

- 1. What factor affects a drug's ability to cross the blood-brain barrier?
 - a. Molecular weight
 - b. Protein binding
 - c. Renal dysfunction
 - d. Age
- 2. Which patient factor influences immunocompetence?
 - a. Healthy diet
 - b. Advanced age
 - c. Physical exercise
 - d. Allergies
- 3. What is a risk factor for multidrug-resistant organisms?
 - a. Recent hospitalization exceeding 5 days
 - b. Lack of immunosuppressive diseases
 - c. No prior antimicrobial therapy
 - d. Low frequency of resistance in the community
- 4. What does concentration-dependent killing refer to in rational dosing?
 - a. Time of administration
 - b. Drug's molecular weight
 - c. Drug concentration in tissues
 - d. Immunocompetence



- 5. What is the postantibiotic effect related to in rational dosing?
 - a. Persistent suppression of microbial growth
 - b. Drug metabolism
 - c. Patient's age
 - d. Cost of therapy
- 6. What is the characteristic of narrow-spectrum antibiotics?
 - a. Effective against many types of bacteria
 - b. Target specific microorganisms
 - c. Modified to be effective against gram-negative bacteria
 - d. Act on both gram-positive and gram-negative bacteria
- 7. What is the advantage of drug combinations in antimicrobial therapy?
 - a. Interference in the mode of action
 - b. Synergism, making the combination more effective
 - c. Selection pressure for resistance
 - d. Narrowing the spectrum of activity
- 8. What is the primary purpose of prophylactic use of antibiotics?
 - a. Treatment of existing infections
 - b. Prevention of infections
 - c. Enhancing drug synergism
 - d. Inducing superinfections





- 9. Which complication of antibiotic therapy ranges from mild skin rash to life-threatening anaphylaxis?
 - a. Direct toxicity
 - b. Hypersensitivity
 - c. Superinfections
 - d. Urticaria
- 10. Which type of antibiotics mainly causes superinfections with opportunistic organisms?
 - a. Narrow-spectrum antibiotics
 - b. Broad-spectrum antibiotics
 - c. Extended-spectrum antibiotics
 - d. Lipid-soluble antibiotics





Answers

- 1. a. Molecular weight
- 2. b. Advanced age
- 3. a. Recent hospitalization exceeding 5 days
- 4. c. Drug concentration in tissues
- 5. a. Persistent suppression of microbial growth
- 6. b. Target specific microorganisms
- 7. b. Synergism, making the combination more effective
- 8. b. Prevention of infections
- 9. b. Hypersensitivity
- 10. b. Broad-spectrum antibiotics