

PHARMACOLOGY

CNS PHARMACOLOGY

1.	Anesthetics	159
2.	Opoid Analgesics	162
3.	Benzodiazepenes	163
4.	Anxiolytics	164
5.	Anti-Epileptics	164
6.	Alcohol	166
7.	Drugs for Migraine	166
8.	AntiPsychotics	166
9.	CNS Stimulant	167
10.	Drugs for Bipolar Disorder	167
11.	Sympathomimetics	168
12.	Antidepressants	168
13.	AntiParkinsonians Drugs	169
14.	NSAID & Glucocorticoids	170

1. ANESTHETICS

1. Use of thiopental for the induction of anesthesia leads to unconsciousness of the patient within 5-10 minutes. The patient regains consciousness within a few minutes if no further thiopental is given. This is because thiopental

- a. Is readily secreted by the renal tubules metabolized
- d. Redistributed from the target tissues
- b. Is Exhaled rapidly
- e. secreted in the bile
- c. Is rapidly

2. A patient is to undergo a brief general anesthesia for surgery. The safest and fastest acting inhalation general anesthetic would be

- a. Enflurane
- b. Halothane
- c. Isoflurane
- d. Nitrogen dioxide
- e. Nitrous oxide

3. Which of the following intravenous anesthetic is used to cause analgesia and catatonia in a conscious patient and acts as a cardiovascular stimulant causing increase in intracranial pressure

- b. Fentanyl
- c. Thiopental
- d. Methohexital
- e. Ketamine

4. Which of the following is not used as an anesthetic in head injury?

- a. Propofol
- b. Ketamine
- c. Midazolam
- d. Isoflurane

5. Vasoconstrictors are less effective in prolonging anesthetic properties of:

- a. Procaine
- b. Bupivacaine
- c. Lidocaine
- d. Mepivacaine

6. The minimal alveolar concentration (MAC) of halothane is:

- a. 75%
- b. 25%
- c. 7.5%
- d. 0.75%
- e. 10%

7. In case of malignant hyperthermia, which one should be given?

- a. Succinylcholine
- b. Propranolol
- c. Dantrolene
- d. Isoproterenol
- e. Aspirin

8. Which of the following local anesthetics is suitable for topical administration, but cannot be given parenterally because of its physicochemical properties, which render it very poorly soluble?

- a. Benzocaine
- b. Bupivacaine
- c. Etidocaine
- d. Mepivacaine
- e. Prilocaine

9. Which of the following intravenous anesthetic is used to cause analgesia and catatonia in a conscious patient and acts as a cardiovascular stimulant causing increase in intracranial pressure?

- a. Morphine
- b. Fentanyl
- c. Thiopental
- d. Methohexital
- e. Ketamine

10. The minimal alveolar concentration (MAC) of an inhalational anesthetic is a measure of its
- Adverse effects
 - Potency
 - Oil: water partition coefficient
 - Diflusibility
 - Therapeutic index
11. Inadvertent use of local anesthetics into vessels can cause cardiotoxicity. Which among following is most cardiotoxic?
- Procaine
 - Bupivacaine
 - Prilocaine
 - Tetracaine
 - Lidocaine
12. Treatment of malignant hyperthermia includes all of the following EXCEPT:
- Cessation of anesthetic and changing of rubber tubing to anesthesia machine
 - Administration of dantrolene sodium 1ml/kg by rapid intravenous infusion until symptoms subside
 - Hyperventilation of patient with 100% oxygen
 - Administration of fluids and diuretics to control myoglobinemia and hyperkalemia
 - Lidocaine indicated for arrhythmias
13. Potential advantages of fentanyl over morphine for the induction or maintenance of Anesthesia include:
- Superior relaxation of skeletal muscles.
 - Absence of postoperative nausea and vomiting
 - Lack of depressant effect on spontaneous respiration
 - None of them
 - All of them
14. Epinephrine is sometimes added to commercial local anesthetic solutions for which purpose
- Decrease the rate of absorption of the local anesthetic
 - Decrease the duration of action of the local anesthetic
 - Block the metabolism of ester-type local anesthetics
 - Enhance the distribution of the local anesthetic
 - Act synergistically with the local anesthetic at the nerve ion channel

15. For reduction of the fracture, the young athlete was given general anesthesia and neuromuscular blocker. At the end of the orthopedic procedure, the surgeon restored neuromuscular transmission by administering:
- Succinylcholine
 - Carbachol
 - Physostigmine
 - Dantrolene
 - Neostigmine
16. A 30 years old woman presented with red and itchy eczematoid dermatitis. She had a dental procedure earlier in the day with a local anesthetic. She has a history of allergic reactions. Which of the following drugs is most likely involved:
- Cocaine
 - Ropivacaine
 - Lidocaine
 - Bupivacaine
 - Etidocaine
17. Which of the following inhalational anesthetics has a low blood-gas partition coefficient but is not used for induction of anesthesia because of airway irritation?
- Desflurane
 - Enflurane
 - Halothane
 - Isoflurane
 - Sevoflurane
18. Muscle rigidity can be a side effect of which intravenous anesthetic?
- Fentanyl
 - Midazolam
 - Ketamine
 - Propofol
 - Thiopental
19. Which one of the following inhalational anesthetics can only provide anesthetic effectiveness under hyperbaric conditions?
- Enflurane
 - Nitrous oxide
 - Halothane
 - Methoxyflurane
 - Isoflurane

20. Which of the following agents is associated with high incidence of disorientation, sensory and perceptual illusions and vivid dreams recovery from anesthesia:

- a. Diazepam b. Fentanyl
c. Ketamine d. Midazolam
e. Thiopental

21. Which of the following local anesthetics is useful for topical (surface) administration only?

- a. Procaine b. Bupivacaine
c. Benzocaine d. Etidocaine
e. Lignocaine

22. A patient is to undergo a brief general anesthesia for surgery. The safest and the fastest acting inhalation general anesthetic would be:

- a. Halothane b. Isoflurane
c. Enflurane d. Nitrous oxide
e. Nitrogen dioxide

23. Which of the following drugs causes malignant hyperthermia?

- a. Decamethonium b. Nitrous oxide c. Isoflurane
d. Halothane e. All of the above

24. A patient is given non depolarizing neuromuscular blocker during open reduction of femur fracture. At the end of surgery, the anesthetist restored neuromuscular transmission by administering

- a. Succinylcholine b. Carbachol
c. Physostigmine d. Neostigmine
e. Iralidoxie

25. A patient has had a documented severe allergic reaction to ester - type local anesthetics. Which one of the following is also a member of the ester class, and so would be the most likely to provoke an allergic or anaphylactic reaction if this patient received it?

- a. Bupivacaine b. Lidocaine

- c. Mepivacaine d. Prilocaine
e. Tetracaine

26. Epinephrine is sometimes added to commercial local anesthetic solutions for which purpose?

- a. Decrease the rate of absorption of the local anesthetic
b. Decrease the duration of action of the local anesthetic
c. Block the metabolism of ester type local anesthetic
d. Enhance the distribution of the local anesthetic
e. Act synergistically with the local anesthetic at the nerve ion channel

27. Which one of the following inhalational anesthetics can only provide anesthetic effectiveness under hyperbaric conditions?

- a. Enflurane b. Nitrous oxide
c. Halothane d. Methoxyflurane

28. Muscle rigidity can be a side effect of which intravenous anesthetic?

- a. Fentanyl b. Midazolam
c. Ketamine d. Propofol
e. Thiopental

29. Local anesthetics exert their effects by which one of the following mechanisms?

- a. Increasing K^+ conductance and hyperpolarizing nerves
b. Blocking the Na^+ channels in nerves
c. Inactivating the Na^+-K^+ adenosine triphosphatase (ATPase) pump
d. Blocking excitation at postsynaptic receptors
e. Blocking by a direct action only at the synapse

30. Which of the following is used as anesthetic in head injury?

- a. Propofol b. Ketamine
c. Midazolam d. Isoflurane
e. None of the above

31. Vasoconstrictors are less effective in prolonging anesthetic properties of:

- a. Procaine
- b. Bupivacaine
- c. Lidocaine
- d. Mepivacaine
- e. None of them

32. Select the anesthetic that increase cardiac output and blood pressure:

- a. Halothane
- b. Fentanyl
- c. Ketamine
- d. Diazepam
- e. Ketorolac

33. The minimal alveolar concentration (MAC) of halothane is:

- a. 75%
- b. 25%
- c. 7.5%
- d. 0.75%
- e. 10N

34. Lorazepam can be safely used as a preanesthetic medication in a patient undergoing liver transplantation without fear of excessive CNS depression because the drug is

- a. Excreted in unchanged form
- b. Actively secreted into the GI tract
- c. Conjugated extrahepatically
- d. A selective anxiolytic devoid of CNS depressant actions
- e. Reversible by Naloxone

2. OPIOID ANALGESICS

1. Significant tolerance does not develop to the following action of morphine:

- a. Analgesia
- b. Euphoria
- c. Sedation
- d. Miosis
- e. Bleeding

2. The following drug is a hallucinogen:

- a. Cocaine
- b. Cannabis
- c. Heroin
- d. Methaqualone
- e. Opium

3. Morphine is useful in the clinical treatment of

- a. Biliary colic
- b. Gastro-intestinal obstruction
- c. Chronic respiratory disease
- d. Terminal cancer pain
- e. Cardiac asthma

4. A patient suffering from terminal stages of bone cancer is no more responding to morphine for the control of pain. Which of the following drugs would you recommend to this patient?

- a. Fentanyl
- b. Codeine
- c. Methadone
- d. Buprenorphine
- e. Meperidine

5. Potential advantages of fentanyl over morphine for the induction or maintenance of anesthesia include:

- a. Superior relaxation of skeletal muscles.
- b. Absence of postoperative nausea and vomiting
- c. Lack of depressant effect on spontaneous respiration
- d. None of them
- e. All of them

6. In case of opioid overdose, naloxone can be given repeated doses because of which property of naloxone?

- a. May have a shorter half-life than the opioid agonist
- b. Is only effective in high doses
- c. Is safe only in extremely small cumulative doses
- d. Is needed to stimulate the respiratory centre
- e. Is only a partial agonist

7. Morphine is used in dyspnea associated with pulmonary edema and heart failure because

- a. Morphine relaxes the muscles of respiration
- b. Morphine relieves anxiety and causes vasodilation
- c. Morphine relieves the cardiac function in heart failure of dyspnea
- d. Morphine relieves the pain
- e. Morphine slows respiration and reduces air hunger

8. Codeine has a greater oral bioavailability compared with morphine because of which reason?

- a. Codeine undergoes less first-pass metabolism more quickly
- b. morphine is conjugated
- c. Morphine directly passes into systemic circulation
- d. Codeine is only available liquid formulation
- e. Codeine is metabolized more by hepatic enzymes

9. Which of the following opioids is so lipophilic that it is marketed in a skin patch used to treat chronic pain?

- a. Morphine
- b. Naltrexone
- c. Scopolamine
- d. Methadon
- e. Fentanyl

10. The drug not used for analgesia in a patient of head injury

- a. Morphine
- b. NSAIDS
- c. Rofecoxib
- d. Acetaminophen
- e. Aspirin

11. Regarding the use of Tramadol which one is true

- a. Has beta blocking properties
- b. Blocks serotonin reuptake
- c. Has greater opioid activity than morphine
- d. Is directly inhibited by yohimbine
- e. it raises the seizure threshold

12. Most clinically used opioid analgesics are selective for which type of opioid receptor?

- a. Kappa
- b. Alpha
- c. Beta (B)
- d. Mu (μ)
- e. Delta

13. In a case of an opioid overdose, naloxone can be given in repeated doses because of which property of naloxone?

- a. may have a shorter half-life than the opioid agonist
- b. is only effective at high cumulative doses
- c. is needed to stimulate the respiratory center extremely small doses
- d. is safe only in extremely small doses
- e. is only a partial opioid agonist

14. Which one of the following is an established clinical use of morphine?

- a. Management of generalized anxiety disorders
- b. Relief of pain associated with biliary colic
- c. Pulmonary congestion
- d. Treatment of cough associated with use of ACE inhibitors
- e. Suppression of the ethanol withdrawal syndrome

03. BENZODIAZAPENES

1. Benzodiazepines are noted for having a long duration of action. This is often due to the biotransformation to active metabolites. Which of the following agents is used for panic disorder attack?

- a. Chlorazepate
- b. Chlordiazepoxide
- c. Diazepam
- d. Lorazepam
- e. Alprazolam

2. A 40 years old patient comes to the physician with the complaint of disturbed sleep. On taking detailed history he told the physician that he had no difficulty in going to sleep but was annoyed with frequent waking. The choice drug for this patient would be:

- a. Flurazepam.
- b. Temazepam.
- c. Triazolam
- d. Flumazaniil
- e. Buspírone.

3. Which of the following molecular processes best describes the mechanism of action of benzodiazepines?

- a. Potentiating the effect of GABA at chloride ion channels
- b. Blocking glutamate excitation
- c. Blocking the inactivation of sodium ion channels
- d. Binding to opioid receptors to produce sedation
- e. Potentiating the action of the inhibitory amino acid glycine

4. Respiratory depression after use of which of the following agents may be reversed by administration of flumazenil

- a. Desflurane
- b. Fentanyl
- c. Ketamine
- d. Midazolam
- e. Morphine

5. Benzodiazepines are noted for altering which one of the following aspects of Sleep?

- a. Increasing the time to sleep onset
- b. Decreasing stage 2 NREM sleep
- c. Increasing slow-wave sleep
- d. Decreasing the REM stage of sleep
- e. Increasing sleep awakenings

6. Baclofen is used to treat muscle spasticity because of which of the following effects?

- a. Is a receptor agonist at GABA receptors
- b. Blocks acetylcholine receptors
- c. Enhances the release of GABA vesicles
- d. Is an antagonist at glutamate receptors
- e. Increases GABA action at Cl⁻ ion channel

7. Which of the benzodiazepines is used only as a sedative and hypnotic agent

- a. Clonazepam
- b. Diazepam
- c. Flurazepam
- d. Alprazolam
- e. Lorazepam

ANXIOLYTICS

1. Which one of the following anxiolytic drugs is noted for its lack of sedation?

- a. Diazepam
- b. Disizepam
- c. Oxazepam
- d. Alprazolam
- e. Buspirone

2. Which one of the following anxiolytic drugs is noted for its lack of sedation?

- a. Hydroxyzine
- b. Diazepam
- c. Oxazepam
- d. Alprazolam
- e. Buspirone

3. A 30 years old driver is suffering from anxiety neurosis but also have a depressive mood. Which of the following anxiolytics which has also

antidepressant property will be your choice for his ailment.

- a. Buspirone
- b. Chlordiazepoxide
- c. Alprazolam
- d. Clorazepate
- e. Lorazepam

4. Which of the following anxiolytic has also antidepressant properties?

- a. Buspirone
- b. Chlordiazepoxide
- c. Alprazolam
- d. Clorazepate
- e. Lorazepam

5. Which of the following anxiolytic drugs is noted for its lack of sedation?

- a. Hydroxyzine
- b. Diazepam
- c. Oxazepam
- d. Buspirone
- e. Alprazolam

6. A 72-year-old woman with a long history of anxiety that has been treated with diazepam decides to triple her daily dose because of increasing fearfulness about "environmental noises." Two days after her attempt at self-prescribing, she is found extremely lethargic and nonresponsive, with markedly obtunded reflexes and reactions to painful stimuli. Respirations are 8/min and shallow. What drug should be given to reverse these signs and symptoms?

- a. Dextroamphetamine
- b. Flumazenil
- c. Naltrexone
- d. Physostigmine
- e. Pralidoxime

5. ANTI-EPILEPTICS

1. A 12 Year old boy with generalized tonic seizures develops and overgrowth of gum tissue. The patient was most likely taking which of the following agents.

- a. Clonazepam
- b. Ethosuximide
- c. Phenobarbital
- d. Phenytoin
- e. Primidone

2. A young boy presented to pediatric OPD was diagnosed as a case of petit Mal epilepsy (absence seizures) with concomitant generalized tonic-clonic attacks. Which of the following antiepileptic drugs will be your choice to manage the child?

- a. Ethosuximide
- b. Carbamazepine
- c. Phenytoin
- d. Lamotrigine
- e. Phenobarbital

3. Which of the following drug is an anticonvulsant and not a true local anesthetic but sometimes is classified with the class of IB agents;

- a. Lidocaine
- b. Mexiletine
- c. Phenytoin
- d. Quinidine
- e. Procainamide

4. A 4 years old child presented with seizures. Which of the following will be the drug of choice?

- a. Phenytoin
- b. Phenobarbital
- c. Fosphenytoin
- d. Ethosuximide
- e. Carbamazepine

5. A Patient in the neurology unit at your hospital develops status Epilepticus and at the time there is no good information about the etiology. What drug should be given first for the fastest suppression of the seizures?

- a. Carbamazepine
- b. Lorazepam
- c. Phenobarbital
- d. Phenytoin
- e. Valproic Acid

6. A 15 year old patient is diagnosed with absence epilepsy. Any of the following drugs could be a reasonable choice except.

- a. Ethosuximide
- b. Phenobarbital
- c. Carbamazepine
- d. Valproic Acid
- e. Clonazepam

7. Which of the following is characteristic of both phenytoin and carbamazepine?

- a. Inhibition of hepatic cytochrome P450
- b. First order elimination
- c. Enhances the effects of oral contraceptives

- d. Safe to use in pregnancy
- e. Prevent sodium influx through fast sodium channels.

8. Which of the following antiepileptics is having both zero and first order kinetic:

- a. Carbamazepine
- b. Sodium valproate
- c. Phenytoin
- d. Phenobarbital
- e. Diazepam

9. Sodium valproate is:

- a. A narrow spectrum anti Epileptic drug
- b. Indicated in grand Mal and petit Mal epilepsy
- c. Safely given in hepatic dysfunction
- d. Acts by stabilizing the neural membrane
- e. Can be used to treat Trigeminal Neuralgia

10. A 25 years old female with absence seizures is treated with ethosuximide. Which of the following is the principal mechanism of action?

- a. Calcium Channel Blockade
- b. Increase in frequency of the chloride channel opening
- c. Increase in GABA
- d. Increased potassium channel permeability
- e. Sodium Channel

11. Which of the following agents is considered the drug of choice for initial treatment of generalized absence seizures (petit Mal) in children?

- a. Ethosuximide
- b. Zonisamide
- c. Levetiracetam
- d. Carbamazepine
- e. Phenytoin

12. Gabapentin has which mechanism of action?

- a. Inhibits monoamine oxidase
- b. Agonist effect at dopamine receptors
- c. Increase Na⁺ channel inactivation
- d. Blocks Reuptake of neurotransmitters
- e. Increase release of neurotransmitters

13. Which of the following is the drug of choice in trigeminal neuralgia?

- a. Phenytoin
- b. Methyldopa
- c. Phenobarbitone
- d. Carbamazapine
- e. Levodopa

14. The drug of choice for partial seizures is:

- a. Carbamazapine
- b. Ethosuximide
- c. Diazepam
- d. Lamotrigene
- e. Verapamil

15. A 12 years old boy with generalized tonic seizures develops and overgrowth of gum tissue. The patient was most likely taking which of the following agents?

- a. Ethosuximide
- b. Clonazepam
- c. Primidone
- d. Phenytoin
- e. Phenobarbital

16. A 20 years old man with absence seizures is treated with ethosuximide. Which of the following is the principle mechanism of action of ethosuximide?

- a. L type of calcium channel Blockade
- b. T Type of calcium Channel Blockar
- c. Increase in the frequency of the chloride channel opening
- d. Increase in GABA
- e. Sodium Channel Blockade

17. Which antiepileptic agent gained wider therapeutic use also to treat Trigeminal Neuralgia and the the mania phase of bipolar disorder?

- a. Ethosuximide
- b. Zonisimide
- c. Levetiractam
- d. Carbamazapine
- e. Phenytoin

06. ALCOHOL

1. Disulfiram effectively treats alcohol (ethanol) dependence by which of the following mechanisms?

- a. Increasing plasma ethanol concentration
- b. Preventing the conversion of ethanol to methanol in the liver
- c. Increasing circulating acetaldehyde concentrations
- d. Blocking the action of ethanol at its cell membrane receptor
- e. Stabilizing the cell membrane to prevent ethanol disruption

07. DRUGS OF MIGRAINE

1. 35 year female patient was suffering from an acute attack of migraine. What medicine Was used by the physician to treat this acute attack.

- a. Dantrolene Sodium
- b. Diclofenac Sodium
- c. Codeine
- d. Sumatriptan
- e. Colchicine.

2. A patient presents with a history of frequent and severe migralline headaches. when we give one of the more commonly used drugs for abortive therapy,

sumatriptan, through which of the following "local control substances" is it mainly acting?

- a. Histamine
- b. PGF_{2a}
- c. Prostacyclin
- d. Serotonin
- e. Thromboxane A₂

3. Which of the following agents has not shown effectiveness in the prophylactic treatment of migraine headache?

- a. Zolmitriptan
- b. Methysergide
- c. Verapamil
- d. Naproxen
- e. Amitriptyline

08. ANTIPSYCHOTICS

1. Which of the following agents produces extrapyramidal symptoms most frequently in terms of its potential?

- a. Haloperidol
- b. Lithium
- c. Loxapine
- d. Olanzapine
- e. Quetiapine

2. A 35- years old schizophrenic patient was treated with Haloperidol. He developed drug-induced Parkinsonism after 10 days of treatment. Which of the following drugs will you prefer for the adverse effects?

- a. selegelline
- b. levodopa
- c. bantzopline
- d. amantidine
- e. bromocriptine

3. Clinical antipsychotic potency for "typical" antipsychotics correlate with actions at which receptor.

- a. dopamine D₂
- b. α₂-adrenergic
- c. Muscarinic
- d. histartine
- e. serotonin

4. Which one of the drugs can cause extrapyramidal reaction

- a. Doeridone
- b. Methyl dopa
- c. Metaclopramide
- d. Phenytoin sodium
- e. Clometidine

5. Clinical antipsychotic potency for "typical antipsychotics correlate with actions at which receptor?

- a. Dopamine D2
- b. α_2 -adrenergic
- c. Muscarinic
- d. Histamine
- e. Serotonin

6. Which agent listed below is an antipsychotic that can improve both positive and negative symptoms of schizophrenia?

- a. Chlorpromazine
- b. Haloperidol
- c. Thiothixene
- d. Risperidone
- e. Thioridazine

9. CNS STIMULANTS

1. The drug of choice for hyperkinetic children is:

- a. Methylphenidate
- b. Nikethamide
- c. Caffeine
- d. Clonazepam
- e. Phalcodein

2. The drug of choice for hyperkinetic children is:

- a. Methylphenidate
- b. Nikethamide
- c. Caffeine
- d. Clonazepam
- e. Phalcodein

10. DRUGS FOR BIPOLAR DISORDER

1. Prolonged lithium therapy can cause:

- a. Diabetes mellitus
- b. Goiter
- c. Parkinsonism
- d. Gout
- e. Bone fracture

2. A 47-year-old man with bipolar depressive illness also has a history of glomerulonephritis. He is relatively manic and needs treatment. Which one of the following drugs would be most appropriate for the treatment of his mania:

- a. Imipramine
- b. Carbamazepine
- c. Lithium carbonate
- d. Diazepam
- e. Buspiron

3. A 45 years old patient with bipolar depression (manic-depressive psychosis) is admitted in Psychiatry unit. He is on Lithium Carbonate therapy. Which of the following drugs he should avoid co-administering?

- a) Carbamazepine
- b) Thiazides
- c) Methyl dopa
- d) Imipramine
- e) Valproate (Sod. Valproate)

4. After few weeks on a drug, a patient reports polydyspepsia and polyuria. Which of the following drug is most likely responsible for the sign and symptoms

- a. Fluoxetine
- b. Diazepam
- c. Haloperidol
- d. Lithium
- e. Phenytoin

5. Which of the following drugs is both effective & safe to use in a pregnant patient suffering from bipolar disorder?

- a. Carbamazepine
- b. Chlorpromazine
- c. Lithium
- d. Olanzapine
- e. Valproic acid

6. Which of the following drugs is not used in mania:

- a. Haloperidol
- b. Imipramine
- c. Fluphenazine
- d. Chlorpromazine
- e. Carbamazepine

7. Prolonged lithium therapy can cause ;

- a. Diabetes mellitus
- b. Goiter
- c. Parkinsonism
- d. Gout
- e. Bone fracture

8. Which one of the following statements about lithium is accurate?

- a. It causes symptoms of mild hyperthyroidism in up to 25% of patients.
- b. Plasma levels are increased by a high-Na diet.
- c. Adverse effects include acne, polydipsia, and polyuria.
- d. Spina bifida is major concern in fetal development.
- e. Sedative actions calm manic patients within 24 h.

9. Which one of the following pairs of drug mechanism of action" is most accurate!
- Carbamazepine/facilitation of the actions of GABA"
 - Ethouzimide/blocks Na channels in naxonal membranes
 - Phenelzine/inhibits dopa decerboxylase
 - Procaine blocks Ca channels (type T) in thalamic neurons
 - Lithium/inhibits recycling of inositol

11. SYMPATHOMEMETICS

- A boy suffering from bed - wetting can be prescribed
 - Amphetamine
 - Ephedrine
 - Isoproterenol
 - Pseudoephedrine
 - Tamsulosin
- A school boy aged 10 years was brought to PediatricOPD by her mother. She complain that her son is passing urine during sleep regularly (Bed-wetting). Which of the following is a suitable drug for this condition?
 - Amphetamine
 - Epinephrine
 - Tamsulosin
 - Isoproterenol
 - Ephedrine
- A 7 years old boy has a significant bed wetting. A long acting Indirect sympathomimetic agent has been used by the oral route for this is:
 - Dobutamine
 - Ephedrine
 - Epinephrine
 - Isoproterenol
 - Phenylephrine
- A boy suffering from bed-wetting can be prescribed:
 - Anphetamine
 - Epinephrine
 - Tamsulosin
 - Isoproterenol
 - Ephedrine

12. ANTIDEPRESSANTS

- A 55 year old man who is a chain smoker has been advised to quit smoking by the doctor. Which of the following drugs would you suggest will help him?
 - Benzodiazepine
 - Bupropion
 - Duloxetine
 - Nefazodon
 - Venlafaxine

- A 50 years old hypertensive male patient (chain smoker) has breathlessness even on slight exertion. The physician advised him to quit smoking along with other medicines. Which of the following drugs would help him to quit smoking?
 - Bupropion.
 - Buspirone.
 - Zolpedem.
 - Zopiclone.
 - All of them.

- A 40 years old woman with a long history of depression comes to the physician with severe body aches and pains. The choice drug for the control of depression as well as painful conditions is:
 - Duloxetine.
 - Paroxetine.
 - Phenelzine.
 - Venlafaxine.
 - Both a & d.

- An 8 years old boy visited doctor along with his mother with a complaint of nocturnal anuresis. Which of the following drugs will you recommend for the treatment of this condition?
 - Desipramine.
 - Imipramine.
 - Doxipin.
 - Amytriptyline.
 - Maprotiline

- A 45 years old man with depression is mechanic by profession. He needs an antidepressant with no sedation. Which of the following antidepressants will be your choice that would not make him drowsy?
 - Citalopram
 - Imipramine
 - Amitriptylin
 - Trozodone
 - Phenelzine

- A 25 years old patient suffering from depressive illness is treated with FLUOXETINE 20mg/day. Which of the following will be the most likely complaint in this case:
 - Dizziness on standing up
 - Blurred vision
 - Weight gain
 - Insomnia
 - Dry mouth

7. You treat a 40 years old female for neurotic depression. After a few visits you prescribe amitriptyline to relieve her depression. After 4 days she calls you to say the pills are having no effect and she still feels depression. The best course of action would be to advise her to:

- a. A continue on medication as prescribed, as the drug often takes up 2-6 weeks to have its antidepressant effect
- b. Double the dose
- c. Stop the pills and you will order other treatment from the pharmacist
- d. Continue on the same dose and also start a second drug to use in combination with it
- e. Take the pills with an alcoholic drink to increase their effect

8. Which one of the following drugs acts by inhibiting neurotransmitter re-uptake?

- a. Lithium
- b. Morphine
- c. Luoxetine
- d. Levodopa
- e. Donepezil

9. The older TCAs share all of the following adverse effects except which one?

- a. Orthostatic hypotension
- b. Sedation
- c. Seizures
- d. Weight gain
- e. Sexual dysfunction

10. Tricyclic antidepressants

- a. Increase the antihypertensive effect of guanethidine
- b. Have anticonvulsant activity
- c. Should not be used in patients with glaucoma
- d. May increase oral absorption of levodopa
- e. Are sometimes used as antiarrhythmics

13. ANTI-PARKINSON DRUGS

1. Bromocriptine is an antagonist drug of.

- a. Adrenaline
- b. Prolactin
- c. Somatotropin
- d. Atropine
- e. Amoxicillin

2. A physician prescribed levodopa along with Carbidopa to a patient. Which of the following facts are true with the combination of levodopa & Carbidopa except:

- a. Increases the peripheral utilization.
- b. Decreases the incidence of Hypertension.
- c. Decreases peripheral side effects.
- d. Increases the transport of levodopa across the blood brain barrier
- e. It decreases the bioavailability of levodopa

3. A 40 years old patient who is already on anti-parkinsonian drugs had severe nausea and vomiting from last 9-10hrs. The physician prescribed him domperidone to counteract vomiting due to L-Dopa or Broctocriptine, as domperidone will not compromise the antiparkinsonian effect of these drugs because

- a. Domperidone is anti-emetic prokinetic gastric enzymes
- b. Domperidone is readily metabolized by
- c. Domperidone can readily cross the BBB reduces the motor fluctuations
- d. Domperidone
- e. Domperidone cannot cross the BBB

4. A 35 years old schizophrenic patient attends a psychiatric clinic. The psychiatrist has prescribed anti-psychotic drugs. A few days later the patient developed Parkinson like symptoms. Which one of the followings will be the drug of choice to treat this condition?

- a. Selegiline
- b. Levodopa
- c. Procyclidine
- d. Amantadine
- e. Bromocriptine

5. Dopamine is used as a pressor agent in cases of circulatory failure. All the following are cardiovascular effects of dopamine EXCEPT:

- a. Activation of β_1 -receptors in the heart.
- b. Increase the both systolic and diastolic blood pressure
- c. Activation of dopamine receptors in the sympathetic area
- d. Regulation of renal blood flow.
- e. Activation of α -receptors at high doses.

6. A hypertensive crisis is most likely to result from action of drugs from which one of the following drug classes:

- Tricyclic anti depressants
- Barbiturates
- Opioids
- Monoamine oxidase(MAO) inhibitors
- All of the above

7. Bromocriptine is antagonist drug of

- Adrenallie
- Prolactin
- Somatotropin
- Atropine
- Amoxicillin

8. Foods containing tyramine should be avoided when taken with which class of medications?

- TCAS
- MAOIs
- SSRIs
- Atypical antidepressants
- Antihypertensive medications

9. Anticholinergic agents are useful in the treatment of parkinsonism because of which one of the following mechanisms?

- Decreased levels of scetylcholine from loss of neurons
- Continuing degeneration of dopamine neurons
- Neurotransmitter imbalance in the basal ganglia
- Increased activity of acetylcholinesterase
- Increased release of dopamine in basal ganglia

10. A 72 year old patient with parkinsonism presents with swollen feet, they are red, tender and very painful these symptoms would abate within a few days if the patient were to stop taking

- Amantadine
- Benzotropine
- Bromoeriptine
- Levodopa
- Selegiline

11. Dopamine is used as a pressor agent in cases of circulatory failure. All of the following are cardiovascular effects of dopamine except:

- Activation of beta receptors in the heart

- Increase the both systolic and diastolic blood pressure
- Activation of dopamine receptors in the splanchnic area
- Regulation of renal blood flow
- Activation of alpha receptors at high doses

12. Selegiline, an antidepressant also used for the treatment of Parkinson's disease, which one of the following mechanisms of action?

- It is a selective MAO-B inhibitor
- It blocks the reuptake of dopamine
- It irreversibly binds to COMT
- Increases release of dopamine vesicles
- Blocks muscarinic cholinergic receptors

13. A patient who has been treated for Parkinson disease for about a year presents with purplish, mottled changes to her skin. What drug is the most likely cause of this cutaneous response?

- Amantadine
- Bromocriptine
- Levodopa (alone)
- Levodopa combined with carbidopa
- Pramipexole

14. NSAIDS OR GLUCORTICOIDS

1. A patient who wants to go to high altitude for some project which drug he should take with himself for light headedness?

- Paracetamol
- O₂ cylinder
- Co trimoxazole
- Acetazolamide
- Furosemide

2. Latanoprost is an agonist at the PGF₂ receptors and is effective for the treatment of?

- Cornea abrasions
- Ocular hypertension and open-angle glaucoma
- Ocular albinism
- Closed-angle glaucoma
- Allergic

CNS PHARMACOLOGY

3. Which of the following glucocorticoids produces the least sodium retention?

- a. Corticosone
- b. Hydrocorticosone
- c. Prednisolone
- d. Dextranethasone
- e. Fludrocortisones

4. Osteoporosis is the major adverse effect caused by the glucocorticoid. Its due to their ability to

- a. Increase excretion of calcium
- b. Inhibit absorption of calcium
- c. Stimulate the hypothalamic pituitary adrenal axis
- d. Stimulate the adrenal cortex
- e. Decrease the production of prostaglandins

5. Latanoprost is an agonist at the PGF2 receptors and is effective for the treatment

- a. cornea abrasions
- b. open-angle glaucoma
- c. ocular albinism
- d. closed-angle glaucoma
- e. allergic conjunctivitis

ANSWER KEYS

1. ANESTHETICS

- | | | | | | |
|------|------|------|------|------|------|
| 1.D | 2.E | 3.E | 4.B | 5.B | 6.D |
| 7.C | 8.A | 9.E | 10.B | 11.B | 12.E |
| 13.E | 14.A | 15.E | 16.A | 17.A | 18.C |
| 19.B | 20.C | 21.C | 22.D | 23.D | 24.D |
| 25.E | 26.A | 27.B | 28.C | 29.B | 30.A |
| 31.B | 32.C | 33.D | 34.C | | |

2. OPIOID ANALGESICS

- | | | | | |
|------|------|------|------|------|
| 1.D | 2.B | 3.D | 4.A | 5.E |
| 6.C | 7.B | 8.A | 9.E | 10.A |
| 11.B | 12.D | 13.C | 14.C | |

3. BENZODIAZEPENES

- | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|
| 1.A | 2.B | 3.A | 4.D | 5.D | 6.A | 7.C |
|-----|-----|-----|-----|-----|-----|-----|

4. ANXIOLYTICS

- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| 1.E | 2.E | 3.A | 4.C | 5.D | 6.B |
|-----|-----|-----|-----|-----|-----|

5. ANTI-EPILEPTICS

- | | | | | | |
|------|------|------|------|------|------|
| 1.D | 2.D | 3.C | 4.D | 5.B | 6.C |
| 7.E | 8.C | 9.B | 10.A | 11.A | 12.E |
| 13.D | 14.A | 15.D | 16.B | 17.D | |

6. ALCOHOL 1. C

7. DRUGS FOR MIGRAINE

- | | | |
|-----|-----|-----|
| 1.D | 2.D | 3.A |
|-----|-----|-----|

8. ANTIPSYCHOTIC

- | | | | | | |
|-----|-----|-----|-----|-----|-----|
| 1.A | 2.C | 3.A | 4.C | 5.A | 6.D |
|-----|-----|-----|-----|-----|-----|

9. CNS STIMULANT

- | | |
|-----|-----|
| 1.A | 2.A |
|-----|-----|

10. DRUGS FOR BIPOLAR DISORDER

- | | | | | |
|-----|-----|-----|-----|-----|
| 1.B | 2.B | 3.B | 4.D | 5.D |
| 6.B | 7.B | 8.C | 9.E | |

11. SYMPATHOMIMETICS

- | | | | |
|-----|-----|-----|-----|
| 1.B | 2.E | 3.B | 4.E |
|-----|-----|-----|-----|

12. ANTIDEPRESSANTS

- | | | | | |
|-----|-----|-----|-----|------|
| 1.B | 2.A | 3.E | 4.B | 5.A |
| 6.D | 7.A | 8.C | 9.E | 10.C |

13. ANTIPARKINSONIANS DRUGS

- | | | | | |
|------|------|------|-----|------|
| 1.B | 2.E | 3.E | 4.C | 5.B |
| 6.D | 7.B | 8.B | 9.C | 10.A |
| 11.B | 12.A | 13.A | | |

14. NSAID & GLUCOCORTICIDS

- | | | | | |
|-----|-----|-----|-----|-----|
| 1.D | 2.B | 3.D | 4.B | 5.B |
|-----|-----|-----|-----|-----|

ENDO PHARMACOLOGY

1.	Pituitary Gland	172
2.	Thyroid Gland	172
3.	Sex Hormone And Antagonist	173
4.	Corticosteroids	174
5.	Diabetes	174
6.	Agonist For Ca Balance	175
7.	Uterine Stimulants	175
	Answer Keys	175

1. PITUITARY

1. Which drug has utility in inhibiting the severe secretory diarrhea of hormone secreting tumors of pancreas and GI tract, as well as in treatment of acromegaly?

- Octeotride
- Leuprolide
- Bromocriptine
- Sertraline
- Anastrozole

2. A 30 year old female came to OPD with excessive milk discharge. She has been complaining of being tired and disturbed all this time. She was taken to immediate care and was given treatment with prolactin antagonist. Regarding clinical use of hormones and their analogs, which of following is antagonist of prolactin?

- Mecasermin
- Conivaptin
- Tolvaptin
- Cabergoline
- Atosiban

3. A 28 year old female had amenorrhoea, primary infertility and galactorea. After the intake of drug, galactorea disappeared and she conceived. Which of the following drug could be the cause?

- Bromocriptine
- Desmopressin
- Human chorionic gonadotropin hormone
- Octeotride
- Leuprolide

4. Many factors or drugs are known to affect growth hormone secretion. Those drugs that stimulate release of growth hormone in normal subjects include all of the following EXCEPT;

- Clonidine
- Bromocriptine
- Growth hormone releasing hormone
- Serotonin
- Somatostatin

5. A side effect of human biosynthetic growth hormone is;

- Creutzfeldt—jakob disease
- Antibody formation
- Hypoglycemia
- Transmission of HIV
- Hepatitis B

6. Bromocriptine is an antagonist drug of;

- Adrenaline
- Prolactin
- Somatotropin
- Atropine
- Amoxicillin

2. THYROID

1. A 65 year old male patient with multinodular goiter is scheduled for the near total thyroidectomy. Which of the following drugs do you suggest the patient should take 10-14 days prior to surgery in order to reduce vascularity of gland?

- Levothyroxine
- Liothyronine
- Lugol's Iodine
- Prednisolone
- Radioactive Iodine

2. Metabolic rate of the following organ is not affected by thyroxine:

- Brain
- Heart
- Liver
- Skeletal muscle
- Lungs

ENDO PHARMACOLOGY

3. A lady who was suffering from hyperthyroidism plans to become pregnant. Which of the following is suitable for her hyperthyroidism in pregnancy?

- a. Radioactive Iodine
- b. Propylthiouracil
- c. Lugol's Iodine
- d. Carbimazole
- e. Methimazole

4. 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 sodium/iodide symporter
- b. Inhibition of thyroperoxidase
- c. Inhibition of TSH secretion
- d. Inhibition of thyroid hormone release
- e. Destruction of thyroid tissue

5. After exposure to radioactive fallout containing ¹³¹Iodine, which agent could be administered to prevent destruction of thyroid tissue?

- a. Liothyronine
- b. Methimazole
- c. Propranolol
- d. Potassium Iodide
- e. Levothyroxine

6. A patient came to endocrinology OPD in the 2nd trimester with hyperthyroidism. She was put on drug which blocks the oxidation and iodination of thyroglobulin. Which drug can it be?

- a. Methimazole
- b. Propylthiouracil
- c. Lugol's Iodine
- d. Propranolol
- e. Corticosteroids

7. Metabolic rate of the following organ is not affected by thyroxine:

- a. Brain b. Heart c. Liver
- d. Skeletal muscle e. Lungs

8. Which of the following is accurate regarding drug management of hyperthyroidism?

- a. Action of thyroid peroxidase are inhibited by Iodine

131

- b. β blocker inhibits conversion of thyroxine to triiodothyronine
- c. Carbimazole is unable to cross the placental barrier
- d. Iodide salts can be used for long term management
- e. Iodination of tyrosyl residues to form MIT and DIT are inhibited by β blockers

9. A patient presents in the emergency department (ED) with a massive overdose of a drug. The most worrisome signs and symptoms include excessive cardiac stimulation (severe tachycardia, palpitations, angina etc). The ED physician orders IV administration of β adrenergic blocker, saying (correctly) it is the

only drug likely to normalize cardiac function quickly and save the patient's life. What was the most likely drug the patient overdosed on?

- a. A second generation sulfonylurea (eg glipizide, glyburide)
- b. Insulin
- c. Levothyroxine
- d. Prednisone (Oral glucocorticoid)
- e. Propylthiouracil

10. A patient with hypothyroidism following thyroidectomy will require lifelong hormone replacement

therapy. What drug or formulation generally would be most suitable?

- a. Levothyroxine (T4)
- b. Liothyronine
- c. Liotrix
- d. Protirelin
- e. Thyroid, desiccated

3. SEX HORMONE AND ANTAGONIST

1. A 70 year old man is diagnosed with benign prostatic hyperplasia (BPH) and his physician is considering drug treatment of the condition. It was decided that the drug finasteride will be used. The effects of finasteride will result in a decrease in the synthesis of what substance?

- a. Epinephrine
- b. Norepinephrine
- c. Dihydrotestosterone
- d. Testosterone e. GnRH

2. Regarding clinical use of hormones and their analogs, which of the following is an analog GnRH?

- a. Mecasermin b. Conivaptin
- c. Tolvaptin d. Oxytocin
- e. Menotropin

3. All of the following drugs can failure of oral contraceptive pills EXCEPT:

- a. Ampicillin
- b. Rifampicin
- c. Amiodarone
- d. Tetracycline
- e. Phenytoin

4. Gonadotropins can be used for the treatment of infertility due to pituitary insufficiency. Side effects of gonadotropin administration include:

- a. Ovarian atrophy and menopausal symptoms
- b. Multiple births
- c. Hirsutism
- d. Ovarian enlargement and rupture
- e. Adrenal atrophy

5. Which of the following agent will block glucocorticoid receptors?

- a. Beclomethasone
- b. Ketoconazole
- c. Mifepristone
- d. Spironolactone
- e. Misoprostol

6. Which agent would be appropriate for the management of postmenopausal osteoporotic females?

- a. Vitamin D
- b. Raloxifene
- c. Propranolol
- d. Corticosteroids
- e. Aspirin

7. Estrogens are palliative in the following malignancy:

- a. Carcinoma breast
- b. Carcinoma cervix
- c. Endometrial carcinoma
- d. Carcinoma prostate
- e. BPH

8. A 22 year old woman has been sexually assaulted and she wishes to have the pregnancy terminated by pharmacologic means. What is generally the most appropriate drug, assuming no contraindications?

- a. Ergonovine(or methylergonovine)
- b. Mifepristone
- c. Raloxifene
- d. Ritodrine
- e. Tamoxifen

4. CORTICOSTEROIDS

1. Insulin resistance can be minimized by the use of:

- a. Corticosteroids
- b. Tolbutamide
- c. Protamine
- d. Monocomponent/human insulin
- e. Regular insulin

5. DIABETES

1. The blood level of which of the following can be measured to measure the level of insulin indirectly in the blood of a diabetic patient?

- a. Glucose
- b. Potassium
- c. Glucagon
- d. C-peptide
- e. Amylase

2. Which of the following drugs is taken during first part of meal for the purpose of delaying the absorption of dietary carbohydrates?

- a. Acarbose
- b. Exenatide
- c. Glipzide
- d. Ploglitazone
- e. Repaglimide

3. A 60 year old man with type 2 diabetes mellitus is treated with ploglitazone. Which of the following is the mechanism of action?

- a. Block intestinal carbohydrate absorption
- b. Causes glycosuria
- c. Increases hepatic gluconeogenesis
- d. Increases release of endogenous insulin
- e. Increases target tissue sensitivity to insulin

4. A 45 year old diabetic is admitted in emergency in medical ward as having diabetic ketoacidosis.

Which insulin preparation is the drug of choice for the patient?

- a. Regular insulin
- b. Lento insulin
- c. Isophano insulin
- d. Monocomponent insulin
- e. PZI

5. A 50 year old diabetic patient developed lactic acidosis. Which of the following antidiabetic drugs should not be given to this patient?

- a. Chlorpropamide
- b. Phenformin
- c. Glipzide
- d. Metformin
- e. Glimpride

ENDO PHARMACOLOGY

6. A man with diabetic autonomic neuropathy complains of dizziness and fainting when arising from bed in the morning. Which drug would be most beneficial to this patient?

- a. Dobutamine
- b. Salbutamol
- c. Midodrine
- d. Clonidine
- e. Isoproterenol

7. The insulin preparation of choice in diabetic ketoacidosis is:

- a. Regular insulin
- b. Lento insulin
- c. Isophane insulin
- d. Monocomponent insulin
- e. PZI

8. Type 2 diabetes mellitus patient begins gaining weight after several months of therapy of oral antidiabetic agent. Workup indicates edema and other s/s of heart failure. Which of the following antidiabetic agent was most likely cause?

- a. Biguanides
- b. Ascarbose
- c. Glitazone
- d. Metformin
- e. Sulfonamides

9. Insulin resistance can be minimized by the use of:

- a. Corticosteroids
- b. Tolbutamide
- c. Protamine
- d. Monocomponent/human insulin
- e. Regular insulin

6. AGONIST FOR Ca BALANCE

1. A woman with postmenopausal osteoporosis started on alendronate. What is the possible mode of action?

- a. Activates Vitamin D
- b. Directly forms hydroxyapatite crystals in the bone
- c. Provides supplemental calcium in diet
- d. Provides supplemental phosphorus
- e. Reduce number and activity of osteoclasts in bone

2. The most suitable Vitamin D preparation for Vitamin D dependant rickets is:

- a. Calciferol
- b. Cholecalciferol
- c. Calcifediol
- d. Calcitriol
- e. Mannitol

7 UTERINE STIMULANTS

1. A post natal patient with PPH came to labor room. On examination, the uterus was relaxed. What will be drug of choice?

- a. PGE2b
- b. PGF2 alpha
- c. Both a and b
- d. Leukotrienes
- e. Thromboxanes

ANSWER KEYS

1. PITUITARY GLAND

- 1.A 2.D 3.A 4.E 5.A 6.B

2. THYROID GLAND

- 1.C 2.C 3.B 4.D 5.D
- 6.B 7.C 8.B 9.C 10.A

3. SEX HORMONE AND ANTAGONIST

- 1.C 2.E 3.C 4.B
- 5.C 6.E 7.D 8.B

4. CORTICOSTEROIDS

- 1.B 2.C

5. DIABETES

- 1.D 2.A 3.E 4.A 5.B
- 6.C 7.A 8.C 9.B

6. AGONIST FOR Ca BALANCE

- 1.E 2.D

7. UTERINE STIMULANTS

- 1. B

RENAL PHARMACOLOGY

DIURETICS

1. Masked hypercalcemia in hyperparathyroidism was unmasked by the use of

- Verapamil
- Loop diuretic
- Thiazide
- Spironolactone
- Epilorenone

2. A fifty years old female patient presented with heart failure. She was put on digoxin. Which of the following diuretics would be best recommended for such patient along with digoxin, which not only will decrease the load on the failing heart but also will not be associated with giving rise to digoxin toxicity.

- Captopril
- Hydrochlorothiazide
- Budesonide
- Furosemide
- Spironolactone

3. A 55 years old male with kidney stones has been placed on a diuretic to decrease calcium excretion. However, after a few weeks, he develops an attack of gout. Which diuretic was he taking?

- Furosemide
- Hydrochlorothiazide
- Spironolactone
- Triamterene
- Mannitol

4. Select the diuretic agent causing headache, vomiting and increased sodium level by removal of water by the intracellular compartment?

- Chlorothiazide
- Furosemide
- Metolazone
- Mannitol
- Acetazolamide

5. Hyperkalemia is a contraindication to the use of which of the following agents?

- Acetazolamide
- Chorthalidone
- Ethacrynic acid
- Spironolactone
- Furosemide

6. The disadvantage of thiazide is that

- they are very toxic
- they cause hypokalemia
- they alter blood pH when used for a long time
- they cause excessive chloride loss from the body
- they are hepatotoxic

7. Gynecomastia, hyperkalemia and menstrual abnormalities are potential adverse effects associated with

- Amiloride
- Captopril
- Triamterene
- Spironolactone
- Methyl dopa

8. A 70 years old man is admitted with a history of recurrent heart failure and metabolic derangements. He has marked peripheral edema and metabolic alkalosis. Which of the following drugs is most appropriate for the treatment of his edema?

- Acetazolamide
- Digoxin
- Dobutamine
- Hydrochlorothiazide
- Spironolactone

RENAL PHARMACOLOGY

9. A 52 years old man is suffering from congestive cardiac failure with pulmonary edema. Cardiologist has advised a high efficacy diuretic which causes blockage of the Na/K/ 2Cl co-transport in distal convoluted tubule, which drug is prescribed

- a. Thiazide
- b. Triamterene
- c. Mannitol
- d. Urea
- e. Furosemide

10. A patient was prescribed one of the following drugs for ascites. After sometime he complained of development of gynecomastia, hyperkalemia and obstruction to the flow of urine. What drug of the following could have those adverse effects?

- a. Amiloride
- b. Captopril
- c. Triamterene
- d. Spironolactone
- e. Methyl dopa

11. Which side effect is associated with spironolactone?

- a. Alkalosis
- b. Hirsutism
- c. Hyperkalemia
- d. Hypercalcemia
- e. Hyperglycemia

12. A patient presents with chronic open angle glaucoma. What "renal" drug or a drug in the same chemical and pharmacologic class might be prescribed as an adjunct to lower Intraocular pressure and help manage this condition?

- a. Acetazolamide
- b. Amiloride
- c. Furosemide
- d. Spironolactone
- e. Triamterene

13. A patient is recently diagnosed with adrenal cortical adenoma. Among the pertinent Cushingoid signs and symptoms are hypertension and weight gain from fluid retention; and hypernatremia and hypokalemia. Which drug would be the most rational to prescribe alone or adjunctively to specifically antagonize both the renal and the systemic effects of the hormone excess?

- a. Acetazolamide
- b. Amiloride
- c. Furosemide
- d. Metolazone
- e. Spironolactone

ANTIDIURETICS

1. The following tissue is most sensitive to vasopressin

- a. Renal collecting ducts
- b. Intestinal smooth muscle
- c. Vascular smooth muscle
- d. Uterus
- e. Brain

KEY:A

ANSWER KEYS

DIURETICS

1.C	2.E	3.B	4.D	5.D
6.B	7.D	8.A	9.E	10.D
11.C	12.A	13.E		

GIT PHARMACOLOGY

1. Which of the following drug Irreversibly inhibits $H^+ K^+$ ATPase enzyme and is used in the treatment of peptic ulcer?

- a. Cimetidine
- b. Sucralfate
- c. Misoprostol
- d. Omeprazole
- e. Bismuth sulphate

2. Which macrolide is indicated in H pylori induced peptic ulcer treatment in triple therapy?

- a. Erythromycin
- b. Clarithromycin
- c. Azithromycin
- d. Roxithromycin
- e. Telithromycin

3. Which histamine H_2 blocker has most marked inhibitory affect on microsomal cytochrome P-450 enzyme?

- a. Ranitidine
- b. Famotidine
- c. Cimetidine
- d. Roxatidine
- e. Omeprazole

4. In peptic ulcer, an acids are now primarily used for.

- a. Prompt pain relief
- b. Ulcer healing
- c. Preventing ulcer relapse
- d. Control of bleeding from ulcer
- e. Reduced side effects

5. Which gastro-prokinetic drug produces extra pyramidal side effects.

- a. Domperidone
- b. Metoclopramide
- c. Cisapride
- d. Ondansetron
- e. Promethazine

6. The effective antilemetic for controlling cisplatin induced vomiting is.

- a. Prochlorperazine
- b. Metoclopramide
- c. Domperidone
- d. Ondansetron
- e. Promethazine

7. Which of the following drug belongs to osmotic laxative?

- a. Caster oil
- b. Lactulose
- c. Magnesium sulphate
- d. Liquid paraffin
- e. Bisacodyl

8. The most possible laxative for a patient of irritable bowel disease with spastic constipation is.

- a. Dietary fiber
- b. Liquid paraffin
- c. Bisacodyl
- d. Senna
- e. Caster oil

9. Which of the following drugs belongs to mixed amoebicidal?

- a. Emetine
- b. Chloroquine
- c. Secnidazole
- d. Ketoconazole
- e. Paromomycin

10. Most serious effect seen with emetine when used as anti amebic agent is?

- a. Sinusitis
- b. Alopecia
- c. Acne vasgaris
- d. Cardiac arrhythmias
- e. Trigeminal neuralgia

11. The following precaution should be advised to the patient while prescribing metronidazole?

- a. To avoid driving
- b. To get leukocyte count every month
- c. To avoid fatty/fried food
- d. To avoid milk products
- e. To get avoid alcoholic beverages

12. Mebendazole is most effective against which of the following microorganisms/parasite.

- a. Entamoebahistolytica
- b. Entrobiumvermicularis
- c. Plasmodium falciparum
- d. Yersinia pestis
- e. Leishmaniadonovani

13. Which of the following drug among anthelmintics can cause corneal opacities?

- a. Albendazole
- b. Niclosamide
- c. Ivermectin
- d. Piperazine
- e. Pyrantel pamoate

14. What is true about human interferon alpha

- a. It is used to treat HIV infection
- b. It is used to treat Kaposi sarcoma in AIDs patients
- c. It is curative for hepatitis B
- d. It is curative for hepatitis A
- e. It is active orally

15. Which of the following drugs orally used for treatment of hepatitis C Infection along with interferon alpha.

- a. Lamivudine
- b. Ribavirin
- c. Amantadine
- d. Metronidazole
- e. Tenofovir

16. Drugs which undergo high degree of first pass metabolism.

- a. Have low oral bio availability
- b. Have greater therapeutic effects
- c. Are primarily excreted in bile
- d. Are contraindicated in liver Disease
- e. Have zero order kinetics of elimination

17. A 48-year-old immigrant from Mexico presents with seizures and other neurologic symptoms. Eggs of Taenia solium are found upon examination of a stool specimen. A magnetic resonance image of the brain shows many cysts, some of which are calcified. Which one of the following drugs would be of benefit to this individual?

- a. Albendazole
- b. Diethylcarbamazine
- c. Ivermectin
- d. Niclosamide
- e. Pyrantel pamoate

18. A 56-year-old man from South America is found to be parasitized by both schistosomes and Taenia solium the pork tapeworm. Which of the following anthelmintic drugs would be effective for both infestations

- a. Albendazole
- b. Ivermectin
- c. Mebendazole
- d. Niclosamide
- e. Praziquantel

19. A peptic ulcer is a sore that forms where the lining of the stomach or duodenum (the first part of the small intestine. has been eaten away by stomach acids or digestive juices in addition to Helicobacter pylori infection of the stomach, what is the most common cause of peptic ulcer?

- a. Consuming very spicy foods
- b. Cigarette smoking
- c. Moderate use of alcohol
- d. Use of nonsteroidal anti-inflammatory drugs (NSAIDs).
- e. None of the above

20. Identify the mucosal protective agent from the given anti-peptic ulcer drugs?

- a. Sodium bicarbonate
- b. Aluminum hydroxide
- c. Famotidine
- d. Bismuth subcitrate
- e. All of the above

21. The only agent among the following that selectively blocks gastric M1-muscarinic receptors, thereby inhibiting stomach secretions

- a. Pirenzepine
- b. Olanzapine
- c. Magnesium trisilicate
- d. Clozapine
- e. Cyclosporine

22. For the effective treatment of Hepatitis C, other than interferon and ribavirin, two drugs (protease inhibitors) directly inhibit HCV virus are?

- a. Boceprevir and-ribavirin
- b. Telprevir and ribavirin
- c. Pegylated interferon and boceprevir
- d. Pegylated interferon and telprevir
- e. Boceprevir and Telprevir

23. A female patient who is being treated for chronic hepatitis B develops nephrotoxicity while on treatment. Which is the most likely medication she is taking for HBV treatment?

- a. Entecavir
- b. Telbivudine.
- c. Lamivudine.
- d. Adenovir.
- e. Both c & d

24. Extrapiramidal symptoms (EPS) have been associated with which of the following drug?

- a. Metoclopramide.
- b. Alprazolam.
- c. Aprepitant.
- d. Loperamide
- e. Misoprostol

25. Which one of the following best describes the mechanism of action of ribavirin?

- a. Inhibits viral aspartate protease
- b. Inhibits viral DNA polymerase
- c. Inhibits viral RNA polymerase
- d. Inhibits viral reverse transcriptase
- e. Prevent integration of viral genome

26. Drug of choice for echinococcosis treatment

- a. Albendazole
- b. Iodoquinol
- c. Piperazine
- d. Niclosamide
- e. Saramin

27. The following helminthic disease can be treated by albendazole but not by mebendazole

- a. Hookworm infestation
- b. Threadworm infestation
- c. Trichuriasis
- d. Neuracyticercosis
- e. Nematodes

28. The primary role of sulfasalazine in ulcerative colitis is:

- a. Suppression of enteroinvasive pathogens
- b. Control of acute exacerbations of the disease
- c. Maintenance of remission
- d. Both band c
- e. None of the above

29. A 30 year, old female undergoes Appendectomy for acute appendicitis. Histopathology shows 1 cm carcinoid tumour at the tip of the appendix most appropriate further management is

- a. Right hemicolectomy
- b. Right hernicelectomy with chemotherapy.
- c. Chemotherapy alone
- d. No further treatment
- e. Radiotherapy

30. A mother brings her four year old child to a doctor with a complaint of Intense perianal itching. Despite being fed properly, he has not gained weight for the last few months. The likely condition is

- a. Ancylostomiasis
- b. Ascariasis
- c. Entrobiasis
- d. Filariasis
- e. Scabies

31. For providing quality health services, community participation plays an essential role. To ensure maximum community participation, which level of health care system should be strengthened?

- a. Higher level referral facility
- b. Primary health care
- c. Second level referral facility
- d. Secondary health care
- e. Tertiary health care

32. To suit the rural situation in Pakistan the lady health visitor introduced a homemade fluid for oral rehydration What does this represent?

- a. Appropriate technology
- b. Community participation
- c. Equality
- d. Equity
- e. Suitability

33. A 68-year-old patient with cardiac failure is diagnosed with ovarian cancer. She is started on cisplatin but becomes nauseous and suffers from severe vomiting. Which of the following medications would be most effective to counteract the emesis in this patient without exacerbating her cardiac problem?

- a. Droperidol
- b. Dolasetron
- c. Dronabinol
- d. Ondansetron
- e. Prochlorperazine

34. A 45-year-old woman is distressed by the dissolution of her marriage. She has been drinking heavily and overeating She complains of persistent heartburn and an unpleasant, acid like taste in her mouth. The clinician suspects gastrointestinal reflux disease and advises her to raise the head of her bed 6 to 8 inches, not to eat for several hours before retiring, to avoid alcohol, and to eat smaller meals. Two weeks later, she returns and says the symptoms have subsided slightly but still are a concern. The clinician prescribes

- a. An antacid such as Aluminum hydroxide.
- b. An antianxiety agent such as alprazolam
- c. Dicyclomine
- d. Esomeprazole
- e. Tetracycline

35. Which of the following agents interferes with most of the cytochrome P450 enzymes and, thus, leads to many drug -drug interactions?

- a. Cimetidine
- b. Famotidine.
- c. Ondansetron.
- d. Omeprazole
- e. Sucralfate

36. A couple celebrating their fortieth wedding anniversary is given a trip to Peru to visit Machu Picchu. Due to past experiences while traveling, they ask their doctor to prescribe an agent for diarrhea. Which of the following would be effective?

- a. Amoxicillin
- b. Famotidine
- c. Loperamide
- d. Lorazepam
- e. Omeprazole

1.D	2.B	3.C	4.A	5.B	6.D
7.B	8.A	9.C	10.D	11.E	12.B
13.A	14.B	15.B	16.A	17.A	18.E
19.D	20.D	21.A	22.E	23.D	24.A
25.C	26.A	27.D	28.C	29.D	30.C
31.B	32.A	33.D	34.D	35.A	36.C