

1. Which of the following is an important effect of chronic therapy with thiazide diuretics?

a. Elevation of blood pressure
b. Metabolic acidosis
c. Teratogenic action in pregnancy

2. Which of the following drugs slows conduction through AV node and has its primary action on Na⁺ K⁺ ATPase?

a. Diltiazem
b. Propranolol

3. Which one of the following is most likely to contribute to the arrhythmogenic effect of digoxin?

a) Increased extracellular potassium
b) Decreased renin release

a. Amiloride
b. Decrease urinary excretion of calcium
c. Digoxin
d. Quinidine
e. Increased intracellular calcium
f. Vagal stimulation

- 09 ① Acetazolamide (a)
- 10 ② Conivaptan (b)
- 11 ③ Mannitol (a)
- 12 ④ decrease urinary excretion of calcium^(d)
- 13 ⑤ Digoxin (c)
- 14 ⑥ Increase ~~in~~ intracellular Ca²⁺ (c)
- 15 ⑦ Dobutamine (c)
- 16 ⑧ (b) cardiac output & renin
- 17 ⑨ (b) ~~cardiac output~~ hypokalemia
- 18 ⑩ (b) cGMP

19 19 MUHARRAM THURSDAY ⑪ (c) Sodium nitroprusside

20 20 MUHARRAM FRIDAY ⑫ (a) Lidocaine

- 09 ⑬ (d) Sodium thiosulfate
- 10 ⑭ (c) Does not inhibit the synthesis of angiotensin
- 11 ⑮ (d) Furosemide

DEPARTMENT OF PHARMACOLOGY

2019

3rd year MBBS

CVS (MCQ's)

Time Allowed: 15 mins

Max Marks: 15

1. Select a drug that is useful in preventing high altitude sickness.
 a. Acetazolamide
b. Amiloride
c. Ethacrynic acid
d. Furosemide
2. Which of the following drug increases the formation of dilute urine and is used to reverse SIADH (syndrome of inappropriate ADH secretion).
a) Desmopressin
 b) Conivaptan
c) mannitol
d) Furosemide
3. Which of the following diuretic would be most useful in the acute treatment of a comatose patient with traumatic brain injury and cerebral edema.
 a) Mannitol
b. Acetazolamide
c. furosemide
d. Amiloride

- 16) High plasma protein binding can cause following effect?
a) Increases the volume of distribution of the drug
b) Facilitates glomerular filtration of the drug
c) Generally makes the drug long acting
d) Both a & b
- 17) Which of the following diuretic would be most useful in acute treatment of comatose patient with brain injury and cerebral edema?
a) Mannitol
b) Acetazolamide
c) Furosemide
d) Amiloride
- 18) A Prodrug is drug which has following characteristic?
a) The prototype member of a class of drugs
b) The oldest member of a class of drugs
c) An inactive drug that is transformed in the body to an active drug
d) A drug that is stored in body tissues and is then gradually released in the circulation
- 19) Tachyphylaxis is a phenomenon which has following characteristic?
a) A drug interaction between two similar types of drugs
b) Rapidly developing decrease response
c) A synergism between two types of drugs
d) None of the above
- 20) A patient being diagnosed for myasthenia gravis would be expected to have improved neuromuscular function after being treated with
a) Donepezil
b) Edrophonium
c) Atropine
d) Echothiophate
e) Neostigmine
- 21) A 50 years old male farm worker is brought to emergency room. He was found unconscious. His heart rate is 45 and blood pressure is 80/40mm. He is sweating and salivating profusely. Which of following treatment is indicated?
a) Physostigmine
b) Norepinephrine
c) Atropine
d) Edrophonium
- 22) A partial agonist can antagonize the effects of a full agonist because it has
a) High affinity but low intrinsic activity
b) Low affinity but high intrinsic activity
c) No affinity and low intrinsic activity
d) High affinity but no intrinsic activity
- 23) The first-line drug for treating an acute attack of re-entrant supraventricular tachycardia (SVT) is
a) Adenosine
b) Digoxin
c) Propranolol
d) Phenylephrine
e) Edrophonium
- 24) A positive Coombs' test and hemolytic anemia may follow the administration of which antihypertensive drug?
a) Methyldopa
b) Clonidine
c) Guanabenz
d) Prazosin
e) Atenolol
- 25) A Patient who has had attacks of paroxysmal atrial tachycardia, an ideal prophylactic drug of choice will be
a) Adenosine
b) Procainamide
c) Lidocaine
d) Nifedipine
e) Verapamil
- 26) The most important therapeutic indication of acetazolamide is?
a) Congestive heart failure
b) Renal insufficiency
c) Cirrhosis of liver
d) Glaucoma
- 27) Select the diuretic that can cause gynaecomastia, hirsutism and menstrual disturbance as a side effect on long-term use.
a) Amiloride
b) Spironolactone
c) Metolazone
d) Acetazolamide
- 28) Down regulation of receptors can occur as a consequence of
a) Continuous use of agonists
b) Continuous use of antagonists
c) Chronic use of CNS depressants
d) Denervation
- 29) Which of the following drug act by combining with G protein coupled receptor?
a) Insulin
b) Epinephrine
c) Glucocorticoid receptor
d) Physostigmine
- 30) The therapeutic index of a drug is a measure of its
a) Safety
b) Potency
c) Efficacy
d) Dose variability

Term Test
CVS + CNS + ANS + General

Pharmacology & Therapeutics
Total Marks: 30

MCQ's Type
Time Allowed: 30 Min

- 1) Which one of the following drug is associated with positive inotropic effect?
a) Losartan b) Verapamil c) Dobutamine d) Propranolol
- 2) A 51 years old man is started on Lisinopril after being found to have an average blood pressure of 154/93 on ambulatory blood pressure monitoring. After starting treatment he presents with dry* cough, Accumulation of which one of following protein is responsible for it?
a) Adenosine b) Histamin c) Bradykinin d) Acetylcholine
- 3) Best choice for a patient who has history of vasospastic angina?
a) ACE inhibitors b) Beta blocker c) Nifedipine d) Thiazide diuretic e) Verapamil
- 4) Which of the following drugs is commonly used topically in the treatment of glaucoma?
a) Esmolol b) Timolol c) Silodosin d) Yohimbine
- 5) Following is inverse agonist of benzodiazepine receptors?
a) Flumazenil b) β -Carbolines c) Chlordiazepoxide d) Glutethimide
- 6) Which of the following agents is associated with high incidence of disorientation, sensory and perceptual illusions and vivid dreams during recovery from anesthesia?
a) Diazepam b) Fantanyl c) Ketamine d) Midazolam
- 7) Epinephrine added to a solution of lidocaine for a peripheral nerve block will cause following effects?
a) Increase the risk of convulsions
 b) Increase the duration of anesthetic action of the local anesthetic
c) decrease the risk of convulsions d) decrease the duration of action of local anesthetics
- 8) Bio-transformation of the drugs is to render them
 a) Less lipid soluble b) More protein bound c) Less ionized d) Less protein bound
- 9) Which of the following drugs is a volatile substance that is administered by inhalation?
a) Thiopental b) Halothane c) Alprazolam d) Buspirone e) Phenytoin
- 10) Which of the following antihypertensive drug is renin inhibitor?
 a) Propranolol b) Verapamil c) Chlonidine d) Prazosin
- 11) Which of the following adverse effect can be caused by Thiazide diuretics?
a) Hyperkalemia b) Hypokalemia c) Hypermnatremia d) Hypoglycemia
- 12) A good example of chemical antagonism is?
 a) Heparin & Protamine b) Protamine & Zinc c) Heparin & Prothrombin d) All the above
- 13) Acidic drugs mainly bind to following substance?
 a) Albumin b) Alpha acidic glycoprotein c) Myoglobin d) Mannitol
- 14) The loading dose of a drug is usually based on the following characteristic?
a) Total body clearance of the drug b) Percentage of drug bound to plasma proteins
c) Fraction of drug excreted unchanged in the urine
 d) Apparent volume of distribution (VD) and desired drug concentration in plasma
- 15) Alkalinization of urine hastens the excretion of
a) Weakly basic drugs b) Weakly acidic drugs c) Strong electrolytes d) Both a & b

8. Select the proposed mechanism of antihypertensive effect of propranolol.

- a. It blocks β_1 receptors and stimulates vagal nerves
- b. It causes reduction in both cardiac output and renin release
- c. It inhibits entry of calcium into blood
- d. It directly blocks angiotensin receptors

9. A patient is put on normal doses of digoxin and some diuretic for his heart failure. He develops digoxin toxicity. Which of the following may be responsible for the toxicity?

- a. Hyponatremia
- b. Hypocalcemia
- c. Hypokalemia
- d. Hypochloremia

10. A 65 years old patient of angina gets relief from a transient bout of angina by using sublingual glycerol trinitrate. Which factor is responsible for his relief with glycerol trinitrate?

- a. Phosphodiesterase
- b. cGMP
- c. Phosphorylation of myosin light chains in smooth muscles
- d. β adrenergic blockade

11. Which of the following vasodilators causes both venular smooth muscle relaxation as well as arteriolar smooth muscle relaxation to maintain cardiac output at appropriate level?

- a. Diazoxide
- b. Hydralazine
- c. Sodium nitroprusside
- d. Minoxidil

12. Which of the following antiarrhythmic drugs is more selective for ischemic myocardium while it has a minimal proarrhythmic effect on normal heart?

- a. Lidocaine
- b. Amiodarone
- c. Quinidine
- d. Procainamide

13. A patient is brought to the casualty with hypertensive crisis. He is promptly given sodium nitroprusside infusion. Which other drug should be administered to prevent the production of toxic metabolite of Na nitroprusside?

- a. Vitamin C
- b. Vitamin K
- c. Propranolol
- d. Sodium thiosulfate

14. The difference between lisinopril and losartan is that the latter drug:

- a. Causes hyperkalemia
- b. Is a drug of choice in pregnancy
- c. Does not inhibit the synthesis of angiotensin II
- d. Causes inactivation of bradykinin into inactive products

15. Which drug is correctly associated with its action in the following table (+ indicates increase and - indicates decrease)

Choice	Drug	Urine Na	Urine K	Metabolic change
A	Mannitol	-	++	Alkalosis
B	Spirolactone	-	+	Alkalosis
C	Acetazolamide	++	+	Alkalosis
D	Furosemide ✓	+++	++	Alkalosis

7. Which one of the following drugs is associated with positive inotropic effect?
- a. Losartan
 - b. Verapamil
 - c. Dobutamine
 - d. Propranolol
8. Select the proposed mechanism of antihypertensive effect of propranolol.