

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

[LL 982]

NOVEMBER 2017

Sub. Code: 2982

**M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-I
PHARMACOLOGY – MPL
PAPER II – ADVANCED PHARMACOLOGY – I**

Q.P. Code : 262982

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the structure and types of GABA receptors. Discuss the pharmacology of Barbiturates and Benzodiazepines.
2. Explain Opioid Peptides and Receptors. Write the pharmacology of Morphine.

II. Write notes on:

(7 x 5 = 35)

1. Classification of drug targets.
2. Drugs used in treatment of congestive heart failure.
3. Pharmacology of Muscarinic receptor antagonists.
4. Fibrinolytic agents.
5. Physiological and pathological role of Histamine.
6. Pharmacokinetic models.
7. Explain the pharmacology of Phenytoin.

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[LM 982]

MAY 2018

Sub. Code: 2982

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-I
PHARMACOLOGY – MPL
PAPER II – ADVANCED PHARMACOLOGY – I

Q.P. Code : 262982

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the steps involved in Neurotransmission.
2. Describe the factors affecting drug absorption.

II. Write notes on:

(7 x 5 = 35)

1. Calcium channel blockers.
2. Significance of protein binding.
3. Co-transmitters.
4. Differentiate Non-depolarizing and Depolarizing neuromuscular blocking drugs.
5. Drugs used to treat anxiety.
6. Anti-platelet drugs.
7. Physiological and pathological role of Prostaglandins.

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

[LN 982]

NOVEMBER 2018

Sub. Code: 2982

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-I
PHARMACOLOGY – MPL
PAPER II – ADVANCED PHARMACOLOGY – I

Q.P. Code : 262982

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain Phase-I and Phase-II biotransformation. Add a note on enzyme induction and enzyme inhibition.
2. Classify diuretics according to site of action. Explain the pharmacology of Thiazide and Loop diuretics.

II. Write notes on:

(7 x 5 = 35)

1. Classify Anti-arrhythmic drugs. Explain the actions of Class 1A drugs.
2. Quantification of drug receptor interaction and its effects.
3. Synthesis, storage, release and fate of Adrenaline.
4. Anti-cholinesterase agents.
5. Pharmacology of Levodopa.
6. Classify lipid lowering drugs. Explain the pharmacology of HMG-COA reductase inhibitors.
7. 5-HT antagonists.

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

[LO 982]

MAY 2019

Sub. Code: 2982

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-I
PHARMACOLOGY – MPL
PAPER II – ADVANCED PHARMACOLOGY – I

Q.P. Code : 262982

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Discuss the absorption of drugs. What are the factors affecting drug absorption.
b) Explain the influence of pH and partition co-efficient on drug absorption.
Explain briefly how drugs are absorbed from various routes.
2. List out various neurotransmitters and receptors involved in signal transduction with special reference to central nervous system.

II. Write notes on:

(7 x 5 = 35)

1. Synthesis and degradation of catecholamine.
2. What is mania? Explain the pharmacology of lithium carbonate.
3. Angiotensin converting enzyme (ACE) inhibitors.
4. Oral anti-coagulants.
5. 5-HT-Antagonists.
6. Anti-arrhythmic drugs.
7. Beta-blockers.

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

[LP 982]

NOVEMBER 2019

Sub. Code: 2982

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-I
BRANCH VI – PHARMACOLOGY – MPL
PAPER II – ADVANCED PHARMACOLOGY – I

Q.P. Code : 262982

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Write in details about elimination of drugs.
b) Write briefly about factors affecting biotransformation of drugs.
2. Define Receptor. Classify receptors and write in details about G protein coupled receptor.

II. Write notes on:

(7 x 5 = 35)

1. Cholinomimetic alkaloid drugs.
2. What is Parkinsonism? Explain the pharmacology of L dopa.
3. Pharmacological actions of Adrenaline.
4. Non-narcotic analgesic drugs.
5. Pharmacological action of α methyl dpoa.
6. Anticoagulants.
7. Pathological role of Histamine.

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

[LQ 0121]

JANUARY 2021

Sub. Code: 2982

(APRIL 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION

SEMESTER-I (PCI New regulations 2016)

PHARMACOLOGY – MPL

PAPER II – ADVANCED PHARMACOLOGY – I

Q.P. Code : 262982

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Define the term Bio-transformation and explain Phase –II metabolic reactions.
b) Discuss the mechanism of metabolism induction and inhibition citing with examples.
2. Explain the role of excitatory and inhibitory neurotransmitters in the synaptic transmission.

II. Write notes on:

(7 x 5 = 35)

1. Treatment of Organo phosphorous compound poisoning.
2. Centrally acting skeletal muscle relaxants.
3. Cox-II Inhibitors.
4. MAO-Inhibitors.
5. Heparin and Low Molecular Weight Heparin.
6. Classify antidepressant drugs and briefly explain about atypical anti-depressant drugs.
7. Physiological and pathological role prostaglandins.

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

[MPHARM 0921]

**SEPTEMBER 2021
(OCTOBER 2020 EXAM SESSION)**

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER-I (PCI New regulations 2016)
PHARMACOLOGY - MPL
PAPER II - ADVANCED PHARMACOLOGY - I
*Q.P. Code : 262982***

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify General Anesthetics. Mention its various clinical applications. Discuss the mechanism, pharmacological actions and adverse reactions of Barbiturates.
2. a) Classify Anti-hyperlipidemics. Discuss the mechanism of action and adverse effects of Clofibrate and Atorvastatin.
b) Write a note on Lipoproteins and its functions.

II. Write notes on:

(7 x 5 = 35)

1. Discuss the importance of Protein Binding in drug distribution.
2. Define Receptor. Discuss the mechanism of Receptor Regulating Gene Transcriptions.
3. Write briefly on types, preceptors and actions of Histamine on the types.
4. Write the MOA of lignocaine.
5. Write the mechanism of action and uses of Clopidogrel.
6. Write the symptoms and management of Mercury Poisoning.
7. Define the term Neuroleptics. Write the mechanism of action and uses of Chlorpromazine.

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

[MPHARM 0122]

**JANUARY 2022
(APRIL 2021 EXAM SESSION)**

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER-I (PCI New regulations 2016)
PHARMACOLOGY - MPL
PAPER II - ADVANCED PHARMACOLOGY - I
*Q.P. Code : 262982***

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Classify Alpha and Beta Adrenergic Antagonist. Discuss the mechanism, adverse reactions, drug interactions and clinical indications of Propranolol.
b) Describe Dale's Vasomotor Reversal with suitable example.
2. Define Absorption. Write elaborately on the methods and factors influencing drug Absorption.

II. Write notes on:

(7 x 5 = 35)

1. Classify peripherally acting Muscle Relaxant and discuss the mechanism of d- tubacurarine.
2. Explain the contraindication and adverse drug reactions of Phenytoin.
3. Discuss the mechanism of action and uses of Benzodiazepines.
4. Classify Diuretics with examples. Mention the uses of Amiodarone.
5. Write the Pharmacology and therapeutic uses of Low Molecular Weight Heparin.
6. Describe the Mechanism of Non-Steroidal Anti-inflammatory Drugs.
7. Classify Anti-hypertensive agents. Write the mechanism and uses of Verapamil.

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

[MPHARM 0422]

**APRIL 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER-I (PCI New regulations 2016)
PHARMACOLOGY - MPL
PAPER II - ADVANCED PHARMACOLOGY - I
*Q.P. Code : 262982***

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define and Classify Narcotic Analgesics. Discuss the mechanism, Pharmacological actions, Side effects, Drug Interactions and uses of Morphine.
2. Define Cardiotonics. Classify the drugs used for Congestive Heart Failure. Discuss the mechanism, pharmacological actions, adverse drug reactions and uses of Digoxin.

II. Write notes on:

(7 x 5 = 35)

1. Define and Classify Autacoids. Mention the uses of Serotonin agonist and antagonist.
2. Discuss the factors affecting drug action.
3. Discuss the symptoms and treatment of Barbiturate Poisoning.
4. List out various Neurodegenerative Diseases. Mention the symptoms and treatment for Parkinson's disease.
5. Write notes on Plasma Kinins.
6. Classify Cholinomimetic agents. Discuss the drugs used for the treatment of Myasthenia gravis.
7. Write elaborately on Drug Elimination.

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

[M.PHARM 0922]

**SEPTEMBER 2022
(APRIL 2022 EXAM SESSION)**

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New regulations 2016)
PHARMACOLOGY – MPL
PAPER II - ADVANCED PHARMACOLOGY - I**

Q.P. Code : 262982

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. List out various neurotransmitters and receptors involved in signal transduction in central nervous system.
2. Classify diuretics according to site of action. Explain the pharmacology of Thiazide and Loop diuretics.

II. Write notes on:

(7 x 5 = 35)

1. Pharmacological Actions of Acetylcholine.
2. Pharmacology of Levodopa.
3. Drugs used to treat anxiety.
4. Physiological and pathological role of Prostaglandins.
5. Sedatives and hypnotics.
6. Hematinics.
7. Explain the pharmacology of Phenytoin.

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

[M.PHARM 0423]

**APRIL 2023
(OCTOBER 2022 EXAM SESSION)**

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New regulations 2016)
PHARMACOLOGY – MPL
PAPER II - ADVANCED PHARMACOLOGY - I**

Q.P. Code: 262982

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain Opioid Peptides and Receptors. Write the pharmacology of Morphine.
2. Explain the influence of pH and partition co-efficient on drug absorption. Explain briefly how drugs are absorbed from various routes.

II. Write notes on:

(7 x 5 = 35)

1. Pharmacology of Muscarinic receptor antagonists.
2. Physiological and Pathological role of Serotonin.
3. Calcium channel blockers.
4. Classify Anti-arrhythmic drugs. Explain the action of Quindine.
5. Significance of protein binding.
6. Differentiate Non-depolarizing and Depolarizing neuromuscular blocking drugs.
7. Anti-platelet drugs.

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

[M.PHARM 0823]

**AUGUST 2023
(APRIL 2023 EXAM SESSION)**

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New Regulations 2016)
PHARMACOLOGY – MPL
PAPER II - ADVANCED PHARMACOLOGY - I**

Q.P. Code: 262982

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Define Diuretics. Classify diuretic drugs, mechanism of action, therapeutic uses and adverse effects of furosemide.
2. Define sedative and hypnotics. Classify sedative and hypnotic drugs and write in details about Diazepam.

II. Write notes on:

(7 x 5 = 35)

1. 5-HT antagonists.
2. Dales vasomotor reversal.
3. Pharmacological actions of Phenytoin.
4. Neurohumoral transmission in ANS.
5. G-Protein coupled receptor.
6. Factors affecting absorption of drugs.
7. Fibrinolytics.

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

[M.PHARM 1223]

DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)

Sub. Code: 2982

M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New Regulations 2016)
PHARMACOLOGY – MPL
PAPER II - ADVANCED PHARMACOLOGY - I

Q.P. Code: 262982

Time: Three hours

Answer ALL Questions

Maximum: 75 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. Describe elaborately structural and functional families of receptors.

II. Write notes on:

(7 x 5 = 35)

1. Define and drugs used to treat glaucoma and myasthenia gravis.
2. Classify parasympatholytic agents. Write the pharmacological actions, adverse drug reaction and therapeutic uses of atropine.
3. Classify Anti-Convulsant drugs. Describe the mode of action and adverse drug reactions of phenytoin sodium.
4. HMG-CO-A reductase inhibitors.
5. Classify antiparkinsonism drugs. Write mechanism of action of carbidopa.
6. Anti-Platelet drugs.
7. Write a note on histamine and explain about H1 antagonists.

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

[M.PHARM 0524]

**MAY 2024
(APRIL 2024 EXAM SESSION)**

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New Regulations 2016)
PHARMACOLOGY – MPL
PAPER II - ADVANCED PHARMACOLOGY - I**

Q.P. Code: 262982

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Define biotransformation. Explain the various phases of biotransformation reactions with suitable examples.
b) Write a note on enzyme induction and enzyme inhibition.
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.

II. Write notes on:

(7 x 5 = 35)

1. Describe pharmacological actions, therapeutic use and adverse effect of acetylcholine.
2. Calcium channel blockers.
3. Hematinics.
4. Describe the pharmacology of anti-anxiety agents.
5. Explain about GABA – Receptor.
6. Serotonin.
7. Write a note on Non-depolarizing and depolarizing neuromuscular blocking drugs.

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

[M.PHARM 0425]

APRIL 2025

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New Regulations 2016)
PHARMACOLOGY – MPL
PAPER II - ADVANCED PHARMACOLOGY - I**

Q.P. Code: 262982

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Define Parasympathomimetics. Classify parasympathomimetic drugs.
b) Discuss the Pharmacological action, Mechanism of action, Therapeutic uses and Adverse effects of Physostigmine.
2. Classify antihypertensives. Elaborate the pharmacological action, adverse effects and therapeutics uses of calcium channel blockers.

II. Write notes on:

(7 x 5 = 35)

1. Classify Diuretics. Explain about spironolactone.
2. Classify drugs used in the treatment of Parkinsonism and explain the mechanism of levodopa.
3. Explain in detail about Mechanism of action and Pharmacology of Morphine.
4. Neurohumoral transmission in central nervous system.
5. Prostaglandins.
6. Significance of Protein binding.
7. Explain about anticoagulants.

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

[M.PHARM 1025]

OCTOBER 2025

Sub. Code: 2982

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - I (PCI New Regulations 2016)
PHARMACOLOGY – MPL
PAPER II - ADVANCED PHARMACOLOGY - I**

Q.P. Code: 262982

Time: Three hours

Answer ALL Questions

Maximum: 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Classify Anti hyper lipidemic drugs. Discuss the mechanism of action and adverse effects of bezafibrate and atorvastatin.
b) Write a note on Lipoproteins and its functions.
2. Classify Non-Steroidal Anti-inflammatory drugs (NSAIDS). Write in detail about the Uses and Adverse reaction of acute poisoning of Paracetamol and its treatment.

II. Write notes on:

(7 x 5 = 35)

1. Write elaborately on Drug elimination.
2. Transmembrane Jak-Stat binding receptors.
3. Brief on symptoms and treatment of Organo phosphorous compound poisoning.
4. Classify peripherally acting Muscle relaxant and discuss the mechanism of d- tubocurarine.
5. Discuss about cardiac action potential and brief on torsade point.
6. Concepts of linear and non-linear compartment models.
7. List out various neurodegenerative diseases. Mention the symptoms and treatment for Parkinson's disease.
