CONCEPT: MEMBRANE TRANSPORT

32. For the process of solute transport, the constant K_t is:

a. analogous to K_a for ionization of a weak acid
b. analogous to K_M for an enzyme-catalyzed reaction
c. analogous to V_{max} for an enzyme reaction
d. the maximum rate of glucose transport
e. proportional to the number of molecules of glucose transporter per cell

33. In one catalytic cycle, the Na^+/K^+ ATPase transporter transports:

a. 2 Na+ out, 3 K+ in, and converts 1 ATP to ADP + Pi
b. 3 Na+ out, 2 K+ in, and converts 1 ATP to ADP + Pi
c. 3 Na+ in, 2 K+ out, and converts 1 ATP to ADP + Pi
d. 1 Na+ out, 1 K+ in, and converts 1 ATP to ADP + Pi
e. 2 Na+ out, 3 K+ in, and converts 1 ADP + Pi to ATP

34. The movement of water across membranes is facilitated by proteins called:

a. annexins
b. hydropermeases
c. selectins
d. aquaporins
e. transportins

35. Glucose transport from the small intestine lumen into blood, uses in order, a _____ transporter and a _____ transporter.

a. facilitated diffusion; ATPase
b. Na^+ glucose symport; facilitated diffusion
c. ATPase; ATPase
d. ABC transporter; facilitated diffusion
e. H^+ glucose symport; Na^+ symport

36. A process not involved in the fusion of two membranes or two regions of the same membrane is:

a. endocytosis
b. entry of enveloped viruses to cells
c. entry of glucose into cells
d. exocytosis
e. reproductive budding in yeasts