

CTU Ph.D Entrance test Model Question Paper  
Subject: Pharmacology

Q1. Nitrous oxide

- a. Decreases cerebral blood flow leading to decreased ICP
- b. Leads to dose-dependent increases in cardiac contractility
- c. Increases GFR by increasing renal vascular resistance
- d. Decreases respiratory response to CO<sub>2</sub> and hypoxia

Q2. Which of the following side effects most occurs with haloperidol

- a. Hypotension
- b. Extrapyramidal side effects
- c. Arrhythmias
- d. Anti muscarinic side effects

Q3. Which of the following is a direct serotonin agonist

- a. Amitriptyline
- b. Moclobemide
- c. Ondansetron
- d. Sumatriptan

Q4. Mechanism of action of methotrexate is:

- a. Inhibition of dihydrofolate reductase
- b. Activation of cell differentiation
- c. Catabolic depletion of serum asparagine
- d. All of the above

Q5. The drug belonging to antibiotics-tetracyclines is:

- a. Doxycycline
- b. Streptomycin
- c. Clarithromycin
- d. Amoxicillin

Q6. Antibiotics inhibiting the bacterial cell wall synthesis are:

- a. Beta-lactam antibiotics
- b. Tetracyclines
- c. Aminoglycosides
- d. Macrolides

Q7. Which of the following drugs is a gastric acid resistant:

- a. Penicillin G
- b. Penicillin V
- c. Carbenicillin
- d. Procain penicillin

Q8. Mechanism of penicillins' antibacterial effect is:

- a. Inhibition of transpeptidation in the bacterial cell wall
- b. Inhibition of beta-lactamase in the bacterial cell
- c. Activation of endogenous proteases, that destroy bacterial cell wall
- d. Activation of endogenous phospholipases, which leads to alteration of cell membrane permeability

Q9. Pick out the beta-lactamase inhibitor for co-administration with penicillins:

- a. Clavulanic acid
- b. Sulbactam
- c. Tazobactam
- d. All of the above

Q10. Aminoglycosides have the following unwanted effects:

- a. Pancytopenia
- b. Hepatotoxicity
- c. Ototoxicity, nephrotoxicity
- d. Irritation of gastrointestinal mucosa