteins

Cell surface markers \_\_\_\_\_\_\_\_ D. Flexible matrix, barrier to permeability

5) What part of the phospholipid is water loving?

 a. Glycerol

 b. 2 fatty acids

 c. phosphate group

 d. proteins

 e. none, it is hydrophobic molecule

6) Blood type is a good example of proteins acting as a \_\_\_\_\_\_\_.

 a. Transporter

 b. Enzyme

 c. Cell to cell adhesion

 d. Attachments to the cytoskeleton

 e. Cell surface identity markers

7) What allows small polar molecules and water to pass through the membrane?

 a. carrier proteins

 b. pores

 c. uniporters

 d. symporters

 e. antiporters

8) Compare and contrast passive and active transport. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9) A substance moving from a higher concentration to a lower concentration without the use of the energy is an example of? (In class we discussed how the smell of a fart moves from one end of the room to the other)

 a. Diffusion

 b. Osmosis

 c. Facilitated diffusion

 d. ion channels

 e. Solvent

10) What is osmosis?

 a. higher water concentration to lower water concentration

b. lower water concentration to higher water concentration

c. movement of air particles

d. Osmosis Jones

e. Water follows solutes

11) Briefly explain what would happen to a human blood cell if it were placed in pure water, using the terms hypotonic, hypertonic, or isotonic.

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12) What ions are moving in and out of the cell using the Na/K pump? How many of each and where are they going?

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13) Compare and contrast the terms endocytosis and exocytosis.

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14) What is the definition of phagocytosis?

 a. Cell takes in only fluid

 b. cell takes in particulate matter

 c. specific molecules are taken in after they bind to a receptor

 d. movement of substances out of the cell

 e. the cell self-destructing

15) What kind of state do plant cells like to be in?

 a. isotonic

 b. hypertonic

 c. hypotonic

 d. exocyte

 e. endocyte