

Question Paper

Exam Date & Time: 16-May-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST YEAR PHARM D (POST BACCALAUREATE PROGRAMME) / FOURTH YEAR PHARM. D DEGREE EXAMINATION
- MAY 2022

SUBJECT: PPR 4.1T: PHARMACOTHERAPEUTICS - III
(REVISED REGULATION 2014)

Answer ALL questions.

Marks: 70

Duration: 180 mins.

Long Answer Questions.

- 1) Explain the pathophysiology and management of Parkinsonism. (10)
- 2) Describe the clinical features and treatment of mania. Explain the role of haloperidol and clozapine in the management of schizophrenia. (10)
- 3) Explain the clinical manifestations and management alcoholic liver disorder. (10)

4. Short Answer Questions.

- 4A) Write briefly about the management of NSAID induced peptic ulcer. (5)
- 4B) Enumerate the clinical presentations of migraine headache and explain its management. (5)
- 4C) Explain the mechanism of drug induced liver disorders with examples. (5)
- 4D) Explain the parental iron therapy in the management of iron deficiency anemia. (5)
- 4E) Explain the steps of designing evidence based guidelines. (5)
- 4F) Explain briefly about the management of generalized clonic tonic seizure (GTCS). (5)

5. Give Reason for the Following:

- 5A) *H.pylori* has predominant role in duodenal ulcer than gastric ulcer. (2)
- 5B) Warfarin should be combined with low molecular weight heparin in DVT patients in the initiation of therapy. (2)
- 5C) Tricyclic antidepressants are used in the management of affective disorders. (2)
- 5D) Drug induced liver disorders occur due to different mechanism. (2)
- 5E) Schilling test is significant in pernicious anemia. (2)

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Question Paper

Exam Date & Time: 14-May-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST YEAR PHARM D (POST BACCALAUREATE PROGRAMME) / FOURTH YEAR PHARM. D DEGREE EXAMINATION
- MAY 2022

SUBJECT: PPR 4.2T: HOSPITAL PHARMACY
(REVISED REGULATIONS 2014)

Marks: 70

Duration: 180 mins.

Long Answer Questions:

- 1) Discuss the various techniques of manufacturing of tablet formulation. (10)
- 2) Mention the differences between the hospital formulary and drug list. Discuss the preparation aspects of hospital formulary. (10)
- 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. (10)

4. Short Answer Questions:

- 4A) Explain the organization of Hospital pharmacy in the small hospital. (5)
- 4B) Define Central Sterile Supply Room (CSSR). Explain its layout with neat diagram. (5)
- 4C) Define inventory turnover. Explain its significance. (5)
- 4D) Explain the procedure to control dated /perishable inventory. (5)
- 4E) Explain the steps involved in the development of therapeutic / clinical guidelines. (5)
- 4F) Explain professional relations of hospital pharmacists with medical staff. (5)

5. Give reasons for the following:

- 5A) Accredited hospitals are considered to be good quality hospital. (2)
- 5B) Pharmacist is the authorised person to give specifications of the drug during purchasing procedure. (2)
- 5C) Isotonicity of the parenteral preparation to be maintained. (2)
- 5D) Pharmacy therapeutic committee is an integral part of any hospital. (2)
- 5E) Individual prescription order system is used in small and private hospital. (2)

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Question Paper

Exam Date & Time: 18-May-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST YEAR PHARM D (POST BACCALAUREATE PROGRAMME) / FOURTH YEAR PHARM. D DEGREE EXAMINATION
- MAY 2022

SUBJECT: PPR 4.3T: CLINICAL PHARMACY
(REVISED REGULATIONS 2014)

Answer ALL questions.

Marks: 70

Duration: 180 mins.

Long Answer Questions.

- 1) Explain pharmacy intervention during various clinical pharmacy activities. (10)
- 2) Define poison information and discuss modified systematic approach in answering a drug information query. (10)
(2+8 = 10 marks)
- 3) Define adverse drug reactions as per WHO and explain the mechanism of type A and type B adverse drug reactions. (10)

4. Short Answer Questions.

- 4A) Explain any five factors contributing to Medication errors. (5)
- 4B) Explain the morphological classification of anemia. (5)
- 4C) Explain the process of evaluating journal, investigators, research site and funding in a clinical trial publication. (5)
- 4D) Explain the procedure in medication history interview. (5)
- 4E) Explain the role of pharmacist in Drug Utilization Evaluation. (5)
- 4F) Explain the SOAP note for documenting pharmaceutical care. (5)

5. Give Reasons for the Following:

- 5A) Micromedex is not a primary drug information resource. (2)
- 5B) Empathy is a useful tool in communicating with patients. (2)
- 5C) A clinical laboratory result that falls outside of a reference range does not always indicate the presence of disease. (2)
- 5D) Environment factor is a barrier for patient counseling. (2)
- 5E) Need for maintenance of patient profile by clinical pharmacist. (2)

Question Paper

Exam Date & Time: 23-May-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST YEAR PHARM D - POST BACCALAUREATE PROGRAMME / FOURTH YEAR PHARM. D DEGREE EXAMINATION -
MAY 2022

SUBJECT: PPR 4.4T / PD 4.4 : BIostatistics AND RESEARCH METHODOLOGY
(Revised Regulation 2014)

Marks: 70

Duration: 180 mins.

Answer all the questions.

Long Essay Questions.

- 1) Discuss the methodology of different observational study designs. (10)
- 2) Explain the important components of a good research report or thesis. (10)
- 3) Describe the application of computers in hospital and clinical pharmacy. (10)

4. Short Essay Questions.

- 4A) Write the general steps involved in the calculation of One-way ANOVA. (5)
- 4B) Compare the properties of parametric and non-parametric tests and write the general steps involved in the calculation of Wilcoxon signed-rank test. (5)
- 4C) With the help of a suitable example explain the properties of binomial distribution. (5)
- 4D) Write the general steps involved in the calculation of Pearson Chi square test. (5)
- 4E) Calculate mean, SD, SEM and 95% confidence interval for the following data (5)
12, 4, 8, 6, 10, 7
- 4F) Write the general steps involved in the calculation of Pearson correlation. (5)

5. Give Reasons Questions.

- 5A) Inter quartile range is more appropriate than range for depicting the dispersion of skewed data. (2)
- 5B) Reference range for various biochemical parameters are constructed using, $\text{mean} \pm 2\text{SD}$. (2)
- 5C) Using semi-log graph paper large numbers can be plotted. (2)
- 5D) Relative risk cannot be calculated for case-control studies. (2)
- 5E) Parametric tests can be used only if the data follows normal distribution. (2)

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Question Paper

Exam Date & Time: 12-May-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST YEAR PHARM D (POST BACCALAUREATE PROGRAMME) / FOURTH YEAR PHARM. D DEGREE EXAMINATION
- MAY 2022

SUBJECT: PPR 4.5T: BIOPHARMACEUTICS AND PHARMACOKINETICS
(REVISED REGULATIONS 2014)

Marks: 70

Duration: 180 mins.

Answer all the questions.

Long Answer Questions.

- 1) Explain the principal processes of urinary elimination of drugs. (10)
- 2) Explain two compartment Open Model for IV bolus administration. (10)
- 3) Describe causes of Nonlinearity of pharmacokinetics and explain it with Michaelis-Menten equation. (10)

4. Short Answer Questions.

- 4A) Explain patient related factors affecting drug absorption. (5)
- 4B) Explain the concept of clearance. (5)
- 4C) Describe Non-compartment model. (5)
- 4D) Explain Mamillary compartment models with suitable illustration. (5)
- 4E) Explain open one compartment model for repeated dose IV bolus administration. (5)
- 4F) Describe cross-over design used in bioequivalence study. (5)

5. Give Reasons for the Following.

- 5A) T_{max} is independent of dose. (2)
- 5B) Enterohepatic circulation increases the half-life of drug. (2)
- 5C) High protein binding generally reduces the volume of distribution. (2)
- 5D) Steady state is attained after five to seven half-lives. (2)
- 5E) In two compartment model, there is a steep fall in concentration during distribution phase. (2)

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Question Paper

Exam Date & Time: 20-May-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST YEAR PHARM D - POST BACCALAUREATE PROGRAMME / FOURTH YEAR PHARM. D DEGREE EXAMINATION -
MAY 2022

SUBJECT: PPR 4.6T / PD 4.6 : CLINICAL TOXICOLOGY
(Revised Regulation 2014)

Marks: 70

Duration: 180 mins.

Answer all the questions.

Long Essay Questions.

- 1) Explain the sign and symptoms of cobra bite. Enlist complications of administration of anti-venom. (10)
- 2) Explain role of different severity assessments in management of poisoning. (10)
- 3) Discuss mechanism of toxicity, toxic dose, clinical presentation and treatment of nicotine poisoning. (10)

4. Short Essay Questions.

- 4A) Explain DSM IV criteria for substance abuse. (5)
- 4B) Explain complications of amphetamine abuse. (5)
- 4C) Explain clinical presentation and treatment of pyrethroid poisoning. (5)
- 4D) Write procedure for gastric lavage process in gut decontamination of poisoning. (5)
- 4E) Clinical manifestations and mechanism of toxicity of NSAIDs poisoning. (5)
- 4F) Explain the management of lead poisoning. (5)

5. Give Reasons Questions.

- 5A) Cyproheptadine is used for general antidepressant intoxication. (2)
- 5B) Mortality rate varies in patients with organophosphorus poisoning. (2)
- 5C) Mercury poisoning often associated with renal damage. (2)
- 5D) Cocaine smugglers are called body "packers" or "stuffers". (2)
- 5E) Alkalinization of urine is useful in the management of phenobarbital poisoning. (2)

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Question Paper

Exam Date & Time: 10-May-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST YEAR PHARM D - (POST BACCALAUREATE PROGRAMME) DEGREE EXAMINATION - MAY 2022
SUBJECT: PPR 4.7T: PHARMACOTHERAPEUTICS - 1 & 2

Marks: 70

Duration: 180 mins.

Long Answer Questions.

- 1) Classify different types of breast cancer. Discuss treatment of breast cancer. (10)
- 2) Define various pulmonary function tests and explain significance of the each tests. (10)
- 3) Explain the pharmacotherapy of both systolic and diastolic heart failure. (10)

4. Short Answer Questions.

- 4A) Explain the role of steroid inhalers in COPD. (5)
- 4B) Discuss post-menopausal symptoms and its pharmacological treatment. (5)
- 4C) Enlist signs and symptoms of hypothyroidism and explain its pharmacotherapy. (5)
- 4D) What are the complications of untreated hypertension? Enumerate drug of choices with its pharmacotherapeutic profile for each compelling indications. (5)
- 4E) Explain the pharmacotherapy of Osteoarthritis. (5)
- 4F) Classify urinary tract infections. Explain antimicrobial therapy of complicated UTIs. (5)

5. Give reasons for the following.

- 5A) Oral antidiabetics are primary preferred first in Type 2 Diabetes Mellitus. (2)
- 5B) Metered Dose Inhalers are uniquely find place in pulmonary medicine. (2)
- 5C) ACE inhibitors may be useful in delaying progression of chronic kidney disease. (2)
- 5D) Dosing in pediatrics is always a challenge. (2)
- 5E) Amiodorone is a better drug than other antiarrhythmics. (2)

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