

QP CODE : 1028

Rajiv Gandhi University of Health Sciences, Karnataka

MBBS Phase – II (CBME) Degree Examination - 18-Aug-2025

Time: Three Hours

Max. Marks: 100

PHARMACOLOGY – PAPER I (RS-4, RS-5 & RS-6)**Q.P. CODE: 1028****(QP contains two pages)**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS**2 x 10 = 20 Marks**

1. Enumerate various routes of drug administration with suitable examples. Mention the advantages and disadvantages of Intravenous route of drug administration.
2. A patient is prescribed Morphine for pain following fracture femur.
 - a. Explain the mechanism of analgesic action of morphine in this patient.
 - b. Write three contraindications for morphine with reasons.
 - c. Discuss the management of morphine poisoning.

SHORT ESSAYS**8 x 5 = 40 Marks**

3. Discuss the various methods of prolonging drug action.
4. Write the therapeutic uses of Adrenaline. Explain the rationale of combining adrenaline with Lignocaine in local anaesthesia
5. Write the therapeutic uses and adverse effects of Alpha adrenergic blockers
6. A 45-year-old lady presented with weakness and easy fatigability. Diagnosis of Myasthenia Gravis was made after clinical evaluation. Discuss the pharmacotherapy of Myasthenia Gravis.
7. Enumerate Four centrally acting muscle relaxants. Write their therapeutic uses
8. A student presented with rash and intense itching all over his body on the morning of his practical examination.
 - a) Which class of antihistaminic is preferred in this patient and give the rationale?
 - b) Explain its other therapeutic uses.
9. Enumerate three classes of Bronchodilators with their mechanism of action
10. A 45-year-old patient is diagnosed with Gastroesophageal reflux disease (GERD).
 - a) Mention any three classes of drugs used with suitable examples.
 - b) Write the mechanism of action of any one drug.

SHORT ANSWERS**10 x 3 = 30 Marks**

11. Define plasma half life. Explain its clinical significance
12. Explain the dose dependent actions of Dopamine
13. Mention the drug used in the treatment of malignant hyperthermia with rationale
14. Write two advantages of Ketamine. Why is it contraindicated in hypertensive patients
15. Write the mechanism of action and uses of Lithium
16. Write the rationale of using low dose Aspirin in secondary prevention of myocardial infarction
17. Name three Mucolytics with their mechanism of action
18. Write the mechanism of action and therapeutic uses of Aprepitant
19. Write three advantages of Fixed Dose Combination of drugs.
20. Write the objectives of conducting Phase IV clinical trial (Post Marketing Surveillance)

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Multiple Choice Questions

10 x 1 = 10 Marks

- 21 i) An orphan drug is
- A drug which is easily available
 - A drug which has no therapeutic use
 - A drug needed for treatment or prevention of rare disease
 - A drug which is cheap
- 21 ii) The loading dose of a drug is governed by its
- Plasma half life
 - Volume of distribution
 - Renal clearance
 - Elimination rate constant
- 21 iii) The drug preferred for prevention of motion sickness is
- Hyoscine
 - Cyclopentolate
 - Aprepitant
 - Cetirizine
- 21 iv) Pilocarpine eye drops produces its effect by which of the following actions in glaucoma
- Activation of Muscarinic M3 receptors
 - Activation of Beta 2 receptors
 - Activation of Dopamine 1 receptors
 - Activation of 5-HT3 receptors
- 21 v) The drug used in the treatment of Diazepam overdose is
- Fomepizole
 - Flumazenil
 - Finasteride
 - Flecainide
- 22 i) Which of the following blood tests should be recommended weekly for a patient on Clozapine for resistant Schizophrenia?
- Creatinine
 - Blood Urea Nitrogen
 - Transaminases
 - Leucocyte Count
- 22 ii) N-Acetyl cysteine is useful in Paracetamol poisoning because:
- It inhibits the excretion of paracetamol
 - It inhibits the metabolism of paracetamol
 - It replenishes glutathione stores of liver
 - It inhibits reabsorption of paracetamol
- 22 iii) Which of the following drug is **NOT** used as an inhalational Corticosteroid in Bronchial Asthma
- Budesonide
 - Fluticasone
 - Beclomethasone
 - Hydrocortisone
- 22 iv) Which of the following antiemetic agent is most preferred in cancer chemotherapy induced vomiting
- Ondansetron
 - Promethazine
 - Cisapride
 - Doxylamine
- 22 v) Drug induced diseases are also called as
- Iatrogenic diseases
 - Nosocomial diseases
 - Teratogenic diseases
 - Mutagenic diseases
