



UNIVERSITY OF THE PUNJAB

Fourth Prof. A/2015

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmaceutics-IV (Hospital Pharmacy)

TIME ALLOWED: 3 hrs.

PAPER: 1

MAX. MARKS: 100

Attempt any FIVE questions. All questions carry equal marks.

- Q.1 Write down the Generic name, company name, Dosage form, Strengths, indications, contra indication and drug interactions of the following brands of drugs: (20 Marks)
(I) Cefspan (II) Vibramycin (III) Ponstan (IV) Britanyl (V) Tenormin (VI) Amryl (VII) Fucidin (VIII) Risek (IX) Nimran (X) Valium
- Q.2 a) Define dispensing, distribution and administration and also list the different types of drug dispensing in hospital. Further discuss in detail the methods of drug dispensing to inpatients settings (12 Marks)
b) Define unit dose dispensing and explain the concepts of centralized (CUUD) and decentralized unit dose (DUDD) dispensing, also discuss the other concepts of unit dose dispensing. (08 Marks)
- Q.3 a) Discuss the operation and policies of "Pharmacy and Therapeutic Committee" (10)
b) Discuss budgetary control aspects for the manufacturing of bulk and sterile supplies in hospitals. (10)
- Q.4 a) Discuss the minimum standards for Pharmacy department in a hospital. (10)
b) Write a detail note on the structure and functions of Pharmacy department organization in a hospital. (10)
- Q.5 a) Define radiopharmaceuticals and give their applications in hospital. (10)
b) What are the discriminatory properties of radiopharmaceuticals? Discuss the basic requirements to establish Radiopharmacy in hospital environment. (10)
- Q.6 a) Define patient's counselling; what types of counselling services can be provided to patients in hospital by the hospital pharmacy. (10 Marks)
b) Write a brief note on the investigational use of drugs in hospital and role of pharmacist in conducting research. (10 Marks)
- Q.7 a) Explain Policies and procedure for recall of medication in hospital (7 Marks)
b) Explain Dextrose and Protein as macronutrients in TPN? (7 Marks)
c) Discuss Research in hospital pharmacy (6 Marks)



UNIVERSITY OF THE PUNJAB

Fourth Prof. A/2016

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmaceutics-IV (Hospital Pharmacy)

TIME ALLOWED: 3 hrs.

PAPER: 1

MAX. MARKS: 100

Attempt any FIVE questions. All questions carry equal marks.

- Q.1 Write down the Generic name, company name, dosage form, Strengths, indications, contra indication and drug interactions of the following drugs: (20)
(I) Keflex (II) Risek (III) Migril (IV) Synflex (V) Rocephin (VI) Ventolin (VII) Brexin
(VIII) Concor (IX) Glucophage (X) Fucidin
- Q.2 a) Define hospital formulary? Discuss different contents of hospital formulary? (10)
b) Discuss merits and demerits of formulary system? (05)
c) What are the Complications of TPN (05)
- Q.3 a) Define the hospital and discuss in detail the organizational pattern of a hospital. (10)
b) Discuss in detail dispensing to ambulatory patients. (10)
- Q.4 Define sutures and ligatures? Discuss different steps involved of its preparation and sterilization (20)
- Q.5 a) What is the job description of a Pharmacist in a hospital? (10)
b) What is the importance of dispensing during off hours in a hospital (10)
- Q.6 a) Discuss in detail abilities required of hospital pharmacist in a health institution. (10)
b) Write a detail note on surgical gauze and bandages (10)
- Q.7 a) Define medication errors and near miss? Explain types of medication errors (10)
b) Discuss the role of Pharmacist in controlling the medication errors (10)



UNIVERSITY OF THE PUNJAB

Fourth Prof. 2nd A/2016

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmaceutics-IV (Hospital Pharmacy)

TIME ALLOWED: 3 hrs.

PAPER: 1

MAX. MARKS: 100

NOTE: Attempt any FIVE questions. All questions carry equal marks.

- Q.1 Write down the Generic name, company name, dosage form, Strengths, indications, contra indication and drug interactions of the following drugs: (20)
(I) Azomax (II) Zantac (III) Valium (IV) Caflam (V) Cefspan (VI) Antial (VII) Nims
(VIII) Adalat (IX) Diamicron (X) Polyfax
- Q.2 a) Discuss the minimum standards for pharmacy department in a hospital. (10)
b) Explain dextrose and fats as macronutrients in TPN? (10)
- Q.3 a) Discuss safe handling practices and reconstitution of cytotoxic drugs? (10)
b) What is patient counseling? Explain the different steps involve in counseling. (10)
- Q.4 a) Define medication errors and near miss? Explain types of medication errors (10)
b) Discuss the role of Pharmacist in controlling the medication errors (10)
- Q.5 What types of supportive services are provided in a hospital (20)
- Q.6 a) Write a detail note on In-patients dispensing. (10)
b) What is Pharmacy departmental organization in a hospital? Explain with charts (10)
- Q.7 a) What is P & TC? Explain its functions in details. (10)
b) Discuss the basic guidelines for the I.V admixture preparations? (10)



UNIVERSITY OF THE PUNJAB

Fourth Prof: A/2017

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmaceutics-IV (Hospital Pharmacy)

PAPER: 1

TIME ALLOWED: 3 hrs.

MAX. MARKS: 100

Note: Attempt any FIVE questions. All questions carry equal marks.

Q 1) Write down the Generic name, company name, Dosage form, Strengths, indications, contra indication and Drug-Drug interactions of the following drugs: (20)

- | | | |
|-------------|-----------------|-------------|
| I. Leflox | V. Tegral | IX. Somogel |
| II. Timorex | VI. Xanax | X. Tagamet, |
| III. Rigix | VII. Getformin, | |
| IV. Caflam | VIII. Adalat | |

Q.2 a) What is hospital pharmacy? Write a detail note on the responsibilities of a pharmacist in a hospital? (10)
b) What are the important factors in planning of CSSR? (10)

Q.3 a.) How the purchase of drugs can be handled only by pharmacist? Justify your answer with examples. (10)
b) Define inventory, describe the role of Pharmacist in inventory control particular define minimum and maximum stock levels, lead time, economic order quantity (10)

Q.4 a) Define P & TC. What is its composition? (05)
b) Discuss the importance and functions of P & TC. (15)

Q.5 a) Define medication errors, and their types. Describe various reasons why errors occur in hospitals? (15)
b) Monitoring of ward stocks by Pharmacist. (05)

Q.6. a) Discuss in detail abilities required of hospital pharmacist in a health institution.(10)
b) What is the importance of dispensing during off hours in a hospital (10)

Q.7 a) Classify the hospitals and discuss in detail the organizational pattern of a hospital (10)
b) Define TPN; discuss micro and macro nutrients used in TPN. (10)



UNIVERSITY OF THE PUNJAB

Fourth Prof: 2nd Annual - 2017

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmaceutics-IV (Hospital Pharmacy)

PAPER: 1

TIME ALLOWED: 3 hrs.

MAX. MARKS: 100

Note: Attempt any FIVE questions. All questions carry equal marks.

- Q1 Write down the Generic name, company name, Dosage form, Strengths, indications, contra indication and Drug-Drug interactions of the following drugs: (20)
- | | | |
|-----------------|-------------------|----------------|
| I. Keflex | V. Valium | IX. Glucophage |
| II. Synflex | VI. Mixtard-30 HM | X. Arinac |
| III. Entamizole | VII. EyeMox | |
| IV. Angised | VIII. Dermovate | |
- Q2 a) Define the hospital pharmacy. What are the minimum standards for pharmacy department in a hospital? (10)
- b) Define TPN, What are precautions to be taken in the preparation of TPN (10)
- Q3 a) Name the types of purchasing; describe the procedure of bulk purchase by making a flow chart. (10)
- b) Describe stock/storage control tools particularly expiry calendar, also give various options for stocking the medicine like FIFO, FEFO, LIFO etc. (10)
- Q4 a) Define & discuss the purposes of CSSR. In how many ways CSSR is managed. (10)
- b) Briefly discuss P& TC. Highlight its role with reference to hospital. (10)
- Q.5 a) What is the organizational pattern of pharmacy department in a hospital? Explain with charts (10)
- b) Write a detail note on In-patients dispensing. (10)
- Q.6 a) Define medication errors, propose some strategies to prevent medication errors in a hospital. (15)
- b) What are Hazards associated with the handling of cytotoxic drugs. How you will dispense them? (05)
- Q.7 a) Define the hospital. What types of supportive services are provided in a hospital? (15)
- b) What are High Alert Medications (05)



UNIVERSITY OF THE PUNJAB

Fourth Prof: Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacy Practice-IV (Hospital Pharmacy) (New Course)
PAPER: 1 (Part – II)

TIME ALLOWED: 2 Hrs. & 30 min.
MAX. MARKS: 80

Attempt this Paper on Separate Answer Sheet provided.

Attempt any 4 questions. Each question carry equal marks.

Q. # 2:

- (a) What is hospital formulary? How addition and removal of drugs is processed in formulary? (10)
- (b) Define purchasing and inventory? Explain the role of pharmacist in drugs procurement? (10)

Q. # 3:

- (a) Define dispensing to Inpatient. Specifically discuss different methods of drug distribution to Inpatients? (15)
- (b) Discuss the areas of knowledge required for the preparation of I/V solutions by a pharmacist? (5)

Q. # 4:

- (a) Discuss standards of hospital pharmacy management? (10)
- (b) Explain the role of Pharmacy & Therapeutic Committee in Hospitals? (10)

Q. # 5:

- (a) Discuss different categories and Locations for outpatient dispensing? (10)
- (b) What are the important factors in planning of CSSR? (10)

Q. # 6:

- (a) What are different Influential Factors for poisoning & drug abuse? (10)
- (b) Discuss Aseptic Dispensing? (10)

Q. # 7:

- (a) Which type of the program come under the sterile manufacturing. How the I/V additives solutions are dispensed? (10)
- (b) Define medication errors. What types of medication errors usually occur in a hospital? (10)



UNIVERSITY OF THE PUNJAB

Fourth Prof: Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacy Practice-IV (Hospital Pharmacy) (New Course)
PAPER: 1 Part – I (Compulsory)

TIME ALLOWED: 30 min.
MAX. MARKS: 20

Attempt this Paper on this Question Sheet only.

Please encircle the correct statement. Each MCQ carries 1 Mark. This Paper will be collected back after expiry of time limit mentioned above.

Q 1: Select the most appropriate option

1*20

1. The functions of a hospital include the followings EXCEPT
 - a) Patient care
 - b) Training
 - c) Drug Regulation
 - d) Public health
2. Allied health professionals working in the hospital include the followings EXCEPT
 - a) Nurse
 - b) Sonographers
 - c) Physiotherapist
 - d) Pharmacist
3. Medium size hospitals are those with number of beds between
 - a) > 1000
 - b) 500 – 1000
 - c) < 500
 - d) None of the above
4. DHQs and THQs are considered as
 - a) Primary level facility
 - b) Secondary level facility
 - c) Tertiary level facility
 - d) All of the above
5. Hospital informational services include the followings EXCEPT
 - a. Billing and collection
 - b. Computer and hospital network
 - c. Medical records
 - d. Oversee budgeting and finance
6. Occupational therapy services include the followings EXCEPT
 - a. Hand-eye coordination
 - b. Social activities
 - c. hydrotherapy
 - d. Emotional Health

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7. LVN stands for
 - a. Licensed vocational nurse
 - b. Licensed visiting nurse
 - c. Lady visiting nurse
 - d. None of the above
 8. Discharge lounge in the hospital is intended for
 - a) : Recreational purpose
 - b) For terminally ill patients
 - c) For patients don't need to stay in ward anymore
 - d) Patient's caretakers
 9. High dependency units are intended for
 - a. Virotherapy
 - b. Critically ill patients
 - c. Pregnant women with one to one care
 - d. None of the above
 10. Buscot ward in the hospital is intended for
 - a. Expectant mothers
 - b. Babies requiring special care
 - c. Post natal women
 - d. Women in labor
 11. Nerve conduction study (NCS) a diagnostic test is offered in
 - a. Medical technology lab
 - b. Psychiatry ward
 - c. Gynecology ward
 - d. Neurology ward
 12. Hospital pharmacy drug information services include the followings EXCEPT
 - a. Monitoring and reporting of ADRs
 - b. Drug use review
 - c. Budgeting & inventory control
 - d. Patient education
 13. Cystoscopy is conducted by a specialized
 - a. Urologist
 - b. Rheumatologist
 - c. Cardiologist
 - d. None of the above

14. The hospital pharmacist has a pivotal role in Pharmacy and Therapeutic Committee as

- a) Chairperson
- b) Secretary
- c) Mediator
- d) Convener

15. The document that contains a set of approved drugs in a particular hospital setting is known as

- a) Formulary
- b) Essential drugs
- c) List of supplies
- d) List of consumables

16. The Pharmacy and therapeutic committee will review and reprint the formulary

- a) Twice in a year
- b) Once in two years
- c) Every year
- d) Once in five year

17. The medicines included in formulary are on the basis of

- a) Brand names
- b) Brand names
- c) Therapeutic class
- d) Both (b) and (c)

18. Essential medicine list includes medicine that

- a) Are available in market
- b) Are life saving
- c) Satisfy the healthcare needs of majority of population
- d) Are available free of cost

19. The model essential drug list was first established by WHO in

- a) 1948
- b) 1960
- c) 1980
- d) 1977

20. In a year, Pharmacy and Therapeutic committee should meet a minimum of

- a) 8 times
- b) 6 times
- c) 5 times
- d) 3 times



UNIVERSITY OF THE PUNJAB

Fourth Prof: 2nd Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacy Practice-IV (Hospital Pharmacy) (New Course)

MAX. TIME: 2 Hrs. 30 Min.

PAPER: 1 Part – II

MAX. MARKS: 80

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

NOTE: Attempt any FOUR questions. All questions carry equal marks.

Q. # 2:

- (a) Draw the organogram of a typical hospital of Pakistan, e.g., Mayo Hospital? (10)
- (b) Define Pharmacy and Therapeutic Committee and its composition? (5)
- (c) Mention different types of hospitals based on disease specialty? (5)

Q. # 3:

- (a) Discuss medication dispensing and delivery system in hospital? (10)
- (b) Discuss medication-use policy development in hospital? (10)

Q. # 4:

- (a) What kind of steps & actions should be taken to control the medication errors? (10)
- (b) Discuss the hyper-alimentation and cytotoxic preparations? (5)
- (c) Write a note on work sheet? (5)

Q. # 5:

- (a) What is Drug Information Center? Explain the scope of services provided from Drug Information Center? (12)
- (b) Enlist & explain the sources of Information Center? (8)

Q. # 6:

- (a) Discuss the role of Pharmacist in controlling medication errors? (10)
- (b) Enlist generic name, pharmacological class, side effects, contraindications, dosage form and strength of the any five of following drugs. (2 marks each drug)
Ciproxin, Fexet, Prozac, Losec, Loprin, Amikin, Brexin, Tagamet, Rigix, Synflex

Q. # 7:

- (a) What is the importance of manufacturing of Bulk and Sterile? Discuss in detail budgetary and quality control procedures under the manufacturing program? (5)
- (b) Discuss the purposes of CSSR and ways of its management? (15)



Subject: Pharmacy Practice-IV(Hospital Pharmacy)(New Course)
PAPER: 1 Part – I (Compulsory)

MAX. TIME: 30 Min.
MAX. MARKS: 20

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the right answer cutting and-overwriting is not allowed. (1x20=20)

1. Which one of the followings is NOT an aggregate drug consumption review
 - a) VEN analysis
 - b) ABC analysis
 - c) Drug utilization patterns
 - d) None of the above
2. Pharmacy and therapeutic committee maintain transparency by selecting members
 - a) Having best expertise
 - b) Having top positions
 - c) Declaring no conflict of interests
 - d) Having experience in Pharmaceutical industries
3. Medicine selection criteria require specification of drug by
 - a) Brand-names
 - b) International non-proprietary name
 - c) Generic name
 - d) Both B & C
4. The pharmacy and therapeutic committee (PTC) should review the formulary list every
 - a) One year
 - b) 2 – 3 years
 - c) Six months
 - d) 5 years
5. Non-confrontational way of monitoring and addressing medication error by PTC include
 - a. Mention the name of doctor but not of pharmacist & nurse
 - b. Mention the name of a pharmacist & nurse but not of a doctor
 - c. Not mentioning the name of doctor, pharmacist and nurse
 - d. None of the above
6. The drug order forms prepared in triplicates, have original copy in pharmacy, second copy for billing procedures, and the third copy in:
 - a) Accounts department
 - b) Hospital records
 - c) Placed in patient profile
 - d) Entered in data base
7. When a medicine is dispensed by a nursing supervisor from a pharmacy, he or she is prohibited to:
 - a) Dispense from night cabinets
 - b) Use the floor stock system
 - c) Compounding the mixtures
 - d) use the resuscitation cart
8. The emergency box is also known as the:
 - a) Stat box
 - b) Resuscitation cart
 - c) Life-saving box
 - d) Three dimensional box

9. Each nursing area has _____ dosage forms on hand for patient dispensing in a floor stock system:
- a) 50 to 100
 - b) 100 to 110
 - c) 10 to 100
 - d) 10 to 150
10. The lay out design of sterile room must be so as to ensure the following facts, except:
- a) Separation of non-sterile areas from sterile
 - b) No entrance of contaminated items from one end
 - c) Passing of material through various sterilizers
 - d) Sterile room located with the waste management areas
11. The space allocation for the sterile room, keeping in mind the adequate spaces for autoclaving, disassembling and assembling etc, depends upon:
- a) The size of hospital
 - b) The particulate count
 - c) The autoclaving capacity
 - d) The sizes of the instruments installed
12. An institutional group delegated with the responsibilities of investigation, developing, and standardizing procedures and equipments is called:
- a) The standardization committee
 - b) The drug regulatory authority
 - c) National procedural committee
 - d) World standards and procedure committee
13. The _____ of the committee is responsible for gathering all samples and prices of materials and data dealing with any procedure:
- a) Chairman
 - b) Secretary
 - c) Head-Pharmacist
 - d) CEO
14. Giving a drug dose, not authorized for a particular patient, gives rise to a:
- a) Authorized drug error
 - b) Un-authorized drug error
 - c) Wrong-dose error
 - d) Dosage form error
15. Z-track is a _____ technique, used for the medications that stain upper tissues:
- a) Preventive
 - b) Authorized medical

- c) Intra dermal insertion
 - d) Intra muscular injection
16. A quiet, clear-glazed and a sized purpose-built facility for storage and preparation of medications, is called:
- a) Medication room
 - b) Provision room
 - c) Drug-dispensing room
 - d) Monitoring room
17. Galenical formulations to be used in a hospital come under the category of:
- a) I/V Admixture
 - b) Bulk compounding
 - c) Sterile manufacturing
 - d) I/V Additives
18. Aggregate drug consumption review VEN stands for
- a) Vital emergency & narcotics
 - b) Vital emergency & Non-essential
 - c) Vital essential and non-essential
 - d) None of the above
19. Institution intended to conduct a clinical research must have approved from
- a) Pharmacy & therapeutic committee
 - b) IRC
 - c) Q. control
 - d) Adam deptt.
20. EOQ stands for
- a) Equal order quantity
 - b) Economic organized quality
 - c) Economic Order Quantity
 - d) None of the above



UNIVERSITY OF THE PUNJAB

Fourth Prof: 2nd Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmaceutics-IV (Hospital Pharmacy) (Old Course)
PAPER: 1

MAX. TIME: 3 Hrs.
MAX. MARKS: 100

NOTE: Attempt any FIVE questions. All questions carry equal marks.

Q#1 Write down the Generic name, company name, Dosage form, Strengths, indications, contra indication and Drug-Drug interactions of the following drugs: (2 marks each)

1. Augmentin 2. Avil 3. Adalat 4. Zantac 5. Ponstan 6. Mixtard-30 HM
7. Cefspan 8. Somogel 9. Caflam 10. Flagyl

Q#2

- (a) What are the job description of a pharmacist in a hospital? (10)
(b) Discuss the management of dispensing during off hours in a hospital? (10)

Q#3

- (a) Write a detail note on **In-patients** dispensing? (10)
(b) Which type of the program come under the sterile manufacturing? How the I/V additives solutions are dispensed? (10)

Q#4

- (a) Define hospital formulary? Discuss different contents of hospital formulary? (10)
(b) Define & discuss the purposes of CSSR? In how many ways CSSR is managed? (10)

Q#5.

- (a) What kind of supportive services should be provided in a hospital?(10)
(b) Discuss different steps taken by the pharmacist in purchasing of drugs in a hospital? (10)

Q#6

- (a) Define & classify the hospitals and discuss in detail the organizational pattern of a hospital? (10)
(b) What kind of aseptic dispensing is carried out in a hospital? Write a detail note on TPN & I/V admixtures? (10)

Q#7

- (a) Write a detail note on different types of surgical cotton and gauze? (10)
(b) Discuss the role of pharmacist in controlling the medication errors? (10)



UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Fourth Prof: Annual-2019

Subject: Pharmacy Practice-IV (Hospital Pharmacy) (New Course)

Paper: 1 Part - I (Compulsory)

Time: 30 Min. Marks: 20

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the correct option.

(20x1=20)

1.	The pharmacy and therapeutic committee (PTC) should review the formulary list every a) One year b) 2 - 3 years c) Six months d) 5 years
2.	Which one of the followings is NOT an aggregate drug consumption review a) VEN analysis b) ABC analysis c) Drug utilization patterns d) None of the above
3.	Pharmacy and therapeutic committee maintain transparency by selecting members a) Having best expertise b) Having top positions c) Declaring no conflict of interests d) Having experience in Pharmaceutical industries
4.	Medicine selection criteria require specification of drug by a) Brand names b) International non-proprietary name c) Generic name d) Both B & C
5.	Non-confrontational way of monitoring and addressing medication error by PTC include a) Mention the name of doctor but not of pharmacist & nurse b) Mention the name of a pharmacist & nurse but not of a doctor c) Not mentioning the name of doctor, pharmacist and nurse d) None of the above
6.	Patients in the hospital not occupying bed are termed as a) out patients b) Ambulatory patients c) Paying patients d) Self-supporting patients
7.	Compounded prescriptions must be prepared and should be a) Packed properly b) Labeled properly c) Stored d) Handed over to patients
8.	A continually updated list of medicine is known as a) Supply list b) Essential drug list c) Formulary d) Official document
9.	The space allocation for the sterile room, keeping in mind the adequate spaces for autoclaving, disassembling and assembling etc, depends upon: a) The size of hospital b) The particulate count c) The autoclaving capacity d) The sizes of the instruments installed
10.	Ambulatory care requires a) Separate outpatient pharmacy b) In patient pharmacy c) Satellite pharmacy d) Central pharmacy

11.	Formulary is usually based on a) Brand names b) Trade names c) Common names d) Generic names
12.	The drug order forms prepared in triplicates, have original copy in pharmacy, second copy for billing procedures, and the third copy is: a) Accounts department b) Hospital records c) Placed in patient profile d) Entered in data base
13.	When a medicine is dispensed by a nursing supervisor from a pharmacy, he or she is prohibited to: a) Dispense from night cabinets b) Use the floor stock system c) Compounding the mixtures d) use the resuscitation cart
14.	The emergency box is also known as the: a) Stat box b) Resuscitation cart c) Life-saving box d) Three dimensional box
15.	Each nursing area has _____ dosage forms on hand for patient dispensing in a floor stock system: a) 50 to 100 b) 100 to 110 c) 10 to 100 d) 10 to 150
16.	Z-track is a _____ technique, used for the medications that stain upper tissues: a) Preventive b) Authorized medical c) Intra dermal insertion d) Intra muscular injection
17.	The lay out design of sterile room must be so as to ensure the following facts, except: a) Separation of non-sterile areas from sterile b) No entrance of contaminated items from one end c) Passing of material through various sterilizers d) Sterile room located with the waste management areas
18.	An institutional group delegated with the responsibilities of investigation, developing, and standardizing procedures and equipment is called: a) The standardization committee b) The drug regulatory authority c) National procedural committee d) World standards and procedure committee
19.	The _____ of the committee is responsible for gathering all samples and prices of materials and data dealing with any procedure: a) Chairman b) Secretary c) Head-Pharmacist d) CEO
20.	Giving a drug dose, not authorized for a particular patient, gives rise to a: a) Authorized drug error b) Un-authorized drug error c) Wrong-dose error d) Dosage form error



UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Fourth Prof: Annual-2019

Roll No.

Subject: Pharmacy Practice-IV (Hospital Pharmacy) (New Course)
Paper: 1 Part - II

Time: 2 Hrs. 30 Min. Marks: 80

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any *FOUR* questions. Each question carries equal marks.

Q. 2

Write notes on **TWO** of the following

- a) Radiopharmaceuticals and role of pharmacist (10)
- b) What are the important factors in planning of Central Sterile Supply Room. (10)
- c) Discuss standards of hospital pharmacy management. (10)

Q. 3

- a) Discuss what is dispensing and what are different steps in the process? (8)
- b) Discuss briefly the ambulatory care (8)
- c) Name different health accessories (4)

Q. 4

- a) Categorize the control drug substances according to schedules and describe hospital control procedures for these drugs (10).
- b) What are the functions of hospital pharmacy and therapeutic committee? (10)

Q. 5

- a) What is Formulary and formulary system? (6)
- b) What is the evaluation procedure of drug for inclusion in the formulary (8)
- c) Explain the advantages of formulary system (6)

Q. 6

- a) Discuss standards of hospital pharmacy management. (10)
- b) Discuss role of a pharmacist in appropriate dispensing of controlled substances. (10)

Q. 7

- a) Explain the relationship between purchasing, distribution and clinical pharmacy services (8)
- b) Role of pharmacist in reducing medication errors. (7)
- c) Role of a pharmacist in off hour dispensing (5)



UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Fourth Prof: Annual-2019

Roll No.

Subject: Pharmaceutics-IV (Hospital Pharmacy) (Old Course)

Paper: 1

Time: 3 Hrs. Marks: 100

Note: Attempt any *FIVE* questions. Each question carries equal marks.

Q. # 1:

- (a) What are investigational drugs and their uses (8)
- (b) What are the potential benefits and problems with hospital formulary (7)
- (c) Briefly discuss the role of drug information center in context of hospital pharmacy (5)

Q. # 2:

Enlist generic name, pharmacological class, side effects, contraindications, dosage form and strengths of the following drugs. (2 marks each drug)

Gentamicin, Ascard, Synflex, Tenormin, Prozac, Rigix, Klaricid, Novidat, Caflam, Panadol

Q. # 3:

- (a) Draw a flow diagram of a tertiary care hospital organogram (Mayo hospital) (7).
- (b) What are the functions of hospital pharmacy and therapeutic committee (8)
- (c) Describe the composition of Pharmacy and Therapeutic committee (5).

Q. # 4:

- (a) Categorize the control drug substances according to schedules and describe hospital control procedures for these drugs (8).
- (b) Specifically discuss different methods of drug distribution to Inpatients. (7)
- (c) Discuss the areas of knowledge required for the preparation of I/V solutions by pharmacist (5)

Q. # 5:

- (a) Discuss standards of hospital pharmacy management. (6)
- (b) Discuss the role of a pharmacist in appropriate dispensing of controlled substances (6)
- (c) What is hospital formulary? Explain the role of pharmacist in development of formulary? (8)

Q. # 6:

- (a) Explain the relationship between purchasing, distribution and clinical pharmacy services (8)
- (b) Discuss the causes of medication errors (5).
- (c) Elaborate the role of pharmacist in reducing medication errors. (7)

Q. # 7:

- (a) Which type of the programs come under the sterile manufacturing (7)
- (b) Write a note on surgical supplies to the hospitals (7)
- (c) Briefly explain the role pharmacist in the management of accident and emergency pharmacy (A&E pharmacy) (6)



UNIVERSITY OF THE PUNJAB
Doctor of Pharmacy (Pharm.D.) 4th Prof: Annual – 2021

Subject: Pharmacy Practice-IV (Hospital Pharmacy) (New Course)

Paper: 1

Part – I (Compulsory)

Time: 30 Min. Marks: 20

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

(20x1=20)

Q.1. Encircle the correct option.

1. According to ASHP guidelines on handling hazardous drugs, the primary route of exposure is
 - a) Skin
 - b) Injection
 - c) Inhalation
 - d) Ingestion
2. To prevent environmental hazard, _____ room is preferred
 - a) Uni-directional room
 - b) Ante room
 - c) Non-unidirectional room
 - d) Clean room
3. In handling hazardous drugs, which one of the following is the possible engineering controls
 - a) Use of Gloves
 - b) Use of gowns
 - c) Availability of safety data sheets
 - d) Use of Isolators
4. For compounding the powdered drug vials, insert the needle at
 - a) 55° angle
 - b) 45° angle
 - c) 35° angle
 - d) 37° angle
5. Which one of the followings is a type of isotonic IV fluid
 - a. 20% albumin
 - b. Mannitol
 - c. 5% albumin
 - d. 3% saline
6. Which one of the followings is the most preferred method to dispose of hazardous drugs waste
 - a) Incineration
 - b) Bleaching
 - c) Decontamination
 - d) Dumping into soil
7. Place all the used needles in properly labelled sharp containers having
 - a) Blue bag
 - b) Yellow bag with biohazard sign
 - c) Orange bag with biohazard sign
 - d) Yellow bag
8. Deactivating the biohazard substance is preferably done using
 - a) Sodium bicarbonate 2%
 - b) Sodium hypochlorite 1%
 - c) Sodium hypochlorite 2%
 - d) Alcohol 70%
9. The use of a drug prescribed for an indication not specifically approved by FDA is often referred to as
 - a) Appropriate drug use
 - b) Rational drug use
 - c) off-label use
 - d) Safe drug use
10. An N-95 respirator and a face shield must be worn for compounding the _____ in the open
 - a) Vial
 - b) Ampule
 - c) Elixirs
 - d) TPN

11. According to PPRA rules, Government of Pakistan only _____ proposal should be opened first
- Technical proposal
 - Financial proposal
 - Purchase proposal
 - Sale proposal
12. For the purchase of medicines in the hospital, the bidder should have a minimum market experience of
- 3 years
 - 2.5 years
 - 1 year
 - 4 years
13. During medicine purchase, the prices of the drugs are mentioned only in the
- Purchase proposal
 - Technical proposal
 - Financial proposal
 - Sale proposal
14. A method that provides the pharmacist with a duplicate copy of the order and does not require special equipment
- Electromechanical order
 - Computerized order
 - Self-copying order form
 - Drug basket method
15. A pharmaceutical entity that is not permitted by health authorities for its general distribution and use is known as
- New drug
 - Off-label drug
 - Investigational use drug
 - Clinical trial drugs
16. _____ falls under the non-charge floor stock drug dispensing of drugs to inpatients
- Drug basket method
 - Envelop method
 - Mobile dispensing unit
 - Unit dispensing
17. Galenical formulations to be used in a hospital come under the category of:
- I/V Admixture
 - Bulk compounding
 - Sterile manufacturing
 - I/V Additives
18. Aggregate drug consumption review VEN stands for
- Vital emergency & narcotics
 - Vital emergency & Non-essential
 - Vital essential and non-essential
 - Vital essential and non-prescription
19. Occupational therapy services include the followings EXCEPT
- Hand-eye coordination
 - Social activities
 - hydrotherapy
 - Emotional Health
20. Hospital pharmacy drug information services include the followings EXCEPT
- Monitoring and reporting of ADRs
 - Drug use review
 - Budgeting & inventory control
 - Patient education



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Roll No.

Subject: Pharmacy Practice-IV (Hospital Pharmacy) (New Course)
Paper: 1 Part – II

Time: 2 Hrs. 30 Min. Marks: 80

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any *FOUR* questions. Each question carries equal marks.

Q. # 2: Briefly explain (20)

- a) Enlist personal protective equipment for handling hazardous drugs
- b) Satellite pharmacy services; merits and demerits
- c) Advantages of Unit dose dispensing
- d) Types of hospitals

Q. # 3:

- (a) Discuss nuclear pharmacy and role of pharmacist in nuclear pharmacy (10)
- (b) Discuss special consideration contributing to drug controls in the hospital (10)

Q. # 4.

- a. Discuss handling and dispensing of cytotoxic drugs and possible controls in the hospital (10)
- b. Write a note on the common organizational groupings and various therapeutic services of a hospital (10)

Q. # 5:

- (a) Discuss different categories and Locations for outpatient dispensing (10)
- (b) Explain various key elements of process and record keeping of controlled drug substances in the hospital (10)

Q. # 6:

- a. Discuss minimum standards for pharmacies in hospitals. (10)
- b. Classify medication errors and discuss the role of a pharmacist in minimizing medication errors (10)

Q. # 7.

- (a) Elaborate on the rationale use and administration of controlled drug substances in the hospital (10)
- (b) Discuss the criteria of medicine selection in the hospital formulary and its maintenance by the pharmacy and therapeutic committee (10)