

MANIPAL UNIVERSITY**MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2014****SUBJECT: PAPER I: GENERAL PHARMACOLOGICAL PRINCIPLES AND APPLIED SCIENCES**

Tuesday, April 01, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss various transducer mechanisms.

(15 marks)

2. Discuss pharmacokinetic drug interactions with examples.

(15 marks)

3. **Write short notes on:**

3A. Drugs contraindicated during pregnancy

3B. Receptor theory of drug action

3C. Dose response relationship

3D. Age as a factor modifying drug action

3E. Principles of HPLC

3F. Plasma half-life

3G. Fixed drug eruptions

3H. Principles of management of poisoning

3I. Drug withdrawal reactions

3J. Enzyme inhibitors

(7×10 = 70 marks)



MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2014

SUBJECT: PAPER II: SYSTEMIC PHARMACOLOGY, CHEMOTHERAPY AND THERAPEUTICS

Wednesday, April 02, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

☞ Answer ALL the questions.

☞ Long Essays:

1. Discuss the pharmacology of vasodilators in hypertension. (15 marks)
2. Discuss the treatment of opportunistic infections in AIDS. (15 marks)

3. Write short notes on:

- 3A. Fentanyl
- 3B. Catechol-*O*-methyl transferase inhibitors
- 3C. Drug treatment of inflammatory bowel disease
- 3D. Lithium carbonate
- 3E. Vasopressin receptor antagonists
- 3F. Antiplatelet drugs
- 3G. Selective estrogen receptor modulators
- 3H. Topical steroids
- 3I. Antipseudomonal penicillins
- 3J. Artemisinin based Combination Therapy (ACT)

(7×10 = 70 marks)



MANIPAL UNIVERSITY**MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2014****SUBJECT: PAPER III: EXPERIMENTAL PHARMACOLOGY, BIOASSAY AND STATISTICS**

Thursday, April 03, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **Long Essays.**

1. Discuss various animal models for screening antipsychotics.

(15 marks)

2. Discuss screening methods for analgesics.

(15 marks)

3. Write short notes on:

3A. Carcinogenicity studies

3B. Case control study

3C. Actophotometer

3D. Detection and estimation of histamine in invitro preparations

3E. Repeated measures of ANOVA

3F. Chromatography

3G. Three point assay

3H. Pentylenetetrazole

3I. Post - hoc tests

3J. CPSCEA guidelines for physical facilities and environment for animal house

(7×10= 70 marks)



MANIPAL UNIVERSITY

MD (PHARMACOLOGY) DEGREE EXAMINATION – APRIL 2014

SUBJECT: PAPER IV: CLINICAL PHARMACOLOGY AND RECENT ADVANCES

Friday, April 04, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Long Essays:

1. Discuss the role of myeloid growth factors in therapy. (15 marks)

2. Explain various phases of clinical trials. (15 marks)

3. Write short notes on;

3A. Glucagon- like peptide- 1 (GLP-1) receptor agonists in therapy

3B. Drug therapy of pulmonary arterial hypertension

3C. Febuxostat

3D. Cost benefit analysis

3E. Pharmacovigilance program of India

3F. Good manufacturing practice guidelines

3G. Impact of irrational prescribing of drugs

3H. Teriparatide

3I. Racecadotril

3J. Biological agents used in the treatment of rheumatoid arthritis

(7×10 = 70 marks)

