

GUJARAT TECHNOLOGICAL UNIVERSITY
Pharm D – 3rd Year EXAMINATION – SUMMER - 2022

Subject Code: 838801**Date: 01/06/2022****Subject Name: Pharmacology - II****Time: 10:30am to 01:30pm****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) Explain mechanism of action, pharmacological effects and therapeutic uses of loop diuretics. **06**
(b) Classify anticoagulants with examples and explain the pharmacology of heparin. **04**
(c) Classify antileprotic drugs and discuss about dapsone. **04**
- Q.2** (a) Explain gene transcription and various factors that regulate transcription. **06**
(b) Give the mechanism of action and side effects of co-trimoxazole. **04**
(c) Write a note on oncogenes. **04**
- Q.3** (a) Classify anti-neoplastic agents with examples. Discuss about alkylating agents. **06**
(b) Explain the mechanism of development of bacterial resistance to antibiotics. **04**
(c) What is chronic toxicity study? Explain its importance in preclinical studies. **04**
- Q.4** (a) Discuss life cycle of malaria and give pharmacology of chloroquine. **06**
(b) What is DNA replication? Give its importance. **04**
(c) Write a short note on mechanism of action, therapeutic uses and adverse effects of aminoglycosides. **04**
- Q.5** (a) Classify the immunosuppressant. Write the mechanism of action, adverse drug reaction, and therapeutic uses of mycophenolate mofetil. **06**
(b) Write a note on reverse transcriptase inhibitors. **04**
(c) What is the mechanism of functioning of MAP kinase? **04**
- Q. 6** (a) What is cell signaling? Explain any two kinase signal transduction pathway. **06**
(b) Describe about gene sequencing and mapping. **04**
(c) Give the rationale for the following combination: **04**
a) Sulbactam with Imepenam b) INH, Rifampicin and Ethambutol
- Q.7** (a) Explain the mechanism of action, spectrum of activity, therapeutic uses and adverse reactions of: a) Ciprofloxacin b) Cefuroxime **06**
(b) Discuss pharmacology of Anthelmintic drugs. **04**
(c) Write mechanism of action, therapeutic uses and adverse reactions of fluoroquinolones. **04**
