

CVS 2020

Department of Pharmacology

3rd year MBBS 31-03-2020

Term exam

MCQS

CVS

129

Time: 50 minutes.

Marks: 50

1. Chronic treatment with large doses of which of the following may produce a condition which resembles systemic lupus erythematosus?
  - A. Hydralazine
  - B. Clonidine
  - C. Captopril
  - D. Reserpine
2. Administration of captopril, a drug which inhibits angiotensin converting enzyme, results in:
  - A. In increase in arterial blood pressure
  - B. Peripheral vasoconstriction
  - C. An increase in extracellular fluid volume
  - D. **A decrease in the rate of aldosterone secretion**
3. An elderly man comes to the emergency room with an acute myocardial infarction. He is in cardiogenic shock in which the cardiac output is very low and there is a reflex vasoconstriction. He has tachycardia. Which of the following drugs would be most appropriate to administer:
  - A. **Dobutamine**
  - B. Isoproterenol
  - C. Nitroglycerine
  - D. Propranolol
4. Which of the following drug decreases heart rate and myocardial oxygen demand?
  - A. **Propranolol**
  - B. Nifedipine
  - C. Verapamil
  - D. Diltiazem



5. Which of the following is far more effective in the management of angina associated with coronary vasospasm?

- A. Nifedipine
- B. Digoxin
- C. Digoxin
- D. Captopril

10. An anginal patient is taking nitroglycerine with propranolol. This combination of drugs is effective because

6. Concomitant use of hydrochlorothiazide and a cardiac glycoside (e.g. digoxin) for the treatment of the symptoms of congestive heart failure may be associated with:

- A. Gynecomastia
- B. **Enhanced toxicity**
- C. Hyperthyroidism
- D. Hyperthermia

7. Which of the following is far more effective in the management of angina associated with coronary vasospasm?

- A. Propranolol
- B. Lisinopril
- C. **Verapamil**
- D. Nitroglycerine

13. Which one of the following drugs is associated with positive inotropic effect?

8. Relief of pulmonary congestion after administration of nitroglycerin to a patient in congestive heart failure is primarily due to:

- A. arteriolar dilation
- B. inotropic stimulation
- C. increased cardiac output
- D. **increased venous capacitance**



9. A patient with chronic heart failure presented in emergency with nausea, vomiting, confusion, hallucination which are the side effects caused by chronic intoxication of digoxin. Which drug will be effective antidote in this patient?

- A. Nifedipine
- B. Fab fragment**
- C. Nitroglycerine
- D. Omalizumab

10. An angina patient was taking nitroglycerine with propranolol. This combination of drugs is effective because

- A. Both increase heart rate
- B. Both decrease the force of contraction of heart
- C. Undesireable compensatory effects of nitrates are reduced by propranolol**
- D. Both decrease the enddiastolic pressure

11. Which of the following prolong life in patient with chronic cardiac failure in spite of having negative inotropic effect

- A. Carvedilol**
- B. Digoxin
- C. Dobutamine
- D. Enalapril

12. Which of the following is an adverse effect of Amiodarone?

- A. Hypertension
- B. Acute renal failure
- C. Thyroid dysfunction**
- D. Orthostatic hypotension

13. Which one of the following drugs is associated with positive inotropic effects:

- A. Dobutamine**
- B. Propranolol.
- C. Verapamil
- D. Captopril

14. Nitroglycerin is given in vasospastic angina because it :

- A. Decreases cardiac contraction
- B. Increases cardiac contraction
- C. Increases cardiac conduction
- D. Causes coronary vasodilation**



15. Which of the following is the best documented mechanism of action of cardiac glycosides?
- A. Inhibits Ca channels.
  - B. **Inhibits Na/K ATPase**
  - C. Activate alpha receptors in blood vessels
  - D. Block beta receptors
16. Which of the following anti-hypertensive drug is safe in pregnancy?
- A. Captopril
  - B. Losartan
  - C. **Methyldopa**
  - D. Nifedipine
17. Which one of the following is characteristic of captopril in patients with hypertension?
- A. Blocks beta receptors
  - B. Decreases K<sup>+</sup> in blood
  - C. **Inhibit ACE enzyme**
  - D. Safe in pregnancy
18. What is the clinical term for angina caused by coronary vasospasm:
- A. Classic angina
  - B. **Variant angina**
  - C. Myocardial infarction
  - D. Unstable angina
19. A patient 38-year-old male known asthmatic has recently started monotherapy for mild hypertension. At his most recent office visit, he complains of cough, fatigue, nightmares and shortness of breath. Which one of the following drugs he was most likely prescribed?
- A. **Propranolol**
  - B. Ephedrine
  - C. Losartan
  - D. Prazosin
20. Propranolol is useful in all of the following except:
- A. Angina.
  - B. Familial tremor
  - C. Hypertension
  - D. **Atrioventricular block**
21. Choose the diuretic agent which is an aldosterone antagonist:



- A. Furosemide.
- B. **Spironolactone**
- C. Chlorothiazide
- D. Captopril

22. Which of the following side effects caused by nitroglycerine can be counteracted by combining blockers in case of angina?

- A. Dizziness
- B. Methemoglobinemia
- C. Tolerance
- D. **Reflex tachycardia**

23. Which of the following is an adverse effect of prazosin?

- A. Tolerance
- B. Throbbing Headache
- C. Bradycardia
- D. **Orthostatic hypotension**

24. Which of the following antihypertensive drugs can cause persistent cough upon administration?

- A. Losartan
- B. **Enalapril**
- C. Amlodipine
- D. Prazosin

25. Select an antihypertensive drug which is anti-hypertensive at low dose and precipitates hypertension at high dose?

- A. **Clonidine**
- B. Diltiazem
- C. Enalapril
- D. Losartan

26. Which of the following drug inhibits breakdown of cAMP in vascular smooth muscles?

- A. Digoxin
- B. Dobutamine
- C. **Amrinone**
- D. Dopamine

27. Which of the following drug reduces myocardial oxygen demand by acting on beta receptors of heart but is contraindicated in vasospastic angina?



- A. Amlodipine
- B. Nifedipine
- C. Phentolamine
- D. **Propranolol**

28. Dihydropyridine is a group of calcium channel blocker drugs which have more effect on peripheral blood vessels so they are more effective in hypertension and angina. Which of the following drugs best fits in above description?

- A. Diltiazem
- B. Hydralazine
- C. **Nifedipine**
- D. Ranolazine

29. A patient was taking a drug for atrio-ventricular arrhythmias and he developed tinnitus, headache, disorientation and psychosis. Which of the following drugs was he most likely prescribed?

- A. Propranolol
- B. **Quinidine**
- C. Lidocaine
- D. Amiodarone

30. Which of the following calcium channel blocker is more selective for actions on myocardium?

- A. Amlodipine
- B. Nimodipine
- C. **Verapamil**
- D. Nifedipine

31. Which of the following diuretic is contraindicated in patients with nephrolithiasis?

- A. Furosemide
- B. **Chlorothiazide**
- C. Acetazolamide
- D. Amiloride

32. The manifestations of glycosides intoxication are:

- A. **Visual changes**
- B. High grade fever
- C. Shortness of breath
- D. Cough



39. An alcoholic male has developed hepatic cirrhosis. Which of the following drug should be prescribed to control the ascites and edema in this patient?
- A. Acetazolamide
  - B. Chlorthalidone
  - C. Furosemide
  - D. Spironolactone**
40. Which of the following statement best describe action of ACE Inhibitor in heart failure?
- A. Increase vascular resistance
  - B. Decrease cardiac output
  - C. Reduce preload**
  - D. Increase aldosterone
41. By which of the following mechanism beta blockers improve cardiac function in heart failure?
- A. Decrease cardiac remodeling**
  - B. Increase heart rate
  - C. Increase renin release
  - D. Activating norepinephrine
42. Which electrolyte is important to monitor in patients taking digoxin?
- A. Chloride
  - B. Potassium**
  - C. Sodium
  - D. Zinc
43. A 60 years old patient had myocardial infarction. Which of the following drug should be prescribed to prevent life threatening arrhythmias that can occur post myocardial infarction in this patient?
- A. Digoxin
  - B. Furosemide
  - C. Metoprolol**
  - D. Quinidine
44. Which arrhythmia can be treated with lidocaine?
- A. Paroxysmal supraventricular tachycardia
  - B. Atrial fibrillation
  - C. Atrial flutter
  - D. Ventricular tachycardia**
45. Which of the following drug can cause anticholinergic adverse effects?
- A. Metoprolol
  - B. Disopyramide**
  - C. Dronedarone
  - D. Sotalol
46. Which adverse effect is associated with amlodipine?



- A. Bradycardia
- B. Cough
- C. Edema**
- D. QT Prolongation

47. Which of the following anti-arrhythmic drug causes dyspepsia?

- A. Amiodarone
- B. Digoxin
- C. Mexiletine**
- D. Propranolol

48. Which drug may exacerbate heart failure by increasing fluid retention?

- A. Acetaminophen
- B. Cetirizine
- C. Furosemide
- D. Ibuprofen**

49. Which of the following diuretic is used to decrease intracranial pressure in a patient with cerebral edema?

- A. Indapamide
- B. Furosemide
- C. Chlorothiazide
- D. Mannitol**

50. Which of the following diuretic increases calcium absorption and can induce acute attack of gout?

- A. Furosemide
- B. Spironolactone
- C. Mannitol
- D. Hydrochlorothiazide**



2019

Max Marks: 60

Time allowed: 60 mins

1. Variation in the sensitivity of a population of individuals to increasing doses of a drug is best determined by which of the following?

- a. Efficacy
- b. Potency
- c. Quantal dose response curve
- d. Graded dose response curve

2. The dose which produces toxic effect in 50% of the population is:

- a. ED50
- b. TD50 *TD50:-*
- c. TD99
- d. ED1

3. All of the following are 2<sup>nd</sup> messengers EXCEPT:

- a. IP3
- b. cAMP
- c. Adenylyl cyclase *(Adenylylase)*
- d. DAG

4. The phenomenon of decrease in intensity of response to a given dose of a drug after repeated administration so that greater amount of drug is required to produce the same previous effect is called:

- a. Allergy
- b. Dependence
- c. Tolerance *(Tolérance)*
- d. Idiosyncrasy

5. Chronic use of an antagonist over a long period of time may cause an increase in the number of receptors. This is called:

- a. Desensitization
- b. Down regulation
- c. Tolerance
- d. Up regulation

6. What is the situation when failure to continue administering the drug result in serious psychological and somatic disturbances called?

- a. Abstinence/ withdrawal syndrome
- b. Idiosyncrasy
- c. Tachyphylaxis
- d. Antagonism

7. Select a receptor which itself has enzymatic property:

- a. Insulin receptor
- b. Steroid receptor
- c. Thyroxine receptor
- d. Spare receptors

8. A man is given a drug to reduce thyroid gland size and vascularity before surgical thyroidectomy. Which mechanism is responsible for its use in this setting?

- a. inhibition of the sodium/iodide symporter
- b. inhibition of thyroperoxidase
- c. inhibition of TSH secretion
- d. inhibition of thyroid hormone release

9. Insulin secretagogue are used widely in the treatment of diabetes type 2. Which of the following drugs acts by increasing insulin secretion?

- a. biguanides
- b. sulfonylureas *sulfonylureas*
- c. Acarbose
- d. thiazolidinediones



10. A patient comes to emergency department in a confused state. He has fruit smelly breath upon examination. His blood sugar is 250mg/dl. Ketones are present in urine. Which of the following insulin preparation will be useful in this case:
- a. Regular insulin
  - b. Lente insulin
  - c. NPH insulin
  - d. Glargine insulin
11. A 50 years old lady having breast cancer may be treated with which of the following drugs having effects on estrogen receptors
- a. Ethinyl estradiole
  - b. Flutamide
  - c. Leuprolide
  - d. Tamoxifen
12. Glucocorticoids have been proved to be effective in the treatment of all the following except:
- a. Addison's diseases
  - b. Bronchial Asthma
  - c. Anaphylaxis
  - d. Peptic ulcer
13. Which of the following drug is a potent inhibitor of corticosteroid synthesis and is used in severe Cushing's disease?
- a. Dexamethasone.
  - b. Hydrocortisone.
  - c. Ketoconazole
  - d. Prednisone.
14. Which of following is best drug to distinguish between myasthenic crises and cholinergic crises?
- a. Atropine
  - b. Edrophonium
  - c. Physostigmine
  - d. Pralidoxime
15. Which of the following may precipitate an attack of glaucoma if instilled into the eye
- a. Physostigmine
  - b. Atropine
  - c. Pilocarpine
  - d. Echothiophate
16. A 60 year old man who was smoker is diagnosed with chronic pulmonary disease and suffers from occasional bronchospasm. Which of following would be effective in treating him?
- a. Ipratropium aerosol
  - b. Scopolamine patches
  - c. Mecamylamine
  - d. Propranolol
17. Atropine is antidote for
- a. Organophosphate poisoning
  - b. Physostigmine poisoning
  - c. Mushroom poisoning
  - d. All of above
18. A patient with Anaphylactic shock is brought to emergency. Which of following drugs is most appropriate to treat this patient:
- a. Phenylephrine
  - b. Dobutamine
  - c. Epinephrine
  - d. Norepinephrine
19. A young boy experiences headache, vertigo and nausea after climbing to Mountain. Select a drug that is useful in preventing high altitude sickness.
- a. Acetazolamide
  - b. Amiloride.
  - c. Ethacrynic acid
  - d. Furosemide



20. Which of the following drug increases the formation of dilute urine and is used to reverse SIADH (syndrome of inappropriate ADH secretion).  
 a. Desmopressin.  
 c. mannitol.  
 (b) Conivaptan *Conivaptan*  
 d. Furosemide
21. Which of the following drugs slows conduction through AV node and has its primary action on  $\text{Na}^+/\text{K}^+$  ATPase?  
 a. Diltiazem.  
 (c) digoxin *digoxin*  
 b. Propranolol  
 d. Quinidine
22. Which one of the following is most likely to contribute to the arrhythmogenic effect of digoxin?  
 a. Increased extracellular potassium  
 (c) Increased intracellular calcium *increased intracellular calcium*  
 b. Decreased renin release  
 d. Vagal stimulation
23. Select the proposed mechanism of antihypertensive effect of propranolol.  
 a. It blocks muscarinic receptors  
 (b) It causes reduction in both cardiac output and renin release.  
 c. It inhibits entry of calcium into blood  
 d. It blocks alpha one receptors.
24. Persistent dry cough may occur as a side effect of the following antihypertensive drug (enalapril)?  
 (a) Enalapril  
 b. Atenolol  
 c. Diltiazem  
 d. Methyldopa
25. Which of the following anti-hypertensive is used topically to treat alopecia areata (Baldness)  
 a. Hydralazine  
 (c) Minoxidil *Minoxidil*  
 b. Prazosin  
 d. Guanethidine
26. Which of the following antiarrhythmic drugs has longest half life?  
 a. Adenosine  
 (c) Amiodarone *Amiodarone*  
 b. Quinidine  
 d. Lidocaine
27. A patient of hyperlipidemia is started on simvastatin. Which of the following is a major mechanism of this drug  
 a. Increased excretion of bile acid  
 (c) Inhibition of HMG CO A reductase  
 b. Increased secretion of VLDL by the liver  
 d. Increased binding with bile acid
28. Which of the following drugs is fibrinolytic? (Streptokinase)  
 a. Ticlopidine  
 (b) Streptokinase  
 c. Aspirin  
 d. Warfarin
29. Which of the following drugs is GP IIb / IIIa inhibitor  
 a. Clopidogrel  
 (d) Abciximab  
 b. Ticlopidine  
 c. Aspirin
30. The drug forming a physical barrier/coating to HCL and Pepsin of stomach is:  
 a. Ranitidine  
 (b) Sucralfate  
 c. Omeprazole  
 d. Pirenzepine



31. Following drugs decrease acid secretion of stomach except.
- H<sub>2</sub> receptor antagonists
  - Proton pump inhibitors
  - Antacids
  - Laxatives (salivates) -
32. A 16 yrs old girl treated for asthma develops skeletal muscle tremors that is drug induced. Which of following is the most likely cause? Salbutamol
- Salbutamol
  - Beclomethasone
  - Cromolyn
  - Ipratropium
33. A 35 years old patient complaining of severe pain along the Rt. Side of jaw and face. The best choice of this neuralgic pain is:
- Methadone
  - Ibuprofen
  - Carbamazepine Carbamazepine
  - Lorazepam
34. An 18 years old college boy was taking morphine for the last 1 year. He now presents in emergency department with complaints of drowsiness, disorientation, cyanosis, pupils constricted, yellow clammy skin and shallow breathing. His BP is 90/60mmHg. Which one of the following drugs is given to overcome the effects of morphine:
- Flumazenil
  - Buspirone
  - Naloxone Naloxone
  - Ketamine
35. A 51 years old patient with parkinsonism is being maintained on levodopa-carbidopa with adjunctive use of low doses of entacapone but continues to have off periods of akinesia. The most appropriate drug to rescue the patient but that will only provide temporary relief is:
- Apomorphine
  - Carbidopa
  - Ropinirole
  - Selegiline
36. A patient is having severe muscle spasms. He is given a spasmolytic that is also used in the management of seizures caused by overdose of a local anesthetic. Which of the following drugs is it most likely? Diazepam
- Baclofen
  - Cyclobenzaprine
  - Dantrolene
  - Diazepam
37. A 31 years old man is diagnosed with schizophrenia. He is treated with a neuroleptic drug and now he becomes rigid confused and develops fever of 105 F. Therapy with neuroleptic is stopped and supportive measures are taken. Which of the following drugs should also be given?
- Amoxapine
  - Dantrolene Dantrolene
  - Fluoxetine
  - Lithium
38. In which of the following conditions would aspirin be contraindicated?
- Myalgia
  - Fever
  - Peptic ulcer peptic ulcer
  - Rheumatoid arthritis
39. A 25-year-old woman with an upper respiratory tract infection caused by H. influenza is treated with trimethoprim-Sulfamethoxazole. Which bacterial process is inhibited by this combination, and accounts for the antibacterial effect.
- Cell-wall synthesis
  - Protein synthesis
  - Folic acid synthesis Folic acid synthesis
  - DNA gyrase



Department of Pharmacology

3<sup>rd</sup> year MBBS Class Test # 2

GIT + Blood MCQ's

DATE: 21-01-2020

Time Allowed: 20min

129

1. Which of the following compound is most likely to block ADP receptors and prevent platelet aggregation?
  - A. Alteplase
  - B. Aspirin
  - C. Clopidogrel
  - D. Heparin
  
2. Which of the following anticoagulant drugs acts by inhibiting clotting factors II, VII, IX, X as well as protein C and S?
  - A. Heparin
  - B. Lepirudin
  - C. Reteplase
  - D. Warfarin
  
3. A 30 years old patient is suffering from Inflammatory Bowel Disease (IBD). Which of the following anti-inflammatory drug is prescribed in IBD is a combination of 5-ASA and sulfapyridine?
  - A. Abciximab
  - B. Corticosteroids
  - C. Olsalazine
  - D. Sulfasalazine
  
4. Which of the following laboratory test should be performed to monitor warfarin treatment?
  - A. aPTT
  - B. Factor X test
  - C. INR
  - D. Red blood cell count
  
5. Which of the following antiplatelet drugs act by inhibiting glycoprotein IIb/IIIa receptors?
  - A. Abciximab
  - B. Alteplase
  - C. Aspirin
  - D. Cilostazol
  
6. Which of the following clinical condition is an adverse effect of fibrates?
  - A. Cholelithiasis
  - B. Facial flushing
  - C. Headache
  - D. Hypertension



7. Which of the following drugs accelerates the conversion of plasminogen to plasmin?

- A. Aminocaproic acid
- B. Heparin
- C. Argatroban
- D. Reteplase
- E. Warfarin

8. Which of the following is antidote of warfarin?

- A. Aminocaproic acid
- B. Antithrombin III
- C. Protamine sulfate
- D. Vitamin K

9. Prostaglandin induced cutaneous flushing is an adverse effect of which of the following antihyperlipidemic drugs?

- A. Colestipol
- B. Ezetimibe
- C. Fenofibrate
- D. Niacin

10. Which of the following anti-hyperlipidemic drugs causes hyper-uricemia and may precipitate gout?

- A. Colestipol
- B. Ezetimibe
- C. Fenofibrate
- D. Niacin

11. Which of the following drug polymerizes in stomach acid and coats the ulcer beds, resulting in accelerated healing of peptic ulcer?

- A. Aluminum hydroxide
- B. Cimetidine
- C. Omeprazole
- D. Sucralfate

12. A 60-year-old man suffering from recurrent heartburn routinely takes large quantity of different antacid preparations. Which of the following antacids had the highest risk of metabolic alkalosis in this patient?

- A. Aluminium hydroxide
- B. Calcium carbonate
- C. Magnesium hydroxide
- D. Sodium bicarbonate



disa  
Which of the following drug is a somatostatin analogue, indicated for inhibition of gastric acid secretion in case of esophageal varices?

- A. Gastrin
- B. Histamine
- C. Lansoprazole
- D. Octreotide

19. Which of the following antiulcer drug is preferred for the treatment of NSAID induced peptic ulcer?

- A. Calcium carbonate
- B. Cimetidine
- C. Lansoprazole
- D. Misoprostol

20. Which of the following antiemetic drugs is most effective in chemotherapy induced nausea and vomiting?

- A. Diphenhydramine
- B. Hyosine
- C. Metaclopramide
- D. Ondansetron



- 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)  $\beta$ -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 *Aliskiren*
- 11) Which of the following adverse effect can be caused by Thiazide diuretics?  
a) Hyperkalemia                      b) Hypokalemia                      c) Hyponatremia                      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



- 6) 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 confused and 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 gynecomastia, 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