

PHARMACOLOGY 78 MCQs

CH1

1. Regarding the nature of drugs (page 2-3):
 - A. Covalent bonding of drugs to receptors generally has a short lived effect
 - B. Electrostatic bonds are stronger than hydrophobic bonds
 - C. Most commonly used drugs have a molecular weight greater than 1000
 - D. Drugs which bind to receptors via weak bonds are generally less selective
 - E. Most drug preparations contain only one enantiomer
2. Regarding pharmacodynamic principles (page 4):
 - A. The effect of a drug lasts only as long as the drug occupies the receptor
 - B. A molecule that binds a drug is a receptor
 - C. Many receptor-effector systems incorporate desensitization mechanisms preventing excess activation when drug molecules are present for extended periods
 - D. A 'partial agonist' exerts effect by inhibiting molecules responsible for terminating the action of an agonist
 - E. Pharmacodynamics govern the absorption, distribution and elimination of drugs.
3. Regarding pharmacokinetic principles (page 5-7):
 - A. Aqueous diffusion is the most important limiting factor for drug permeation
 - B. The Henderson-Hasselbach equation describes the passive flux of molecules down a concentration gradient
 - C. Ionized molecules are more lipid soluble
 - D. As pH decreases, a higher proportion of a weak acid exists in its more lipid soluble, protonated form
 - E. A weak acid is excreted faster in acidic urine

CH 2

4. Regarding receptors (page 9):
 - A. The concentration of a drug required to produce effect relates to the receptor's affinity for the drug
 - B. Antagonists directly alter the function of the receptors
 - C. Transport proteins are the best characterized group of drug receptors
 - D. The anti-neoplastic effect of methotrexate is due to an action on structural protein receptors
 - E. Low K_D equates to low binding affinity
5. Regarding drugs and receptors (page 16-19):
 - A. The effect of a physiologic antagonist is generally more easy to control than a receptor-specific antagonist
 - B. Atropine is a physiologic antagonist
 - C. A chemical antagonist binds directly to the agonist drug
 - D. Lipid soluble drugs generally act on membrane proteins
 - E. Hormones and drugs affecting gene transcription take 10 minutes to show effect
6. Regarding receptors (page 18-22):
 - A. Insulin acts via a simple ligand gated receptor channel
 - B. Binding of Epithelial Growth Factor and Platelet Derived Growth Factor to their receptors causes up-regulation of receptors
 - C. Acetylcholine works at nicotinic receptors via tyrosine kinase
 - D. Adenyl cyclase converts cAMP into ATP
 - E. G-proteins enable amplification of the initial ligand receptor transduction signal

CH 3

7. Regarding pharmacokinetics (page 36-43):
 - A. Drug elimination occurs only in the liver and kidney
 - B. The liver only eliminates drugs by biotransformation
 - C. Capacity limited elimination occurs for phenytoin
 - D. Accumulation will occur if dosing interval is less than 5 half-lives
 - E. The rate of drug absorption is 'zero-order' when it is proportionate to the amount of drug remaining in the gut
8. Regarding pharmacokinetics (42-43):
 - A. Extraction ratio refers to drug excretion by the kidneys
 - B. Isoniazid, morphine and propranolol are poorly extracted by the liver
 - C. Diazepam, warfarin and phenytoin are highly extracted by the liver
 - D. Only 50% of a suppository medication can be assumed to bypass the liver on initial pass.
 - E. Inhaled drugs are subject to first pass metabolism

9. Regarding pharmacokinetics (page 43-49):

- A. A short half life always means a drug will have to be given frequently
- B. Well controlled infusion of aminoglycosides is thought to cause less renal toxicity than regular dosing
- C. Poor cardiac function may affect drug clearance
- D. Older people have a larger volume of distribution for digoxin
- E. Increased body weight due to ascites decreases the volume of distribution of aminoglycosides.

CH 4

10. Regarding biotransformation (page 51-62):

- A. Phase II reactions only follow phase I
- B. Phase I reactions involve conjugation
- C. The cytochrome P450 enzymes catalyse phase I reactions
- D. Diet does not affect drug metabolism
- E. Barbiturate users require lower doses of warfarin to raise their prothrombin time

CH 5

11. Regarding Drug evaluation (page 64-73):

- A. Phase 3 trials follow approval to market a drug
- B. Phase 1 trials usually involve testing a drug on a small number of volunteer patients
- C. Phase 1 trials involve animal experimentation
- D. Many antibiotics were developed through random screening of natural products
- E. There are 3 conventional phases of drug evaluation in humans

CH 6

12. Acetylcholine (page 76-79):

- A. Is not released from sympathetic postganglionic fibres
- B. Is the neurotransmitter at all ganglions in the autonomic nervous system.
- C. Is mostly contained in large vesicles at synaptic endings
- D. Is synthesized by acetylcholinesterase
- E. Is released from synaptic endings when intracellular Ca^{++} decreases

13. Acetylcholine (page 76-88):

- A. Is competitively inhibited by botulinum toxin
- B. Is synthesized in the mitochondria
- C. Is broken down into choline and acetate by acetylcholinesterase
- D. Acts via muscarinic receptors when preganglionic fibres synapse in ganglia
- E. Causes pupil dilation

14. Noradrenaline (page 80-86):

- A. Is synthesized from tyrosine
- B. Is mimicked by cocaine acting on the NA receptor
- C. Is mimicked by amphetamines primarily due to them preventing NA uptake
- D. Has its action terminated primarily by metabolism
- E. As a slow infusion has a net effect of increasing heart rate in a patient with intact ANS reflexes

CH 7

15. Regarding acetylcholine and its receptors (92-94):

- A. Nicotinic receptors act via a G-protein
- B. Muscarinic receptors are located at synapses in sympathetic ganglions
- C. Acetylcholinesterase inhibitors affect both nicotinic and muscarinic receptors
- D. Acetylcholinesterase hydrolyzes Ach to Acetyl CoA and choline
- E. All cholinesterase inhibitors only have indirect cholinomimetic action

16. Regarding cholinomimetics (page 94-96):

- A. Esters of Ach are mainly lipophilic
- B. Choline esters are well absorbed and distributed
- C. Cholinomimetic alkaloids are poorly absorbed
- D. Activation of muscarinic receptors increases K^+ flux across cardiac cell membranes
- E. In prolonged agonist occupancy of nicotinic receptors the effector response is prolonged

17. Muscarinic agonists (page 96-98):

- A. Cause miosis
- B. Increase inward Ca^{++} flux in cardiac pacemakers
- C. Relax bronchial smooth muscle
- D. Stimulate the bladder sphincter and trigone and relax the detrusor
- E. Are more richly evident in the spinal cord than in the brain

18. Regarding indirect-acting cholinomimetics (96-102):

- A. Most organophosphates are poorly absorbed
- B. Organophosphates bind covalently to acetylcholinesterase
- C. They have similar effect on blood pressure and vascular smooth muscle to directly acting muscarinic agonists
- D. Are used in large daily doses in myasthenia gravis
- E. Have no beneficial effect in treatment of Alzheimer's disease.

CH 8

19. Atropine (page 107-108):

- A. Has more lasting CNS effects than scopolamine
- B. Is poorly absorbed from the gut
- C. Has rapidly declining effects on all organ systems
- D. Is more effective at blocking endogenous ACh than exogenous cholinergic agonists
- E. Does not distinguish between M1, M2 and M3 subtypes of muscarinic receptor

20. Atropine (page 108-115):

- A. May decrease PR interval of an ECG in the presence of high vagal tone
- B. Blocks parasympathetic innervation of most blood vessels
- C. Blocks gastric secretions more so than other GI functions
- D. Is of no use in organophosphate poisoning
- E. Is a valuable treatment in the poisoning caused by Amanita phalloides mushrooms

CH 18.

21. Regarding thyroid hormone supplementation (p645):

- A. Large doses of iodine can increase iodine organification
- B. T4 is primarily absorbed from the stomach
- C. Hyperthyroidism may cause increased clearance to T3 and T4
- D. T3 is preferred as a thyroid supplement in hypothyroid patients with concurrent cardiac disease.
- E. Synthetic T4 has a short half life

22. Regarding thioamides (645---):

- A. Propylthiouracil is much more active than carbimazole
- B. They work by inhibition reactions catalysed by thyroid peroxidase
- C. They are safe for administration during pregnancy
- D. They are ineffectual when administered concurrently with thyroxine
- E. The most dangerous side effect is hypoproteinaemia

23. With respect to thyroid and non-thyroid drugs in the treatment of thyroid disease (page 651):

- A. Beta-blockers are useful management of hypothyroid symptoms
- B. Barbiturates inhibit the conversion of T4 to T3
- C. If anti-thyroid treatment is required in pregnancy
- D. Radioactive Iodine (^{131}I) is not excreted in breast milk
- E. Iodine, propranolol and hydrocortisone are all useful in the treatment of Thyroid Storm.

CH 9

24. Regarding catecholamines and their receptors (page 120-123):

- A. All β receptors act by increasing levels of cAMP
- B. All α receptors act by decreasing cAMP
- C. Norepinephrine is more selective for β_2 than β_1 receptors
- D. G_i is the important G protein subunit of β receptors
- E. Catecholamines readily cross the blood brain barrier

25. Regarding chemistry and pharmacokinetics of sympathomimetics (page 125-126):
- A. COMT increases bioavailability of catecholamines
 - B. Amphetamine and ephedrine have a lower oral bioavailability than catecholamines
 - C. Ephedrine and amphetamine are broken down by MAO
 - D. Ephedrine and amphetamine enhance release of catecholamines from nerve endings
 - E. Larger substitutes of amino groups increase alpha activity of sympathomimetics
26. Regarding cholinergic/sympathomimetic action (page 127-129):
- A. Cholinergic stimulation of the heart decreases coronary blood flow
 - B. Cholinergic stimulation of the heart increases ventricular ejection time
 - C. Phenylephrine increases peripheral arteriole resistance and decreases venous capacitance
 - D. α_1 stimulation causes bladder wall contraction
 - E. β_2 activation causes increased ECF K^+
27. Regarding specific sympathomimetic drugs (page 130-131)
- A. Norepinephrine has more lasting inotropic effects than chronotropic
 - B. Ephedrine is primarily a direct agonist
 - C. Dobutamine affects only β_1 receptors
 - D. Amphetamine has a stimulant effect on mood, alertness and appetite
 - E. Cocaine stimulates release of catecholamines from nerve endings

CH 10

28. Regarding α blockers (page 140-144):
- A. Prazosin has a half life of 12 hours
 - B. Prazosin acts with similar efficacy on α_1 and α_2 receptors
 - C. Nasal stuffiness and mydriasis are minor side effects of α blockade
 - D. The main therapeutic effect of ergot derivatives in migraine treatment is due to α blockade
 - E. Tamsulosin appears more selective for prostatic α_1 receptors than vascular smooth muscle α_1 receptors
29. Propranolol (page 144-146):
- A. Has relatively high bioavailability
 - B. Has a large volume of distribution
 - C. Is excreted unchanged in the urine
 - D. Is more selective for β_1 receptors than β_2
 - E. Has no local anaesthetic effect
30. β Blockers (page 145-147):
- A. Cause hypotension in normotensive subjects
 - B. Cause increased plasma rennin
 - C. Aid glaucoma by decreasing production of aqueous humor
 - D. May result in increased plasma glucose
 - E. May increase HDL concentration
31. Regarding specific β blockers (page 144, 147-148):
- A. Metoprolol and atenolol may be safer than propranolol for patients with airways disease
 - B. Timolol is β_1 selective
 - C. Carvedilol has pure β blocking properties
 - D. Esmolol has a longer half life than propranolol
 - E. Atenolol is completely metabolized by the liver
32. β blockers (page 148-152):
- A. Have no effect on AV node refractory period
 - B. May reduce ventricular ectopic beats
 - C. Have no benefit in obstructive cardiomyopathy
 - D. Do not cause significant systemic effects when administered topically
 - E. Do not require tapered withdrawal

CH 11

33. Regarding centrally acting anti-hypertensives (page 160-162):

- A. Clonidine initially produces a rise in BP before hypotension
- B. Methyldopa lowers HR and CO more than clonidine
- C. Methyldopa has high bioavailability orally
- D. Clonidine affects mainly venous capacitance vessels
- E. Clonidine has poor bioavailability

34. Regarding propranolol and β blockers page 166-167):

- A. They frequently cause postural hypotension
- B. Atenolol dose should be lowered in renal failure
- C. Metoprolol is more potent than propranolol at β_1 receptors
- D. Withdrawal from β blockers is not a problem
- E. Pindolol decreases heart rate more than other β blockers

35. Regarding vasodilators (page 169-172):

- A. Hydralazine dilates the venous system
- B. Hydralazine is a good sole agent for treatment of hypertension
- C. Sodium nitroprusside is a general vasodilator
- D. Verapamil has less effect on cardiac muscle than diltiazem
- E. Diltiazem is more effective at decreasing BP than other calcium channel blockers

36. Regarding ACE inhibitors (page 172-173):

- A. Captopril inactivates bradykinin
- B. ACE is released from the renal cortex
- C. ACE inhibitors result in decreased cardiac output
- D. They decrease post AMI myocardial remodeling
- E. Captopril has low bioavailability

37. ACE inhibitors (page 174-):

- A. Are safe for use in pregnancy
- B. May be less effective when taken with NSAIDs
- C. Inhibit angiotensin action more completely than angiotensin receptor antagonists
- D. Are mostly eliminated by the liver
- E. Include hypokalaemia as a side effect

CH 12

38. Regarding vascular tone (page 182-183):

- A. NO causes vasodilation primarily through activation of adenylyl cyclase
- B. Decreased intracellular Ca^{++} leads to vasodilation
- C. Decreased potassium permeability stabilizes membrane potential in excitable cells
- D. Increased cAMP increases activation of myosin light chain kinase
- E. Venous tone determines systolic myocardial wall stress

39. Nitroglycerine (page 183-185):

- A. Is degraded by light
- B. Has high oral bioavailability
- C. Relaxes all types of smooth muscle
- D. Relaxes arteries at lower concentrations than veins
- E. Affects arterioles and precapillary sphincters more than large arteries

40. Regarding nitrates (page 185-188):

- A. Nitroglycerine increases coronary blood flow in patients with obstructive disease
- B. Long acting nitrates do not cause tolerance
- C. Isosorbide mononitrate has low bioavailability
- D. Nitrates have no effect on platelet function
- E. Relief of angina is primarily through decreased myocardial oxygen demand

41. Regarding calcium channel blockers (page 189-191):
- Verapamil is a dihydropyridine
 - All bind to the same receptor on the calcium channel
 - They generally have a high first pass effect
 - They have similar effects on venous and arterial smooth muscle
 - Do not affect cardiac output

CH 13

42. Digoxin/Cardiac glycosides (page 202-205):
- Show useful inotropic effect in all cardiac failure
 - Vary in solubility with pH
 - Has poor distribution to body tissues
 - Is extensively metabolized by the liver
 - May have levels affected by antibiotics
43. Digoxin
- May lead to ST depression on ECG
 - Directly inhibits the Ca/Na transporter
 - Increases membrane potential in high doses
 - Causes decreased heart rate as a direct effect on cardiac muscle
 - Has its most common toxic effects on the CNS

44. Digoxin (page 211-212):
- Does not have significant interactions with diuretics
 - Is affected by quinidine primarily due to displacement from tissue binding
 - May require lower doses in hyperthyroidism
 - May cause more arrhythmias when catecholamine release is high
 - Is useful in treatment of Wolff-Parkinson-White syndrome

Pharm CH 14

45. Regarding cardiac electrophysiology (page 219-221):
- Conduction through the AV node takes 0.05secs
 - Transmembrane potential of cardiac cells is determined chiefly by Cl⁻
 - QRS complex reflects the duration of the ventricular AP
 - Spontaneous depolarization of the pacemaker cells occurs during diastole
 - Hypokalaemia will usually cause ectopic pacemaker cells to slow or stop
46. Regarding cardiac electrophysiology (page 221-224):
- Normal cardiac (non pacemaker) AP upstroke is dependant on K⁺ current
 - L-type Ca⁺⁺ channels open more rapidly than other Ca⁺⁺ channels
 - Potassium permeability increases during phase 3 of the cardiac AP
 - Na⁺ channels are active during the plateau phase (2) of the cardiac AP
 - Na current is greatest when membrane depolarization reaches levels positive to -55mV
47. Regarding antiarrhythmic drugs (page 227-229, 237):
- They reduce conduction and excitability more in depolarized tissue than in normally polarized
 - They decrease refractory period of depolarized tissue more than polarized
 - Na and Ca channel blocking drugs have the greatest affinity for rested channels
 - Class Ib agents lengthen the duration of the cardiac AP
 - Flecainide is a class IV antiarrhythmic agent
48. Lignocaine (page 229-236):
- Is a class Ia antiarrhythmic agent
 - Acts on sodium and potassium channels
 - Blocks Na channels only in the activated state
 - Is effective in blocking both depolarized and normally polarized tissues
 - Undergoes extensive hepatic metabolism
49. Quinidine (page 230-231):
- Shortens action potential duration
 - Has α -adrenoreceptor blocking activity
 - Stimulates increased vagal tone
 - Decreases the effect of digoxin
 - Toxic effects are more likely in the presence of hypokalaemia

50. Procainamide (page 231-232):

- A. Has greater antimuscarinic action than quinidine
- B. Does not have ganglion-blocking properties
- C. May cause a lupus-like syndrome
- D. Has poor oral bioavailability
- E. Is not indicated for ventricular arrhythmias associated with MI

51. Amiodarone (page 233-234):

- A. Has class I antiarrhythmic properties
- B. Combines mainly with activated sodium channels
- C. Shorten AP duration
- D. Has no effect on Ca channels
- E. Prolongs QRS but not QT interval

52. Amiodarone (page 234-235):

- A. Frequently induces new ventricular arrhythmias
- B. Does not have anti-anginal properties
- C. Causes peripheral vasoconstriction
- D. May cause skin photosensitivity
- E. Toxicity resolves soon after cessation

53. Regarding class III antiarrhythmics (page 238-239):

- A. Shorten cardiac Aps
- B. Do not exhibit reverse use-dependence
- C. Sotalol does not cause increased risk of Torsades de Pointes
- D. Sotalol is extensively metabolized by the liver
- E. Sotalol is effective in both supraventricular and ventricular arrhythmias

54. Verapamil (page 239-240):

- A. Blocks both activated and inactivated Ca⁺⁺ channels
- B. Is effective in VT
- C. Has high oral bioavailability
- D. Does not cause heart block
- E. Is excreted relatively unchanged in the urine

55. Regarding miscellaneous antiarrhythmic agents (page 240):

- A. Adenosine has a half life of 10mins
- B. Adenosine directly inhibits AV nodal conduction
- C. Adenosine has effects inhibited by dipyridamole
- D. Magnesium is not effective for digoxin induced arrhythmias even if the blood level is low
- E. Hyperkalaemia increases the activity of ectopic pacemakers.

CH 45

56. Aminoglycosides (page 784):

- A. Include gentamicin, tobramycin, vancomycin
- B. Are more active at lower pH
- C. Enter the inner cell membrane via porin channels
- D. Bind to 30-S subunit ribosomal proteins
- E. Are primarily bacterostatic

57. Aminoglycosides (page 785-789):

- A. Are well distributed through bodily tissues
- B. Do not have activity against gram positive organisms
- C. Are toxic to the auditory portion of the cranial nerve VIII but spare vesibular function
- D. Exhibit antibacterial action beyond the time that the drug is present
- E. Have decreased nephrotoxicity when used with loop diuretics

58. Regarding gentamicin (page 788-790):

- A. Has better anaerobic cover than other aminoglycosides
- B. Gram negative resistance is usually due to selection of permeability mutants
- C. Ototoxicity is more common in the vestibular system than the auditory
- D. Ototoxicity is largely reversible
- E. If resistance to gram negative organisms is shown, the organism is likely to be susceptible to tobramycin.

CH 43

59. Regarding Beta-lactams (page 754-755):

- A. The beta lactams ring has 5 members
- B. All beta lactams are unstable in acid
- C. Penicillins are stable in solution
- D. Betalactams bind to penicillin binding proteins and thereby inhibit peptidoglycan synthesis
- E. Penicillins and cephalosporins are bactericidal regardless of cells state

60. Regarding beta-lactam resistance (page 755-757):

- A. Beta-lactamase is the most common mechanism of resistance
- B. Cephalosporins and penicillins are equally susceptible to inactivation by beta-lactamase
- C. Beta-lactamase production is responsible for MRSA
- D. Impaired penetration of drug to Penicillin Binding Protein is a mechanism of gram positive organism resistance
- E. Gram positive organisms may produce an efflux pump which expels beta-lactam drugs

CH 25

61. Regarding signs and stages of anaesthesia (page 420-421):

- A. Stage I involves irregular respiration, struggling and delirium
- B. Stage III is marked by cessation of spontaneous respiration
- C. Stage II is desirable for small procedures
- D. The most reliable indicator that surgical anaesthesia has been achieved is the loss of the eye-lash reflex and establishment of a regular respiratory pattern
- E. Amnesia is a common feature of stage I anaesthesia

62. Regarding inhaled anaesthetics (page 422-425, 428)

- A. Low blood solubility results in more rapid induction of anaesthesia
- B. Isoflurane is associated with hepatotoxicity
- C. Methoxyflurane has relatively low blood solubility
- D. Sevoflurane has higher risk of nephrotoxicity than methoxyflurane
- E. The major site of elimination is the liver

63. Regarding inhaled anaesthetics (page 426-429):

- A. Halothane depresses BP primarily by decreasing systemic vascular resistance
- B. Inhaled anaesthetics generally reduce myocardial O₂ consumption
- C. Halothane decreases myocardial sensitivity to catecholamines
- D. They cause decreased cerebral blood flow
- E. They do not trigger malignant hyperthermia in susceptible individuals

64. Thiopentone (page 430-431):

- A. Recovery is rapid due to rapid metabolism
- B. Is mostly excreted unchanged in the urine
- C. Causes dose dependent decrease in arterial BP, stroke volume and cardiac output
- D. Cardiovascular changes are primarily due to decreased total peripheral resistance
- E. Increases cerebral blood flow

65. Regarding the anaesthetic use of benzodiazepines and opioids (page 431-432):

- A. Midazolam is H₂O soluble at physiologic pH
- B. Elimination half life of midazolam is 2-4hours
- C. Flumazenil is reliable for reversing benzodiazepine induced respiratory depression
- D. IV opioids may decrease chest wall rigidity
- E. Epidural opioids prevent pain caused by surgical incision

66. Regarding propofol and ketamine (page 423-433):

- A. Propofol is frequently associated with nausea
- B. Propofol causes marked hypotension primarily by decreased peripheral resistance
- C. Ketamine appears to work at the glutamine receptor
- D. Ketamine produces cardiovascular depression
- E. Ketamine decreases cerebral blood flow

CH 27

67. Regarding neuromuscular blocking agents (page 447-450):

- A. Non-depolarizing and depolarizing muscle relaxants are acetylcholine antagonists
- B. Neuromuscular blocking agents are all non-polar compounds
- C. Non-depolarising muscle relaxants have a similar volume of distribution to blood volume
- D. Non-depolarising agents with high renal excretion generally have shorter half lives
- E. Atracurium is mostly eliminated by the liver

68. Succinyl-choline/suxamethonium (page 461-456):

- A. Plasma cholinesterases decrease the duration of action by metabolizing the drug at the motor end plate
- B. Causes fasciculations which are unaffected by general anaesthesia
- C. Stimulates all autonomic cholinergic receptors
- D. Causes muscle pain especially in bedridden patients
- E. Action in phase I is reversed by neostigmine

69. Regarding non-depolarising muscle relaxants (page 453):

- A. The cause weakness in larger muscles first
- B. Vecuronium and rocuronium cause significant hypotension
- C. Severe burns may result in increased sensitivity
- D. NMJ blockade may be decreased in myasthenia gravis
- E. They antagonize depolarizing agents in phase I and augment phase II activity

70. Regarding spasmolytics (page 457-460):

- A. Diazepam reduces muscle tone at non-sedating doses
- B. Baclofen is poorly absorbed orally
- C. Baclofen is a GABA agonist at GABA-B receptors
- D. Dantrolene acts in the CNS to relieve spasticity
- E. Dantrolene increases Calcium release from the sarcoplasmic reticulum

CH 59

71. Activated charcoal (page 1016):

- A. Is effective for lithium overdose
- B. Is never indicated in repeated doses
- C. Is less effective alone than in combination with gastric lavage
- D. Generally absorbs 10% of its weight of susceptible drugs
- E. Is ineffective in carbamazepine overdose

CH 56

72. Regarding adverse drug reactions (pages 964-5, 981-3):

- A. Majority of drug hypersensitivity reactions are of type I variety
- B. Type I hypersensitivity to drugs is due to direct antibody formation against the drug
- C. Penicillin only causes type I hypersensitivity reactions
- D. Stevens-Johnson syndrome is likely a severe form of type III hypersensitivity
- E. Drugs do not cause cell mediated hypersensitivity

73. Corticosteroids (page 968):

- A. Reduce proliferation of myeloid and erythroid stem cells
- B. Decrease size of lymph node and spleen lymphoid content
- C. Main immunologic function is due to certain T cell cytotoxicity
- D. Alter monocyte and neutrophil phagocytic ability
- E. Affect humoral immunity more than cellular

74. Corticosteroids (page 968-969):

- A. Cause neutropenia and lymphocytosis
- B. Decrease catabolic rate of IgG
- C. Interfere with cell cycle of activated lymphoid cells
- D. Increase chemotaxis in monocytes and neutrophils
- E. Are ineffective in delayed hypersensitivity

CH 57:

75. Carbon Monoxide (page 990):

- A. Average atmospheric concentration is 1ppm
- B. Combines irreversibly with Hb
- C. Interferes with dissociation of oxyhaemoglobin
- D. Produces symptoms at 5-10%
- E. Clinical effect may be lessened by increased altitude and temperature

CH 57 and 59

76. Regarding Carbon monoxide toxicity (page 990, 1014, 1020):

- A. Tachycardia is usually the first sign of intoxication
- B. Half life at 1atm is 4 times more than with 100%O₂
- C. Does not affect foetus
- D. May cause metabolic alkalosis in severe cases
- E. PO₂ and SaO₂ will be decreased

CH 59, 7 and 8

77. Regarding organophosphate poisoning (page 101, 105, 115, 1021):

- A. Dominant initial signs are of nicotinic excess
- B. Are initially bound and phosphorylated by AChEsterase
- C. Pralidoxime is most effective when the phosphorylated enzyme complex has "aged"
- D. Does not exert ganglionic effects
- E. Pralidoxime is effective in reversing central effects of organophosphate poisoning

CH 57, 59

78. Regarding Organophosphate poisoning (page 114, 115, 994, 1021):

- A. Results in mydriasis
- B. Atropine is of no use
- C. Pralidoxime is inactive at nicotinic sites
- D. Pralidoxime helps regenerate Acetylcholinesterase by hydrolyzing the enzyme-organophosphate bond
- E. Chronic low level exposure has no effects

Answers

Ch 1	27	A	57	D	
1	B	Ch 10	58	C	
2	C	28	E	Ch 43	
3	D	29	B	59	D
Ch 2	30	C	60	A	
4	A	31	A	Ch 25	
5	C	32	B	61	D
6	E	Ch 11	62	A	
Ch 3	33	A	63	B	
7	C	34	B	64	C
8	D	35	C	65	B
9	C	36	D	66	B
Ch 4	37	B	Ch 27	67	C
10	C	Ch 12	68	C	
Ch 5	38	B	69	E	
11	C	39	C	70	C
Ch 6	40	E	Ch 59	71	D
12	D	41	C	Ch 56	
13	B	Ch 13	72	D	
14	C	42	E	73	B
Ch 7	43	A	74	C	
15	A	44	D	Ch 57	
16	C	Ch 14	75	C	
17	D	45	D	Ch 57 & 59	
18	A	46	C	76	B
Ch 8	47	A	Ch 59, 7, 8	77	B
19	E	48	E	Ch 57, 59	
20	A	49	B	78	D
Ch 18	50	C			
21	C	51	A		
22	B	52	D		
23	E	53	E		
Ch 9	54	A			
24	A	55	B		
25	D	Ch 45			
26	C	56	D		