

Seat Number

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PANKH-39

BP-404T  
Pharmacology-I  
(724404)

Total Pages : 5]

Time : 3 Hours

Max Marks : 75

**Note :** (1) Do not write anything on question paper except Seat No.

(2) Draw well labelled diagram wherever necessary.

(3) All questions are compulsory.

(4) Students should note, no supplement will be provided.

1. Solve Multiple Choice Questions :

20

(i) Pharmacodynamics involves the study of the following :

(a) Mechanism of drug action (b) Biotransformation

(c) Distribution (d) Excretion of drug

(ii) First pass effect is seen with which route of administration ?

(a) Oral route (b) Sublingual

(c) Intramuscular (d) Intravenous

(iii) Affinity is a measure of :

(a) how tightly a drug binds to plasma protein

(b) how tightly a drug binds to a receptor

(c) inhibiting potency of a drug

(d) bioavailability of a drug

P.T.O.

- (iv) Local anaesthetics produce :
- (a) Analgesia, amnesia, loss of consciousness
  - (b) Blocking pain sensation without loss of consciousness
  - (c) Alleviation of anxiety and pain with an altered level of consciousness
  - (d) A stupor or somnolent state
- (v) Which of the following local anaesthetics is a useful antiarrhythmic agent ?
- (a) Cocaine
  - (b) Lidocaine
  - (c) Bupivacaine
  - (d) Ropivacaine
- (vi) Indicate the location of M2 Cholinoreceptor type :
- (a) Heart
  - (b) Glands
  - (c) Smooth muscle
  - (d) Endothelium
- (vii) Indicate a reversible cholinesterase inhibitor :
- (a) Isoflurophate
  - (b) Carbochol
  - (c) Polodarpine
  - (d) Physostigmine
- (viii) Which of the following cholinomimetics is commonly used in the treatment of glaucoma ?
- (a) Pilocarpine
  - (b) Lobeline
  - (c) Acetylcholine
  - (d) Atropine

- (ix) Which of the following agents is used as an inhalational drug in asthma ?
- (a) Atropine (b) Ipratropium  
(c) Lobeline (d) Homatropine
- (x) Indicate an antimuscarinic drug used in the treatment of mushroom poisoning :
- (a) Pralidoxim (b) Pilocarpine  
(c) Homatropine (d) Atropine
- (xi) Which of the following drugs is a non-selective alfa receptor antagonist ?
- (a) Prazosin (b) Phentolamine  
(c) Metoprolol (d) Reserpine
- (xii) Hypnotic drugs are used to treat :
- (a) Psychosis (b) Sleep disorders  
(c) Narcolepsy (d) Parkinsonian disorder
- (xiii) Which neurons are involved in Parkinsonism ?
- (a) Cholinergic neurons (b) GABAnergic neurons  
(c) Dopaminergic neurons (d) Serotonergic neurons
- (xiv) Alcohol may cause :
- (a) CNS depression (b) Vasodilation  
(c) Hypoglycemia (d) All of these

- (xv) All of the following agents are beta receptor agonist EXCEPT :
- |                 |                   |
|-----------------|-------------------|
| (a) Epinephrine | (b) Isoproterenol |
| (c) Methoxamine | (d) Dobutamine    |
- (xvi) Indicate the alfa-1-selective antagonist :
- |                  |                       |
|------------------|-----------------------|
| (a) Phentolamine | (b) Dihydrocrystamine |
| (c) Prazosin     | (d) Labetalol         |
- (xvii) Which of the following sympathomimetics act indirectly ?
- |                 |                    |
|-----------------|--------------------|
| (a) Epinephrine | (b) Norepinephrine |
| (c) Ephedrine   | (d) Methoxamine    |
- (xviii) The mechanism of atropine is :
- Competative ganglion blockade
  - Competative muscarinic blockade
  - Competative neuromuscular blockade
  - Non-competative neuromuscular blockade
- (xix) Atropine is highly selective for :
- |                            |                            |
|----------------------------|----------------------------|
| (a) $M_1$ receptor subtype | (b) $M_2$ receptor subtype |
| (c) $M_3$ receptor subtype | (d) All of these           |
- (xx) The following are all examples of ester local anaesthetic except :
- |                 |                |
|-----------------|----------------|
| (a) Priolocaine | (b) Procaine   |
| (c) Cocaine     | (d) Benzocaine |

2. Solve any *two* of the following : 20
- (a) Explain receptor types.
  - (b) Explain in detail neurohumoral transmission process and cholinergic transmission.
  - (c) Define opioid analgesic and explain the pharmacology of morphine.
3. Solve any *seven* of the following : 35
- (a) Write a short note on Antiepileptics.
  - (b) Write a note on phases of General Anaesthesia.
  - (c) Write a note on Local Anaesthetics.
  - (d) Write a note on routes of Administration.
  - (e) Explain in detail clinical trials.
  - (f) Explain adverse drug reactions.
  - (g) Write a note on antiparkinsonian drugs.
  - (h) Describe treatment of alcoholism.
  - (i) Describe drugs used in myasthenia gravis.