

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**PHARM.D YEAR-3 EXAMINATION – SUMMER - 2024**

**Subject Code: 838801****Date: 29-04-2024****Subject Name: Pharmacology-II****Time: 10:30 AM TO 1:30 PM****Total Marks: 70****Instructions:**

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

- Q.1** (a) Classify Anticoagulants. Differentiate between heparin and warfarin. **06**  
(b) Discuss mechanisms of action of Antiplatelet drugs. **04**  
(c) Explain in detail about acute toxicity study. **04**
- Q.2** (a) Write the mechanism of actions of following drugs: **06**  
(i) Streptokinase (ii) Desmopressin (iii) Spironolactone.  
(b) Classify diuretics. Write pharmacology of thiazide diuretics. **04**  
(c) Classify immunosuppressants. Give its therapeutic uses. **04**
- Q.3** (a) Classify penicillins. Explain molecular mechanism of action, side effects, therapeutic uses and antibacterial spectrum of penicillins. **06**  
(b) Write note on chloramphenicol. **04**  
(c) Classify antimalarial drugs. Describe the mechanism of action and adverse effects of Chloroquine. **04**
- Q.4** (a) Enumerate aminoglycoside antibiotics. Describe the mechanism of action, characteristics, adverse effects and uses of aminoglycosides. **06**  
(b) Write a note on antifungal drugs. **04**  
(c) Write a note on antiretroviral drugs. **04**
- Q.5** (a) Give the mechanism of action and uses of the following drugs: **06**  
(i) Metronidazole (ii) Cotrimoxazole (iii) Erythromycin  
(b) Discuss first line drugs used for the treatment of tuberculosis **04**  
(c) Classify anticancer agents and describe the role of antimetabolites as anticancer agents. **04**
- Q. 6** (a) Write principles, processes and applications of Recombinant DNA technology. **06**  
(b) Write a note on macromolecules. **04**  
(c) Explain in brief about genetic elements that control gene expression. **04**
- Q.7** (a) Write a note on Protein synthesis. **06**  
(b) Discuss the signal transduction pathways. **04**  
(c) Explain in detail about gene therapy and its targets. **04**

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