[KD 310] **APRIL 2001**

M.Pharmacy DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Answer ALL the questions.

All questions carry equal marks.

1. (a) Explain the role of a clinical pharmacist in the design and establishment of clinical trials. (12)

(b) Explain the role of liver function tests (LFT) and haematological tests in the evaluation of disease and drug therapy. (13)

2. (a) Discuss the calculation of loading dose and maintenance dose in geriatric and paediatric patients. (15)

(b) Briefly discuss the terms 'renal clearance' and 'plasma clearance'. (10)

3. (a) Explain the significance of therapeutic drug monitoring (TDM) in Clinical Pharmacy giving examples of drugs that are generally subjected to therapeutic drug monitoring. (15)

(b) What is 'bio equivalence' and 'bioavailability' of drugs? Explain their significance in drug therapy and Pharmacy Practice. (10)

4. Write brief notes on any FIVE : (5 × 5)

(a) Drug and Poison Information.

(b) Patient medication history review.

(c) Clinical Pharmacy in India.

(d) Adverse Drug Reaction Reporting.

(e) Clinical Pharmacist and ward round participation.

(f) Patient Compliance.

(g) Drug clearance.

NOVEMBER 2001

[KE 310]

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

1. (a) Explain the importance of patient case history in therapeutic management. (12)

(b) How is Bioavailability estimated? What are the parameters considered in assessing the comparative bioavailability of two products. (7 + 6)

2. (a) Explain with examples the necessity and method of dose adjustment in geriatric and paediatric patients. (15)

(b) Discuss the establishment of Drug Information Centre. (10)

3. (a) Discuss the legal requirement, design and execution of clinical trials in a hospital setting. (15)

(b) Explain the importance of Drug Utilisation Evaluation (DUE) and Review (DUR) implementing rational therapeutic management. (10)

4. Write short notes on any FIVE : (5 × 5)

(a) Scope of clinical pharmacy in India.

(b) Fluid and Electrolyte balance.

(c) Analysis of variance.

(d) Tests associated with cardiac disorder.

(e) Adverse Drug Reaction management.

(f) Drug clearance.

(g) Mathematical models of drug distribution.

SEPTEMBER 2002

[KH 310]

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Answer ALL the questions.

All questions carry equal marks.

1. (a) What is Therapeutic Drug Monitoring? Why is it important? How does it help in optimising individual drug therapy? (10)

(b) Discuss the role of clinical pharmacists in clinical trial of new drugs. (10)

(c) Write a note on analysis of variance. (5)

2. (a) What are the various laboratory tests conducted to assess the condition of Liver and Kidney? (5 + 5)

(b) Discuss the importance of pharmacokinetic analysis. (10)

(c) Write on drug information resources and literatures. (5)

3. (a) Discuss the educational and training functions of clinical pharmacists. (10)

(b) Write on the importance of Drug Utilisation Evaluation. (10)

(c) Write atleast 10 common medical abbreviations with their expansion. (5)

4. Write note on : (7 + 6 + 6 + 6)

(a) Significance of sensitivity testing of pathogens.

(b) Drug and therapeutic News Letter.

(c) Hepatic clearance.

(d) Estimation of Bioavailability.

APRIL 2003

[KI 310] **Sub. Code : 1027**

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Answer ALL the questions.

All questions carry equal marks.

1. (a) What is clinical trial? What are the legal requirements to be fulfilled before carrying out clinical trials? Discuss the role of clinical pharmacist in clinical trials. (2 + 10 + 5)

(b) Discuss the importance of Therapeutic Drug Monitoring. (8)

2. (a) Giving examples discuss the calculation of loading and maintenance dose in paediatric patients. (8)

(b) Discuss the estimation and importance of bioavailability. (10)

(c) Design an Adverse Drug reaction reporting form. (7)

3. (a) Discuss the treatment of poisoning. (8)

(b) Discuss the importance of patient medication history review in patient care. (8)

(c) Explain the common laboratory tests carried out on urine. (9)

4. Write notes on :

(a) Patient counselling.

(b) Sources of drug information

(c) Clearance and dosing adjustment. (8 + 8 + 9)

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OCTOBER 2003

[KJ 310] **Sub. Code : 1027**

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Answer ALL the questions.

All questions carry equal marks.

1. (a) Discuss the designing of clinical trials. (8)

(b) How does the sensitivity screening of pathogenic microorganisms help in selection of appropriate antimicrobial agents? (8)

(c) Discuss the setting up of drug and poison information centre. (9)

2. (a) Discuss the laboratory tests and interpretation associated with cardiac disorders. (8)

(b) Describe the function of clinical pharmacists in educational and training programme. (9)

(c) Write a note on adverse drug reactions management. (8)

3. (a) Discuss in detail how a drug utilisation evaluation is carried out. (10)

(b) Discuss the application of statistics in clinical data analyser. (10)

(c) How does patient counselling improve therapeutic outcome? (5)

4. Write notes on : (8 + 8 + 9)

(a) Publication of drug and therapeutic news letter

(b) Estimation of pharmaco kinetic parameters

(c) Liver function tests and their significance.

APRIL 2004

[KK 310] Sub. Code : 1027

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Sec. A & B : Two hours and Forty minutes Sec. A & Sec. B : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

SECTION A

Long Essay : (2 × 15 = 30)

1. Discuss various drug information resources with their benefits and limitations.

2. Describe the therapeutic drug monitoring process for an anti–convulsant drug.

SECTION B

Short Notes. (10 × 5 = 50)

3. How dosage regimen is calculated in renally impaired patients?

4. Add a note on "Organ clearance".

5. Write a note on patient's case history and its utilization in clinical practice.

6. How would you develop a effective search strategy for locating drug information literature?

7. What are orphan drugs and unknown drugs? Mention drug information sources for the above drugs.

8. Explain clinical significance of plasma protein binding of drugs.

9. Estimate the 'Loading Dose' of digoxin for a 70 Kg patient which would be necessary to attain a plasma level of 1.5 microgram per ml.

(V_d = 7.3 L/Kg; f = 0.62).

10. Explain the following terms :

(a) AUC and AUMC

(b) $t\frac{1}{2}$ and MRT.

11. How dose adjustment is done in geriatric patient? Explain.

12. Explain "Volume of distribution" and its significance.

[KL 310] AUGUST 2004 Sub. Code : 1027

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Sec. A & B : Two hours and forty minutes Sec. A & B : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions

SECTION A — (2 × 15 = 30 marks)

1. Discuss the various education and training activities of clinical pharmacists.

2. Discuss the use of statistics in sampling and designing experiments for clinical data evaluation.

SECTION B — (10 × 5 = 50 marks)

Write short notes on :

3. How are loading and maintenance dose calculated?

4. What is clinical trial? Discuss the role of clinical pharmacist in clinical trials.

5. Define the following terms :

Drug clearance, Volume of distribution.

6 Why it is important to adjust the dose in hepatic dysfunction?

7. What are the various tests conducted on blood.

8. Discuss the scope of clinical pharmacy service in patient care.

9. Write on the usefulness of patient's case history in drug therapy.

10. How does patient counselling improve the drug therapy?

11. Write on the management of Adverse Drug Reactions.

12 Patient counselling.

FEBRUARY 2005

[KM 310] Sub. Code : 1027

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Sec. A & B : Two hours and forty minutes Sec. A & B : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

SECTION A — (2 × 15 = 30 marks)

1. Discuss Drug Utilisation Evaluation (DUE) and Drug Utilisation Review (DUR).

2. Discuss the tests associated with cardiac disorders and how will you interpret the test results.

SECTION B — (10 × 5 = 50 marks)

Short notes on the following :

3. Drug and therapeutics news letter.

4. Q.A. of clinical pharmacy services.

5. Linear pharmacokinetics.

6. Patient medication counselling.

7. Selection of anti–microbial regimen.

8. Renal clearance.

9. Medication chart review.

10. Drug information data.

11. Evaluation of drug therapy.

12. Phases of clinical trials.

[KO 310] MARCH 2006 Sub. Code : 1027

M. Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV – CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Long Essay : (2 × 15 = 30)

1. List Liver function tests. How do the values differ intra and entra hepatic jaundice? Give examples of drugs that can cause elevation in Liver Function Tests LTT's.

2. Enumerate the different compartmental models and explain any one compartmental model with its clinical significance.

II. Short notes : (10 × 5 = 50)

1. Chi-square test.
2. Poison information centre.
3. Patient counseling.
4. Sources of drug information.
5. Drug utilisation evaluation.
6. Therapeutic drug monitoring.
7. Patient compliance to drug.
8. Medication chart review.
9. Prescription audit.
10. Cardiac disorders tests.

SEPTEMBER 2006

[KP 310] Sub. Code : 2838

M.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes — Theory : 80 marks

M.C.Q. : Twenty minutes — M.C.Q. : 20 marks

Answer ALL the questions.

I. Long Essay :

1. (a) Publication of drug and therapeutics news letter.

(b) Clinical significance of plasma protein binding of drugs. (10 + 10 = 20)

2. Discuss various drug information resources with its merits and demerits. (15)

3. Discuss the activities of a clinical pharmacist in a hospital. (15)

II. Write short notes on : (6 × 5 = 30)

1. Renal function test

2. Patient medication history interview

3. Therapeutic Drug monitoring

4. Drug Utilisation Evaluation

5. Phases of clinical trials

6. Patient compliance.

MARCH 2007

[KQ 336] **Sub. Code : 2872**

M.Pharm. DEGREE EXAMINATION.

(Regulations 2006)

First Year

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

I. Long essay :

1. What is Drug Use Evaluation? How is it carried out? Develop a protocol for carrying out a DUE for antimicrobial use in a tertiary care hospital. (20)

2. Discuss the legal and ethical requirements for carrying out a clinical trial in our country. What is the significance of Good Clinical Practice? (15)

3. (a) Discuss the importance of medication history in therapeutic management of patients. (8)

(b) Write on ten of significance. (7)

II. Write short notes on : (6 × 5 = 30)

1. Sources of Drug Information Service.

2. Liver function tests.

3. Classification of ADR with examples.

4. Estimation of Bioavailability.

5. Quality Assurance in Clinical Pharmacy Service.

6. Total Parenteral Nutrition.

MARCH 2007

[KQ 310] **Sub. Code : 2838**

M. Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV – CLINICAL PHARMACY

Time : Three hours Maximum : 100 marks

Theory : Two hours and forty minutes Theory : 80 marks

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL the questions.

I. Long Essay :

1. Discuss the protocol and importance of Drug utilization review programme of a hospital. (20)

2. Discuss the design and protocol of clinical trial of new drugs. (15)

3. Explain the need of dosage adjustment in pathological condition. Give an example of Dosage adjustment in Renal failure. (15)

II. Short notes on : (6 × 5 = 30)

1. Write briefly on the scope of clinical pharmacy service in our country.

2. What are the minimum requirements for starting a drug information service in a district headquarter hospital?

3. What are the importance of clearance and apparent volume of distribution in clinical practice?

4. What is student's '*t*' test? How is it performed?

5. What are the various methods of bioavailability determinations? Explain any one briefly.

6. Write briefly on the importance of Review of patient's medication history.

SEPTEMBER 2007

[KR 336] **Sub. Code : 2872**

M. Pharm. DEGREE EXAMINATION.

(Revised Regulations)

First Year

Branch VII — Pharmacy Practice

Paper IV – CLINICAL PHARMACY

Time : Three hours	Maximum : 100 marks
Theory : Two hours and forty minutes	Theory : 80 marks
M.C.Q. : Twenty minutes	M.C.Q. : 20 marks

Answer ALL the questions.

I. Long Essay :

1. Discuss the protocol and importance of Drug utilization review programme of a hospital. (20)

2. Discuss the design and protocol of clinical trial of new drugs. (15)

3. Explain the need of dosage adjustment in pathological condition. Give an example of Dosage adjustment in Renal failure. (15)

II. Short notes on : (6 × 5 = 30)

1. Write briefly on the scope of clinical pharmacy service in our country.

2. What are the minimum requirements for starting a drug information service in a district headquarter hospital?

3. What are the importance of clearance and apparent volume of distribution in clinical practice?

4. What is student's '*t*' test? How is it performed?

5. What are the various methods of bioavailability determinations? Explain any one briefly.

6. Write briefly on the importance of Review of patient's medication history.

September 2008

[KT 336] **Sub. Code : 2872**

M.Pharm. DEGREE EXAMINATION.

First Year

(Regulation 2006)

Branch VII — Pharmacy Practice

Paper IV — CLINICAL PHARMACY

Q.P. Code : 262872

Time : Three hours Maximum : 100 marks

Answer ALL questions.

I. Long Essays : (3 × 20 = 60)

1. How would you assess acute myocardial infarction with the aid of various laboratory investigations? Explain.

2. What is ward round participation? Describe the types, procedure and the significances of ward round participation.

3. Describe the various post marketing surveillance with their advantages and disadvantages.

II. Write short notes on : (8 × 5 = 40)

1. Assessment of synthetic capacity of liver.

2. Metabolic alkalosis.

3. Modified systematic approach in answering drug information queries.

4. Disorders of malnutrition and their treatment.

5. Dosage adjustment in renal and hepatic dysfunction.

6. Factors influencing plasma drug concentration.

7. Sample size calculation.

8. Types of drug utilization review.

March 2009

[KU 336] **Sub. Code: 2872**

M.PHARM. DEGREE EXAMINATION

(Regulations 2006)

Candidates admitted from 2006-2007 onwards

FIRST YEAR

Branch VII – PHARMACY PRACTICE

Paper IV – CLINICAL PHARMACY

Q.P. Code : 262872

Time : Three hours **Maximum : 100 marks**

Answer All questions

I. Essay Questions : **(3 x 20 = 60)**

1. Highlight the role of routine laboratory tests in diagnosis of disease with reference to hematology, liver functions, renal functions and cardiac markers.
2. What are the contributions to the therapeutics by the routine activities of a clinical pharmacist?
3. Explain the significance of clinical pharmacokinetics in determining. Loading dose, maintenance dose, bioavailability hepatic clearance, multiple dosage with appropriate models and illustrations.

II. Write Short Notes : **(8 x 5 = 40)**

1. Non parametric statistical tests.
2. Therapuetic drug monitoring.
3. Patient medication history review.
4. Monitoring and auditing of clinical trails.
5. Quality assurance in clinical pharmacy services.
6. Management of diazepam poisioning.
7. Common tests in urine.
8. Reporting of adverse drug reaction.

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September 2009

[KV 336] **Sub. Code: 2872**

M.PHARM. DEGREE EXAMINATION

(Regulations 2006)

Candidates admitted from 2006-2007 onwards

FIRST YEAR

Branch VII – PHARMACY PRACTICE

Paper IV – CLINICAL PHARMACY

Q.P. Code : 262872

Time : Three hours **Maximum : 100 marks**

Answer All questions

I. Essay Questions : **(3 x 20 = 60)**

1. What are the roles and responsibilities of a clinical pharmacist on day today basis in a tertiary care hospital?
2. Write about the principles of management of establishing and provision of services of drugs and poision information center in a teaching hospital.
3. Discuss the epidemiology, classifications risk factors, monitoring and dectecting of ADR.

II. Write Short Notes : **(8 x 5 = 40)**

1. Dose adjustment in renal and hepatic failure.
2. Guidelines for good clinical research practice
3. Drug utilization evaluation.
4. Pharmaceutical core.
5. Opiodes poisoning management.
6. Estimation and determinants of bio availability.
7. Molnutrition and defienciency states.
8. Selection of antimicrobial regimens in resistance disease states.

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March 2010

[KW 336] **Sub. Code: 2872**

M.PHARM. DEGREE EXAMINATION

(Regulations 2006)

Candidates admitted from 2006-2007 onwards

FIRST YEAR

Branch VII – PHARMACY PRACTICE

Paper IV – CLINICAL PHARMACY

Q.P. Code : 262872

Time : Three hours **Maximum : 100 marks**

Answer All questions

I. Essay Questions : **(3 x 20 = 60)**

1. Enumerate the common laboratory tests and write their procedure with clinical significance. Pertaining to hematology, liver, kidney and cardiology.
2. Describe the applications of various clinical pharmacokinetic models. Add a note on physiological determinants of drug clearance and volumes of distribution.
3. What are the principles of pharmaceutical care? Add a note on quality assurance of clinical pharmacy services.

II. Write Short Notes : **(8 x 5 = 40)**

1. Total parental nutrition.
2. Calculations of loading and maintenance doses.
3. Sample size calculations.
4. Ward round participation.
5. Role of emetics in poision management.
6. Sensitivity screening for common pathogens.
7. Reporting of adverse drug reactions.
8. Objectives of phase IV clinical trials.

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September 2010

[KX 336] **Sub. Code: 2872**

M.PHARM. DEGREE EXAMINATION

(Regulations 2006)

(Candidates admitted from 2006-2007 onwards)

FIRST YEAR

Branch VII – PHARMACY PRACTICE

Paper IV – CLINICAL PHARMACY

Q.P. Code : 262872

Time : Three hours **Maximum : 100 marks**

Answer All questions

I. Essay Questions : **(3 x 20 = 60)**

1. How would you assess acute myocardial infarction with the aid of various laboratory investigations? Explain.

2. Describe the various post marketing surveillance with their advantages and disadvantages.

3. What are requirements and function modalities of poison information center? Explain the role of clinical pharmacist in the management of poisoning by paracetamol, aspirin and morphine.

II. Write Short Notes : **(8 x 5 = 40)**

1. Applied biomedical statistics.
2. Quality assurance of clinical pharmacy services.
3. Patient medication counselling.
4. Pharmacist interventions.
5. Evaluation of drug therapy.
6. Documentation of clinical reports.
7. Dose adjustment in Geriatrics.
8. Management of Tobacco poisoning.

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MAY 2011

[KY 336] **Sub. Code: 2872**

M.PHARM. DEGREE EXAMINATION

(Regulations 2006)

(Candidates admitted from 2006-2007 onwards)

FIRST YEAR

BRANCH VII – PHARMACY PRACTICE

PAPER IV – CLINICAL PHARMACY

Q.P. Code : 262872

Time : Three hours **Maximum : 100 marks**

Answer All questions

I. Essay Questions : **(3 x 20 = 60)**

1. Discuss various drug information resources with their benefits and limitations.
2. Discuss the design and protocol of clinical trial of new drugs.
3. Explain the need of dosage adjustment in pathological condition. Give an example of Dosage adjustment in Renal failure.

II. Write Short Notes : **(8 x 5 = 40)**

1. Explain Volume of distribution and its significance.
2. How does patient counseling improve the drug therapy?
3. Explain the common laboratory tests carried out on urine?
4. Disorders of malnutrition and their treatment.
5. Calculations of loading and maintenance doses
6. Quality assurance of clinical pharmacy services.
7. Reporting of adverse drug reaction.
8. Estimation of bio availability.

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