بسم الله الرحمن الرحيم

Key answers for physiology second exam

**Q1)** A 45-year- old female has elevated thyroxin production, which of the following would accompany this condition:

**** Decreased TSH.

**Q2)** Protein inhibiting factor’s target tissue is the:

**** The anterior pituitary.

**Q3)** Antiduretic hormone ( ADH) release from posterior pituitary is stimulated by:

**** High serum osmolarity sensed by osmoreceptors in the hypothalamus .

**Q4)** All of the following properties allow erythrocyte to function as gas carrier EXCEPT :

****Presence of many mitochondria .

**Q5)** A cell that can differentiate into any tissue type is referred to as:

****Pluripotent .

**Q6)** Which of the following nutritional components is needed for erythropoiesis :

****Cobalamin .

**Q7)** A 20-yer-old male underwent echocardiogram to assess chest pain ,results revealed a congenital defect in papillary muscles. Which of the following could occure:

****Backflow expulsion of the atrioventricular valves.

**Q8)** A65-year-old male is transported to the ER for chest pain . An ECG reveals a prolong QRS interval. This result indicate :

**** Increased isovolumetric contraction time .

**Q9)** Depolarization of cardiac muscle cell occurs as the result of :

****The rapid movement of ions across the cell membrane .

**Q10)**The \_\_\_\_ period following the depolarization of the myocardium and represent a period during which no new cardiac potential can be propagated :

**** Absolute refractory .

**Q11)** In a normal ECG , the P-R interval represents:

****onset of atrial activation to onset of ventricular activation .

**Q12)** A 28-year-old female with seizure disorder has a vagal nerve stimulator implanted to help control seizure activity . Which of the following would also expected to occur ?

**** Decreased cardiac conduction .

**Q13)** As stated by Frank-Starling law , there is a direct relationship between the \_\_\_\_of the blood in the heart at the end of diastole and the \_\_\_ of contraction during the next systole :

**** volume, force .

**Q14)** Right ventricular afterload is determined by :

**** Pulmonary vascular resistance .

**Q15)** Which of the following statements correctly describes a direct end effect of the Renin-Angiotension-Aldosterone system :

****Angiotension II causes systemic vasoconstriction .

**Q16)** Autonomic and hormonal control are involved in gastrointestinal motility and :

**** Digestive enzyme secretion.

**Q17)** Clinical manifestation of bile salt deficiencies are related to poor absorption of :

****fats and fat soluble vitamins .

**Q18)** Which of the following components of the circulatory system has the largest distribution of blood volume ?

**** veins.

**Q19)** An increase in tissue metabolism is results in :

**** An increase in tissue concentration of metabolites and an increase in arteriole diameter .

**Q20)** A decreased of which of the following would best explain the increase in blood pressure:

**** Glomerular filtration rate .

**Q21)** Which statements is most correct regarding erythropoietin :

****Excessive x-ray exposure with destruction of the bone marrow leads to an increased erythropoietin secretion .

**Q22)**The hormone gastrin is released primarily from which structure?

****Antrum .

**Q23)** Epinephrine:

**** Promotes glycogenolysis.

**Q24)** Normal blood pressure for adults age 18 or older:

****systolic pressure is less than 120 mmHg and diastolic pressure is less than 80 mmHg .

**Q25)** A healthy 28-year old women stands up from a supine position , which of the following cardiovascular changes is most likely to occur :

****Increased heart rate.

**Q26)** Choose the correct statement regarding the rule of K+ in resting and action potential in the nerve :

**** The equilibrium potential for K+ is closer to resting membrane potential compared with that for Na+.

**Q27)** Graded potential :

****Duration depends on the duration of the stimulus .

**Q28)** Choose the correct statement regarding electrical activity of the cell:

****The refractory period help in the unidirectional spread of the action potential down the nerve fiber away from the initial site of activation.

**Q29)** During the rising face of the action potential :

****The membrane permeability for Na+ is much greater than that for K+ .

**Q30)** Which of the following statements concerning propagation of action potential is INCORRECT ?

****The action potentials jump from Schwann cell to the adjacent Schwann cell in the myelinated fiber.

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