

**MANIPAL UNIVERSITY****FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – AUGUST 2009****SUBJECT: PD 4.1: PHARMACOTHERAPEUTICS – III**

Monday, August 03, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 70

**Long Essay Questions.**

1. Explain the various mechanisms of drug induced liver disorders with suitable examples. (10 Marks)
- 2A. Define Epilepsy and explain the international classification of epilepsy based on clinical presentations.
- 2B. Explain the management of status epilepticus. (5+5 = 10 Marks)
- 3A. Explain the role of atypical antipsychotics in the management of schizophrenia.
- 3B. Explain any the role of nonbenzodiazepines for management of anxiety. (5+5 = 10 Marks)

**Short Essay Questions.**

4. Explain the management of inflammatory bowel diseases.
5. Enumerate the contraindications for the anticoagulation therapy and explain the management of excessive bleeding during anticoagulation therapy.
6. Explain the etiology and management of drug induced hemolytic anemia.
7. Explain the role of narcotic analgesics in cancer pain management.
8. Explain the steps of evaluating biomedical literature for evidence based therapy.
9. Explain the management of hepatitis B infection. (5 × 6 = 30 Marks)

**Short Answer Questions.**

10. Difference between ulcerative colitis and Crohn's disease.
11. Explain the management of megaloblastic anemia.
12. Enumerate eight DSM IV criteria for depression.
13. Enumerate the role of lithium and valproate in the treatment of mania.
14. Enumerate four drugs with their dose used for obsessive compulsive disorder. (2 × 5 = 10 Marks)



**MANIPAL UNIVERSITY**  
**FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – AUGUST 2009**  
**SUBJECT: PD 4.2: HOSPITAL PHARMACY**  
 Tuesday, August 04, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 70

**SECTION – A****☞ Long Essay Questions.**

1. Discuss the manufacturing of small volume parenterals with respect to
  - 1A. Product testing and evaluation
  - 1B. Methods of sterilization
  - 1C. Packaging materials

(4+3+3 = 10 Marks)
2. What is a Pharmacy and Therapeutics Committee (PTC)? Explain the composition, operation and functions of PTC in a hospital.
 

(2+8 = 10 Marks)
3. Define inventory and purchase. Explain ABC analysis and Economic Order Quantity (EOQ) methods of inventory control.
 

(2+8 = 10 Marks)

**SECTION – B****☞ Short Essay Questions.**

4. Explain the activity chart of outpatient and inpatient dispensing in a hospital.
5. Explain any three types of classification of hospitals.
6. Explain any two drug distribution methods for inpatients in a hospital.
7. Explain the cycle of continuing professional development programs (CPD cycle).
8. Explain the composition and indications of TPN solution.
9. Write briefly on Infection Control Committee.
 

(5 × 6 = 30 Marks)

**SECTION – C****☞ Short Answers Questions.**

10. Explain the control procedure for perishable drugs.
11. Enumerate the steps in the development of evidence based guideline.
12. Explain the legal basis of the formulary system.
13. Enumerate any four pharmaceutical services rendered by a hospital pharmacist.
14. Define Central Sterile Supply Room and mention its functions.
 

(2 × 5 = 10 Marks)



**MANIPAL UNIVERSITY****FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – AUGUST 2009****SUBJECT: PD 4.3: CLINICAL PHARMACY**

Wednesday, August 05, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 70

**Long Essay Questions.**

1. State the goals and explain the procedure for Adverse reaction management and provision of drug information by clinical pharmacists.  
(5+5 = 10 Marks)
2. Elaborate on methods for evaluating compliance to standard in Quality Assurance of clinical pharmacy services.  
(10 Marks)
3. Explain the steps involved in patient counseling and discuss in detail about communication skills needed for a practicing pharmacist.  
(5+5 = 10 Marks)

**Short Essay Questions.**

4. Explain the format of a SOAP note.
5. Explain Liver function tests for assessing synthetic capability of liver with their clinical significance.
6. Describe the structure of patient data with relevance of each item in drug therapy monitoring.
7. Enlist the various pulmonary function tests and explain any one test with its significance.
8. Define therapeutic drug monitoring and list out indications for carrying out TDM.
9. Explain the process of evaluating Journal, Investigators, Research site and Funding in a clinical trial publication.  
(5 × 6 = 30 Marks)

**Short Answer Questions.**

10. Illustrate DUE cycle.
11. Mention Normal values of Haemoglobin and Haematocrit with its significance.
12. Define Medication history interview.
13. Define Pharmaceutical care.
14. Mention the types of Blinding in a clinical trial.  
(2×5 = 10 Marks)



**MANIPAL UNIVERSITY**  
**FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – AUGUST 2009**  
**SUBJECT: PD 4.4: BIOSTATISTICS AND RESEARCH METHODOLOGY**

Thursday, August 06, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 70

✍ **Answer ALL questions.**

✍ **Long Essay Questions**

1. Describe the two important observational epidemiological study designs with suitable examples.

(10 marks)

2A. Define correlation tests and explain its application.

2B. Explain the two tests for estimating linearity of data.

(5+5 = 10 marks)

3A. Define null hypothesis and explain its importance.

3B. Enumerate various parametric tests and explain any two.

(5+5 = 10 marks)

✍ **Short Essay Questions:**

4. Describe the Framinghams study.

5. Explain the requirements for a good quality protocol.

6. Explain the chi square tests with a suitable example.

7. Define central tendencies tests and explain the importance of standard deviation.

8. Explain the determination of sample size of proportions.

9. Explain the role of semi logarithmic and scatter plots.

(5 × 6 = 30 Marks)

✍ **Short Answer Questions:**

10. Mention the formula for estimating the standard error of mean.

11. Explain sign rank test with a suitable example.

12. Mention the applications of logarithmic graphs.

13. Explain the role of computers in medication order entry.

14. Explain the importance of power of a study.

(2×5 = 10 Marks)



**MANIPAL UNIVERSITY****FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – AUGUST 2009****SUBJECT: PD 4.5: BIOPHARMACEUTICS & PHARMACOKINETICS**

Friday, August 07, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 70

**Long Essay Questions**

1. Explain causes of Nonlinearity of pharmacokinetics and describe Michaelis-Menten equation for non-linear pharmacokinetics.
2. Explain the principal processes of urinary elimination of drugs.
3. Explain physicochemical factors influencing drug absorption.

(10 × 3 = 30 Marks)

**Short Essay Questions**

4. Describe Electrochemical diffusion and Endocytosis in drug absorption.
5. Discuss about patient related factors affecting protein binding of drugs.
6. Explain the role of Glomerular filtration in drug elimination.
7. Describe enterohepatic cycling.
8. Explain Mamillary compartment models with suitable illustration.
9. Explain physiologic models of pharmacokinetics.

(5 × 6 = 30 Marks)

**Short Answer Questions**

10. Define Endocytosis.
11. Define first pass metabolism.
12. Give two examples of absorption interactions.
13. What is peripheral compartment in compartment modeling?
14. Define Pharmaceutical equivalence.

(2 × 5 = 10 Marks)



**MANIPAL UNIVERSITY****FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – AUGUST 2009****SUBJECT: PD 4.6: CLINICAL TOXICOLOGY**

Saturday, August 08, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 70

**SECTION – A**

- 1A. Explain the approaches to basic life supportive care in acute poisoning.  
1B. Explain the grading of severity according to symptoms by Poison Severity scale. (5+5 = 10 marks)
- 2A. Explain the clinical features and complications of acute OP poisoning.  
2B. Explain the role of atropine and pralidoxime in the management of OP poisoning. (5+5 = 10 marks)
- 3A. Explain the various sources and clinical signs and symptoms of chronic lead Poisoning.  
3B. Explain the management of acute mercury poisoning. (5+5 = 10 marks)

**SECTION – B**

4. Discuss the first aid measures for snake bite envenomation.  
5. Explain clinical features and management of methanol poisoning.  
6. Explain the detoxification process of cocaine abuse.  
7. Classify pyrethroids. Explain the management of pyrethroid poisoning.  
8. Explain the signs and symptoms of hallucinogenic drug abuse.  
9. Explain Reye's syndrome. (5×6 = 30 marks)

**SECTION – C**

10. Explain the role of activated charcoal in gut decontamination.  
11. Enumerate the four drugs that can be removed by haemodialysis.  
12. Explain role of nicotine gum in smoking cessation.  
13. Explain the management of benzodiazepine poisoning.  
14. Explain cholinergic toxidrome with examples. (2×5 = 10 marks)



**MANIPAL UNIVERSITY****FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – AUGUST 2009****SUBJECT: PD 4.7: PHARMACOTHERAPEUTICS – I AND II**

Monday, August 17, 2009

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

**✍ Answer ALL questions.****✍ Long Essay**

1. Enumerate the various types of Insulin. Explain the mechanism, pharmacokinetics and adverse effects of Insulin injections.

(4+6 = 10 marks)

2A. Explain any two complications and management of Chronic Renal Failure (CRF).

2B. Explain the role of nitrates in acute coronary syndrome.

(5+5 = 10 marks)

3A. Explain the management of any four upper respiratory tract infections.

3B. Explain the algorithm for management of Rheumatoid arthritis.

(5+5 = 10 marks)

**✍ Short Essay**

4A. Differentiate lung volume tests and capacities with a neat illustration.

4B. Describe the management of protozoal infections in (Toxoplasmosis) AIDS patients.

4C. Discuss the treatment for Gout.

4D. Explain the management of Diabetic ketoacidosis.

4E. Explain the management of community acquired Pneumonia.

4F. Explain the role of Class I anti-arrhythmic agents.

(5×6 = 30 marks)

**✍ Short Answers**

5A. Classify Angina based on symptoms.

5B. Explain the ALLHAT clinical trial for the management of Hypertension.

5C. List out the ideal anti-retroviral drug combinations.

5D. Enlist four drugs that affect the thyroid function.

5E. Enumerate the abnormal findings of cerebro spinal fluid in Meningitis.

(2×5 = 10 marks)

