[KD 716]

Sub. Code: 4204

THIRD B.Pharmacy DEGREE EXAMINATION.

(Revised Regulations)

Paper IV — DISPENSING, HOSPITAL PHARMACY INCLUDING CLINICAL PHARMACY

Time : Three hours	Maximum : 90 marks
Two and a half hours	Sec. A & Sec. B : 60 marks
for Sec. A and Sec. B	Section C : 30 marks

Answer Sections A and B in the same Answer Book.

Answer Section C in the answer sheet provided.

SECTION A $-(2 \times 15 = 30 \text{ marks})$

Answer any TWO questions.

1. Define incompatibilities. Classify them with examples. Discuss the various chemical incompatibilities with methods to overcome the same.

 Discuss the various drug distribution systems available for distribution of drugs to inpatients giving their merits and demerits. 3. What is patient compliance? What are the reasons for non compliance? How can the patient compliance be improved?

(a) Discuss the general procedure for dispensing cocoa butter suppositories.

(b) What are the functions of the pharmacy and therapeutic committee?

SECTION B — $(6 \times 5 = 30 \text{ marks})$

Answer any SIX questions.

 Give the various formulae used for calculation of the child's dose from the adult dose.

6. How are effervescent granules prepared?

7. What is the importance of bioavailability in selection of a brand?

 How do you dispense mixtures containing indiffusible solids? Give reasons.

9. What is Quality Assurance? How can quality assurance system be applied to hospital pharmacy practice? 2 (KD 716)

APRIL - 2001

10. What are Adverse drug reactions? How are they detected?

11. How is hospital formularly compiled?

12. Give examples of at least five Drug-drug and/or Drug-food interactions and explain.

13. How are tablet tritrates prepared?

APRIL - 2001

[KD 721] Sub. Code : 4209

THIRD B.Pharmacy DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours Maximum : 75 marks

Answer Section A and Section B in the same Answer Book.

SECTION A — $(6 \times 5 = 30 \text{ marks})$

Answer any SIX questions.

 Give the organisational structure of a modern hospital.

Outline the staff pattern of a hospital pharmacy department of a big hospital.

 Write the functions of pharmacy and therapeutic committee of a hospital.

4. What are the functions of the clinical pharmacists?

5. How is Adverse Drug reaction monitored and reported?

6. What are the requirements of a drug information centre?

7. How is effective patient counselling done?

8. What procedure is followed in dispensing narcotic and psychotropic substances?

9. How are drugs purchased for hospitals?

SECTION B - (3 × 15 = 45 marks)

Answer any THREE questions.

10. Discuss the various drug distribution systems followed, giving their advantages and disadvantages in a modern hospital.

11. How do the pharmacokinetic data help in designing optimum dosage regimen?

12. What is Therapeutic Drug Monitoring? Discuss the organisation of a clinical pharmacokinetic and toxicology laboratory. How is TDM data is utilised to adjust the individual dosage regimen?

2

[KD 721]

13. Write short notes on any THREE :

(a) Influence of protein binding in drug therapy

(b) Patient compliance

(c) Importance of interdepartmental communication in a hospital

(d) Ward pharmacy.

14. Discuss the role of a Hospital Pharmacist in Educational and Training Programme.

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[KD 721]

[KE 716]

Sub. Code: 4204

THIRD B.Pharmacy DEGREE EXAMINATION.

(Revised Regulations)

Paper IV — DISPENSING, HOSPITAL PHARMACY INCLUDING CLINICAL PHARMACY

 Time : Three hours
 Maximum : 90 marks

 Two and a half hours
 Sec. A & Sec. B : 60 marks

 for Sec. A and Sec. B
 Section C : 30 marks

Answer Sections A and B in same Answer Book.

Answer Section C in the Answer Sheet provided.

SECTION A --- (2 × 15 = 30 marks)

Answer any TWO questions.

1. Define and classify mixtures. Explain the principle and procedure adapted in dispensing mixture containing indiffusible substances and precipitate forming liquids. (3+6+6)

2. (a) What are suppositories and pessaries? Write the ideal requirement of suppository base. (2+6)

(b) What is displacement value and its application? How will you dispense 8 iodoform suppositories each weighing 2 gms. Using theobroms oil as the base. Displacement value of Iodoform is 4.0.(3 + 4) What are the various factors responsible for the medication errors? How can we rectify it? What are the various functions of drug information centres?(5 + 5 + 5)

 Briefly explain the different types of adverse drug reactions. Discuss the various methods of monitoring ADR. Write a note on apparent volume of distribution.

(5 + 5 + 5)

SECTION B -- (6 × 5 = 30 marks)

Answer any SIX questions.

5. Define and classify incompatibility. Discuss therapeutic incompatibilities.

6. Explain the stability problems of emulsions. How can it be rectified?

7. Define suspension. What are flocculated and deflocculated suspensions?

8. How does ointments differ from pastes? Classify the ointment bases with examples. (2 + 3)

- 9. What do you mean be
 - (a) Omni Hora.
 - (b) Elixir.
 - (c) Isotonic solution.
 - (d) Bioavailability.
 - (e) T.D.M. (5 × 1 = 5)

2

[KE 716]

NOVEMBER - 2001

10. Explain central sterile supply service.

11. What are the objectives and functions of hospital pharmacy?

12. What is non-compliance? What are the various methods of improving compliance? (1+4)

13. What are clinical trials? Explain the different phases of clinical trials.

3

NOVEMBER - 2001

[KE 721] Sub. Code : 4209 7. 8. pharmacy and therapeutic committee. THIRD B.Pharm. DEGREE EXAMINATION. (Re-Revised Regulations) 9. out-patients. Paper IV - HOSPITAL AND CLINICAL PHARMACY Time : Three hours Maximum : 75 marks Answer any THREE questions. Answer Section A and Section B in the same Answer Book. optimum dosage regimen. SECTION A — $(6 \times 5 = 30 \text{ marks})$ Answer any SIX questions. methods of achieving patient compliance. Write a note on storage of medicaments in 1. hospital. system. What are the responsibilities of pharmacist 2. towards in-patients? and rationale use of drugs to in-patients.

14. Write short notes on any THREE :

- (a) Organisation of a modern hospital.
- (b) Case—control studies.
- (c) Drug information centre.
- (d) Pharmacokinetic drug interactions.

[KE 721]

Write a note on dispensing of Narcotic drugs in 3. hospital pharmacy.

- Write a brief account of Allergic drug interactions. 4.
- What do you mean by record linage studies. 5.

Discuss the role of hospital pharmacist in training 6. programme.

What is the role of a clinical pharmacist?

Discuss the organisation and functions of

Write a note on distribution system of drugs for

SECTION B — $(3 \times 15 = 45 \text{ marks})$

10. Discuss different data helpful in designing

11. What are the factors associated with noncompliance and consequences of it? Add a note on

12. Discuss salient features of a hospital formulary

13. Describe the concept of clinical pharmacy in safe

[KG 716]

Sub. Code : 4204

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

Paper IV --- DISPENSING, HOSPITAL PHARMACY INCLUDING CLINICAL PHARMACY

Time : Three hoursMaximum : 90 marksTwo and a half hoursSec. A & Sec. B : 60 marksfor Sec. A & Sec. BSection C : 30 marks

Answer Sections A and B in same Answer Books.

Answer Section C in the Answer Sheet provided.

SECTION A — $(2 \times 15 = 30 \text{ marks})$

Answer any TWO questions.

 Discuss the technique of weighing and measuring in prescription (dispensing) practice. Write notes on care and use of a prescription balance.

 Describe the objectives and functions of a hospital pharmacy service. Explain the abilities required for a hospital pharmacist.

Describe the layout, facilities including air control of the sterile products area in a hospital.

 Explain the significance of 'pharmacokinetics' and 'protein binding' in clinical pharmacy practice.

SECTION B — $(6 \times 5 = 30 \text{ marks})$

Answer any SIX questions.

5. Write notes on containers for dispensed products.

 Explain drug interactions involving vitamins (vitamins with other drugs).

7. Discuss physical incompatibility with examples.

 How do you prepare 100 ml of a solution of potassium permanganate such that 5 ml of this solution when diluted to 100 ml gives a 1 : 5,000 solution.

9. How do you dispense the following :

R

Sodium salicylate 8.0 g

Soda bicarb 16.0 g

Peppermint water ad 180.0 ml.

Ft. mist. send 60 ml. Signa : s.o.s. sumenda.

10. How does counselling of patient help in improving compliance with regard to drug therapy?

11. Write notes on Drug information bulletin and community service rendered by clinical pharmacy division. 2 [KG 716] MARCH - 2002

12. Explain the floor-stock system.

13. Discuss the relevance of quality assurance in clinical pharmacy practice.

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[KG 721] Sub. Code : 4209

THIRD B.Pharmacy DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours Maximum : 75 marks

Answer Sections A and B in the same Answer Book.

SECTION A — $(6 \times 5 = 30 \text{ marks})$

Answer any SIX questions.

1. Give the organisational structure of a hospital.

2. Discuss the pharmacist's responsibilities towards ambulatory patients in a hospital.

3. Write the functions of pharmacy and therapeutic committee of a hospital.

4. What are the guiding principles of preparation of a hospital formulary system?

Write a note on distribution of drugs in a hospital for ambulatory patients.

6. What are the requirements of a drug information centre?

Briefly explain pharmacodynamic drug interactions. 8. Define and classify Adverse Drug Reactions.

 Write a note on patient medication counselling. SECTION B — (3 × 15 = 45 marks) Answer any THREE questions.

10. Discuss the role of hospital pharmacist in educational and training programme.

11. Define patient compliance. Discuss the various types of non-compliance and the factors associated with non-compliance.

12. Define and explain clinical pharmacy concept. Discuss the role of clinical pharmacist in the safe and rational use of drugs in a hospital set—up.

13. Write short notes on any THREE :

(a) Ward pharmacy

(b) Beneficial drug interactions

(c) Influence of clearance in drug dose optimization

(d) Importance of interdepartmental communication in a hospital.

14. Discuss the various drug distribution methods for the in-patients with their advantages and disadvantages.

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[KG 721]

SEPTEMBER - 2002

[KH 721] Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION.

(ReRevised Regulations)

HOSPITAL AND CLINICAL PHARMACY

Time : Three hours Maximum : 75 marks

Answer Sections A and B in the same answer book.

SECTION A $-(6 \times 5 = 30 \text{ marks})$

Answer any SIX questions.

1. List out the functions of pharmacy and therapeutic committee. (5)

Write a brief account of out-patient drug dispensing.
 (5)

 Write the factors associated with patient noncompliance. (5)

What are the roles of clinical pharmacist? (5)

5. What is adverse drug reaction? Write the different types of adverse drug reaction with suitable examples?

(1 + 4)

SEPTEMBER - 2002

 Define patient counselling. Write the different barriers involved in patient counselling. (1 + 4) What is spontaneous reporting system? Write the advantages and disadvantages of spontaneous reporting system. (1 + 4) Enlist the factors which affect the therapeutic drug monitoring (TDM). (5) 	 11. What is inventory control? Discuss different methods of inventory control. (2 + 13) 12. What is drug information? Mention the various drug information resources. Discuss the roles and responsibilities of drug information pharmacist in the pharmaceutical care. (1 + 4 + 10) 13. Discuss the different types of Drug-Drug interactions with suitable examples. (15)
9. Define the terms :	14. Write short notes on any THREE :
(a) Half-life	(a) Ward pharmacy. (5)
(b) C _{max}	(b) Bio availability. (5)
(c) T _{max}	(c) Individualisation of drug therapy. (5)
 (d) Renal clearance (e) Area under curve (AUC). (1+1+1+1+1) SECTION B (3 × 15 = 45 marks) Answer any THREE questions. 	 (d) Pharmacists' communication with healthcare professionals. (5)
 Discuss the typical organisational structure of a hospital pharmacy department. (15) 	

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[KH 721]

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[KH 721]

APRIL - 2003

[KI 716] Sub. Code : 4204

THIRD B PHARMACY DEGREE EXAMINATION.

(Revised Regulations)

Paper IV — DISPENSING, HOSPITAL PHARMACY INCLUDING CLINICAL PHARMACY

Time : Three hours	Maximum : 90 marks
Two and a half hours	Sec. A & B : 60 marks
For Sec. A & Sec. B	Section C : 30 marks.

Half an hour for Sec. C

Answer Section A and B in the SAME answer book.

SECTION A -- (2 × 15 = 30 marks)

Answer any TWO questions.

1. Define a prescription. Explain the various parts of the prescription with suitable examples. Discuss the procedure adopted to dispense a prescription. (2 + 6 + 7)

2. Define the following. Give examples wherever necessary.

- (a) Non-Compliance
- (b) Adverse drug reactions
- (c) Apparent volume of distribution

Therapeutic drug monitoring (d)

Drug information centre. (e) $(5 \times 3 = 15)$

Define Hospital Pharmacy. Discuss the objectives 3. and functions of hospital pharmacy. Discuss the various drug distribution systems in a hospital. (2+8+5)

What is an emulsion? Classify with examples the emulsifying agents used in the preparation of emulsions. Discuss the various stability problems of emulsions and its rectification. (2 + 6 + 7)

SECTION B -- (6 x 5 = 30 marks)

Answer any SIX questions

Define proof spirit. Convert 80% v/v alcohol to the 5. proof strength and 25° O.P. spirit to % v/v strength. (1+2+2)

What are tolerated and adjusted incompatibilities? б. How can they be rectified?

2. Differentiate between following with the examples :

(a) Liniment and Lotion

Flocculated and deflocculated suspensions. (b)

 $(2 \times 2\frac{1}{2})$

[KI 716]

What do you understand by S.O.S? 8. (a)

Expand infull latin and give the English (b) meaning of b.i.d.

> Give the metric equivalent of 3 pints. (c)

What is the meaning of R ? (d)

What is posology? (e) (5 x 1)

Discuss the pharmaceutical services in out-9. patient departments.

10. What are the guidelines in preparing a hospital formulary?

11. Briefly explain the different phases of clinical trials. What is the role of pharmacist in it?

What is protein binding? Explain its clinical 12 significance.

13. Write a note on central sterile supply.

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APRIL - 2003

[KI 721] Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours Maximum : 75 marks

Answer Section A and Section B in SAME Answer Book.

SECTION A - (6 × 5 = 30 marks)

Answer any SIX questions.

1. Define 'Hospital'. What are the functions of a hospital?

Draw and explain the flow-chart for materials in a hospital pharmacy.

3. What is the composition of the Pharmacy and Therapeutics Committee? What are its sub committees? Suggest a model check list for drug safety as developed by the PTC.

4. What are the guiding principles for using a Hospital Formulary?

5. Draw a schematic chart depicting the role of a clinical pharmacist and explain it. 6. What is meant by compliance? Define percent compliance? What are the objectives of taking medication history of a patient?

7. What is the importance of communication in a pharmacy?

8. Explain the location of outpatient dispensing (pharmacy service) unit.

9. What are predictable adverse drug reactions?

SECTION B — $(3 \times 15 = 45 \text{ marks})$

Answer any THREE questions.

10. Describe the purchase procedure of medicaments in a hospital.

11. Discuss the importance of 'Drug Information Service' and 'Drug Information Centre' in a hospital.

12. How is individualisation of drug therapy done? What is its necessity? What are the problems encountered in bioavailability studies in patients? 13. What are genetically determined drug toxicity effects? How are adverse drug reaction effects detected? Discuss about drug induced skin reactions.

14. Explain the method of drug distribution to inpatients in a hospital.

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OCTOBER - 2003

[KJ 721] Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours Maximum : 75 marks

Two hours and Forty

Five minutes

for Sec. A and Sec. B Sec. A & Sec. B : 60 marks

Fifteen minutes for Sec. C Sec. C : 15 marks

Answer Sections A and B in the SAME Answer Book.

SECTION A — $(2 \times 15 = 30 \text{ marks})$

Answer any TWO questions.

 Explain therapeutic drug monitoring and its clinical significance with specific examples.

2. Discuss the consequences of patient noncompliance, factors contributing to patient noncompliance and methods for achieving patient compliance.

3. Describe purchasing and inventory control procedure followed in Hospital Pharmacy.

SECTION B — $(6 \times 5 = 30 \text{ marks})$

Answer any SIX questions.

Define and classify hospital.

Add a note on hospital formulary.

Write a note on communication skill and its significance in pharmaceutical care.

 Describe dispensing procedure of narcotic drugs in a hospital pharmacy.

Add a note on role of clinical pharmacist in safe and rational use of drugs.

Explain the clinical significance of plasma protein binding of drugs.

10. Describe the methods followed for detecting adverse drug reactions.

11. Add a note on Pharmacy and Therapeutic Committee.

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[KK 721]

Sub. Code: 4209

THIRD B.Pharm. DEGREE EXAMINATION. (Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours Maximum : 75 marks

Sec. A & B : Two hours and

forty five minutes Sec. A & B : 60 marks

M.C.Q. : Fifteen minutes M.C.Q. : 15 marks

Answer Sections A and B in the SAME Answer Book.

SECTION A — $(2 \times 15 = 30 \text{ marks})$

Answer any TWO questions.

1. Explain the process of dispensing drugs to outpatients and inpatients in a typical hospital.

 Give an organisation chart of a hospital pharmacy service and also discuss the objectives of a hospital pharmacy service.

3. Define drug's adverse reactions and explain their significance. Classify adverse drug reactions.

SECTION B -- (6 × 5 = 30 marks)

Answer any SIX questions.

4. Write a note on procurement of medicament.

5. Write a note on Pharmacy and therapeutic Committee.

6. Write any five guiding principles while using a formulary.

7. Give important function of a clinical pharmacist.

 Give reasons for non-compliance in respect of patients while on therapy.

9. Define and explain :

Idiosyncrasy and drug intolerance.

10. Define Bio-availability and mention the factors affecting bio-availability.

11. Mention the sources of drug information.

[KK 721]

[KL 721]

Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION. (Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours		Maximum : 75 marks
Sec. A &	B : Two hours and	
	forty five minutes	Sec. A & B : 60 marks

M.C.Q. : Fifteen minutes M.C.Q. : 15 marks

Answer Sections A and B in the SAME Answer Book.

SECTION A

Answer any TWO questions.

 $(2 \times 15 = 30)$

1. Define compliance. What are the methods for assessing compliance. Briefly describe them. Enumerate the major reasons for non compliance. (2+8+5)

2. What are the guiding principles in the design and optimisation of dosage regimen. Describe its relevance giving special emphasis on (a) Bio availability (b) plasma protein binding. (3+6+3+3)

3. Classify adverse drug reaction. Briefly describe the methods of ADR monitoring. Write a note on Pharmacodynamic drug interactions. (3+7+5)

SECTION B

Answer any SIX of the following : $(6 \times 5 = 30)$

 What are the functions of drug information centre? Explain its role in consultation regarding drug therapy.

5. What are the objectives and functions of hospital pharmacy?

6. Explain the ABC analysis in inventory control.

7. What are the different steps in the preparation of model hospital formulary?

8. Explain the objectives and constitution of Pharmacy and Therapeutic committee.

9. Explain the clinical pharmacokinetic basis of drug therapy monitoring of Digoxin and Phenytoin.

 Briefly describe the role of pharmacist in medication history interview.

11. What are the precautions taken while dispensing narcotics?

[KL 721]

FEBRUARY - 2005

involved in patient counselling.

[KM 721]	Sub. Code : 4209	SECTION B — $(6 \times 5 = 30 \text{ marks})$		
Third B.Pharm. DEGREE EXAMINATION. (Re-Revised Regulations)		Answer any SIX questions.		
		5. What are the different roles of Hospital Pharmacist? (5)		
Paper IV - HOSPITAL AND	CLINICAL PHARMACY	6. What is hospital formulary? Write the		
Time : Three hours	Maximum : 75 marks	significances of hospital formulary. (1+4)		
Sec. A & B : Two hours and forty five minutes	Sec. A & B : 60 marks	7. Define adverse drug reaction (ADR). What are the factors which predisposes to ADR? (1+4)		
M.C.Q. : Fifteen minutes	M.C.Q. : 15 marks	8. What is rational drug use? Why is rational drug		
SECTION A - (2×1	.5 = 30 marks)	use important? (2 + 3)		
Answer any TWO questions.		9. What is bioavailability? Write the various factors affecting bioavailability. (1+4)		
 Define Pharmacy and (PTC). What are the objective functions of PTC. 		10. Write a note on renal clearance. (5)		
2. Discuss the various drug distribution systems for the hospital in-patients. (15)		 Mention the different types of Drug Information Resources. Write their advantages and disadvantages. (2+3) 		
3. What is Therapeutic Dr. Write the indications for TDN	d. Discuss the various	 Write a brief account on Pharmaco Kinetic drug- drug interactions. (5) 		
factors which influences the TD 4. What is Patient Counsel involved in patient counselling	ling? Discuss the steps	 Write a note on storage of medications. (5) 		

(1+10+4)

[KM 721]

[KN 721]

Sub. Code : 4209

Third B.Pharm. DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours	Maximum : 75 marks
Theory : Two hours and forty five minutes	Theory : 60 marks
M.C.Q. : Fifteen minutes	M.C.Q. : 15 marks
I. Long Essay :	$(2 \times 15 = 30)$

Answer any TWO questions.

 Outline the organizational structure of a modern hospital? Describe the various departments and supportive service in it.

2. (a) What is adverse drug reaction? Classify them briefly describe the following phenomena related to adverse drug reactions. (1+4)

- (b) Rebound phenomena. (21)
- (c) Delayed effect. (21)
- (d) Drug allergy. (5)

 Explain the various control procedure followed for dispensing of narcotic drugs in hospital.

4. Outline the purchase procedure followed for the purchase of drugs in a hospital. Explain how economic order quantity is determined for purchase of goods?

II. Short notes : (6 x 5 = 30)

Answer any SIX questions.

 What is complete floor stock systems? What are its merits and demerits?

 What is therapeutic drug monitoring? How do you apply this concept in the therapy with anticoagulants and bronchodilators? Substantiate your answer with relevant examples.

3. Define pharmacogenetics. How does it relate to metabolism of drugs. Explain its significance in therapy.

 What are drug interaction? Explain the significance of drug metabolism in drug interaction.

Explain the structure and organization of clinical pharmacoknetics and toxicology laboratory.

2

[KN 721]

AUGUST - 2005

6. Discuss the role of pharmacist in education and training programmes.

7. What are the objectives and function of pharmacy and therapeutic committee?

8. Explain the function of drug information center.

9. Explain the methods of storage procedures adopted in a hospital.

FEBRUARY - 2006

[KO 72	21]	Sub. Code : 4209	п.	Short notes :	(6 × 5 = 30)
Th	aird B.Pharm. DEGRE	E EXAMINATION.		Answer any SIX	questions.
			1.	Discuss about sources of d	rug information.
Paper I	(Re-Revised Re V — HOSPITAL AND	gulations) CLINICAL PHARMACY	2. Explain the process of drug distribution system i IPD of a hospital.		•
Time : T	hree hours	Maximum : 75 marks	3.	Explain the applications o	f Pharmacokinetics.
Theory : Two hours and forty five minutes		Theory : 60 marks	4.	Write various duties of Ho	ospital Pharmacist.
			5.	Discuss the possible medic	cation errors in OPD.
M.C.Q. : Fifteen minutes M.C.Q. : 15 marks 6. Explain the bas		Explain the basic element	s of pharm care.		
I. Lo	ng Essay :	$(2 \times 15 = 30)$	7.	What are the various l	
	Answer any TW	O questions.	pha	rmacist in Hospital Pharma	cyl
			8.	Explain the concept of bios	availability.

9.

1. Explain the organisation and functions of Hospital Pharmacy.

2. Define dosage regimen and discuss various factors influencing dosage regimen.

3. Write in detail about organisation and functions of P.T.C.

4. Discuss the concept of essential drugs and rational use of drugs.

Write briefly about ambulatory patient care.

2

[KO 721]

[KP 721]

Sub. Code: 4209

THIRD B.Pharm. DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours	Maximum : 75 marks
Theory : Two hours and forty five minutes	Theory: 60 marks
M.C.Q. : Fifteen minutes	M.C.Q. : 15 marks
I. Long Essay :	$(2\times 20=40)$

Answer any TWO questions.

 Define pharmacy and therapeutic committee. Discuss the objectives and functions of pharmacy and therapeutic committee.

 What is therapeutic drug monitoring (TDM)? Describe structure and organisation of a clinical pharmacolinetics and toxicology laboratory.

Discuss various drug distribution systems followed in the hospitals for in patients.

 What is patient compliance? Discuss types, factors associated with and consequences of non-compliance. Describe the methods of achieving patient compliance.

п.	Short notes :	$(4 \times 5 = 20)$

Answer any FOUR questions.

1. Define hospital classify hospitals.

 What are the responsibilities of hospital pharmacist towards ambulatory and inpatients? (5)

3. Define and explain significances of a hospital formulary. (5)

 Discuss importance of proper communication in the pharmacy. Describe barriers in communication.

(3+2)

5. Discuss role of clinical pharmacist in safe and rational use of drugs to in patients. (5)

Add a note on volume of distribution and its clinical significance.

2

[KP 721]

FEBRUARY - 2007

[KQ 721]

Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV - HOSPITAL AND CLINICAL PHARMACY

Time : Three hours	Maximum : 75 marks
Theory : Two hours and	Theory : 60 marks
forty five minutes	
M.C.Q. : Fifteen minutes	M.C.Q. : 15 marks
I. Long Essay :	$(2\times 20=40)$

Answer any TWO questions.

1. How 'Hospital is a city away from city'? Discuss in detail about the drug distribution systems in the 'inpatient pharmacy services' of a 1000 bedded hospital?

2. Discuss the concept of essential drugs and rational use of drugs?

3. What is Hospital pharmacy? Discuss the typical organizational structure of hospital pharmacy department and its responsibilities in health care system?

4. How "Pharmacy and Therapeutic Committee (PTC)" is constituted and discuss various functions of PTC? II. Short notes : $(4 \times 5 = 20)$

Write any FOUR of the following questions.

1. Discuss the drug information services in hospital pharmacy?

2. Explain central sterile services department in hospital?

3. Write various guiding principles for framing of hospital formulary?

4. Brief out the role of hospital pharmacist in patient counseling?

5. Discuss the scope of clinical pharmacy in India?

Write the therapeutic drug monitoring on usage of the following category of drugs on your choice :

(a) Cardio tonic (b) Antibiotic

[KR 721]

Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV — HOSPITAL AND CLINICAL PHARMACY

Time	: Three hours	Maximum	: 75 marks
Theory	: Two hours and forty five minutes	Theory :	60 marks

M.C.Q. : Fifteen minutes M.C.Q. : 15 marks

I. Long Essay :

Answer any TWO questions.

 $(2 \times 15 = 30)$

1. What is therapeutic drug monitoring? Discuss the organization of a clinical pharmacokinetics and toxicology laboratory. How is TDM data utilized to adjust the dosage regimen?

2. Discuss the composition and function of pharmacy and Therapeutic committee in a hospital.

3. Write short notes on any THREE :

(a) Ward pharmacy

(b) Influence of protein binding in drug therapy.

(c) Types of hospitals.

(d) Rational use of drug.

4. Discuss the organizational structure and function of hospital pharmacy decision of a corporate hospital.

II. Answer any SIX questions : $(6 \times 5 = 30)$

1. Describe the drug distribution system to the in patients in the hospital.

2. Describe the role of pharmacists in adverse drug reaction monitoring.

3. Explain with example, how renal disease influences the dosage of a drug.

4. What pharmacokinetic parameters are required to be considered in optimizing dosage regimen?

5. Give an account on the control of narcotics and additive drugs.

6. How is effective patient counseling done?

7. Write a note on storage of medicines in hospitals.

8. Drug Information centre in a Hospital and its functions.

[KR 721]

August-2007				
[KR 749]	Sub. Code : 4240	II. Short Notes :	$(6 \times 5 = 30)$	
(For candidates admitted fro	m 2004–05 onwards)	Answer any SIX of the fo	ollowing :	
THIRD B. Pharm. DEGRE	E EXAMINATION.	1. Explain various modes of c health care team in Hospital pharm		
(Regulation		2. Write the concept of clinical ph	armacy.	
Paper V — HOSPITAL AND C	LINICAL PHARMACY	3. Write laws and regulation. Pe	Write laws and regulation. Pertaining ; inventory ntrol and storage of drug.	
Time : Three hours	Maximum : 75 marks	control and storage of drug.		
Theory : Two hours and forty five minutes	Theory: 60 marks	4. Compare stock system prescription order.	with individual	
M.C.Q. : Fifteen minutes	M.C.Q. : 15 marks	5. (a) Explain the various	control procedured	
I. Essay Questions :	$(2 \times 15 = 30)$	followed for dispensing of narcotic di		
Answer any TWO questions.		(b) Describe the functioning o centre.	f a drug information	
1. Discuss the objectives, organisation and functions of pharmacy and therapeutic committee.		6. Write briefly ambulatory patie	nt care.	
2. Explain space, location a pharmacy.	and layout of hospital (3 + 6 + 6)	7. Discuss Medication errors in H		
3. Discuss the channels of d in H.P.	· · · ·	8. Discuss the importance of monitoring in general nealth.	Therapeutic drug	

4. Explain the purchase procedure and related forms in hospital. Explain how economic order quantity is determined?.

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[KR 749]

February-2008

[KS 721] Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV --- HOSPITAL AND CLINICAL PHARMACY

Q.P. Code : 564209

Time : Three hours	Maximum : 75 marks
Theory : Two hours and forty five minutes	Theory : 60 marks
M.C.Q. : Fifteen minutes	M.C.Q. : 15 marks

I. Long Essay: $(2 \times 15 = 30)$

1. (a) Explain how protein binding influences drug absorption.

(b) What are adverse drug reactions?

2. (a) Discuss the organisational structure of a modern hospital.

(b) Write various procedures involved in the purchase of drugs in hospitals.

3. Give the concept of clinical pharmacy. Outline the functions of clinical pharmacist.

4. Discuss the various drug distribution systems followed, giving their advantage and disadvantage in the modern hospitals.

II. Short notes : $(6 \times 5 = 30)$

Answer any SIX questions.

1. Discuss the drug information services in the hospital.

2. How is educational activities in hospital pharmacy carried out?

3. Write a note on : Drug interactions.

4. What are the strategies for improving compliance?

5. Write various guiding principles for framing hospital formulary.

6. Plasma Protein binding.

7. What are drugs require therapeutic drug monitoring? Write the basic data for TDM.

8. Write the procedures involved in narcotic drug dispensing.

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Answer any TWO questions.

[KS 749]

Sub. Code : 4240

(For candidates admitted from 2004-05 onwards)

THIRD B.Pharm. DEGREE EXAMINATION.

(Regulation 2004)

Paper V - HOSPITAL AND CLINICAL PHARMACY

Q.P. Code : 564240

Time : Three hours	Maximum : 75 marks
Theory : Two hours and forty five minutes	Theory : 60 marks
M.C.Q. : Fifteen minutes	M.C.Q.: 15 marks
I. Essay questions :	$(2 \times 15 = 30)$

Answer any TWO questions.

1. Define Hospital Pharmacy. Discuss organization, functions and objectives of Hospital Pharmacy.

2. Define hospital formulary system. What are the guidelines for hospital formulary system? What are the contents of hospital formulary?

3. Discuss the requirements of (a) premises and (b) clothing and sanitation of workers for sterile manufacture in a hospital.

4. Discuss role of hospital pharmacists in public awareness and continuing education programmes.

II. Short notes :

$(6 \times 5 = 30)$

Answer any SIX of the following.

(a) Add a note on patient counselling.

(b) Describe dispensing procedure of controlled products in hospitals.

(c) Describe master formula record.

(d) Add a note on medication errors in hospital pharmacy.

(e) Give a brief account of pharmacokinetic drug interactions.

(f) Discuss hazards associated with use radiopharmaceuticals and measures to minimize them.

(g) What are radiation hazards? Write the prevention of such cases in hospital.

(h) Discuss organization of drug store.

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August 2008

[KT 721]

Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION.

(Re-Revised Regulations)

Paper IV --- HOSPITAL AND CLINICAL PHARMACY

Q.P. Code : 564209

Time : Three hours Maximum : 75 marks

I. Long Essay : $(2 \times 20 = 40)$

Answer any TWO questions.

1. Define Patient compliance. Discuss the various types of non-compliance and the factors associated with non-compliance. Write in detail about the methods for achieving patient compliance. (2 + 4 + 6 + 8)

2. Discuss the various drug distribution methods for the inpatients and outpatients with their advantages and disadvantages. (6+6+4+4)

3. (a) Explain the organisational structure and functions of Hospital Pharmacy. (5+5)

(b) Discuss the steps involved in Patient counselling and the barriers involved in Patient counselling. (6+4)

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II. Short Notes :

Answer any FIVE questions.

1. Write a note on purchasing procedure in hospitals.

2. Give an account of influence of protein binding in drug therapy.

3. Describe Drug Information centre in a hospital and its function.

4. Give important function of a clinical pharmacist.

5. Explain pharmacy and Therapeutics committee's role in drug safety.

6. Describe the guidelines for hospital formulary system.

7. What are the protocols for reporting Drug abuse or diversion?

III. Short Answers : $(5 \times 2 = 10)$

Answer any FIVE questions.

1. Mention various types of Hospital.

2. Write about beneficial drug interaction.

- 3. Explain automatic stop order for dangerous drugs.
- 4. Define the term Inventory and control.
- 5. Explain the term MOSAICS.
- 6. Write a note on volume of distribution.
- 7. What is Ward Pharmacy?

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 $(5 \times 5 = 25)$

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[KT 721]

August 2008

[KT 749]

Sub. Code : 4240

(For candidates admitted from 2004-05 onwards)

THIRD B.Pharm. DEGREE EXAMINATION.

(Regulations 2004)

Paper V — HOSPITAL AND CLINICAL PHARMACY

Q.P. Code: 564240

Time : Three hours	Maximum : 75 marks
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I. Essay questions : $(2 \times 20 = 40)$

Answer any TWO questions.

(1) \mathbb{R}

Ventolin Inhaler 2 Puffs S. O. S

NIZATIDINE	150 mg	B.D. $ imes$ 15 days
Tab. Isorbid	5 mg	$B.D. imes 15 ext{ days}$
Tab. Slow K	$600 \ \mathrm{mg}$	$B.D. \times 7 \text{ days}$
Tab. Lasix	40 mg	$B.D. imes 7 ext{ days}$

Find out is there any drug interaction in the above prescription, Yes/No; If yes explain and elucidate what is slow K 600 mg? What is the purpose to dispense along with other medicaments? (2) Write the purchase procedure and related forms in hospital. Explain about EOQ.

(3) Explain about various sources of drug information centre with suitable example. Give a model format of maintenance of DIC in MEDLINE Service.

II. Short notes : $(5 \times 5 = 25)$

Answer any FIVE questions.

(1) What is gynaecomastia? How that is interrelated with cimetidine.

(2) Write a note on various counselling procedure adopted for diabetes and blood pressure patients.

(3) Discuss medication errors in pharmacy.

(4) Explain the role of hospital pharmacist in educational and training programme.

(5) Give a note on allergic reactions pertaining to ADR.

(6) Explain the various methods of production of radiopharmaceuticals.

(7) Prescription refilling.

III. Short answers :

$(5 \times 2 = 10)$

Answer any FIVE questions.

(1) Write a note on sterilization equipments used in physical methods of sterilization.

- (2) Contents of Hospital formulary.
- (3) Contents of drug profile.
- (4) Detection of ADR.
- (5) Barriers in counselling.
- (6) ADR of ACE Inhibitors.
- (7) Role of pharmacist in ADR Monitoring.

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[KU 721]

Sub. Code: 4209

THIRD B.PHARM. DEGREE EXAMINATION (Re-Revised Regulations) Candidates Admitted upto 2003-04 Paper IV – HOSPITAL AND CLINICAL PHARMACY Q.P. Code : 564209

Time : Three hours

Maximum : 75 marks

I. Essay Questions : Answer any TWO questions (2 x 20 = 40)

- 1. Discuss the role of hospital pharmacist in education and training programmes.
- 2. What is therapeutic drug monitoring. Explain the structure and organization of a clinical pharmacokinetics and toxicology lab.
- 3. What are the factors associated with non compliance and consequences of it? Add a note on the methods of achieving patient compliance.

II. Write Short Notes : Answer any FIVE questions $(5 \times 5 = 25)$

- 1. Write the organizational structure of a hospital pharmacy department.
- 2. Discuss the procedures involved in narcotic drug dispensing.
- 3. What are the factors affecting bioavailability.
- 4. Explain the significances of hospital formulary.
- 5. List out the functions of pharmacy and therapeutic committee.
- 6. Influence of protein binding in drug therapy.
- 7. Scope of clinical pharmacy in India.

III. Short Answers: Answer any FIVE questions $(5 \times 2 = 10)$

- 1. The details of storage conditions for drugs explained in Indian pharmacopoeia.
- 2. Non charge floor stock drugs.
- 3. Write a note on: Allergic drug reactions.
- 4. Procedure for dispensing of drugs to emergency patients.
- 5. Verbal orders.
- 6. Central unit dose drug distribution system.
- 7. Minimum effective concentration.

THIRD B.PHARM. DEGREE EXAMINATION (Re-Revised Regulations) Candidates Admitted upto 2003-04 Paper IV – HOSPITAL AND CLINICAL PHARMACY *Q.P. Code : 564209*

Time : Three hours	Maxi	mum : 75 marks
I. Essay Questions :	Answer any TWO questions	$(2 \times 20 = 40)$

- 1. a) Define hospital pharmacy. Discuss the organizational structure of the hospital pharmacy and its role on inpatient service.
 - **b)** Discuss the various types of hospital with a suitable organizational structure on modern hospital.
- 2. a) Discuss in detail on pharmacy and therapeutic committee in hospital pharmacy.
 - **b)** Define hospital formulary, its method of preparation and its role in modern hospital.
- 3. a) Discuss distribution of drugs to inpatients and charging procedure for drugs in hospital pharmacy.
 - **b)** Explain in detail the clearance, half life and drug interaction on ADR.

II. Write Short Notes : Answer any FIVE questions $(5 \times 5 = 25)$

- 1. Discuss in detail the storage of drugs in hospital pharmacy.
- 2. Explain the role of hospital pharmacist in educational training.
- 3. Briefly discuss barriers involved in patient counseling.
- 4. Discuss in detail structure and organization of the toxicology laboratory.
- 5. Bioavailability in design of dosage regimen.
- 6. Short note on clinical pharmacist and dispensing pharmacist.
- 7. Idiosyncrasy and yellow card in ADR.

III. Short Answers: Answer any FIVE questions $(5 \times 2 = 10)$

- 1. Out patient dispensing methods.
- 2. Pharmacokinetic data in clinical pharmacy for optimization of dosage regimen.
- 3. Explain disposition dependent dosage adjustment.
- 4. Allergic drug reactions in ADR.
- 5. Measures taken to maintain quality of drugs in hospital.
- 6. Therapeutic drug monitoring.
- 7. Quality assurance and good manufacturing practice in hospital pharmacy.

THIRD B.PHARM. DEGREE EXAMINATION

(Re-Revised Regulations)Candidates Admitted upto 2003-04

Paper IV – HOSPITAL AND CLINICAL PHARMACY

Q.P. Code: 564209

Time : Three hours I. Essay Questions :

Maximum : 75 marks (2 X 20 = 40)

Answer any TWO questions.

- a) Discuss the scope of clinical pharmacy in India
 b) Describe the role of hospital pharmacist.
- 2. a) Explain the constitution and functions of pharmacy and Therapeutic committee.
 - b) How PTC ensures the safety use of drugs.
- 3. a) Discuss the principles involved in the design and optimization of dosage regimen.
 - b) Write the concept of (i) Bioavailability (ii) Plasma protein binding

II. Write Short Notes :

Answer any FIVE questions.

(5X 5 = 25)

(5X2 = 10)

- 1. Organisation and structure of a Modern Hospital
- 2. Consequences of Non Compliance
- 3. Pharmcokinetic drug interactions
- 4. Charging of prescribed drugs
- 5. Guiding principles to prepare the Hospital formulary
- 6. Distribution system of drugs for the inpatients
- 7. Concept of medication history interviews.

III. Short Answers:

Answer any FIVE questions.

- 1. Give examples for allergic drug reactions
- 2. Emergency drug lists
- 3. Effect of phenytoin with phenothiazines
- 4. Enumerate the barriers involved inpatient counseling
- 5. Importance of communication in pharmacy
- 6. Distinguish the clinical pharmacist from dispensing pharmacist
- 7. Dispensing of hazardous substances to patients.

FEBRUARY 2011

Sub. Code : 4209

THIRD B.PHARM. DEGREE EXAMINATION. (Re-Revised Regulations) Candidates Admitted upto 2003–04 Paper IV — HOSPITAL AND CLINICAL PHARMACY

Q.P. Code : 564209

Time : Three hours		Maximum : 75 marks
I. Essay Questions :	Answer any TWO questions.	$(2 \ge 20 = 40)$

- 1. Types of non compliance, factors related to non compliance and role of Pharmacist in patient compliance.
- 2. Organisation and structure of hospital pharmacy and Responsibilities of a hospital pharmacist.
- 3. Importance of bioavailability, urinary excretion, plasma protein binding and clearance in design and optimization of dosage.

II. Write Short Notes : Answer any FIVE questions. $(5 \times 5 = 25)$

- 1. Organisation and functions of Pharmacy and Therapeutic Committee.
- 2. Importance of proper communication in Clinical Pharmacy.
- 3. Drug distribution system in hospital for the inpatients.
- 4. Pharmacokinetic drug interactions.
- 5. ABC analysis.
- 6. Sources of drug information centre.
- 7. Dispensing of controlled drugs.

III. Short Answers : Answer any FIVE questions. $(5 \times 2 = 10)$

- 1. Thalidomide Disaster.
- 2. What do you mean by drug profile?
- 3. Therapeutic window.
- 4. Binding site for most of the acidic drugs.
- 5. Abbreviation for GFR.
- 6. Antagonism.
- 7. Objective of PTC.