

Reg. No.

MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2009

SUBJECT: PAPER I: GENERAL PHARMACOLOGY, CLINICAL PHARMACOLOGY,
BIOSTATISTICS AND SCREENING

Wednesday, April 01, 2009

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

1. Beneficial and harmful effects of drug combinations - substantiate with suitable examples.
(20 marks)
2. Influence of pharmacogenetics on therapeutic outcome of drugs – discuss with examples.
(20 marks)
3. **Write briefly on:**
 - 3A. Transgenic animals.
 - 3B. Effect of change in kinetics on drug dose, dosing schedule.
 - 3C. Randomization techniques.
 - 3D. Receptor supersensitivity and its clinical relevance.
 - 3E. Neutraceuticals.
 - 3F. Hepatotoxic drugs.

(10×6 = 60 marks)



MANIPAL UNIVERSITY**MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2009****SUBJECT: PAPER II: AUTONOMIC NERVOUS SYSTEM, CARDIOVASCULAR SYSTEM, DIURETICS, RESPIRATORY SYSTEM**

Thursday, April 02, 2009

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ **Answer ALL the questions.**
- ✍ **Write your answers that are brief, clear, relevant and legible.**
- ✍ **Illustrate your answers with neatly drawn and correctly labeled diagrams wherever appropriate.**

1. Essay questions:

- 1A. Discuss the pharmacodynamics and limitations of drugs used in therapy of myocardial ischaemia.
- 1B. Discuss the mechanism of action of drugs used in prophylaxis and treatment of organophosphate poisoning.

(20×2 = 40 marks)

2. Write briefly on:

- 2A. Non-cardiovascular uses of sympathomimetic drugs.
- 2B. Inhibitors of Renal Epithelial Na^+ Channels.
- 2C. Positive inotropic agents.
- 2D. Inhibitors of Renin Angiotensin System.
- 2E. Non – nicotinic therapies for smoking cessation.
- 2F. Peripheral skeletal muscle relaxants.

(10×6 = 60 marks)



Reg. No.

HEALTH SCIENCES LIBRARY

MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2009

SUBJECT: PAPER III: CENTRAL NERVOUS SYSTEM, GASTRO INTESTINAL TRACT,
BLOOD, AUTACOIDS, MISCELLANEOUS.

Friday, April 03, 2009

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

1. **Essay questions:**

- 1A. Discuss the drug therapy of parkinsonism.
- 1B. Discuss the role of cytokines in health and disease. Describe the drugs affecting the same.

(20×2 = 40 marks)

2. **Write briefly on:**

- 2A. Gabapentin.
- 2B. Drug treatment of obesity.
- 2C. Proton pump inhibitors.
- 2D. Low molecular weight heparins.
- 2E. Ondansetron.
- 2F. Opioid antagonists

(10×6 = 60 marks)



Reg. No.

MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2009

SUBJECT: PAPER IV: CHEMOTHERAPY, HORMONES, VACCINES, VITAMINS

Saturday, April 04, 2009

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

1. **Essay questions:**

- 1A. Discuss the recent advances in the treatment of osteoporosis.
- 1B. Discuss the monoclonal antibodies as therapeutic agents.

(20×2 = 40 marks)

2. **Write briefly on:**

- 2A. GnRH analogues.
- 2B. Insulin secretagogues.
- 2C. Single daily dosage of aminoglycosides.
- 2D. Management of cerebral malaria.
- 2E. Caspofungin.
- 2F. Selective estrogen receptor modulators.

(10×6 = 60 marks)

