

Test 4 Practice Questions

Chapter14

1. Which term best describes the development of disease?
 - a. Pathology
 - b. Pathogenesis
 - c. Pathogenicity
 - d. Etiology
 - e. Epidemiology
2. What term describes an infection that is caused because the organism moved to a different location in your body?
 - a. Antagonistic
 - b. Chronic
 - c. Mutualistic
 - d. Opportunistic
 - e. Systemic
3. Describe the three types of symbiotic relationships.
4. Write out the four steps of Koch's Postulates. Give an example of an exception of Koch's Postulates. Say "Koch's Postulates" 3 times very fast!
5. Ebola virus symptoms appear very quickly and strongly. What type of infection would you call this?
 - a. Acute
 - b. Chronic
 - c. Latent
 - d. Secondary
 - e. Subclinical
6. For pathogenesis, describe the three types of placements for infection.
7. Which is the first stage of infection?
 - a. Decline
 - b. Convalescence
 - c. Prodromal
 - d. Illness
 - e. Incubation
8. What is the difference between *incidence* and *prevalence*?
9. What are the differences among *endemic*, *epidemic*, and *pandemic*?
10. Ahhh-chooo! I just sneezed on you. What type of transmission most applies to this situation?
 - a. Direct
 - b. Droplet
 - c. Indirect
 - d. Vector-mechanical
 - e. Vector-biological
11. What are the three main factors that contribute to a nosocomial infection (think of the figure with the three circles converging!)
12. Describe the functions of the CDC and WHO.

13. What method of investigation involves comparing factors between infected and uninfected people?
- Analytical
 - Descriptive
 - Experimental
 - Paradoxical

Chapter 15

- Describe three portals of entry for pathogens to enter the human body.
- Draw an ID₅₀ and LD₅₀ curve. What is the difference between the two?
- What structure is least likely to be involved in bacterial adherence?
 - Fimbriae
 - Pili
 - Ribosome
 - Capsule
 - Cell Wall
- Describe three enzymes used by bacteria to help them infect host cells.
- When bacteria change surface proteins to avoid immune detection, this is:
 - Antigenic variation
 - Immunodeficiency
 - Toxicity
 - Superantigenic
 - Endocytosis
- What molecule do siderophores bind?
 - Calcium
 - Iron
 - Magnesium
 - Carbon
 - Nitrogen
- Describe the function of each part of an A-B toxin.
- What component of Gram- bacteria acts as an endotoxin?
 - DNA
 - Phospholipid
 - Peptidoglycan
 - Mycolic Acid
 - LPS

Chapter 16

- Which body part contains mucous membranes?
 - Stomach
 - Nasal cavity
 - Respiratory tract
 - All of the above
- Draw /label the 5 steps of phagocytosis.

3. Draw out the mechanism of the inflammatory response. Be sure to cover *histamine*, *vasodilation*, and *diapedesis*. (Where does the ink stay when you get a tattoo?)
4. What molecule stimulates the hypothalamus to trigger the onset of a fever?
 - a. Prostaglandins
 - b. IFN
 - c. IL-1
 - d. Complement
 - e. Antibodies
5. What are the three ways in which the complement system can be activated?
6. Describe the three actions of the complement system.
7. What molecule acts as a distress signal to warn uninfected cells of a virus attack?
 - a. Antibodies
 - b. IFN gamma
 - c. IFN alpha
 - d. IL-1
 - e. Lectin

Chapter 17

1. Describe the process of clonal selection.
2. T cells mature in what gland?
 - a. Adrenal
 - b. Hypothalamus
 - c. Ovary
 - d. Thymus
 - e. Thyroid
3. Draw an antibody and label these parts: heavy chain, light chain, V, C, Fc.
4. Describe the six antibody functions.
5. Draw a graph of an immune response. Include a primary and secondary exposure. Include a primary and secondary response.
6. What type of T cell stimulates B cells?
 - a. Helper Th1
 - b. Helper Th2
 - c. Memory
 - d. Cytotoxic
 - e. Phagocytic
7. This protein can mark cells as “self” but also can be used to display antigens
 - a. Perforin
 - b. Antibody
 - c. MHC
 - d. Complement
 - e. IL-1
8. Name two ways in which cell-mediated and humoral immunity work together.

Chapters 18

1. Snake venom is an example of a _____ immunization.
 - a. Active
 - b. Passive
2. What type of vaccine uses a killed organism injected into the patient?
 - a. Subunit
 - b. Toxoid
 - c. Conjugated
 - d. Attenuated whole-agent
 - e. Inactivated whole-agent
3. Define primary and secondary antibody
4. What test relies on blocking the function of a toxin?
 - a. Agglutination
 - b. ELISA
 - c. FACS
 - d. Neutralization
 - e. Obamanation
 - f. Precipitation
5. Describe the steps in FACS analysis.
6. Draw out the difference between an *indirect* and *direct* ELISA.
7. What hormone is detected in the ELISA pregnancy test?
 - a. Estrogen
 - b. Progesterone
 - c. Testosterone
 - d. Androgen
 - e. Chorionic Gonadotropin