

NAME [REDACTED]

(Please Print CLEARLY)

Voluntary quiz 3. Monday, May 20, 2002
Instructions: Circle the one best answer.

1. Which of the following changes in the electrical properties of a pacemaker cell can slow down the rate at which the cell initiates impulses?

- (a) The threshold potential becomes less negative. ~~x~~
- (b) The rate of spontaneous depolarization decreases. ✓
- (c) The maximum diastolic potential becomes more negative. ~~x~~

- ~~a.~~
- ~~b.~~
- c.
- d.
- e.

- (a) or (b).
- (a) or (c).
- (b) or (c).
- (c) only.
- (a), or (b), or (c).

Relax



2. In an experimental animal, the heart rate can be accelerated by:

symp.

- (a) sectioning vagus nerves. ✓
- (b) stimulating vagus nerves.
- (c) sectioning sympathetic nerves.
- (d) stimulating sympathetic nerves. ✓

- a.
- b.
- c. ✓
- d.
- e.

- (a) only.
- (a) or (b).
- (a) or (d).
- (b) or (d).
- (c) only.

3. If two vessels are connected in series, their total resistance to blood flow is:

- a. ✓ the sum of their individual resistances.
- b. the average of their individual resistances.
- c. less than if they were connected in parallel.
- d. equal to the resistance of the smaller vessel.
- e. less than the resistance of either vessel alone.

4. A decrease in arterial pulse pressure can be expected with:

- a. aortic valve insufficiency.
- b. an increase in stroke volume. ~~x~~
- c. ✓ an increase in vascular distensibility.
- d. Both (a) and (b) are correct choices.
- e. All of the above (a, b, & c) are correct choices.

$$SV = ED - ES$$

$$CO = SV \times HR$$

$$\frac{\Delta PP}{DR}$$

$$C = K \cdot V$$

$$\frac{dV}{dP} = \frac{1}{K}$$

5. The effect of vasoconstriction on net transcapillary fluid movement could also be produced by:

- a. increased plasma oncotic pressure.
- b. decreased venous pressure.
- c. increased capillary permeability. ~~x~~
- d. ✓ Both (a) and (b) are correct choices.
- e. All of the above (a, b & c) are correct choices.

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Corrected