

**MANIPAL UNIVERSITY****M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2014****SUBJECT: APPLIED PHARMACOTHERAPEUTICS – I (PPR 601)**  
**(SPECIALIZATION: PHARMACY PRACTICE)**

Saturday, May 24, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

- 1A. Draw the treatment algorithm and explain the role of COMT and MAO-B inhibitors in the management of Parkinson's disease.
- 1B. Explain the management of status epilepticus. (10+10 = 20 marks)
- 2A. Enumerate the causative factors for secondary hypertension and classify hypertension based on the latest JNC guidelines.
- 2B. Explain the non-pharmacological and pharmacological management of hypertension. (8+12 = 20 marks)
- 3A. Discuss the etiology, clinical manifestations and management of iron deficiency anemia.
- 3B. Explain the mechanisms of any four drug induced hematological disorders. (10+10 = 20 marks)
- 4A. Discuss the pathophysiology and management of chronic asthma.
- 4B. Enumerate the various types of dialysis and explain any two with its significance. (10+10 = 20 marks)
- 5A. Explain the pathogenesis, clinical presentation and management of systemic sclerosis.
- 5B. Explain the advantages of second-generation antipsychotic drugs over traditional antipsychotics.
- 5C. Write a short note on neuroleptic malignant syndrome. (10+5+5 = 20 marks)



## MANIPAL UNIVERSITY

## M. PHARM PART-I DEGREE EXAMINATION – MAY/JUNE 2014

SUBJECT: APPLIED PHARMACOTHERAPEUTICS – II (PPR 602)  
(SPECIALIZATION: PHARMACY PRACTICE)

Monday, May 26, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

- 1A. Explain the dosing of levothyroxine in hypothyroidism patients.  
1B. Discuss the role of thiourea in the management of hyperthyroidism.  
1C. Explain the role of dipeptidyl peptidase-4 (DPP-4) inhibitors in the management of diabetes mellitus. (6+8+6 = 20 marks)
- 2A. Write the different risk factors for complicated urinary tract infections.  
2B. Explain the management of native valve endocarditis.  
2C. Explain the management of community acquired pneumonia. (4+8+8 = 20 marks)
- 3A. Explain the etio-pathogenesis of acquired immune deficiency syndrome and discuss the antiretroviral drug therapy in HIV infection.  
3B. Enlist different complications of falciparum malaria and explain its management. (10+10 = 20 marks)
- 4A. Explain the management of osteoporosis with algorithm.  
4B. Discuss the general prescribing guidelines in pediatrics.  
4C. Discuss the role of beta-adrenoreceptor antagonists in the management of glaucoma. (10+5+5 = 20 marks)
- 5A. Explain the management of extrapulmonary tuberculosis.  
5B. Describe the eradication regimens for H.Pylori infection.  
5C. Briefly explain mechanisms of any four drug induced liver disorders. (8+4+8 = 20 marks)



**MANIPAL UNIVERSITY****M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2014****SUBJECT: CLINICAL AND HOSPITAL PHARMACY (PPR 603)  
(SPECIALIZATION: PHARMACY PRACTICE)**

Wednesday, May 28, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

- 1A. Enumerate advantages and disadvantages of hospital formulary system.
- 1B. What is Pharmacy Therapeutic Committee? Explain its role in ADR reporting and drug defection reporting.
- 1C. Explain the time release pattern of cardiac enzyme after acute myocardial infarction.  
(5+10+5 = 20 marks)
- 2A. Explain the various markers with normal values to estimate glomerular filtration rate. Mention three formulas to calculate creatinine clearance and its significance.
- 2B. Describe different steps involved in DUE program with the help of a schematic representation.  
(8+12 = 20 marks)
- 3A. Define Pharmacoepidemiology. Mention the aims and applications of Pharmacoepidemiology.
- 3B. Describe any three types of pharmaco-economic evaluations.
- 3C. Define unit dose drug distribution system and mention its advantages and disadvantages.  
(5+9+6 = 20 marks)
- 4A. Discuss the goals and procedures of the following clinical pharmacy services:  
i) Therapeutic drug monitoring  
ii) Ward round participation
- 4B. Enumerate and explain various synthetic capability tests for liver.
- 4C. Explain any five pulmonary function tests.  
(10+5+5 = 20 marks)
5. **Write briefly on:**
- 5A. Rational use of drugs
- 5B. Functions of a hospital pharmacist
- 5C. Patient information leaflet
- 5D. Drug information resources  
(5 marks × 4 = 20 marks)



**MANIPAL UNIVERSITY****M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2014****SUBJECT: DRUG DISCOVERY DEVELOPMENT AND CLINICAL RESEARCH (PPR 604)  
(SPECIALIZATION: PHARMACY PRACTICE)**

Friday, May 30, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

**✍ Answer ALL questions.**

- 1A. Describe the composition and responsibilities of IRB/IEC.  
1B. Explain safety reporting of serious adverse events in clinical trials.  
1C. Describe the various methods for ensuring security of computerized data in clinical trials. (10+5+5 = 20 marks)
- 2A. Explain the objectives and procedure of obtaining informed consent.  
2B. Describe the functions of various regulatory authorities in India, USA, and Europe. (10+10 = 20 marks)
- 3A. Enumerate essential components of a clinical trial protocol.  
3B. Explain various pre-clinical toxicity studies.  
3C. Explain the various sources of lead generation with suitable examples. (10+5+5 = 20 marks)
- 4A. Describe the contents of investigators brochure.  
4B. Explain the procedure of critical evaluation of a quantitative and qualitative review article. (10+10 = 20 marks)
- 5A. Explain the process of ANDA submission with a flow chart.  
5B. Explain the responsibilities of a principal investigator with regard to records and reports, and premature termination of a trial. (10+10 = 20 marks)





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### M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2014

SUBJECT: CLINICAL PHARMACOKINETICS, TOXICOLOGY AND BIostatISTICS (PPR 605)

(SPECIALIZATION: PHARMACY PRACTICE)

Monday, June 02, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

- 1A. Explain the general principles involved in the management of acute poisoning.  
1B. Mention the clinical symptoms and explain the management of paracetamol and arsenic poisoning.  
(10+10 = 20 marks)
- 2A. Mention the indications for TDM and explain the TDM for digoxin and theophylline.  
2B. Define bioavailability. Explain the factors affecting bioavailability.  
(10+10 = 20 marks)
- 3A. Mention signs and symptoms of opioid abuse and explain the process of detoxification.  
3B. Explain the factors affecting protein binding of drug.  
(10+10 = 20 marks)
- 4A. Explain one compartment open model for extra vascular administration.  
4B. Write briefly on:  
i) Enterohepatic circulation  
ii) Steady state concentration  
(10+10 = 20 marks)
- 5A. Explain the significance and determination of ANOVA and Mann-Whitney U test.  
5B. Explain the measures of central tendency and variance.  
(10+10 = 20 marks)

