

Antibiotics Review Quiz

1 . Which of the following classes of antibiotics is associated with a risk for developing *Clostridium difficile*-associated diarrhea?

- A) Macrolides
- B) Quinolones
- C) Cephalosporins
- D) All of the above

2 . Bacteria become resistant to the effects of antibiotics by

- A) altered cellular permeability.
- B) increased efflux of the antibiotic from the cell.
- C) elaboration of deactivating enzymes that alter interactions at binding sites.
- D) All of the above

3 . Which of the following are common ways for bacteria to gain antibiotic resistance?

- A) Genetic mutations
- B) Transfer of genetic information on plasmids
- C) Both A and B
- D) None of the above

4 . The first oxazolidinone created, which was developed in an attempt to stay ahead of the developing bacteria resistance, was

- A) linezolid.
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- B) cefprozil.
- C) norfloxacin.
- D) meropenem.
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5 . What recommendation has the CDC made regarding infection control to minimize the spread of antibiotic resistances among patients in hospitals and residential care facilities?

- A) Tailor treatment plans to the most likely pathogens
- B) Proper hand washing during and after patient care
- C) Only use invasive medical devices when they are necessary
- D) All of the above

6 . The antibacterial effect of penicillins is caused by the drugs' action of

- A) inhibiting protein synthesis.
- B) impairing cell wall synthesis.
- C) blocking the binding of aminoacyl transfer-RNA.
- D) displacing cations that link phospholipids together.

7 . Labeled uses for the natural penicillins include treatment of infections of the

- A) eye.
- B) meninges.
- C) gastrointestinal tract.
- D) upper and lower respiratory tracts.

8 . Which of the following is an absolute contraindication for administering penicillins?

- A) Severe renal failure
- B) Severe hepatic failure
- C) Prior allergic reaction to a member of the class
- D) All of the above

9 . Which of the following is considered a first-generation cephalosporin?

- A) Cefixime
- B) Cefepime
- C) Cefadroxil
- D) Loracarbef

10 . What route of elimination is used by members of the cephalosporin class of antibiotics?

- A Renal
)
- B) Mixed renal/hepatic
- C) Hepatic metabolism with excretion into the bile
- D All of the above
)

11 . Probenecid increases serum levels of which cephalosporin?

- A) Cefotetan
- B) Cefotaxime
- C) Ceftriaxone

D) All of the above

12 . Meropenem is approved by the FDA for the treatment of

- A) pneumonia.
- B) urinary tract infections.
- C) intra-abdominal infections.
- D) meningitis in patients younger than 3 months of age.

13 . One side effect associated with the use of imipenem/cilastatin is

- A diarrhea.
)
- B) headache.
- C) hypotension.
- D phlebitis at the infusion site.
)

14 . Aztreonam is considered pregnancy category

- A) A.
- B) B.
- C) C.
- D) D.

15 . Aminoglycosides are effective for the treatment of

- A) anaerobic bacilli.
- B) gram-positive bacilli.
- C) aerobic gram-negative bacilli.
- D) All of the above

16 . Which of the following aminoglycosides is taken orally as a bowel decontaminant due to its minimal absorption?

- A Neomycin
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- B) Gentamicin

- C) Tobramycin
- D) Streptomycin
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17 . Which of the following is a well-established side effect of the aminoglycosides?

- A) Ototoxicity
- B) Nephrotoxicity
- C) Both A and B
- D) None of the above

18 . Which of the following is a topical sulfonamide?

- A) Sulfadiazine
- B) Sulfasalazine
- C) Sulfacetamide
- D) Sulfadoxine/pyrimethamine

19 . Of the tetracyclines, which drug is mainly excreted in the urine?

- A) Tetracycline
- B) Minocycline
- C) Doxycycline
- D) All of the above

20 . Which of the following is a contraindication for administering tetracycline?

- A) Age older than 65 years
- B) Age younger than 8 years
- C) Patient history of syndrome of inappropriate antidiuretic hormone secretion
- D) Both A and B