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

[MD 1224] **DECEMBER 2024** **Sub. Code: 4092**

(OCTOBER 2024 EXAM SESSION)

M.D. DEGREE EXAMINATION

PHARMACOLOGY

PAPER II – SYSTEMIC PHARMACOLOGY

Q.P. Code: 204092

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 15 = 30)**

(3+3+5+2+2)

1. 70-year-old male comes to the hospital with complaints of trouble with balance and mild hand tremor. On examination patient had bradykinesia, muscular rigidity, resting tremor and impairment of postural balance. He was diagnosed as a case of Early-Stage Parkinsonism. Describe the Neural mechanisms of parkinsonism. Classify drugs used in Parkinsonism. Enumerate the pharmacokinetics and adverse effects of Levodopa. Role of Produodopa in parkinsonism. Write a note on Gene therapy in parkinsonism.

(3+3+5+2+2)

2. A 45-year-old male patient complaints of productive cough for more than two weeks, one episode of hemoptysis. He gives history of loss of weight, loss of appetite, fever, night sweats. Clinical examination and Investigations confirmed the diagnosis of Pulmonary Tuberculosis. Classify drugs used in the treatment of Tuberculosis. Mention the Goals and General principles of Anti TB chemotherapy. Enumerate the treatment Guidelines based on RNTCP. Rationale of BPaLM in MDR/RR-TB. Principle of Individualized treatment of MDR-TB.

II. Short notes: **(10 x 5 = 50)**

1. Cardiovascular uses of prostaglandins and PG Analogues.
2. Therapeutic uses of Alpha 2 – Selective agonist.
3. Drugs used in Precocious Puberty.
4. Antimicrobial resistance.
5. Ventilatory stimulants.
6. Pharmacotherapy of pruritus with neurological and psychological cause.
7. Vaccines against Protozoal infections.
8. Analyze Toxicity of topical and systemic retinoids.
9. Drugs used in Criminal Offences.
10. Individualized controlled ovarian stimulation.

III. Reasoning Out: **(4 x 5 = 20)**

1. Role of UNITHIOL in metal poisoning.
2. Lipid formulations of Amphotericin B.
3. Modafinil in Narcolepsy.
4. Role of cilastazol in treatment of Intermittent claudication.

****

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

[MD 0525] **MAY 2025** **Sub. Code: 4092**

M.D. DEGREE EXAMINATION

PHARMACOLOGY

PAPER II – SYSTEMIC PHARMACOLOGY

Q.P. Code: 204092

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 15 = 30)**

1. Describe the different types of Glaucoma and drugs used in the treatment of Glaucoma with their mechanism of action and contraindications.

2. Discuss the Pharmacotherapy of Psoriasis including the recent advances.

II. Short notes: **(10 x 5 = 50)**

1. Multi Drug Resistant Tuberculosis treatment.
2. GEPOTIDACIN.
3. Phase IV clinical trials.
4. Newer drugs in Acid Peptic disease.
5. Adrenergic Neurotransmission and its modification by drugs.
6. Drugs for the treatment of Erectile dysfunction.
7. Newer parenteral iron preparations.
8. Inotropic drugs in cardiac failure.
9. Uterine Relaxants.
10. Uricosuric agents in Pharmacotherapy.

III. Reasoning Out: **(4 x 5 = 20)**

1. Oral contraceptive failure.
2. Enzymes in cancer chemotherapy.
3. Tamoxifen in Carcinoma breast.
4. Steroids in haematological malignancies.

****

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

[MD 1025] **OCTOBER 2025** **Sub. Code: 4092**

M.D. DEGREE EXAMINATION

PHARMACOLOGY

PAPER II – SYSTEMIC PHARMACOLOGY

Q.P. Code: 204092

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 15 = 30)**

1. Discuss the pathophysiology and drug targets for Chemotherapy Induced Nausea and Vomiting (CINV).

2. Discuss in detail about the drugs targeting potassium channels and their therapeutic applications.

II. Short notes: **(10 x 5 = 50)**

1. Centrally acting muscle relaxants.
2. Therapeutic uses of anticholinesterases.
3. Discuss briefly on various Hemostatic agents.
4. Drugs used in antiresorptive therapy.
5. Novel intravenous iron formulations.
6. What is Diuretic resistance and how will you manage?
7. Role of chemoprophylaxis in reducing disease transmission.
8. Drugs for lymphatic filariasis.
9. Soft steroids.
10. Chemoprevention and its applications.

III. Reasoning Out: **(4 x 5 = 20)**

1. Time dependent vs Concentration dependent killing.
2. Sacubitril – Valsartan fixed dose combination.
3. Heparin induced thrombocytopenia.
4. Prebiotics vs Probiotics.

****

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

[MD 0526] **MAY 2026** **Sub. Code: 4092**

M.D. DEGREE EXAMINATION

PHARMACOLOGY

PAPER II – SYSTEMIC PHARMACOLOGY

Q.P. Code: 204092

Time : Three Hours **Maximum : 100 Marks**

I. Essay: **(2 x 15 = 30)**

1. Discuss the pharmacotherapy for chronic pain with emphasis on principles of management and drug selection criteria. Add a note on novel drug targets for neuropathic pain.

2. Discuss in detail about the drugs targeting phosphodiesterase superfamily and their therapeutic applications.

II. Short notes: **(10 x 5 = 50)**

1. Discuss the pharmacology and uses of Botulinum toxin.
2. CGRP antagonists with emphasis on its advantages.
3. Role of Biological DMARDs.
4. Therapeutic uses of Magnesium.
5. Write briefly on the pharmacology of PCSK9 inhibitors.
6. Adult vaccination in India.
7. Second gas effect and diffusion hypoxia.
8. Drugs for cutaneous mycotic infections.
9. Long-acting insulin preparations.
10. Discuss the role of Endocrine disruptors.

III. Reasoning Out: **(4 x 5 = 20)**

1. Surfactants in respiratory distress syndrome.
2. Antipsychotics induced movement disorders.
3. Beta 3 agonists in overactive bladder.
4. Antimicrobial combination therapy.

****