M. Pharmacy (Pharmacy Practice) (Sem–2)

CLINICAL PHARMACOKINETICS AND THERAPEUTIC DRUG MONITORING

Subject Code : MPP203T

M.Code : 79832

Date of Examination : 02-06-2023

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

1. a) Define loading and maintenance dose. Describe the factors affecting size of loading dose and derive the pharmacokinetic relationship between loading and maintenance dose.

   b) Define hepatic extraction ratio and describe various models of hepatic clearance.

2. a) Describe the genetic polymorphism in drug transport genes with suitable examples.

   b) Describe the fixed and adaptive models for designing dosage regimen.

3. a) Briefly describe about pharmacometrics software.

   b) Briefly describe assumptions and model building techniques of Non-Linear Mixed Effect Model.

4. Describe the basis and various methods of dose adjustment in elderly and paediatric patients.

5. a) Describe the pharmacokinetics basis of TDM of Digoxin.

   b) Describe the causes of variability for deciding individualized drug dosage regimen.

6. Write a short note on the following :

   a) Dose conversion from intravenous to oral regimen of drug therapy

   b) Role of Cytochrome P-450 isoenzymes in drug metabolism

   c) Drug dosing in Renal failure.

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(S31)-1840

July–2023

M.Pharmacy (Pharmacy Practice) (Sem–2)
PRINCIPLES OF QUALITY USE OF MEDICINES
Subject Code : MPP-201T

M.Code : 79830

Date of Examination : 05-06-2023

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of SIX questions.
2. Each question carry FIFTEEN marks.

1. a) Describe the need and components of rational drug prescribing.

   b) Describe the principles of quality use of medicines.

2. a) Describe the role of health care professionals in promoting quality use of medicines.

   b) Describe the concept of essential drugs.

3. Briefly describe the regulatory aspects of complementary and OTC medications.

4. Describe the principles of quality use of medications in paediatric and geriatric prescribing practices.

5. Classify medication errors. Describe the role of pharmacist in monitoring and management of medication errors.

6. Write a short note on the following :

   a) Evidence-based medicine

   b) Causality assessment of ADRs

   c) Cost effective prescribing

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(S31)-20

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July-2023

M.Pharmacy (Pharmacy Practice) (Sem–2)
PHARMACOEPIDEMIOLOGY & PHARMACOECONOMICS
Subject Code : MPP204T
M.Code : 79833
Date of Examination : 07-06-2023

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

1. Discuss in detail about various drug use measures calculated and applied in pharmacoepidemiology.

2. Discuss in detail about various quantitative models used in pharmacoepidemiology.

3. Discuss the objectives, steps involved in drug utilization review and its applications.

4. Discuss about various types of cost categorizations in pharmacoeconomic evaluations and their significance.

5. Define and discuss about the steps involved, applications, advantages and disadvantages of Cost minimization analysis, Cost benefit analysis and Cost-effective analysis.

6. Define and discuss about the need, steps involved, applications, advantages and disadvantages of common HRQOL measures.

M-79833

(S31)-2250

July-2023

Roll No. _____

Total No. of Questions : 06

Total No. of Pages : 01

M.Pharmacy (Pharmacy Practice) (Sem–2)
PHARMACOTHERAPEUTICS-II
Subject Code : MPP-202T
M.Code : 79831
Date of Examination : 30-05-2023

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of SIX questions.
2. Each question carry FIFTEEN marks.

1. a) Define pain, explain the pain pathways and discuss in detail about management of pain.

   b) Write an exhaustive note on pharmacotherapy of Parkinsonism.

2. a) Indicate the various types of epilepsy and discuss management of Grand mal & Petitmal Epilepsy.

   b) What is stroke? Explain etiopathogenesis and diagnostic methods of stroke.

3. Define Schizophrenia; explain positive and negative symptoms of schizophrenia and discuss critically about pharmacotherapy of Schizophrenia.

4. Write notes on following :

   a) Chronic renal failure

   b) Renal dialysis

   c) Management of MDR-Tuberculosis.

5. a) Indicate clinical features of breast cancer and pharmacotherapy of breast cancer

   b) Write a note on stem cell transplantation in hematological malignancies.

6. a) Discuss in detail about HIV associated opportunistic infections.

   b) Add a brief note on hormone replacement therapy.

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(S31)-1571

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July-2023

M.Pharmacy (Pharmacy Practice) (Sem.–2)

PHARMACOEPIDEMIOLOGY & PHARMACOECONOMICS

Subject Code : MPP-204T
M.Code : 79833
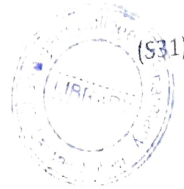### Date of Examination : 12-07-22

Max. Marks: 75

Time : 3 Hrs.

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

1. Define pharmacoepidemiology, its scope and need. Discuss about measurement of various outcomes used in pharamacoepidemiology.

2. Write about concept of risk. Discuss about the types of risk and measurements of risk.

3. Define and discuss various types of cost categorization and resources for cost estimation.

4. Define and discuss in detail the steps involved, applications, advantages and disadvantages of Cost Minimization Analysis, Cost Benefit Analysis and Cost Effective Analysis.

5. Define HRQOL. Discuss the steps involved, application, advantages and disadvantages of measurements in HRQOL.

6. Define and discuss in detail about Quality Adjusted Life Years, Disability Adjusted Life Years, Incremental Cost-Effective Ratio and Average Cost-Effective Ratio.

(S31)-1055

June-2022

Roll No.

Total No. of Questions : 06

Total No. of Pages : 01

M.Pharmacy (Pharmacy Practice) (Sem.–2)
PRINCIPLES OF QUALITY USE OF MEDICINES
Subject Code : MPP-201T
M.Code : 79830
Date of Examination : 04-07-22
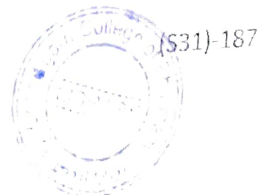
Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of SIX questions.
2. Each question carry FIFTEEN marks.

1. Define quality use of medicines. Discuss the principles, key partners and responsibilities of the partners in achieving quality use of medicines.

2. Define Evidence Based Medicine. Discuss the concept, approach and practice of evidence based medicine and the role of pharmacist in it.

3. Discuss in detail about principles of quality use of medicine in hospital and ambulatory settings and steps and procedures in achieving the same.

4. Define OTC drugs. Discuss about the regulatory aspects of quality use of medicine in OTC drugs and the professional responsibility of pharmacist in use of OTC drugs.

5. Define medication errors. Discuss in detail the types, categories, causes, detection and prevention of medication errors. Discuss the role of pharmacist in minimizing the same.

6. Define adverse drug reactions. Discuss the need lifted, types, predisposing factors, mechanism, detection, reporting and monitoring of adverse drug reactions.

(S31)-187

M 79830

June – 2022

Roll No. [ ][ ][ ][ ][ ][ ][ ]

Total No. of Pages : 01

Total No. of Questions : 06

M.Pharmacy (Pharmacy Practice) (Sem.–2)
PHARMACOTHERAPEUTICS-II

Subject Code : MPP-202T

M.Code : 79831

Date of Examination : 06-07-22

Time : 3 Hrs.   Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of SIX questions.
2. Each question carry FIFTEEN marks.

1. What is Alzheimer's disease? Discuss in detail about etiopathogenesis and drug therapy of AD.   15

2. Give an account of anxiety disorders and discuss pharmacotherapy of anxiety disorders.   15

3. a) Add a note on acute renal failure and its management.   7

   b) Discuss the drug therapy of depression.   8

4. Discuss in detail about pharmacotherapy of tuberculosis with special emphasis on multi-drug resistant TB.   15

5. a) What are opportunistic infections? Discuss HIV related bacterial opportunistic infections and drug therapy for these infections.   8

   b) Write a critical note on dysmenorrhea and its pharmacotherapy.   7

6. a) Discuss pharmacotherapy of breast cancer.   7

   b) Write an exhaustive note on management of nausea and vomiting.   8

M-79831   (S31)-472

June 2022

M.Pharmacy (Pharmacy Practice)   (Sem.–2)
CLINICAL PHARMACOKINETICS AND THERAPEUTIC DRUG MONITORING
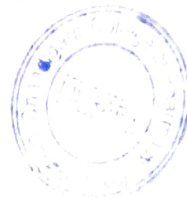Subject Code : MPP-203T
M.Code : 79832
Date of Examination : 08-07-22

Time : 3 Hrs.   Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :
1. ATTEMPT 5 OUT OF 6 QUESTIONS. EACH QUESTION CARRIES 15 MARKS.

1. a. Describe the protocol for therapeutic drug monitoring and also the pharmacokinetic and pharmacodynamic basis of therapeutic drug monitoring of carbarnazepine.

   b. Describe various methods for calculating Area Under Curve (AUC) to determine bioavailability.

2. a. Describe pharmacokinetic basis of drug-drug interactions with suitable examples.

   b. Draw and explain Siersback-Nielson Nomogram for finding renal clearance.

3. a. Describe the factors affecting size of loading dose.

   b. Describe the principle of superposition.

4. a. Describe the significance and methods of dose adjustment in elderly subjects.

   b. Describe the pharmacokinetic-pharmacodynamic correlation in drug therapy.

5. a. Briefly describe about pharmacometrics software.

   b. Briefly explain the implementation of Bayesian Approach using Non-Linear Mixed Effect Modelling (NONMEM) computer software.

6. a. Describe various models of hepatic clearance.

   b. Describe methods for population Pharmacokinetic data analysis.

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(S16)-738

June -2022

M.Pharmacy (Pharmacy Practice)   (Sem.–2)

PRINCIPLES OF QUALITY USE OF MEDICINES

Subject Code : MPP-201T

M.Code : 79830

Date of Examination : 04-07-22

Time : 3 Hrs.

Max. Marks: 75

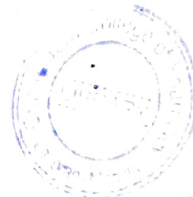**INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of SIX questions.
2. Each question carry FIFTEEN marks.

1. Define quality use of medicines. Discuss the principles, key partners and responsibilities of the partners in achieving quality use of medicines.

2. Define Evidence Based Medicine. Discuss the concept, approach and practice of evidence based medicine and the role of pharmacist in it.

3. Discuss in detail about principles of quality use of medicine in hospital and ambulatory settings and steps and procedures in achieving the same.

4. Define OTC drugs. Discuss about the regulatory aspects of quality use of medicine in OTC drugs and the professional responsibility of pharmacist in use of OTC drugs.

5. Define medication errors. Discuss in detail the types, categories, causes, detection and prevention of medication errors. Discuss the role of pharmacist in minimizing the same.

6. Define adverse drug reactions. Discuss the need lifted, types, predisposing factors, mechanism, detection, reporting and monitoring of adverse drug reactions.

(S31)-187

M 79830

June –2022

Roll No. ☐☐☐☐☐☐☐

Total No. of Questions : 06

Total No. of Pages : 01

M.Pharmacy (Pharmacy Practice) (Sem.–2)

PHARMACOTHERAPEUTICS-II

Subject Code : MPP-202T

M.Code : 79831

Date of Examination : 06-07-22

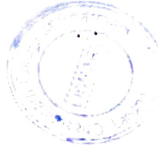Time : 3 Hrs.　　　　　　　　Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. **Attempt any FIVE questions out of SIX questions.**
2. **Each question carry FIFTEEN marks.**

1. What is Alzheimer's disease? Discuss in detail about etiopathogenesis and drug therapy of AD. 15

2. Give an account of anxiety disorders and discuss pharmacotherapy of anxiety disorders. 15

3. a) Add a note on acute renal failure and its management. 7

   b) Discuss the drug therapy of depression. 8

4. Discuss in detail about pharmacotherapy of tuberculosis with special emphasis on multi-drug resistant TB. 15

5. a) What are opportunistic infections? Discuss HIV related bacterial opportunistic infections and drug therapy for these infections. 8

   b) Write a critical note on dysmenorrhea and its pharmacotherapy. 7

6. a) Discuss pharmacotherapy of breast cancer. 7

   b) Write an exhaustive note on management of nausea and vomiting. 8

1 | M-79831　　　　　　　　　　　　　　　　　(S31)-472

Roll No. _____

Total No. of Questions : 06

Total No. of Pages : 01

M.Pharmacy (Pharmacy Practice) (Sem.–2)
CLINICAL PHARMACOKINETICS AND THERAPEUTIC DRUG MONITORING

Subject Code : MPP-203T
M.Code : 79832
Date of Examination : 08-07-22

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :
1. ATTEMPT 5 OUT OF 6 QUESTIONS. EACH QUESTION CARRIES 15 MARKS.

1. a. Describe the protocol for therapeutic drug monitoring and also the pharmacokinetic and pharmacodynamic basis of therapeutic drug monitoring of carbarnazepine.

   b. Describe various methods for calculating Area Under Curve (AUC) to determine bioavailability.

2. a. Describe pharmacokinetic basis of drug-drug interactions with suitable examples.

   b. Draw and explain Siersback-Nielson Nomogram for finding renal clearance.

3. a. Describe the factors affecting size of loading dose.

   b. Describe the principle of superposition.

4. a. Describe the significance and methods of dose adjustment in elderly subjects.

   b. Describe the pharmacokinetic-pharmacodynamic correlation in drug therapy.

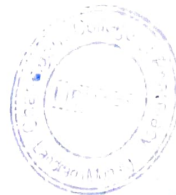5. a. Briefly describe about pharmacometrics software.

   b. Briefly explain the implementation of Bayesian Approach using Non-Linear Mixed Effect Modelling (NONMEM) computer software.

6. a. Describe various models of hepatic clearance.

   b. Describe methods for population Pharmacokinetic data analysis.

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(S16)-738

| M-79832

June-2022

M.Pharmacy (Pharmacy Practice) (Sem.–2)
PHARMACOEPIDEMIOLOGY & PHARMACOECONOMICS
. Subject Code : MPP-204T

M.Code : 79833

Date of Examination : 04-01-2023

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

1. Explain and discuss in detail about various drug use and outcomes measures used in pharamacoepidemiology.

2. Discuss about various qualitative and quantitative models used in pharmacoepidemiological studies.

3. Discuss in detail about various types of outcomes measurements used in pharmacoeconomics.

4. Define and discuss in detail the steps involved, application, advantages and. disadvantages of Cost Utility Analysis, Cost of Illness, Cost Consequences Analysis.

5. Define and discuss about the steps involved, applications of decision analysis, decision tree and sensitivity analysis.

6. Discuss about various softwares used in pharmacoeconomic analysis and their applications in pharmacoeconomics.

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DEC-2022

Roll No. ☐☐☐☐☐☐☐☐☐☐

Total No. of Questions : 06

Total No. of Pages : 01

M.Pharmacy (Pharmacy Practice)   (Sem.–2)
CLINICAL PHARMACOKINETICS AND
THERAPEUTIC DRUG MONITORING
Subject Code : MPP-203T
M.Code : 79832
Date of Examination : 02-01-2023

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :
1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

1. a. Define creatinine clearance and describe various methods of determining creatinine clearance.
(10)

   b. Describe the significance of loading dose and derive the pharmacokinetic relationship between loading and maintenance dose.
(5)

2. a. Describe the genetic polymorphism in drug target genes with suitable examples.
(10)

   b. Describe the fixed and adaptive model for designing dosage regimen.　(5)

3. a. Describe the pharmacokinetic and pharmacodynamic basis of therapeutic drug monitoring of phenytoin.
(10)

   b. Describe the significance and method of dose adjustment in obese subjects.　(5)

4. a. Describe the pharmacokinetic models for dose adjustment during extracorporeal removal of drugs.
(7.5)

   b. Describe the causes of variability for determining individualization of drug dosage regimen.
(7.5)

5. a. Describe pharmacogenetic variation attributed to CYP2D6 inhibition and induction.
(7.5)

   b. Describe die basis of dose calculation for converting from intravenous to oral regimen of drug therapy.
(7.5)

6. a. Describe the Bayesian adaptive method of dosing.　(7.5)

   b. Describe various models of hepatic clearance.　(7.5)

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M-79832

(S16)-2085

Roll No.

Total No. of Questions : 06

Total No. of Pages : 01

M.Pharmacy (Pharmacy Practice)   (Sem.–2)

PHARMACOTHERAPEUTICS-II

Subject Code : MPP-202T

M.Code : 79831

Date of Examination : 23-12-2022

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of SIX questions.
2. Each question carry FIFTEEN marks.

1. a) Give an exhaustive view of novel anti-epileptic agents.

    b) Discuss pharmacotherapy of Parkinsonism.

2. Describe depression and discuss in detail about drug therapy of depression.

3. a) Add a note on chronic renal failure and its management.

    b) Write a note on Neuralgias and management of pain.

4. a) Discuss pharmacotherapy of urinary tract infections.

    b) Give an account of anti-malarial drugs with special reference to chloroquine resistant malaria.

5. Discuss critically about pharmacotherapy of fungal infections.

6. a) Add a note on general principles of cancer chemotherapy.

    b) Write a note on breast cancer and its drug therapy.

(S31)-2043

M.Pharmacy (Pharmacy Practice)   (Sem.–2)

PRINCIPLES OF QUALITY USE OF MEDICINES

Subject Code : MPP-201T
M.Code : 79830
Date of Examination : 21-12-2022

Time : 3 Hrs.

Max. Marks: 75

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of SIX questions.
2. Each question carry FIFTEEN marks.

1. Define quality use of medicines. Discuss the building blocks and evaluation processes in quality use of medicines.

2. Define and discuss about the concept, need of rational use of drugs. Discuss about the causes of irrationality and the role of pharmacist in promoting rational drug use.

3. Describe the strategies to promote the quality use of medicine. Discuss the impact of quality use of medicine on E-health, integrative medicine and multidisciplinary care.

4. Discuss about regulations including scheduling of drugs. Discuss in detail about role of industry in quality use of medicine in medicine development.

5. Define medication errors. Discuss in detail the types, categories, causes, detection and prevention of medication errors. Discuss the role of pharmacist in monitoring and management of medication errors.

6. Define adverse drug reactions. Discuss about detection, reporting and monitoring of adverse drug reactions. Discuss the role of pharmacist in pharmacovigilance.

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Dec-2022