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### MANIPAL UNIVERSITY

IXCE. INU.

# MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2008

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

Tuesday, April 01, 2008

Answer ALL the questions.

Max. Marks: 100

- ✓ Write your answers that are brief, clear, relevant and legible.
- Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.
- 1. Essay questions:

Time: 3 Hrs.

- 1A. Discuss the pharmacology of G-Protein-Coupled Receptors.
- 1B. Give an account of modern scientific approach to drug discovery and clinical development.

 $(20 \times 2 = 40 \text{ marks})$ 

- 2. Write briefly on:
- 2A. Write briefly on statistical significance in clinical pharmacological research.
- 2B. Write on Bio-assay and Biostandardization.
- 2C. How do you screen a newly synthesized compound for its Anti-inflammatory activity?
- 2D. Write briefly on therapeutic drug monitoring.
- 2E. Write briefly on toxic potential on fetus of therapeutically used drugs.
- 2F. Write briefly on the use of transgenic animal models in pharmacological experiments.

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# MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2008

SUBJECT: PAPER II: AUTONOMIC NERVOUS SYSTEM, CARDIOVASCULAR SYSTEM, DIURETICS, RESPIRATORY SYSTEM

Wednesday, April 02, 2008

Answer ALL the questions.

Max. Marks: 100

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- **Write your answers that are brief, clear, relevant and legible.**
- Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.
- 1. Essay questions:

Time: 3 Hrs.

- 1A. Discuss the clinical uses of beta 1 selective and recently introduced vasodilator beta adrenergic receptor blockers.
- 1B. Discuss the drug management of commonly encountered clinical types of cardiac tachyarrythmias.

 $(20 \times 2 = 40 \text{ marks})$ 

- 2. Write briefly on:
- 2A. Describe the clinical uses of atropine like drugs.
- 2B. Discuss the role of diuretics in the management of different clinical types of edema.
- 2C. Describe the role of angiotensin receptor blockers in therapeutics.
- 2D. Discuss the merits and demerits of inhalation steroids.
- 2E. Discuss why statins are more commonly preferred to other drugs for dyslipidemias.
- 2F. Anti-ischemic drugs in angina pectoris.

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### MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2008

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

Thursday, April 03, 2008

Time: 3 Hrs.

Answer ALL the questions.

Max. Marks: 100

- Write your answers that are brief, clear, relevant and legible.
- Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.
- 1. Essay questions:
- 1A. Briefly describe the pathophysiology and discuss the therapeutics of neurodegenerative disorders.
- 1B. Describe the role of Growth Factors in haematopoiesis.

 $(20 \times 2 = 40 \text{ marks})$ 

- 2. Write briefly on:
- 2A. GABA modulators in epilepsy.
- 2B. NMDA receptor antagonists.
- 2C. Steroid sparing agents in rheumatoid arthritis.
- 2D. Cannabinoids.
- 2E. Selective serotonin receptor inhibitors.
- 2F. Therapeutic uses of prostaglandins.

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# MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2008

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

Friday, April 04, 2008

Time: 3 Hrs.	Max. Marks: 100

- Answer ALL the questions.
- Ø Write your answers that are brief, clear, relevant and legible.
- ℤ Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.
- 1. Essay questions:
- 1A. Discuss macrolide antibiotics. Add a note on its current status.
- 1B. Discuss the therapeutically useful actions of glucocorticoids. Explain the long term toxicities of glucocorticoids and methods to minimize them.

 $(20 \times 2 = 40 \text{ marks})$ 

- 2. Write briefly on:
- 2A. Vitamin B<sub>12</sub>.
- 2B. Current status of thalidomide.
- 2C. III generation Cephalosporins.
- 2D. Guidelines to treat HIV patients.
- 2E. Selective estrogen receptor modulators.
- 2F. Nitazoxanide.

 $(10\times6 = 60 \text{ marks})$