

August 2011

[KZ 4264]

Sub. Code: 4264

THIRD B.PHARM. EXAMINATION

Paper IV – PHARMACOLOGY – I

Q.P. Code : 564264

Time : Three hours

Maximum: 100 Marks

Answer ALL questions.

I. LONG ESSAYS

(2 x 20 = 40)

1. a) Define angina pectoris and classify the anti anginal drugs.
b) Write the mechanism of action and pharmacological action of nitrate.
c) Mention the therapeutic use and adverse drug effect of nitrate.
2. a) Classify cholinergic drugs with example for each group.
b) Describe pharmacological actions of and therapeutic use and adverse effect of acetylcholine.
c) Mention the therapeutics uses of and adverse effect of atropine.

II. SHORT NOTES

(8 x 5 = 40)

1. Define metabolism? Write short notes as various reaction involved in metabolism ?
2. Write short note on bio-availability?
3. Classify antidepressant and write mechanism of fluoxetine?
4. Preanaesthetics medication?
5. Define asthma and write the pharmacological action of and therapeutic uses of theophylline ?
6. Mast cell stabilizers. ?
7. Jak/stat kinase binding receptor? 8. Write short notes on central nerves system stimulant?

III. SHORT ANSWERS

(10 x 2 = 20)

1. Define tachyphylaxis ?
2. Agonist?
3. Define metabolism?
4. Define distribution?
5. What are receptors?
6. What is status asthmaticus the drug of choice?
7. What is prodrug give example?
8. Explain the Volume of distribution?
9. Name two drugs used in glaucoma?
10. Name two drugs that suppress dry cough.

February 2012

[LA 4264]

Sub. Code: 4264

THIRD B.PHARM. EXAMINATION

Paper IV – PHARMACOLOGY – I

Q.P. Code: 564264

Time : Three hours

Maximum: 100 Marks

Answer ALL questions.

I. Elaborate on:

(2X20=40)

1. Define hypertension. What are the different types of hypertension? Enumerate anti hypertensive drugs with examples write the mechanism, adverse effects and uses of any one class of drug.
2. What are the neuromuscular blockers? Classify them with examples. Compare and contrast between depolarizing and non depolarizing neuromuscular blocking drugs.

II. Write notes on:

(8X5=40)

1. What are diuretics? Classify them with examples.
2. Define cardiac arrhythmias. What are the different types of arrhythmias?
3. Enumerate antitussives drugs.
4. Enumerate anti parkinsonism drugs
5. Anti-inflammatory drugs
6. Pharmacogenetics
7. Calcium channel blockers
8. Preanesthetic medications

III. Short Answer:

(10X2=20)

1. What are inverse agonist? Give examples
2. Give two examples for mast cell stabilizers
3. What are hypnotics? Give examples
4. Tachyphylaxis
5. Write the mechanism of action of Disulfuran
6. Write the mechanism of action of frusimide
7. Give two examples for HMG-coA reductase inhibitors
8. Give two examples Narcotic antagonists
9. Give two examples of CNS stimulants
10. What are Secondary messengers in G-protein coupled receptor

[LB 4264]

AUGUST 2012

Sub. Code: 4264

THIRD YEAR B.PHARM. EXAM
Paper IV – PHARMACOLOGY – I
Q.P. Code: 564264

Time : Three hours

Maximum: 100 Marks

(180 Min) Answer ALL questions in the same order.

I. Elaborate on:

Pages Time Marks
(Max.)(Max.)(Max.)

- | | | | |
|--|----|----|----|
| 1. a) Classify Sympathetic blocking drugs with examples for each group. b) Describe Pharmacological actions, therapeutic uses and adverse effects of propranolol. | 19 | 33 | 20 |
| 2. a) Classify Anti arrhythmic drugs with examples for each group. b) Explain the mechanism of action, pharmacological actions, therapeutic uses and adverse effects of Quinidine. | 19 | 33 | 20 |

II. Write notes on:

- | | | | |
|--|---|---|---|
| 1. Drugs used in the therapy of shock. | 3 | 8 | 5 |
| 2. Write notes on Anti diuretic drugs. | 3 | 8 | 5 |
| 3. Mechanism of drug action. | 3 | 8 | 5 |
| 4. Classify Anti tussives and expectorants with suitable examples. | 3 | 8 | 5 |
| 5. Mechanism of action of lignocaine. | 3 | 8 | 5 |
| 6. Centrally acting muscle relaxants. | 3 | 8 | 5 |
| 7. Classify Anti epileptic drug with suitable examples. | 3 | 8 | 5 |
| 8. Write a short note on Inhalation anaesthetics. | 3 | 8 | 5 |

III. Short Answer:

- | | | | |
|--|---|---|---|
| 1. Define pharmacovigilance. | 1 | 5 | 2 |
| 2. Brief the therapeutic uses of Aspirin. | 1 | 5 | 2 |
| 3. Name any two Dopaminergic agonists. | 1 | 5 | 2 |
| 4. Name any two drugs for the treatment of congestive heart failure. | 1 | 5 | 2 |
| 5. Name any two Cholinomimetic alkaloids. | 1 | 5 | 2 |
| 6. High ceiling diuretics. | 1 | 5 | 2 |
| 7. Competitive antagonism with example. | 1 | 5 | 2 |
| 8. Acute alcoholism. | 1 | 5 | 2 |
| 9. Define sedatives and Hypnotics. | 1 | 5 | 2 |
| 10. Angiotensin antagonists. | 1 | 5 | 2 |

[LC 4264]

FEBRUARY 2013
THIRD YEAR B.PHARM. EXAM
Paper IV – PHARMACOLOGY – I
Q.P. Code: 564264

Sub. Code: 4264

Time : Three hours
(180 Min)

Maximum: 100 Marks

I. Elaborate on:

(2x20=40)

1. What are anti-inflammatory drugs? Classify them with suitable examples. Discuss the pharmacological action, adverse effects and therapeutic uses of aspirin.
2. Classify parasympathomimetics, discuss the pharmacological and mechanism of action and therapeutic uses of any one cholinergic drug.

II. Write notes on:

(8x5=40)

1. Write a note on drug abuse.
2. Explain insulin bioassay.
3. Write a note on parenteral route of drug administration.
4. What is mean by bioavailability and bioequivalence? Give its significance.
5. Write a note on pharmacogenetics.
6. Classify anti hyperlipidemia drugs. Explain the mechanism of action of statins.
7. What are loop diuretics? State its therapeutic uses.
8. Write a note on treatment of shock.

III. Short Answers:

(10x2=20)

1. Name two drugs acting through sodium channels.
2. What is Nicotine?
3. What is competitive reversible antagonism?
4. Write the mechanism of action of digitalis.
5. State the therapeutic uses of sodium nitrites.
6. What is minoxidil?
7. What are osmotic diuretics? Give example.
8. What is montelukast?
9. Name the category of any receptor in which formoterol produce its response.
10. What are the side effects of dextromethorphan?

(LD 4264)

AUGUST 2013

Sub. Code: 4264

**THIRD YEAR B.PHARM. EXAM
PAPER IV – PHARMACOLOGY - I**

Q.P. Code: 564264

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X20=40)

1. Classify drugs used in the treatment of congestive cardiac failure. Explain the mechanism of action of Digoxin. Mention its adverse effects.
2. Explain various routes of administration with their advantages and disadvantages. Add a note on novel drug delivery system.

II. Write notes on:

(8X5=40)

1. Anti-parkinsonism drugs. Explain the purpose of combining levodopa and carbidopa.
2. Classify benzodiazepines. Write the mechanism of action and uses.
3. Write notes on Drug – Drug interaction.
4. Explain the pharmacology of Opioid analgesics.
5. Mast cell stabilizers.
6. Describe the pharmacology of anti-anxiety agents.
7. Mood stabilizers
8. Drugs for the treatment of Angina pectoris?

III. Short Answers on:

(10X2=20)

1. Therapeutic use of Benserazide.
2. What is Preanesthetic medication?
3. Define analgesic with examples.
4. What is status epilepticus site the drug of choice?
5. Dissociative anesthetics
6. Disulfuram reaction.
7. Name two potassium sparing diuretics.
8. What is prodrug? Give examples.
9. Define teratogenicity with example.
10. Therapeutic uses of Losartan.

(LE 4264)

FEBRUARY 2014
THIRD YEAR B.PHARM. EXAM
PAPER IV – PHARMACOLOGY - I
Q.P. Code: 564264

Sub. Code: 4264

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X20=40)

1. a) Classify the various routes of drug administration and explain in detail about the various injections.
b) Write a note on new drug delivery system
2. a) Define Parasympatholytics and classify it with examples for each group.
b) Describe the pharmacological actions, adverse effects and therapeutic uses of Atropine

II. Write notes on:

(8X5=40)

1. Bioassay of oxytocin.
2. Write in brief about acute and chronic alcoholism and give its mode of treatment
3. Define Parkinsonism and classify the drugs used for it. Comment a note on Levodopa and Carbidopa combination.
4. Write a note on drug addiction and drug habituation with examples.
5. Explain about the nitrites and nitrates used as an antianginal drug.
6. Explain about the sodium channel blockers used as an anti arrhythmic drug.
7. Effect of enzyme induction and inhibition in drug metabolism.
8. Write in brief about spiranolactone as a diuretic.

III. Short Answers on:

(10X2=20)

1. Pharmacoepidemiology.
2. Advantages of sublingual route.
3. Give four examples of drugs with low therapeutic index and high rate of adverse drug reactions.
4. Receptor down regulation.
5. Mechanism of action of succinylcholine.
6. Four therapeutic uses of Analeptics.
7. Name four hallucinogens.
8. Mention four drugs known to cause bronchospasm.
9. Name four common causes of inadequate response to antihypertensive treatment.
10. Hypovolemic or Oligemic shock.

(LF 4264)

AUGUST 2014

Sub. Code: 4264

**THIRD YEAR B.PHARM. EXAM
PAPER IV – PHARMACOLOGY - I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 marks

I. Essay: (2X20=40)

1. a) Define Bioassay. Mention the indications of bioassay and explain about the types of bioassay.
b) Explain in detail about the bioassay of insulin and digitalis.
2. a) Define hypertension and give the types.
b) Define and classify antihypertensive drugs with examples.
c) Explain in detail about Potassium channel activators and ACE inhibitors.

II. Short notes: (8X5=40)

1. Explain about Phase-I and II metabolic reactions.
2. Write in brief about the physiological factors which affect the drug absorption.
3. Centrally acting skeletal muscle relaxants.
4. Drugs indicated in Alzheimer's disease.
5. Define Atherosclerosis and mention the drugs used in its treatment.
6. Principles of treatment of digitalis poisoning.
7. Selective COX-2 inhibitors.
8. Drugs used in the treatment of Grand mal epilepsy.

III. Short Answers: (10X2=20)

1. Name two calcium channel blockers.
2. Name two ganglion blockers with their therapeutic uses.
3. What is physiological antagonism? Give example.
4. Advantages of procainamide over procaine as an antiarrhythmic agent.
5. State therapeutic uses of Chlorpromazine.
6. What are the side effects of thiazides?
7. Advantages of using spiranolactone.
8. What are the contraindication to the use of Propranolol?
9. Name the neurotransmitters of the CNS.
10. Name two drugs used in the prophylaxis of asthma.

(LG 4264)

FEBRUARY 2015

Sub. Code: 4264

**THIRD YEAR B.PHARM. EXAMINATION
PAPER IV – PHARMACOLOGY - I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 marks

I. Essay:

(2 x 20 = 40)

1. What is biotransformation? What are cytochrome enzymes? Explain the various phases of biotransformation reactions with suitable examples.
2. Define and classify Antipsychotics. Explain the mechanism of actions, Pharmacological actions, side effects and therapeutic uses of Chlorpromazine.

II. Short notes:

(8 x 5 = 40)

1. What are symptoms and treatment for acute organophosphorus poisoning?
2. Factors modifying drug effects
3. Levodopa
4. Classify anticonvulsant drugs with examples
5. Selective β_2 agonists and their advantages
6. What is cough? Explain the drugs used in the treatment of cough
7. MAO inhibitors
8. Bioassay of oxytocin

III. Short answers:

(10 x 2 = 20)

1. Advantage for combining adrenaline along with local anesthetics.
2. Name two drugs used in glaucoma.
3. Therapeutic uses of Lithium and precautions to be taken while using Li.
4. Give examples of Cox-2 inhibitors.
5. Propranolol is contra indicated in Bronchial asthma – explain.
6. Give examples of centrally acting muscles relaxants.
7. Define drug dependence and give examples of drugs showing drug dependence.
8. Two uses of minoxidil.
9. Define pre-anaesthetic medication. Give two examples.
10. Give two examples of anti hyperlipidemic.

B.PHARM. DEGREE EXAMINATION

THIRD YEAR

PAPER IV – PHARMACOLOGY - I

Q.P. Code: 564264

Time : Three Hours

Maximum : 100 marks

Answer All Questions

I. Essay:

(2 x 20 = 40)

1. Classify Diuretics. Write the pharmacological actions, therapeutic uses and adverse effect of chlorthiazides. Add a note on hypertension therapy.
2. Define biotransformation. Explain in detail different phases of biotransformation reactions.

II. Short notes :

(8 x 5 = 40)

1. Write the pharmacological actions of atropine in eye and smooth muscles.
2. Write the pharmacological action of alpha and beta adrenergic blockers on heart and blood pressure.
3. Write briefly on chlorpromazine.
4. Discuss the mechanism of action and therapeutic uses of lignocaine.
5. Briefly discuss the pharmacological action of chlorpromazine in CNS.
6. Give the therapeutic uses of narcotic analgesics.
7. Classify sedatives with example. State the mechanism of action of diazepam.
8. Give one example and one therapeutic use for the following group of drugs.
 - a. Cardioselective β blocker
 - b. SSRI
 - c. Potassium channel blocker
 - d. COX 2 inhibitor
 - e. Aldosterone antagonist.

III. Short answers:

(10 x 2 = 20)

1. Give two therapeutic uses of adrenaline.
2. Give two examples of drugs used in the treatment of arrhythmias.
3. Explain the mechanism of action of atorvastatin.
4. Name two inhalational general anaesthetics.
5. Give one example each for antipyretics and non narcotic analgesic.
6. Give the side effects of haloperidol.
7. What is amitryptiline?
8. Define bioassay.
9. Write the mechanism of actions of carbamazepine.
10. What is partial agonist? Give example.

(LI 4264)

FEBRUARY 2016

Sub. Code: 4264

**THIRD YEAR B.PHARM. EXAMINATION
PAPER IV – PHARMACOLOGY - I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Essay :

(2 x 20 = 40)

1. What are Anticonvulsants? Classify them with suitable example. State the pharmacological activity, mechanism of actions, therapeutic uses and side effects of Diazepam.
2. Classify Anti-inflammatory drugs. Discuss the mechanism of action, pharmacological actions, side effects and uses of Aspirin.

II. Short notes on :

(8 x 5 = 40)

1. Write the mechanism of action and Therapeutic uses of Loop Diuretics.
2. Classify Anti Asthmatic drugs. Write the mechanism of action of Terbutaline.
3. Give the diagrammatic representation of Adrenergic Neurohumoral Transmission.
4. Write the Therapeutic uses of Beta Blockers.
5. Write a note on Calcium Channel Blockers.
6. Pharmacological actions and uses of Succinyl Choline.
7. Write a note on SSRIs.
8. Explain the effects of pH and diseases state in drug absorption.

III. Short answers on :

(10 x 2 = 20)

1. Give two examples of Ion channels.
2. Write two limitation of Bioassay.
3. What is first pass Metabolism?
4. State two important properties of a Receptor.
5. Give two examples of drugs of abuse.
6. Give two symptoms of Morphine poisoning.
7. What are the Analeptics? Give examples.
8. Name the antidotes for Methanol poisoning.
9. What are Neurotransmitters? Give example.
10. Drug Synergism.

(LJ 4264)

AUGUST 2016

Sub. Code: 4264

**B.PHARM. EXAMINATION
THIRD YEAR
PAPER IV – PHARMACOLOGY - I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Elaborate on :

(2 x 20 = 40)

1. Define and classify Antipsychotics agents. Explain the mechanism of action, pharmacological actions, side effects and therapeutic uses of Chlorpromazine.
2. Classify drugs used in Congestive Cardiac failure. Write in detail about mechanism of action, side effects and uses of Digoxin.

II. Write notes on :

(8 x 5 = 40)

1. Write briefly on the factors modifying drug effects.
2. Classify neuromuscular blocking agents with examples.
3. Diuretics in treatment of Hypertension.
4. Narcotic drug dependence and its treatment.
5. Write briefly on the bioassay of Oxytocin.
6. Pharmacological actions and side effects of Atropine.
7. Symptoms and treatment of Salicylate poisoning.
8. Write briefly about Lithium Carbonate.

III. Short answers on :

(10 x 2 = 20)

1. What is the rationality of combining Adrenaline with local anaesthetics.
2. What is prodrug? Give two examples.
3. Give four examples of HMG-CoA reductase inhibitors.
4. Define Potency and Efficacy of a drug.
5. Name two side effects of Phenytoin.
6. Mention two ganglion blockers and their uses.
7. What are osmotic diuretics? Give two examples.
8. Define Teratogenicity. Give two examples.
9. Name two common side effects of ACE Inhibitors.
10. Name two therapeutic uses of bromocriptine.

(LK 4264)

FEBRUARY 2017

Sub. Code: 4264

**B.PHARM. EXAMINATION
THIRD YEAR
PAPER IV – PHARMACOLOGY - I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify Hypnotics. Elaborate on the mode of action, pharmacokinetics, adverse effects and therapeutic uses of Diazepam.
2. a) What is biotransformation? Explain the various phases of biotransformation reactions with suitable examples.
b) What are cytochrome enzymes? Write a note on enzyme inducers and inhibitors?

II. Write notes on:

(8 x 5 = 40)

1. Write briefly on drug tolerance.
2. Explain why Carbidopa is combined with Levodopa in the treatment of Parkinsonism.
3. Drug interactions.
4. Define Cardiac arrhythmia. Write briefly on the use of calcium channel blockers in treatment of arrhythmia.
5. Write briefly on Lignocaine.
6. Write briefly on the bioassay of Insulin.
7. Write on the transduction mechanism in G-Protein coupled receptors.
8. Write briefly on the drugs used in the treatment of Gout.

III. Short answers on :

(10 x 2 = 20)

1. Name four drugs used in the treatment of congestive heart failure.
2. Give two examples for competitive antagonism.
3. Give examples of two Anti-tussives and two expectorants.
4. What is a dissociative anaesthesia? Give an example of drug producing it.
5. Name four antianginal drugs.
6. Give two examples of class IA anti-arrhythmic drugs.
7. Name two centrally acting muscle relaxants.
8. Give two examples of selective serotonin reuptake inhibitors.
9. Name two neurotransmitters each of the ANS and CNS.
10. Enlist four anti-parkinsonian agents.

(LL 4264)

AUGUST 2017

Sub. Code: 4264

**B.PHARM. DEGREE EXAMINATION
THIRD YEAR
PAPER IV – PHARMACOLOGY – I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. a) Explain different types of Epilepsy and write the classification of antiepileptic drugs.
b) Explain the mechanism of action, pharmacological actions, therapeutic uses and adverse effects of Phenytoin.
2. Define the term Diuretics. Classify them with example. Enumerate any one class with their pharmacological action uses and adverse effects.

II. Write notes on: **(8 x 5 = 40)**

1. Define bioassay. Write note on different types of bioassay.
2. Preanaesthetic medication.
3. What are the symptoms and treatment for acute organophosphorus poisoning?
4. Mast cell stabilizers.
5. Classify anti hyperlipidemic drugs. Write the mechanism of HMG – CoA reductase inhibitors.
6. Mood stabilizers.
7. Write the mechanism of action of loop diuretics add a note on their adverse effects and uses.
8. Write a note on treatment of shock.

III. Short answers on : **(10 x 2 = 20)**

1. What is prodrug? Give two examples.
2. Advantage for combining adrenaline along with local anaesthetic.
3. Name any two COX-II inhibitors.
4. Give two examples of atypical antidepressants.
5. Name two mucolytic.
6. Name two ganglion blockers with their therapeutic uses.
7. Name any two dopaminergic agonist.
8. What are the side effects of thiazide?
9. Brief the therapeutic uses of nitrates.
10. Define gout and give two examples.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LM 4264)

FEBRUARY 2018

Sub. Code: 4264

**B.PHARM. DEGREE EXAMINATION
THIRD YEAR
PAPER IV – PHARMACOLOGY – I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. a) Classify anti-cholinergic drugs with examples for each group.
b) Describe pharmacological actions, therapeutic uses and adverse effects of atropine.
2. a) Classify anti-hypertensive drugs with examples for each group.
b) Explain the mechanism of action, pharmacological actions, therapeutic uses and adverse effects of calcium channel blocker.

II. Write notes on: **(8 x 5 = 40)**

1. Write the pharmacological activity of cardiac glycosides.
2. Anti-inflammatory drugs.
3. Write briefly the mechanism of action of chlorpromazine.
4. Explain the mechanism of action and therapeutic uses of digoxin.
5. Define Anti-tussives. Explain the drugs used for anti-tussives.
6. Write in brief about spironolactone as a diuretic.
7. Define parkinsonism and classify the drugs used for it.
8. Write a note on parenteral route of drug administration.

III. Short answers on : **(10 x 2 = 20)**

1. Define teratogenicity and give two examples.
2. Name of the four neurotransmitters in the CNS.
3. Name two drugs used in glaucoma.
4. Give two examples of anti-hyperlipdemic drugs.
5. Propranolol is contraindicated in bronchial Asthma – explain.
6. Define diuretics and give two examples for osmotic diuretic.
7. Name two hallucinogens.
8. Define Hypnotic and Sedative.
9. Two examples for narcotic analgesic and its antagonists.
10. Name two drugs used in angina pectoris.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LN 4264)

AUGUST 2018

Sub. Code: 4264

**B.PHARM. DEGREE EXAMINATION
THIRD YEAR
PAPER IV – PHARMACOLOGY – I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: (2 x 20 = 40)

1. a) What is Biotransformation? Elaborate the various phases of biotransformation reaction with suitable examples.
b) Define Bioassay. Explain the Bioassay of d-tubocurarine.
2. Classify NSAIDs. Discuss the mechanism of action, pharmacological action, side effects and uses of Aspirin.

II. Write notes on: (8 x 5 = 40)

1. What are the factors modifying drug action?
2. Write a note on potassium channel openers.
3. Write the actions of Angiotensin-II receptor blockers (ARBs) in hypertension.
4. Write a note on Ganglionic blocking agents.
5. Principles of treatment of digitalis poisoning.
6. Write the stages of general anaesthesia.
7. Write a note on centrally acting skeletal muscle relaxants.
8. Mechanism of action of diazepam and its uses.

III. Short answers on : (10 x 2 = 20)

1. What is montelukast?
2. What are Atypical antipsychotics?
3. Define tachyphylaxis.
4. Name two drugs used in congestive cardiac failure.
5. What is status asthmaticus, site the drug of choice?
6. Give two examples for competitive antagonism.
7. Give two examples for class I-A anti-arrhythmic drugs.
8. What are osmotic diuretics? Give two examples.
9. Name two therapeutic uses of bromocriptine.
10. What is amitriptyline?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LO 4264)

FEBRUARY 2019

Sub. Code: 4264

**B.PHARM. DEGREE EXAMINATION
THIRD YEAR
PAPER IV – PHARMACOLOGY – I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: (2 x 20 = 40)

1. a) Classify Anti-depressant drugs with examples for each group.
b) Explain the mechanism of action, pharmacological action, therapeutic uses and adverse reaction of Imipramine.
2. a) Classify Anti arrhythmic drugs with examples.
b) Explain the mechanism of action, pharmacological action, therapeutic uses and adverse reaction of Quinidine.

II. Write notes on: (8 x 5 = 40)

1. Source of drugs.
2. Bioassay of d-tubocurarine.
3. Classify Local anaesthetic agents with examples.
4. Neurohumoral transmission of ANS.
5. Write the treatment of Barbiturate poisoning.
6. Angiotensin receptor blockers.
7. Selective β -2 adrenergic receptor agonists.
8. Define Diuretics. Explain the osmotic diuretics.

III. Short answers on : (10 x 2 = 20)

1. Define chemotherapy.
2. Drug Tolerance.
3. Define Receptor and write the types of receptor.
4. Define general anaesthetics, give eg.
5. Write the drugs used in the treatment of gout.
6. Name two drugs used for therapy of shock.
7. Name any two calcium channel blockers and its uses.
8. Name any two neuromuscular blocking agents and its clinical uses.
9. Central cough suppressants.
10. What are endogenous peptides?

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LP 4264)

AUGUST 2019

Sub. Code: 4264

**B.PHARM. DEGREE EXAMINATION
THIRD YEAR
PAPER IV – PHARMACOLOGY – I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. Define and classify Sedative and Hypnotics. Explain in detail the mechanism of action, pharmacological action, side effects and uses of Barbiturates.
2. a) What are neuromuscular blockers? Classify them with suitable examples, compare and contrast between depolarizing and non-depolarizing blocking drugs.
b) Explain the signal transduction mechanism by G-protein coupled receptors.

II. Write notes on: **(8 x 5 = 40)**

1. Antianxiety drugs.
2. Write a note on Pharmacogenetics.
3. Write the mechanism of action of Lignocaine.
4. Write a note on Anti-diuretic drugs.
5. Principles of treatment of Barbiturate poisoning.
6. Write about Bronchodilators in detail.
7. Classify anti-anginal drugs. Add a note about their MOA of nitrates.
8. Write a note on MAO Inhibitors.

III. Short answers on : **(10 x 2 = 20)**

1. Write the use and mechanism of Lithium.
2. Give two therapeutic uses of adrenaline.
3. Name the antidotes for methanol poisoning.
4. What is partial agonist? Give example.
5. Name two inhalational general anaesthetics.
6. What are SSRIS give example and their uses?
7. Give two examples for class I-B anti-arrhythmic drugs.
8. What are respiratory stimulants? Give two examples.
9. Define hypovolemic shock.
10. Name two Carbonic anhydrase inhibitor.

THE TAMIL NADU Dr.M.G.R. MEDICAL UNIVERSITY

(LQ 4264)

FEBRUARY 2020

Sub. Code: 4264

**B.PHARM. DEGREE EXAMINATION
THIRD YEAR
PAPER IV – PHARMACOLOGY – I**

Q.P. Code: 564264

Time: Three hours

Maximum: 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. Explain various routes of administration with their advantages and disadvantages. Add a note on novel drug delivery system.
2. a) Classify the Drugs.
b) Explain the mechanism of action, pharmacological action, therapeutic uses and adverse reaction of Acetylcholine.

II. Write notes on: **(8 x 5 = 40)**

1. Define angina pectoris and classify the antianginal drugs.
2. Selective serotonin reuptake inhibitors.
3. Factors affect the drug absorption.
4. Bioassay of Digitalis.
5. Write the Pharmacological action and uses of Aspirin.
6. Classify Antitussives and expectorants with suitable examples.
7. Classify Diuretics. Mention the adverse effects of loop diuretics.
8. Write brief note about Selective β_2 agonists and its uses.

III. Short answers on : **(10 x 2 = 20)**

1. Define Pharmacoeconomics.
2. Define Bioavailability.
3. Name any two sympathomimetic drugs.
4. Give two examples of centrally acting skeletal muscle relaxants.
5. Write the treatment of acute alcoholism.
6. Write the different stages of General anaesthetics.
7. Define Cardiac arrhythmias. Give two examples of antiarrhythmic drugs.
8. Write any two drugs used angiotensin converting enzyme inhibitors and uses.
9. Define Bio-transformation.
10. Define Bronchospasm.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LR 1220]

DECEMBER 2020

Sub. Code: 4264

(AUGUST 2020 EXAM SESSION)

B. PHARMACY DEGREE EXAMINATION

THIRD YEAR – (Regulation from 2009-2010)

PAPER IV – PHARMACOLOGY - I

Q.P. Code: 564264

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Explain different types of Epilepsy & write the classification of Antiepileptic drugs.
b) Write the mechanism of actions, adverse effects & therapeutic uses of Phenytoin.
2. Classify Antihypertensive drugs with examples. Explain the Pharmacological action of Potassium channel activators & ACE Inhibitors.

II. Write notes on:

(8 x 5 = 40)

1. What are the symptoms & treatment of acute Organophosphorus poisoning?
2. Name the Factors modifying drug action.
3. Mood stabilizers.
4. What are the principles of Bio assay? Describe the bioassay of Vasopressin.
5. Mast cell stabilizers.
6. Explain the various stages of anaesthesia.
7. Write in brief about Osmotic diuretics.
8. Classify Anti hyperlipidemic drugs. Write the mechanism of action of HMG-CoA reductase inhibitors.

III. Short answers on:

(10 x 2 = 20)

1. What is Pro drug? Give two examples.
2. Define Gout and name two Anti Gout drugs.
3. Give the Antidote for Methanolpoison.
4. How does the local Anaesthetic act?
5. What are Carbonic anhydrase inhibitors?
6. Name any two Cholinomimetic alkaloids.
7. Define Teratogenicity with examples.
8. Name two drugs used in Angina pectoris.
9. Name two Expectorant.
10. Name two Antianxiety drugs.

**B. PHARMACY DEGREE EXAMINATION
THIRD YEAR – (NON-SEMESTER)
PAPER IV – PHARMACOLOGY - I
*Q.P. Code: 564264***

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What is bio transformation? What are the Cytochrome enzymes? Explain the various phases of bio transformation reactions with suitable examples.
2. a) Define Parasympatholytics & classify it with examples for each group.
b) Describe the pharmacological actions, adverse effects and therapeutic uses of Atropine.

II. Write notes on:

(8 x 5 = 40)

1. Write a note on treatment of shock.
2. Enumerate Antitussives drugs.
3. Give reasons for the usage of Preanaesthetic medications before surgery.
4. Write note on different types of Bio assay.
5. Explain the mechanism of action & therapeutic uses of Digoxine.
6. Write the Mechanism of action and therapeutic uses of Selective serotonin reuptake inhibitors.
7. Write the Mechanism of action of Spiranalactone and Give its adverse effects.
8. Classify Neuromuscular blocking agents with examples.

III. Short answers on:

(10 x 2 = 20)

1. What is the rationality of combining Adrenaline with Local anaesthetics.
2. Name two therapeutic uses of Bromocriptine.
3. Name two side effects of Phenytoin.
4. Define physiological Antagonism & give two examples.
5. Name two Neurotransmitters each of the ANS & CNS.
6. Propranolol is contraindicated in Bronchial asthma-Explain.
7. What is Vasopressin? Give its use.
8. Give two examples for HMG-CoA reductase inhibitors.
9. Write the mechanism of action of Disulfiram.
10. Name any two Class II Antianginal drugs.

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
THIRD YEAR (Regulation 2009-2010)
PAPER IV – PHARMACOLOGY - I
Q.P. Code: 564264

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify the drugs used in the treatment of Congestive Cardiac Failure. Explain the mechanism of action and pharmacological actions of Digoxin. Mention its adverse effects.
2. Classify the various routes of drug administration and explain in detail about the Parenteral route of administration. Write a note on new drug delivery system.

II. Write notes on:

(8 x 5 = 40)

1. Explain drug transport across the cell membrane.
2. Mood stabilizers & its pharmacological action.
3. Give the Pharmacogenetics and Pharmacogenomics applications in therapy.
4. Explain the Factors affecting drug absorption.
5. What are Selective serotonin reuptake inhibitors? Give example. State its uses & adverse effect.
6. Write a note on loop Diuretic drugs.
7. Explain Cyclooxygenase-2 inhibitors.
8. Give the Symptoms and treatment of organophosphates poisoning.

III. Short answers on:

(10 x 2 = 20)

1. Why Phenytoin should not be given to pregnant women?
2. Define Pharmacovigilance.
3. How to treat Acute Alcoholism?
4. Name the adrenergic receptor present in bronchial smooth muscle and what is the action of salbutamol on this receptor?
5. Name the direct Renin inhibitors.
6. What is Flumazenil?
7. Uses of α - blockers.
8. Side effects of Aspirin.
9. Types of Nicotinic receptors with an example of Agonist and Antagonist of each receptor.
10. Therapeutic uses of Nitrates.

**B. PHARMACY DEGREE EXAMINATION
THIRD YEAR – (NON-SEMESTER)
PAPER IV – PHARMACOLOGY - I
Q.P. Code: 564264**

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify Anti Psychotics. Explain the mechanism of action, Pharmacological action, side effects and therapeutic uses of Chlorpromazine.
2. Define the term Diuretics. Classify them with suitable example.

II. Write notes on:

(8 x 5 = 40)

1. Explain drug – drug interactions.
2. Mood stabilizers & its pharmacological action.
3. Give the Pharmacogenetics and Pharmacogenomics applications in therapy.
4. Explain the Factors affecting drug absorption.
5. Explain treatment of shock.
6. Drugs used in Alzheimer's disease.
7. Explain Cyclooxygenase-2 inhibitors.
8. Give the Symptoms and treatment of organophosphates poisoning.

III. Short answers on:

(10 x 2 = 20)

1. What is first pass metabolism?
2. Define Pharmacovigilance.
3. How to treat Acute Alcoholism?
4. What are Vasodilators?
5. Name the direct Renin inhibitors.
6. What is Flumazenil?
7. Uses of α - blockers.
8. Side effects of Aspirin.
9. Write the Contraindications of propranolol.
10. Therapeutic uses of Nitrates.

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
THIRD YEAR (Regulation 2009-2010)
PAPER IV – PHARMACOLOGY - I
Q.P. Code: 564264

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Define Hypertension. What are the different types of hypertension?
b) Classify Anti-hypertensive drugs with examples.
c) Write the Mechanism of action, adverse effects and Uses of Amlodipine.
2. a) Define Parasympathomimetics. Classify parasympathomimetic drugs.
b) Discuss the Pharmacological action, Mechanism of action, Therapeutic uses and Adverse effects of Physostigmine.

II. Write notes on:

(8 x 5 = 40)

1. Classify Anti-anxiety drugs. Write the Mechanism of action and Uses of Barbiturates.
2. CNS Stimulants.
3. Define Shock. Write the drugs used in therapy of shock.
4. Classify Diuretics. Discuss the Mechanism of action and Uses of Potassium Sparing diuretics.
5. Bioassay of Oxytocin.
6. Classify Anti-asthmatic drugs. Explain the Mechanism of action, Therapeutic uses and Adverse effects of Salbutamol.
7. General Anaesthetics.
8. Explain Phase-I and Phase-II Metabolic reactions.

III. Short answers on:

(10 x 2 = 20)

1. What are the Neurotransmitters in CNS?
2. Therapeutic uses and Adverse effects of Anti-psychotic drugs.
3. What is Receptor and write their types?
4. Drugs used for Anti-hyperlipidemic.
5. Drugs used for Narcotic Antagonist.
6. Define Bioassay and their types.
7. Define Expectorant and write their drugs.
8. Disulfuram reaction.
9. Enlist the Anti-gout drugs.
- 10 Name any two COX-II inhibitors.

**B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
THIRD YEAR (Regulation 2009-2010)
PAPER IV – PHARMACOLOGY – I**

Q.P. Code: 564264

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify Anti-inflammatory drugs. Discuss the mechanism of action, pharmacological actions, side effects and uses of Aspirin.
2. Define angina pectoris and classify the anti angina drugs. Write the pharmacological action side effects and therapeutic uses of Nitrates.

II. Write notes on:

(8 x 5 = 40)

1. Write briefly on the bio assay of Oxytocin.
2. Pharmacological actions and therapeutic uses of succinylcholine.
3. Write the mechanism of action and uses of Lithium carbonate.
4. Write briefly on drug tolerance.
5. Write the therapeutic uses of Beta blockers.
6. Classify Antitussives and expectorants. With suitable examples.
7. Define diuretics. Give the pharmacological actions of Furosemide.
8. Classify benzodiazepines. Write the mechanism of action and uses.

III. Short answers on:

(10 x 2 = 20)

1. Advantages of carbidopa with levodopa combinations.
2. Define sublingual route and give its advantages.
3. Name two drugs used in glaucoma.
4. Name two anticholinergic drugs used in Parkinsonism.
5. Give two examples of CNS stimulants.
6. What are the side effects of thiazides?
7. Name two calcium channel blocker.
8. Name two inhalational corticosteroids.
9. Name two narcotic antagonists.
10. Define Pharmacogenetics.

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
THIRD YEAR (Regulation 2009-2010)
PAPER IV – PHARMACOLOGY – I

Q.P. Code: 564264

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Define hypertension. Classify anti hypertensive drugs with example.
b) Explain in detail about angiotensin converting enzyme Inhibitors.
2. a) Describe briefly the adrenergic Neuro transmission.
b) Explain the types of adrenergic receptors.
c) Explain the pharmacological actions of adrenaline.

II. Write notes on:

(8 x 5 = 40)

1. Write a note on Mast Cell Stabilizers and its Therapeutic uses.
2. Write a note on Hypolipidaemic drugs.
3. Write a note on Drug abuse.
4. Classify Anti-tussives and give its uses.
5. Advantage and Disadvantage of oral route of drug administration.
6. Write the Class 1B anti arrhythmic drugs, their mechanism of action and uses.
7. Explain G Protein coupled receptors.
8. Write a note on General anaesthetics.

III. Short answers on:

(10 x 2 = 20)

1. What are Monoamineoxidase inhibitors? Give examples.
2. State the uses of CNS Stimulants.
3. What are Phosphodiesterase – 3 inhibitors?
4. Aldosterone antagonist.
5. Disulfiram and its action.
6. Mechanism of action of sodium valproate.
7. Uses of anticholinesterase agents.
8. What is Hypovolemic shock?
9. Classify antidepressants.
10. Give the Therapeutic uses of Mucolytics.

B. PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
THIRD YEAR (Regulation 2009-2010)
PAPER IV – PHARMACOLOGY – I

Q.P. Code: 564264

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) What is Biotransformation? Explain the various phases of biotransformation with suitable examples.
b) What are Cytochrome enzymes? Write a note on Enzyme Induction and Enzyme Inhibition.
2. a) Define Epilepsy and explain different types of epilepsy.
b) Write the classification and Mechanism of action of Anti-epileptic drugs.
c) Explain the Pharmacological actions, Therapeutic actions and adverse effects of Sodium Valproate.

II. Write notes on:

(8 x 5 = 40)

1. Classify Anti-depressant drugs and write the mechanism of Amitryptiline.
2. Alcohols and Disulfiram.
3. Neuromuscular blocking agents.
4. Bioassay of d- Tubocurarine.
5. Write Pharmacological actions and Therapeutic uses of Chlorpromazine.
6. Write the Mechanism of action and Therapeutic uses of Lignocaine.
7. Write Pharmacological actions and Therapeutic uses of Osmotic diuretics.
8. Classify Neuromuscular blocking agents and explain the mechanism of action for any one class.

III. Short answers on:

(10 x 2 = 20)

1. Two common side effects of calcium channel blockers.
2. Mention two Ganglionic blockers and their uses.
3. Define metabolism.
4. Narcotic analgesics.
5. Name two Mucolytics and mention their uses.
6. Define Gout and give two examples.
7. Drugs used for Respiratory Stimulants.
8. Mechanism of action for Disulfiram.
9. Adverse effects of Cardiac glycosides.
10. Define Anti-maniacs and Hallucinogens.
