



# FINAL CVS 020 EXAM



# PHARMACOLOGY

**DR. ALIA SHATANAWI**

1. Which drug causes gingival hyperplasia?
  - a) Verapamil
  - b) Diltiazem
  - c) Amlodipine
  - d) **Nifedipine**
2. Which drug treats baldness?
  - a) Diazoxide
  - b) **Minoxidil**
  - c) Hydralazine
3. The drugs which are useful in the treatment of heart failure and hypertension, can produce hyperkalemia but reduce salt and water retention are :
  - a) **ACEi**
  - b) Vasodilators
  - c) Angiotensin receptor blockers
  - d) Digitalis
  - e) Beta blockers
4. Many drugs can be used to treat heart failure, but what's SPECIAL about angiotensin converting enzyme inhibitors is:
  - a) Decrease morbidity and mortality
  - b) Effect bradykinin
  - c) Decrease water retention
  - d) **Reduce cardiac remodelling**
5. Must be very careful when indicating this drug to a diabetic patient:
  - a) **Propranolol**

6. Which of the following lipid lowering drugs are more effective at increasing HDL and lowering LDL levels?

a) Fenofibrate

b) Atorvastatin

c) simvastatin

7. Sympathomimetic drugs are used to treat the following except?

a) Cardiogenic shock

b) Anaphylactic shock

c) Cardiac arrest

d) Bronchial asthma

e) Paralytic ileus

8. All of the following are used to treat CHF, except?

a. verapamil

9. Drug that causes transient pressor effect?

a) Propranolol

b) Clonidine

Both are true, question got deleted

10. A 50 year old female came in with hypertension, if left untreated the following will decrease:

a. Baroreceptor reflex

b. Work done by heart

c. Diastolic distensibility

d. Myocardial consumption of oxygen

e. Left ventricle wall thickness

11. Incorrect match:

a. Cholestyramine – decreases triglyceride levels

b. Niacin- increase HDL

c. Ezetimibe- decrease LDL cholesterol

# CLINICAL

**DR. QAIS BALBISI**

**DR. AMJAD ABUHANI**

**DR. HANNA MKHARMEH**

1. True regarding valvular diseases:
  - a) Mitral stenosis associated with reduced tolerance to tachycardia
  - b) Mitral stenosis is treated by vasodilators
2. Pulmonary edema, heart failure, high JVP, good urination, warm:
  - a) Dobutamine
  - b) Furosemide
  - c) Furosemide with dobutamine
  - d) Furosemide with hydralazine
3. Indication for CABG:
  - a) Single artery disease without distal main left coronary
  - b) Double artery diseases without distal left coronary
  - c) Triple arteries disease without distal left coronary
  - d) Triple arteries diseases with distal main left coronary
4. Best conduit for coronary aortic bypass:
  - a) Radial artery
  - b) Left internal thoracic artery
5. Patient comes with a pressure 149/70 mmHg, what is his blood pressure according to ACC/AHA guidelines?
  - a) Stage 1
  - b) Stage 2
  - c) Stage 3
  - d) Stage 4
  - e) Unclassified hypertension

# PHYSIOLOGY

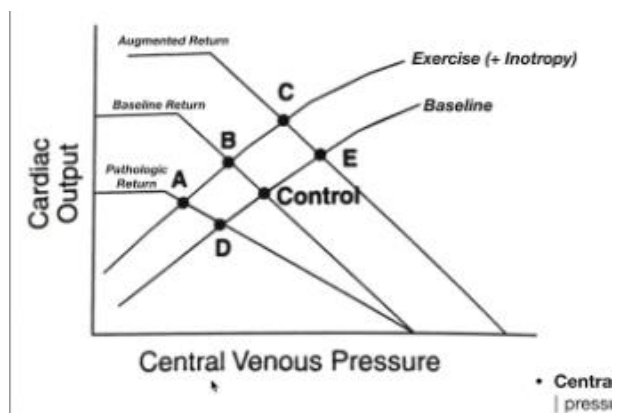
**DR. FAISAL MOHAMMED**

**CO & venous return**

1. Given pulmonary vein O<sub>2</sub> content =150 ml O<sub>2</sub> /min , pulmonary artery O<sub>2</sub> content=110 ml of O<sub>2</sub>/min , Lungs add 280 ml O<sub>2</sub>/ min, what is the cardiac output?

Answer :  $280/150-110 = 7 \text{ L/min}$

2. Which of the following increases Right Atrial Pressure?
  - a. **Increased venous return**
  - b. Increases contractility of heart
3. Which of the following leads to decreased venous return?
  - a. **Obstruction of venous valves(varicose veins)**
  - b. inspiration
4. The control point shows the working output for someone who is in the resting state, what would be the new working output when he is exercising and the sympathetic nervous system is now stimulated?
  - a) A
  - b) B
  - c) C**
  - d) D
  - e) E



## DR. FATIMA RYALAT

1. Which of the following has the highest velocity of blood?
  - a) **Aorta**
  - b) Capillaries
  - c) Small arteries
  - d) arterioles
2. A group of your colleagues are inventing an artificial blood vessel, they found out Reynold's number to be high, which of the following is true regarding Reynolds number?
  - a) Thrombosis would decrease reynold's number
  - b) **Anemia causes an increase in Reynold's number**
3. Which of the following is true regarding resistance ?
  - a) Amputation of a limb will not increase the overall resistance
  - b) **When the diameter of the artery is increased it will increase the conduction at a certain pressure.**
  - c) The total resistance is lower than the resistance in the arterioles alone
4. Which of the following is a function of Angiotensin 2?
  - a. Acts on hypothalamus to decrease thirst
  - b. Acts directly on the arterioles by binding to Gprotein coupled AT2 receptors to cause vasoconstriction
  - c. Acts directly on the kidney to increase excetion of water and Na+
  - d. **Acts on zona glomerulosa cells of the adrenal cortex to stimulate the synthesis and secretion of aldosterone.**
5. A patient with renal failure undergoes dialysis, and arteriovenous (A-V fistula) directly from the radial artery to the antecubital vein of the forearm is created to permit vascular access for dialysis. What occurred to the venous side?
  - a) Inward eutrophic remodelling

- b) Hypertrophic remodeling
  - c) Outward remodeling
  - d) **Outward hypertrophic remodeling**
6. Which of the following is a vasoconstrictor ?
- a) Bradykinin
  - b) Histamine
  - c) **Endothelin**
7. Regarding local control of tissue blood flow, which of the following is true?
- a. Reactive hyperemia is when a tissue becomes highly active, such as an exercising muscle so the rate of blood flow through the tissue increases
  - b. Active hyperemia is When the blood supply to a tissue is blocked for a few seconds to hours then is unblocked, blood flow through the tissue usually increases immediately
  - c. Angiogenesis is stimulated by increased metabolic requirements and tissue hypoxia
8. True regarding neural BP control:
- a. Information from the carotid sinus and aortic arch baroreceptors is carried by vagus nerve
  - b. **The carotid sinus baroreceptors are responsive to increases or decreases in arterial pressure**

# PATHOLOGY

## DR. NISREEN ABU SHAHIN

1. What could be found as a result of infective endocarditis?
  - a. Aschoff bodies
  - b. Bacteria on vegetation**
2. Which of the following is true ?
  - a. Kaposi sarcoma- borderline neoplasm
3. Which of the following is a malignant vascular tumor?
  - a. Strawberry hemangioma
  - b. Hepatic angiosarcoma**
  - c. Lymphangioma
  - d. Cavernous Hemangioma
4. Which of the following is not one of JONES criteria?
  - a. Arthritis
  - b. Elevated ESR**
  - c. Erythema marginatum
  - d. Synderham chorea
  - e. carditis
5. Which of the following is true regarding aortic bicuspid valve ?
  - a. Forms stenosis later on**
  - b. 50% of humans are diagnosed with it
  - c. It is acquired
6. Which of the following is true?
  - a. Kaposi sarcoma is a borderline vascular tumor



# EMBRYOLOGY

**DR. AHMAD SALMAN**

1. Which of the following is an incorrect match?
  - a. Eisenmenger complex- noncyanotic
  - b. atrial septal defect- cyanotic
  - c. VSD- no cyanosis
  - d. Patent ductus arteriosus- cyanosis
2. The congenital anomaly that allows blood to pass from pulmonary vein to the aorta?
  - a. Patent ductus arteriosus
3. The cranial part of the valvular fold on the sinoatrial orifice forms?
  - a. Eustachian valve
  - b. Thebesian valve
  - c. Crista terminalis
4. Ductus arteriosus is from?
  - a. Left distal 6<sup>th</sup> arch
5. What forms the muscular part of interventricular septum ?
  - a. Ventricular septum
6. Which of the following is true?
  - a. Ostium secundum formed due to apoptosis of septum primum
7. Which of the following forms the renal part of IVC?
  - a. Subcardinal vein
  - b. Supracardinal vein
  - c. Sacrocardinal vein

# MICROBIOLOGY

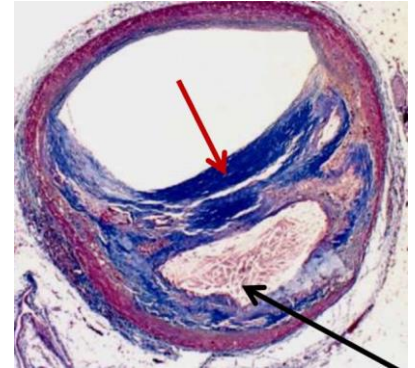
## DR. NADER AL ARAIDEH

1. Most common cause of myocarditis?
  - a. **Coxsackie B virus**
  - b. Mumps virus
  - c. Rubella virus
2. Which of the following is true regarding Dengue fever?
  - a. **Infection with one serotype gives you immunity for the same serotype only.**
  - b. It has five serotypes
  - c. It has negative ssRNA
3. Which is wrong about filoviridae?
  - a. **It primarily infects liver cells, resulting in fever, jaundice, and hemorrhage**
  - b. Human to human transmission via body fluids and respiratory droplets
  - c. The natural animal reservoir has never been determined
  - d. Enveloped, nonsegmented, single stranded, RNA viruses
  - e. Most pathogenic of the hemorrhagic fever viruses
4. Catalase negative, coagulase negative, alpha hemolysis and causes subacute endocarditis :
  - a. **Strep viridans**
5. Rheumatic fever is a complication of which of the following bacteria?
  - a. Group B strep
  - b. **Group A strep**

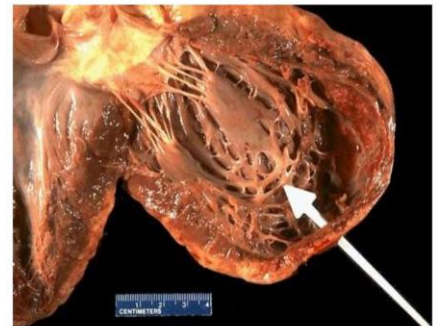
# LABS

## PATHOLOGY

1. Identify black arrow
  - a. Cholesterol crystals



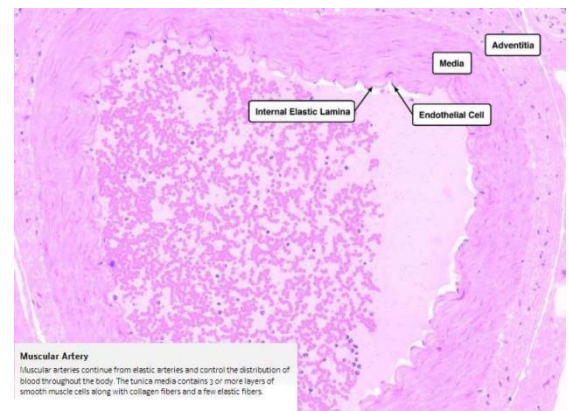
2. A consequence of this condition?
  - a. Cardiac tamponade



## HISTOLOGY

1. what type of vessel could this be ?

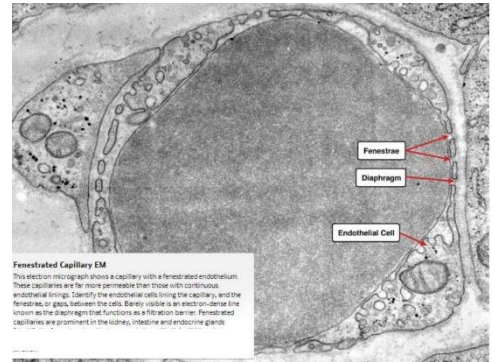
- a. radial artery
- b. aorta
- c. inferior vena cava
- d. iliac artery



## 2. Identify

**a. Fenestrated capillary**

**b. Continuous capillary**



## PHYSIOLOGY

1. Which of the following is incorrect?

a. V5--- left 5<sup>th</sup> intercostal space ant axillary

**b. V1- right 2<sup>nd</sup> intercostal space**

c. V4- 5<sup>th</sup> intercostal space mid clavicle

d. Green lead- left leg

e. Yellow lead- left arm

2. What could this ECG mean?

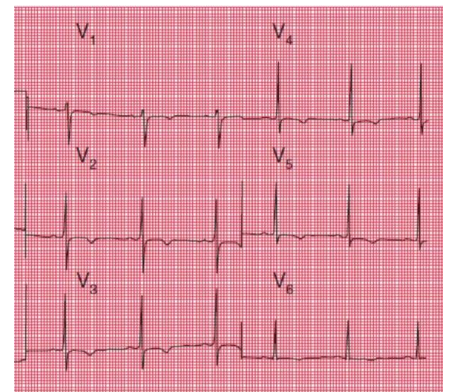
**a. Inferior wall ischemia**

b. Right atrial enlargement

c. Left atrial enlargement

d. Ventricular fibrillation

e. Ventricular hypertrophy

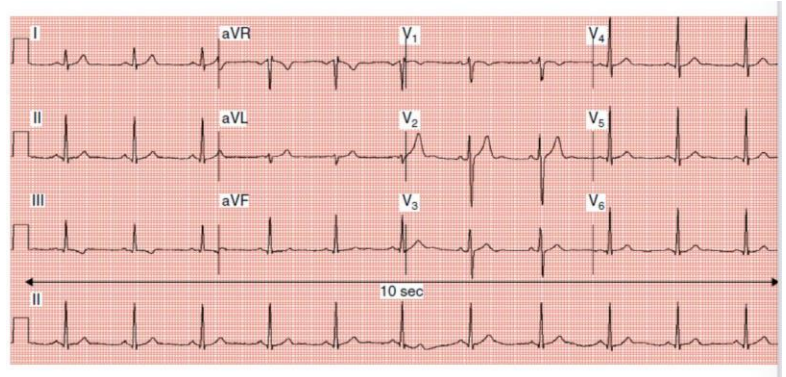


3. Which of the following is true about this ECG?



**Atrial fibrillation**

4. What could this ECG mean?
- a. Hyperacute T waves
  - b. Normal QRS progression
  - c. P pulmonale



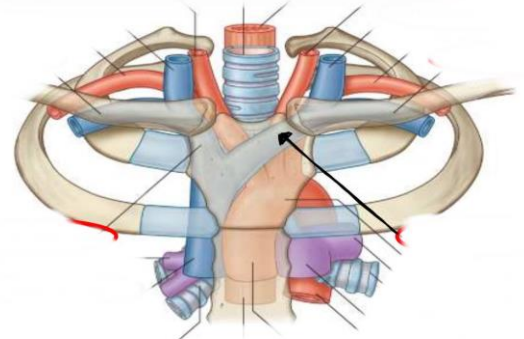
5. What could this ECG mean?
- a. Left axis deviation
  - b. Right axis deviation



# ANATOMY

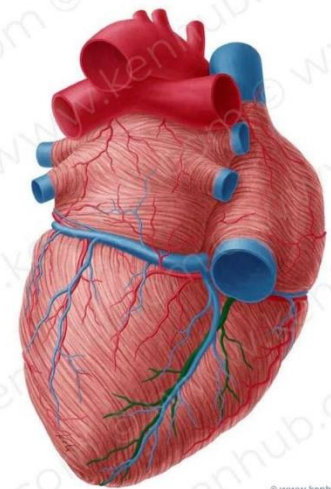
1. At what point is this structure formed?

- a. **Left sternoclavicular joint**
- b. 1<sup>st</sup> costal cartilage
- c. Right sternoclavicular joint



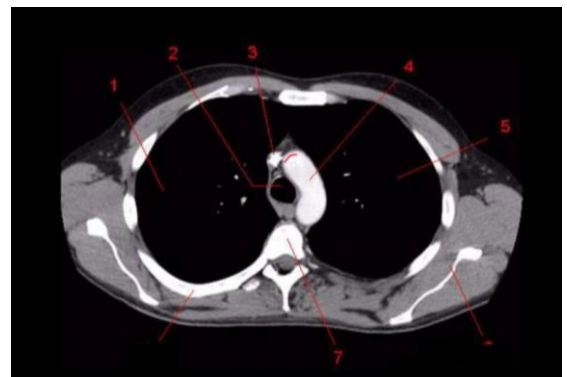
2. What does this structure supply?

- a. Right atrium
- b. Left atrium
- c. **Posterior interventricular septum**

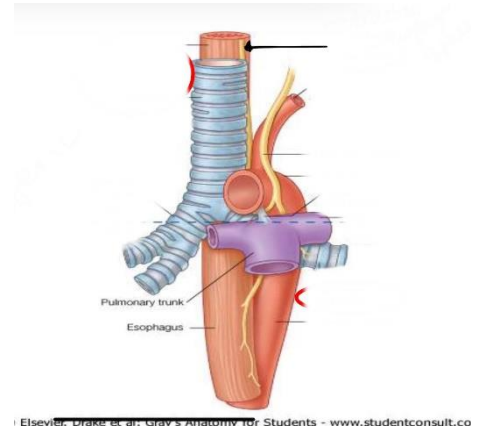


3. Posterior and left to structure 4 is?

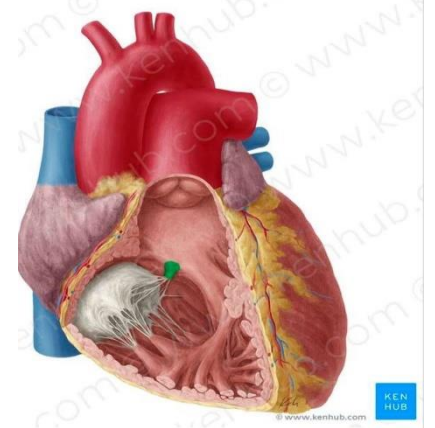
- a. Trachea
- b. **Esophagus**



4. Identify
- a. Left vagus
  - b. Left recurrent laryngeal**



5. This structure is attached to ?
- a. Septal and posterior cusps
  - b. Anterior and posterior cusps
  - c. Septal and anterior cusps**



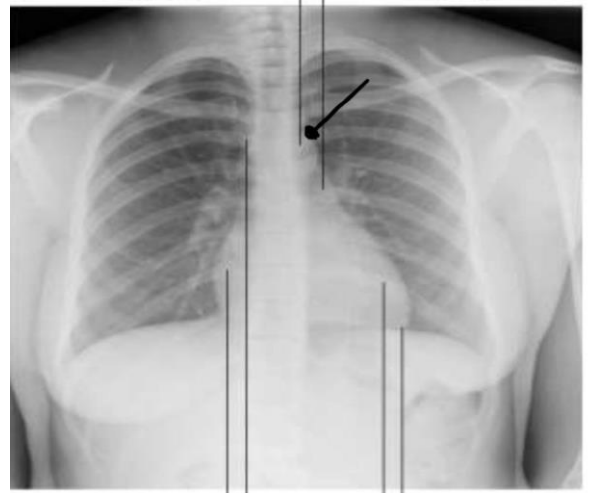
6. The heart is shifted due to hypertrophy of?
- a. Left ventricle
  - b. Right ventricle**



7. Identify:

a. **Aorta**

b. Pulmonary trunk

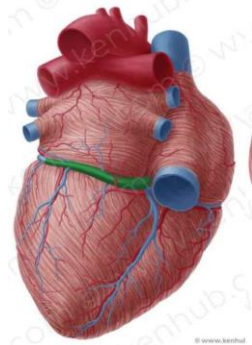


8. The embryonic origin of this structure is?

a. Common cardinal vein

b. **Left horn**

c. Right horn



9. The embryonic origin of this structure is?

a. **Left proximal 6<sup>th</sup> arch**

