

(3 Hours)

(Total marks: 70)

- N.B.: (1) All questions are **compulsory**.
 (2) **Figures** to the **right** indicate **full marks**

- Q.1 (a) Answer the following: 12
- Explain the mechanism of action (MOA) of barbiturates.
 - Why are selective COX 2 inhibitors contraindicated in patients with cardiovascular disease?
 - Explain the mechanism of action of Omeprazole.
 - Describe the triphasic response of serotonin.
 - How does lignocaine exert local anesthetic effect?
 - Comment on the use of opioids in diarrhea.
- Q.1 (b) Answer the following: 3
- _____ is used to treat absence seizures.
 - The PGE₂ analogue used to treat peptic ulcers is _____.
 - What is the therapeutic indication of sulfasalazine?
- Q.2 (a) Answer **any two** of the following: 8
- Explain the merits and demerits of tricyclic antidepressants.
 - Discuss the MOA of morphine. Justify the contraindications for its use.
 - Elaborate on the adverse effects of antipsychotic drugs.
- Q.2 (b) Answer **any one** of the following: 3
- Discuss the therapeutic challenges of levodopa therapy in Parkinson's disease.
 - Name the stages of general anesthesia. How do solubility in blood and tissues impact the induction and recovery of inhalation anesthetic agents?
- Q.3 (a) Answer **any two** of the following: 8
- Discuss the pharmacology of Aspirin.
 - Classify antiasthmatics. Explain the role of leukotriene receptors antagonists in the treatment of asthma.
 - Classify H₁ anti-histaminics. Add note on pharmacological actions of second generation anti-histaminic drugs.
- Q.3 (b) Write a short note on **any one** of the following: 3
- Bradykinin
 - Therapeutic uses of serotonergic drugs
- Q.4 (a) Answer **any two** of the following: 8
- Classify anti-ulcer drugs. Add a note on antacids.
 - Discuss irritant purgatives.
 - Classify antiemetic drugs. Explain the role of scopolamine in motion sickness.

- Q.4 (b) Write a short note on **any one** of the following: 3
(i) Medical importance of oral rehydration therapy
(ii) Pro-kinetic drugs
- Q.5 (a) Answer **any two** of the following: 8
(i) Discuss the treatment of status epilepticus. Explain the MOA of phenytoin.
(ii) Classify CNS stimulant drugs. Add a note on Amphetamine.
(iii) Discuss the effects of lithium therapy in mania.
- Q.5 (b) Write a short note on **any one** of the following: 3
(i) Cholinergic activators in Alzheimer's disease
(ii) Therapeutic indications benzodiazepines
- Q.6 (a) Discuss the symptoms and management of **any two** of the following: 8
(i) Lead poisoning
(ii) Methanol poisoning
(iii) Arsenic poisoning
- Q.6 (b) Write a short note on **any one** of the following: 3
(i) Allopurinol
(ii) Theophylline
