

APRIL - 1991

046

THIRD B. PHARM. DEGREE EXAMINATION, APRIL 1991

Paper IV—HOSPITAL PHARMACY INCLUDING DISPENSING
AND CLINICAL PHARMACY

Time : Three hours.

Maximum : 100 marks.

1. Answer THREE questions from Section I and ONE question each from Sections II and III.
2. Section I is to be answered in one answer book. Sections II and III are to be answered in a separate answer book.
3. All questions carry equal marks.

SECTION I

1. (a) Compare and contrast: Dusting powders and effervescent powders.

(b) Suggest a suitable base for Eye ointments. Explain the importance of each constituent.

(c) Write notes on :
 - (i) Physical incompatibility.
 - (ii) Hard gelatin capsules.

2. (a) Point out incompatibility of any and suggest a method for dispensing the following prescriptions :

(i) R_x

| | |
|-------------------|---------|
| Potassium iodide | 1.3 g |
| Sodium salicylate | 4.0 g |
| Syrup of Lemon | 15.0 ml |
| water ad | 60.0 ml |

Fiat mistura. Sig: Cochlean magnium prodose, mare dicto sumenda.

(ii) R_x

| | |
|------------------------|--------|
| Acidi acetylsalicylici | gr X |
| Pot. citras | gr XXX |
| Aquam chloroformi ad | ꝑi |

Fiat mistura. Sig: Ter in die sumenda.

(b) How do you dispense the following :

R_x Hyoscine hydrobromide gr 1/150.

Fiat pulvis. Mitle duodecim.

Sig: Capiat unum bis in die.

3. (a) Prepare 4 oz of a solution of potassium permanganate so that two teaspoonfuls diluted to a pint will make a 1 in 1000 solution.

(b) Give the maximum dose and route of administration of the following drugs : Codeine phosphate, phenylbutazone, cyanocobalamine, sulphadiazine.

4. (a) What are jellies and what are their specific advantages? Give the preparation of one jelly and mention its use.

(b) Write a note on Displacement value of medicaments and its importance in dispensing of suppositories and tablet triturates.

SECTION II

5. With the aid of a schematic diagram, describe the organisation of a hospital pharmacy department. Write briefly the functions of each division.

6. Discuss briefly the layout, equipment and process for the production of transfusion fluids in a hospital pharmacy.

SECTION III

7. Write notes on :

(a) Adverse Drug reactions and their prevention.

(b) Operation of quality assurance system.

8. (a) What is non-compliance? How do you overcome this problem?

(b) Describe the procedure employed in carrying out clinical trials on a drug substance.

APRIL - 1993

[RS 549]

THIRD B.Pharm. DEGREE EXAMINATION.

(Old Regulations)

**Paper IV – HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY**

Time : Three hours

Maximum : 100 marks

Answer any **THREE** questions from Section A and
ONE question each from Sections B and C.

Section A is to be answered in one answer book.
Sections B and C are to be answered in a separate
answer book.

All questions carry equal marks.

SECTION A

1. (a) What are the different formulae for calculation of children doses?
(b) What are the precautions to be observed while doing aseptic work?
(c) Write the differences between ointment and jelly.
2. (a) Describe the general method of dispensing the following :
 - (i) A mixture containing indiffusible solid substance.
 - (ii) An oil in water emulsion containing 1% of the oily phase.
(b) Write notes on Elixirs.

3. Write short notes on :
 - (a) mouth washes.
 - (b) plasters.
 - (c) flavouring agents.
 - (d) closures.

4. Write notes on :
 - (a) physical incompatibility.
 - (b) cachets.

SECTION B

5. (a) Write briefly on medication procedure for unit dose system.
(b) What are the building facilities required for the manufacture of iv dextrose solution preparations.
6. (a) What is the role of pharmacy in hospitals?
(b) Write briefly on controls on purchasing of drugs to the hospitals.

SECTION C

7. Write notes on :
 - (a) Drug interactions.
 - (b) GMP.
8. (a) What is the role of pharmacokinetics in clinical pharmacy?
(b) What are the implications of drug metabolism on therapeutic efficiency of drugs.

NOVEMBER - 1993

[PR 172]

THIRD B.Pharm. DEGREE EXAMINATION.

(New Regulations)

**Paper II — HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY**

Time : Three hours

Maximum : 90 marks

**Two and a half hours
for Sections A and B**

Sections A and B : 60 marks

Answer Sections A and B in separate answer books.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. Discuss in detail the aims and functions of Hospital Pharmacy.
2. What are the problems of patient non compliance? Discuss how to achieve patient compliance.
3. Discuss the dispensing of ointments in hospitals.
4. Discuss the importance of dispensing various medicaments in different type of containers and closures.

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

5. Discuss the importance of central sterile supply in hospitals.
6. Discuss the method of charging of drugs in hospitals.
7. Discuss therapeutic incompatibility with examples.
8. Discuss the need and organisation of Drug information service in hospitals.
9. Discuss the role of pharmacist in clinical trials.
10. Record maintenance of narcotic drugs in hospitals.
11. What measures should be taken to maintain quality of drugs in hospitals?
12. List down salient points to maintain good manufacturing practices in hospitals.
13. Short notes on any THREE :
 - (a) Mouth wash
 - (b) Milk of Magnesia
 - (c) Kaolin poultice
 - (d) Dispensing medicaments in hard gelatin capsules.

NOVEMBER - 1994

[ND 583]

THIRD B.Pharm. DEGREE EXAMINATION

(Old Regulations)

**Paper IV — HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY**

Time : Three hours.

Maximum : 100 marks.

**Answer THREE questions from Section I and
ONE each from Sections II and III.**

All questions carry equal marks.

SECTION I

1. Define displacement value of the medicament and give its significance. Describe the method of preparation of glycerine suppositories.

2. Define ointment. Discuss in brief the factors influencing the selection of a base for a medicated ointment.

3. Define Posology. What are the factors to be considered while determining the dose. Write the different methods used to calculate the doses.

4. How do you dispense the following? Write the dispensing routine :

(a) Mixture containing aspirin medicament

(b) A simple linctus for a child.

[ND 583]

SECTION II

5. Define hospital. Give hospital classification. Describe in brief the organisation pattern of a hospital.

6. Define inventory. Describe the purchasing procedure of drugs in hospital.

SECTION III

7. Define compliance. Explain the strategies to enhance patient compliance. Mention compliance aids.

8. Explain with suitable examples, the influence of protein binding of drugs in the pharmacokinetics. Describe the methods to monitor the efficacy of drugs in a clinical setup.

NOVEMBER - 1994

[ND 589]

THIRD B.Pharm. DEGREE EXAMINATION.

(New Regulations)

Paper II — HOSPITAL PHARMACY INCLUDING DISPENSING AND CLINICAL PHARMACY

Time : Three hours

Maximum : 90 marks

Two and a half hours
for Sections A and B

Section A and B : 60 marks

Answer Section A and B in separate answer books.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30)

Answer any TWO questions.

1. Define hospital pharmacy. Give a flow sheet (chart) of departmental activities. How do you determine the departmental staff?
2. Define Compliance. Explain the strategies to enhance the patient compliance.
3. Give the merits of capsules. Write the different sizes and their approximate capacities of hard gelatin capsules. Discuss in brief, the sanitary handling and filling of capsules extemporaneously.
4. Describe the general method of preparation of suppositories containing different types of solids. Define displacement value.

[ND 589]

SECTION B — (6 × 5 = 30)

Answer any SIX questions.

5. Write the influence of drug protein binding on the pharmacokinetics of drugs.
6. What is the difference between quality assurance and quality control? Describe the different operations of a quality assurance system.
7. What is the difference between drug-drug interactions and adverse drug interactions? Describe the patient related variables in the development of adverse drug effects.
8. Explain the drug distribution and floor stock system of drugs in a hospital.
9. Mention the functions of P and T committee.
10. Highlight the functions and importance of Drug Information Centre.
11. Write in brief the mechanisms of emulsification based on type of interfacial films.
12. Describe different types of physical incompatibilities with suitable examples.
13. Send 5 hard capsules each containing 600 micrograms of hyoscine hydrobromide. Explain the calculations involved.

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SB 588

THIRD B. Pharm DEGREE EXAMINATION

(Old Regulations)

Paper IV - HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY

Time: Three hours Maximum: 100 marks

Answer THREE questions from Section I
ONE each from Sections II and III.

All questions carry equal marks.

SECTION I

1. With the help of an example, describe the various parts of an ideal prescription. Mention the common dispensing errors and the ways to avoid them.
2. Enumerate the properties of an ideal suppository base. Give a brief account of the various suppository bases, with their advantages and disadvantages.
3. What are isotonic and paratonic solutions? Briefly explain the various methods to render a solution isotonic with blood plasma.
4. Define incompatibility. Give a brief account of chemical incompatibility with reference to
 - (i) Alkaloidal salts
 - (ii) Soluble salicylates and benzoates

SB 588

SECTION II

5. Describe the various activities of the Drug Information Centre. What is the role of a Hospital Pharmacist in it?
6. Discuss the various steps in the preparation of Hospital Formulary.

SECTION III

7. Discuss the role of a Clinical Pharmacist in
 - (i) Evaluating drug in preventing adverse
 - (ii) Monitoring patient
 8. Mention areas encompassed by hospital pharmacy and explain its distribution systems.
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APRIL - 1995

[SB 594]

THIRD B.Pharm. DEGREE EXAMINATION.

(New Regulations)

**Paper II — HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY**

Time : Three hours

Maximum : 90 marks

Two and a half hours
for Section A and B

Section A and B : 60 marks

Answer Section A and B in separate answer books.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. (a) Describe the role of a Hospital Pharmacist in Drug Information Centre.
(b) Discuss the composition and functions of Pharmacy and Therapeutics Committee.
2. What are the objectives and scope of clinical pharmacy? What is the role of clinical pharmacist in investigational drugs?
3. Define and classify incompatibility. Explain briefly the chemical incompatibilities giving suitable examples.
4. What are the factors to be considered in the selection of an ointment base? Write briefly about the preparation, packing, storing and labelling of sterile ointments.

[SB 594]

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

5. Write a note on pricing of prescription.
6. With the help of a prescription, explain the procedure for dispensing of powders containing a very small dose of a potent medicament.
7. Define an emulsion. Explain the various tests to find the type of an emulsion.
8. How do you dispense the following :
Phenobarbitone – 10 mg
M.F.T. caps. send 10
9. What are the reasons for hospital manufacturing?
10. Give a brief account of central sterile supply department in a modern hospital.
11. Write a note on emergency drugs and ward stock medicines.
12. What is a controlled prescription? How will you fill such a prescription?
13. Define a poultice. How do you prepare Kaolin Poultice?

NOVEMBER - 1995

MB 719

THIRD B.PHARM DEGREE EXAMINATION

(Old Regulation)

PAPER IV - HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY

Time: Three hours Maximum:100 Marks

Answer THREE questions from Section I
ONE each from Section II and Section III.

All questions carry equal marks.

SECTION I

1. Define Incompatibility. Classify them. Discuss various therapeutic incompatibility with suitable examples.
2. Give the characteristics of an ideal Suppository base. How will you dispense the prescription given below:

Rx. Boric acid 120 mg
 Cocoa butter q.s. 1 G

Make suppository send such 4
(D.V. of boric acid = 1.5)

3. Write the steps involved in the dispensing of a water insoluble solid medicament in the form of a mixture.

MB 719

4. Differentiate between

- (a) Cold cream and vanishing cream
- (b) Liniment and Lotion
- (c) Paste and Ointment
- (d) Mouth wash and Gargle

SECTION II

5. Define Unit Dose Medication. Discuss the merits of Unit Dose Medication system.
6. Discuss briefly the 'Selection' and 'Dispensing' of charge floor stock drugs.

SECTION III

7. How is drug toxicity managed, controlled and minimized in a hospital.
8. Define Adverse Drug Reactions(ADR). Discuss briefly the factors responsible for ADR.

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NOVEMBER - 1995

[MB 725]

Third B. Pharm Degree Examination

(New Regulations)

**Paper II - HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY**

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

Answer section A and B in separate answer books.

Answer section C in the answer sheet provided.

SECTION - A (2X15 = 30)

Answer any TWO questions

1. How are medicines purchased in a hospital medical store? Give various methods of drug procurements.
2. Define hospital. Suggest the organizational set up at hospital pharmacy in major hospital.
3. Define incompatibility. Classify them. Discuss various types of chemical incompatibility with one example each
4. Define powder. Classify powders. Write the principle and procedure for dispensing effervescent granules. What are the advantages of effervescent granules?

SECTION - B (5X5 = 30)

Answer any SIX questions

5. Discuss the role of patient education to improve compliance.
6. State the importance of clinical pharmacist in hospital
7. Discuss the role of GMP in quality assurance in hospital pharmacy
8. How will you plan and supply drugs from hospital pharmacy.
9. What are the roles of hospital pharmacist in education and training programme in the community.
10. Give the functions of hospital pharmacy.
11. Discuss with examples the adverse drug reactions with respect to multiple pharmacological effects.
12. With suitable examples of drugs discuss the need for therapeutic drug monitoring
13. Write short notes on any THREE
 - a) Displacement value
 - b) Throat paint
 - c) Turpentine liniment
 - d) Calamine lotions

AK 721

THIRD B. PHARM DEGREE EXAMINATION

(Old Regulation)

Paper IV - HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL
PHARMACY

Time: Three hours Maximum: 100 Marks

Answer THREE questions from Section I
ONE each from
Section II and Section III.

All questions carry equal marks.

SECTION I

1. Define prescription. Describe the various parts of a prescription with suitable examples.
2. Define suppository. Classify the suppository bases and briefly discuss their properties with suitable examples.
3. What are desired characteristics of an ointment base. Give the procedure (step wise) to dispense sulphur ointment I.P.
4. a) Write the factors which influence the dose of a drug.

b) Give various formulae to calculate the dose of a drug for children.

SECTION II

5. Discuss briefly merits and demerits of different drug distribution systems in a Hospital.
6. Define Hospital Pharmacy. Describe the various functions of Hospital Pharmacy.

SECTION III

7. Define and explain the term 'Patient non-compliance'. Discuss the types of non-compliance commonly observed.
8. With suitable examples discuss the effect of food on Adverse Drug Reactions.

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APRIL - 1996

[AK 727]

Subject Code : 4194

SECTION—B

(6X5=30)

Third B. Pharm Degree Examination

(New Regulations)

**Paper II - HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY**

Time : Three hours

Max. : 90 marks.

Two and a half an hours

Sec. A and B : 60 marks

for Section A and B

Answer Sections A and B in separate answer books.

Answer Section C in the answer sheet provided.

SECTION—A (2X15=30)

Answer any TWO questions

1. What do you understand by floor stock drugs in a hospital ?
2. Define Adverse Drug reactions. Discuss the factors responsible for Adverse drug reaction.
3. What procedure would you adopt to control drug purchases with regard to duplication of stock, dead inventory, brand selection and discounts ?
4. Write the principle underlying the dispensing of the following.
 - a) Potent powder
 - b) Wettable solids
 - c) Elixirs
 - d) Liniments
 - e) Mixtures

Answer any SIX questions.

5. How do you select containers for dispensing ?
 6. Give the functions of hospital pharmacy.
 7. Discuss the merits of Unit Dose medication.
 8. Discuss the organization set up of Hospital pharmacy.
 9. What is good manufacturing practice ? How does it relate to manufacturing in a hospital pharmacy.
 10. Prepare an out-patient activity chart. What steps will you take to minimise queue at the OPD windows ?
 11. Explain the concept of economic order quantity (EOQ) including in terms of formula and the specific information it provides the pharmacist.
 12. Describe the functions and scope of the pharmacy and Therapeutic committee in a hospital.
 13. Discuss the role of metabolism and protein binding in drug action and drug-drug interactions.
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APRIL - 1996

[AK 747]

Subject Code : 4200

SECTION—B (6×5=30)

Third B. Pharm Degree Examination

(Revised Regulations)

**Paper II - DISPENSING HOSPITAL AND
CLINICAL PHARMACY**

Time : Three hours. Maximum : 90 marks.

Two and a half an hours

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

Answer Sections A and B in separate answer books.

Answer Section C in the answer sheet provided.

SECTION—A (2X15=30)

Answer any TWO questions.

1. a) What are mixtures? What are the advantages of mixtures? Explain the principle and procedure involved in the dispensing of a mixture containing an indiffusible solid.
b) Calculate the quantity of 90% alcohol required to prepare 900 ml of 50% alcohol.
2. What is an emulsion? Classify emulsifying agents and mention their properties. Discuss the various factors to be considered in the formulation of a stable emulsion.
3. With a neat lay out, explain the design and operation of a sterile manufacturing area in a hospital. How will you organize a central sterile supply room?
4. Discuss the procedures adopted for the purchase of drugs in a hospital pharmacy. What is the use of inventory control?

Answer any SIX questions.

1. What are the properties required for ideal eye drops? Discuss the various additives included in eye drops.
2. a) Discuss the advantages and disadvantages of suppository bases.
b) Calculate the quantity of cocoa butter required to prepare 8 suppositories of 1g, each containing 300 mg, of Bismuth subgallate. (Displacement Value = 2.5)
3. Write a note on isotonic solutions. How will you prepare an isotonic solution?
4. Discuss the various sources of information on drugs required for a drug information centre.
5. Explain the functions of pharmacy and Therapeutic Committee in a hospital. What is the purpose of pharmacy procedure manual?
6. Discuss the operation of a quality assurance system in a hospital pharmacy. What is good laboratory practice?
7. What is non-compliance? Discuss the reasons for non-compliance and the methods to overcome it.
8. Discuss the steps needed to design and conduct clinical trial of a new drug.
9. Write short notes on any TWO of the following :
 - a) Methods of detecting adverse drug effects.
 - b) Bioavailability.
 - c) Therapeutic drug monitoring.

OCTOBER - 1997

[MS 716]

Sub. Code : 4194

THIRD B.Pharm. DEGREE EXAMINATION.

(New Regulations)

Paper IV — HOSPITAL PHARMACY INCLUDING
DISPENSING AND CLINICAL PHARMACY

Time : Three hours

Maximum : 90 marks

Two and a half hours

Sec. A & B : 60 marks

for Sections A and B

Section C : 30 marks

Answer Sections A and B in separate answer books.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. What are the various types of adverse drug reactions? Discuss the methods used for monitoring adverse drug reactions.
2. Classify incompatible prescriptions with examples. Discuss the measures to be adopted to overcome such incompatibilities.
3. With a neat layout, discuss the design of a sterile production area in a hospital pharmacy unit. What type of sterile preparations are most suited for production, in a hospital pharmacy unit and why?
4. Classify ointment bases. Discuss the advantages and disadvantages of various types of ointment bases. What are the methods used for preparing ointments?

[MS 716]

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

5. Write briefly on good pharmaceutical practice in compounding and dispensing.
6. What are the reasons for colouring pharmaceutical preparations? Mention the desirable properties of a colouring agent.
7. List the advantages and disadvantages of plastic and metal containers for dispensed products.
8. How will you dispense a prescription containing 25% V/V Arachis oil, and 2.5% V/V Peppermint Emulsion in a chloroform water vehicle.
9. How will you dispense the following prescription?
R
Chalk 20 g
Concentrated cinnamon water 4 ml
Syrup 100 ml
Chloroform water to produce 1000 ml.
10. What are the properties of an ideal suppository base? Mention the advantages and disadvantages of theobroma oil as a suppository base.
11. What are the functions of a Drug Information Centre? What are the various sources of drug information?

OCTOBER - 1997

[MS 716]

12. Mention the advantages and disadvantages of suspensions as oral dosage forms. What are the suspending agents used in oral preparations?

13. What is patient compliance? Mention the reasons for non compliance and the methods used to assess it.

OCTOBER - 1997

[MS 722]

Water to make 90 ml

Make a mixture

Label : To be taken as directed.

12. What do you mean by non-compliance? Give reasons for non-compliance.
 13. State and explain the objectives of a Drug Information Centre.
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APRIL - 1998

[SV 716]

Sub. Code : 4194

THIRD B.Pharm. DEGREE EXAMINATION.

(New Regulations)

HOSPITAL PHARMACY INCLUDING DISPENSING AND
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

Sec. C : 30 marks

Answer Sections A and B in separate answer books.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

- (a) Discuss the role of a clinical pharmacist in evaluating drug interactions.
(b) Write a note on "emergency drugs" and ward stock medicines.
- (a) With the help of a suitable example, explain the various parts of an ideal prescription.
(b) Mention the common dispensing errors and the ways to avoid them.
- Discuss the factors influencing the stability of an emulsion with special reference to role of emulsifying agent, zeta potential and HLB of the system.
- Describe the various activities of a Drug Information Centre. What is the role of a hospital Pharmacist in it?

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

- Briefly describe the methods adopted to sterilize surgical dressings, rubber gloves and catheter instruments.
- Explain therapeutic incompatibilities with examples.
- Discuss the merits and demerits of different suppository bases.
- Discuss the scope, functions and composition of P and T committee.
- Write short notes on gargles and mouthwashes.
- How do you dispense?
(a) Powders containing a very small dose of a potent medicament.
(b) Powders containing hygroscopic and deliquescent substances.
- Enumerate the properties of an ideal ointment base.
- What precautions will you take while dispensing ophthalmic preparations?
- Discuss the role of a pharmacist in family planning programme.

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[SV 722]

Sub. Code : 4204

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

DISPENSING, HOSPITAL AND 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 separate answer books.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. Define incompatibility. Briefly explain the incompatibilities of alkaloidal salts. Give examples.
2. (a) Classify dermatological bases. Discuss their advantages and disadvantages.
(b) Discuss the advantages of suppository formulations.
3. (a) Explain the legal and professional aspects of a prescription. Add a note on controlled prescriptions.
(b) Discuss the factors dictating the container selection of a pharmaceutical product.
4. What are the responsibilities of a hospital pharmacist in purchasing drugs included in the hospital schedule? What procedure does he follow?

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

5. Define bioavailability, Bioequivalence. Differentiate between passive diffusion and active transport.
6. Comment on the following prescription
 \mathcal{R}
Sodium Salicylate — 1 G
Caffeine citrate — 0.6 G
Water to make — 30 ml
Fiat haustus. Signs : Statim sumat.
7. Write a note on the stability of an emulsion.
8. How will you distinguish between
 - (a) Lotions and liniments
 - (b) Ointments and pastes
 - (c) Pastilles and lozenges.
9. State the role of pharmacist in the prevention of adverse drug reactions.
10. Write a note on Hospital Formulary.
11. Discuss the functions and composition of P and T committee.
12. How is a stable suspension formulated by adopting flocculation Techniques? What are the criteria for a stable suspension?

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13. (a) What is proof spirit? Convert the following to percentage strength.

(i) 40° OP and

(ii) 25° UP.

(b) Find the proportion of Sodium Chloride required to render a 1% solution of cocaine hydrochloric isotonic with blood serum.

(Freezing point of 1% w/v solution of cocaine hydrochloride is -0.12 and that of 1% w/v solution of Sodium chloride is -0.576°C)

APRIL - 1999

[SG 716]

Sub. Code : 4204

THIRD B.Pharm. 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 separate answer book.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. Classify Hospitals and discuss the Space, Location and layout of a 500 bedded hospital with a note on duties of a pharmacist.
2. Explain the salient features of a bonded laboratory and discuss the dispensing restrictions for psychopharmaceuticals.
3. Define suspensions? Differentiate deflocculated with flocculated suspensions and how do you prepare calamine lotion.
4. Discuss the organisation and functions of pharmacy and therapeutic committee and pharmacy purchase committee.

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

5. Explain the pattern of drug distribution system of a hospital.
6. Write a note on common medication errors.
7. Define Biological half life of a drug and how do you determine.
8. Explain the kinetics of drug disposition.
9. Write briefly about stability of emulsions.
10. Write about therapeutic incompatibility and how do you overcome.
11. Define prescription and explain the parts of a prescription.
12. Write a note on Suppository Bases.

[SG 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 Sections A and B in separate answer book.

SECTION A — (3 × 15 = 45 marks)

Answer any THREE questions.

1. (a) What are the objectives of pharmacy and therapeutics committee? (4)
(b) Describe the organisation and functions of pharmacy and therapeutics committee. (11)
2. Define adverse drug reaction. Classify adverse drug reactions with examples. How they are reported? (1 + 10 + 4)
3. (a) What are the functions performed by a Hospital Pharmacy? Show the typical organisational chart of a Hospital Pharmacy. (5 + 5)
(b) What are the responsibilities of pharmacist in out-patient dispensing? (5)
4. (a) What is Therapeutic Drug Monitoring and its importance in a hospital? (9)
(b) What are the commonly observed types of patient non-compliance? (6)

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

5. Define Hospital. Give the classification of Hospitals.
6. How the Hospital Formulary is prepared?
7. Explain the pharmacokinetic parameters C_{max} , t_{max} and AUC.
8. What is the role of hospital pharmacist in Education and Training programme?
9. Write a short note on 'Drug Information Center'.
10. How the drugs are purchased for a hospital pharmacy? What are the procedures?
11. Discuss the methods of drug dispensing to In-patients.
12. What are the functions of clinical pharmacist?
13. What is the significance of protein binding of drugs?

OCTOBER - 1999

[KA 716]

Sub. Code : 4204

THIRD B.Pharm. DEGREE EXAMINATION.

(Revised Regulations)

Paper IV — HOSPITAL PHARMACY INCLUDING
DISPENSING AND 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 & B in separate answer books.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. Discuss the design of a sterile production area in a hospital pharmacy unit. What are the bulk and sterile preparations that can be manufactured in hospital pharmacy?
2. Define and classify mixtures. Explain the methods for dispensing different classes of mixtures with suitable examples.
3. Discuss the role of pharmacokinetics in clinical pharmacy with suitable illustrations.
4. Discuss the important pathways of metabolism with suitable example.

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

5. Briefly explain the purchasing and inventory control of medicines in hospital pharmacy systems.
6. Give an account on the control of narcotics and addictive drugs.
7. Explain the functions of Drug Information Centre.
8. List the advantages and disadvantages of plastic and metal containers for dispensed product.
9. Write briefly on the biphasic liquid preparations meant for external use.
10. What are the ideal requirements for suppository bases? Mention the advantages and disadvantages of cocoa butter.
11. Define Non-compliance. Mention the reasons for non-compliance and methods to overcome non-compliance.
12. Give a brief account of good manufacturing practice.

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13. How the following prescription can be dispensed?

R_x

Calamine 50 g.

Oleic acid 5 ml.

Wool fat 10 g.

Arachis oil 500 ml.

Calcium hydroxide solution q.s. to 1000 ml.

Send 100 ml.

Label oily calamine lotion B.P.

[KA 721]

Sub. Code : 4209

THIRD B.Pharm. DEGREE EXAMINATION.

HOSPITAL AND CLINICAL PHARMACY

Time : Three hours

Maximum : 75 marks

Answer Section A and Section B in separate papers.

SECTION A — (5 × 6 = 30 marks)

Answer any SIX questions.

1. Classify Adverse Drug Reactions. Mention their properties.
2. Explain with example how renal disease influences the dosage of a drug.
3. What pharmacokinetic parameters are required to be considered in optimising dosage regimen.
4. How is patient's medication history recorded?
5. Explain blood level curve.
6. Write a note on storage of medicines in a hospital.
7. Discuss the role of pharmacists in the Pharmacy and Therapeutic committee.
8. Explain the clinical pharmacokinetic basis of drug therapy taking theophylline as example.
9. Write the importance of interdepartmental communication in a hospital.

SECTION B — (3 × 15 = 45 marks)

Answer any THREE questions.

10. Discuss the organisational structure and function of Hospital Pharmacy decision of a Corporate Hospital.
11. Give the concept of clinical pharmacy. Outline the functions of clinical pharmacists.
12. Describe the role of Hospital Pharmacists in Educational and Training programme.
13. Write short notes on any THREE :
 - (a) Rational use of drugs.
 - (b) Bioavailability.
 - (c) Dispensing of schedule X drugs.
 - (d) Types of Hospitals.
14. Discuss the various types of drug interactions with examples.

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(f) Write a label for dispensing-Turpentine Liniment and Glycero Gelatin suppositories.

(g) What is Prepacking? What are the advantages of Prepacking?

(h) What are the contents of Annual report of division of Hospital Pharmacy?

(i) Write a note on the current status of hospital pharmacy practice in India.

[KB 721]

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SECTION B — (6 × 5 = 30 marks)

Third B.Pharm. DEGREE EXAMINATION.

Answer any SIX questions.

(Re-Revised Regulations)

Paper II — HOSPITAL AND CLINICAL PHARMACY

Time : Three hours

Maximum : 75 marks

Answer Sections A and B in separate answer book.

SECTION A — (3 × 15 = 45 marks)

Answer any THREE questions.

1. Describe the Drug distribution system in hospital for the in-out-patients and charging of prescribe Drugs.
2. What is effective communication? What is its importance in the pharmacy? How is it achieved?
3. (a) How central sterile supply department in a big hospital is organised?

(b) What are the functions and responsibilities of Drug information centre?
4. Discuss the concept of Clinical Pharmacy in the safe and rationale use of drugs to in and ambulatory patients.

5. What is the role of pharmacokinetic basis dosage adjustment, disposition dependent, plasma level of Digitoxin?
6. Explain the adverse drug reactions in antidiabetic with corticosteroids.
7. Define 'Bio availability', 'Clearance', 'Volume of distribution' and half life with examples.
8. What is inventory control? Give formula for purchasing and drugs and explain.
9. What are the types of patient non-compliance? How do you overcome the problem of non-compliance?
10. Write about organisation of out-patient Dispensary.
11. What is the role of Hospital Pharmacist in Education and Training Programme?
12. Describe the structure and organisation of a clinical pharmacokinetics and toxicology laboratory.
13. What is the distribution dependent dosage adjustment of anti-coagulants?

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Sub. Code : 4204

THIRD B.Pharm. 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 and Sec. B : 60 marks

for Sec. A and Sec. B

Section C : 30 marks

Answer Sections A and B in Separate Answer Books.

Answer Section C in the Answer Sheet provided.

SECTION A — (2 × 15 = 30 marks)

Answer any TWO questions.

1. Discuss the objectives, organization and functions of the pharmacy and therapeutics committee.
2. What is effective communication? What is its importance in the pharmacy? How is it achieved?
3. Describe the systems of drug distribution in detail.
4. How do you design and optimize the dosage regimen of drugs? What is the importance of individualization of dosage regimens? How is it done?

SECTION B — (6 × 5 = 30 marks)

Answer any SIX questions.

5. How do you prepare and dispense eye-ointments?
6. What are the parts of a prescription? Give examples.
7. Classify hospitals with examples.
8. What are the types of patient non-compliance? How do you overcome the problem of non-compliance?
9. Define 'bioavailability', 'clearance', 'volume of distribution', 'half-life'. Illustrate your answer with examples.
10. What are the methods of purchase in a hospital? Who is the authority for these purchases? Explain the meaning of inventory.
11. Classify adverse drug reactions with atleast two examples under each class. Add a note on beneficial interactions.
12. How do you dispense effervescent (liquid) mixtures?
13. Define 'displacement value'. What is its importance in tablet triturates and suppositories? How do you choose a base for pessaries?

[KC 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 separate answer papers.

SECTION A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. Describe the role of pharmacists in Adverse drug Reaction monitoring.
2. Emphasize the importance of Therapeutic Drug Monitoring in drug therapy.
3. Explain the influence of protein binding in optimisation of dosage regimen.
4. Give a typical monograph of a drug in hospital formulary.
5. Write a note on types of Hospitals.
6. Outline the importance of proper communication between pharmacist and patient.
7. Describe the drug distribution system to the inpatients in the hospital.

8. Give a proforma for reporting Adverse Drug Reactions (ADR).

9. Explain with specific example the importance of clinical pharmacokinetics in drug therapy.

SECTION B — (3 × 15 = 45 marks)

Answer any THREE questions.

10. Discuss the composition and function of pharmacy and Therapeutic Committee in a hospital.
11. Describe the factors associated with patient's non compliance to medication. Suggest methods for better compliance.
12. Discuss the setting up of a drug information centre in the hospital. How does it improve the patient care?
13. Write short notes on any THREE :
 - (a) Storage of medicines.
 - (b) Purchase procedure in a hospital
 - (c) Organisation of a pharmacokinetic and toxicologic laboratory.
 - (d) Importance of Hospital Formulary.
14. Discuss 'how the pharmacists can contribute to drug therapy'.