

Choose one of the best answer (2% each)

- 1. Calcium channel blockers have all of the following characteristics EXCEPT
 - A. they block the slow inward current carried by calcium during phase 2 of the cardiac action potential
 - B. They dilate peripheral arterioles and reduce total peripheral resistance
 - C. they constrict arteries and arterioles and decrease oxygen delivery to the myocardium
 - D. they are useful in treating stable angina pectoris and Prinzmetals' angina
 - E. their adverse effects include aggravation of congestive heart failure
- 2. Cardiac glycosides may be useful in treating all of the following conditions EXCEPT
 - A. atrial flutter
 - B. paroxysmal atrial tachycardia
 - C. congestive heart failure
 - D. atrial fibrillation
 - E. ventricular tachycardia
- 3. The termination of heparin activity by protamine sulfate is due to
 - A. a chelating action
 - B. an acid-base interaction
 - C. the inhibition of gastrointestinal motility
 - D. the displacement of heparin-plasma protein binding
 - E. the prothrombin-like activity of protamine
- 4. Parenterally administered antihypertensive agents used in the treatment of hypertensive emergencies include the
 - I. centrally acting antiadrenergic clonidine
 - II. arteriolar and venous vasodilator nitroprusside
 - III. ganglionic-blocking agent trimethaphan
 - A. only I is correct
 - B. only III is correct
 - C. I and II are correct
 - D. II and III are correct
 - E. I, II, III are correct
- 5. The antianginal effect of propranolol may be attributed to all of the following EXCEPT
 - A. increases end-diastolic ventricular volume
 - B. decrease systolic fiber tension
 - C. block of exercise-induced tachycardia
 - D. decreases cardiac forces
 - E. reduces resting heart rate

- 6. Steptokinase is indicated for the treatment of
 - A. impaired fat absorption
 - B. tuberculosis
 - C. neoplastic disorders
 - D. psoriasis
 - E. pulmonary edema
- 7. Choose one of the following drugs which principal site of action is on the thick ascending limb of Henle's loop, and is useful in treating pulmonary edema and ascites
 - A. furosemide
 - B. hydrochlorothiazide
 - C. spironolactone
 - D. mannitol
 - E. acetazolamide
- 8. Agents useful in the treatment of bronchial asthma usually
 - A. block both α and β -adrenergic receptors
 - B. stimulate α -receptors but block β -receptors
 - C. stimulate β -receptors but block α -receptors
 - D. stimulate α and β -receptors
 - E. none of above
- 9. Heparin does not
 - A. inhibit blood clotting
 - B. decrease the activity of antithrombin III
 - C. lyse existing clots
 - D. prolong clotting time
 - E. inhibit activation of the fibrin-stabilizing factor (Factor VIII)
- 10. An agent that would be most likely to cause drug-induced bronchospasm is
 - A. pindolol
 - B. reserpine
 - C. aminophylline
 - D. hydrochlorothiazide
 - E. isoproterenol

- 11. Anticancer agents that act as enzyme inhibitors include
 - I. doxorubicin
 - II. methotrexate
 - III. floxuridine
 - A. only I is correct
 - B. only III is correct
 - C. I, II are correct
 - D. II, III are correct
 - E. I, II, III are correct
- 12. Systemic antifolate therapy has been found to be useful in the treatment of psoriasis. Which of the following agents most likely would be dispensed for this purpose?
 - A. cyclophosphamide
 - B. methotrexate
 - C. vinblastine
 - D. bleomycin
 - E. carmustine
- 13. Which of the following drugs should be avoided in the treatment of rheumatoid arthritis (because of aplastic anemia)?
 - A. aspirin
 - B. hydroxychloroquine
 - C. phenylbutazone
 - D. methotrexate
 - E. cyclophosphamide
- 14. Tamoxifen is an agent than can best be described as a(n)
 - A. gonadotropin-releasing hormone analog
 - B. progestin
 - C. androgen
 - D. estrogen
 - E. antiestrogen
- 15. The sulfonylureas are believed to exert the hypoglycemic effect by
 - A. stimulating the release of insulin from the pancreas
 - B. inhibiting the breakdown of endogenous insulin
 - C. enhancing the effectiveness of small amounts of insulin that the diabetic can produce
 - D. increasing the peripheral utilization of glucose
 - E. all of the above mechanisms

- 16. AZT (azidothymidine) acts by inhibiting
 - A. protein kinase
 - B. HIV protease
 - C. integrase
 - D. reverse transcriptase
 - E. RNA polymerase
- 17. The mechanism of antibacterial action of cephalosporins involves
 - A. inhibition of peptide synthesis
 - B. interference with the synthesis of ergosterol
 - C. inhibition of transpeptidase enzymes
 - D. inhibition of beta-lactamases
 - E. inhibition of DNA gyrase
- 18. All of the following are quinolone antimicrobials EXCEPT
 - A. nalidixic acid
 - B. cinoxacin
 - C. nitrofurantoin
 - D. ciprofloxacin
 - E norfloxacin
- 19. Common decongestants used for topical application to the nasal passage include
 - I. phenylephrine HCl and naphazoline
 - II. oxymetazoline HCl and xylometazoline HCl
 - III. phenylpropanolamine HCl and pseudoephedrine sulfate
 - A. I only
 - B. III only
 - C. I and II
 - D. II and III
 - E. I, II, and III
- 20. An advantage of amoxicillin over ampicillin is that it
 - A. is more acid stable
 - B. is not destroyed by penicillinase
 - C. has a broader spectrum
 - D. does not cause allergies
 - E. has a longer shelf-life
- 21. All of the following are diuretics EXCEPT
 - A. aminophylline
 - B. glyburide
 - C. spironolactone
 - D. bumetamide
 - E. chlorthalidone

- 22. Isotretinoin is commonly used to treat
 - A. lice infestations
 - B. fungal infestations
 - C. ringworm
 - D. burns
 - E. acne
- 23. True statements about potency and efficacy include which of the following?
 - I. The slope of the dose-response curve gives a good idea of a drug's efficacy
 - II. Potency refers to the different amounts of two or more drugs that are needed to produce the same effect
 - III. The log dose-response curve allows comparison of the relative potency of two drugs but not a comparison of their efficacy
 - IV. Potency and efficacy are unrelated properties
 - A. I and III are correct
 - B. II and IV are correct
 - C. I, II and III are correct
 - D. Only IV is correct
 - E. I, II, III and IV are correct
- 24. Ocular timolol is used primarily in
 - A. glaucoma
 - B. pink eye
 - C. conjunctivitis
 - D. eye infections
 - E. eye cleansers
- 25. Estrogens tend to increase the risk of
 - A. hirsutism
 - B. endometrial carcinoma
 - C. hearing loss
 - D. visual problems
 - E. pregnancy
- 26. Drugs useful in the treatment of infertility include all of the following EXCEPT
 - A. human chorionic gonadotropin
 - B. bromocriptine
 - C. gonadotropin-releasing hormone
 - D. prolactin
 - E. clomiphene

- 27. The following statements about Viagra are true except
 - A. it is used for the treatment of erectile dysfunction
 - B. its chemical name is sildenafil
 - C. it is a selective inhibitor of phosphodiesterase type 3
 - D. it enhances the effect of nitric oxide
 - E. it is cleared predominantly by hepatic elimination
- 28. How does rifampin decrease the efficacy of certain oral contraceptive (OC)?
 - A. Increases OC renal clearance
 - B. Increases OC metabolism via hepatic enzyme induction
 - C. Reduces OC systemic circulation via protein binding
 - D. Decreases intestinal absorption of OC
 - E. None of the above
- 29. Finasteride's action in the treatment of benign prostatic hypertrophy is as a (an)
 - A. HMG-CoA reductase inhibitor
 - B. 5α reductase inhibitor
 - C. serotonin reuptake inhibitor
 - D. P450 hepatic enzyme inhibitor
 - E. none of the above
- 30. Which one of the following statements about desmopressin is not true?
 - A. It's a synthetic polypeptide containing 8 amino acid.
 - B. Its antidiuretic effect is greater than arginine vasopressin
 - C. It is used intranasally or parenterally
 - D. It increases water reabsorption in the kidney
 - E. It reduces urinary sodium and potassium excretion
- 31. The glucocorticoid that exhibits very low mineralocorticoid activity and high topical activity is
 - A. cortisol
 - B. triamcinolone
 - C. aldosterone
 - D. fludrocortisone
 - E. spironolactone

- 32. Terazocin, an α 1 adrenergic antagonist, improves urine flow and symptoms of benign prostatic hypertrophy (BPH) via
 - I. smooth muscle relaxation in the prostate
 - II. smooth muscle relaxation in the bladder neck
 - III. reduces bladder contractility
 - A. I only
 - B. III only
 - C. I and II only
 - D. II and III only
 - E. I, II, and III
- 33. Which one of the following drug combination has (have) been effective therapy for the treatment of helicobacter pylori?
 - I. clarithromycin/ranitidine bismuth citrate
 - II. omeprazole/clarithromycin
 - III. ciprofloxacin/erythromycin
 - A. I only
 - B. III only
 - C. I and II only
 - D. II and III only
 - E. I, II, and III
- 34. Which one of the hypoglycemic agents is associated with high incidence of lactic acidosis?
 - A. acetohexamide
 - B. tolbutamide
 - C. chlorpropamide
 - D. phenformin
 - E. Metformin
- 35. The purpose of fluoride in topical dental products is to
 - I. prevent tooth staining
 - II. remove calculus from the tooth surface
 - III. combine with calcium and phosphorous to strengthen the tooth surface
 - A. I only
 - B. III only
 - C. I and II only
 - D. II and III only
 - E. I, II, and III

- 36. Which of the following agents is commonly used in the therapy of multiple sclerosis?
 - A. Neostigmine
 - B. Cyanocobalamine
 - C. Adrenocorticotropic hormone (ACTH)
 - D. Propylthiouracil
 - E. 5-Fluorouracil
- 37. Which of the following drugs would most likely be used in the treatment of bronchospasm that is associated with chronic obstructive pulmonary disease?
 - A. Ambenonium
 - B. Edrophonium
 - C. Homatropine
 - D. Ipratropium
 - E. Propantheline
- 38. All of the following adverse effects are associated with the use of levodopa EXCEPT
 - A. depression
 - B. delusion and confusion
 - C. dyskinesia and dystonia
 - D. livedo reticularis
 - E. orthostatic hypotension
- 39. All of the following statements describing acetaminophen are true EXCEPT
 - A. it has anti-inflammatory activity similar to or greater than that of salicylates
 - B. it acts as an analgesic and antipyretic
 - C. it may cause skin rash
 - D. it may be used in children with influenza-type vial infections
 - E. acute overdose is characterized by severe hepatotoxicity
- 40. Which of the following substances when present in urine is the most likely positive sign of pregnancy?
 - A. Thyroid-stimulating hormone
 - B. Corticotropin
 - C. Human chorionic gonadotropin
 - D. Interstitial cell-stimulating hormone
 - E. Protamine zinc insulin

- 41. Which of the following glucocorticoids produces the least sodium retention?
 - A. Cortisone
 - B. Dexamethasone
 - C. Fludrocortisione
 - D. Hydrocortisone
 - E. Prednisolone
- 42. All of the following medications should not be routinely used during the third trimester EXCEPT
 - A. acetaminophen
 - B. lithium
 - C. warfarin
 - D. aspirin
 - E. non-steroidal anti-inflammatory drugs
- 43. Which anticonvulsant drug requires therapeutic monitoring of phenobarbital serum levels as well as its own serum levels?
 - A. Carbamazepine
 - B. Clonazepam
 - ·C. Ethotoin
 - D. Phenytoin
 - E. Primidone
- 44. Most antipsychotic agents except clozapine are potent blockers of which neurotransmitters?
 - A. acetylcholine
 - B. calcium
 - C. dopamine
 - D. norepinephrine
 - E. zinc
- 45. In the emergency room, the preferred first-line therapy for asthma is
 - A. theophylline
 - B. a β-agonist
 - C. a corticosteroid
 - D. cromolyn sodium
 - E. an antihistamine

- 46. The diuretic of choice for the initial treatment of a patient with either acute or chronic renal failure whose creatinine clearance is below 25 ml/min is
 - A. bumetanide
 - B. ethacrynic acid
 - C. furosemide
 - D. hydrochlorothiazide
 - E. mannitol
- 47. Which of the following narcotics has the longest duration of effect?
 - A. Dihydromorphone
 - B. Transdermal fentanyl
 - C. Levorphanol
 - D Methadone
 - E. Controlled-release morphine
- 48. Which of the following neuromuscular blocking agents may cause muscarinic response such as bradycardia and increased glandular secretions?
 - A. Gallamine
 - B. Decamethonium
 - C. Pancuronium
 - D. Succinylcholine
 - E. Tubocurarine
- 49. A 23-year-old patient is diagnosed with simple partial seizures. What would the drug of choice be in this patient?
 - A. Carbamazepine
 - B. Clonazepam
 - C. Ethotoin
 - D. Phenytoin
 - E. Primidone
- 50. A woman has an upper respiratory infection. She experienced an episode of bronchospasm following penicillin V therapy six years ago. The cultures now reveal a strain of *Streptococcus pneumoniae* that is sensitive to all of the following drugs. Which of these drugs would be the best choice for this patient?
 - A. Ampicillin
 - B. Cefaclor
 - C. Cyclacillin
 - D. Erythromycin
 - E. Amoxicillin/clavulanate