



### Question 1

With regard to the Wiggers Diagram (above): In isovolumetric contraction which of the following statements is correct:

- A)  $LVP < LAP$  and  $AP > LVP$
- B)  $LVP > LAP$  and  $AP > LVP$
- C)  $LVP < LAP$  and  $AP < LVP$
- D)  $LVP > LAP$  and  $AP < LVP$

LVP = Left Ventricular Pressure; LAP = Left Atrial Pressure  
AP = Aortic Pressure

### Question 2

With regard to the **pacemaker action potential** which of the following statements is correct:

- A) The phase 4 depolarization is due to the opening of sodium channels
- B) The plateau phase (2) is due to the opening of sodium channels.
- C) The rising phase (0) is due to the opening of fast sodium channels.
- D) The stable resting membrane potential is due to the increased permeability to potassium.

### Question 3

With regard to the ECG, which of the following statements describes the correct orientation of the leads:?

- A) Lead I is LA (+) and RA (-)
- B) Lead I is LA (-) and RA (+)
- C) Lead II is LA (-) and LL (+)
- D) Lead II is LA (+) and LL (+)
- E) Lead III is RA (-) and LL (+)
- F) Lead III is RA (+) and LL (+)

#### Question 4

Under normal conditions which of the following Starling forces relationships describes balanced filtration and reabsorption from capillaries?

- A) capillary hydrostatic pressure > capillary oncotic pressure
- B) capillary hydrostatic pressure < capillary oncotic pressure
- C) capillary hydrostatic pressure = capillary oncotic pressure

#### Question 5

In response to an acute rise in arterial pressure, which of the following occurs as part of the baroreflex?

- A) aortic arch baroreceptors are less stretched
- B) glossopharyngeal afferent nerve activity is decreased
- C) parasympathetic nerves to the heart are stimulated**
- D) stroke volume is increased
- E) sympathetic nerves to the blood vessels are stimulated.

Answer key

Question #	Correct Answer
1	B
2	A
3	A
4	C
5	C