

MANIPAL UNIVERSITY

M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – FEBRUARY 2008

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

Monday, February 04, 2008

Time available: 3 Hours

Maximum Marks: 100

- ✍ **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 role of ion channels in the mechanism of action of drugs with appropriate examples.
(20 marks)

2. Discuss the preclinical evaluation of anti-inflammatory agents.
(20 marks)

3. Illustrate with examples how genetic variation alters drug action.
(20 marks)

4. Write briefly on:
 - 4A. Confidence Interval.
 - 4B. Bio-equivalence.
 - 4C. Drug tolerance.
 - 4D. Essential Drug List.

(10×4 = 40 marks)

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M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – FEBRUARY 2008

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

Tuesday, February 05, 2008

Time available: 3 Hours

Maximum Marks: 100

- ✍ **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. Classify anti epileptics. Describe the pharmacology of drugs used in grand mal epilepsy.
(20 marks)

2. Classify anti anginal drugs. Discuss the pharmacology, indications and adverse effects of any one drug. Add a note on management of acute attack of classical angina.
(20 marks)

3. Enumerate the drugs used in the treatment of anemias. Outline briefly the treatment of megaloblastic anemia.
(20 marks)

4. Write briefly on:
 - 4A. Drugs used in status asthmaticus.
 - 4B. Second generation H₁ receptor blockers.
 - 4C. High ceiling diuretics.
 - 4D. Anti-muscarinic drugs.

(10×4 = 40 marks)

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M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – FEBRUARY 2008

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

Wednesday, February 06, 2008

Time available: 3 Hours

Maximum Marks: 100

- ✍ **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 fluoroquinolones. Discuss the mechanism of action, therapeutic uses and toxicities of any one of them.

(20 marks)

2. Describe the mechanism of action and adverse reactions of currently available different oral contraceptives.

(20 marks)

3. Classify drugs used in immunosuppressive therapy. Discuss the use of antibodies as immunosuppressants.

(20 marks)

4. Write briefly on:

4A. Anti thyroid drugs.

4B. Anti-viral drugs.

4C. Non systemic uses of steroids.

4D. Bone mineralization modulators.

(10×4 = 40 marks)

MANIPAL UNIVERSITY

M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – AUGUST 2008

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

Monday, August 04, 2008

Time available: 3 Hours

Maximum Marks: 100

- ✍ **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. Explain the factors affecting 'Drug action' with suitable examples.

2. Describe in detail the experimental evaluation of anti-inflammatory agents.

(20×2 = 40 marks)

3. Write briefly on:

3A. ELISA.

3B. 'P' value.

3C. Plasma protein binding and its implications.

3D. Acute toxicity studies.

3E. Pharmacogenetics.

3F. Drugs used in glaucoma.

(10×6 = 60 marks)

MANIPAL UNIVERSITY

M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – AUGUST 2008

PAPER II: SYSTEMIC PHARMACOLOGY: CNS, GIT, BLOOD, R.S., AUTACOIDS, CVS, DIURETICS

Tuesday, August 05, 2008

Time available: 3 Hours

Maximum Marks: 100

- ✍ **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. Classify different classes of drugs useful in acid peptic disease. Explain mechanism of action, uses and adverse effects of a common drug which reduces the gastric acid secretion.
2. Classify local anesthetics. Explain various techniques of local anesthesia and problems/adverse effects related to local anesthetic. Add a note on methods adopted to prolong the action of local anesthetics.

(20×2 = 40 marks)

3. **Write briefly on:**

- 3A Centrally acting antihypertensives.
- 3B. Intravenous drugs useful in CCF.
- 3C. Clinically useful prostaglandin analogues.
- 3D. Streptokinase.
- 3E. Uses and adverse effects of nitrates.
- 3F. Inhalational drugs useful in bronchial asthma.

(10×6 = 60 marks)

MANIPAL UNIVERSITY

M. Sc. (FINAL) PHARMACOLOGY DEGREE EXAMINATION – AUGUST 2008 PAPER III: SYSTEMIC PHARMACOLOGY: CHEMOTHERAPY, IMMUNOTHERAPY, ENDOCRINES AND MISCELLANEOUS TOPICS

Wednesday, August 06, 2008

Time available: 3 Hours

Maximum Marks: 100

- ✍ **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 fluoroquinolones. Discuss the mechanism of action, clinical uses and drug interactions of Ciprofloxacin.

2. Discuss the clinical pharmacology of oral antidiabetic drugs.

(20×2 = 40 marks)

3. Write briefly on:

3A. Cyclosporine.

3B. Vinca alkaloids.

3C. Dimercaprol.

3D. Albendazole.

3E. Retroviral protease inhibitors.

3F. Antithyroid drugs.

(10×6 = 60 marks)