

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

[MD(SIDDHA) 0321]

MARCH 2021

Sub. Code: 3113

(OCTOBER 2020 EXAM SESSION)

M.D. (SIDDHA) DEGREE EXAMINATION

THIRD YEAR

BRANCH I - POTHU MARUTHUVAM

PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC EMPHASIS

Q.P. Code : 323113

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify Diuretics and write briefly about the pharmacological actions of high ceiling diuretics and how will you evaluate diuretic drugs.
2. Classify Oral antidiabetic drugs and briefly write about the pharmacological actions and therapeutic uses of Thiazolidinediones.

II. Write notes on:

(10 x 6 = 60)

1. Define bioassay and write briefly about the indications and importance of bioassay.
2. Write short note on the following:
 - a) Methods of Biotransformation
 - b) Drug tolerance.
3. Write any two experimental methods to evaluate the drugs used as bronchodilators.
4. Write a note on the following:
 - a) Therapeutic index.
 - b) G-protein coupled receptors.
5. Write a short on the following:
 - a) Forced swim test.
 - b) Elevated plus maze.
6. Discuss briefly about different toxicity studies carried on animals.
7. Write a note on the following:
 - a) Yeast induced pyrexia
 - b) Adjuvant arthritis.
8. Write a short note on:
 - a) Dopamine precursor.
 - b) Heparin.
9. Write short note on the following:
 - a) Cat papillary method.
 - b) Embryonic chick heart.
10. Write any two evaluation methods of antifertility test in male.

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[MD(SIDDHA) 1221]

**DECEMBER 2021
(MAY 2021 EXAM SESSION)**

Sub. Code: 3113

**M.D. (SIDDHA) DEGREE EXAMINATION
THIRD YEAR - (For the candidates admitted from 2017-2018 onwards)
BRANCH I - POTHU MARUTHUVAM
PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC EMPHASIS
*Q.P. Code : 323113***

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write detailed principles and procedures of screening of Anti-hypertensive agents?
2. Discuss the principles, indication and limitation of Bioassay? Discuss the various methods of Bioassay in detail?

II. Write notes on:

(10 x 6 = 60)

1. Explain the terms acute, sub-acute and chronic toxicity studies in preclinical research?
2. Write a note on Microbiological assay with its application?
3. Describe any two screening procedures for CNS depressants?
4. Write a brief note on Pylorus ligated ulceration in rats?
5. Explain the following models:
 - a) Cotton pellet granuloma pouch method
 - b) Eddy's Hot plate method
6. Discuss the screening methods of anti-diarrheal agents.
7. Write a brief account on Biotransformation?
8. Explain the following terms:
 - a) Teratogenicity
 - b) Tolerance
 - c) Synergism
9. Discuss the application of following instruments in the screening of drugs used in mental illness?
 - a) Rotarod apparatus
 - b) Plethysmograph
10. Explain the pharmacological importance of plasma protein binding.

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

[MD(SIDDHA) 0222]

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

Sub. Code: 3113

**M.D. (SIDDHA) DEGREE EXAMINATION
THIRD YEAR - (For the candidates admitted from 2017-2018 onwards)
BRANCH I - POTHU MARUTHUVAM
PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC EMPHASIS
Q.P. Code : 323113**

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify NSAIDS and discuss in detail about pharmacological actions and therapeutic uses of Salicylates.
2. Discuss elaborately about different routes of drug administration and mention its advantages and disadvantages with suitable examples.

II. Write notes on:

(10 x 6 = 60)

1. Describe in brief the different sub-divisions of pharmacology.
2. Write a short notes on the following:
 - a) Drug synergism.
 - b) Drug antagonism.
3. Discuss briefly about
 - a) Special drug delivery system.
 - b) Passive transfer of drugs.
4. Write short notes on the following:
 - a) Biological half-life.
 - b) Drug receptor.
5. Write briefly about the therapeutic uses of ACE Inhibitors.
6. Describe any two experimental methods to evaluate anti-inflammatory drugs.
7. Mention the therapeutic uses of Benzodiazepines with suitable examples.
8. Discuss in detail about the limitations of animal tests with suitable examples.
9. Write any two experimental methods to evaluate the drug used as cardiotonics.
10. Write any two experimental methods to evaluate the drug used as anti-histamines.

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

[MD(SIDDHA) 0822]

**AUGUST 2022
(MAY 2022 EXAM SESSION)**

Sub. Code: 3113

**M.D. (SIDDHA) DEGREE EXAMINATION
THIRD YEAR - (For the candidates admitted from 2017-2018 onwards)
BRANCH I - POTHU MARUTHUVAM
PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC
EMPHASIS**

Q.P. Code : 323113

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss Biotransformation of drugs. Describe the factors influencing drug metabolism.
2. Describe the suitable techniques to screen anti-arrhythmic agents.

II. Write notes on:

(10 x 6 = 60)

1. Write the evaluation techniques of analgesics.
2. Write one method for screening drugs useful in petitmal epilepsy.
3. Write the screening methods for anti-depressant drugs.
4. Give a brief note on MPTP induced Parkinsonism.
5. Describe any one model used in the screening of anti-hypertensive agents.
6. Write a note on screening of anxiolytics.
7. Discuss carageenan induced paw edema.
8. Write a note on NSAID induced ulceration in rats.
9. Explain the following terms: 1) Antagonism.
2) LD₅₀.
10. Write a note on Microbiological assay.

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[MD(SIDDHA) 1122]

**NOVEMBER 2022
(OCTOBER 2022 EXAM SESSION)**

Sub. Code: 3113

**M.D. (SIDDHA) DEGREE EXAMINATION
THIRD YEAR - (For the candidates admitted from 2017-2018 onwards)
BRANCH I - POTHU MARUTHUVAM
PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC
EMPHASIS**

Q.P. Code : 323113

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail about the phases of drug metabolism and factors affecting the drug metabolism.
2. Discuss about the acute and chronic screening methods used for the screening of anti-inflammatory drugs.

II. Write notes on:

(10 x 6 = 60)

1. Explain one animal model used in the screening of urolithiasis.
2. Discuss the screening methods of anti-diahhoreal agents.
3. Write a note on two kidney one clip method.
4. Write a note on stress induced ulceration in rats.
5. Write a brief note on yeast induced pyrexia.
6. Write a note on carcinogenicity and mutagenicity.
7. Explain streptazotocin induced diabetes.
8. Describe one screening procedure for skeletal muscle relaxants.
9. Write one method of screening of drugs useful in grandmal epilepsy.
10. Write a note on Elevated plus maze test.

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

[MD(SIDDHA) 0823]

**AUGUST 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 3113

**M.D. (SIDDHA) DEGREE EXAMINATION
THIRD YEAR - (For the candidates admitted from 2017-2018 onwards)
BRANCH I - POTHU MARUTHUVAM
PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC
EMPHASIS**

Q.P. Code : 323113

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify analgesics and discuss in detail about pharmacological actions and therapeutic uses of Morphine and how analgesics are evaluated?
2. Discuss elaborately about different routes of drug administration and mention its advantages and disadvantages with suitable examples.

II. Write notes on:

(10 x 6 = 60)

1. Describe with suitable examples the changes that occur during biotransformation of drugs.
2. Write a note on:
 - a) Drug synergism
 - b) Drug antagonism.
3. Discuss briefly about:
 - a) First order kinetics
 - b) Drug clearance.
4. Write a short on following:
 - a. Biological half-life
 - b) Drug receptor.
5. What is therapeutic index? Mention its limitations.
6. Describe any two experimental methods to evaluate anti-inflammatory drugs.
7. Write any two experimental methods to evaluate the drug used as anti-asthmatics.
8. Discuss in detail about the limitations of animal tests with suitable examples.
9. Write any two experimental methods to evaluate the drug used as cardiogenic.
10. Write any two experimental methods to evaluate the drug used as antihistamines.

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

[MD(SIDDHA) 0824]

**AUGUST 2024
(MAY 2024 EXAM SESSION)**

Sub. Code: 3113

**M.D. (SIDDHA) DEGREE EXAMINATION
THIRD YEAR - (For the candidates admitted from 2017-2018 onwards)
BRANCH I - POTHU MARUTHUVAM
PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC
EMPHASIS**

Q.P. Code: 323113

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Classify Antiulcer agents and explain the pharmacological actions of proton pump inhibitors and discuss how antiulcer are evaluated?
2. Explain in detail about the mechanism of drug actions and outline the various factors affecting the actions of drugs.

II. Write notes on:

(10 x 6 = 60)

1. Write a short note on:
 - a) Special drug delivery system
 - b) Passive transport.
2. Write an account on:
 - a) Zero order kinetics
 - b) Methods of prolongation of drug action.
3. Discuss briefly about:
 - a) Side effects
 - b) Intolerance
 - c) Toxic effects.
4. Discuss briefly about enteral route and outline its advantages and disadvantages with suitable examples.
5. Discuss any two experimental methods to evaluate the drugs used for anti-arrhythmia.
6. Explain any two experimental methods to evaluate the drug used for antidiarrheals.
7. Explain any two experimental methods to evaluate anti-histamines.
8. Write any two evaluation methods of antitussive drugs in animals.
9. Write a short on:
 - a) Primary screening of drugs
 - b) Tail suspension test.
10. Write any two methods of evaluation of diuretics in animals.

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

[MD(SIDDHA) 0225]

FEBRUARY 2025

Sub. Code: 3113

**M.D. (SIDDHA) DEGREE EXAMINATION
THIRD YEAR - (For the candidates admitted from 2017-2018 onwards)
BRANCH I - POTHU MARUTHUVAM
PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC
EMPHASIS**

Q.P. Code : 323113

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What are the different mechanism of transport of drugs across biological membranes and enumerate the factors influencing drug absorption with suitable examples.
2. Define pharmacodynamics and explain elaborately about the mechanism of drug action and the factors modifying the drug effects giving suitable examples.

II. Write notes on:

(10 x 6 = 60)

1. Write a notes on the following:
 - a) Pharmacovigilance
 - b) Chronopharmacology.
2. Describe about targeted drug delivery system and give examples.
3. Discuss briefly about bioavailability of drugs and give examples.
4. Write a note on the following:
 - a) First order kinetics
 - b) Plasma half-life of drug.
5. What are Phase-I reactions? Give examples.
6. Describe any two experimental methods to evaluate anti-anxiety drugs.
7. Write a notes on the following:
 - a) Toxicity studies
 - b) Limitations of animal studies.
8. Write any two experimental methods to evaluate the drug used as anti-emetics.
9. Write any two experimental methods to evaluate the anti cancer agents.
10. Write any two experimental methods to evaluate the drug used as anti-fertility.

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

[MD(SIDDHA) 0825]

**AUGUST 2025
(SUPPLEMENTARY EXAM)**

Sub. Code: 3113

**M.D. (SIDDHA) DEGREE EXAMINATION
THIRD YEAR - (For the candidates admitted from 2017-2018 to 2023-2024)
BRANCH I - POTHU MARUTHUVAM
PAPER III – INTRODUCTION TO PHARMACOLOGY WITH THERAPEUTIC
EMPHASIS**

Q.P. Code: 323113

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What are the different routes of drug administrations and explain in detail about the advantages and disadvantages of parenteral route. Give examples.
2. Define Adverse drug reactions and discuss elaborately about different types of allergic reactions and their mechanism. Give examples.

II. Write notes on:

(10 x 6 = 60)

1. Define biotransformation and what are the chemical reactions of biotransformation and give examples.
2. Write a note on the following: a) G-protein coupled receptors b) Enzymatic receptors.
3. Write any two experimental methods to evaluate the drugs used as analgesics.
4. Write a note on the following: a) Water wheel method b) Elevated plus maze.
5. Write a note on the following: a) Two kidney one clip method b) Shay rat method.
6. Discuss any two experimental models for evaluation of anti-epileptic drugs.
7. Write a note on the following: a) Vogel's conflict test b) Mirrored chamber.
8. Write any two experimental methods to evaluate anti-diabetic drugs.
9. Write a short on the following: a) cat papillary method b) embryonic chick heart.
10. Write any two experimental evaluation methods of antidiarrhoeal test in male.
