

# Multiple Choice Questions

1. Select the correct answer.

(I) The rhythmic beating of cardiac muscle in the mammalian heart is initiated by the

- (A) atrio-ventricular node (B) parasympathetic nervous system  
(C) Purkinje tissue (D) Sino- artial node

(II) A red blood cell, entering the light side of the heart, passes by or through the following structure:

1. atrioventricular valve                      2. Semilunar valve                      3. Right atrium  
4. Right ventricle                              5. Sinoatrial node

In which order will the red blood cell passes the structures?

- (A) 2 → 3 → 1 → 4 → 5  
(B) 3 → 1 → 5 → 2 → 4  
(C) 3 → 5 → 1 → 2 → 4  
(D) 5 → 3 → 1 → 4 → 2

(III) What effect would be caused by cutting the sympathetic nerve fibres to the heart?

- (A) a decrease in the heartbeat rate  
(B) a decrease in the length of the diastole phase  
(C) a decrease in the leanth systole phase  
(D) a decrease in the stroke volume

(IV) What produces systolic blood pressure?

- (A) contraction of the right atrium  
(B) contraction of the right ventricle  
(C) contraction of the left atrium  
(D) contraction of the left ventricle

(V) Human heart is

- (A) myogenic (B) neurogenic  
(C) Cardiogenic (D) digenic

(VI) Typical lub-dub sounds heard in heart in heartbeat are due to

- (A) closing of bicuspid and tricuspid valves.  
(B) closing of semilunar valves.  
(C) blood under pressure though aorta.  
(D) closure of bicuspid – tricuspid valves followed by semilunar valves

(VII) Bicuspid valve connects

- (A) left atrium and left ventricle  
(B) left atrium and right ventricle

- (C) right atrium and left ventricle
- (D) right atrium and right ventricle

**(VIII Pacemaker is situated in heart)**

- (A) in the wall of right atrium
- (B) on interauricular septum
- (C) on interventricular septum
- (D) in the wall of left atrium

**(IX) During ventricular systole in a mammalian heart the**

- (A) ventricular pressure increases
- (B) atrioventricular valves open
- (C) semilunar valves close
- (D) aortic pressure decreases

**(X) Lymph returns \_\_\_\_\_ to blood**

- (A) oxygen
- (B) carbon dioxide
- (C) interstitial fluid
- (D) white blood cells

**(XI) Lymph most closely resembles which of the following?**

- (A) blood
- (B) urine
- (C) water
- (D) interstitial fluid

**(XII) Which of these factors has little effect on blood flow in arteries?**

- (A) total cross sectional area of vessels
- (B) blood pressure
- (C) skeletal muscle contraction
- (D) heartbeat

**(XIII) The Sino Atrial node (SA node)**

- (A) regulates the rhythm of contraction
- (B) is also called AV node
- (C) regulates the rate of contraction
- (D) is also called bundle of His

**ANSWERS**

- |        |         |          |        |       |
|--------|---------|----------|--------|-------|
| (i) D  | (ii) D  | (iii) A  | (iv) D | (v) A |
| (vi) D | (vii) A | (viii) A | (ix) A | (x) C |

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