

Physiology-med

دفعه رَوَح

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الطبيب والجراحة  
لجنة

1) putting RBC in Distilled water causes the RBC to, select one :

- a) Inflat with pope
- b) Double in size but stay the same
- c) shrink
- d) Nothing above

**Answer: A**

2) rigor is caused by, select one:

- a) Depletion of ATP
- b) Decrease of ADP
- c) Decrease Ca intracellular

**Answer: A**

3) which structure covers the active site of actin?

- a) troponin I
- b) troponin C
- c) Tropomyosin

**Answer: C**

4) heavy water is used to measure:

- a) ECF
- b) plasma
- c) ICF
- d) total body water
- e) interstitial fluid

**Answer: D**

**5)obligatory loss of water :**

- a)0.5L
- b) 0.7L
- c)1L
- d) 2L

**Answer: C**

**6) nerve excitability is increased by, select one :**

- a) cooling
- b) decrease of  $Ca^{++}$  extracellularly
- c) anesthetic drugs
- d) blockage of Na channels
- e) acidity

**Answer: B**

**7) frequent diarrhea leads to:**

- a) metabolic acidosis:
- b) metabolic alkalosis
- c) respiratory acidosis
- d) respiratory alkalosis

**Answer: A**

**8) Which of the following is true related to the local response , select one:**

- a- can't be graded
- b- no ARP

**Answer: B**

**9) The chronaxia in the muscle:**

- a- variable**
- b- long**
- c- short**

**Answer: B**

**10) The osmotic pressure is, select one:**

- a- the transfer of water from high con of solut to low con of solut**
- b- the transfer of water from low con of solut to high con of solut**
- c- the transfer of solut from high con of solut to low con**
- d- Transfer of solut from low con of solut to high con of solut**

**Answer: B**

**11) When you put red blood cell in hypotonic solution:**

- a- shrink**
- b- swell**
- d- shrink then swell**
- e- swell then shrink**

**Answer: B**

**12) Conduction of action potential in myelinated nerve cells is through:**

- a- node of Ranvier**
- b- dendrites**

**Answer: A**

**13) The isotonic make**

- a- the work is done**
- b- the muscle is long**
- c- the stretch is happen**

**Answer: A**

14) Which one the following sequential events is correct regarding the neuromuscular junction:

- a- Ca released in the terminal nerve- the Ach combine with receptor - the Na enter the end plate
- b- the Ach combine with receptor - the end plate potential - the Na release in end plate
- c- neuron action potential- release of Ach- end plate potential
- d- neuron action potential- release of Na in end plate- combine of Ach with receptor

**Answer: A**

15) which of the following matched pairs is not true, select one:

- a. Sodium Potassium Pump-only Gastrointestinal
- b. Calcium Pump membrane of sarcoplasmic reticulum
- c. Potassium hydrogen Pump primary active
- d. Sodium hydrogen Pump secondary active transport

**Answer: A**

16) Which if the following is not related to the function of the protein:

- a- buffer
- b- channel
- c- carrier
- d- recognition c- enzyme

**Answer: A**

17) Which of the following is not constitute in facilitated diffusion :

- a\_ ions
- b\_ CO<sub>2</sub>/O<sub>2</sub>
- C\_ carrier mediated
- d\_ small water soluble

**Answer: A**

18)  $pH = 7.2$  ,  $pCO_2 = 53$  ,  $HCO_3 = 40$  :

- a. respiratory acidosis with renal (metabolic) compensation
- b. metabolic acidosis with respiratory compensation
- c. respiratory alkalosis with metabolic compensation

**Answer: A**

19) Which of the following matched pairs are NOT describing the Fluid Mosaic Model? Select one:

- a. Cholesterol- Buffer
- b. Increasing unsaturated fatty acids - decreased Fluidity
- c. Hydrophilic- Phosphates head
- d. Hydrophobic - Fatty acid tails
- e. Two phospholipids bilayers with fatty acid tail

**Answer: B**

20) All of the following concenter passive except:

- A) Osmosis
- B) Glucose
- C) Bulk transport
- D) Facilitated Filtratio

**Answer: C**

21) Troponin C binds with :

- a)  $4++Ca$
- b)  $2++Ca$
- c) Na
- d) tropomyosin

**Answer: B**

**22) Producing Action potential in skeletal muscle because:**

- a) decrease  $Ca^{++}$  intracellular
- b) blocked  $Na^+$  chanal
- c) decrease temperature
- d) decrease  $k^+$  intracellular e) decrease Ach

**Answer: D**

**23) The fatigue in skeletal muscle cased by :**

- A) decrease in blood supply
- B) exhaustion of Ach
- C) lactic acid

**Answer: A**

**24) Fatigue in motor end plate:**

- A) decrease in blood supply
- B) exhaustion of Ach
- C) lactic acid

**Answer: B**

**25)The stair-case phenomenon :**

- A)decreased temperature
- B) raise ph in ICF
- C)low  $k$  intracellular
- D) low  $Na$  intracellular

**Answer: C**

**26) All of these are true EXEPT:**

- a.Glucose,glactose ~2nd active with  $Na$
- b.Amino acid ~2nd active with  $Na$
- c.Di,tri peptide ~2nd active with  $H^+$
- d.Fatty acid ~facilitated diffusion

**Answer: D**

**27) Which of the following matched pairs are INCORRECT ? Select one :**

- a . Pulmonary ventilation - Continuous replacement of gases in alveoli**
- b . External respiration - Gas exchange between blood and air at alveoli**
- c . Internal respiration - Gas exchange in capillaries between blood and tissue cells**
- d . Cellular respiration - O<sub>2</sub> is used by the cells**
- e . Conducting zone - Site of gas exchange**

**Answer: E**

**28) Which of the following is NOT consistent with neuromuscular junction ? Select one :**

- a . Pre - synaptic membrane**
- b . Synaptic cleft**
- c . Post- synaptic membrane**
- d . Synaptic Knob**
- e . Sensory neuron**

**Answer: E**

**29) Regarding H<sup>+</sup> elimination in renal tubules which of the following is NOT true ? Select one :**

- a . Early proximal tubules -Accompanied with HCO<sub>3</sub>**
- b . Distal tubules and collecting duct - Accompanied by urine acidification**
- c . Ammonia secretion- Depends on activity of glutaminase which pH sensitive**
- d . H<sup>+</sup> secretion in the early proximal tubules - Can eliminate significant amount of H<sup>+</sup>**
- e . Titratable acids in the renal tubular lumen - Secretion of Phosphate and ammonia with H**

**Answer: D**

**30) One of the following is related to Positive Feedback Mechanism ?**

**Select one :**

- a . Osmoregulation**
- b . Blood pH**
- c . Generation of action potential**
- d . Learning**
- e . Blood pressure**

**Answer: C**

**31) All the followings describe homeostasis EXCEPT ? Select one :**

- a . Allow baseline to be regained**
- b . Negative Feedback mechanism**
- c . Positive Feedback mechanism**
- d . Feedforward mechanism**
- e . Static equilibrium**

**Answer: E**

**32) Which of the following is true regarding simple diffusion across the cell membrane ? Select one :**

- a . The solutes would move against the concentration gradient "**
- b . The osmolarity and the volume would be the same after the equilibrium**
- c . Cellular**
- d . The osmolarity would be the same but the volume would be changed after the equilibrium**
- e . Only water would move across the cell membrane energy**

**Answer: B**

**33) Which of the following matched pairs are NOT true regarding function of renal system ? Select one:**

- a . Glomerulus filtration- From blood to the renal tubular lumen**
- b . Reabsorption - From Lumen of renal tubules to the peritubular capillaries**
- c . Secretion - Occurs in Loop of Henle**
- d . Juxtamedullary nephron - Glomeruli located near the medulla Cortical nephrons - Short loop of Henle**

**Answer: C**

**34) Which of the following is NOT consistent with surfactant? Select one:**

- a. Type II cuboidal epithelial cells are scattered in alveolar walls**
- b. Decreases alveolar surface tension**
- c. Detergent-like substance**
- d. Premature babies - problem breathing is largely because lack surfactant**
- e. The pressure of alveolar with surfactant 4.5 time grater**

**Answer: A**

**35) Cross bridge is Acctin**

**Myosin Troponin**

**35) All of these are true EXEPT:**

- a. Glucose, glactose ~2nd active with Na**
- b. Amino acid ~2nd active with Na**
- c. Di, tri peptide ~2nd active with H+**
- d. Fatty acid ~facilitated diffusion Tropomycin**

**Answer: D**

36) *The stair-case phenomenon :*

A) *decreased temperature*

B) *raise ph in ICF*

C) *low k intracellular*

D) *low Na intracellular*

**Answer: C**

37) *contractile skeletal muscle is ?*

a) *produce tension in isotonic contraction more than isometric contraction*

b) *produce work in isotonic contraction more than isometric contraction*

c) *not important for action potential*

**Answer: B**

38) *intracellular fluid in total body:*

a\_60%

b\_40%

**Answer: B**

39) *Which of the following gives immediate protein buffer effect:*

**Hemoglobin**

40) *In relative refractory period :*

**Strong stimulus is needed**

41) *Myasthenia gravis*

**Cause by curare like substance**

42) Regarding H<sup>+</sup> excretion through kidneys all true except:

**Early proximal tubule secretes a large amount of H<sup>+</sup>**

43) Which of the following is not true regarding neuromuscular junction:

**Have Sensory nerve**

44) Which of the following is NOT true regarding net:

**filtration Net filtration pressure is 10**

قال الإمام ابن القيم رحمه الله في مدارج السالكين:

"وَمَنْ لَمْ تَكُنْ هَمَّتْهُ التَّقَدُّمُ فَهُوَ فِي تَأْخُرٍ وَلَا يَشْعُرُ، فَإِنَّهُ لَا وَقُوفَ فِي الطَّبِيعَةِ، وَلَا فِي السَّيْرِ، بَلْ إِمَّا إِلَى قُدَّامٍ، وَإِمَّا إِلَى وِرَاءٍ، فَالسَّالِكُ الصَّادِقُ لَا يَنْظُرُ وِرَاءَهُ، وَلَا يَسْمَعُ النِّدَاءَ إِلَّا مِنْ أَمَامِهِ لَا مِنْ وِرَائِهِ".

**لا تنسوننا من صالح دعائكم**

**مع خالص أمنياتنا بالتوفيق والنجاح**

**#لجنة\_الطب\_والجراحة**

