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Grade 60 out of 75 (80%)

Question 1

Complete

Mark 1 out of 1

Where is Cyclo-oxygenase-1 (COX-1) not found?

- A. Gastrointestinal (GI) mucosa
- B. Platelets
- C. Sites of inflammation
- D. Vasculature

Question 2

Complete

Mark 1 out of 1

Which of these drugs would be most effective for intra-vaginal administration to ripen the cervix during induction of labour?

- A. Misoprostol
- B. Epoprostenol (a prostaglandin)
- C. Ergometrine
- D. Indomethacin (non-selective NSAID)

Question 3

Complete

Mark 1 out of 1

A 58-year-old man presented to a clinic with the chief complaint of increasing shortness of breath and a 4 kg weight gain over the past 2 weeks. Physical examination revealed a dyspneic and cyanotic male with the following vital signs: blood pressure 135/100 mm Hg, pulse 125 bpm, respirations 22/min. His liver was enlarged, and pitting oedema was seen on the legs. A Doppler echocardiogram showed an ejection fraction of 35%. Appropriate drug therapy was started that included metoprolol.

Which of the following actions most likely contribute to the therapeutic effect of metoprolol in this patient?

- A. Increased down-regulation of cardiac β adrenergic receptors
- B. Decreased preload
- C. Prevention of chronic sympathetic over-activity
- D. Increased renin secretion

Question 4

Complete

Mark 1 out of 1

Which of the following enzymes do leukotrienes require for their biosynthesis?

- A. Cyclo-oxygenase-2
- B. Cyclo-oxygenase-1
- C. 8-Lipoxygenase
- D. 5-Lipoxygenase

Question 5

Complete

Mark 1 out of 1

An injection of atropine does not typically produce

- A. Decreased gastrointestinal movements
- B. Dryness of the mouth
- C. Weakness of skeletal muscles throughout the body
- D. Decreased secretion of mucus in the respiratory tract



Question 6

Complete

Mark 1 out of 1

Which of the following statements is **INCORRECT**?

- A. Unbound drug concentration is more closely related to drug effects
- B. Bioavailability affects the duration of the drug effect
- C. Highly plasma protein-bound drugs have low volumes of distribution
- D. In first-pass metabolism, the drug is eliminated after reaching the systemic circulation

Question 7

Complete

Mark 0 out of 1

Which of the following **DOES NOT** correctly match the adrenergic agonist's receptor activation with the pharmacological effect?

- A. β_1 receptor agonists: Increase the rate and force of myocardial contraction
- B. β_2 agonists: Increase lipolysis in fat cells
- C. α_1 receptor agonists: Increases peripheral resistance and venous return
- D. α_2 receptor agonists: Reduce blood pressure and decrease insulin secretion

$\beta_3 = \text{lipolysis.}$

Question 8

Complete

Mark 0 out of 1

The following statements about cough suppressants are true **EXCEPT**:

- A. Morphine has greater anti-tussive (anticough) action than codeine
- B. Inhibits 5-lipoxygenase
- C. When using opioids for cough suppression, the doses required are less than the doses needed for analgesic activity
- D. Dextromethorphan is the opioid drug of choice for cough suppression

Question 9

Complete

Mark 1 out of 1

Which of the following **diuretics** are correctly matched to the given adverse effects?

- A. Spironolactone (mineralocorticoid receptor antagonist): Metabolic alkalosis
- B. Frusemide (Loop diuretic): Metabolic acidosis
- C. Hydrochlorothiazide (thiazide-type diuretic): Hyper-uricaemia
- D. Amiloride (potassium-sparing diuretic): Hypokalaemia

Question 10

Complete

Mark 1 out of 1

If the effect of the combination of two drugs is more than equal to the sum of their individual effects, the two drugs are exhibiting:

- A. Antagonism
- B. Synergism
- C. Cross tolerance
- D. Potentiation

Question 11

Complete

Mark 1 out of 1

A 32-year-old man who has haemophilia had been recently diagnosed with tension headache. The headaches occurred two to four times weekly, usually toward the end of his workday. The pain was constant, dull in character, and usually lasted the rest of the day with variable intensity. Which of the following analgesic drugs would be appropriate for this patient?

- A. Paracetamol
- B. Aspirin
- C. Ketorolac (COX-1 selective NSAID)
- D. Indomethacin (non-selective NSAID)



Question 12

Complete

Mark 1 out of 1

Prostacyclin (PGI₂) can be used to achieve which of the following?

- A. Facilitate blood clotting
- B. Treat occlusive vascular disease
- C. Control bleeding from the uterine artery
- D. Cause peripheral vasoconstriction

Question 13

Complete

Mark 0 out of 1

Infliximab is effective in Rheumatoid Arthritis because it does which of the following?

- A. Is a TNF- α receptor agonist
- B. It is a synovium-specific anti-inflammatory agent
- C. Binds to TNF- α and sequesters it from receptors
- D. Is a TNF- α receptor antagonist

on inflammatory cells.

Question 14

Complete

Mark 1 out of 1

A 19-year-old woman has a history of asthma for 10 years and complains of an acute onset of wheezing.

Which of the following drugs would be best for the treatment of an acute attack of asthma?

- A. Oral salmeterol (long-acting B2 agonist)
- B. Oral albuterol (salbutamol) (short-acting B2 agonist)
- C. Oral dexamethasone (steroid)
- D. Inhaled albuterol (salbutamol) (short-acting B2 agonist)



Question 15

Complete

Mark 1 out of 1

A 69-year-old man was recently diagnosed with severe cardiac failure, and the physician started treatment with propranolol, captopril, and digoxin. Diuretic therapy was also included.

Which of the following pairs of **diuretics** would have been most appropriate for this patient?

- A. Frusemide (loop **diuretics**) and spironolactone (mineralocorticoid receptor antagonist)
- B. Hydrochlorothiazide (thiazide diuretic) and mannitol (osmotic diuretic)
- C. Frusemide (loop **diuretics**) and mannitol (mineralocorticoid receptor antagonist)
- D. Triamterene (potassium-sparing **diuretics**) and acetazolamide (carbonic anhydrase inhibitor)

Question 16

Complete

Mark 1 out of 1

Which of the following adverse effects is most likely expected from misoprostol treatment?


- A. Hypertension
- B. Peptic ulcer
- C. Diarrhoea
- D. Drowsiness

Question 17

Complete

Mark 0 out of 1

The following is true about cimetidine (H₂ receptor antagonist) EXCEPT:

- A. It may cause gynecomastia
- B. Cimetidine (prolactin-stimulating activity)
- C. It has anti-androgenic activity
- D. It may decrease the anticoagulant effects of Warfarin 



Question 18

Complete

Mark 1 out of 1

Low molecular weight heparins have the following advantages over unfractionated heparin **EXCEPT**:

- A. Higher and more consistent subcutaneous bioavailability
- B. Higher efficacy in arterial thrombosis
- C. Less frequent dosing
- D. Laboratory monitoring of response is not required

Question 19

Complete

Mark 1 out of 1

A 63-year-old man with a long history of heart failure was admitted to the emergency department because of severe dyspnea and oedema in his legs, thighs, and lower abdominal wall. Pertinent lab results on admission included a glomerular filtration rate of 20 mL/min.

Which class of **diuretics** would be appropriate to relieve the oedema in this patient?

- A. Spironolactone (mineralocorticoid receptor antagonist)
- B. Thiazide **diuretics**
- C. Loop **diuretics**
- D. Mannitol (osmotic diuretic)

Question 20

Complete

Mark 1 out of 1

Which of the following statements is most accurate?

- A. Antihistamine agents are generally useful in the treatment of asthma
- B. Antihistamine agents used for allergic rhinitis have antagonistic activity against both H₁ and H₂ receptors.
- C. Second-generation antihistamines have fewer anticholinergic and sedating effects than first-generation antihistamines
- D. Antihistamines are the preferred agent in the treatment of acute anaphylaxis



Question 21

Complete

Mark 1 out of 1

What types of medications **DO NOT** cause constipation?

- A. Aluminium-containing antacids
- B. Magnesium-containing antacids
- C. Anticholinergics
- D. Opioid analgesics

Question 22

Complete

Mark 1 out of 1

The following classes of drugs are effective in the treatment of diarrhoea EXCEPT:

- A. Adsorbents
- B. Magnesium-containing antacids
- C. Anti-motility agents
- D. Anti-secretory agents

Question 23

Complete

Mark 1 out of 1

During fight-or-flight situations, the adrenal gland releases significant amounts of epinephrine into the bloodstream. Epinephrine, in turn, stimulates a variety of adrenergic receptors.

Which vascular receptor subtype is not normally innervated but, when stimulated by epinephrine, results in vasodilation & increased regional blood flow to skeletal muscle?

- A. Alpha-2
- B. Beta-2
- C. Beta-1
- D. Alpha-1



Question 24

Complete

Mark 1 out of 1

A 61-year-old man recently diagnosed with stage C heart failure was admitted to the hospital for evaluation. It was found that he had an ejection fraction of 30% at rest. A treatment that included digoxin was started.

Which of the following cardiovascular parameters did digoxin most likely increase in this patient?

- A. End-diastolic volume
- B. Stroke volume
- C. Total peripheral resistance
- D. Oxygen consumption of the heart

Question 25

Complete

Mark 1 out of 1

Atropine causes:

- A. Bradycardia, hypotension and bronchoconstriction
- B. Decrease in contractile strength, conduction velocity through the AV node
- C. Tachycardia, hypertensive crisis and bronchodilatation
- D. Tachycardia, little effect on blood pressure and bronchodilatation

Question 26

Complete

Mark 1 out of 1

The volume of distribution relates:

- A. Total clearance to elimination half-life
- B. Amount of the drug in the body to plasma volume
- C. Amount of a drug in the body to the concentration of the drug in plasma
- D. Bioavailability to plasma protein binding



Question 27

Complete

Mark 1 out of 1

Zileuton is effective in treating asthma because it performs which of the following?

- A. Inhibits 5-lipoxygenase
- B. Inhibits cyclooxygenase
- C. Inhibits mast cell degranulation
- D. Activates leukotriene receptors

Question 28

Complete

Mark 1 out of 1

A 49-year-old farmer came to the emergency department complaining of blurred vision, nausea, and painful muscle contractions in his legs. The attending physician appropriately administered pralidoxime intravenously soon after the man arrived.

An agent from which of the following drug classes most likely caused the patient's symptoms?

- A. Organophosphates
- B. Adrenergic antagonists
- C. Adrenergic agonists
- D. Cholinergic antagonists

Question 29

Complete

Mark 1 out of 1

In addition to slow intravenous infusion, which of the following routes of administration allows for titration of the dose of a drug with the response?

- A. Nasal
- B. Inhalational
- C. Transdermal
- D. Sublingual



Question 30

Complete

Mark 0 out of 1

Which are the main molecular targets involved in the therapeutic effect of digoxin in atrial fibrillation?

- A. Alpha-1 adrenoceptors
- B. Beta-1 adrenoceptors
- C. Muscarinic receptors
- D. Na⁺/K⁺-ATPase

Question 31

Complete

Mark 1 out of 1

A 56-year-old man admitted to the hospital with a myocardial infarction underwent a percutaneous coronary angioplasty for the revascularisation of his left coronary.

Which of the following drugs was most likely given intravenously during the procedure?

- A. Recombinant factor VIIa
- B. Tranexamic acid (antifibrinolytics)
- C. Protamine (heparin antagonist)
- D. Abciximab (monoclonal anti-glycoprotein IIb/IIIa receptor antibody)

Question 32

Complete

Mark 1 out of 1

During a prolonged surgical procedure performed under halothane general anaesthesia, a patient experiences a fall in blood pressure. The anesthesiologist administers a pressor agent by subcutaneous injection that does not stimulate cardiac beta-1 adrenoceptors. This drug was:

- A. Phenylephrine (α -1 adrenergic agonist)
- B. Isoproterenol (isoprenaline) (β -adrenergic receptor agonist)
- C. Phentolamine (non-selective α -adrenergic antagonist)
- D. Doxazosin (α -blocker)



Question 33

Complete

Mark 1 out of 1

Which drug most effectively improves symptoms and prolongs survival in primary pulmonary hypertension?

- A. Misoprostol (prostaglandin E1 analogue)
- B. Epoprostenol (A prostaglandin)
- C. Dinoprostone (Prostaglandin E2 analogue)
- D. Alprostadil (Prostaglandin E1 agonist)

Question 34

Complete

Mark 1 out of 1

Which of these statements is not true of acetylcholine receptors?

- A. Muscarinic receptors are present in the heart
- B. Nicotinic and muscarinic receptors are present in skeletal muscles
- C. Nicotinic receptors are ligand-gated ion channels
- D. Smooth muscle and secretory glands contain muscarinic receptors

Question 35

Complete

Mark 1 out of 1

A patient undergoing [chemotherapy](#) with cisplatin has severe nausea.

Which of the following would be the drug to use for this patient?

- A. Ondansetron (serotonin antagonist)
- B. Cyclizine (antihistamine)
- C. Naloxone (opioid antagonist)
- D. Scopolamine/ hyoscine (antimuscarinic)



Question 36

Complete

Mark 1 out of 1

Indications for warfarin (anticoagulant) **INCLUDE:**

- A. Cerebrovascular accident
- B. Prevention of pulmonary embolism and venous thrombosis
- C. To avoid the recurrences of myocardial infarction
- D. Retinal artery thrombosis

1, 2, 7, 9, 10
Factors 10, 9, 7, 3
Protein C, S

Question 37

Complete

Mark 1 out of 1

A 68-year-old man with no past medical history was admitted to the emergency department because of severe substernal crushing chest pain with radiation to the left arm for the past 2 hours. An electrocardiogram confirmed the diagnosis of acute anterior myocardial infarction.

Which of the following pairs of drugs were most likely immediately given intravenously to the patient?

- A. Alteplase (recombinant tissue plasminogen activator (rt-PA) and heparin (anticoagulants)
- B. Aspirin and warfarin (anticoagulant)
- C. Clopidogrel (antiplatelet) and heparin (anticoagulants)
- D. Alteplase (recombinant tissue plasminogen activator (rt-PA) and warfarin (anticoagulant)

Question 38

Complete

Mark 1 out of 1

A 33-year-old malnourished woman in her eighth month of pregnancy presented to the clinic complaining of extreme lethargy. The woman was multiparous and living in a poor suburban area with her two daughters. Laboratory values on admission were: RBC count $2.9 \times 10^6/\text{mm}^3$ (normal female $3.5\text{--}5.5 \times 10^6/\text{mm}^3$), MCV 90 fL (normal 80–100 fL), Hb 7 g/dL (normal female > 12 g/dL), serum ferritin 8 $\mu\text{g}/\text{dL}$ (normal 30–300 $\mu\text{g}/\text{dL}$), serum vitamin B12 350 pg/mL (normal > 280 pg/mL), RBC folate 45 ng/mL (normal 150–800 ng/mL). Blood slides demonstrated both micro- and macrocytic erythrocytes and blood hypochromia.

Which of the following pairs of drugs would represent an appropriate treatment for this patient?

- A. Cyanocobalamin & ferrous sulphate
- B. Erythropoietin & hydroxocobalamin
- C. Folic acid & ferrous sulphate
- D. Iron dextran & filgrastim (colony-stimulating factors)



Question 39

Complete

Mark 1 out of 1

What types of medications are not useful in treating GERD or PUD?

- A. Calcium channel blockers
- B. Prokinetic agents (cisapride, metoclopramide, bethanechol)
- C. Antacids; H₂-receptor antagonists; proton pump inhibitors (PPIs)
- D. Mucosal protectants (sucralfate)

Question 40

Complete

Mark 1 out of 1

The receptor transduction mechanism with the fastest time course of response effectuation is:

- A. Intrinsic ion channel operation
- B. Phospholipase C-IP₃:DAG pathway
- C. Protein synthesis modulation
- D. Adenylyl cyclase-cyclic AMP pathway

Ion channel = 0.01 Sec.
Pharmacodynamics

Question 41

Complete

Mark 1 out of 1

The following is true about oral rehydration therapy EXCEPT:

- A. It is far less expensive than IV fluids
- B. It can be given by family members and non-professionals as well as by health workers
- C. No expertise is needed to administer the fluid
- D. The solution needs to be sterile and prepared on the spot with components and plain water available at home

Question 42

Complete

Mark 0 out of 1

A 56-year-old woman has nausea due to **chemotherapy** for breast cancer. Droperidol is effective in reducing nausea because it blocks which of the following?

- A. Serotonin (5-HT₂) receptors in the CTZ
- B. Glucocorticoid receptors in the vomiting centre
- C. Acetylcholine receptors in the periphery
- D. Dopamine receptors in the CTZ

Question 43

Complete

Mark 1 out of 1

A 58-year-old alcoholic man who has hepatic cirrhosis was diagnosed with portal-systemic encephalopathy.

Which drug would be appropriate to eliminate toxic enteric products in this patient?

- A. Omeprazole (proton-pump inhibitor)
- B. Lactulose (osmotic laxative)
- C. Sucralfate (GIT protectant)
- D. Loperamide (opiate agonist)

Question 44

Complete

Mark 1 out of 1

Ranitidine is used to treat PUD and GERD. It inhibits which of the following?

- A. Histamine binding to parietal cells
- B. Gastrin binding to parietal cells
- C. Parietal cell prostaglandin receptors
- D. H⁺-K⁺-ATPase



Question 45

Complete

Mark 1 out of 1

Which of the following **diuretics** are correctly matched to the given clinical indications?

- A. Hydrochlorothiazide (thiazide-type diuretic): Diabetes insipidus
- B. Spironolactone (mineralocorticoid receptor antagonist): Myxoedema
- C. Triamterene (potassium-sparing **diuretics**): Papilloedema
- D. Frusemide (loop diuretic): Angioneurotic oedema

Question 46

Complete

Mark 1 out of 1

A 42-year-old man with diffuse non-Hodgkin lymphoma was hospitalised for autologous bone marrow transplantation.

Which of the following drugs should be administered after transplantation to hasten neutrophil recovery?

- A. Cyanocobalamin
- B. Leucovorin (folic acid analogue)
- C. Filgrastim (colony-stimulating factors)
- D. Oprelvekin (recombinant interleukin-11)

Question 47

Complete

Mark 1 out of 1

A 48-year-old man was brought to the emergency department because of severe chest pain that had been ongoing for over 3 hours. The man had been suffering from chronic stable exertional angina for 1 year and from duodenal ulcer for 3 months. His current medication included isosorbide mononitrate, verapamil for angina, and famotidine for duodenal ulcers. The patient stopped the anti-anginal medications one week earlier because he had not had anginal attacks during the past month.

Which of the following events most likely triggered the patient's present chest pain?

- A. Reflex tachycardia due to nitrate therapy
- B. Famotidine-induced inhibition of verapamil metabolism
- C. Abrupt withdrawal from nitrate therapy
- D. Famotidine-induced inhibition of isosorbide mononitrate metabolism

Question 48

Complete

Mark 0 out of 1

If the dose-response curve of a drug for producing different actions is widely separated on the dose axis, the drug is:

- A. Highly selective
- B. Highly potent
- C. Highly efficacious
- D. Highly toxic

Question 49

Complete

Mark 1 out of 1

Which of the following drugs would be most appropriate for treating primary dysmenorrhea?

- A. Mefenamic acid/ PONSTAN) (NSAID)
- B. Misoprostol
- C. Alprostadil (Prostaglandin E1 agonist)
- D. Paracetamol

Question 50

Complete

Mark 1 out of 1

Which one of the following antiarrhythmic drugs may require a baseline thyroid function test before administration?

- A. Phenytoin (anti-epileptic class Ib antiarrhythmic)
- B. Sotalol (non-cardioselective beta-blocker)
- C. Verapamil (calcium-channel blocker)
- D. Amiodarone (class III antiarrhythmic drug)



Question 51

Complete

Mark 1 out of 1

A 44-year-old man has recurrent gouty arthritis. His serum uric acid level is elevated, and you prescribe allopurinol. However, within 1 week of the allopurinol, he develops a painful episode that “feels like gout.”

Which of the following is the best explanation?

- A. The patient likely has an arthritis syndrome produced by allopurinol
- B. The patient is resistant to allopurinol and should be placed on another medication.
- C. This likely represents a drug-drug interaction, so the allopurinol should be discontinued
- D. The patient probably developed acute gout because of the mobilisation of the urate from joints and tissues

Question 52

Complete

Mark 1 out of 1

1. The common use of second-generation histamine H₁-receptor blockers is the treatment of the following complaints?

- A. Hay fever
- B. Sleeplessness
- C. Cough associated with influenza
- D. Motion sickness

Question 53

Complete

Mark 1 out of 1

Which of the following is a G protein-coupled receptor?

- A. Nicotinic cholinergic receptor
- B. Muscarinic cholinergic receptor
- C. Insulin receptor
- D. Glucocorticoid receptor



Question 54

Complete

Mark 0 out of 1

A 50-year-old male presents with striking hypertriglyceridemia. After about 6 months of drug treatment, his 'triglyceride and VLDL cholesterol' levels dropped dramatically, and his 'HDL cholesterol' levels doubled.

This phenomenon is commonly seen with:

- A. Ezetimibe (selective cholesterol-absorption inhibitors)
- B. Nicotinic acid (B Vitamins)
- C. Gemfibrozil (fibrate)
- D. Lovastatin (HMG CoA reductase inhibitors/ statins)

Question 55

Complete

Mark 1 out of 1

A 61-year-old male patient has 5– 6 painful gouty attacks yearly despite being treated with febuxostat (xanthine oxidase inhibitors). He is also highly allergic to probenecid.

Which of the following would be the best course of treatment for this patient?

- A. NSAIDs at maximal doses
- B. Allopurinol (xanthine oxidase inhibitors)
- C. Sulfapyrazone (uricosurics)
- D. Pegloticase (PEGylated uric acid specific enzymes)

Question 56

Complete

Mark 1 out of 1

A 16-year-old female with severe persistent asthma is placed on multiple medications. She has been taking her medications as instructed. However, one of the medications is causing her to have tachycardia, nausea, and jitteriness. She has been informed of the need to measure serum levels of this medication.

Which medication is the source of the undesirable side effects?

- A. Leukotriene receptor antagonist
- B. Lipoygenase inhibitor
- C. Anticholinergic inhaler
- D. Methylxanthines



Question 57

Complete

Mark 1 out of 1

Which of the following statements about autocooids is NOT true?

- A. Eicosanoids (inflammatory mediators) are synthesised from Arachidonic acid
- B. Leukotrienes (LTs), Prostaglandins (PGs) are two examples of eicosanoids.
- C. Corticosteroids Inhibit phospholipase A2
- D. 5-Lipoxygenase enzyme acts on arachidonic acid to form thromboxane

Question 58

Complete

Mark 1 out of 1

A 78-year-old female has been newly diagnosed with atrial fibrillation. She is not currently having any symptoms of palpitation or fatigue.

Which of the following is appropriate to initiate rate control as an outpatient?

- A. Dronedaron (Class III antiarrhythmic drug)
- B. Flecainide (class Ic antiarrhythmic drug)
- C. Metoprolol (selective β -1 blocker)
- D. Sotalol (non-cardioselective β -blocker)

Question 59

Complete

Mark 0 out of 1

Which of the following is the MOST SUITABLE drug for reversing heart block due to an overdose of beta-adrenoceptor blockers?

- A. Isoprenaline (Isoproterenol) (β -adrenergic receptor agonist)
- B. Dopamine (dopamine and β -1 receptor agonist)
- C. Norepinephrine (α 1, α 2, and β receptor agonist)
- D. Dobutamine (α -1, β -1, and β -2 receptors receptor agonist)



Question 60

Complete

Mark 0 out of 1

A 43-year-old man came to the hospital for a radiologic examination of the colon. Before starting the exam, he received intramuscular scopolamine (hyoscine) injection to relax the intestine.

Which adverse effects did the patient most likely experience a few minutes after the administration?

- A. Salivation
- B. Urge urinary incontinence
- C. Abdominal pain
- D. Palpitations

Question 61

Complete

Mark 1 out of 1

The antagonism between adrenaline and histamine is called 'physiological antagonism' because:

- A. They act on physiological receptors
- B. They have opposite physiological effects
- C. Both are physiologically present in the body
- D. Both affect many physiological processes

Question 62

Complete

Mark 0 out of 1

Which of the following statements is **NOT TRUE** about phase I metabolism?

- A. Products are mostly pharmacologically inactive
- B. Products are mostly chemically reactive
- C. Involves cytochrome P450 enzymes
- D. Includes reduction reactions



Question 63

Complete

Mark 1 out of 1

The actions of thromboxane (TXA₂) **DO NOT** include which of the following statements below?

- A. Vasoconstriction
- B. Promotes platelet aggregation
- C. Increases glomerular filtration rate
- D. Bronchoconstriction

Question 64

Complete

Mark 0 out of 1

Which of the following drugs can be used to treat diarrhoea and intestinal spasms produced by serotonin-secreting carcinoid tumours?

- A. Ondansetron (serotonin antagonist)
- B. Cyproheptadine (H₁ blocker and a serotonin antagonist)
- C. Metoclopramide (dopamine antagonist)
- D. Acrivastine (H₁ receptor antagonist)

Question 65

Complete

Mark 1 out of 1

H₁ antihistamines used for motion sickness, and nausea include:

- A. Diphenhydramine (first-generation antihistamine)
- B. Loratadine (second-generation antihistamine)
- C. Fexofenadine (second-generation antihistamine)
- D. Cetirizine (second-generation antihistamine)



Question 66

Complete

Mark 1 out of 1

Which of the following drugs is correctly matched with its actions on serotonin (5-HT) receptors?

- A. Cyproheptadine: 5-HT₂ agonist
- B. Metoclopramide: 5-HT₄ antagonist
- C. Octreotide: 5-HT₁/5-HT₂ antagonist
- D. Ondansetron: 5-HT₃ antagonist

Question 67

Complete

Mark 1 out of 1

An 8-year-old sickle cell disease patient with a history of Vaso-occlusive crisis received whole blood transfusion therapy. What is the expected complication of this therapy, and how can it be prevented?


- A. Low neutrophil count/ Filgrastim (colony-stimulating factors)
- B. Continued haemolysis/ Ferritin
- C. Hypertension and thrombotic events/ Erythropoietin
- D. Transfusion iron overload/ Deferoxamine

Question 68

Complete

Mark 0 out of 1

What types of medications are the LEAST useful for the treatment of peptic ulcer disease?

- A. Histamine H₂-receptor antagonists
- B. Proton pump inhibitors
- C. Over-the-counter antacids 
- D. Antimicrobial agents



Question 69

Complete

Mark 1 out of 1

The immunosuppressive effect of methotrexate results from its inhibition of which of the following?

- A. Phospholipase A₂
- B. Microtubule function
- C. Leukocyte migration
- D. Dihydrofolate reductase ✓

Question 70

Complete

Mark 1 out of 1

Cocaine is an example of a drug that interferes with the major mechanism of termination of synaptically released norepinephrine.

What is the cellular target that is inhibited by this drug?

- A. Catechol-O-methyltransferase (COMT)
- B. Tyrosine Hydroxylase (TH)
- C. Monamine Oxidase (MAO)
- D. Norepinephrine Transporter (NET)

Question 71

Complete

Mark 0 out of 1

Prostaglandin E₁ (PGE₁) has the following actions/uses EXCEPT:

- A. Maintains patency of the patent ductus arteriosus
- B. Used as an abortifacient during pregnancy
- C. Decreases uterine smooth muscle contraction
- D. Gastric mucosa cytoprotective effect

PEF₁
PGE₂.



Question 72

Complete

Mark 1 out of 1

Systemic clearance of a drug that follows first-order kinetics can be calculated using the following formula:

- A. Plasma concentration of the drug multiplied by the bioavailability
- B. Elimination rate constant divided by the volume of distribution
- C. The volume of distribution divided by the plasma concentration of the drug
- D. The volume of distribution multiplied by the elimination rate constant

Question 73

Complete

Mark 1 out of 1

Which of the following is **CORRECT** concerning the actions/effects of [diuretics](#)?

- A. Acetazolamide (carbonic anhydrase inhibitor): Increases bicarbonate in blood
- B. Mannitol (osmotic [diuretics](#)): Inhibits sodium/potassium/chloride co-transport in the loop of Henle.
- C. Furosemide (loop [diuretics](#)): Inhibits renal prostaglandins
- D. Thiazide [diuretics](#) : Inhibit sodium/chloride co-transport in the distal convoluted tubule

Question 74

Complete

Mark 1 out of 1

Examples of drugs that can suppress the CNS cough reflex include the following **EXCEPT**:

- A. Hydrocodone
- B. Codeine
- C. Dextromethorphan
- D. Guaifenesin



Question 75

Complete

Mark 0 out of 1

A 52-year-old woman was discharged from the hospital after recovery from an acute myocardial infarction (MI). Her post-discharge medications included captopril.

Which of the following actions most likely contributes to mortality reduction obtained using angiotensin-converting enzyme (ACE) inhibitors in MI?

- A. Increased preload
- B. Coronary vasodilation
- C. Reduction in cardiac remodelling ✓
- D. Decreased ventricular automaticity

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