Chapter 20 practice questions

1. Antimicrobial medications are considered selective in terms of toxicity, what does the term selective toxicity mean?

a. The antimicrobial damages both the pathogen and the host (human cells)

b. The antimicrobial damages pathogen without harming the host

c. The antimicrobial damages a specific host and pathogen

d. None of the above

2. Antibiotics can target a wide variety of different cell structures in order to slow the growth of pathogens. In general, targeting which of the following structures will result in the best selective toxicity?

1. The prokaryotic plasma membrane
2. Fungal sterol synthesis
3. Protein synthesis by a 70S ribosome
4. DNA replication by protozoa
5. The bacterial cell wall

3. When an antibiotics activity is broad spectrum…

a. the drug is effective against a limited range of microorganisms

b. the drug is ineffective against all microorganisms

c. the drug is effective against a wide range of microorganisms

d. the drug is effective against all microorganisms

4. True or False. When an antimicrobial drug is bacteriocidal, its activity slows or prevents the growth of microorganisms.

a. True

b. False

5. Penicillins and Cephalosporins prevent the production of …

a. Lipids

b. Spores

c. Peptidoglycan

d. All of the above

6. True or False. Bacitracin is a narrow spectrum antibiotic active against gram positives that can be ingested in pill form by infected host.

a. True

b. False

7. Chloramphenicol, Aminoglycoside, Tetracycline and Macrolide antibiotics are inhibitors of…

a. Cell wall synthesis

b. Plasma membrane

c. Protein Synthesis

d. Nucleic acid synthesis

8. Antimicrobial resistance in bacteria is a result of..

a. Decreased drug uptake

b. Inactivation of the drug

c. Target alteration

d. Removal of drug from the cell

e. All of the above

9. True or False. Fungi infections are difficult to treat because they are similar to animals.

a. True

b. False

10. True or False. The antifungal agent Griseofulvin, when taken orally, acts against fungal infections of the skin and hair.

a. True

b. False

11. Which of the following best describes the mode of action of an Antiviral?

a. Antivirals prevent the entry of a virus

b. Antivirals interfere with uncoating process

c. Antivirals interfere with nucleic acid synthesis

d. Antivirals interfere with formation of provirus

e. Antivirals interfere with the assembly and release of the virus

f. All of the above.

12. Vancomycin is considered the last resort treatment for which organism?

a. *E. coli*

b. *Pseudomonas aeruginosa*

c. MRSA (Methicillin resistant *Staphylococcus aureus*)

d. *Mycobacterium tuberculosis*