

Physiology -final

Nabd 2019



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1) Regarding the following matched pairs?

- A) superior collicull- Tectospinal tract**
- B) Reticulospinal tract- Respiratory information**
- C) Rubrospinal tracts- Extra pyramidal system**
- D) Inferior collicul- Auditory information**
- E) Corticobulbar tract- Subconscious tract**

Answer: E

2) Which of the following is INCORRECT Concerning cardiac muscle?

- A) cardiac cells are smaller than skeletal muscle cells.**
- B) Electrical communication between cardiac cells is maintained via gapP junctions which are specialized portions of the intercalated discs**
- C) Mechanical attachment of cardiac cells is at the intercalated disC)**
- D) The spread of excitation through the heart muscle is 3-dimensional.**
- E) Transverse tubules are larger in skeletal muscle than in heart muscle allowing more diffusion of Ca^{2+} into the interior of the cell.**

Answer: E

3) The main higher autonomic center is?

- A) Midbrain.**
- B) Brain stem.**
- C) Hypothalamus.**
- D) Cerebral cortex**
- E) Medulla oblongatA**

Answer: D

4)Damage of the pyramidal system will cause?

- A) Paralysis**
- B) Loss of sensation**
- C) Loss of all reflex**
- D) Loss of fine delicate movement**
- E)Loss of vision**

Answer: D

5)Which of the following regulates the fine control of Arterial blood pressure?

- A) Medulla oblongata**
- B) Midbrain**
- C) Hypothalamus.**
- D) Pons.**
- E)Thalamus**

Answer: A

6)Patient with diabetes insipidus may have?

- A) Edema of the lower limbs**
- B) Increased blood Osmolarity**
- C) Excretion of hypertonic urine**
- D) Increased Anti-diuretic hormone**
- E) Reduced urinary volume excretion**

Answer: B

7) Sounds of the heart?

- A) Mainly produced by closure of valves.**
- B) Opening of the valves produces inaudible sounds.**
- C) Heard by phonocardiograph**
- D) Recorded by stethoscope**
- E) We have only two.**

Answer: A

8) All the following are the functions of the supra-renal medulla secretion EXCEPT?

- A) It has prolonged sympathetic like effect**
- B) It is stimulated in emergency**
- C) Its stimulation causes diffuse sympathetic like effect**
- D) Its effect like that of the sacral out flow nerves**
- E) It is supplied by nerve that secrete acetylcholine**

Answer: D

9) Which of the following are NOT CONSISTENT with UMN?

- A) Extrapyramidal tract**
- B) Pyramidal tract**
- C) Subconscious regulation**
- D) Motor neurons of the spinal cord**
- E) Reticular information system**

Answer: E

10) Regarding the LMN.

- A) Innervate the skeletal muscle fiber**
- B) Cranial nerve nuclei**
- C) Extrafusal gamma motor neuron**
- D) Alpha motor neuron**
- E) Muscle spindle**

Answer: B

11) Sympathetic stimulation may cause all the following EXCEPT?

- A) Constriction of pupil**
- B) Increased blood glucose**
- C) Increased heart rate**
- D) Increased respiratory rate**
- E) Increased dilatation of blood vessels**

Answer: A

12) Which of the following is NOT true of the parasympathetic control of the heart?

- A) It affects muscarinic receptors**
- B) It decreases heart rate via the SA node**
- C) It decreases conduction velocity via the AV node**
- D) It can be blocked by beta blockers, eg. propranolol.**
- E) It does not supply ventricles**

Answer: D

13) The early filling of ventricles occurs in?

- A) Reduced filling phase**
- B) Maximum filling phase**
- C) Atria systole**
- D) Both reduced and max. filing phases.**
- E)Both max. filling and atrial contraction phases.**

Answer: D

14) The component of cardiac tissue having the highest propagation velocity is?

- A)Atrial muscle**
- B)Ventricular muscle**
- C)Purkinjefibres.**
- D)AVN.**
- E) Bundle of Hiss.**

Answer: C

15) As regards phases of cardiac cycle?

- A) The shortest phase of cardiac cycle is maximum ejection phase**
- B) Ventricular diastole is shorter than Ventricular systole**
- C) Increase H.R will shorten the duration of cardiac cycle**
- D) Cyclic pressure changes in the left side of the heart are of the same magnitude in right side**
- E) 4th heart sound occurs in maximum ejection phase**

Answer: C

16) During exercise, cardiac output is augmented by?

- A) Dilation of venous vessels**
- B) Sympathetic stimulation to the resistance vessels.**
- C) Decreased end-diastolic volume**
- D) Decreased mean systemic arterial pressure**
- E) Decreased stroke volume**

Answer: B

17) Pyramidal tracts are characterized by all the following EXCEPT?

- A) It may be started by discharge at the motor cortex**
- B) It may need input from the sensory area**
- C) Pyramidal tracts are decussating (Crossing) at the medulla oblongata**
- D) Some fibers of pyramidal tract crossing to the opposite side before termination**
- E) It is responsible for regulation of muscle tones and posture of the body**

Answer: E

18) Which of the following is the property of a cardiac cell to initiate an action potential on its own without external stimulation?

- A) Selectivity.**
- B) Spontaneity.**
- C) Automaticity.**
- D) Conductance**
- E) Excitability**

Answer: C

19) Total peripheral resistance is conserved mainly by?.

- A) venules**
- B) small arteries**
- C) capillaries**
- D) arterioles**
- E) Veins.**

Answer: D

20) Cardiac reserve in heart failure equals?

- A) 300-400 %**
- B) 500-700%**
- C) 0%**
- D) 100%.**
- E) 200%.**

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Answer: C

21) All the following are local responses EXCEPT?

- A) Receptor potential**
- B) Miniature end plate potential**
- C) Cat-electrotonic potential**
- D) Generator potential**
- E) An-electrotonic potential**

Answer: D

22) systolic murmurs occurs in the following conditions except?

- A) Aortic stenosis.
- B) Aortic incompetence
- C) Pulmonary stenosis
- D) Mitral incompetence
- E) Tricuspid incompetence

Answer: B

23) Beta 2 adrenergic receptors are present in all the following sites EXCEPT?

- A) Heart.
- B) Uterus.
- C) Bladder
- D) Bronchus
- E) Stomach.

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Answer: A

24) One of the following receptors is responding to chemical stimulus?.

- A) Olfactory cell
- B) Muscle spindle
- C) Pacinian corpuscles
- D) Photoreceptors
- E) Hearing receptors

Answer: A

25) A-V valves?

- A) Opened during systole**
- B) Closed during diastole**
- C) Attached to papillary muscle**
- D) Their closure causes the 2nd heart sound**
- E) Their closure causes the 4th heart sound**

Answer: C

26) Which of the following is a TRUE statement concerning pacemaker potential?

- A) Specialized cells depolarize during phase 4, but ventricular and atrial muscle cells do not.**
- B) Specialized cells depolarize during phase 3, but ventricular and atrial muscle cells do not**
- C) Specialized cells repolarize during phase 4, but ventricular and atrial muscle cells do not.**
- D) Specialized cells repolarize during phase 3, but ventricular and atrial muscle cells do not.**
- E) Need a threshold stimulus to be evoked**

Answer: A

27) Acetylcholine is released from all the following EXCEPT?

- A) Autonomic nerve to the uterus.**
- B) Autonomic nerve to sweat glands**
- C) Autonomic nerve to the esophagus.**
- D) Pre-ganglionic nerves of peripheral autonomic ganglia**
- E) Pre-ganglionic nerves of sympathetic autonomic ganglia**

Answer: A

28) Peripheral edema is seen in?.

- A) Heart failure**
- B) Normal young person.**
- C) Hypovolemic shock.**
- D) Young athletes.**
- E) Sleeping**

Answer: A

29) Regarding pyramidal tracts?

- A) Corticospinal tract is involved in voluntary movement**
- B) Axons of Betz cells is the largest pyramidal cells**
- C) The myelination of pyramidal fibers is Incomplete at birth**
- D) The myelination of pyramidal tract complete by 12 years of age**
- E) Corticobulbar tract is involved in facial expression**

Answer: D

30) The following statement is true about the dermatome?:

- A) Area of skin related to one single receptor**
- B) Area of skin related to one single nerve fiber**
- C) Area of skin related to certain area of the cerebral cortex**
- D) Area of skin related to one single spinal root**
- E) Area of skin related to many spinal segments**

Answer: D

31) Maximum coronary blood flow occurs in?

- A) Isometric contraction phase**
- B) Isometric relaxation phase**
- C) Maximum filling phase**
- D) Reduced filling phase**
- E) protodiastolic phase**

Answer: B

32) Mary's law denotes relationship between heart?.

- A) Contraction and conductivity**
- B) Rate and contraction**
- C) Contraction and volume**
- D) Rate and blood pressure**
- E) Rate and volume**

Answer: D

33) Which of the following matched pairs are NOT CONSISTENT?

- A) Motor somatic system- Skeletal muscle**
- B) Motor Autonomic system- Cardiac muscle**
- C) Motor commands - Response to sensory information**
- D) Motor tracts- UMN and LMN**
- E) The extrapyramidal system- Conscious regulation**

Answer: E

34) The following nerve contains parasympathetic fibers?

- A) Oculo-motor nerve**
- B) Thoracic spinal roots**
- C) Olfactory nerve**
- D) Vcranial nerve**
- E) Lumbar spinal nerve**

Answer: A

35) The following property is characteristic for Baroreceptors?

- A) It is tonic receptor**
- B) Fast adaptable receptor**
- C) Stimulated by chemical stimulus**
- D) It is one of the superficial receptors**
- E) It play a role in equilibrium**

Answer: A

36) Cardiac index is the ratio of?

- A) CO and body weight**
- B) CO and body surface area**
- C) CO and work of heart**
- D) SV and surface area**
- E) SV and heart rate.**

Answer: B

37) All the following are increased on increasing the stimulus intensity EXCEPT?

- A) Number of receptors excited**
- B) Number of stimulated nerve fibers**
- C) Type of the stimulus that is used**
- D) Number of sensory unite excited**
- E) Rate of stimulus discharge (frequency)**

Answer: C

38) All the following are characteristic of the cardiac muscle EXCEPT?

- A) The T-tubule is present at the Z-Z line**
- B) Their sarcomer is shorter than that of the skeletal muscle**
- C) Their tone is higher than that of the skeletal muscle**
- D) Their action potential is longer than that of skeletal muscle**
- E) Their excitation contraction coupling need calmodulin**

Answer: E

39) Which of the following inhibits VMC (Vaso motor center)?

- A) hypercapnea**
- B) hypoxia**
- C) left ventricular baroreceptors**
- D) peripheral chemo receptors**
- E) Acidosis.**

Answer: C

40) First heart sound is exaggerated in?

- A) Mitral regurge.
- B) Mitral stenosis.
- C) Bradycardia
- D) Hypertension.
- E) Hypotension.

Answer: B

أَعْلَمُ أَنْ مَا تَمَرُّ بِهِ مَوْلِمٌ.. يَسْرِقُ مِنْكَ النَّوْمَ، وَيَصِيبُكَ بِالْأَرْقِ
وَالضَّغْطِ، وَقَدْ يُبْكِيكَ.. لَكِنَّ صَبْرَكَ وَيَقِينِكَ بِفَرَجِ اللَّهِ وَعَدْلِهِ سَيَجْلِبُ لَكَ
رِزْقًا عَظِيمًا.. هَذَا التَّعَبُ سَيَنْتَهِي، وَالْمُرُّ مِنَ الْحَالِ حَتْمًا سَيَمُرُّ،
وَسَيُزْهِرُ صَبْرُكَ نَصْرًا.. فَإِنَّ مَعَ الْعَسْرِ يَسْرًا، إِنَّ مَعَ الْعَسْرِ يَسْرًا..
وَاللَّهُ مَعَكَ.. أَقْرَبُ إِلَيْكَ مِنْ نَفْسِكَ.. فَلَا تَبْتَسِسْ.. أَنْتَ بِرَبِّكَ أَقْوَى. [?]
- جِهَادٌ حَجَّابٌ.

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