

# MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

## M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – JUNE 2004

### PAPER I: GENERAL PHARMACOLOGY, CLINICAL PHARMACOLOGY, EXPERIMENTAL PHARMACOLOGY, BIOLOGICAL STANDARDIZATION AND BIostatISTICS

Tuesday, June 22, 2004

**Time available: 3 Hours**

**Maximum Marks: 100**

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- **Answer all the questions.**
  - **Write your answers that are brief, clear, relevant and legible.**
  - **Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.**
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1. Discuss the various biotransformation reactions and add a note on prodrugs.  
(20 marks)
  
2. Discuss the methods to evaluate a drug for peptic ulcer healing activity.  
(20 marks)
  
3. Write briefly on G-protein coupled receptors.  
(20 marks)
  
4. Write short notes on:
  - 4A. Methods to prolong the action of drug
  - 4B. Essential drug list
  - 4C. ELISA
  - 4D. Students 't' test.

(10×4 = 40 marks)



**M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – JUNE 2004**

**PAPER II: SYSTEMIC PHARMACOLOGY: ANS, CNS, CVS, GIT, HEMOPOIETIC,  
RENAL AND RESPIRATORY SYSTEMS, AUTACOIDS**

Wednesday, June 23, 2004

**Time available: 3 Hours**

**Maximum Marks: 100**

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- **Answer all the questions.**
  - **Write your answers that are brief, clear, relevant and legible.**
  - **Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.**
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1. Diagrammatically depict the various sites of action of antihypertensive drugs. Discuss the uses and adverse effects of propranolol.

(20 marks)

2. Classify anti-epileptics. Discuss the uses and adverse effects of diphenyl hydantoin.

(20 marks)

3. Discuss the mechanism of action and adverse effects of drugs used in bronchial asthma.

(20 marks)

4. Write short notes on:

4A. Nitrates in therapy

4B. Heparin

4C. Loop diuretics

4D. II generation antihistamines.

(10 × 4 = 40 marks)



**M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – JUNE 2004**

**PAPER III: SYSTEMIC PHARMACOLOGY: CHEMOTHERAPY, IMMUNOTHERAPY,  
ENDOCRINES AND MISCELLANEOUS TOPICS**

Thursday, June 24, 2004

**Time available: 3 Hours**

**Maximum Marks: 100**

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- **Answer all the questions.**
  - **Write your answers that are brief, clear, relevant and legible.**
  - **Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.**
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1. Classify glucocorticoids. Discuss the mechanism of action and uses of glucocorticoids.  

(20 marks)
  
2. Discuss the special features of tuberculosis pertaining to its chemotherapy. Describe the pharmacology of any two first line antituberculous drugs.  

(20 marks)
  
3. Classify the drugs used in AIDS. Discuss the pharmacology of the most commonly used antiretroviral drugs.  

(20 marks)
  
4. Write briefly on:
  - 4A. Aminopenicillins
  - 4B. Metronidazole
  - 4C. Cyclophosphamide
  - 4D. Immunostimulants.

(10×4 = 40 marks)

