Code No. 4269

FACULTY OF PHARMACY

Pharm. D IV-Year (6 YDC) (Main) Examination, July 2017

Subject : Pharmacotherapeutics - III

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Differentiate between the different types of headaches.
2 Write a note on anemia in pediatric population.
3 What are the motor complications of levodopa?
4 How is Hepatitis A diagnosed?
5 Write the clinical presentation of pulmonary embolism.
6 Write a brief note on the different scales for rating depression.
7 What are the different types of Bipolar disorder?
8 Write a short note on obsessive compulsive disorder.
9 Differentiate between gastric and duodenal ulcers.
10 Write a brief note on different types of sleep disorders.

PART – B (5 x 10 = 50 Marks)

11 (a) Write about the patterns of drug induced liver disease.
(b) Write briefly about alcoholic liver disease and its management.

12 (a) Draw an algorithm for the treatment of schizophrenia.
(b) Write a note on parenteral iron therapy.

13 (a) Classify antipsychotic agents with examples.
(b) Classify the types of seizures and add a note on the role of phenytoin in the management of seizures.
(c) Discuss briefly the management of different types of headaches.

14 (a) Elaborate on the pharmacological management of Parkinson's disease.
(b) Write briefly the pathophysiology of pain.

15 (a) Discuss regarding jaundice, its clinical presentation and management.
(b) Write about the etiopathogenesis and management of Heparin Induced Thrombocytopenia.

16 (a) Write briefly on any two drug induced blood disorders.
(b) Elaborate on the different resources used in practicing evidence based medicine.

17 (a) Discuss the management of generalized anxiety disorder.
(b) Write in detail the pathophysiology of Alzheimer's disease.

18 Discuss in detail the etiopathogenesis and management of stroke.

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Code No. 4274

FACULTY OF PHARMACY

Pharm. D (6 YDC) IV-Year (Main) Examination, July 2017

Subject : Clinical Toxicology

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What is tobacco amblyopia? Write the signs and symptoms of tobacco dependence.
2 Define toxicokinetics.
3 Write a note on gut decontamination.
4 What are the signs and symptoms of cannabis abuse?
5 What are caustics and mention any two examples of each?
6 Write a note on carbamate poisoning.
7 Define antidote and mention at least two examples.
8 List out clinical features for paracetamol overdose.
9 Write the management of benzodiazepine poisoning.
10 What are hallucinogens? Mention clinical features of its overdose.

PART – B (5 x 10 = 50 Marks)

11 Explain general principles involved in the management of poisoning.

12 (a) Discuss the clinical features and management of acute organophophorus poisoning.
(b) Write a note on activated charcoal.

13 (a) Describe the management of tricyclic antidepressant poisoning.
(b) Write a note on overdose of NSAIDs.

14 (a) Classify poisonous snakes. Discuss the management of viper poisoning.
(b) Give a brief note on mycotoxins.

15 (a) Describe the management of mercury poisoning.
(b) Discuss the investigations in petroleum toxicity.

16 Differentiate the acute and chronic poisoning of
(a) Hallucinogens (b) Morphine

17 (a) Explain clinical applications of antidotes in detail.
(b) Enumerate the clinical features and complications of bacterial food poisoning.

18 Give a detailed note on :
(a) Amphetamine abuse
(b) Tobacco abuse

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Code No. 4271

FACULTY OF PHARMACY

Pharm. D (6 YDC) IV-Year (Main) Examination, July 2017

Subject : Clinical Pharmacy

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Write a note on scope of clinical pharmacy in India.
2 Give the examples of primary, secondary and tertiary poison information resources.
3 What is the importance of medication history?
4 Give the significance of pharmacist interventions.
5 Write the normal values of Total bilirubin, unconjugated bilirubin, AST and ALT.
6 What are the various types of communication skills required in patient counseling?
7 Write a note on Naranjo adverse drug reaction probability scale?
8 How does pharmaceutical care differ from clinical pharmacy?
9 What is root cause analysis?
10 Differentiate between bias and confounding.

PART – B (5 x 10 = 50 Marks)

11 (a) Write a note on clinical / daily progress review.
(b) What are the goals and objectives of clinical pharmacists in ward rounds?

12 (a) Write a note on counseling aids.
(b) What information should be recorded during medication history interview?

13 Explain the steps involved in conducting Drug Utilization Evaluation.

14 (a) Explain hematological tests.
(b) What are the applications of pulmonary function tests?

15 (a) What are the advantages and disadvantages of different drug information resources?
(b) Write the systematic approach of answering drug queries.

16 (a) What are the mechanisms of Type A Adverse Drug Reactions?
(b) Write a note on role of pharmacist in ADR management.

17 Explain the types of medication errors. Write a note on prevention of medication errors.

18 (a) How is Pharmaceutical care documented?
(b) Write a note on sample size in clinical studies.

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Code No. 4273

FACULTY OF PHARMACY

Pharm. D (6 YDC) IV-Year (Main) Examination, July 2017

Subject : Bio Pharmaceutics and Pharmacokinetics

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Define bioavailability and write any two objectives.
2 List the factors that influence the gastric emptying role.
3 State the pH partition hypothesis and its assumptions.
4 Why is in-vivo drug dissolution always faster than in vitro dissolution?
5 What are the characteristics of microsomal enzymes?
6 Mention various factors influencing renal excretion of drugs.
7 Write a short note on flip-flop phenomenon.
8 What do you mean by principle of superposition?
9 Why the drugs are administered in multiple doses?
10 What are the assumptions made in developing for the one compartment model?

PART – B (5 x 10 = 50 Marks)

11 (a) Explain briefly physiological barriers for the dissolution of drugs.
(b) Write the concept of clearance.

12 (a) What is statistical moment theory?
(b) Derive Michalis – Menton equation and give its importance.

13 (a) Write a note on drug accumulation in multiple dosing.
(b) How do you determine steady state maximum and minimum concentrations of drug following multiple oral doses?

14 Explain the mechanism of drug absorption from GIT.

15 Explain briefly protocols and methods of assessment of Bioavailability.

16 Explain conjugation reactions for elimination of drugs with suitable examples.

17 Write a detailed note on compartment model.

18 A 59 kg male received 2 mg / kg of an antibiotic orally. The plasma concentration vs time data is obtained. Assume that the drug follows one compartment open model and is completely absorbed. Calculate all possible parameters.

Time (Hrs)	0.25	0.5	0.75	1.0	1.5	2.0	2.5	3.0	4.0	6.0	8.0	12	18	24
Plasma conc. (mg/ml)	2.2	3.8	5	5.8	6.8	7.1	7.1	6.9	6.2	4.8	3.5	1.9	0.8	0.3

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Code No. 4272

FACULTY OF PHARMACY

Pharm. D (6 YDC) IV-Year (Main) Examination, July 2017

Subject : Biostatistics and Research Methodology

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Define and write the significance of Interventional studies.
2 What are scatter plots?
3 Find out the median from the following data
10, 15, 12, 13, 14, 14, 15, 12, 11, 13, 15
4 Write the properties of t-test.
5 Define type-I and type-II errors.
6 Write the uses of data – Range.
7 Define Incidence and prevalence.
8 Explain Null hypothesis.
9 Define parametric and non-parametric test.
10 Write the uses of standard error of mean.

PART – B (5 x 10 = 50 Marks)

11 Find the mean, standard deviation, variance and coefficient of variance of the following data on random blood sugar (mg) of 10 individuals recorded in hospital.

112	118	150	170	132	128	140	110	175	125

12 Discuss the following:
(a) Mann Whitney 'U' test with example.
(b) Advantages of computerized literature retrieval

13 Performa ANOVA for the following data and find out whether means of the three samples differ significantly or not. [F_{tab} at α=0.05 = 3.9].

Sample - I	Sample – II	Sample – III
20	19	13
10	13	12
17	17	10
17	12	15
16	9	5

14 (a) Find the coefficient of correlation between the variables X and Y using Karl Pearson's method.

X	1	3	4	6	8	9	11	14
Y	1	2	4	4	5	7	8	9

(b) Explain the advantages and applications of SAS software.

..2

15 Write the principle and procedure involved in unpaired t - test using suitable example.

16 Describe the role of computers in patient record data base management, in patient medication profile and inventory control in hospital pharmacy.

17 (a) The following figures shown disease count form a region over a span of 8 months. Represent the data by a pie-diagram.

Disease	Disease count
HIV	13
Malaria	15
Diarrhea	13
Tuberculosis	12
Influenza	17

(b) Write the procedure of report writing in Research methodology.

18 A certain drug was administered to 550 persons out of a total 900 persons in a certain locality to test its efficiency against cholera. The result are given below in the table. Find out the effectiveness of the drug against the disease. [tabulated value of ψ^2 at 6% is 3.84].

	Infection	No-Infection
Drug	300	300
No Drug	250	50

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Code No. 4270

FACULTY OF PHARMACY

Pharm. D (6 YDC) IV-Year (Main) Examination, July 2017

Subject : Hospital Pharmacy

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Explain in brief the departmental organization of a hospital pharmacy.
2 Write about the clinical notes on hospital pharmacist in evolving health care system in India.
3 What is satellite pharmacy?
4 Give the composition of PTC.
5 What is hospital formulary?
6 Write a brief note on drug distribution.
7 Write in brief about hospital pharmacy communication.
8 What are the differences between granule and powder?
9 What is radio pharmaceutical committee?
10 Write in brief about professional relation and practices of a hospital pharmacist.

PART – B (5 x 10 = 50 Marks)

11 Describe in detail about the functions of various departments of hospital.

12 Define budget. Explain different divisions of budget.

13 Define PTC. Explain the role of PTC in drug safety, ADR monitoring and drug utilization review with the help of blank report / proforma respectively.

14 Write in detail about the composition and function of research and ethical committee.

15 Write the steps involved in procurement and warehousing of drug in hospital pharmacy.

16 Describe in brief the manufacture of ointments and enlist the differences in manufacturing, packaging, and labeling of ointments and creams.

17 Give a detailed account on responsibilities of pharmacist in IPD and OPD.

18 What is TPN? Write a short note on manufacturing of TPN and its significance in critically ill patients.

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Code No. 7305

FACULTY OF PHARMACY

Pharm.D. (6 YDC) IV Year (Instant) Examination, January 2014

Subject: Clinical Pharmacy

Time: 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (10x2 = 20 Marks)

1	What you mean by clinical intervention?	2
2	What are the steps involved in medication chart interview?	2
3	Define SOAP protocol?	2
4	Mention four activities of ward round participation?	2
5	Mention various types of ADRs.	2
6	Define pharmacovigilance.	2
7	Mention few counseling aids.	2
8	Mention important counseling points while dispensing TB medication.	2
9	Briefly write on fluid and electrolyte balance.	2
10	Mention various types of medication errors.	2

PART – B (5x10 = 50 Marks)

11	Describe SOAP protocol and various steps involved in ward round participation.	10
12	(a) Describe various drug information sources and its advantages and disadvantages?	6
	(b) How will you evaluate primary literature?	4
13	Define ADR? Describe various monitoring techniques of adverse drug reaction monitoring.	10
14	(a) How will you design a DIC for a 500 bedded hospital?	5
	(b) Write a note on quality control of drug information services?	5
15	Write a note on renal function tests? Explain in detail pathophysiological conditions of kidney and renal function tests significance.	10
16	Write in detail the essential components of pharmaceutical care? Describe in detail patient counseling techniques.	10
17	Classify and describe medication errors? What are the measures to prevent medication errors?	10
18	Explain drug utilization review? Describe methods to combat antibiotic resistance.	10

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Code No. 7308

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV – Year (Instant) Examination, January 2014

Subject : Clinical Toxicology

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Section-A and answer any Five questions from Section-B.

Section – A (10 x 2 = 20 Marks)

1	Define Clinical Toxicology.	2
2	Differentiate between self poisoning and accidental poisoning.	2
3	What are the advantages and disadvantages of acetaminophen?	2
4	How will you identify chronic exposure of arsenic poisoning?	2
5	How would you identify methanol poisoning?	2
6	Define Antidote. Specify the antidote for Viper bite.	2
7	Which type of antidote is prescribed for a child in case of Venomous snakebite?	2
8	What are the clinical features of scorpion bite?	2
9	What are the alternative medicines available in the treatment of methanol poisoning?	2
10	Is there any evidence of carbamate poisoning contamination in the environment food and human beings.	2

Section – B (5 x 10 = 50 Marks)

11	a)	What are the symptoms, signs, mechanism of action diagnosis and treatment of organo phosphorous compound poisoning.	
	b)	Differentiate between acute and chronic exposure of opium poisoning.	8+2
12	a)	Explain the mechanism and role of antidote in ethanol poisoning.	
	b)	Describe about toxicity and management of acetaminophen poisoning.	5+5
13	a)	Write down the general principles involved in the management of poisoning.	
	b)	How would you manage childhood lead poisoning?	6+4
14		Write short notes on :	
	a)	GUT decontamination b) Iron poisoning	5+5
15	a)	Enumerate the type of organisms enter in case of food poisoning.	
	b)	Write a note on treatment of mushroom poisoning.	5+5
16	a)	List out mushroom species potentially toxic to human beings.	
	b)	Draw a schematic diagram pathways of lead exposure from the environment to and within man.	6+4
17	a)	Describe the management of chronic exposure of copper poisoning, explain the risk factors for copper poisoning.	
	b)	What are the signs and symptoms of copper poisoning? Add a note on how to investigate the type of poisoning.	5+5
18		Write short notes on :	
	a)	Radiation poisoning b) Barbiturate poisoning	5+5

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Code No. 7307

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV Year (Instant) Examination, January 2014

Subject: Biopharmaceutics and Pharmacokinetics

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (10 x 2 = 20 Marks)

1	What is the major mechanism of absorption of most drugs? What is the driving force for such a process?	2
2	What are soft drugs? Why are they considered safe and have short half life?	2
3	Brief notes on plateau principle?	2
4	Why is HSA considered a versatile protein for drug binding?	2
5	Define absolute and relative bioavailability. What is the basic difference between two?	2
6	Brief notes on limitations of multi-compartmental analysis.	2
7	What is flip-flop phenomen and when is it observed.	2
8	Write notes on MRT.	2
9	What is the main reason for giving a drug by slow IV infusion?	2
10	Define GFR and factors affecting renal excretion.	2

PART – B (5x10 = 50 Marks)

11	Discuss the physicochemical properties of drugs affecting GI absorption with suitable examples.	10
12	Describe the pharmacokinetic method of estimating bioavailability using plasma sample and urine sample.	10
13	(a) Give possible reasons for reduction in dose of drug in elder patients. (b) Write notes on randomized block design.	5 5
14	Explain the Michaleins – Menten kinetics and method to determine K_m and V_{max}.	10
15	Explain the physiologic pharmacokinetic models.	10
16	A 70 Kg patient is to be given oubain by I.V. infusion. The drug has a half life of 22 hr, apparent V_d 15.7 litres and the desired steady-state plasma concentration is 0.0002 mcg/ml. Assuming one compartment kinetics calculate (a) time required to reach 90% C_{ss} (b) Infusion rate to achieve the desired C_{ss} (c) loading dose to attain C_{ss} rapidly (d) concentration of drug in plasma after 48 hrs from the start of infusion.	10
17	Explain the phenomen of drug accumulation.	10
18	(a) Write notes on intrinsic dissolution rate? How is it determined? (b) Write notes on first pass metabolism.	5 5

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Code No. 7306

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV – Year (Instant) Examination, January 2014

Subject: Biostatistics and Research Methodology

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Section-A and answer any Five questions from Section-B.

Section – A (10 x 2 = 20 Marks)

1 Define the primary Data. 2
2 What do you understand by Central Tendency? 2
3 Define the Coefficient of Variation. 2
4 How can you determine the size of the sample to be drawn? Explain. 2
5 State the principles of Experimental Design. 2
6 Explain the procedure of obtaining the Scatter Diagram. 2
7 Define the standard error. 2
8 Define Interval estimation 2
9 Define the Level of significance and Power of Test. 2
10 State the importance of SPSS in Pharmaceutical Applications. 2

Section – B (5 x 10 = 50 Marks)

11 The details of expenditures of two companies are given below. Draw suitable graphical/diagrammatical representation and give your comments on the following data. 10

Details of Expenditure	Company - A	Company - B
Rental charges	55,000	50,000
Electricity charges	32,000	30,000
Raw material charges	2,50,000	3,00,000
Transportation charges	75,000	50,000
Employees salaries	2,75,000	3,00,000
Miscellaneous charges	50,000	35,000

12 Compute the standard error of mean for the following data. 10

Class Interval	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Frequency	2	10	22	25	25	22	10	2

13 The duration for curing by using the drug produced by the four companies on patients are given below. Test at 5% level that the average duration for curing by the drug is same. Consider the table values as ($F_{22,3}$ = 3.24 ; $F_{3,22}$ = 2.59). 10

Companies	Days for cure							
A	14	15	16	13	17	22	18	
B	21	16	22	25	17			
C	18	25	22	31	27	20		
D	23	25	26	28	25	21	31	25

14 Derive the Regression line Y on X for the following data 10

X :	25	32	42	56	65	72	49	57	45	75
Y :	32	40	38	45	70	56	40	65	50	72

15 A drug is injected to 10 patients and the increase of blood pressure is noted as : -2, -10, -6, -8, -5, -10, -5, -7, -4, -8, Test at 1% level is the drug influencing in decreasing the B.P. 10
16 State the assumptions and limitations of the Mann-Whitney U-test. Also explain its test procedure. Illustrate it with a suitable example. 10
17 State the characteristics of normal distribution. Give its importance. 10
18 State the features of statistical software SAS. Illustrate each with suitable pharmaceutical applications. 10

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Code No. 7303

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV Year (Instant) Examination, January 2014

Subject: Pharmacotherapeutics – III

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (10 x 2 = 20 Marks)

1	Write a brief note on the steps to incorporate evidence based medicine into pharmacotherapeutic decision making.	2
2	Write briefly about the role of phenytoin in the management of epilepsy.	2
3	Classify types of stroke based on the mechanism.	2
4	Clinical presentation of a GERD patient.	2
5	Write a brief note on hepatorenal syndrome.	2
6	Define early virologic response and sustained virologic response seen in Hepatitis C infection.	2
7	Write the formula for calculation of iron supplementation required in iron deficiency anemia.	2
8	Write the clinical features of idiopathic Parkinson's disease.	2
9	Write a brief note on anxiety rating scales.	2
10	Diagnostic criteria for schizophrenia.	2

PART – B (5 x 10 = 50 Marks)

11	(a) Etiology and clinical presentation of a patient with venous thromboembolism.	4
	(b) Zollinger Ellison syndrome and its management.	6
12	(a) Write in detail the pharmacological and nonpharmacological management of ascites.	7
	(b) Write a note on alcoholic liver disease.	3
13	(a) Write a note on different oral iron supplements and its role in anemia.	6
	(b) Adverse effects and monitoring of warfarin treatment.	4
14	(a) Write in detail the etiopathogenesis and management of Crohn's disease.	7
	(b) Pharmacological management of Alzheimer's disease.	3
15	(a) Represent the pharmacological management of migraine with an algorithm.	7
	(b) Elaborate on the different opioids and their role in pain management.	3
16	Elaborate on pharmacologic strategies used for primary and secondary stroke prevention.	10
17	Write short notes on:	
	a) Any one drug induced liver injury.	5
	b) Any one drug induced blood disorder.	5
18	(a) Write about the etiology and risk factors for Peptic ulcer disease.	4
	(b) Management of stress related mucosal bleeding.	6

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Code No. 2752 / M

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV Year (Main) Examination, September 2013

Subject: Pharmacotherapeutics – III

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (10x2 = 20 Marks)

1.	Etiology of Venous thromboembolism.	2
2.	Differentiate between gastric and duodenal ulcers.	2
3.	Write briefly about the management of hepatic encephalopathy.	2
4.	List out the different hepatitis viruses with their mode of transmission.	2
5.	Write a brief note on hemolytic anemia.	2
6.	Write the staging of Parkinsons according to Hoehn and Yahr scale.	2
7.	Clinical presentation of a patient with generalized anxiety disorder.	2
8.	Write the pharmacological management for obstructive sleep apnea.	2
9.	Classify different types of pain with examples.	2
10.	Differentiate the characteristics of tension and cluster headaches.	2

PART – B (5x10 = 50 Marks)

11.(a)	Write briefly the significance of validity and the types of bias in evidenced based medicine.	4
(b)	Elaborate on the pathophysiologic mechanisms involved in epilepsy.	6
12.(a)	Prehospital management of stroke.	5
(b)	Etiopathogenesis of GERD.	5
13.(a)	Give a schematic representation of the pathogenesis of pulmonary hypertension, varices and variceal hemorrhage.	6
(b)	Write a note on jaundice and its management.	4
14.	Discuss in detail the etiology, prevention and pharmacological management of Hepatitis B.	10
15.(a)	Write in detail the role of Carbidopa/levodopa and its motor complications in the management of Parkinson's disease.	6
(b)	Write a note on narcolepsy and its management.	4
16.(a)	Elaborate on the adverse effects of antipsychotic agents used in management of schizophrenia.	6
(b)	Clinical presentation of a patient with migraine headache.	4
17.(a)	Elaborate the role of 5 amino salicylate derivatives and their various formulations in the treatment of IBD.	7
(b)	Different scales used to evaluate patients with Alzheimer's disease.	3
18.(a)	Elaborate on heparin induced thrombocytopenia and its management.	6
(b)	Use and adverse effects of benzodiazepines in generalized anxiety disorder.	4

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Code No. 2754/ M

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV Year (Main) Examination, September 2013

Subject: Clinical Pharmacy

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (10x2 = 20 Marks)

1. Distinguish between medication errors and adverse drug events. 2
2. Write a brief note on objective of DUE. 2
3. Write a brief note on drug information. 2
4. What information would you consider to assist in the detection of a possible ADR? 2
5. Give an account of counselling aids. 2
6. Differentiate between open-ended and close ended questionnaires. 2
7. Write a brief note on scope of pharmaco-vigilance. 2
8. Write a brief note on systematic approach in answering DI queries. 2
9. Describe the term “Medication History”. 2
10. Write a brief note on “Role of Emetics” in poison management. 2

PART – B (5x10 = 50 Marks)

11. Write short notes on:
    a) Reporting of adverse drug reaction. 5
    b) Types of drug utilization review. 5

12.(a) List out the goals and objectives for clinical pharmacist on ward rounds. 5
    (b) Explain about a scope for clinical pharmacy practice in India. 5

13.(a) Describe various steps involved in the counselling process. 5
    (b) Discuss the basic requirement for the drug in formation centre. 5

14. Write short notes on:
    a) Pulmonary Function Tests 5
    b) Microbiological culture Sensitivity Tests 5

15.(a) Explain the importance of patient case history in therapeutic management. 5
    (b) What are the principles of pharmaceutical care? 5

16.(a) What are the functions of poison information centre? 6
    (b) How should drug information centres be organized in hospital? 4

17.(a) Describe the case study method. 4
    (b) Enumerate the general guidelines for ward round participation. 6

18.(a) List out the types of drug related problems which are commonly identified during drug therapy review. 5
    (b) Explain about causality relationship between a suspected drug and reaction. 5

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Code No. 2756 / M

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV – Year (Main) Examination, Sept 2013

Subject : Bio-Pharmaceutics and Pharmacokinetics

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Section-A and answer any Five questions from Section-B.

Section – A (10 x 2 = 20 Marks)

1. Differentiate the terms biopharmaceutics and pharmacokinetics. 2
2. Vitamin B complex preparations are advised to be taken after meals. Explain. 2
3. Amorphous form has greater solubility as compared to that of crystalline form, Why? 2
4. Define bioavailability. List two of its applications. 2
5. List the reasons for the failure of IVIVC Intravenous catheters. 2
6. Describe the term 'open' with the help of one-compartment open model. 2
7. Define volume of distribution and give its significance. 2
8. Drug-protein binding increases renal excretion of drug. True/False. Explain. 2
9. Explain the terms 'biotransformation' and 'detoxification'. 2
10. Give two reasons for observing nonlinear pharmacokinetics at high doses of drugs. 2

Section – B (5 x 10 = 50 Marks)

11. Explain in detail on the objectives and considerations in bioavailability study. 10

12.a) Describe the significance of non-renal excretion of drugs.
b) Write the importance of conjugation reactions. 7+3

13. Describe two methods for determining elimination half life of a drug in one compartment model from urine analysis. 10

14. Write the characteristics of drug absorption mechanisms in GIT with suitable examples. 10

15.a) Explain the importance of oxidative reactions in metabolism. Describe the role of cytochrome P450 in oxidation-reduction cycle.
b) Write the significance of AUC. 7+3

16. Describe saturation kinetics with reasons, implications and examples. 10

17.a) Describe the role of physiological barriers for distribution of drugs.
b) Explain the role of polymorphism on drug absorption. 6+4

18. A dose of 325mg of a new drug injected Intra venously to healthy volunteer and the following data was obtained. 10

Time (hrs)	2	4	6	8	10	12	16	20
Plasma conc'n (mcg/ml)	18.3	10.1	5.8	3.3	1.8	1	0.31	0.12

Calculate various pharmacokinetic parameters.

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Code No. 2757 / M

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV Year (Main) Examination, Sept 2013

Subject: Clinical Toxicology

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (10x2 = 20 Marks)

1. Write a note on dimercaprol.
2. Write the factors influencing elimination enhancement.
3. Write a note on pralidoxime.
4. Write the role of Tannic acid in gut decontamination.
5. Write a note on disulfiram.
6. Name the adverse effects of NSAIDS.
7. Write a note on paracetamal poisoning.
8. Write a note on mycotoxins.
9. Write the clinical symptoms of copper poisoning.
10. Write a note on LSD.

PART – B (5x10 = 50 Marks)

11.(a) Write the general principles involved in the management of poisoning.
(b) Write a note on supportive care in clinical toxicology.

12.(a) Write the clinical symptoms and management of benzodiazepines poisoning.
(b) Describe in brief about toxicokinetics.

13.(a) Write in brief about radiation poisoning.
(b) Write the clinical symptoms and management of inorganic acids and alkali poisoning

14.(a) Describe in brief about lead poisoning.
(b) Write the clinical symptoms and management of salicylates poisoning.

15.(a) Write a note on families of venomous snake.
(b) Write the clinical symptoms and management of snake poisoning.

16. Describe in detail about food poisoning.

17. Describe in detail about substance abuse.

18.(a) Write a note on arthropod bites and sting.
(b) Write a note on mushrooms poisoning.

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Code No. 2755 / M

FACULTY OF PHARMACY

Pharm. D. (6 YDC) IV – Year (Main) Examination, September 2013

Subject : Biostatistics and Research Methodology

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Section-A and answer any Five questions from Section-B.

Section – A (10 x 2 = 20 Marks)

1. How do you use computer for inventory control in a hospital? 2
2. Name and write briefly about any two software's that are used in corporate hospitals. 2
3. Write the advantages of computerized literature retrieval. 2
4. What is the difference between an observational study and an interventional study? 2
5. Write about different types of presentation of data. 2
6. Two samples of human males yield the following results. 2

	Sample 1	Sample 2
Age	25 years	11 years
Mean weight	145 pounds	80 pounds
Standard deviation	10 pounds	10 pounds

Find which samples shows more variation.

7. What is standard deviation? Explain its important properties in pharmacy. 2
8. Write about the significance of Null hypothesis and alternative hypothesis. 2
9. Write down the applications of t-test. 2
10. Enumerate the advantages of graphical representation of data. 2

Section – B (5 x 10 = 50 Marks)

11. Define Sample? And write about different sampling methods in detail. 10

12.a) Distinguish between research and research methodology. 5
b) Write in brief about incidence and prevalence. 5

13. Use of computers in maintaining patient medication profiles and management of patient management reports in a hospital. 10

14. Write about use drug information storage and retrieval. 10

15. Tablets were weighed and assayed with the following results. 10

Weight	200	205	203	201	195	203	198	200	190	205	207	210
Assay	10.0	10.1	10.0	10.1	9.9	10.1	9.9	10.0	9.6	10.2	10.2	10.3

i) Calculate the correlation coefficient between weight and assay of tablets.
ii) Test the significance of correlation coefficient at 5% level of significance.

16. Briefly discuss the following : 10
a) Mann Whitney U test b) Linear Regression Analysis

17. A certain stimulus administered to each of 12 patients resulted in the following change in blood pressure 10
5, 2, 8, -1, 3, 0, -2, 1, 5, 0, 4, 6
can it be concluded that the stimulus will in general be accompanied by an increase in blood pressure. (The value of t at 5% Level of Significance for 10 degree of freedom is 2.228).

18. Explain briefly the one-way classification technique of analysis of variance (ANOVA) with example. 10

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16 Mention in details about Bioequivalence study protocol for Extended Release dosage forms. (10)

17 (a) Explain the design of dosage regimen. Add a note an assumption made in design of dosage regimen. (5)

(b) The equation best fits the plasma level time curve after I.V. bolus dose of a drug 100 mg is $C=7.14e^{-0.173t}$. Calculate Vd, $t_{1/2}$, AUC and Total systemic clearance. (5)

18 A 50 kg male received 2mg/kg of a drug orally. The following plasma concentration vs time data is obtained. Assume the drug follows one compartment open model and it is completely absorbed. Calculate all possible pharmacokinetic parameters. (10)

Time (Hr)	0.25	0.5	0.75	1	1.5	2	2.5	3	4	6	8	12	18	24
Plasma Conc.(μg/ml)	2.2	3.8	5	5.8	6.8	7.1	7.1	6.9	6.2	4.8	3.5	1.9	0.8	0.3

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Code No. 6135 / PB

FACULTY OF PHARMACY

Pharm. D I-Year (3-YDC) (Post Baccalaureate) (Main & Backlog) Examination, August 2016

Subject : Bio Pharmaceutics & Pharmacokinetics

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 With examples, Name the various drug binding sites on HSA.
2 Explain, Greater the free drug concentration of drug in plasma, larger its volume of distribution.
3 Estimate the creatinine clearance of a 20 years old, 70 kg man with serum creatinine value of 2.0 mg %. What is the renal function of a such patient?
4 What are the different sites of presystemic metabolism of orally administered drugs?
5 Define Drug Accumulation and list the factors influencing renal clearance of drugs.
6 List out the reasons for failure of IVIVC.
7 Layout a Latin square cross over design for bioequivalence study on three formulations-A, B and C in six volunteers.
8 Define orange book objectives of bioequivalence studies.
9 Significance and determination of MRT and $t_{1/2}$.
10 Define the terms absolute bioavailability and relative bioavailability and derive the relationship.

PART – B (5 x 10 = 50 Marks)

11 Write note on :
(a) pH-Partition Theory (5)
(b) Physiological barriers to distribution of drugs (5)

12 (a) How do you calculate K_E from urinary excretion data by using Sigma-Minus method. (5)
(b) Following a 500 mg I.V. bolus dose of a drug to a 50 kg subject, the plasma drug concentration was found to decline biexponentially. The equation that best described the drug kinetic was : $C = 57e^{-14t}+43e^{-3t}$. Calculate the following parameters Vc, Vp, Vd.ss, Vd.area, k_{12}, k_{21} and K_E etc. (5)

13 What is linear and Non-Linear pharamcokinetics ? Explain the role of Michaelis Menton kinetics in Non-Linear pharamacokinetics. (10)

14 (a) Explain the pharmacokinetic parameters of a drug which follows two compartment open model when given by intravenous bolus with relevant mathematical equations. (6)
(b) Estimate the Ka by Loo-Riegelman method. (4)

15 Explain details about Phase-I reactions of biotransformation with suitable examples. (10)

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16 Mention in details about Bioequivalence study protocol for Extended Release dosage forms. (10)

17 (a) Explain the design of dosage regimen. Add a note an assumption made in design of dosage regimen. (5)

(b) The equation best fits the plasma level time curve after I.V. bolus dose of a drug 100 mg is $C=7.14e^{-0.173t}$. Calculate Vd, $t_{1/2}$, AUC and Total systemic clearance. (5)

18 A 50 kg male received 2mg/kg of a drug orally. The following plasma concentration vs time data is obtained. Assume the drug follows one compartment open model and it is completely absorbed. Calculate all possible pharmacokinetic parameters. (10)

Time (Hr)	0.25	0.5	0.75	1	1.5	2	2.5	3	4	6	8	12	18	24
Plasma Conc.(μg/ml)	2.2	3.8	5	5.8	6.8	7.1	7.1	6.9	6.2	4.8	3.5	1.9	0.8	0.3

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Code No. 2753 / M

FACULTY OF PHARMACY

Pharm. D (6 YDC) IV Year (Main) Examination, Sept 2013

Subject: Hospital Pharmacy

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (10x2 = 20 Marks)

1.	Define Hospital Pharmacy.	2
2.	Define inventory control.	2
3.	Write a note on infection committee.	2
4.	Write a note on manufacturing of creams.	2
5.	Define hospital and its functions.	2
6.	Write brief notes on management of materials.	2
7.	What is the importance of hospital pharmacist in packaging of Radio Pharmaceuticals?	2
8.	What is pharmacy procedure manual?	2
9.	Describe the objective of pharmacy and therapeutics committee.	2
10.	Write notes on role of the pharmacist in drug procurements.	2

PART – B (5x10 = 50 Marks)

11.(a)	Write notes on role of PTC in developing emergency drug list.	5
(b)	Write notes on out patient pharmacist responsibilities.	5
12.	Define sterile area? Describe the lay out of sterile product area and how the parenterals are evaluated.	10
13.	What is hospital formulary and explain its content, preparation and distribution in a typical hospital.	10
14.	Explain the purpose of various hospital committees and describe the role of pharmacist in hospital committees.	10
15.	Describe the various sources of data for drug information and explain the role of pharmacist in it.	10
16.	Explain the various methods of inventory control.	10
17.(a)	Write detail note on the role of hospital pharmacist in continuous professional development program.	5
(b)	Write on preparation of small volume parenterals.	5
18.	Explain the distribution of narcotic supply and controlled substance.	10

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