

MANIPAL UNIVERSITY**FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY/JUNE 2012****SUBJECT: PD 4.1: PHARMACOTHERAPEUTICS – III**

Wednesday, May 23, 2012

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

☞ Long Essay Questions:

1. Explain the clinical manifestations and management alcoholic liver disorder. (10 marks)
2. Describe the clinical presentation and pharmacotherapy of cognitive symptoms of Alzheimer's disease. (10 marks)
- 3A. Explain the treatment algorithm of schizophrenia.
- 3B. Explain the management of migraine headache. (5+5 = 10 marks)

4. Short Essay Questions:

- 4A. Explain the role of misoprostol in the management of NSAID induced ulcers.
- 4B. Explain the etiopathogenesis and management of drug induced aplastic anemia.
- 4C. Explain the algorithm for the management of deep venous thromboembolism.
- 4D. Explain the therapeutic considerations required to treat epilepsy in pregnant women and write the role of lamotrigine as add on therapy for epilepsy.
- 4E. Explain the advantages and disadvantages of evidence based guidelines.
- 4F. Explain the symptoms and management of megaloblastic anemia. (5×6 = 30 marks)

5. Short Answers:

- 5A. Difference between gastric ulcer and duodenal ulcer.
- 5B. Enumerate the contraindication for the anticoagulation therapy.
- 5C. Explain the DSM IV criteria for affective disorders.
- 5D. Explain the role of SSRIs in the treatment of depression.
- 5E. Enumerate the role of lithium and valproate in the treatment of mania. (2×5 = 10 marks)



MANIPAL UNIVERSITY**FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY/JUNE 2012****SUBJECT: PD 4.2: HOSPITAL PHARMACY**

Friday, May 25, 2012

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

Answer all questions.**Long Essay:**

1. Discuss the manufacturing of liquid oral solutions with respect to formulation considerations. (10 marks)

2. Mention the differences between the hospital formulary and drug list. Discuss the preparation aspects of hospital formulary. (2+8 = 10 marks)

3. Who is responsible for safe guarding and handling of controlled substances in the hospital and explain the procedure for ordering ward stock of controlled substances from the pharmacy. (3+7 = 10 marks)

Short Essay:

4A. Explain the organization of Hospital pharmacy in the large hospital.

4B. Define Central Sterile Supply Room (CSSR). Explain its layout and functions.

4C. Explain the perpetual inventory control and inventory turnover method.

4D. Explain unit dose drug distribution method.

4E. Explain the steps involved in the development of therapeutic / clinical guidelines.

4F. Explain various professional relations of hospital pharmacists. (5×6 = 30 marks)

Short Answers:

5A. Enumerate the sterilization methods used in the preparation of large volume parenterals.

5B. Explain the role of Pharmacy and Therapeutic Committee in the preparation of emergency drug list.

5C. Enumerate the composition of IEC.

5D. Enumerate any four functions of hospital pharmacy.

5E. Mention the content of Newsletter (Hospital Pharmacy Communication). (2×5 = 10 marks)



MANIPAL UNIVERSITY**FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY/JUNE 2012****SUBJECT: PD 4.3: CLINICAL PHARMACY**

Monday, May 28, 2012

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

Long Essay Questions:

1. Explain the steps involved in Drug Utilization Evaluation Cycle. (10 marks)
2. Explain the process of Evaluating Clinical trial Methodology. (10 marks)
3. State the goals and explain the procedure of Therapeutic drug monitoring and Drug information provision by the clinical pharmacists. (5+5 = 10 marks)

4. Short Essay Questions:

- 4A. Explain about disease monitoring in Pharmaceutical care.
- 4B. Discuss the role of Pharmacist in selection of drug therapy.
- 4C. Enlist the various pulmonary function tests and explain any one test briefly.
- 4D. Explain the role of pharmacist in reporting, documenting and managing the adverse drug reaction.
- 4E. Explain the laboratory assessment of anemia using RBC indices.
- 4F. Explain the structure of patient data and its relevance in disease management. (5×6 = 30 marks)

5. Short Answer Questions:

- 5A. Enumerate the key determinants of sample size in a clinical trial.
- 5B. Mention four consequences of medical error.
- 5C. Enumerate methods of causality assessment for adverse drug reactions.
- 5D. Mention liver function tests which are altered in hepatitis with their clinical significance.
- 5E. Enumerate various types of blinding used in clinical trial (2×5 = 10 marks)



MANIPAL UNIVERSITY**FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY/JUNE 2012****SUBJECT: PD 4.4: BIostatISTICS AND RESEARCH METHODOLOGY**

Wednesday, May 30, 2012

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

Answer all questions.**Long Essay:**

1. Describe the cohort studies with suitable examples.

(10 marks)

2. Describe the need and method of sample size determination for continuous data.

(10 marks)

3. Classify tests of significance with suitable examples and describe any two tests to compare means.

(10 marks)

Short Essay:

4A. Explain the contents of a good quality results during report writing.

4B. Explain the application of scatter plots and logarithmic plot with suitable examples.

4C. Define and explain the determination of standard deviation.

4D. Explain the different tests of linearity.

4E. Explain the importance and determination of chi square tests.

4F. Explain the role computers in patient record data base and patient medication profiles.

(5×6 = 30 marks)

Short Answer:

5A. Explain the role of 'p' value in statistics.

5B. Explain the determination of sign rank test.

5C. Explain the determination of Kruskal Wallis test.

5D. Explain the two types of errors in statistics.

5E. Explain the application of SPSS in statistics.

(2×5 = 10 marks)



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MANIPAL UNIVERSITY

FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY/JUNE 2012

SUBJECT: PD 4.5: BIOPHARMACEUTICS AND PHARMACOKINETICS

Friday, June 01, 2012

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ **Long Essay Questions.**

1. Explain the factors affecting drug distribution.
2. Discuss in detail about non-renal routes of elimination.
3. Explain one compartment open model for repetitive IV bolus administration.

(10×3 = 30 marks)

4. Short Essay Questions:

- 4A. Discuss the role of solubility and dissolution in drug absorption.
- 4B. Explain the concept of Apparent volume of distribution.
- 4C. Explain the role of Glomerular filtration in drug elimination.
- 4D. Describe open one compartment model for IV Infusion administration.
- 4E. Explain the Michaelis-Menten equation for Non-linear pharmacokinetics.
- 4F. Describe carrier mediated transport of drugs.

(5×6 = 30 marks)

5. Short Answer Questions:

- 5A. Describe displacement interaction of drugs.
- 5B. Define Mean Residence Time and mention the formula to calculate it.
- 5C. What is peripheral compartment in compartment modeling?
- 5D. Describe the effect of temperature on gastric emptying.
- 5E. Mention Cockcroft Gault formula for calculating creatinine clearance.

(2×5 = 10 marks)



MANIPAL UNIVERSITY**FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY/JUNE 2012****SUBJECT: PD 4.6: CLINICAL TOXICOLOGY**

Monday, June 04, 2012

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ Long Essay Questions:

- 1A. Explain the principles and role of toxicokinetics in poisoning decontamination.
1B. Discuss the principles and role of antidotes in the management of acute poisoning. (5+5 = 10 marks)
- 2A. Explain the signs and symptoms of Reye's syndrome with suitable example.
2B. Explain the role of methionine and N-acetylcysteine in acute acetaminophen poisoning. (5+5 = 10 marks)
- 3A. Explain the role of newer antidotes in the management of organophosphorus poisoning.
3B. Explain the clinical features and management of copper sulphate poisoning. (5+5 = 10 marks)

4. Short Essay Questions:

- 4A. Discuss the clinical symptoms and management of tricyclic antidepressants.
4B. Explain clinical features of Elapidae and Viperidae snake envenomation.
4C. Explain the withdrawal symptoms of alcohol abuse.
4D. Explain the clinical features and management of mushroom poisoning.
4E. Explain the importance of charcoal and emesis in the management of poisoning.
4F. Explain the clinical features of chronic lead poisoning. (5×6 = 30 marks)

5. Short Questions:

- 5A. Define intermediate syndrome and enumerate its clinical features.
5B. Explain the signs and symptoms of organochlorine poisoning.
5C. Explain the management of benzodiazepine poisoning.
5D. Enumerate the indications for antivenom therapy.
5E. Explain the sympathomimetic toxidrome with example. (2×5 = 10 marks)



MANIPAL UNIVERSITY

FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – MAY/JUNE 2012

SUBJECT: PD 4.7: PHARMACOTHERAPEUTICS – I & II

Wednesday, June 06, 2012

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ **Answer all questions.**

✍ **Long essay:**

- 1A. Explain the role of oral and inhaled beta agonists in the management of asthma.
- 1B. Explain the role of nucleoside reverse transcriptase inhibitors (NRTIs) and non-nucleoside reverse transcriptase inhibitors (NNRTs) in the management of HIV infections. (5+5 = 10 marks)
2. Explain the pathophysiology and first line drugs used in the management of Tuberculosis. (5+5 = 10 marks)
- 3A. Explain the complications of type II Diabetes mellitus.
- 3B. Explain the role of thiazolidinediones and alpha-glucosidase inhibitors in the management of type II Diabetes mellitus. (5+5 = 10 marks)

4. Short essay:

- 4A. Explain the management of Septic Shock.
- 4B. Explain the management of Hyperthyroidism.
- 4C. Explain the prevention and radical cure for Malaria.
- 4D. Discuss the role of biological modifiers in the management of Rheumatoid arthritis.
- 4E. Explain the role of statins and fibrates in the management of dyslipidemia.
- 4F. Explain the role of Calcium channel blockers and Angiotensin receptor blockers in the management of Hypertension. (5×6 = 30 marks)

5. Short Answers:

- 5A. Enlist the agents and events that trigger asthma.
- 5B. List out the complications of peritoneal dialysis.
- 5C. Mention the advantages and disadvantages of progesterone in Hormone replacement therapy.
- 5D. Enlist the adverse effects associated with methotrexate therapy.
- 5E. Discuss the role of osmotic agents in Meningitis. (2×5 = 10 marks)

