

# MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

## M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – JULY 2005

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

Monday, July 04, 2005

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.**

1. Discuss parenteral (Injections) routes of drug administration.

(20 marks)

2. Discuss the methods to evaluate anti-inflammatory activity of a given drug.

(20 marks)

3. Discuss the non-receptor mechanisms of drug action.

(20 marks)

4. Write briefly on:

4A. Therapeutic drug monitoring (TDM)

4B. Dose response curves (DRC)

4C. How do you experimentally demonstrate “tachyphylaxis”?

4D. Radio-immunoassay (RIA)

(10×4 = 40 marks)



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## M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – JULY 2005

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

Tuesday, July 05, 2005

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.**

1. Enumerate the indirectly acting cholinomimetic drugs. Explain how they act and discuss the clinically useful effects of these drugs on various organs.

(20 marks)

2. Diagrammatically depict the sites of action of antihypertensive drugs with suitable examples and explain how they act.

(20 marks)

3. Explain the pathophysiology of Parkinsonism. List the drugs useful in Parkinsonism and discuss how these drugs produce beneficial effects.

(20 marks)

4. Write briefly on:

4A. Lansoprazole

4B. Atorvastatin

4C. Inhalational agents used in bronchial asthma

4D. Fibrinolytics

(10 × 4 = 40 marks)



**M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – JULY 2005**

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

Wednesday, July 06, 2005

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.**

1. Discuss the mechanism of action and adverse effects of drugs used in hyperthyroidism.

(20 marks)

2. Enumerate the drawbacks of Penicillin G and explain the methods adopted to overcome this with suitable examples.

(20 marks)

3. Discuss the actions and uses of immunosuppressants.

(20 marks)

4. Write briefly on:

4A. Combined pill

4B. GnRh analogues

4C. d - penicillamine

4D. Triazoles

(10×4 = 40 marks)

