

Pharmacology & Therapeutics  
MCQ's (Send up examination)

Max Marks: 60

Time allowed: 60 mins

- Variation in the sensitivity of a population of individuals to increasing doses of a drug is best determined by which of the following?
  - Efficacy
  - Potency
  - Quantal dose response curve
  - Graded dose response curve
- The dose which produces toxic effect in 50 % of the population is:
  - ED50
  - TD50
  - TD99
  - ED1
- All of the following are 2<sup>nd</sup> messengers EXCEPT:
  - IP3
  - cAMP
  - Adenylyl cyclase
  - DAG
- 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:
  - Allergy
  - Dependence
  - Tolerance
  - Idiosyncrasy
- Chronic use of an antagonist over a long period of time may cause an increase in the number of receptors. This is called:
  - Desensitization
  - Down regulation
  - Tolerance
  - Up regulation
- What is the situation when failure to continue administering the drug result in serious psychological and somatic disturbances called?
  - Abstinence/ withdrawal syndrome
  - Idiosyncrasy
  - Tachyphylaxis
  - Antagonism
- Select a receptor which itself has enzymatic property:
  - Insulin receptor
  - Steroid receptor
  - Thyroxine receptor
  - Spare receptors
- 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?
  - inhibition of the sodium/iodide symporter
  - inhibition of thyroperoxidase
  - inhibition of TSH secretion
  - inhibition of thyroid hormone release
- Insulin secretagogue are used widely in the treatment of diabetes type 2. Which of the following drugs acts by increasing insulin secretion?
  - biguanides
  - sulfonylureas
  - Acarbose
  - thiazolidenidions

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

31. Following drugs decrease acid secretion of stomach except.
- H<sub>2</sub> receptor antagonists
  - Proton pump inhibitors
  - Antacids
  - Laxatives
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
  - 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
  - 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
  - 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?
- 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
  - Fluoxetine
  - Lithium
38. In which of the following conditions would aspirin be contraindicated?
- Myalgia
  - Fever
  - 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
  - DNA gyrase