Part One: Multiple Choice Questions (50 questions, 70 marks)

Note: Encircle the most appropriate answer

Q1. Morphine may safely be given:
   a. subcutaneously to shocked patient
   b. to patient with hepatic failure
   c. to control diarrhea
   d. together with MAO inhibitors
   e. repeatedly to patient with trigeminal neuralgia.

Q2. The following statements regarding benzodiazepines are incorrect, except:
   a. alter sleep pattern more than do other hypnotics
   b. are potent inducer of hepatic drug metabolizing enzymes.
   c. are safer if taken in overdosage than other hypnotics
   d. all have pharmacologically active metabolites.
   e. those having long half lives are best for repeated use in insomnia.

Q3. All of the following statements about the adverse effects of Phenytoin are incorrect, except:
   a. Rarely produces gingival hyperplasia.
   b. It causes venous thrombosis.
   c. It causes alopecia especially in young women.
   d. It interferes with vitamin D metabolism and results in osteomalacia.
   e. It causes nystagmus at low therapeutic drug level.
**Q4.** Which one of the followings may precipitate an attack of open-angle glaucoma if instilled into the eye?

a. Physostigmine  
b. Atropine  
c. Pilocarpine  
d. Echotiotholate.  
e. Neostigmine.

**Q5.** Therapeutic importance of the following drugs include the followings, except:

a. Neostigmine is antidote for tubocurarine.  
b. Edrophonium is useful in the treatment of myasthenia gravis.  
c. Pralidoxime is used in the treatment of poisoning with a nerve agent.  
d. Hyoscine is useful in preventing motion sickness.  
e. Ipratropium is an effective bronchodilator.

**Q6.** With regard to tetracycline ,all the followings are incorrect, except:

a. All tetracyclines crosses the placental barrier.  
b. They are contraindicated in cholera.  
c. Doxycycline is a short acting tetracycline.  
d. They act at the 50S subunit of the bacterial ribosome.  
e. All tetracyclines should not be used in renal compromised patients.
Q7. All of the following statements regarding INH are incorrect, except:

a. discovered as a drug in 1945.
b. is a drug capable of penetrating into phagocytic cells.
c. it acts by blocking DNA synthesis of mycobacteria.
d. it should not be used with pyrazinamide.
e. it should not be used with vitamin B6.

Q8. All of the following statements regarding pyrazinamide are incorrect, except:

a. can cause vitamin B6 deficiency as an adverse effect.
b. acts by inhibiting an essential components in the bacterial cell wall.
c. can cause a flu-like syndrome as an adverse effect.
d. is distributed throughout the body including CSF and mainly excreted by glomerular filtration.
e. should not used with INH.

Q9. All of the following statements regarding proton pump inhibitors are incorrect, except:

a. their half-lives in the ranges between 10 to 12 hours.
b. they should be given after a fatty meal.
c. no IV preparations were available of this group of drugs.
d. they should not be used with an antacids

e. they are of poor efficacy in comparison to H2 receptor blocker in treating peptic ulcer.
Q10. With regard to INH, one of the following statements is true:

a. Incidence of hepatitis as an adverse effect is about 10%.

b. It interferes with the absorption of vitamin B6 and so causes its deficiency.

c. It can cause seizure as an adverse effect.

d. It should not be used with streptomycin.

e. It is free from neurological adverse effect

Q11. With regard to misoprostol, one of the following statements is true:

a. Is an effective anticholinergic drug.

b. Is an effective antihistamine (H2) drug.

c. Is an effective prostaglandin E1 analogue that can cause constipation.

d. Is an effective prostaglandin E1 analogue that can cause diarrhea.

e. Is an effective antipsychotic drug.

Q12. With regard to cycloserine, one of the following statements is true:

a. It is an effective antiemetic drug.

b. It is a ganglion blocking agent.

c. It is an effective anticholinergic drug.

d. It is an antibiotic used in TB, with reported depression and peripheral neuropathy as an adverse effect.

e. It is the drug of choice in therapy of myasthenia gravis.
Q13. With regard to Rifampicin, one of the following statements is true:

a. Can cause a flu-like illness as an adverse effect.
b. Act by inhibiting mycolic acid synthesis.
c. Is an antifungal drug.
d. Carry no risk of causing hepatitis as an adverse effect.
e. Should not be used with pyrazinamide.

Q14. Antibiotics inhibiting cell wall synthesis are which one of the followings?

a. beta-lactam antibiotics.
b. tetracyclines.
c. aminoglycosides.
d. macrolides.
e. quinolones.

Q15. Which one of the following statements regarding carbenicillin and ticarcillin is true?

a. antipseudomonal antibiotics.
b. ester salts of ampicillin.
c. natural penicillins.
d. antistaphylococcal antibiotics.
e. all of the above.
Q16. Which one of the following statements regarding cefamandole and cefaclor is true?

a. they are first generation cephalosporines.
b. they are second generation cephalosporines.
c. they are third generation cephalosporines.
d. they are fourth generation cephalosporines.
e. a & c.

Q17. Which one of the following statements regarding the renal secretion of cephalosporines is true?

a. probenecid slows their elimination and increases their t 1/2.
b. probenecid increases their elimination and decreases their t 1/2.
c. probenecid slows their elimination and decreases their t 1/2.
d. a & c
e. none of the above

Q18. Mechanism of action of penicillins are which one of the followings?

a. binding to penicillin-binding protein.
b. inhibition of transpeptidation reaction
c. activation of autolytic enzymes
d. a & b
e. all of the above
Q19. which of the following statements best describe the mechanism of action of benzodiazepine?

a. benzodiazepine activate GABA receptors in the spinal cord
b. their inhibition of GABA transaminase lead to increase levels of GABA
c. benzodiazepine block glutamate receptors in hierarchical neuronal pathway in the brain
d. they increase the frequency of opening of chloride ion channels that are coupled to GABA receptor
e. they are direct acting GABA receptor agonist in the CNS

Q20. A hypnotic drug facilitate the inhibitory action of GABA, but it lacks anticonvulsants or muscle relaxing properties and has minimal effect on sleep architecture?

a. Buspirone
b. Diazepam
c. Flurazepam
d. Phenobarbital
e. Zolpidem

Q21. which of the followings has overdose toxicity that includes insomnia, arrhythmias, and convulsions?

a. aminophylline
b. cromolyn
c. ipratropium
d. prednisolone
e. zafirlukast
Q22. which of the followings is a prophylactic agent that appear to stabilize mast cells?

a. Cromolyn
b. Terbutaline
c. Epinephrine
d. Ipratropium
e. Zileuton

Q23. A drug most likely to suppress herpetic infections and provide prophylaxis against CMV retinitis is:

a. gancyclovir
b. fluconazole
c. indinavir
d. rifabutin
e. trimethoprim /sulfamethaxazole

Q24. which of the following drugs is most likely to be prescribed for a 27-year – old nursing mother diagnosed as suffering from genital herpes?

a. acyclovir
b. amantadine
c. foscarnet
d. ritonavir
e. trifluridine
Q25. All the following drugs are low efficacy diuretics, except:
   a. spironolactone
   b. amiloride
   c. triamtrene
   d. furosemide
   e. mannitol

Q26. Erythromycin is considered the drug of first choice in the treatment of all the followings, except:
   a. diphtheria
   b. pertussis
   c. mycoplasma pneumonia
   d. urinary tract infection
   e. legionella pneumonia

Q27. Which one of the following drugs is an indirect acting adrenergic agonist?
   a. albuterol
   b. dopamine
   c. phenylephrine
   d. ephedrine
   e. amphetamine

Q28. All of the following drugs can cause dependence, except:
   a. pethidine.
   b. Amphetamine.
   c. morphine.
   d. hydrocodiene
   e. candesartan
Q29. Which one of the following statements about antagonism is incorrect?

a. reversible antagonist occurs if the bond that bind the drug to the receptors are covalent bond

b. competitive antagonist can be displaced from the receptors when increase the concentration of agonist

c. chemical antagonist occurs between heparine and protamine

d. drugs can also act as antagonist by binding to enzymes

e. the action of enalpril is an example of competitive inhibition of enzyme activity

Q30. Which one of the following drugs could significantly impair the ability to drive a car?

a. diphenhydramine

b. ergotamine

c. loratadine

d. sumatriptan

e. ranitidine

Q31. Which one of the following statements about ondansetrone is incorrect?

a. Has serotonin receptor antagonist activity

b. Used in the prevention of nausea and vomiting associated with cancer chemotherapy

c. More effective when combined with dexamethasone

d. It can be administered intravenously and orally

e. It blocks dopamine receptors
Q32. The following drugs are ergot alkaloid, except:

a. cabergoline
b. buspirone
c. ergometrine
d. bromocriptine
e. methysergide

Q33. The following adverse effects are caused by parenteral iron therapy, except:

a. intramuscular injection results in skin staining
b. myalgia and metallic taste
c. anaphylactic reaction following IV injection
d. gastric upset
e. retroperitoneal fibrosis

Q34. Which one of the following statements regarding epoetin is correct?

a. subcutaneous injection is more effective than IV one.
b. effective for anemia of acute renal failure.
c. causes hypotension
d. iron deficiency is not a side effect
e. flu-like illness accompanies subcutaneous injection
**Q35.** All of the following statements are related to warfarine, except:

a. readily crosses the placental barriers
b. indicated for the prevention of venous thrombosis
c. contraindicated in advanced hepatic and renal failure.
d. ciprofloxacin decreases warfarine metabolism
e. needs 5 days to start action

**Q36.** The following contraindications are related to steroid therapy, except:

a. peptic ulcer
b. diabetes mellitus
c. osteoporosis
d. glaucoma
e. hypotension

**Q37.** The following drugs are non-sulphonylurea, except:

a. repaglinide
b. nateglinide
c. a & b
d. troglitazone
e. none of the above

**Q38.** The following drugs are estrogen antagonist, except:

a. clomiphene citrate.
b. cycofenil
c. tamoxifen
d. levonorgestrel
e. a & b
Q39. The following drugs are selective COX-2 inhibitor, except

a. Celecoxib.
b. Rofecoxib.
c. Diclofenac.
d. a & b
e. Valdecoxib

Q40. The following statements concerning antifibrinolytic agents are correct, except:

a. They include aminocaproic acid and tranexamic acid.
b. Reduce bleeding after ocular trauma.
c. Cause orthostatic hypotension.
d. Contraindicated in patients with hematuria.
e. Cause constipation.

Q41. The following drugs are used in treatment of heart failure, except:

a. Captopril.
b. Carvedilol.
c. Milrinone.
d. Glyceryl trinitrate.
e. Terbutaline.

Q42. Prolonged use of organic nitrate is likely to result in the development of which of the following?

a. Urinary retention.
b. Nephrotoxicity.
c. Tolerance.
d. Hepatotoxicity.
e. Megaloblastic anemia.
Q43. Which one of the following antihypertensive agents is used safely in patients with bilateral renal artery stenosis?

a. Captopril.
b. Candesartan.
c. Amlodipine.
d. Aliskirine.
e. Valsartan.

Q44. Which one of the following drugs is a selective alpha1-adrenergic antagonist?

a. Phentolamine
b. Doxazosine
c. Tolazoline
d. Phenoxybenzamine
e. Metoprolol

Q45. Which one of the following drugs is a local anesthetic agent?

a. Benzocaine
b. Enflurane
c. Thiopental
d. Fentanyl
e. Midazolam

Q46. The following drugs are contraindicated in pregnancy-induced hypertension, except:

a. Metyldopa.
b. Candesartan.
c. Captopril.
d. Aliskirine.
e. a & d.
**Q47.** A headache is a common experienced side effect of which drug:
   a. clonidine  
   b. nitroglycerin  
   c. doxazosin  
   d. diltiazem  
   e. captopril.

**Q48.** How does hydralazine, an antihypertensive agent, works?
   a. block alpha adrenergic receptor  
   b. directly dilates peripheral blood vessels  
   c. inhibits ACE  
   d. inhibits COMT  
   e. blocks beta adrenergic receptors

**Q49.** Which of the following drugs causes Grey baby syndrome?
   a. kanamycin  
   b. ciprofloxacin  
   c. demeclocycline  
   d. amphotericin B  
   e. chloramphenicol

**Q50.** All of the following statements about verapamil are correct, except:
   a. it is a calcium channel blocking agent  
   b. used for the treatment of hypertension  
   c. used safely in combination with beta-blockers  
   d. it has marked effects on the heart and low effects on the blood vessels  
   e. used for the treatment of angina pectoris
Part two: Short Essay Questions (12 questions, 30 marks)

Q1. Enumerate the adverse effects of tetracyclines.
Q2. Enumerate clinical uses of fluoroquinolones.
Q3. Enumerate the main indications of diuretic therapy.
Q4. How can we limit the development of antibiotic resistance?
Q5. Enumerate the classes of antianginal drugs with examples.
Q6. What are the adverse effects of angiotensin receptor blockers (ARBs)?
   Which adverse effects seen with ACE inhibitors are not seen with ARBs?
Q7. Enumerate the adverse effects of metformin.
Q8. Enumerate the indications of vitamin k therapy.
Q9. Enumerate the reasons behind failure of oral iron therapy.
Q10. Enumerate five adverse effects of Steroid therapy.
Q11. Write the clinical uses of danazole.
Q12. Write the mechanism of action of digoxin.

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