

MANIPAL UNIVERSITY

M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2009

SUBJECT: APPLIED PHARMACOTHERAPEUTICS – I (PPR 601)

SPECIALIZATION: PHARMACY PRACTICE

Wednesday, May 27, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 100

- 1A. Enumerate the NYHA classification of heart failure and explain the pathophysiology of heart failure.
- 1B. Explain the role of ACE inhibitors, diuretics and digoxin in the management of congestive heart failure.
- (10+10 = 20 marks)
- 2A. Discuss the various management options for Parkinson's disease.
- 2B. Discuss the etiology, clinical manifestations and management of iron deficiency anemia.
- (10+10 = 20 marks)
- 3A. Explain the clinical manifestations of chronic renal failure.
- 3B. Enumerate the risk factors and explain the management of ischemic stroke.
- (10+10 = 20 marks)
- 4A. Define asthma and enumerate the trigger factors for asthma.
- 4B. Explain the management of chronic asthma in adults.
- 4C. Enumerate the clinical features that differentiate between chronic bronchitis and emphysema.
- (5+10+5 = 20 marks)
- 5A. Explain the effects of HMG Co-A reductase inhibitors on lipid metabolism and mention their major side effects.
- 5B. Write briefly on serotonin syndrome.
- 5C. Mention the clinical manifestations and explain the management of systemic lupus erythematosus.
- (4+4+12 = 20 marks)



MANIPAL UNIVERSITY**M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2009****SUBJECT: APPLIED PHARMACOTHERAPEUTICS – II (PPR 602)****SPECIALIZATION: PHARMACY PRACTICE**

Thursday, May 28, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 100

- 1A. Explain the management of diabetic ketoacidosis.
1B. Describe the treatment options of hyperthyroidism.
1C. Explain the thyroid hormone replacement therapy in hypothyroidism. (6+10+4 = 20 marks)
- 2A. Mention the symptoms of amoebiasis and explain the treatment of same.
2B. Explain the etiology and treatment of protozoal and fungal infections in AIDS patient.
2C. Explain the treatment of bacterial endocarditis. (6+8+6 = 20 marks)
- 3A. Explain the management of any two upper respiratory tract infections.
3B. Explain the symptoms of malaria and the treatment regimen of falciparum malaria.
3C. Explain the management of hepatic encephalopathy and ascites. (6+8+6 = 20 marks)
- 4A. Explain the staging of cancer and the log cell kill hypothesis.
4B. Explain the management of peptic ulcer with an algorithm.
4C. Describe the role of biological modifiers in management of rheumatoid arthritis. (8+6+6 = 20 marks)
- 5A. Explain the drugs used for the management of primary open angle glaucoma.
5B. Explain the management of uncomplicated UTI in adults and children.
5C. Describe the prescribing guidelines in pregnancy. (6+8+6 = 20 marks)



MANIPAL UNIVERSITY

M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2009

SUBJECT: CLINICAL AND HOSPITAL PHARMACY (PPR 603)

SPECIALIZATION: PHARMACY PRACTICE

Friday, May 29, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 100

- 1A. Enumerate five important cardiac enzymes with its normal ranges and explain the time course of cardiac enzymes release following acute myocardial infarction.
- 1B. Discuss various standard parameters to be analyzed in urine with its significance. (10+10 = 20 marks)
- 2A. Define pharmacoepidemiology and discuss any two methodologies for pharmacoepidemiological studies.
- 2B. Discuss various types of pharmacokinetic interactions with examples. (12+8 = 20 marks)
- 3A. Discuss any three methods of dispensing during off hours.
- 3B. Explain the steps involved in patient medication counseling and the skills needed for counseling patients. (10+10 = 20 marks)
- 4A. Define hospital pharmacy. Draw an organization chart of hospital pharmacy in a large hospital and discuss the functions of each division.
- 4B. What is hospital formulary? Describe general guiding principles for developing hospital formulary system. (12+8 = 20 marks)
5. Write Briefly on:
- 5A. Types of medication error.
- 5B. OTC drugs.
- 5C. ABC method of inventory control.
- 5D. Record keeping in community pharmacy. (5×4 = 20 marks)



MANIPAL UNIVERSITY**M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2009****SUBJECT: DRUG DISCOVERY DEVELOPMENT AND CLINICAL RESEARCH (PPR 604)****SPECIALIZATION: PHARMACY PRACTICE**

Saturday, May 30, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 100

- 1A. Explain the various animal studies required during preclinical testing.
1B. Explain the role of structure activity relationship in drug discovery.
1C. Describe the methods and the importance of pharmacokinetic studies in preclinical testing.
(8+6+6 = 20 marks)
- 2A. Explain the process of IND application with a flow chart.
2B. Explain the component of inclusion and exclusion criteria in a protocol.
2C. Describe the objectives and process of Phase I clinical trial.
(10+4+6 = 20 marks)
- 3A. Explain the objectives and the functions of Institutional Review Board.
3B. Explain the qualifications and responsibilities of a monitor.
3C. Explain the principles of ICH-GCP guidelines.
(8+6+6 = 20 marks)
- 4A. Describe the critical literature evaluation of qualitative systematic reviews.
4B. Describe the rules and regulations for providing compensation to study subject participation.
4C. Describe the various contents of an informed consent form.
(6+6+8 = 20 marks)
- 5A. Explain the procedures adopted in order to ensure security of computerized data.
5B. Explain the objectives and role of various regulatory authorities in conducting clinical trials.
5C. Explain the qualifications and the responsibilities of a chief investigator in medical care of trial subjects.
(6+8+6 = 20 marks)



MANIPAL UNIVERSITY**M. PHARM. PART-I DEGREE EXAMINATION – MAY/JUNE 2009****SUBJECT: CLINICAL PHARMACOKINETICS, TOXICOLOGY AND BIostatISTICS (PPR 605)****SPECIALIZATION: PHARMACY PRACTICE**

Monday, June 01, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 100

- 1A. Define loading dose. Explain the clinical importance and estimation of steady state concentration.
- 1B. Define volume of distribution and explain the clinical significance and the factors affecting volume of distribution.
- 1C. Explain various causes of non-linearity with suitable examples. (10+5+5 = 20 marks)
- 2A. Define bioavailability and bioequivalence. Explain various pharmacokinetic methods to measure bioavailability.
- 2B. Explain open compartment models for IV bolus administration. (10+10 = 20 marks)
- 3A. Explain therapeutic drug monitoring of gentamycin and digoxin.
- 3B. Define half life of drug and explain its clinical significance.
- 3C. Explain population pharmacokinetics. (10+5+5 = 20 marks)
- 4A. Describe the clinical features and management of acute organophosphate poisoning.
- 4B. Explain detoxification procedures for the following drugs of abuse
i) Opioids ii) Alcohol (10+10 = 20 marks)
- 5A. Explain Mann Whitney U and Pearsons correlation tests.
- 5B. Write briefly on:
i) Measures of central tendency.
ii) Data distribution curves. (10+10 = 20 marks)

