

MANIPAL UNIVERSITY

FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY 2014

SUBJECT: PD 4.1: PHARMACOTHERAPEUTICS – III

Monday, May 05, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ Answer ALL the questions.

✍ Long Essays:

1. Discuss the etiology and management of Peptic ulcer. (10 marks)
- 2A. Define Epilepsy and explain the international classification of epilepsy based on Clinical presentation.
- 2B. Explain the management of partial seizure. (5+5 = 10 marks)
- 3A. Explain the role of benzodiazepines in the management of anxiety disorders.
- 3B. Explain the role of haloperidol and clozapine in the management of schizophrenia. (5+5 = 10 marks)

✍ Short Essays:

- 4A. Explain the factors which promote gastroesophageal reflux.
- 4B. Explain the symptoms and management of iron deficiency anemia.
- 4C. Explain the management of crohn's disease.
- 4D. Explain the role of MAO-B inhibitors and COMT inhibitors in the management of Parkinsonism.
- 4E. Explain the etiopathogenesis and management of drug induced hemolytic anemia.
- 4F. Describe the clinical features of affective disorders. (5 marks×6 = 30 marks)

✍ Short Answers:

- 5A. Enumerate eight DSM IV criteria for depression.
- 5B. Explain the role of parenteral iron therapy.
- 5C. What is Schilling test and coombs test.
- 5D. State the different patterns of drug induced liver disorders with suitable examples.
- 5E. Enumerate the role of lithium and valproate in the treatment of mania. (2 marks×5 = 10 marks)



MANIPAL UNIVERSITY**FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY 2014****SUBJECT: PD 4.2: HOSPITAL PHARMACY**

Wednesday, May 07, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ Answer ALL questions.**✍ Long Essays:**

1. Define Hospital Pharmacy. Draw and explain organization chart of the hospital pharmacy in large hospital.
2. Enumerate various methods of inventory control. Explain any two methods with its advantages.
3. What is large volume parenteral and explain various sterilization methods and quality control tests for parenteral products.

(10 marks×3 = 30 marks)

✍ Short Essays:

- 4A. Write brief note on radiopharmaceuticals.
- 4B. Explain the procedure and advantages of unit dose drug distribution system.
- 4C. Define Total Parenteral Nutrition (TPN) and explain its indications and contraindications.
- 4D. Explain the guiding principles to adapt hospital formulary system in the hospitals.
- 4E. Write the procedure for getting ward stock of narcotics from hospital pharmacy.
- 4F. Explain continuing professional development (CPD) cycle.

(5 marks×6 = 30 marks)

✍ Short Answers:

- 5A. Enumerate four important functions of hospital pharmacist.
- 5B. Enumerate the members of infection control committee.
- 5C. What is the role of research and ethical committee?
- 5D. Define Central Sterile Supply Room (CSSR) and enlist two important objectives of CSSR.
- 5E. Mention the parts of pharmacy news letter.

(2 mark×5 = 10 marks)



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FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY 2014

SUBJECT: PD 4.3: CLINICAL PHARMACY

Friday, May 09, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ Answer ALL the questions.

✍ Long Essays:

1. Describe the steps in patient counseling process.
2. Explain the structure of patient's data analysis and its relevance in patient care.
3. Describe the steps in the DUE cycle.

(10 marks×3 = 30 marks)

✍ Short Essays:

- 4A. Describe the facilities required to establish a drug information center.
- 4B. Explain any two methods of antibiotic sensitivity testing.
- 4C. Enlist various pulmonary function tests and explain any one test briefly.
- 4D. Explain the role of pharmacists in the detection, assessment and management of ADRs.
- 4E. Explain the importance of ward round follow-up by clinical pharmacists.
- 4F. Discuss the procedure for patient medication history interview.

(5 marks×6 = 30 marks)

✍ Short Answers:

- 5A. Enlist some of the potential causes of laboratory errors.
- 5B. Write the Cockcroft and Gault formula for estimation of GFR in males and females.
- 5C. Define medication error.
- 5D. Expand the abbreviations: SIADH, MCHC, DMARD, TEN.
- 5E. Mention the normal values of serum sodium and their clinical significance.

(2 marks×5 = 10 marks)



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FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY 2014

SUBJECT: PD 4.4: BIOSTATISTICS AND RESEARCH METHODOLOGY

Monday, May 12, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ Answer ALL the questions.

✍ Long Essays:

1. Classify epidemiological study designs and describe the methodology of case control studies.
2. Enlist the assumptions of parametric tests and write the general steps of calculation of paired t-test and One-way ANOVA.
3. With the help of a suitable example describe the methodology for calculation of sample size for estimation of mean, estimation of proportion, comparison of mean and comparison of proportion.

(10 marks×3 = 30 marks)

✍ Short Essays:

- 4A. Classify variables (data types) and discuss the different measures of central tendency.
- 4B. Discuss the application of computers in patient data storage and retrieval.
- 4C. Write the general steps of calculation of Mann-Whitney U test.
- 4D. 12, 11, 14, 15, 10 -are the Hb levels of five students, calculate Variance, SD & SEM.
- 4E. Discuss the application of SPSS and Epi-Info software in data analysis.
- 4F. Discuss the applications of computers in community pharmacy.

(5 marks×6 = 30 marks)

✍ Short Answers:

- 5A. Define null hypothesis; what is the criteria for rejection of null hypothesis?
- 5B. Write the assumptions of Chi square test.
- 5C. Define odds ratio (OR) and relative risk (RR). How OR & RR is interpreted?
- 5D. Spine bone density is normally distributed in the population with a mean of 1.5 g/cm^2 and a standard deviation of 0.2 g/cm^2 . If a woman has a spine bone density of 0.75 g/cm^2 , translate this number into a Z-score.
- 5E. Write the formula for the calculation of Pearson's correlation and Spearman rank correlation.

(2 marks×5 = 10 marks)



MANIPAL UNIVERSITY**FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY 2014****SUBJECT: PD 4.5: BIOPHARMACEUTICS AND PHARMACOKINETICS**

Wednesday, May 14, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ **Answer all the questions.**

✍ **Long Essays:**

1. Explain factors affecting Renal clearance of drugs.
2. Explain one compartment open model for IV bolus administration.
3. Explain dosage from characteristics which affect drug absorption.

(10 marks×3 = 30 marks)

✍ **Short Essays:**

- 4A. Describe facilitated diffusion and active transport in drug absorption
- 4B. Explain the tissue binding of drugs
- 4C. Explain the determination of Renal function
- 4D. Discuss Enterohepatic cycling
- 4E. Describe Mamillary models with their advantages and disadvantages
- 4F. Explain physiologic models of pharmacokinetics

(5 marks×6 = 30 marks)

✍ **Short Answers:**

- 5A. Define active transport
- 5B. Enumerate drug binding sites in human serum albumin
- 5C. Mention two examples of metabolism interactions
- 5D. Mention some drugs which undergo non-linear metabolism with its reason
- 5E. What is relative bioavailability?

(2 marks×5 = 10 marks)



MANIPAL UNIVERSITY**FIRST YEAR PHARM D (POST BACCALAUREATE)/FOURTH YEAR PHARM D.
DEGREE EXAMINATION – MAY 2014****SUBJECT: PD 4.6: CLINICAL TOXICOLOGY**

Friday, May 16, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Explain the different severity assessment scales used in the clinical toxicology. (10 marks)

2. Explain the clinical features and management of following heavy metal poisoning:
i) Arsenic ii) Copper (5+5 = 10 marks)

- 3A. Define DSM-IV criteria for substance abuse.
- 3B. Explain clinical signs and symptoms of Amphetamine overdose and its management. (5+5 = 10 marks)

✍ **Short Essays:**

- 4A. Discuss the importance of ADME in the toxicokinetic principles.
- 4B. Explain the different regimens of N-acetyl cysteine (NAC) used in the management of acetaminophen poisoning.
- 4C. Explain the different complications of Organophosphorous (OP) poisoning.
- 4D. Explain the management of methanol poisoning.
- 4E. Enlist different hypersensitivity reactions associated with antivenom administration and explain the management of the same.
- 4F. Explain the role of five R's (5R's) in smoking cessation programme. (5 marks×6 = 30 marks)

✍ **Short Answers:**

- 5A. Enlist different clinical manifestation of carbamate poisoning.
- 5B. Write the management of pyrethroid poisoning.
- 5C. Enumerate sign and symptoms of mushroom poisoning.
- 5D. Name the antidotes use in the management of Benzodiazepine poisoning.
- 5E. Define LD₅₀. (2 marks×5 = 10 marks)



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MANIPAL UNIVERSITY

FIRST YEAR PHARM D (POST BACCALAUREATE) DEGREE EXAMINATION – MAY 2014

SUBJECT: PD 4.7: PHARMACOTHERAPEUTICS – I & II

Monday, May 19, 2014

Time: 10:00 – 13:00 Hrs.

Max. Marks: 70

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1A. Define Hypertension. Classify Hypertension according to JNC-7 guidelines.

1B. Discuss the management of Hypertension with compelling indication.

(4+6 = 10 marks)

2. Enlist different long term complication of Diabetes mellitus. Explain the treatment algorithm for management of type 2 Diabetes mellitus.

(3+7 = 10 marks)

3A. Explain the role of steroids in acute exacerbation of Asthma.

3B. Explain the management of open angle glaucoma.

(5+5 = 10 marks)

✍ **Short Essays:**

4A. Explain management of thyroid storm.

4B. Explain the management of complicated Urinary tract infections.

4C. Explain the role of pharmacists in rational drug use.

4D. Explain the role of protease inhibitors in the management of HIV.

4E. Explain pathophysiology of Systemic lupus erythematosus (SLE).

4F. Explain the treatment algorithm for NSTEMI.

(5 marks×6 = 30 marks)

✍ **Short Answers:**

5A. Enlist clinical features of Gonorrhoea.

5B. Explain the role of ACE inhibitors in Diabetic nephropathy.

5C. Enlist adverse drug reactions of methotrexate and metformin.

5D. Explain the role of mannitol in Meningitis.

5E. Enlist the advantages of haemodialysis.

(2 marks×5 = 10 marks)

