



**PHARMACOLOGY—IV**

**Paper—3**

Time : Three Hours]

[Maximum Marks : 80

- N.B. :—** (1) Question No. 1 is compulsory.  
(2) Solve any four questions from remaining.  
(3) Draw neat labelled diagram wherever necessary.  
(4) Assume suitable data wherever necessary.  
(5) Discuss the reaction, mechanism wherever necessary.  
(6) Use of electronic calculator is permitted.

1. Solve any **FIVE** of the following :
  - (a) Classify Antimicrobial drugs
  - (b) Give the treatment of urinary tract infections
  - (c) Explain the adverse effects of aminoglycosides
  - (d) Write a note on Antithyroid agent
  - (e) Explain phase-III of clinical trial
  - (f) Give the pharmacology of Acyclovir
  - (g) Give the pharmacology of cotrimoxazole. 4×5=20
2. Classify Antineoplastic agents. Give types and causes of cancer. Write detailed account on targeted drug therapy. Explain how toxicity amelioration can be done in anticancer therapy. 15
3. (a) Discuss the life cycle of malarial parasite. Classify antimalarial drugs according to their stage of inhibition. Elaborate the pharmacology of Artemisinin derivatives. 10  
(b) Give treatment for tuberculosis. 5
4. (a) What is Diabetes Mellitus ? Classify Oral Hypoglycemic drugs. Discuss the role of Insulin in treatment of diabetes. 10  
(b) Comment on fertility agents. 5
5. (a) What are Immunomodulators ? Explain the pharmacology of various Immunosuppressant drugs. 10  
(b) Give a detailed account on Antiviral therapy. 5
6. (a) Write mechanism of action, uses and adverse effects of (any **FOUR**) :
  - (i) Plurifloxacin
  - (ii) Pemetrexate
  - (iii) Tigecycline
  - (iv) Paramomycin
  - (v) Dorepenem. 10  
(b) Discuss the guidelines given for ICH-GCP in clinical research. 5
7. Write short notes on (any **THREE**) :
  - (a) Advantages and disadvantages of designs used in clinical trials.
  - (b) Pharmacology of  $\beta$ -lactum antibiotics.
  - (c) Thyroid hormone
  - (d) Anabolic steroids. 5×3=15

