

PhD Admission Test 2017 Question Paper

Subject : Pharmacology

Q. No. 1 0121001	Drugs that are highly bound to albumin:
Option A	Are easily filtered at the glomerulus.
Option B	Effectively cross the BBB.
Option C	Often contain quaternary nitrogens.
Option D	Can undergo competition with other drugs for albumin binding sites.
Correct Option	D
Q. No. 2 0121002	Which of the following is a phase II drug metabolism reaction associated with a genetic polymorphism?
Option A	Glucuronidation
Option B	Acetylation
Option C	Oxidation
Option D	Reduction
Correct Option	В
Q. No. 3 0121003	Differences in bioavailability among oral formulations of a drugs are most likely occur if the drug:
Option A	Is freely water soluble
Option B	Is completely absorbed
Option C	Undergoes little or somewhat first-pass metabolism.
Option D	Is incompletely absorbed
Correct Option	D
Q. No. 4 0121004	What is true in relation to drug receptors:
Option A	All drugs act through specific receptors.
Option B	All drug receptors are located on the surface of the target cells.
Option C	Agonists induce a conformational change in the receptor.
Option D	Partial agonists have low affinity for the receptor.
Correct Option	С
Q. No. 5 0121005	Drugs acting through receptors exhibit the following features except:
Option A	Structural specificity.
Option B	High potency.
Option C	Competitive antagonism.
Option D	Dependence of action on lipophilicity.
Correct Option	D
Q. No. 6 0121006	Select the receptor that is located intracellularly

Option A	Steroid receptor.
Option B	Opioid receptor.
Option C	Prostaglandin receptor.
Option D	Angiotensin receptor.
Correct Option	A
Q. No. 7 0121007	Urination in the human subject is decreased by
Option A	Muscarinic agonists
Option B	Muscarinic antagonists
Option C	Nicotinic agonists
Option D	Spider venom
Correct Option	В
Q. No. 8 0121008	Atropine produces the following actions except:
Option A	Tachycardia
Option B	Mydriasis
Option C	Dryness of mouth
Option D	Urinary incontinence
Correct Option	D
Q. No. 9 0121009	The activation of muscarinic receptors in bronchiolar smooth muscle is associated with
Option A	activation of adenylyl cyclise.
Option B	decrease in cAMP formation mediated by G-proteins.
Option C	increase in IP3 and DAG.
Option D	inhibition of protein kinase C.
Correct Option	D
Q. No. 10 0121010	Carvedilol is an effective antihypertensive agent that, like propranolol, is capable of blocking beta receptors. An important difference between the two drugs is that carvedilol A. B. C. D.
Option A	is a selective blocker of cardiac $oldsymbol{eta}_1$ receptors
Option B	has intrinsic sympathomimetic activity
Option C	is available only as eye drops
Option D	has α 1 receptor blocking actions
Correct Option	D
Q. No. 11 0121011	Sildenafil has been prescribed for years to treat erectile dysfunction. This drug is also being used for which of the following condition?
Option A	cyanide poisoning
Option B	supraventricular tachycardia
Option C	pulmonary hypertension
Option D	Raynaud disease

Correct Option	c
Q. No. 12 0121012	Which one of the following is untrue for Kinin beta 1 receptor?
Option A	Bradykinin receptor B1 (B1) is a G-protein coupledreceptor
Option B	It is encoded by the BDKRB1 gene in humans.
Option C	Its principal ligand is bradykinin, a 9 amino acid peptide generated in pathophysiologic conditions.
Option D	Principal pathway is ligand-induced dimerization.
Correct Option	D
Q. No. 13 0121013	The most important and near channel of elimination of digoxin is:
Option A	Tubular secretion
Option B	Glomerular filtration
Option C	Hepatic metabolism
Option D	Excretion in bile
Correct Option	В
Q. No. 14 0121014	Which general anaesthetic selectively inhibits NMDA receptors:
Option A	Ketamine
Option B	Desflurane
Option C	Halothane
Option D	Thiopentone
Correct Option	A
Q. No. 15 0121015	Midazolam is an effective anesthetic because it acts by
Option A	increasing functional activity at GABAB receptors
Option B	enhancing the actions of dopamine
Option C	blocking the NMDA glutamate receptor subtype
Option D	facilitating GABA-mediated increases in chloride ion conductance
Correct Option	D
Q. No. 16 0121016	Tricyclic antidepressants
Option A	have anticonvulsant activity
Option B	are sometimes used as antiarrhythmics
Option C	may increase oral absorption of levodopa
Option D	should not be used in patients with glaucaoma
Correct Option	D
Q. No. 17 0121017	Which one of the following pairs of "drug/mechanism of action" is most accurate?
Option A	Carbamazepine/facilitation of the actions of GABA

Option C Option D Correct Option Q. No. 18 0121018 Option A	Ethosuximide/blocks Na channels in axonal membranes Lithium/inhibits recycling of inositol Procaine/blocks Ca channels (type T) in thalamic neurons C
Option D Correct Option Q. No. 18 0121018 Option A	Procaine/blocks Ca channels (type T) in thalamic neurons
Correct Option Q. No. 18 0121018 Option A	
Q. No. 18 0121018 Option A	С
0121018 Option A	
•	Which one of the following drugs inhibits bacterial protein synthesis, preventing the translocation step via its interaction with the 50S ribosomal subunit?
Ontion P	Gentamicine
Option B	Imipenem
Option C	Chloramphenicol
Option D	Clindamycin
Correct Option	D
Q. No. 19 0121019	Which one of the following drugs is most likely to be associated with elevations of pancreatic enzymes, including amylase and lipase?
Option A	Erythromycin
Option B	Didanosine
Option C	Isoniazide
Option D	Pyrazinamide
Correct Option	В
Q. No. 20 0121020	Despite its age, penicillin G remains the drug of choice in the treatment of infections caused by which of the following organisms?
Option A	Bacteroides fragilis
Option B	Treponema pallidum
Option C	Haemophilus influenzae
Option D	Escherichia coli
Correct Option	В
Q. No. 21 0121021	Which one of the following drugs has a high therapeutic index?
Option A	Cephalexin
Option B	Streptomycin
Option C	Doxycycline
Option D	Vancomycin
Correct Option	A
Q. No. 22 0121022	A reasonable explanation for the therapeutic effects of ibuprofen or naproxen in primary dysmenorrhoea is that these drugs
Option A	decreases PGE2 and PGF2 🕊
Option B	selectively inhibit COX 2
Option C	decreases LTB4
Option D	inhibit PLA2
1	A

Q. No. 23 0121023	Which of the following statements is accurate in context to hyperthyroidism drug use/management?
Option A	The actions of thyroid peroxidase are inhibited by I^{131} .
Option B	Propylthiouracil inhibits the conversion of thyroxine to triiodothyronine.
Option C	Methimazole is unable to cross the placental barrier.
Option D	Iodide salts can be used for long-term management.
Correct Option	В
Q. No. 24 0121024	Which of the following chemotherapeutic drugs inhibits the polymerization of microtubules but is not associated with causing bone marrow suppression?
Option A	Cyclophosphamide
Option B	Vincristine
Option C	Vinblastine
Option D	Cisplatin
Correct Option	В
Q. No. 25 0121025	Which one of the following is untrue for Bedaquiline?
Option A	First anti-TB drug to interfere with bacterial energy metabolism.
Option B	Specifically inhibits mycobacterial ATP (adenosine 5'-triphosphate) synthase, by binding to subunit c of the enzyme.
Option C	Active against DS, MDR, Pre-XDR, and XDR strains of M. tuberculosis in vitro.
Option D	First anti-TB drug to interfere/block RNA polymerase.
Correct Option	D
Q. No. 26 0121026	All of the following are true for Ticagrelor Except:
Option A	An antagonist of the P2Y12 receptor.
Option B	Ticagrelor binds reversibly and noncompetitively to the P2Y12 receptor at a site.
Option C	Ticagrelor binds irreversibly and competitively to the P2Y12 receptor at a site
Option D	Ticagrelor is not a prodrug and metabolite is reported equipotent.
Correct Option	С
Q. No. 27 0121027	Choose the correct statement about severity of side effects to oral iron medication
Option A	Ferrous salts are better tolerated than ferric salts
Option B	Complex organic salts of iron are better tolerated than inorganic salts
Option C	Liquid preparations of iron are better tolerated than tablets
Option D	Tolerability depends on the quantity of elemental iron in the medication
Correct Option	D
Q. No. 28 0121028	All of the following are true for Travoprost Except
0121020	This procedure land in analysis
Option A	It is prostaglandin analogs.
	A prostaglandin analog is a selective FP prostanoid receptor agonist.

Correct Option	D
Q. No. 29 0121029	Which of the following hypolipidemic drugs is most effective in raising HDL-cholestero level
Option A	Pravastatin
Option B	Cholestyramine
Option C	Fenofibrate
Option D	Nicotinic acid
Correct Option	D
Q. No. 30 0121030	All of the following drugs have a direct glucogenic effect except:
Option A	Thiazide diuretics
Option B	Acetohexamide
Option C	Corticosteroids
Option D	Sympathomimetics
Correct Option	В
Q. No. 31 0121031	Which Of the following is true for Tolterodine.
Option A	Acts on M2 and M3 subtypes of muscarinic receptors and control over active bladder.
Option B	A non competitive muscarinic receptor antagonist.
Option C	Increase activity of detrusor muscle.
Option D	Act by direct inhibitory effect like imipramine.
Correct Option	A
Q. No. 32 0121032	Calcium-channel blockers can have all of the following characteristics except
Option A	They block the slow inward current carried by calcium during phase 2 of the cardiac action potential.
Option B	They dilate peripheral arterioles and reduce total peripheral resistance.
Option C	They are useful in treating vasospastic angina.
Option D	They constrict coronary arteries and arterioles and decrease oxygen delivery to the myocardium.
Correct Option	D
Q. No. 33 0121033	Which of the following compounds is incorrectly matched with its mechanism of action?
Option A	Miglitol: inhibits -glucosidase
Option B	Anastrozole: inhibits aromatase
Option C	Pioglitazone: competitively blocks the binding of estrogens to their receptor
Option D	Canagliflozin: sglt2 inhibitor

0121034	
Option A	They are the most efficacious drugs in inhibiting gastric acid secretion.
Option B	They cause fastest healing of duodenal ulcers
Option C	They afford most prompt relief of ulcer pain
Option D	They prevent stress ulcers in the stomach
Correct Option	c
Q. No. 35 0121035	The percentage of elemental iron in hydrated ferrous sulfate is:
Option A	3%
Option B	10%
Option C	20%
Option D	28%
Correct Option	С
Q. No. 36 0121036	Memantine's reported benefits in treating the symptoms of Alzheimer's disease is thought to be result of
Option A	Increasing serotonin receptor activity
Option B	Decreasing intracellular dopamine activity
Option C	Direct blocking of acetylcholine receptors
Option D	Blocking the effect of glutamate on receptors
Correct Option	D
Q. No. 37 0121037	How does carbidopa affect levodopa?
Option A	Slows the release from presynaptic neurons
Option B	Inhibits the peripheral conversion to dopamine
Option C	Decreases tolerance to normal doses
Option D	Prevents the excretion of dopamine
Correct	
Option	В
	B Select the drug combination which does not exhibit supra-additive synergism:
Option Q. No. 38	
Option Q. No. 38 0121038	Select the drug combination which does not exhibit supra-additive synergism:
Q. No. 38 0121038 Option A	Select the drug combination which does not exhibit supra-additive synergism: Nimesulide +Paracetamol
Q. No. 38 0121038 Option A Option B	Select the drug combination which does not exhibit supra-additive synergism: Nimesulide +Paracetamol Amoxicillin + Clavulanic acid
Q. No. 38 0121038 Option A Option B	Select the drug combination which does not exhibit supra-additive synergism: Nimesulide +Paracetamol Amoxicillin + Clavulanic acid Levodopa + Carbidopa
Q. No. 38 0121038 Option A Option B Option C Option D Correct	Select the drug combination which does not exhibit supra-additive synergism: Nimesulide +Paracetamol Amoxicillin + Clavulanic acid Levodopa + Carbidopa Sulfamethoxazole + Trimethoprim
Option Q. No. 38 0121038 Option A Option B Option C Option D Correct Option Q. No. 39	Select the drug combination which does not exhibit supra-additive synergism: Nimesulide +Paracetamol Amoxicillin + Clavulanic acid Levodopa + Carbidopa Sulfamethoxazole + Trimethoprim A
Option Q. No. 38 0121038 Option A Option B Option C Option D Correct Option Q. No. 39 0121039	Select the drug combination which does not exhibit supra-additive synergism: Nimesulide +Paracetamol Amoxicillin + Clavulanic acid Levodopa + Carbidopa Sulfamethoxazole + Trimethoprim A DealkyIation and hydroxylation of drugs is retarded by deficiency in
Option Q. No. 38 0121038 Option A Option B Option C Option D Correct Option Q. No. 39 0121039 Option A	Select the drug combination which does not exhibit supra-additive synergism: Nimesulide +Paracetamol Amoxicillin + Clavulanic acid Levodopa + Carbidopa Sulfamethoxazole + Trimethoprim A DealkyIation and hydroxylation of drugs is retarded by deficiency in Vitamin A

Correct Option	D
Q. No. 40 0121040	Ciprofloxacin is not active against:
Option A	H.influenzae
Option B	E.coli
Option C	Bacteroides fragilis
Option D	Enterobacter spp
Correct Option	С
Q. No. 41 0121041	The following is true of loperamide except:
Option A	It is absorbed from intestines and exerts centrally mediated antidiarrhoeal action
Option B	It acts on the opioid receptors in the gut
Option C	It increases tone and segmenting activity of the intestines
Option D	It inhibits intestinal secretion by binding to calmodulin in the mucosal cells
Correct Option	A
Q. No. 42 0121042	Drug of choice for emperic treatment of typhoid fever is:
Option A	Chloramphenicol
Option B	Ciprofloxacin
Option C	Cotrimoxazole
Option D	Ampicillin
Correct Option	В
Q. No. 43 0121043	Drug 'X binds to drug as a result of which an inactive complex is formed. This type of antagonism is called
Option A	Competitive antagonism
Option B	Non-competitive antagonism
Option C	Neutralizing antagonism
Option D	Partial antagonism
Correct Option	С
Q. No. 44 0121044	Which one of the following is untrue for Ulinastatin
Option A	A serine protease inhibitor
Option B	Used for nursing women in principle for pancreatitis.
Option C	decreased MDA levels and ameliorated the down-regulation of SOD
Option D	activates haem oxygenase 1 antioxidant pathway and attenuates allergic inflammation
Correct Option	В
Q. No. 45 0121045	The second-generation antihistamines (H1-receptor antagonists) are generally considered non-sedating because they
Option A	are more selective for H1 receptors than the first generation agents.

Option B	are metabolized faster than the first-generation agents.
Option C	actually function as H1 receptor inverse agonists.
Option D	do not cross the blood-brain barrier as easily as the first-generation agents.
Correct Option	D
Q. No. 46 0121046	Acetaminophen has advantages over aspirin or other nonsteroidal anti-inflammator drugs by virtue of all of the following except
Option A	relative lack of antiplatelet effects.
Option B	relative lack of gastrointestinal ulcerative effects.
Option C	being a safe alternative for children with viral infections.
Option D	no hepatotoxicity.
Correct Option	D
Q. No. 47 0121047	Which of the following antiulcer medications is most likely to cause drug interaction and endocrine side effects?
Option A	Ranitidine
Option B	Omeprazole
Option C	Cimetidine
Option D	Famotidine
Correct Option	С
Q. No. 48 0121048	Which of the following glucocorticoids produces the least sodium retention?
Option A	Cortisone
Option B	Hydrocortisone
Option C	Prednisolone
Option D	Dexamethasone
Correct Option	D
Q. No. 49 0121049	Which of the following is not true of the blood-brain barrier:
Option A	It limits entry of highly ionized drugs into the brain
Option B	It is constituted by tight junctions between the endothelial cells of brain capillaries and the glial tissue
Option C	It allows passage of lipid soluble drugs into the brain
Option D	It regulates passage of substances from brain into blood
Correct Option	A
Q. No. 50 0121050	Which of the following 5HT3 receptor blockers has highest receptor affinity?
Option A	Ondansetron
Option B	Granisetron
Option C	Dolasetron
Option D	Palonosetron
Correct Option	D

