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MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2012

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

Monday, April 02, 2012

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 labelled diagrams wherever appropriate.**

1. **Essay Questions:**

- 1A. Discuss the significance of drug receptor interactions with suitable examples. Illustrate how age and disease affect the responsiveness to drug therapy.
- 1B. Describe the experimental methods to evaluate anti-diabetic action of drugs.

(20×2 = 40 marks)

2. **Write briefly on:**

- 2A. The relationship of drug distribution to pharmacodynamics
- 2B. The prerequisites and explain the study design of phase – II clinical trial
- 2C. "**conflict of interest**" giving a suitable example
- 2D. The clinical significance of enzyme induction
- 2E. Precautions to be followed while prescribing drugs in pregnancy
- 2F. The impact of cost on selection of drug therapy for chronic management of diseases

(10×6 = 60 marks)



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MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2012

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

Tuesday, April 03, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

1. **Essay Questions:**

- 1A. Discuss Vaughan-Williams classification of Anti-arrhythmic agents with its merits and demerits. Discuss the mechanism of action of each class of these drugs.
- 1B. Discuss the pharmacology of **alpha (α) blockers**. Add a note on their current status in therapeutics.

(20×2 = 40 marks)

2. **Write briefly on:**

- 2A. Aldosterone antagonist in therapeutics
- 2B. $\text{Na}^+ / \text{K}^+ / 2\text{Cl}^-$ symport inhibitors
- 2C. Pharmacotherapy of myasthenia gravis
- 2D. Sodium Nitroprusside
- 2E. Inhalational agents used in bronchial asthma
- 2F. Atropine derivatives in therapeutics

(10×6 = 60 marks)



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MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2012

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

Wednesday, April 04, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

1. Essay Questions:

- 1A. Mention the various dopaminergic pathways in central synapses. Discuss the effect of drugs in nigrostriatal pathway.
- 1B. Discuss the recent advances in the treatment of epilepsy.

(20×2 = 40 marks)

2. Write briefly on:

- 2A. Low molecular weight heparins
- 2B. Atypical antipsychotics
- 2C. d- Penicillamine
- 2D. Intravenous anaesthetics
- 2E. Pharmacotherapy of H-Pylori infection
- 2F. Therapeutic uses and toxicity of oxygen

(10×6 = 60 marks)



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MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2012

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

Thursday, April 05, 2012

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Answer ALL the questions.

1. Essay Questions:

- 1A. Discuss the various mechanisms in the development of antimicrobial resistance and add a note on the methods adopted to prevent it.
- 1B. Discuss various drugs used in thyrotoxicosis with their rationale.

(20×2 = 40 marks)

2. Write briefly on:

- 2A. Somatostatin analogs
- 2B. Therapeutic uses of gonadotropins
- 2C. Paclitaxel
- 2D. Artemisinin
- 2E. Antirabies vaccine
- 2F. Newer insulin delivery devices

(10×6 = 60 marks)

