

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.PHARM – SEMESTER – 6 EXAMINATION – SUMMER-2025****Subject Code: BP602TP****Date: 13-05-2025****Subject Name: Pharmacology III****Time: 10.30 AM TO 01.30 PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Discuss the combined use of antibiotics with suitable examples with emphasis on synergism and to prevent the emergence of resistance. **06**  
(b) Describe biochemical mechanisms of resistance to antibiotics. **05**  
(c) Define cough. Differentiate between Expectorants and Antitussive agents. **05**
- Q.2** (a) Classify antifungal agents based on their mechanism of action. Write the mechanism of action and adverse effect of amphotericin B and Capsosungin. **06**  
(b) Classify antiviral drugs. Describe the pharmacology of acyclovir. **05**  
(c) Describe clinical symptoms and management of Organophosphorus poisoning **05**
- Q.3** (a) Describe the life cycle of the malarial parasite and write the mechanism of action and adverse effects of drugs acting on various phases of the life cycle of the parasite. **06**  
(b) Explain the mechanism of action, adverse effects, and therapeutic uses of the following drugs (i.) Fluoroquinolone (ii.) Chloramphenicol. **05**  
(c) Write a note on proton pump inhibitors. **05**
- Q.4** (a) What is HAART? Write a note on drugs used in the treatment of HIV infection. **06**  
(b) Discuss treatment and management of diarrhea with emphasis on ORT. **05**  
(c) Classify semi-synthetic penicillins. Write antibacterial spectrum and therapeutic uses of amoxicillin. **05**
- Q.5** (a) Explain in detail: (i.) Superinfection and (ii.) Chronopharmacology **06**  
(b) Write the MOA of the following drugs: (i.) Metoclopramide (ii.) Mesalazine (iii.) Etofamide (iv.) Foscarnet (v.) Doxorubicin **05**  
(c) Enlist first-line drugs used in Tuberculosis and provide an overview of the DOTS strategy in India. **05**
- Q. 6** (a) Define immunopharmacology and Classify immunosuppressant drugs. Explain the Mechanism of action of Cyclosporine. **06**  
(b) Classify Laxatives. Explain Osmotic purgatives. **05**  
(c) Classify cell cycle-specific inhibitors. Explain the mechanism of action and adverse effects of Vinca alkaloids. **05**
- Q.7** (a) Write a note on bacterial cell wall synthesis inhibitors. **06**  
(b) Classify types of Leprosy. Write detailed pharmacology of Dapsone. **05**  
(c) Explain the following terms: (i.) Gray baby syndrome (ii.) Kernicterus (iii.) Jarisch Herxheimer's reaction (iv.) Fanconi-like syndrome (v.) Crystaluria. **05**