

Exam 4 Review

- 1) Which type of immunity is NOT present at birth?

Adaptive

- D 2) Which cells are involved in the memory response?

- a. B cells
- b. T cells
- c. NK cells
- ☒ d. a and b
- e. a and c

- 3) What signaling proteins help to recruit adaptive immune cells?

Cytokines

- 4) What has the ability to initiate an immune response?

antigens

- 5) What are the functions of each type of immunoglobulin?

IgA: In breast milk, protects GI tract from pathogens

IgM: Microbial infection, antigen invasion, first antibody produced

IgE: Helminths & allergy response *least common*

IgG: Innate immunity, passes thru placenta, detoxification *most plentiful antibody*

IgD: Activation of B-cells, but mainly unknown

- B 6) What type of tissue is found in the urinary tract?

- a. Skeletal Muscle
- ☒ b. Transitional Epithelium
- c. Simple Cuboidal Epithelium
- d. Stratified Squamous Epithelium

- B 7) ADH is associated with water retention. Where is it secreted from?

- a. Anterior Pituitary
- ☒ b. Posterior Pituitary
- c. Adrenal
- d. Kidneys

- 8) Cortisol is secreted by the adrenal gland and is associated with stress.

- 9) True ~~False~~: Urine is a byproduct of digestive waste.

- 10) Name two functions of the renal system.

- Control of blood pH, volume, & pressure
- Removal of waste products and reabsorption of filtered nutrients

11) Which of the following is not a function of complement proteins?

- a. Cell Lysis ✓
- b. Initiate Phagocytosis ✓
- c. Antibody Production ✗
- d. Induce Inflammation ✓

12) Matching

- a. Endocrine
- b. Paracrine
- c. Autocrine
- d. Oxytocin
- e. Peptide
- f. Mastication
- g. Deglutition
- h. Prehension
- i. Insulin

D Causes smooth muscle contractions.

F Chewing/mashing of food.

B Acts on tissue in close proximity to where it was produced.

H Act of getting food into the mouth.

A Acts on tissue far from where it was produced.

G Swallowing of the bolus.

E Needs a second messenger to carry it to a different cell.

C Acts on the same cell that produced it.

I Hormone secreted in response to high blood glucose.

13) Hormones are specific and will only bind to specific receptors.

14) Define each type of feedback loop and give an example of each.

Positive: Response AMPLIFIES the system → oxytocin & contraction

Negative: Response INHIBITS the system → insulin & blood sugar

15) True False: Pinnae are not a prehensile tool.

16) What is the function of the brush boarder?

Absorption of nutrients in the SI (small intestines)

17) What do parietal cells (found in the stomach) do?

Secrete H^+ & Cl^- to make HCl

18) The omasum absorbs water.

A 19) Microbial fermentation in ^{hind-gut} ~~humid~~ fermenters occurs in the

- a. Cecum
- b. Rumen
- c. Reticulum
- d. Proventriculus

C 20) What hormone is associated with hunger?

- a. Insulin
- b. GnRH
- c. Ghrelin
- d. Glucagon

B 21) Which type of digestion occurs in the true stomach?

- a. Mechanical
- b. Enzymatic
- c. Fermentation
- d. Chemical

22) What are some signs of standing heat?

Vocalization, Winking Vulva, Lordosis, Interest in Males, Swelling

23) What brings the testicles closer to or further from the body?

Cremaster Muscle

24) What provides blood, lymph, and nerve supply to the female reproductive tract while suspending it inside of the body? *Broad Ligament*

25) What is a cryptorchid?

Male where one or both testes fail to descend

26) What is the function of the cervix?

seal between the ^(outside) vagina & ^(inside) uterus

27) Where does spermatogenesis start?

seminiferous tubules

28) Where do sperm mature?

epididymus