

MAY 2011

[KY 350]

Sub. Code: 2911

M.PHARM. DEGREE EXAMINATION

(Regulations 2010)

(Candidates admitted from 2010-2011 onwards)

FIRST YEAR

Branch IV – PHARMACOLOGY

Paper II – PHARMACOLOGY AND TOXICOLOGY

Q.P. Code : 262911

Time : Three hours

Maximum : 100 marks

Answer All questions

I. Essay Questions :

(6 x 10 = 60)

1. Explain the pharmacological importance of “plasma protein binding”.
2. Enumerate the various principles of drug action.
3. Explain the role of excitatory neurotransmitters and inhibitory neurotransmitters in the synaptic transmission.
4. Enumerate the various inflammatory mediators.
5. Explain the mechanism and mode of action of digitalis in congestive heart failure.
6. Outline the four classes of hypersensitive reactions.

II. Write Short Notes :

(8 x 5 = 40)

1. Write the mode of action of diuretics in hypertension.
2. Write the mode of action of beta blockers in angina.
3. Write the mode of action of phenylpropanolamine in common cold.
4. Enumerate the role of prostaglandins in gastrointestinal tract.
5. Write the mode of action of steroidal drugs in asthma.
6. Explain briefly the two uses of prokinetics.
7. Explain briefly the two uses of antihistamines.
8. Explain briefly about the development of bacterial resistance to antimicrobials.

October 2011

[KZ 350]

Sub. Code: 2911

M.PHARM. DEGREE EXAMINATION

FIRST YEAR

BRANCH IV – PHARMACOLOGY

PAPER II – PHARMACOLOGY AND TOXICOLOGY

Q.P. Code : 262911

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. a) Discuss the absorption of drugs. What are the factors affecting drugs absorption?	17	40	20
b) Explain the influence of pH and partition co-efficient on drug absorption.			
c) Explain briefly how drugs are absorbed from various routes.			
2. a) What are catecholamines? Classify sympathomimetic drugs			
b) Discuss the pharmacology of Amphetamine.	17	40	20
c) Write a note on Dale's vasomotor reversal.			

II. Write notes on :

1. Explain the synthetic reactions of biotransformation.	4	10	6
2. Describe briefly peripherally acting skeletal muscle relaxant.	4	10	6
3. Define Glaucoma, and drugs used for Glaucoma.	4	10	6
4. Explain drugs interaction with the help of examples.	4	10	6
5. Note on Hypolipidemic drugs.	4	10	6
6. Explain the treatment of Thrombolytic.	4	10	6
7. Explain Alcohol and treatment of alcohol poisoning.	4	10	6
8. What are the different phases of clinical trials? Describe the all phase.	4	10	6
9. Mechanism of action and uses of ACE inhibitors.	4	10	6
10. Discuss detail about treatment of Migraine.	4	10	6

[LA 350]

MAY 2012

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY
Q.P. Code: 262911**

**Time: 3 hours
(180 Min)**

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on:

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. a) Discuss the drugs for Neurodegenerative diseases			
b) Classify Anti-parkinsonism drugs. Explain pharmacology of Levodopa			
c) Write a note on decarboxylase inhibitors synergism.	17	40	20
2. a) Classify Anti-hypertensive drugs. Discuss the systemic pharmacology of Angiotension II receptor blockers			
b) Describe the calcium channel blockers			
c) Write a note on treatment of Hypertension.	17	40	20

II. Write notes on:

1. Factors affecting drugs metabolism.	4	10	6
2. Explain how Aspirin acts as a anti platelet agent.	4	10	6
3. Explain about MAO inhibitors with examples.	4	10	6
4. Describe the Bioavailability and Bioequivalence of drugs.	4	10	6
5. Write a note on Prokinetic agent.	4	10	6
6. Classify oral hypoglycemic agents with examples.	4	10	6
7. Explain about Eicosanoides.	4	10	6
8. Mast cell stabilizers.	4	10	6
9. Describe detailly about Drug dependence and addiction.	4	10	6
10. Describe the structural and functional aspects of receptors.	4	10	6

[LB 350]

NOVEMBER 2012
M.PHARM. DEGREE EXAMS
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY
Q.P. Code : 262911

Sub. Code: 2911

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

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

- | | | | |
|---|----|----|----|
| 1. Define antibiotics. Explain the general mechanisms of action of various antibiotics. Explain the various ways by which the organisms develop antibiotic resistance. | 17 | 40 | 20 |
| 2. Define congestive heart failure. Classify drugs used to treat congestive heart failure. Explain the mechanism of action, pharmacological effects, therapeutic indications and toxicity of digitalis. | 17 | 40 | 20 |

II. Write Notes on :

- | | | | |
|--|---|----|---|
| 1. Factors affecting biotransformation of drugs. | 4 | 10 | 6 |
| 2. Pharmacogenetics. | 4 | 10 | 6 |
| 3. Synthesis and degradation of catecholamines. | 4 | 10 | 6 |
| 4. Pharmacological actions of morphine. | 4 | 10 | 6 |
| 5. Metronidazole. | 4 | 10 | 6 |
| 6. Calcium channel blockers. | 4 | 10 | 6 |
| 7. Phenytoin. | 4 | 10 | 6 |
| 8. Tachyphylaxis. | 4 | 10 | 6 |
| 9. General methods of treating poison. | 4 | 10 | 6 |
| 10. Generation of free radicals. | 4 | 10 | 6 |

[LC 350]

APRIL 2013
M.PHARM. DEGREE EXAMS
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY
Q.P. Code : 262911

Sub. Code: 2911

Time : 3 hours

Maximum : 100 marks

I. Elaborate on :

(2x20=40)

1. a) Classify NSAID'S with examples. Discuss the Mechanism of action and Therapeutic uses of NSAID'S.
b) Enumerate the various inflammatory mediators.

2. a) Define cancer chemotherapy and classify chemotherapeutic agents.
b) Describe briefly about Anti metabolites of drugs.
c) Write a note on Radioactive isotopes.

II. Write notes on :

(10x6=60)

1. Concept of hepatic and renal clearance.
2. Explain the plasma proteins binding of drugs.
3. Discuss about Immunosuppressant drugs.
4. Classify and mention the pharmacology of Benzodiazepines with one example.
5. Drugs for Anti-emetics.
6. Write a note on Histamine and explain about H1 antagonists.
7. Describe detailly mechanisms of Anti-bodies and give related examples of each mechanism.
8. Explain the Tachyphylaxis and give the examples of the drugs.
9. Describe the regulatory bodies in clinical pharmacology.
10. Write about Therapeutic drugs monitoring of Digoxin.

[LD 350]

OCTOBER 2013

Sub. Code: 2911

M.PHARM. DEGREE EXAMINATIONS

FIRST YEAR

BRANCH IV – PHARMACOLOGY

PAPER II – PHARMACOLOGY AND TOXICOLOGY

Q.P. Code : 262911

Time: Three Hours

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

(2 x 20 = 40)

1. Explain the general principles of neurotransmission. Describe the steps involved in cholinergic neurotransmission and discuss about the various drugs affecting the same.
2. a) Describe the insulin receptor and discuss the mechanism of action of insulin.
b) Classify oral hypoglycaemic agents. Explain the pharmacology of insulin secretagogues.

II. Write notes on :

(10 x 6 = 60)

1. Cytochrome P 450 enzyme system.
2. Drug-drug interactions.
3. Clonidine.
4. Opioid peptides.
5. Anti-emetic drugs.
6. Mechanism and therapeutic uses of benzodiazepines.
7. Oral anticoagulants.
8. Class II antiarrhythmic agents.
9. Mechanisms involved in tachyphylaxis.
10. Clinical trial designs.

[LE 350]

APRIL 2014

Sub. Code: 2911

**M.PHARM. DEGREE EXAMS
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code : 262911

Time : 3 hours

Maximum : 100 marks

I. Elaborate on :

(2x20=40)

1. a) Define the term biotransformation and explain phase II metabolic reactions.
b) Discuss the mechanism of metabolism induction and inhibition citing examples
2. Classify antibiotics based on their site of action with examples. Describe the mechanism of action, spectrum of activity and therapeutic use of cefuroxime. What is the use of clavulanic acids?

II. Write notes on :

(10x6=60)

1. Explain the influence of pH and partition coefficient on drug absorption.
2. Write the physiological role and consequences of deficiency of Superoxide Desmutase.
3. Classify skeletal muscle relaxants. Describe the mechanism of action of gallamine.
4. Classify drugs used in the treatment of bronchial asthma with example.
5. Explain about MAO inhibitors with example.
6. Write notes on mast cell stabilizers.
7. Describe angina pectoris and write short notes on vasodilators.
8. Describe about the action of HMG-Co A reductase inhibitors.
9. Describe the management of heavy metal poisoning.
10. Write notes on treatment of migraine.

[LF 350]

OCTOBER 2014

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code : 262911

Time : Three hours

Maximum : 100 marks

I. Elaborate on:

(2 x 20 = 40)

1. Define bioavailability. Explain the various factors affecting bioavailability. Describe the importance of bioequivalence studies.
2. What is congestive heart failure? Classify the drugs used in congestive heart failure. Explain the mechanism of action, pharmacological actions, toxicity and therapeutic uses of digoxin.

II. Write notes on:

(10 x 6 = 60)

1. Membrane transporters.
2. Hepatic clearance of drugs.
3. Excitatory neurotransmitters in CNS.
4. Mechanism of local anaesthetic agents.
5. Cephalosporins.
6. Angiotensin converting enzyme (ACE) inhibitors.
7. Cyclooxygenase-2 (COX-2) inhibitors.
8. Vasopressin.
9. Free radicals.
10. Components of clinical trial protocol.

[LG 350]

APRIL 2015

Sub. Code: 2911

M.PHARM. DEGREE EXAMINATION

FIRST YEAR

BRANCH IV – PHARMACOLOGY

PAPER II – PHARMACOLOGY AND TOXICOLOGY

Q.P. Code : 262911

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on :

(2 x 20 = 40)

1. a) Define the term biotransformation and explain phase I metabolic reactions.
b) Discuss the mechanism of induction and inhibition of drug metabolism.
2. a) What is catecholamine? Discuss the systemic pharmacology of Epinephrine.
b) Explain the drug treatment of glaucoma.
c) Write a note on cholinesterase inhibitors.

II. Write notes on :

(10 x 6 = 60)

1. Explain the plasma protein binding and its pharmacological importance.
2. What are the general aspects of receptor pharmacology?
3. Explain the role of excitatory neurotransmitter in the synaptic transmission.
4. What is mania? Explain the pharmacology of lithium carbonate.
5. Outline the four classes of hypersensitive reactions.
6. Explain the effect of Haematinics in blood constituents.
7. Explain the insulin importance in Diabetes.
8. Write a note on Cephalosporins.
9. Describe the regulatory bodies in clinical pharmacology.
10. Explain about Eicosanoides.

[LH 350]

OCTOBER 2015

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time : Three hours

Maximum : 100 marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify antibiotics based on their site of action with examples. Describe the mechanism of action, spectrum of activity and therapeutic use of β – lactam antibiotics. What is the importance of β – lactamase inhibitor?
2. Define arrhythmias and mechanism of cardiac arrhythmia. Classify drugs used to treat arrhythmia. Explain the mechanism of action, pharmacological effects, therapeutic indications and toxicity of β blockers in arrhythmia.

II. Write notes on:

(10 x 6 = 60)

1. Explain the influence of pH and partition coefficient on drug absorption.
2. Describe the Bioavailability and Bioequivalence of drugs.
3. Explain the Drug-drug interactions.
4. Role of neurotransmitters in various disorders.
5. Explain the Myasthenia gravis and its treatment.
6. Classify sedative and hypnotics. Explain pharmacology of Benzodiazepines.
7. Write a note on Histamine and explain about H_1 antagonists.
8. Discuss detail about treatment of Migraine.
9. Write about Therapeutic drugs monitoring of Digoxin.
10. Explain the role of Free radicals in pharmacology.

[LI 350]

APRIL 2016

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the principle in the Drug action and explain about the different types of Receptors with examples.
2. Classify Anti Hypertensive drug and explain the role of Renin-Angiotensin-Aldosterone in regulating the blood pressure.

II. Write notes on:

(10 x 6 = 60)

1. Role of CYP450 family enzymes in the drug metabolism.
2. Explain the Mechanism action and adverse drug reaction of anti metabolites and natural alkaloids.
3. Classify α -adrenergic blocking agents and explain the pharmacological action of the same.
4. Explain Pharmacology of selective Estrogen Receptor modulating agents.
5. Classify anti ulcer drug and explain the mechanism of proton pump inhibitor.
6. Write the treatment procedure for Organophosphorus poisoning.
7. Explain the Pharmacological action of Calcineurin inhibitors.
8. Write the Pharmacological property of Platelet-activating factors.
9. Explain the mechanism of action, uses and adverse drug reaction of Hydantoins.
10. Types of food-drug interactions.

[LJ 350]

OCTOBER 2016

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify anti-neoplastic agents with examples. Discuss the role of hormones and anti-hormones in cancer chemotherapy. Write about the general toxicity of cytotoxic agents.
2. Write about neurohumoral transmission in central nervous system and discuss about neurotransmitters in CNS with their actions and receptors they act upon.

II. Write notes on:

(10 x 6 = 60)

1. Write on atypical antipsychotic drugs.
2. Free radicals and its etiology in various diseases.
3. Classify anti-retroviral drugs. Write the mechanism of action and adverse effects of zidovudine.
4. Insulin and its preparations.
5. Classify Diuretics. Write the mode of action of diuretics in Hypertension.
6. Write about the stages of anaesthesia and add a note on dissociate anaesthesia.
7. Classify immunosuppressant drugs. Write the mechanism of action and toxicities of cyclosporine.
8. Write a note on directly acting parenteral anticoagulants and its therapeutic uses.
9. Write the general principles in management of poisoning.
10. Write in brief about the phases of clinical trials.

[LK 350]

MAY 2017

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the general principles of neurotransmission. Describe the steps involved in cholinergic neurotransmission and discuss about the various drugs affecting the same.
2. a) Classify β lactam antibiotics.
b) Discuss the mechanism of action, spectrum of activity and side effects of cephalosporins.
c) Write a note on β lactamase inhibitors.

II. Write notes on:

(10 x 6 = 60)

1. Plasma protein binding and its pharmacological importance.
2. Concept of hepatic and renal clearance.
3. Anti-emetic drugs.
4. Treatment of migraine.
5. Calcium channel blockers.
6. Mechanism of action and therapeutic uses of benzodiazepine.
7. Mast cell stabilizers.
8. Oral anti-coagulants.
9. Tachyphylaxis.
10. Oxytocin.

[LL 350]

OCTOBER 2017

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify antibiotics based on their site of action with examples. Describe the mechanism of action, spectrum of activity and therapeutic uses of Macrolide antibiotics.
2. Define Bio-availability. Explain the various factors affecting bio-availability. Describe the importance of bio-availability studies.

II. Write notes on:

(10 x 6 = 60)

1. Cytochrome p-450 enzyme system.
2. General aspects of receptor pharmacology.
3. Histamine and H₁ antagonists.
4. Angiotensin Converting Enzyme (ACE) inhibitors.
5. Management of heavy metal poisoning.
6. Pro-kinetic agents.
7. Eicosanoides.
8. Synthesis and degradation of catecholamines.
9. Opioid peptides and receptors.
10. Pharmacology of lithium carbonate.

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

[LM 350]

MAY 2018

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Discuss the various mechanisms of absorption of Drugs.
b) Explain the various factors affecting Drug absorption.
2. a) Describe the Insulin receptor and discuss the mechanism of action of Insulin.
b) Classify oral hypoglycemic agents. Explain the pharmacology of insulin secretagogues.

II. Write notes on:

(10 x 6 = 60)

1. Membrane transporters.
2. Excitatory neurotransmitters in CNS.
3. Pharmacological actions of Morphine.
4. Myasthenia gravis and its treatment.
5. Cephalosporins.
6. Mechanism of action and therapeutic uses of NSAIDs.
7. Hypersensitive reactions.
8. Physiological role and consequences of deficiency of superoxide dismutase.
9. HMG-CoA reductase inhibitors.
10. MAO inhibitors.

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

[LN 350]

OCTOBER 2018

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify Opioid analgerics. Discuss he mechanism of action, pharmacological actions, side effects and uses of Morphine.
2. Classify anti-arrhythmic drugs. Explain the pharmacology of class 1 anti-arrhythmic agents.

II. Write notes on:

(10 x 6 = 60)

1. Volume of distribution and its significance.
2. Proton pump inhibitors.
3. Free radicals and their role in various diseases.
4. Therapeutic drug monitoring.
5. Oral hypoglycemic drugs.
6. Mechanism of action, pharmacological actions and adverse effects of Phenytoin.
7. Beta lactamase inhibitors.
8. Mechanism of action, pharmacological actions and adverse effects of chlorpromazine.
9. Levodopa.
10. Pharmacological actions and therapeutic uses of H₁ antagonists.

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

[LO 350]

MAY 2019

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. The steps involved in neurohumoral transmission in ANS and drugs affecting them.
2. The various mechanisms of drug absorption and factors affecting absorption of drugs.

II. Write notes on:

(10 x 6 = 60)

1. Hepatic clearance of drugs.
2. Mechanism, pharmacological actions and adverse effects of thiazide diuretics.
3. Combination of levodopa and carbidopa.
4. Heavy metal poisoning and their antagonists.
5. Role of antioxidants in treatment of diseases.
6. Depolarizing and non-depolarizing neuromuscular blocking agents-a comparison.
7. Fluroquinolones.
8. Drugs used in treatment of anxiety.
9. Role of beta blockers in treatment of diseases.
10. Nucleoside reverse transcriptase inhibitors.

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

[LP 350]

OCTOBER 2019

Sub. Code: 2911

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH IV – PHARMACOLOGY
PAPER II – PHARMACOLOGY AND TOXICOLOGY**

Q.P. Code: 262911

Time: Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify Anti-cancer drugs and explain the mechanism, uses and adverse effect of nitrogen mustard and platinum co-ordination compounds.
2. Explain the general principle of the treatment of acute poisoning.

II. Write notes on:

(10 x 6 = 60)

1. Define the following terms:
a) Half life b) Phototoxic c) Drug dependence d) Teratogenicity
e) Therapeutic index
2. Classify muscarinic receptors and explain the role of each.
3. Classify Anti-asthma drug and explain the mechanism of action of Leukotriene antagonist and mast cell stabilizer.
4. Write a note on oral contraceptives.
5. Write the mechanism of action of drug used in angina.
6. Write the difference between non depolarizing agents and depolarizing blockers.
7. Explain the plasma volume expanders and there ideal characters.
8. Classify anti fungal drugs and explain the mechanism and drug interaction of konazol derivatives.
9. Different mechanism of drug absorption.
10. Write the different mechanism of microbial resistance to antibiotic.

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

[LQ 0121]

JANUARY 2021

Sub. Code: 2911

(APRIL 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION

FIRST YEAR

BRANCH IV – PHARMACOLOGY

PAPER II – PHARMACOLOGY AND TOXICOLOGY

Q.P. Code: 262911

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Biotransformation. Discuss the various pathways of biotransformation with suitable examples and factors affecting biotransformation.
2. Classify anti-cholinergic agents with examples. Discuss the pharmacological actions, adverse effects and therapeutic uses of Atropine.

II. Write notes on:

(10 x 6 = 60)

1. Cephalosporins.
2. Calcium-channel blockers.
3. Explain the mechanism of action and therapeutic uses of digoxin.
4. Drug-drug interactions with examples.
5. Classify oral hypoglycaemic agents. Write a note on dipeptidyl-peptidase IV inhibitors.
6. Angiotensin converting enzyme inhibitors.
7. Discuss the concept of renal clearance and its importance.
8. Explain the various stages of anaesthesia and explain the mode of action of general anaesthetics.
9. Classify anti-anginal agents. Write the mechanism of action of nitrates.
10. Current concepts in management of multi-drug resistant Plasmodium falciparum.
