

Physiology Spring Final Review Questions

- 1) What does the adrenal medulla produce?
- 2) Follicle cells in the ovary produce large quantities of _____ when stimulated by FSH.
- 3) What is the pituitary hormone that triggers the release of thyroid hormone from the thyroid gland?
- 4) Insulin-dependent diabetes mellitus is also known as _____.
- 5) What is the hormone that is the antagonist of calcitonin?
- 6) The _____ lies within the abdominopelvic cavity near the border between the stomach and the small intestine.
- 7) What are steroid hormones?
- 8) What is diabetes insipidus caused by?
- 9) What do the C cells of the thyroid gland produce?
- 10) What do endocrine cells do?
- 11) The hormone that is important for maintenance of the immune system is _____.
- 12) What does the hormone oxytocin do?
- 13) The beta cells of the pancreas produce _____.
- 14) What are the functions of the endocrine system?
- 15) How does the hypothalamus control the secretions of the anterior pituitary?
- 16) How is fresh whole blood usually collected?
- 17) _____ is a condition in which the oxygen-carrying capacity of the blood is reduced.
- 18) What are the function of red blood cells?
- 19) What are the function of stem cells?
- 20) What are platelets?
- 21) The following is a list of vessels and structures that are associated with the heart. Place them in order, entering from the systemic system.
 - . right atrium
 - . left atrium
 - . right ventricle
 - . left ventricle
 - . vena cavae
 - . aorta
 - . pulmonary trunk
 - . pulmonary veins
- 22) Discuss the conduction velocity of a Purkinje fiber
- 23) What are the branches of the right coronary artery?
- 24) What are the functions of the fibrous skeleton of the heart?
- 25) How is the cardiac output calculated?
- 26) What is the vertebral artery?
- 27) How are the arteries of elderly people different?
- 28) The fusion of the brachiocephalic veins forms the _____.
- 29) What is edema?
- 30) What is the tunica interna?
- 31) What are microphages?
- 32) What are the functions of the lymphatic system?
- 33) What class of chemical mediators stimulates the production of both microphages and monocytes.
- 34) What actions are included in the body's nonspecific defenses?
- 35) What are the functions of lymph nodes?
- 36) Areas of the spleen that contain large numbers of lymphoid nodules are known as _____.
- 37) The white pulp of the spleen is composed primarily of _____.
- 38) Immunoglobulins that are found on the surface of B cells and may play a role in regulation of the humoral immune response are _____.
- 39) The specificity of an antibody is determined by the _____.
- 40) Stem cells that will form T cells are modified in the _____.
- 41) The role of accessory cells in immunity is to _____.
- 42) The major histocompatibility complex (MHC)
 - A) produces antibodies in lymph glands.

- B) is the antigen found on bacteria that stimulates an immune response.
 C) is a group of genes that codes for human leukocyte antigens.
 D) is responsible for forming lymphocytes.
 E) is a membrane protein that can recognize foreign antigens.
- 43) In active artificial immunity,
 A) the immune system attacks normal body cells.
 B) the body is deliberately exposed to an antigen.
 C) genes for antibodies are introduced into the body.
 D) the body receives antibodies produced by another animal.
 E) the body receives antibodies produced by another person.
- 44) The red pulp of the spleen contains large numbers of _____.
- 45) Why is there an increased incidence of cancer in the elderly?
- 46) One measure of pulmonary function can be determined by a spirometer. This instrument measures _____.
- 47) The vocal folds are located in the _____.
- 48) Air entering the body is filtered, warmed, and humidified by _____.
- 49) What does the hard palate separate?
- 50) Tuberculosis results from the colonization of which microorganism?
- 51) The portion of the nasal cavity contained within the flexible tissues of the external nose is the _____.
- 52) Which of the following is greater?
 A) the partial pressure of carbon dioxide in expired air
 B) the partial pressure of carbon dioxide in the alveoli
- 53) A device called a pneumotachometer measures _____.
- 54) The actual sites of gas exchange within the lungs are _____.
- 55) What does surfactant do in the lungs?
- 56) Air moves into the lungs because:
 57) Air moves out of the lungs because:
- 58) The portion of the pharynx that receives both air and food is the _____.
- 59) The cartilage that makes up most of the anterior and lateral surface of the larynx is the _____.
- 60) The cartilage that serves as a base for the larynx is _____.
- 61) What changes in the digestive system occur with advancing age?
- 62) What is the uvula located at the _____?
- 63) An intestinal hormone that stimulates the pancreas to release a watery secretion that is high in bicarbonate ion is _____.
- 64) Functions of the tongue include:
 65) The bulge of the greater curvature of the stomach superior to the esophageal junction is the _____.
- 66) Where is peristalsis fastest? Slowest?
- 67) The prominent ridges in the lining of the stomach are called _____.
- 68) Contraction of the _____ layer of the intestinal wall functions to change the shape of the intestinal lumen and moves food through its length.
- 69) Gastric pits are:
 70) What organs are part of the digestive tract?
- 71) What are the functions of the secretions of the salivary glands?
- 72) An intestinal hormone that stimulates the release of insulin from the pancreatic islet cells is _____.
- 73) The space between the tongue and the teeth is called the _____.
- 74) Gastrin is released in response to:
 75) The lateral walls of the oral cavity are formed by the _____.
- 76) In response to increased levels of aldosterone, the kidneys produce _____.
- 77) The principal cation in the ICF is _____.
- 78) Renal columns are:
 79) Management of renal failure involves restriction of water and salt intake and reducing caloric intake to a minimum; dietary proteins are also limited. This combination lessens the strain on the urinary system by _____.
- 80) What is the hormone ADH?
- 81) In a normal kidney, which of the following conditions would cause an increase in the glomerular filtration rate (GFR)?
- 82) When the amount of sodium ion in the ECF increases,
 A) osmoreceptors are stimulated.

- B) ADH secretion decreases.
 - C) there is an increase in the volume of urine produced.
 - D) aldosterone secretion increases.
 - E) there is decreased thirst.
- 83) The amount of potassium secreted by the kidneys is regulated by _____.
- 84) The primary function of the proximal convoluted tubule is _____.
- 85) What happens during the micturition reflex?
- 86) The following is a list of the blood vessels that carry blood to the kidney. Place them in the proper order in which blood passes.
- . afferent arteriole
 - . arcuate artery
 - . interlobar artery
 - . renal artery
 - . glomerulus
 - . interlobular artery
 - . efferent arteriole
 - . peritubular capillary
- 87) Each of the following statements concerning chloride ions is true except one. Identify the exception.
- A) Chloride ions are the most abundant anions in the ECF.
 - B) Chloride ion concentrations in the ICF are usually low.
 - C) Chloride ions are lost in perspiration.
 - D) Chloride ions are absorbed along the digestive tract in the company of sodium ions.
 - E) Large amounts of chloride ion are lost each day in the urine.
- 88) What are the organs of the urinary system.?
- 89) Factors that increase the secretion of ADH include:
- 90) Calcium homeostasis primarily reflects
- A) an interplay between parathormone and aldosterone.
 - B) an interplay between reserves in the bone, the rate of absorption, and the rate of excretion.
 - C) a balance between absorption in the gut and excretion at the kidneys.
 - D) careful regulation of blood calcium levels by the kidneys.
 - E) hormonal control of calcium reserves in the bones.
- 91) The role of the pituitary hormone FSH in males is to _____.
- 92) The clinical term for inflammation of the prostate is _____.
- 93) What are the parts of the reproductive system?
- 94) Interstitial cells produce _____.
- 95) The scrotum is _____.
- 96) The process of spermiogenesis produces _____.
- 97) Long-term compression of the spermatic artery and vein could result in _____.
- 98) The generally dark, pigmented skin that surrounds the nipple is called the _____.
- 99) The organism responsible for 50% to 80% of pelvic inflammatory disease (PID) infections is _____.
- 100) Sperm are moved along the ductus deferens by _____.
- 101) The process of detumescence is under the control of the _____.
- 102) What happens during menses?
- 103) How do oral contraceptives work?
- 104) A rise in the blood levels of FSH at the beginning of the ovarian cycle is responsible for _____.
- 105) Major functions of the accessory glands of the male reproductive system include _____.