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

[MD 1224] DECEMBER 2024 Sub. Code: 4093

(OCTOBER 2024 EXAM SESSION)

M.D. DEGREE EXAMINATION

PHARMACOLOGY

PAPER III – CLINICAL PHARMACOLOGY WITH RECENT ADVANCES

Q.P. Code: 204093

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

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

(3+3+3+2+4)

1. Mr. X 62 years old male comes to the hospital with complaints of retrosternal chest pain during emotional stress, climbing stairs and while exertional work. Pain is radiating in nature and is relieved after rest. On examination his vitals were normal. ECG taken at rest was normal. Stress ECG revealed changes suggestive of unstable angina.
   a) Classify Antianginal drugs.
   b) Describe the mechanism of action, pharmacological actions and adverse effects of Organic nitrates.
   c) Enumerate the pharmacotherapy of Myocardial Infarction with rationale for using these drugs in Myocardial Infarction.

(3+2+2+4+4)

2. Mr. Y, 68-year-old presented to Diabetic OP for treatment. He is a known Type Il diabetic patient on irregular treatment. He is obese, smoker. Vitals were normal, random blood sugar was 260mg/dL, HbA1c was 8 %.
   a) Classify oral Antidiabetic drugs.
   b) Describe the mechanism of action and uses of Metformin.
   c) Enumerate the Insulin preparation.
   d) Management of diabetic ketoacidosis.

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

1. Cholinomimetic Alkaloids.
2. Neuraminidase inhibitors.
3. Depolarizing Skeletal Muscle Relaxants.
4. Anti-epileptic drugs acting by Sodium channel blockade.
5. Serotonin receptor antagonists.
6. Osmotic diuretics.
7. Inhibitors of Steroidogenesis.
8. Neurokinin receptor antagonists.
9. Tissue schizonticides.
10. Vancomycin uses and adverse effects.

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

1. Neprilysin inhibitors in Cardiac failure.
2. Lithium with vasopressin.
3. Alprostidil in PDA.
4. Bisphosphonates in Paget's disease.

****

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

[MD 0525] **MAY 2025** **Sub. Code: 4093**

M.D. DEGREE EXAMINATION

PHARMACOLOGY

PAPER III – CLINICAL PHARMACOLOGY WITH RECENT ADVANCES

Q.P. Code: 204093

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

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

1. a) Write in detail about Insulin analogues and its uses and advantages.
   b) Add a note on GLP - I agonists and DPP-4 inhibitors.

2. a) Describe in detail about Pharmacotherapy of Chloroquine Resistant Malaria.
   b) Write briefly on Chemoprophylaxis of Malaria.

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

1. Drug therapy in Geriatric population.
2. Randomized Controlled Trials.
3. Alternative for animal models.
4. Drug therapy in Bronchial Asthma.
5. Chi Square Test.
6. Disulfiram like Reaction.
7. Atypical antipsychotic drugs.
8. Fibrinolytic drugs in therapy.
9. Evidence Based Medicine.
10. Drugs used in Obesity.

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

1. Betablockers in hyperthyroidism.
2. Role of clonidine in morphine addiction.
3. Diuretics and diabetes insipidus.
4. Dosing of aminoglycosides in impaired renal function.

****

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

[MD 1025] **OCTOBER 2025** **Sub. Code: 4093**

M.D. DEGREE EXAMINATION

PHARMACOLOGY

PAPER III – CLINICAL PHARMACOLOGY WITH RECENT ADVANCES

Q.P. Code: 204093

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

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

1. Outline the management of malaria according to the current guidelines. Add a note on chemoprophylaxis for malaria.

2. Discuss in detail about the current trends in the pharmacotherapy of hypertension with co-morbidities. Describe the recent advances in hypertensive emergencies.

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

1. Write the salient features of Melatonin congeners.
2. Management of Diabetic ketoacidosis.
3. Linaclotide.
4. Radiosensitizers and radioprotectors.
5. Pharmacological actions and uses of Nootropics.
6. Describe the various drugs used as Nasal decongestants.
7. Anaesthetic adjuncts.
8. Drug induced Fetal syndromes.
9. Non endocrine uses of corticosteroids.
10. Regiments for management of drug-resistant Tuberculosis.

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

1. Beta 2 agonists are not recommended as monotherapy in asthma treatment.
2. Immunostimulants and their uses.
3. Drug eluting endovascular stents and its advantages.
4. Antimicrobial stewardship to prevent resistance.

****

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

[MD 0526] **MAY 2026** **Sub. Code: 4093**

M.D. DEGREE EXAMINATION

PHARMACOLOGY

PAPER III – CLINICAL PHARMACOLOGY WITH RECENT ADVANCES

Q.P. Code: 204093

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

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

1. Outline the management of drug sensitive and drug-resistant tuberculosis as per latest NTEP and WHO guidelines. Describe the role of glucocorticoids in tuberculosis. Add a note on TB preventive treatment.

2. Discuss in detail about the current trends in the pharmacotherapy of diabetes mellitus with co-morbidities. Describe the recent advances in diabetes.

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

1. Write briefly on the Drugs used in rosacea.
2. De-escalation of antibodies and its significance.
3. Management of overdose of anticoagulants.
4. Role of Thiazide diuretics in hypertension.
5. Lubiprostone.
6. Dual Orexin Receptor Antagonists (DORAs).
7. Radiation recall reaction and its management.
8. Management of epilepsy in special populations.
9. Aging in Organophosphorus poisoning and its significance.
10. Cell cycle specific anti-tumour drugs.

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

1. Pharmacokinetic enhancers in Anti-retroviral therapy.
2. Montelukast-Restrict use for allergic rhinitis.
3. Nitrate tolerance and Rebound angina pectoris.
4. Drugs may precipitate hemolysis in G6PD deficiency.

****