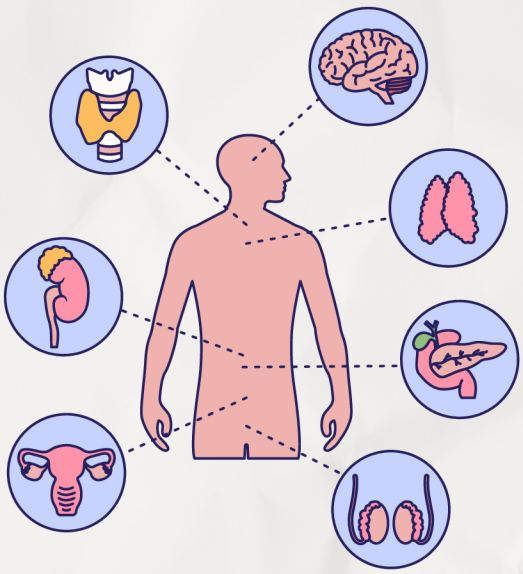
PHYSIOLOGY

MID EXAM



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Q1: A woman came to hospital in labour condition..and oxytocin is released what is the physiological mechanism

A. Negative feedback

B.positive feedback

C. Negative feedback to hormone secretion

D. Hypoxia

Ans: A

In the external pathway, what is the factor which stimulates factor X .

A. Tissue factor

B.factorV

C. Fibrinogen

Ans: A

Q3.. What of the following statements are correct

A. Albumin is important for blood viscosity

B. Fibrogin is important to blood clotting

C.Gloubin is important to osmotic blood pressure

Ans:b

Q4: The semilunar value is closed of

A. Rapid ejection phase

B. Slow ejection phase

C. Doesn't close

D.Artial systol phase

Ans :D

:Q5: in which phase the pressure of a artery is increased

.A. Isometric contraction phase

B. Isometric relaxing phase

C. Rapid filling phase

D. Rapid ejection phase

Ans:C

Q6: one of the following is correct between primary and secondary transport

A. Primary doesn't need ATP

B.Secondary is transport just of co-transport

C.primary generat ATP for move material

Ans:C

Q7: the pulmonary artery in slow filling phase

A. Contract

B.relax

C. Relax then contract

D. Contract then relax

Ans: b

Q8: the primary transport for 02 which dissolves in plasma

A. Physical

B.chemical

C. Bicarbonate

D. Hypoxia

Ans A

Q9: The difference in breathing at bed

A. Dysspna

B.orthopnea

C. Apnea

D. Cyanosis

Ans: B

Q10: The pressure of artery is equal to pressure of vein this indicates an type of hypoxia

A. Hypoкic

Anemic .8

C. Stagnant

D. Hisotoxic

Ans:C

Q11: Compared with the intracellular fluid, the extracellular fluid has sodium ion concentration, concentration, potassiu mion chloride ion .concentration, and phosphate ion concentration

A) Lower, lower, lower, lower

B) Lower, higher, lower, lower

C) Lower, higher, higher, lower

D) Higher, lower, higher, lower

E) Higher, higher, lower, higher

F) Higher, higher, higher, higher

Ans: D

Q12: An increase in which of the following tends to decrease capillary filtration rate?

A) Capillary hydrostatic pressure

B) Plasma colloid osmotic pressure

C) Interstitial colloid osmotic pressure

D) Venous hydrostatic pressure

E) Arteriolar diameter

Ans:B

Q13: The resting potential of a myelinated nerve fiber is primarily dependent on the concentration gradient of which of the ?following ions

+A) Ca2

-B) Cl

-C) HCO3

+D) K

+E) Na

Ans:D

?Q14: Which group has the highest percentage of body water

A) Elderly people

B) Women

C) Children

D) Adult men

Ans:C) Children

?Q15: What is the main function of the hormone ADH (antidiuretic hormone)

A) Increases blood pressure by vasodilation

B) Increases sodium excretion from the kidneys

C) Decreases water reabsorption in the kidneys

D) Increases water reabsorption in the kidneys

Ans: D) Increases water reabsorption in the kidneys

?Q16: What causes the action potential (AP) in cardiac muscle cells

A) Influx of calcium ions (Ca**)

B) Efflux of sodium ions (Na)

C) Opening of potassium channels

D) Decrease in oxygen levels

Ans : A) Influx of calcium ions (Ca")

Q17: Which of the following is true about basophils?

A) They directly initiate coagulation

B) They have no role in inflammation

C) They indirectly participate in the coagulation process

D) They are the most abundant type of white blood cell

Ans: C) They indirectly participate in the coagulation process

?Q18: What is the role of fibrinogen in the body

A) It is an enzyme that digests fats

B) It helps in oxygen transport

C) It plays a role in blood clotting

D) It increases blood pressure

Ans: C) It plays a role in blood clotting

?Q19: Which of the following is true regarding the lipid bilayer of the cell membrane

A) It contains proteins that act as transport channels

B) It is completely impermeable to water

C) It is composed mainly of carbohydrates

D) It has no role in substance exchange

Ans: A) It contains proteins that act as transport channels

?Q20: Which of the following has the highest percentage of body water relative to body weight

A) Adult male

B) Pregnant woman

C) Elderly person

D) Newbom (or fetus)

Ans: D) Newborn (or fetus)

Q21: During which phase of the cardiac cycle does ventricular pressure exceed atrial pressur

?e, causing the AV valves to close

A. Atrial systole

B. Isovolumetric contraction

C. Ventricular ejection

D. Isovolumetric relaxation

Ans: B

:Q22: All of the following increase renin secretion EXCEPT

A. Decreased blood pressure

B. Decreased sodium levels

C. Sympathetic stimulation

D. Increased atrial natriuretic peptide (ANP)

Ans: D

Q23: Who has the highest total body water (TBW) as a percentage of body weight?

A. Normal adult male

B. Pregnant woman

C. Obese male

D. Newborn infant

Ans: D

?Q24: Which of the following factors is most important for DNA synthesis and thereby support s erythropoiesis

A. Iron

B. Folic acid

C. Vitamin C

D. Erythropoietin

Ans: B

:Q25: A pregnant woman is in labor and the baby's head begins to press against the cervix, sti mulating oxytocin release. This is an example of

A. Negative feedback

B. Positive feedback

C. Feedforward control

D. Reflex inhibition

Ans: B

?Q26: What is the primary ion responsible for establishing the resting membrane potential (RM P) in neurons and muscle cells

A. Sodium

B. Calcium

C. Potassium

D. Chloride

Ans: C

:Q27: Resting membrane potential is defined as

A. The membrane potential when all channels are open

B. The potential due to active transport only

C. The steady-state voltage across the membrane in a resting cell

D. The maximum voltage reached during depolarization

Ans: C

?Q28: What primarily causes the action potential in cardiac muscle cells

A. Influx of potassium

B. Influx of calcium through fast channels

C. Influx of sodium through fast channels

D. Efflux of chloride

Ans: C. Influx of sodium through fast channels

?Q29: What is the correct definition of apnea

A. Abnormal fast breathing

B. Shortness of breath

C. Temporary cessation of breathing

D. Rapid shallow breathing

Ans: C. Temporary cessation of breathing

Q30: What type of anemia causes equal oxygen content in arteries and veins?

A. Aplastic anemia

B. Iron deficiency anemia

C. Carbon monoxide poisoning

D. Hemorrhagic anemia

Ans: C. Carbon monoxide poisoning

:Q31: Anemia caused by impaired blood flow is best described as

A. Aplastic anemia

B. Ischemic anemia

C. Hemolytic anemia

D. Megaloblastic anemia

Ans: B. Ischemic anemia

?Q32: What does Starling's Law of the heart state

A. Blood volume is constant regardless of preload

B. Stroke volume increases with increased venous return

C. Heart rate is independent of end-diastolic volume

D. Blood pressure determines contractility

Ans: B. Stroke volume increases with increased venous return

?Q33: What are the components of a physiological buffer system

A. Strong acid and weak base

B. Weak acid and its salt with a strong base

C. Water and enzymes

D. Protein and lipids

Ans:B. Weak acid and its salt with a strong base

Q34: Antidiuretic hormone (ADH) increases water permeability in which nephro

?n segment

A. Proximal tubule

B. Loop of Henle

C. Distal convoluted tubule and collecting duct

D. Bowman's capsule

Ans: C. Distal convoluted tubule and collecting duct

Q35: The sodium-glucose co-transport is an example of:

A. Simple diffusion

B. Facilitated diffusion

C. Primary active transport

D. Secondary active transport

Ans: D. Secondary active transport

?Q36: Which group has the highest body water percentage

A. Adult male

B. Adult female

C. Newborn

D. Obese male

Ans: C. Newborn

?Q37: What is the main function of antidiuretic hormone (ADH)

A. Increase sodium excretion

B. Decrease water reabsorption

C. Increase water reabsorption

D. Stimulate thirst only

Ans: C

?Q38: During which phase of the cardiac cycle is ventricular pressure rising but no blood is ejected

A. Atrial systole

B. Isovolumetric contraction

C. Ventricular ejection

D. Isovolumetric relaxation

Ans: B. Isovolumetric contraction

?Q39: What initiates the action potential in the heart

A. AV node firing

B. SA node depolarization

C. Bundle of His conductionu

D. Ventricular automaticity

Ans: B. SA node depolarization

?Q40: What is a correct statement about basophils

A. They directly form blood clots

B. They produce erythropoietin

C. They indirectly aid coagulation

D. They phagocytose bacteria

Ans: C. They indirectly aid coagulation

?Q41: What is the role of fibrinogen in hemostasis

A. Stimulates platelet production

B. Acts as an anticoagulant

C. Forms fibrin to stabilize the clot

D. Degrades clots

Ans: C. Forms fibrin to stabilize the clot

Q42: Which statement about the lipid bilayer is true?

A. It lacks any protein

B. It is impermeable to all molecules

C. It contains proteins that function as channels

D. It stores calcium

Ans C. It contains proteins that function as channels

?Q43: What is the final and most powerful regulator of acid-base balance

A. Buffer systems

B. Renal compensation

C. Respiratory rate

D. Blood volume

Ans: B

?Q44: What does "isopotential" mean in physiology

A. Having the same action potential

B. Being electrically neutral

C. Having equal electrical potential across a membrane

D. Having opposite charges

Ans: C

?Q45: Which valves are open during ventricular systole

A. Mitral and tricuspid

B. Aortic and pulmonary

C. All valves

D. None of the above

Ans: B

?Q46: What initiates the extrinsic pathway of coagulation

A. Fibrinogen

B. Platelet activation

C. Tissue factor

D. Factor XII

Ans: C. Tissue factor

Q46: What initiates the extrinsic pathway of coagulation?

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B. Platelet activation

C. Tissue factor

D. Factor XII

Ans:C. Tissue factor

?Q47: Which of the following is an example of positive feedback

A. Blood pressure control

B. Blood glucose regulation

C. Oxytocin during labor

D. Thermoregulation

Ans C

?Q48: Which factor decreases glomerular filtration rate (GFR)

A. Afferent arteriole dilation

B. Increased renal blood flow

C. Efferent arteriole constriction

D. Afferent arteriole constriction

Ans D. Afferent arteriole constriction

?Q49: In the cardiac action potential, when does repolarization begin

A. Phase 0

B. Phase 1

C. Phase 2

D. Phase 3

Ans: D. Phase 3

?Q50: Why do most negatively charged molecules not pass the glomerular membrane

A. They are too small

B. They are bound to plasma proteins

C. The glomerular basement membrane is also negatively charged

D. They are actively reabsorbed

.Ans: C