### MANIPAL UNIVERSITY

## M. PHARM. PART-I DEGREE EXAMINATION - MAY/JUNE 2013

# SUBJECT: APPLIED PHARMACOTHERAPEUTICS – I (PPR 601)

(SPECIALIZATION: PHARMACY PRACTICE)

Friday, May 24, 2013

Time: 10:00 - 13:00 Hrs.

Max. Marks: 100

- 1A. Classify hypertension based on JNC VII guidelines. Explain the management of hypertensive emergency and hypertension in pregnancy.
- 1B. Explain the management of Acute Myocardial infarction.

((2+8)+10=20 marks)

- 2A. Explain the management of various seizure disorders.
- 2B. Discuss the management of Parkinsons disease.

(10+10=20 marks)

- 3A. Explain the role of various bronchodilators in the management of asthma.
- 3B. Explain the management of hyperlipidemia.
- 3C. Explain the role of atypical antipsychotics in the management of schizophrenia

(6+8+6=20 marks)

- 4A. Enumerate various cellular components of immunity and explain the role of each type of cells.
- 4B. Write briefly on serotonin syndrome.
- 4C. Explain the management of migraine.

(10+5+5 = 20 marks)

- 5A. Explain the clinical manifestations of chronic renal failure.
- 5B. Explain pathophysiology, clinical presentation and management of Systemic sclerosis.

(10+10=20 marks)

PPR 601

### MANIPAL UNIVERSITY

## M. PHARM PART-I DEGREE EXAMINATION - MAY/JUNE 2013

## SUBJECT: APPLIED PHARMACOTHERAPEUTICS – II (PPR 602)

(SPECIALIZATION: PHARMACY PRACTICE)

Monday, May 27, 2013

Time: 10:00 - 13:00 Hrs.

Max. Marks: 100

- 1A. Describe the role of sulfonylureas in the management of diabetes mellitus.
- 1B. Explain the management of diabetic ketoacidosis.
- 1C. Explain the management of thyroid storm.

(8+7+5 = 20 marks)

- 2A. Explain the pathogenesis and clinical symptoms of pulmonary tuberculosis.
- 2B. Explain the management of multi drug resistant tuberculosis.

(10+10 = 20 marks)

- 3A. Enumerate the clinical symptoms of pneumonia and describe its management.
- 3B. Explain the clinical symptoms and management of uncomplicated urinary tract infections.

(10+10 = 20 marks)

- 4A. Differentiate osteoarthritis and rheumatoid arthritis and explain the role of steroids and NSAIDs in the management of rheumatoid arthritis.
- 4B. Explain the management of open angle glaucoma.
- 4C. Explain the mechanism of any two drugs that cause liver disorder.

(10+5+5=20 marks)

- 5A. Describe the etiopathogenesis and management of bacterial endocarditis.
- 5B. Enumerate the opportunistic infections of AIDS and explain the management of any two.

(10+10 = 20 marks)

## MANIPAL UNIVERSITY

## M. PHARM. PART-I DEGREE EXAMINATION - MAY/JUNE 2013

SUBJECT: CLINICAL AND HOSPITAL PHARMACY (PPR 603)

(SPECIALIZATION: PHARMACY PRACTICE)

Wednesday, May 29, 2013

Time: 10:00 - 13:00 Hrs.

Max. Marks: 100

- 1A. Enumerate various clinical pharmacy services and explain the goals and procedures for any two.
- 1B. Discuss the selection of location and Schedule N requirements to start a community pharmacy.

(10+10 = 20 marks)

- 2A. Enumerate four types of costs. Explain cost benefit analysis in the pharmaco-economic evaluation with a suitable example.
- 2B. Classify pulmonary function tests and explain the significance of any three tests.
- 2C. Write briefly on OTC drugs.

(6+10+4 = 20 marks)

- 3A. Define hospital formulary. Describe general guiding principles for developing a hospital formulary system.
- 3B. Explain the steps involved in patient medication counseling and the skills needed for counseling patients.

(10+10 = 20 marks)

- 4A. Mention the need for drug information service and explain the modified systematic approach for providing drug information service.
- 4B. Discuss the various methods of quality assurance program for Clinical Pharmacy Services.

(12+8 = 20 marks)

## 5. Write briefly on:

- 5A. Types of medication error
- 5B. Case cohort study
- 5C. Medication adherence
- 5D. Legal requirements for prescription

 $(5\times4 = 20 \text{ marks})$ 



## MANIPAL UNIVERSITY

### M. PHARM, PART-I DEGREE EXAMINATION - MAY/JUNE 2013

SUBJECT: DRUG DISCOVERY DEVELOPMENT AND CLINICAL RESEARCH (PPR 604)
(SPECIALIZATION: PHARMACY PRACTICE)

Friday, May 31, 2013

Time: 10:00 - 13:00 Hrs.

Max. Marks: 100

#### Answer ALL questions.

- 1A. Explain the process of drug discovery and preclinical drug development.
- 1B. Define clinical trials and explain the different phases of clinical trial.

(10+10 = 20 marks)

- 2A. Describe the following components of a clinical trial protocol:
  - i) Trial objective and purpose
  - ii) Trial design
  - iii) Assessment of efficacy
  - iv) Financing and insurance
  - v) Publication policy
- 2B. Explain the steps involved in critical evaluation of a biomedical literature.

(10+10 = 20 marks)

- 3A. Mention the essential documents required after the conduct of a clinical trial with respect to purpose and their location in the files of investigator or a sponsor.
- 3B. Describe the provision for data security in clinical trials and write briefly on system dependability.
- 3C. Draw the flowchart for ANDA process.

(8+8+4 = 20 marks)

- 4A. Explain the objectives and principles of ICH-GCP guidelines.
- 4B. Describe the role of institutional ethical committee.
- 4C. Discuss the measures to ensure drug safety in clinical trial.

(8+6+6=20 marks)

- 5A. Explain the roles and responsibilities of investigator with respect to:
  - i) Randomization process and unblinding.
  - ii) Informed consent of trial subjects.
- 5B. Explain the qualification and responsibilities of a monitor in clinical trials.

(10+10 = 20 marks)

## MANIPAL UNIVERSITY

## M. PHARM. PART-I DEGREE EXAMINATION - MAY/JUNE 2013

SUBJECT: CLINICAL PHARMACOKINETICS, TOXICOLOGY AND BIOSTATISTICS (PPR 605)
(SPECIALIZATION: PHARMACY PRACTICE)

Monday, June 03, 2013

Time: 10:00 - 13:00 Hrs.

Max. Marks: 100

### Answer ALL questions.

- 1A. Define half life of a drug. Explain the determination and clinical significance of plasma half life.
- 1B. Explain the various pharmacokinetic models. Explain one compartment open model for intravenous bolus injection.

(10+10 = 20 marks)

- 2A. Define and explain the clinical significance of apparent volume of distribution.
- 2B. Explain nonlinear kinetics with suitable examples.

(10+10 = 20 marks)

- 3A. Explain the clinical signs and symptoms of organophosphorus poisoning and explain its management.
- 3B. Explain the clinical signs and symptoms of alcohol withdrawal and explain the detoxification procedure.

(10+10 = 20 marks)

- 4A. Enumerate the tests of significance. Explain any two parametric tests of significance.
- 4B. Explain the various tests of central tendency with suitable examples for each.

(10+10 = 20 marks)

- 5A. Explain the TDM of theophylline and explain the significance of TDM in clinical practice.
- 5B. Explain the general study design for bioavailability studies.

(10+10 = 20 marks)

