

MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2015

SUBJECT: PAPER I: GENERAL PHARMACOLOGICAL PRINCIPLES AND APPLIED SCIENCES

Wednesday, April 01, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Essay questions:

1. Discuss the role of dopamine in central nervous system disorders. (15 marks)

2. Discuss the passage of drugs across the biological membranes. (15 marks)

3. Write briefly on:

3A. Phototoxicity

3B. Down regulation of receptors and its clinical importance

3C. HER2 receptors

3D. Blood brain barrier

3E. Advantages and disadvantages of topical application of drugs

3F. Drugs contraindicated during breast feeding

3G. Methods to prolong action of orally administered drugs

3H. Loading dose

3I. Drug releasing implants

3J. Risk benefit ratio

(7 marks × 10 = 70 marks)



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MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2015

SUBJECT: PAPER II: SYSTEMIC PHARMACOLOGY, CHEMOTHERAPY AND THERAPEUTICS

Thursday, April 02, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Essay questions:**

1. Discuss drug treatment of cardiac edema.

(15 marks)

2. Discuss various drugs used in malaria.

(15 marks)

3. **Write briefly on:**

3A. Teicoplanin

3B. Selective α_2 agonists

3C. Beta lactamase inhibitors

3D. Plasma expanders

3E. Ondansetron

3F. Steroid receptors

3G. Caspofungin

3H. Drugs for myasthenia gravis

3I. Dapagliflozin

3J. Drugs for vertigo

(7 marks \times 10 = 70 marks)



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MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2015

SUBJECT: PAPER III: EXPERIMENTAL PHARMACOLOGY, BIOASSAY AND STATISTICS

Saturday, April 04, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Essay questions:

1. Discuss the screening methods to evaluate analgesic activity of drugs. (15 marks)

2. Discuss the experimental methods to evaluate antiasthmatic action of drugs. (15 marks)

3. Write briefly on:

3A. Chemical induced carcinoma models

3B. ANOVA

3C. Acute toxicity studies

3D. Guinea pig as an experimental animal

3E. Methods of euthanasia in animals

3F. Ethics committee

3G. Streptozotocin induced diabetes

3H. Writing levers in experimental pharmacology

3I. Dose response relationship

3J. Student's t- test

(7 marks × 10 = 70 marks)



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MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2015

SUBJECT: PAPER IV: CLINICAL PHARMACOLOGY AND RECENT ADVANCES

Monday, April 06, 2015

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.**

✍ **Essay questions:**

1. Discuss the recent advances in the management of schizophrenia. (15 marks)

2. Explain the drug development and approval process. (15 marks)

3. **Write briefly on:**

- 3A. Me too drugs
- 3B. Newer vasodilators
- 3C. Recent advances in the treatment of congestive heart failure
- 3D. P drug concept
- 3E. Role of monoclonal antibodies in rheumatoid arthritis
- 3F. Antiglucocorticoids
- 3G. Expedited review
- 3H. Counterfeit drugs
- 3I. Drug eluting stents
- 3J. Recent supreme court rulings on clinical trials

(7 marks × 10 = 70 marks)

