



# AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Approved by A.I.C.T.E, PCI, New Delhi, Recognized by the Govt. of A.P. & Affiliated to JNTU-GV, Vizianagaram)

Cherukupally (Village), Chittivalasa (SO), Bhogapuram (Mandal), Vizianagaram (Dist) -531162.

[www.avanthipharma.ac.in](http://www.avanthipharma.ac.in), [principal@avanthipharma.ac.in](mailto:principal@avanthipharma.ac.in)

## 1.3.1: Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

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*Principal*  
Principal

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## CLASSTIMETABLEAY:2022-23

**CLASS: I B.Pharm II Sem(PCI Regulation)**

**w.e.f:29/05/2023**

**SECTION-A(2022AdmittedBatch)**

Class Teacher: Mrs.L.Divya Sri				Batch A : Roll 01-25			Batch:B-26-55		
DAY/ TIME	9:30 – 10:30	10:30- 11:20	11:20– 12:20	12:00 1:00	1:00 - 1:50	1:50 2:40	2:40 3:30	3:30 – 4:20	
MON	POC-I	PATHO	BIOCHEM	<b>L U N C H</b>	HAP-II	Batch A:POC-I Lab Batch B:BIOCHEMLab			
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A:BIOCHEMLab Batch B:POC-I Lab			
WED	HAP-II	CA	PATHO		POC1	Batch A:HAP-II Lab Batch B:CA Lab			
THU	BIOCHEM	PATHO	CA		TUTORIAL (OC)	Batch A:CA Lab Batch B:HAP-II Lab			
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP- II	TUTORIAL (HAP)	
SAT	CA	BIOCHEM	HAP-II		PATHO	POC-I	ES	L/S	

S.No.	Name of the Faculty	Designation	Name of the Subject (Hrs)	Department
1.	D.PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I (5)	B. Pharm
2.	L.Divya Sri	Associate Professor	Pharmaceutical Biochemistry (5)	B. Pharm
3.	Vinay Ramji	Assistant Professor	Human Anatomy and Physiology-II (5)	B. Pharm
4.	B.MeherJyoti	Assistant Professor	Pathophysiology (5)	B. Pharm
5.	K.Rohini	Assistant Professor	Environmental Sciences (3)	B. Pharm
6.	K.VenkataRadhika	Assistant Professor	Computer Applications (4)	B. Pharm
7.	D.PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I Lab (6)	B. Pharm
8.	L.Divya Sri	Associate Professor	Pharmaceutical Biochemistry Lab (6)	B. Pharm
9.	VinayRamji	Assistant Professor	Human Anatomy and Physiology-II Lab (6)	B. Pharm
10.	K.VenkataRadhika	Assistant Professor	Computer Applications Lab (6)	B. Pharm
11.	D.PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I Tutorial (1)	B. Pharm
12.	VinayRamji	Assistant Professor	Human Anatomy and Physiology-I Tutorial (1)	B. Pharm
13.	Mr.R.Ramana	Librarian	Library (1)	B. Pharm
14.	Mr.KoteshwarRao	Physical Director	Sports (1)	B. Pharm

*Anaraji*  
Time Table Incharge

*[Signature]*  
Principal  
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## CLASS TIME TABLE AY: 2022-23

CLASS: I B.Pharm II Sem (PCI Regulation)

w.e.f:29/05/2023

SECTION-B (2022AdmittedBatch)

Class Teacher: Mrs.B.MeherJyoti				Batch C : Roll - 56-80		Batch D:-Roll -81-B0		
DAY/ TIME	9:30 - 10:30	10:30 - 11:20	11:20- 12:20	12:20- 1:00	1:00 - 1:50	1:50 -2:40	2:40 3:30	3:30 - 4:20
MON	POC-I	HAP-II	BIOCHEM	<b>L U N C H</b>	PATHO	Batch C-HAP-II Lab Batch D-CA Lab		
TUE	CA	PATHO	POC-I		HAP-II	Batch C-CA Lab Batch D-HAP-II Lab		
WED	PATHO	BIOCHEM	HAP-II		CA	Batch C-POC-I Lab Batch D-BIOCHEM Lab		
THU	POC-I	BIOCHEM	ES		CA	Batch C-BIOCHEM Lab Batch D-POC-I Lab		
FRI	BIOCHEM	POC-I	PATHO		TUTORIAL (HAP)	POC-I	ES	(L/S)
SAT	HAP-II	PATHO	BIOCHEM		ES	CA	HAP-II	TUTORIAL (POC-I)

S.No.	Name of The Faculty	Designation	Name of The Subject (Hrs)	Department
1.	S.Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (5)	B. Pharm
2.	B. Poornima	Associate Professor	Pharmaceutical Biochemistry (5)	B. Pharm
3.	Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology-II (5)	B. Pharm
4.	B.MeherJyoti	Assistant Professor	Patho physiology (5)	B. Pharm
5.	K.Rohini	Assistant Professor	Environmental Sciences (3)	B. Pharm
6.	B.RamaMadhuri	Assistant Professor	Computer Applications(4)	B.Pharm
7.	S.ChandraSekhar	Associate Professor	Pharmaceutical Organic Chemistry-I Lab (6)	B. Pharm
8.	B. Poornima	Associate Professor	Pharmaceutical Bio Chemistry Lab (6)	B. Pharm
9.	Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology-II Lab (6)	B. Pharm
10.	B.RamaMadhuri	Assistant Professor	Computer Applications Lab (6)	B. Pharm
11.	S.ChandraSekhar	Associate Professor	Pharmaceutical Organic Chemistry-I Tutorial (1)	B. Pharm
12.	Vinay Ramji	Assistant Professor	Human Anatomy and Physiology-II Tutorial (1)	B. Pharm
13.	Mr.R.Ramana	Librarian	Library (1)	B. Pharm
14.	Mr.Koteshwar Rao	Physical Director	Sports (1)	B. Pharm

*Ananaji*  
Time Table Incharge



*[Signature]*  
Principal

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**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>

## BP 206 T. ENVIRONMENTAL SCIENCES (Theory)

30 hours

**Scope:** Environmental Sciences is the scientific study of the environmental system and the status of its inherent or induced changes on organisms. It includes not only the study of physical and biological characters of the environment but also the social and cultural factors and the impact of man on environment.

**Objectives:** Upon completion of the course the student shall be able to:

1. Create the awareness about environmental problems among learners.
2. Impart basic knowledge about the environment and its allied problems.
3. Develop an attitude of concern for the environment.
4. Motivate learner to participate in environment protection and environment improvement.
5. Acquire skills to help the concerned individuals in identifying and solving environmental problems.
6. Strive to attain harmony with Nature.

### Course content:

#### Unit-I

10hours

The Multidisciplinary nature of environmental studies

Natural Resources

Renewable and non-renewable resources:

Natural resources and associated problems

a) Forest resources; b) Water resources; c) Mineral resources; d) Food resources; e) Energy resources; f) Land resources: Role of an individual in conservation of natural resources.

#### Unit-II

10hours

Ecosystems

- Concept of an ecosystem.
- Structure and function of an ecosystem.
- Introduction, types, characteristic features, structure and function of the ecosystems: Forest ecosystem; Grassland ecosystem; Desert ecosystem; Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

#### Unit- III

10hours

Environmental Pollution: Air pollution; Water pollution; Soil pollution



  
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**Recommended Books (Latest edition):**

1. Y.K. Sing, Environmental Science, New Age International Pvt, Publishers, Bangalore
2. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
3. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India,
4. Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
5. Clark R.S., Marine Pollution, Clarendon Press Oxford
6. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumbai, 1196p
7. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
8. Down of Earth, Centre for Science and Environment



  
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## B.PHARMACY LECTUREPLAN SECTION-A

<b>COURSE NAME: Environmental Science</b>	<b>COURSECODE :BP206T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION:PCI (R14)</b>

Date	LectureNo.	Topic Name	Source
30-05-2023	Lecture 1	Introduction of all the topics to be covered	Text Book
02-06-2023	Lecture 2	Unit-1 The multidisciplinary nature of Environmental Studies	Text Book
03-06-2023	Lecture 3	Natural Resources	Text Book
06-06-2023	Lecture 4	Renewable Sources	Text Book
09-06-2023	Lecture 5	Non-renewable Resources	Text Book
10-06-2023	Lecture 6	Forest Resources and its associated Problems	Text Book
13-06-2023	Lecture 7	Water Resources and its associated Problems	Text Book
16-06-2023	Lecture 8	Mineral Resources and its associated problems	Text Book
17-06-2023	Lecture 9	Food Resources and its Associated Problems	Text Book
20-06-2023	Lecture 10	Energy Resources and its Associated Problems	Text Book
23-06-2023	Lecture 11	Land Resources and its associated problems	Text Book
24-06-2023	Lecture 12	Role of an individual in conservation of natural Resources	Text Book
27-06-2023	Lecture 13	Unit-2 Ecosystems	Text Book
30-06-2023	Lecture 14	Concept of an Ecosystem	Text Book
01-07-2023	Lecture 15	Structure of an Ecosystem	Text Book
04-07-2023	Lecture 16	Function of an Ecosystem	Text Book
07-07-2023	Lecture 17	Introduction to Ecosystem	Text Book
07-07-2023	Lecture 18	Definition of Ecosystem	Text Book
08-07-2023	Lecture 19	Types of Ecosystem	Text Book
11-07-2023	Lecture 20	Characteristic Features of an Ecosystem	Text Book
14-07-2023	Lecture 21	Introduction to Forest Ecosystem	Text Book
15-07-2023	Lecture 22	Brief view on Forest Ecosystem	Text Book
25-07-2023	Lecture 23	Continuation of Forest Ecosystem	Text Book
28-07-2023	Lecture 24	Introduction to Forest and Ecosystem	Text Book

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01-08-2023	Lecture 25	Brief view on Grassland Ecosystem	Text Book
04-08-2023	Lecture 26	Continuation of Grassland Ecosystem	Text Book
08-08-2023	Lecture 27	Introduction to Desert Ecosystem	Text Book
11-08-2023	Lecture 28	Brief view on Desert Ecosystem	Text Book
12-08-2023	Lecture 29	Continuation of Desert Ecosystem	Text Book
18-08-2023	Lecture 30	Introduction to aquatic Ecosystem	Text Book
19-08-2023	Lecture 31	Aquatic Ecosystem	Text Book
22-08-2023	Lecture 32	Unit-3 Environmental Pollution	Text Book
25-08-2023	Lecture 33	Introduction to Pollution	Text Book
26-08-2023	Lecture 34	Brief view on environmental Pollution	Text Book
28-08-2023	Lecture 35	Air Pollution	Text Book
01-09-2023	Lecture 36	Prevention of Air Pollution	Text Book
02-09-2023	Lecture 37	Water Pollution	Text Book
08-09-2023	Lecture 38	Prevention of Water Pollution	Text Book
09-09-2023	Lecture 39	Soil Pollution & Prevention of Soil Pollution	Text Book

*\*Rohini*

Signature of the Faculty

  
Principal

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## B.PHARMACY LECTUREPLAN SECTION-B

<b>COURSENAME: Environmental Science</b>	<b>COURSECODE : BP206T</b>
<b>YEAR/ SEM : I B. Pharm II Sem</b>	<b>REGULATION: PCI (R14)</b>

Date	Lecture No.	Topic Name	Source
01-06-2023	Lecture 1	Introduction of all the topics to be covered	Text Book
02-06-2023	Lecture 2	Unit-1 The multidisciplinary nature of Environmental Studies	Text Book
03-06-2023	Lecture 3	Natural Resources	Text Book
08-06-2023	Lecture 4	Renewable Resources Non-renewable Resources	Text Book
09-06-2023	Lecture 5	Non –renewable Resources	Text Book
10-06-2023	Lecture 6	Forest Resources and its associated Problems	Text Book
15-06-2023	Lecture 7	Water Resources and its associated Problems	Text Book
16-06-2023	Lecture 8	Mineral Resources and its associated problems	Text Book
17-06-2023	Lecture 9	Food Resources and its associated Problems	Text Book
22-06-2023	Lecture 10	Energy Resources and its associated Problems	Text Book
23-06-2023	Lecture 11	Land Resources and its associated problems	Text Book
24-06-2023	Lecture 12	Role of an individual in conservation of natural resources	Text Book
30-06-2023	Lecture 13	Unit–2 Ecosystems	Text Book
30-06-2023	Lecture 14	Concept of an Ecosystem	Text Book
01-07-2023	Lecture 15	Structure of an Ecosystem	Text Book
06-07-2023	Lecture 16	Function of an Ecosystem	Text Book
07-07-2023	Lecture 17	Introduction to Ecosystem	Text Book
08-07-2023	Lecture 18	Definition of Ecosystem	Text Book
13-07-2023	Lecture 19	Types of Ecosystem	Text Book
14-07-2023	Lecture 20	Characteristic Features of an Ecosystem	Text Book
15-07-2023	Lecture 21	Introduction to Forest Ecosystem	Text Book
27-07-2023	Lecture 22	Brief view on Forest Ecosystem	Text Book

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28-07-2023	Lecture 23	Continuation of Forest Ecosystem	Text Book
03-08-2023	Lecture 24	Introduction to Grassland Ecosystem	Text Book
24-08-2023	Lecture 33	Introduction to Pollution	Text Book
25-08-2023	Lecture 34	Brief view on environmental Pollution	Text Book
26-08-2023	Lecture 35	Air Pollution	Text Book
31-08-2023	Lecture 36	Prevention of Air Pollution	Text Book
01-09-2023	Lecture 37	Water Pollution	Text Book
02-09-2023	Lecture 38	Prevention of Water Pollution	Text Book
08-09-2023	Lecture 39	Soil Pollution	Text Book
09-09-2023	Lecture 40	Prevention of Soil Pollution	Text Book

*K. Rohini*  
Signature of the Faculty

  
Principal  
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## CLASSTIMETABLEAY:2022-23

CLASS: I B.Pharm II Sem(PCI Regulation)

w.e.f:29/05/2023

SECTION-A(2022AdmittedBatch)

Class Teacher: Mrs.L.DivyaSri				Batch A : Roll 01-25			Batch:B-26-55	
DAY/ TIME	9:30 – 10:30	10:30- 11:20	11:20– 12:20	12:00 1:00	1:00 - 1:50	1:50 2:40	2:40 3:30	3:30 – 4:20
MON	POC-I	PATHO	BIOCHEM	<b>L U N C H</b>	HAP-II	Batch A:POC-I Lab Batch B:BIOCHEMLab		
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A:BIOCHEMLab Batch B:POC-I Lab		
WED	HAP-II	CA	PATHO		POC1	Batch A:HAP-II Lab Batch B:CA Lab		
THU	BIOCHEM	PATHO	CA		TUTORIAL (OC)	Batch A:CA Lab Batch B:HAP-II Lab		
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP-II	TUTORIAL (HAP)
SAT	CA	BIOCHEM	HAP-II		PATHO	POC-I	ES	L/S

S.No.	Name of the Faculty	Designation	Name of the Subject(Hrs)	Department
1.	D.PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I (5)	B. Pharm
2.	L.Divya Sri	Associate Professor	Pharmaceutical Biochemistry (5)	B. Pharm
3.	Vinay Ramji	Assistant Professor	Human Anatomy and Physiology-II (5)	B. Pharm
4.	B.MeherJyoti	Assistant Professor	Pathophysiology (5)	B. Pharm
5.	K.Rohini	Assistant Professor	Environmental Sciences (3)	B. Pharm
6.	K.VenkataRadhika	Assistant Professor	Computer Applications (4)	B. Pharm
7.	D.PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I Lab (6)	B. Pharm
8.	L.Divya Sri	Associate Professor	Pharmaceutical Biochemistry Lab (6)	B. Pharm
9.	VinayRamji	Assistant Professor	Human Anatomy and Physiology-II Lab (6)	B. Pharm
10.	K.VenkataRadhika	Assistant Professor	Computer Applications Lab (6)	B. Pharm
11.	D.PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I Tutorial (1)	B. Pharm
12.	VinayRamji	Assistant Professor	Human Anatomy and Physiology-I Tutorial (1)	B. Pharm
13.	Mr.R.Ramana	Librarian	Library(1)	B. Pharm
14.	Mr.KoteshwarRao	Physical Director	Sports (1)	B. Pharm

*Aravaji*  
Time Table Incharge

*Principal*  
Principal

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## CLASS TIME TABLE AY: 2022-23

CLASS: I B.Pharm II Sem (PCI Regulation)

w.e.f:29/05/2023

SECTION-B (2022AdmittedBatch)

CLASSTEACHER: Mrs.B.MeherJyoti				Batch C : Roll -56-80		Batch D:-Roll -81-B0		
DAY/ TIME	9:30 - 10:30	10:30 - 11:20	11:20- 12:20	12:20- 1:00	1:00 – 1:50	1:50 -2:40	2:40 3:30	3:30 – 4:20
MON	POC-I	HAP-II	BIOCHEM	L U N C H	PATHO	Batch C-HAP-II Lab Batch D-CA Lab		
TUE	CA	PATHO	POC-I		HAP-II	Batch C-CA Lab Batch D-HAP-II Lab		
WED	PATHO	BIOCHEM	HAP-II		CA	Batch C-POC-I Lab Batch D-BIOCHEM Lab		
THU	POC-I	BIOCHEM	ES		CA	Batch C-BIOCHEM Lab Batch D-POC-I Lab		
FRI	BIOCHEM	POC-I	PATHO		TUTORIAL (HAP)	POC-I	ES	(L/S)
SAT	HAP-II	PATHO	BIOCHEM		ES	CA	HAP-II	TUTORIAL (POC-I)

S.No.	Name of The Faculty	Designation	Name of The Subject (Hrs)	Department
1.	S.Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (5)	B. Pharm
2.	B. Poornima	Associate Professor	Pharmaceutical Biochemistry (5)	B. Pharm
3.	Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology-II (5)	B. Pharm
4.	B.Meher Jyoti	Assistant Professor	Patho physiology (5)	B. Pharm
5.	K.Rohini	Assistant Professor	Environmental Sciences (3)	B. Pharm
6.	B.Rama Madhuri	Assistant Professor	Computer Applications(4)	B.Pharm
7.	S.Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I Lab (6)	B. Pharm
8.	B. Poornima	Associate Professor	Pharmaceutical Bio Chemistry Lab (6)	B. Pharm
9.	Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology-II Lab (6)	B. Pharm
10.	B.Rama Madhuri	Assistant Professor	Computer Applications Lab (6)	B. Pharm
11.	S.Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I Tutorial (1)	B. Pharm
12.	Vinay Ramji	Assistant Professor	Human Anatomy and Physiology-II Tutorial (1)	B. Pharm
13.	Mr.R.Ramana	Librarian	Library (1)	B. Pharm
14.	Mr.Koteswar Rao	Physical Director	Sports (1)	B. Pharm

*Anveshi*  
Time Table Incharge

*[Signature]*  
Principal

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**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>



## BP 201T. HUMAN ANATOMY AND PHYSIOLOGY-II (Theory)

45 Hours

**Scope:** This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It also helps in understanding both homeostatic mechanisms. The subject provides the basic knowledge required to understand the various disciplines of pharmacy.

**Objectives:** Upon completion of this course the student should be able to:

1. Explain the gross morphology, structure and functions of various organs of the human body.
2. Describe the various homeostatic mechanisms and their imbalances.
3. Identify the various tissues and organs of different systems of human body.
4. Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume.
5. Appreciate coordinated working pattern of different organs of each system
6. Appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body.

### Course Content:

#### Unit I

10 hours

- **Nervous system**

Organization of nervous system, neuron, neuroglia, classification and properties of nerve fibre, electrophysiology, action potential, nerve impulse, receptors, synapse, neurotransmitters.

Central nervous system: Meninges, ventricles of brain and cerebrospinal fluid. structure and functions of brain (cerebrum, brain stem, cerebellum), spinal cord (gross structure, functions of afferent and efferent nerve tracts, reflex activity)


#### Unit II

06 hours

- **Digestive system**

Anatomy of GI Tract with special reference to anatomy and functions of stomach, ( Acid production in the stomach, regulation of acid production through parasympathetic nervous system, pepsin role in protein digestion) small intestine



  
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and large intestine, anatomy and functions of salivary glands, pancreas and liver, movements of GIT, digestion and absorption of nutrients and disorders of GIT.

- **Energetics**

Formation and role of ATP, Creatinine Phosphate and BMR.

### Unit III

- **Respiratory system**

**10 hours**

Anatomy of respiratory system with special reference to anatomy of lungs, mechanism of respiration, regulation of respiration

Lung Volumes and capacities transport of respiratory gases, artificial respiration, and resuscitation methods.

- **Urinary system**

Anatomy of urinary tract with special reference to anatomy of kidney and nephrons, functions of kidney and urinary tract, physiology of urine formation, micturition reflex and role of kidneys in acid base balance, role of RAS in kidney and disorders of kidney.

### Unit IV

**10 hours**

- **Endocrine system**

Classification of hormones, mechanism of hormone action, structure and functions of pituitary gland, thyroid gland, parathyroid gland, adrenal gland, pancreas, pineal gland, thymus and their disorders.

### Unit V

**09 hours**

- **Reproductive system**

Anatomy of male and female reproductive system, Functions of male and female reproductive system, sex hormones, physiology of menstruation, fertilization, spermatogenesis, oogenesis, pregnancy and parturition

- **Introduction to genetics**

Chromosomes, genes and DNA, protein synthesis, genetic pattern of inheritance



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## B.PHARMACY LECTUREPLAN SECTION-A

<b>COURSE NAME:</b> Human Anatomy & Physiology	<b>COURSECODE :BP201T</b>
<b>YEAR/ SEM: I B. Pharm IISem</b>	<b>REGULATION:PCI (R14)</b>

Date	Lecture No.	Topic Name	Source
29-05-2023	Lecture 1	Introduction of all the topics to be covered	Text Book
30-05-2023	Lecture 2	Unit-1 Nervous System	Text Book
31-05-2023	Lecture 3	Organization of nervous system	Text Book
02-06-2023	Lecture 4	Structure & Function of neuron	Text Book
03-06-2023	Lecture 5	Neuroglial Cells	Text Book
05-06-2023	Lecture 6	Classification and properties of nerve fibre	Text Book
06-06-2023	Lecture 7	Electrophysiology & Action potential	Text Book
07-06-2023	Lecture 8	Nerve impulse & Receptors	Text Book
09-06-2023	Lecture 9	Synapse & Neurotransmitters	Text Book
10-06-2023	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
12-06-2023	Lecture 11	Cerebrospinal fluid	Text Book
13-06-2023	Lecture 12	structure and functions of brain (cerebrum) brain stem, and cerebellum)	Text Book
14-06-2023	Lecture 13	structure and functions of brain stem	Text Book
16-06-2023	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
17-06-2023	Lecture 15	Structure of spinal cord	Text Book
19-06-2023	Lecture 16	Functions of afferent and efferent nerve tracts, reflex activity.	Text Book
20-06-2023	Lecture 17	Unit-2 Digestive System	Text Book
21-06-2023	Lecture 18	Anatomy of GI Tract	Text Book
23-06-2023	Lecture 19	Functions of stomach	Text Book
24-06-2023	Lecture 20	Acid production in the stomach	Text Book
26-06-2023	Lecture 21	Regulation of acid production through parasympathetic nervous system	Text Book
27-06-2023	Lecture 22	Pepsin role in protein digestion	Text Book

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28-06-2023	Lecture 23	Small intestine	Text Book
30-06-2023	Lecture 24	Large intestine	Text Book
01-07-2023	Lecture 25	Anatomy& Functions of salivary glands	Text Book
03-07-2023	Lecture 26	Anatomy& Functions of pancreas	Text Book
04-07-2023	Lecture 27	Anatomy& Functions of Liver	Text Book
05-07-2023	Lecture 28	Movements of GIT	Text Book
07-07-2023	Lecture 29	Digestion and Absorption of Nutrients	Text Book
08-07-2023	Lecture 30	Disorders of GIT.	Text Book
10-07-2023	Lecture 31	Formation and role of ATP, Creatinine Phosphate and BMR.	Text Book
11-07-2023	Lecture 32	Unit-3 Respiratory System	Text Book
12-07-2023	Lecture 33	Anatomy of Respiratory system with reference to lungs	Text Book
21-07-2023	Lecture 34	Mechanism of respiration	Text Book
22-07-2023	Lecture 35	Regulation of respiration	Text Book
24-07-2023	Lecture 36	Lung Volumes and capacities	Text Book
25-07-2023	Lecture 37	Transport of respiratory gases	Text Book
26-07-2023	Lecture 38	Artificial respiration	Text Book
31-07-2023	Lecture 39	Resuscitation methods	Text Book
01-08-2023	Lecture 40	Urinary system	Text Book
02-08-2023	Lecture 41	Anatomy of urinary tract with reference to anatomy of kidney	Text Book
04-08-2023	Lecture 42	Structure & Functions of Nephrons	Text Book
05-08-2023	Lecture 43	Functions of kidney and Urinary tract	Text Book
07-08-2023	Lecture 44	Physiology of Urine formation	Text Book
08-08-2023	Lecture 45	Micturition reflex & Role of kidneys in acid base balance	Text Book
09-08-2023	Lecture 46	Role of RAS in kidney	Text Book
11-08-2023	Lecture 47	Disorders of kidney.	Text Book
12-08-2023	Lecture 48	Unit-4 Endocrine system	Text Book
14-08-2023	Lecture 49	Classification of hormones	Text Book
16-08-2023	Lecture 50	Mechanism of hormone action	Text Book

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16-08-2023	Lecture 50	Mechanism of hormone action	Text Book
19-08-2023	Lecture 51	Structure and Functions of Pituitary gland	Text Book
19-08-2023	Lecture 52	Structure and Functions of Thyroid gland	Text Book
21-08-2023	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
22-08-2023	Lecture 54	Structure and Functions of Adrenal gland	Text Book
23-08-2023	Lecture 55	Structure and Functions of Pancreas	Text Book
26-08-2023	Lecture 56	Structure and Functions of Pineal gland	Text Book
26-08-2023	Lecture 57	Thymus and their disorders	Text Book
28-08-2023	Lecture 58	Unit-5 Reproductive system	Text Book
29-08-2023	Lecture 59	Anatomy of male and female reproductive system	Text Book
30-08-2023	Lecture 60	Functions of male and female reproductive system	Text Book
02-09-2023	Lecture 61	Sex hormones	Text Book
02-09-2023	Lecture 62	Physiology of Menstruation	Text Book
04-09-2023	Lecture 63	Fertilization & Spermatogenesis	Text Book
05-09-2023	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
06-09-2023	Lecture 65	Chromosomes & genes & DNA	Text Book
16-09-2023	Lecture 66	Protein Synthesis	Text Book
16-09-2023	Lecture 67	Genetic pattern of inheritance	Text Book

Signature of the Faculty



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### B.PHARMACY LECTUREPLAN SECTION-B

<b>COURSE NAME: Human Anatomy &amp; Physiology</b>	<b>COURSECODE :BP201T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION:PCI (R14)</b>

Date	Lecture No.	Topic Name	Source
29-05-2023	Lecture 1	Introduction of all the topics to be covered	Text Book
30-05-2023	Lecture 2	Unit-1 Nervous System	Text Book
31-05-2023	Lecture 3	Organization of nervous system	Text Book
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10-06-2023	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
12-06-2023	Lecture 11	cerebrospinal fluid	Text Book
13-06-2023	Lecture 12	structure and functions of brain (cerebrum) brain stem, and cerebellum)	Text Book
14-06-2023	Lecture 13	structure and functions of brain stem	Text Book
17-06-2023	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
17-06-2023	Lecture 15	Structure of spinal cord	Text Book
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24-06-2023	Lecture 19	Functions of stomach	Text Book
24-06-2023	Lecture 20	Acid production in the stomach	Text Book
26-06-2023	Lecture 21	Regulation of acid production through parasympathetic nervous system	Text Book

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27-06-2023	Lecture 22	Pepsin role in protein digestion	Text Book
28-06-2023	Lecture 23	Small intestine	Text Book
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12-08-2023	Lecture 47	Disorders of kidney.	Text Book
12-08-2023	Lecture 48	Unit-4 Endocrine system	Text Book
14-08-2023	Lecture 49	Classification of hormones	Text Book



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Cherukupally (Village), Chittivalasa (SO), Bhogapuram (Mandal), Vizianagaram (Dist) -531162.  
[www.avanthipharma.ac.in](http://www.avanthipharma.ac.in), [principal@avanthipharma.ac.in](mailto:principal@avanthipharma.ac.in)

18-08-2023	Lecture 51	Structure and Functions of Pituitary gland	Text Book
19-08-2023	Lecture 52	Structure and Functions of Thyroid gland	Text Book
21-08-2023	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
22-08-2023	Lecture 54	Structure and Functions of Adrenal gland	Text Book
23-08-2023	Lecture 55	Structure and Functions of Pancreas	Text Book
25-08-2023	Lecture 56	Structure and Functions of Pineal gland	Text Book
26-08-2023	Lecture 57	Thymus and their disorders	Text Book
28-08-2023	Lecture 58	Unit-5 Reproductive system	Text Book
29-08-2023	Lecture 59	Anatomy of male and female reproductive system	Text Book
30-08-2023	Lecture 60	Functions of male and female reproductive system	Text Book
01-09-2023	Lecture 61	Sex hormones	Text Book
02-09-2023	Lecture 62	Physiology of Menstruation	Text Book
04-09-2023	Lecture 63	Fertilization & Spermatogenesis	Text Book
05-09-2023	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
06-09-2023	Lecture 65	Chromosomes & genes & DNA	Text Book
15-09-2023	Lecture 66	Protein Synthesis	Text Book
16-09-2023	Lecture 67	Genetic pattern of inheritance	Text Book

Signature of the Faculty



Principal

Avanthi Institute of Pharmaceutical Sciences  
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## CLASS TIMETABLE AY: 2022-23

Class: III B.Pharm I Sem (PCI Regulation)

SECTION-A (2020 Admitted Batch)

w.e.f: 15/07/2022

Class Teacher- Dr. M.Sowmya				Batch A : Roll -1-25			Batch B: Roll -26-50	
DAY/TIME	9:30-10:30	10:30-11:20	11:20-12:10	12:10-1:00	1:00-01:50	1:50-2:40	2:40-3:30	3:30-4:20
MON	MC-II	COLOGY	IP-I	L U N C H	COGNOSY - II	BATCH A- IP-I LAB BATCH B- COLOGY LAB		
TUE	PJ	MC-II	COLOGY		TUTORIAL (IP-I)	BATCH A- COLOGY LAB BATCH B-IP-I LAB		
WED	IP-I	COGNOSY -II	MC-II		COLOGY	BATCH A-LIBRARY/SPORTS BATCH B-COGNOSY -II LAB		
THU	PJ	COLOGY	COGNOSY -II		IP I	BATCH A-COGNOSY-II LAB BATCH B-LIBRARY/SPORTS		
FRI	COLOGY	COGNOSY -II	PJ		MC-II	PJ	TUTORIAL (MC-II)	LIBRAR/SPORTS
SAT	COGNOSY-II	MC-II	PJ		IP-I	STI	TUTORIAL (COL)	LIBRARY /SPORTS

S.No	Name of the Faculty	Designation	Name of the Subject(Hrs)	Department
1.	Mrs.M.Sowmya	Associate Professor	Medicinal Chemistry-II (5)	B .Pharm
2.	Mr. B. Yerni Kumar	Assistant Professor	Pharmacology (5)	B.Pharm
3.	Mr. K. B. K. Raju	Associate Professor	Industrial Pharmacy-I (5)	B.Pharm
4.	Mr. A. Srinivas	Associate Professor	Pharmacognosy-II (5)	B.Pharm
5.	Mr. M. Suresh Kumar	Associate Professor	Pharmaceutical Jurisprudence (5)	B.Pharm
6.	Mr. B. Yerni Kumar	Assistant Professor	Pharmacology Lab (6)	B.Pharm
7.	Mr. K. B. K. Raju	Assistant Professor	Industrial Pharmacy-I Lab (6)	B.Pharm
8.	Mr. A. Srinivas	Associate Professor	Pharmacognosy-II Lab (6)	B.Pharm
9.	Mr. M. Suresh Kumar	Associate Professor	Medicinal Chemistry-II Tutorial (1)	B.Pharm
10.	Mr. B. Yerni Kumar	Assistant Professor	Pharmacology Tutorial (1)	B.Pharm
11.	Mr. K. B. K. Raju	Assistant Professor	Industrial Pharmacy-I Tutorial (1)	B.Pharm
12.	Dr. M. Sowmya	Associate Professor	Student Teacher Interaction (1)	B.Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B.Pharm
14.	Mr. D. Koteswara Rao	Physical Director	Sports (1)	B.Pharm

*Ananaj*  
Time Table Incharge



*Principal*  
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## CLASSTIME TABLEAY: 2022-23


CLASS: III B.Pharm I Sem (PCI Regulation)

SECTION-B (2020AdmittedBatch)

w.e.f:15/07/2022

Class Teacher-Mrs.I.Adi Lakshmi				Batch: C- Roll- 51-75			Batch:D- Roll -76-A0	
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10 -1:00	1:00- 01:50	1:50 2:40	2:40- 3:30	3:30-4:20
MON	IP-I	COGNOSY -II	MC-II	<b>L U N C H</b>	COLOGY	BATCH C -COGNOSY-II LAB BATCH D- LIBRARY/SPORTS		
TUE	COLOGY	COGNOSY -II	PJ		MC-II	BATCH C-LIBRARY/SPORTS BATCH D -COGNOSY - II LAB		
WED	MC-II	COLOGY	IP-I		TUTORIAL (COLOGY)	BATCH C-IP-I LAB BATCH D-COLOGY LAB		
THU	COGNOSY -II	MC-II	IP-I		PJ	BATCH C-COLOGY LAB BATCH D -IP-I LAB		
FRI	PJ	MC-II	COLOGY		COGNOSY- II	IP-I	TUTORIAL (IP-I)	LIBRARY/ SPORTS
SAT	PJ	IP-I	COGNOSY -II		COLOGY	PJ	STI	TUTORIAL (MC-II)

S.No.	Name of The Faculty	Designation	Name of The Subject(Hrs)	Department
1.	Mrs.M.Sowmya	Associate Professor	Medicinal Chemistry-II (5)	B. Pharm
2.	Mr. VamsiYadav	Associate Professor	Pharmacology (5)	B. Pharm
3.	Mrs.I.AdiLakshmi	Associate Professor	Industrial Pharmacy-I (5)	B. Pharm
4.	Mr.A.Nanaji	Associate Professor	Pharmacognosy-II (5)	B. Pharm
5.	Mrs.M.Geethanjali	Associate Professor	Pharmaceutical Jurisprudence (5)	B. Pharm
6.	Mr. VamsiYadav	Associate Professor	Pharmacology Lab (6)	B. Pharm
7.	Mrs.I.AdiLakshmi	Associate Professor	Industrial Pharmacy-I Lab (6)	B. Pharm
8.	Mr. A.Nanaji	Associate Professor	Pharmacognosy-II Lab(6)	B. Pharm
10.	Mrs.M.Sowmya	Associate Professor	Medicinal Chemistry- II Tutorial (1)	B. Pharm
11.	Mr. VamsiYadav	Associate Professor	Pharmacology Tutorial (1)	B. Pharm
12.	Mrs.I.AdiLakshmi	Associate Professor	Industrial Pharmacy-I Tutorial (1)	B. Pharm
13.	Mrs.I.Adi Lakshmi	Associate Professor	Student Teacher Interaction(1)	B. Pharm
14.	Mr.R.Ramana	Librarian	Library (1)	B. Pharm

  
Time Table Incharge

  
Principal

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**Table-IV: Course of study for semester IV**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP401T	Pharmaceutical Organic Chemistry III– Theory	3	1	4
BP402T	Medicinal Chemistry I – Theory	3	1	4
BP403T	Physical Pharmaceutics II – Theory	3	1	4
BP404T	Pharmacology I – Theory	3	1	4
BP405T	Pharmacognosy and Phytochemistry I– Theory	3	1	4
BP406P	Medicinal Chemistry I – Practical	4	-	2
BP407P	Physical Pharmaceutics II – Practical	4		2
BP408P	Pharmacology I – Practical	4	-	2
BP409P	Pharmacognosy and Phytochemistry I – Practical	4	-	2
<b>Total</b>		<b>31</b>	<b>5</b>	<b>28</b>

**Table-V: Course of study for semester V**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP501T	Medicinal Chemistry II – Theory	3	1	4
BP502T	Industrial PharmacyI– Theory	3	1	4
BP503T	Pharmacology II – Theory	3	1	4
BP504T	Pharmacognosy and Phytochemistry II– Theory	3	1	4
BP505T	Pharmaceutical Jurisprudence – Theory	3	1	4
BP506P	Industrial PharmacyI – Practical	4	-	2
BP507P	Pharmacology II – Practical	4	-	2
BP508P	Pharmacognosy and Phytochemistry II – Practical	4	-	2
<b>Total</b>		<b>27</b>	<b>5</b>	<b>26</b>

## BP 505 T. PHARMACEUTICAL JURISPRUDENCE (Theory)

45 Hours

**Scope:** This course is designed to impart basic knowledge on important legislations related to the profession of pharmacy in India.

**Objectives:** Upon completion of the course, the student shall be able to understand:

1. The Pharmaceutical legislations and their implications in the development and marketing of pharmaceuticals.
2. Various Indian pharmaceutical Acts and Laws
3. The regulatory authorities and agencies governing the manufacture and sale of pharmaceuticals
4. The code of ethics during the pharmaceutical practice

### Course Content:

#### UNIT-I

10 Hours

##### Drugs and Cosmetics Act, 1940 and its rules 1945:

Objectives, Definitions, Legal definitions of schedules to the Act and Rules

Import of drugs – Classes of drugs and cosmetics prohibited from import, Import under license or permit. Offences and penalties.

Manufacture of drugs – Prohibition of manufacture and sale of certain drugs,

Conditions for grant of license and conditions of license for manufacture of drugs, Manufacture of drugs for test, examination and analysis, manufacture of new drug, loan license and repacking license.

#### UNIT-II

10 Hours

##### Drugs and Cosmetics Act, 1940 and its rules 1945.

Detailed study of Schedule G, H, M, N, P,T,U, V, X, Y, Part XII B, Sch F & DMR (OA)

Sale of Drugs – Wholesale, Retail sale and Restricted license. Offences and penalties

Labeling & Packing of drugs- General labeling requirements and specimen labels for drugs and cosmetics, List of permitted colors. Offences and penalties.


Administration of the Act and Rules – Drugs Technical Advisory Board, Central drugs Laboratory, Drugs Consultative Committee, Government drug analysts, Licensing authorities, controlling authorities, Drugs Inspectors

#### UNIT-III

10 Hours

- **Pharmacy Act –1948:** Objectives, Definitions, Pharmacy Council of India; its constitution and functions, Education Regulations, State and Joint state pharmacy councils; constitution and functions, Registration of Pharmacists, Offences and



  
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## Penalties

- **Medicinal and Toilet Preparation Act –1955:** Objectives, Definitions, Licensing, Manufacture In bond and Outside bond, Export of alcoholic preparations, Manufacture of Ayurvedic, Homeopathic, Patent & Proprietary Preparations. Offences and Penalties.
- **Narcotic Drugs and Psychotropic substances Act-1985 and Rules:** Objectives, Definitions, Authorities and Officers, Constitution and Functions of narcotic & Psychotropic Consultative Committee, National Fund for Controlling the Drug Abuse, Prohibition, Control and Regulation, opium poppy cultivation and production of poppy straw, manufacture, sale and export of opium, Offences and Penalties

## UNIT-IV

08 Hours

- **Study of Salient Features of Drugs and Magic Remedies Act and its rules:** Objectives, Definitions, Prohibition of certain advertisements, Classes of Exempted advertisements, Offences and Penalties
- **Prevention of Cruelty to animals Act-1960:** Objectives, Definitions, Institutional Animal Ethics Committee, CPCSEA guidelines for Breeding and Stocking of Animals, Performance of Experiments, Transfer and acquisition of animals for experiment, Records, Power to suspend or revoke registration, Offences and Penalties
- **National Pharmaceutical Pricing Authority:** Drugs Price Control Order (DPCO)-2013. Objectives, Definitions, Sale prices of bulk drugs, Retail price of formulations, Retail price and ceiling price of scheduled formulations, National List of Essential Medicines (NLEM)

## UNIT-V


07 Hours

- **Pharmaceutical Legislations** – A brief review, Introduction, Study of drugs enquiry committee, Health survey and development committee, Hathi committee and Mudaliar committee
- **Code of Pharmaceutical ethics** Definition, Pharmacist in relation to his job, trade, medical profession and his profession, Pharmacist's oath
- **Medical Termination of Pregnancy Act**
- **Right to Information Act**
- **Introduction to Intellectual Property Rights (IPR)**

### Recommended books: (Latest Edition)

1. Forensic Pharmacy by B. Suresh



  
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2. Text book of Forensic Pharmacy by B.M. Mithal
3. Hand book of drug law-by M.L. Mehra
4. A text book of Forensic Pharmacy by N.K. Jain
5. Drugs and Cosmetics Act/Rules by Govt. of India publications.
6. Medicinal and Toilet preparations act 1955 by Govt. of India publications.
7. Narcotic drugs and psychotropic substances act by Govt. of India publications
8. Drugs and Magic Remedies act by Govt. of India publication
9. Bare Acts of the said laws published by Government. Reference books (Theory)



  
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## B.PHARMACY

### LECTUREPLAN

#### SECTION-A

<b>COURSENAME:</b> Pharmaceutical Jurisprudence	<b>COURSECODE :BP505T</b>
<b>YEAR/SEM:III B. Pharm I Sem</b>	<b>REGULATION:PCI (R14)</b>

Date	Lecture No.	Topic Name	Source
19-07-2022	Lecture 1	Introduction of all the topics to be covered	Text Book
21-07-2022	Lecture 2	Unit-1 Drug & Cosmetic Act-1940&Its Rules 1945: Objectives.	Text Book
22-07-2022	Lecture 3	D&C Act-Definitions and Legal definitions.	Text Book
23-07-2022	Lecture 4	Import of drugs-Classes of drugs & cosmetics prohibited from import.	Text Book
23-07-2022	Lecture 5	Import under License or permit.	Text Book
26-07-2022	Lecture 6	Offences and penalties.	Text Book
28-07-2022	Lecture 7	Manufacture of drugs- Prohibition of Manufacture & Sale of certain drugs.	Text Book
29-07-2022	Lecture 8	Conditions for grant of License and condition of License for manufacture of drugs.	Text Book
30-07-2022	Lecture 9	Manufacture of drugs for test, examination and analysis.	Text Book
30-07-2022	Lecture 10	Manufacture of new drug	Text Book
02-08-2022	Lecture 11	Loan license and repackaging license	Text Book
04-08-2022	Lecture 12	Unit-2 Drug & Cosmetic Act-1940& Its Rules 1945: Detailed study on schedule G, H, M, N	Text Book
05-08-2022	Lecture 13	Study of schedules P, T, U, V, X, Y	Text Book
06-08-2022	Lecture 14	Study of Part XIIB Schiff & DMR(OA)	Text Book
06-08-2022	Lecture 15	Sale of drugs -Wholesale ;Retail Drugs	Text Book
12-08-2022	Lecture 16	Restricted License & offences and penalties	Text Book
13-08-2022	Lecture 17	Labeling & Packaging of drugs- General labeling requirements	Text Book
13-08-2022	Lecture 18	Specimen labels for drugs and cosmetics	Text Book
16-08-2022	Lecture 19	List of permitted colors , offences & penalties	Text Book
20-08-2022	Lecture 20	Administration of the act and rules-Drug Technical Advisory Board	Text Book
20-08-2022	Lecture 21	Central drug laboratory; drug consultative committee; Licensing authorities	Text Book

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23-08-2022	Lecture 22	Government drug Analysts, controlling authorities ,Drug inspectors	Text Book
25-08-2022	Lecture 23	Unit3:PharmacyAct1948: Objectives, definitions.	Text Book
26-08-2022	Lecture 24	Pharmacy council of India–constitution& functions; Education regulations	Text Book
27-08-2022	Lecture 25	State and Joint state pharmacy councils-constitution and functions	Text Book
27-08-2022	Lecture 26	Registration of Pharmacists; offences and penalties	Text Book
30-08-2022	Lecture 27	Medicinal&ToiletPreparationAct-1955:Objectives, definitions Licensing	Text Book
01-09-2022	Lecture 28	Manufacture inbound and outside bond &Export of alcoholic preparations	Text Book
02-09-2022	Lecture 29	Manufacture of Ayurvedic	Text Book
03-09-2022	Lecture 30	Manufacture of Homeopathic	Text Book
03-09-2022	Lecture 31	Patent &proprietary preparations &offences and penalties	Text Book
06-09-2022	Lecture 32	Narcotic drugs &Psychotropic substances act -1985 and rules: Introduction	Text Book
08-09-2022	Lecture 33	Objectives ;definitions	Text Book
09-09-2022	Lecture 34	authorities; officers	Text Book
10-09-2022	Lecture 35	Constitution of narcotic &psychotropic consultative committee	Text Book
10-09-2022	Lecture 36	Functions of narcotic& psychotropic consultative committee	Text Book
13-09-2022	Lecture 37	National fund for controlling the drug abuse	Text Book
15-09-2022	Lecture 38	prohibition, control&regulation	Text Book
16-09-2022	Lecture 39	Opium poppy cultivation	Text Book
17-09-2022	Lecture 40	Production of poppy straw	Text Book
17-09-2022	Lecture 41	Manufacture of opium	Text Book
20-09-2022	Lecture 42	Sale and export of opium; offences and penalties	Text Book
22-09-2022	Lecture 43	Unit:4 – Drug &Magic remedies act-Introduction	Text Book
23-09-2022	Lecture 44	Drug &Magic remedies act-Objectives; definitions	Text Book
24-09-2022	Lecture 45	Prohibition of certain advertisements	Text Book
24-09-2022	Lecture 46	Classes of exempted advertisements; offences &penalties	Text Book
11-10-2022	Lecture 47	Prevention of cruelty to animalsact-1960:Objectives; definitions	Text Book



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13-10-2022	Lecture 48	IAEC	Text Book
14-10-2022	Lecture 49	CPCSEA	Text Book
15-10-2022	Lecture 50	Guidelines for breeding & stocking of animals	Text Book
15-10-2022	Lecture 51	Performance of experiments	Text Book
18-10-2022	Lecture 52	Transfer and acquisition of animals for experiment	Text Book
20-10-2022	Lecture 53	Record for experiments on animals	Text Book
21-10-2022	Lecture 54	Power to suspend or revoke registrations; offences penalties	Text Book
22-10-2022	Lecture 55	National Pharmaceutical Pricing authority: DPCO 2013	Text Book
22-10-2022	Lecture 56	DPCO 2013-Objectives	Text Book
25-10-2022	Lecture 57	DPCO 2013-definitions	Text Book
27-10-2022	Lecture 58	Sale prices of bulk drugs	Text Book
28-10-2022	Lecture 59	Retail price of formulations;	Text Book
29-10-2022	Lecture 60	Retail price of scheduled formulations	Text Book
29-10-2022	Lecture 61	Ceiling price of scheduled formulations	Text Book

*Suresh Kumar*

Signature of the Faculty



*[Signature]*  
Principal

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### B.PHARMACY LECTUREPLAN SECTION-B

<b>COURSENAME:</b> Pharmaceutical Jurisprudence	<b>COURSECODE :BP505T</b>
<b>YEAR/ SEM: III B. Pharm-I-Sem</b>	<b>REGULATION:PCI (R14)</b>

Date	Lecture No.	Topic Name	Source
19-07-2022	Lecture 1	<b>Introduction of all the topics to be covered</b>	Text Book
21-07-2022	Lecture 2	<b>Unit-1</b> Drug & Cosmetic Act-1940&Its Rules 1945: Objectives.	Text Book
22-07-2022	Lecture 3	D&C Act-Definitions and Legal definitions.	Text Book
22-07-2022	Lecture 4	Import of drugs-Classes of drugs & cosmetics Prohibited from import.	Text Book
23-07-2022	Lecture 5	Import under License or permit.	Text Book
26-07-2022	Lecture 6	Offences and penalties.	Text Book
28-07-2022	Lecture 7	Manufacture of drugs-Prohibition of Manufacture& Sale of certain drugs.	Text Book
29-07-2022	Lecture 8	Conditions for grant of License and conditions of License for manufacture of drugs.	Text Book
29-07-2022	Lecture 9	Manufacture of drugs for test ,examination and Analysis.	Text Book
30-07-2022	Lecture 10	Manufacture of new drug	Text Book
02-08-2022	Lecture 11	Loan licence and repackaging licence	Text Book
04-08-2022	Lecture 12	<b>Unit-2</b> Drug&CosmeticAct-1940&Its Rules1945:Detailed study on schedule G,H,M,N	Text Book
05-08-2022	Lecture 13	Study of schedules P,T,U,V,X,Y	Text Book
05-08-2022	Lecture 14	Study of Part XIIB SchF&DMR(OA)	Text Book
06-08-2022	Lecture 15	Sale of drugs –Wholesale; Retail Drugs	Text Book
12-08-2022	Lecture 16	Restricted License& offences and penalties	Text Book
12-08-2022	Lecture 17	Labeling &Packaging of drugs-General labeling Requirements	Text Book
13-08-2022	Lecture 18	Specimen labels for drugs and cosmetics	Text Book
16-08-2022	Lecture 19	List of permitted colors, offences &penalties	Text Book
20-08-2022	Lecture 20	Administration of the act and rules-Drug Technical Advisory Board	Text Book
23-08-2022	Lecture 21	Central drug laboratory ,drug consultative	Text Book

Text Book  
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		Committee ;Licensing authorities	
25-08-2022	Lecture 22	Government drug Analysts, controlling authorities, Drug inspectors	Text Book
26-08-2022	Lecture 23	<b>Unit 3: Pharmacy Act1948:</b> Objectives, definitions.	Text Book
27-08-2022	Lecture 24	Pharmacy council of India– constitution& Functions ;Education regulations	Text Book
30-08-2022	Lecture 25	State and Joint state pharmacy councils- Constitution and functions	Text Book
01-09-2022	Lecture 26	Registration of Pharmacists ;offences and penalties	Text Book
02-09-2022	Lecture 27	Medicinal&ToiletPreparationAct-1955: Objectives ,definitions Licensing	Text Book
02-09-2022	Lecture 28	Manufacture in bond and outside bond &Export Of alcoholic preparations	Text Book
03-09-2022	Lecture 29	Manufacture of Ayurvedic	Text Book
06-09-2022	Lecture 30	Manufacture of Homeopathic	Text Book
09-09-2022	Lecture 31	Patent &proprietary preparations &offences and penalties	Text Book
09-09-2022	Lecture32	Narcotic drugs &Psychotropic substances act-1985andrules: Introduction	Text Book
10-09-2022	Lecture 33	Objectives; definitions	Text Book
13-09-2022	Lecture 34	Authorities ; officers	Text Book
15-09-2022	Lecture 35	Constitution of narcotic &psychotropic Consultative committee	Text Book
16-09-2022	Lecture 36	Functions of narcotic &psychotropic Consultative committee	Text Book
16-09-2022	Lecture 37	National fund for controlling the drug abuse	Text Book
17-09-2022	Lecture 38	prohibition, control &regulation	Text Book
20-09-2022	Lecture 39	Opium poppy cultivation	Text Book
22-09-2022	Lecture 40	Production of poppy straw	Text Book
23-09-2022	Lecture 41	Manufacture of opium	Text Book
23-09-2022	Lecture 42	Sale and export of opium ;offences and penalties	Text Book
24-09-2022	Lecture 43	<b>Unit:4– Drug&amp; Magic remedies act-Introduction</b>	Text Book
11-10-2022	Lecture 44	Drug &Magic remedies act-Objectives; Definitions	Text Book
13-10-2022	Lecture 45	Prohibition of certain advertisements	Text Book
14-10-2022	Lecture 46	Classes of exempted advertisements; offences& Penalties	Text Book

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14-10-2022	Lecture 47	Prevention of cruelty to animal act-1960: Objectives; definitions	Text Book
15-10-2022	Lecture 48	IAEC	Text Book
18-10-2022	Lecture 49	CPCSEA	Text Book
20-10-2022	Lecture 50	Guidelines for breeding & stocking of animals	Text Book
21-10-2022	Lecture 51	Performance of experiments	Text Book
21-10-2022	Lecture 52	Transfer and acquisition of animals for Experiment	Text Book
22-10-2022	Lecture 53	Record for experiments on animals	Text Book
25-10-2022	Lecture 54	Power to suspend or revoke registrations; Offences & penalties	Text Book
27-10-2022	Lecture 55	National Pharmaceutical Pricing authority: DPCO 2013	Text Book
28-10-2022	Lecture 56	DPCO 2013-Objectives	Text Book
28-10-2022	Lecture 57	DPCO 2013-definitions	Text Book
29-10-2022	Lecture 58	Sale prices of bulk drugs	Text Book
01-11-2022	Lecture 59	Retail price of formulations;	Text Book
03-11-2022	Lecture 60	Retail price of scheduled formulations	Text Book
04-11-2022	Lecture 61	Ceiling price of scheduled formulations	Text Book
04-11-2022	Lecture 62	NLEM	Text Book
05-11-2022	Lecture 63	Unit-5: Pharmaceutical Legislation-Introduction	Text Book
10-11-2022	Lecture 64	Brief review on Legislation	Text Book
11-11-2022	Lecture 65	Introduction of DEC	Text Book
11-11-2022	Lecture 66	Study of DEC	Text Book
12-11-2022	Lecture 67	Introduction of Health survey & Development Committee	Text Book
15-11-2022	Lecture 68	Study of Health survey & Development Committee	Text Book
17-11-2022	Lecture 69	Hathi committee	Text Book
18-11-2022	Lecture 70	Mudaliar committee	Text Book
18-11-2022	Lecture 71	Code of Pharmaceutical ethics Definition	Text Book
19-11-2022	Lecture 72	Pharmacist in relation to his job; trade	Text Book
22-11-2022	Lecture 73	Pharmacist in relation to his job; medical profession; Pharmacist oath	Text Book



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25-11-2022	Lecture 74	Introduction to MTP act& Medical termination of pregnancy act	Text Book
26-11-2022	Lecture 75	Right to information act	Text Book
26-11-2022	Lecture 76	Introduction to IPR& Continuation of Intellectual Property Rights	Text Book

*Suresh Kumar*

Signature of the Faculty

*[Signature]*

Principal

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## CLASS TIME TABLE AY:2022-23

CLASS: IV B.PHARM I SEM (PCI REGULATION)

SECTION-A(2019AdmittedBatch)

w.e.f:04/07/2022

ClassTeacher:Mrs.B.Aruna				Batch A: Roll 01-25			Batch B: Roll 26-50	
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10 1:00	1:00- 01:50	1:50- 2:40	2:40- 3:30	3:30- 4:20
MON	IMA	IP-II	GPAT	<b>L U N C H</b>	NDDS	Batch-A- IMALAB Batch-B-PROJECT		
TUE	NDDS	IMA	IP-II		GPAT	Batch-A-PROJECT Batch-B-IMALAB		
WED	IP-II	PP	IMA		GPAT	STI	PROJECT	LIBRARY/ SPORTS
THU	NDDS	IP-II	PP		TUTORIAL (IMA)	GPAT	PROJECT	
FRI	PP	IMA	NDDS		PP	GPAT	PROJECT	
SAT	IP-II	NDDS	PP		IMA	GPAT	PROJECT	

S. No	Name of The Faculty	Designation	Name of The Subject(Hrs)	Program
1.	Mrs.B.Aruna	Assistant Professor	Instrumental Methods of Analysis(IMA)(5)	B. Pharm
2.	Mr.M.RajeswaraRao	Assistant Professor	Industrial Pharmacy-II (IP-II) (5)	B. Pharm
3.	Mr. M. Vasu	Associate Professor	Pharmacy Practice(PP)(5)	B. Pharm
4.	Mr. V.H.S.Reddy	Associate Professor	Novel Drug Delivery Systems(NDDS)(5)	B. Pharm
5.		Associate Professor	GPAT(6)	B. Pharm
6.	Mrs.B.Aruna	Assistant Professor	Instrumental Methods of Analysis(IMA)Lab(6)	B. Pharm
7.	Mrs.B.Aruna	Assistant Professor	Instrumental Methods of Analysis(IMA)Tutorial(1)	B. Pharm
8.	Mrs.B.Aruna	Assistant Professor	Student Teacher Interaction (STI)(1)	B. Pharm
9.	Mr. R. Ramana	Librarian	Library(1)	B. Pharm
10	Mr. D.Koteswara Rao	Physical Director	Sports(1)	B. Pharm

  
Time Table Incharge

  
Principal

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## CLASS TIME TABLE AY:2022-23

CLASS: IV B.PHARM I SEM (PCI REGULATION)

SECTION – B (2019 Admitted Batch)

w.e.f: 04/07/2022

Class Teacher: Mrs.Y.Pavani				Batch C: Roll 51-75		Batch D: Roll 76-A <sub>3</sub>			
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10 1:00	1:00 – 01:50	1:50 – 2:40	2:40 – 3:30	3:30 – 4:20	
MON	IP-II	IMA	PP	L U N C H	GPAT	PROJECT			
TUE	PP	IMA	IMA		NDDS	PROJECT	GPAT		
WED	IMA	NDDS	GPAT		IP-II	Batch-C- PROJECT Batch-D -IMA LAB			
THU	IP-II	IMA	GPAT		PP	Batch-C- IMA LAB Batch-D – PROJECT			
FRI	NDDS	PP	IP-II		NDDS	GPAT	PROJECT	STI	
SAT	PP	IP-II	NDDS		IMA	GPAT	PROJECT	LIBRARY/ SPORTS	

S. No	Name of The Faculty	Designation	Name of The Subject (Hrs)	Program
1.	Mrs. Y.Pavani	Assistant Professor	Instrumental Methods of Analysis(IMA) (5)	B. Pharm
2.	Mr. S. Rama Krishna	Associate Professor	Industrial Pharmacy – II(IP-II) (5)	B. Pharm
3.	Mrs. M.Divya	Assistant Professor	Pharmacy Practice (PP) (5)	B. Pharm
4.	Mrs. M.V.Naga Deepika	Associate Professor	Novel Drug Delivery Systems(NDDS) (5)	B. Pharm
5.		Associate Professor	GPAT (6)	B. Pharm
6.	Mrs. Y.Pavani	Assistant Professor	Instrumental Methods of Analysis (IMA) Lab (6)	B. Pharm
7.	Mrs. Y.Pavani	Assistant Professor	Student Teacher Interaction (STI)(1)	B. Pharm
8.	Mr. R.Ramana	Librarian	Library (1)	B. Pharm
9.	Mr. D.Koteswara Rao	Physical Director	Sports (1)	B. Pharm

*Anaraji*  
Time Table Incharge



*Anaraji*  
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**Table-VI: Course of study for semester VI**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP601T	Medicinal Chemistry III – Theory	3	1	4
BP602T	Pharmacology III – Theory	3	1	4
BP603T	Herbal Drug Technology – Theory	3	1	4
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	3	1	4
BP605T	Pharmaceutical Biotechnology – Theory	3	1	4
BP606T	Quality Assurance –Theory	3	1	4
BP607P	Medicinal chemistry III – Practical	4	-	2
BP608P	Pharmacology III – Practical	4	-	2
BP609P	Herbal Drug Technology – Practical	4	-	2
<b>Total</b>		<b>30</b>	<b>6</b>	<b>30</b>

**Table-VII: Course of study for semester VII**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP701T	Instrumental Methods of Analysis – Theory	3	1	4
BP702T	Industrial PharmacyII – Theory	3	1	4
BP703T	Pharmacy Practice – Theory	3	1	4
BP704T	Novel Drug Delivery System – Theory	3	1	4
BP705P	Instrumental Methods of Analysis – Practical	4	-	2
BP706PS	Practice School*	12	-	6
<b>Total</b>		<b>28</b>	<b>5</b>	<b>24</b>

\* Non University Examination (NUE)



## BP 703T. PHARMACY PRACTICE (Theory)

45 Hours

**Scope:** In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug information, and therapeutic drug monitoring for improved patient care. In community pharmacy, students will be learning various skills such as dispensing of drugs, responding to minor ailments by providing suitable safe medication, patient counselling for improved patient care in the community set up.

**Objectives:** Upon completion of the course, the student shall be able to

1. know various drug distribution methods in a hospital
2. appreciate the pharmacy stores management and inventory control
3. monitor drug therapy of patient through medication chart review and clinical review
4. obtain medication history interview and counsel the patients
5. identify drug related problems
6. detect and assess adverse drug reactions
7. interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states
8. know pharmaceutical care services
9. do patient counseling in community pharmacy;
10. appreciate the concept of Rational drug therapy.

### Unit I:

10 Hours

#### a) Hospital and it's organization

Definition, Classification of hospital- Primary, Secondary and Tertiary hospitals, Classification based on clinical and non- clinical basis, Organization Structure of a Hospital, and Medical staffs involved in the hospital and their functions.

#### b) Hospital pharmacy and its organization

Definition, functions of hospital pharmacy, Organization structure, Location, Layout and staff requirements, and Responsibilities and functions of hospital pharmacists.

#### c) Adverse drug reaction

Classifications - Excessive pharmacological effects, secondary pharmacological effects, idiosyncrasy, allergic drug reactions, genetically determined toxicity, toxicity following sudden withdrawal of drugs, Drug interaction- beneficial interactions, adverse interactions, and pharmacokinetic drug interactions, Methods for detecting



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drug interactions, spontaneous case reports and record linkage studies, and Adverse drug reaction reporting and management.

**d) Community Pharmacy**

Organization and structure of retail and wholesale drug store, types and design, Legal requirements for establishment and maintenance of a drug store, Dispensing of proprietary products, maintenance of records of retail and wholesale drug store.

**Unit II:**

**10 Hours**

**a) Drug distribution system in a hospital**

Dispensing of drugs to inpatients, types of drug distribution systems, charging policy and labelling, Dispensing of drugs to ambulatory patients, and Dispensing of controlled drugs.

**b) Hospital formulary**

Definition, contents of hospital formulary, Differentiation of hospital formulary and Drug list, preparation and revision, and addition and deletion of drug from hospital formulary.

**c) Therapeutic drug monitoring**

Need for Therapeutic Drug Monitoring, Factors to be considered during the Therapeutic Drug Monitoring, and Indian scenario for Therapeutic Drug Monitoring.

**d) Medication adherence**

Causes of medication non-adherence, pharmacist role in the medication adherence, and monitoring of patient medication adherence.

**e) Patient medication history interview**

Need for the patient medication history interview, medication interview forms.

**f) Community pharmacy management**

Financial, materials, staff, and infrastructure requirements.

**Unit III:**

**10 Hours**

**a) Pharmacy and therapeutic committee**

Organization, functions, Policies of the pharmacy and therapeutic committee in including drugs into formulary, inpatient and outpatient prescription, automatic stop order, and emergency drug list preparation.

**b)  
information services**

**Drug**



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Drug and Poison information centre, Sources of drug information, Computerised services, and storage and retrieval of information.

c) **Patient counseling**

Definition of patient counseling; steps involved in patient counseling, and Special cases that require the pharmacist

d) **Education and training program in the hospital**

Role of pharmacist in the education and training program, Internal and external training program, Services to the nursing homes/clinics, Code of ethics for community pharmacy, and Role of pharmacist in the interdepartmental communication and community health education.

e) **Prescribed medication order and communication skills**

Prescribed medication order- interpretation and legal requirements, and Communication skills- communication with prescribers and patients.

**Unit IV 8 Hours**

a) **Budget preparation and implementation**  
Budget preparation and implementation

b) **Clinical Pharmacy**

Introduction to Clinical Pharmacy, Concept of clinical pharmacy, functions and responsibilities of clinical pharmacist, Drug therapy monitoring - medication chart review, clinical review, pharmacist intervention, Ward round participation, Medication history and Pharmaceutical care.

Dosing pattern and drug therapy based on Pharmacokinetic & disease pattern.

c) **Over the counter (OTC) sales**

Introduction and sale of over the counter, and Rational use of common over the counter medications.


**Unit V 7 Hours**

a) **Drug store management and inventory control**

Organisation of drug store, types of materials stocked and storage conditions, Purchase and inventory control: principles, purchase procedure, purchase order, procurement and stocking, Economic order quantity, Reorder quantity level, and Methods used for the analysis of the drug expenditure

b) **Investigational use of drugs**



  
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Description, principles involved, classification, control, identification, role of hospital pharmacist, advisory committee.

**c) Interpretation of Clinical Laboratory Tests**

Blood chemistry, hematology, and urinalysis


**Recommended Books (Latest Edition):**

1. Merchant S.H. and Dr. J.S.Quadry. *A textbook of hospital pharmacy*, 4th ed. Ahmadabad: B.S. Shah Prakakshan; 2001.
2. Parthasarathi G, Karin Nyfort-Hansen, Milap C Nahata. *A textbook of Clinical Pharmacy Practice- essential concepts and skills*, 1<sup>st</sup> ed. Chennai: Orient Longman Private Limited; 2004.
3. William E. Hassan. *Hospital pharmacy*, 5th ed. Philadelphia: Lea & Febiger; 1986.
4. Tipnis Bajaj. *Hospital Pharmacy*, 1<sup>st</sup> ed. Maharashtra: Career Publications; 2008.
5. Scott LT. *Basic skills in interpreting laboratory data*, 4th ed. American Society of Health System Pharmacists Inc; 2009.
6. Parmar N.S. *Health Education and Community Pharmacy*, 18th ed. India: CBS Publishers & Distributers; 2008.

**Journals:**

1. Therapeutic drug monitoring. ISSN: 0163-4356
2. Journal of pharmacy practice. ISSN : 0974-8326
3. American journal of health system pharmacy. ISSN: 1535-2900 (online)
4. Pharmacy times (Monthly magazine)



  
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### B.PHARMACY LECTUREPLAN SECTION-A

<b>COURSE NAME: Pharmacy Practice</b>	<b>COURSECODE :BP703T</b>
<b>YEAR/ SEM: IV B. Pharm I Sem</b>	<b>REGULATION:PCI (R14)</b>

Date	Lecture No.	Topic Name	Source
06-07-2022	Lecture 1	Introduction of all the topics to be covered	Text Book
07-07-2022	Lecture 2	<b>Unit-1</b> Hospital & its organization	Text Book
08-07-2022	Lecture 3	Definition, Classification of hospital- Primary, Secondary and Tertiary hospitals	Text Book
08-07-2022	Lecture 4	Classification based on clinical and non- clinical basis	Text Book
09-07-2022	Lecture 5	Organization Structure of a Hospital	Text Book
13-07-2022	Lecture 6	Medical staffs involved in the hospital and their functions.	Text Book
14-07-2022	Lecture 7	a)Hospital pharmacy and its organization Definition, functions of hospital pharmacy	Text Book
15-07-2022	Lecture 8	Organization structure	Text Book
15-07-2022	Lecture 9	Location, Layout and staff requirements	Text Book
16-07-2022	Lecture 10	Responsibilities and functions of hospital pharmacists.	Text Book
20-07-2022	Lecture 11	b)Adverse drug reaction Classifications - Excessive pharmacological effects	Text Book
21-07-2022	Lecture 12	secondary pharmacological effects, idiosyncrasy	Text Book
22-07-2022	Lecture 13	allergic drug reactions, genetically determined toxicity	Text Book
22-07-2022	Lecture 14	toxicity following sudden withdrawal of drugs	Text Book
23-07-2022	Lecture 15	interaction- beneficial interactions ,adverse interactions	Text Book
27-07-2022	Lecture 16	Pharmacokinetic drug intereactions, Methods for detecting drug reactions	Text Book
28-07-2022	Lecture 17	Spontaneous case reports & Record linkage studies	Text Book
29-07-2022	Lecture 18	Adverse drug reaction reporting & management	Text Book
29-07-2022	Lecture 19	c) Community Pharmacy Organization and structure of retail and wholesale drug store	Text Book
30-07-2022	Lecture 20	Types and design	Text Book
03-08-2022	Lecture 21	Legal requirements for establishment and maintenance of a drug store	Text Book



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04-08-2022	Lecture 22	Dispensing of proprietary products	Text Book
05-08-2022	Lecture 23	Maintenance of records of retail and wholesale drug store.	Text Book
05-08-2022	Lecture 24	<b>Unit -2</b> a) Drug distribution system in a hospital Dispensing of drugs to inpatients	Text Book
06-08-2022	Lecture 25	Types of drug distribution systems	Text Book
10-08-2022	Lecture 26	charging policy and labeling	Text Book
11-08-2022	Lecture 27	Dispensing of drugs to ambulatory patients	Text Book
12-08-2022	Lecture 28	Dispensing of controlled drugs.	Text Book
12-08-2022	Lecture 29	b) Hospital formulary Definition, contents of hospital formulary	Text Book
13-08-2022	Lecture 30	Differentiation of hospital formulary and Drug list	Text Book
17-08-2022	Lecture 31	Preparation and revision	Text Book
18-08-2022	Lecture 32	Addition and deletion of drug from hospital formulary.	Text Book
19-08-2022	Lecture 33	c) Therapeutic drug monitoring Need for Therapeutic Drug Monitoring	Text Book
19-08-2022	Lecture 34	Factors to be considered for the TDM	Text Book
20-08-2022	Lecture 35	Indian scenario for Therapeutic Drug Monitoring.	Text Book
24-08-2022	Lecture 36	d) Medication adherence Causes of medication non-adherence	Text Book
25-08-2022	Lecture 37	Pharmacist role in the medication adherence	Text Book
26-08-2022	Lecture 38	Monitoring of patient medication adherence.	Text Book
26-08-2022	Lecture 39	e) Patient medication history interview Need for the patient medication history interview	Text Book
27-08-2022	Lecture 40	Medication interview forms	Text Book
31-08-2022	Lecture 41	f) Community pharmacy management Financial, materials	Text Book
01-09-2022	Lecture 42	staff, and infrastructure requirements	Text Book
02-09-2022	Lecture 43	<b>Unit-3</b> Pharmacy and therapeutic Committee Organization, functions	Text Book
03-09-2022	Lecture 44	Policies of the pharmacy and therapeutic committee in including drugs into formulary	Text Book
10-09-2022	Lecture 45	Inpatient and outpatient prescription	Text Book
14-09-2022	Lecture 46	Automatic stop order and emergency drug list preparation.	Text Book



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15-09-2022	Lecture 47	c) Patient counseling Definition of patient counseling	Text Book
16-09-2022	Lecture 48	Steps involved inpatient counseling	Text Book
16-09-2022	Lecture 49	Special cases that require the pharmacist	Text Book
17-09-2022	Lecture 50	d)Education and training program in the hospital	Text Book
21-09-2022	Lecture 51	Role of pharmacist in the education and training program	Text Book
22-09-2022	Lecture 52	Internal and external training program	Text Book
23-09-2022	Lecture 53	Services to the nursing homes/clinics	Text Book
23-09-2022	Lecture 54	Code of ethics for community pharmacy	Text Book
24-09-2022	Lecture 55	Role of pharmacist in the interdepartmental communication.	Text Book
28-09-2022	Lecture 56	Role of pharmacist in the community health education.	Text Book
29-09-2022	Lecture 57	d)Prescribed medication order and communication skills Prescribed medication order-	Text Book
30-09-2022	Lecture 58	Interpretation and legal requirements	Text Book
30-09-2022	Lecture 59	Communication skills- communication with prescribers and patients	Text Book
01-10-2022	Lecture 60	Unit-4 a) Budget preparation and implementation Budget preparation and implementation	Text Book
05-10-2022	Lecture 61	b) Clinical Pharmacy Introduction to Clinical Pharmacy	Text Book
06-10-2022	Lecture 62	Concept of clinical pharmacy	Text Book
07-10-2022	Lecture 63	Functions and responsibilities of clinical pharmacist	Text Book
07-10-2022	Lecture 64	Drug therapy monitoring - medication chart review, clinical review,	Text Book
08-10-2022	Lecture 65	Pharmacist intervention, Ward round participation,	Text Book
12-10-2022	Lecture 66	Genetic pattern of inheritance	Text Book
13-10-2022	Lecture 67	Medication history and Pharmaceutical care.	Text Book
14-10-2022	Lecture 68	Dosing pattern and drug therapy based on Pharmacokinetic & disease pattern.	Text Book
14-10-2022	Lecture 69	c) Over the counter (OTC) sales Introduction and sale of over the counter,	Text Book
15-10-2022	Lecture 70	Rational use of common over the counter medications.	Text Book
19-10-2022	Lecture 71	Unit-5 a) Drug store management and inventory control Organization of drug store, types of materials stocked and storage conditions	Text Book



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20-10-2022	Lecture 72	Purchase and inventory control: principles	Text Book
21-10-2022	Lecture 73	purchase order, procurement and stocking	Text Book
21-10-2022	Lecture 74	Economic order quantity, Reorder quantity level	Text Book
22-10-2022	Lecture 75	Methods used for the analysis of the drug expenditure	Text Book
26-10-2022	Lecture 76	a) Investigational use of drugs Description, principles involved	Text Book
27-10-2022	Lecture 77	classification, control, identification,	Text Book
28-10-2022	Lecture 78	Role of hospital pharmacist, advisory committee.	Text Book
28-10-2022	Lecture 79	c) Interpretation of Clinical Laboratory Tests Blood chemistry, hematology, and urinalysis	Text Book

  
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### B.PHARMACY LECTUREPLAN SECTION-B

<b>COURSE NAME: Pharmacy Practice</b>	<b>COURSECODE :BP703T</b>
<b>YEAR/ SEM: IV B. Pharm I Sem</b>	<b>REGULATION:PCI (R14)</b>

Date	Lecture No.	Topic Name	Source
05-07-2022	Lecture 1	Introduction of all the topics to be covered	Text Book
06-07-2022	Lecture 2	Unit-1 <b>Hospital&amp; its organization</b>	Text Book
08-07-2022	Lecture 3	Definition, Classification of hospital- Primary, Secondary and Tertiary hospitals	Text Book
09-07-2022	Lecture 4	Classification based on clinical and non- clinical basis	Text Book
11-07-2022	Lecture 5	Organization Structure of a Hospital	Text Book
12-07-2022	Lecture 6	Medical staffs involved in the hospital and their functions.	Text Book
14-07-2022	Lecture 7	<b>a) Hospital pharmacy and its organization</b> Definition, functions of hospital pharmacy	Text Book
15-07-2022	Lecture 8	Organization structure	Text Book
16-07-2022	Lecture 9	Location, Layout and staff requirements	Text Book
18-07-2022	Lecture 10	Responsibilities and functions of hospital pharmacists.	Text Book
19-07-2022	Lecture 11	<b>b) Adverse drug reaction</b> Classifications - Excessive pharmacological effects	Text Book
21-07-2022	Lecture 12	Secondary pharmacological effects, idiosyncrasy	Text Book
22-07-2022	Lecture 13	Allergic drug reactions, genetically determined toxicity	Text Book
23-07-2022	Lecture 14	Toxicity following sudden withdrawal of drugs	Text Book
25-07-2022	Lecture 15	Interaction- beneficial interactions ,adverse interactions	Text Book
26-07-2022	Lecture 16	Pharmacokinetic drug interactions, Methods for detecting drug reactions	Text Book
28-07-2022	Lecture 17	Spontaneous case reports & Record linkage studies	Text Book
29-07-2022	Lecture 18	Adverse drug reaction reporting& management	Text Book
30-07-2022	Lecture 19	<b>c) Community Pharmacy</b> Organization and structure of retail and wholesale drug store	Text Book
01-08-2022	Lecture 20	Types and design	Text Book



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02-08-2022	Lecture 21	Legal requirements for establishment and maintenance of a drug store	Text Book
04-08-2022	Lecture 22	Dispensing of proprietary products	Text Book
05-08-2022	Lecture 23	Maintenance of records of retail and wholesale drug store.	Text Book
06-08-2022	Lecture 24	<b>Unit -2 a) Drug distribution system in a hospital</b> Dispensing of drugs to inpatients	Text Book
08-08-2022	Lecture 25	Types of drug distribution systems	Text Book
09-08-2022	Lecture 26	Charging policy and labeling	Text Book
11-08-2022	Lecture 27	Dispensing of drugs to ambulatory patients	Text Book
12-08-2022	Lecture 28	Dispensing of controlled drugs.	Text Book
13-08-2022	Lecture 29	<b>b) Hospital formulary</b> Definition, contents of hospital formulary	Text Book
15-08-2022	Lecture 30	Differentiation of hospital formulary and Drug list	Text Book
16-08-2022	Lecture 31	Preparation and revision	Text Book
18-08-2022	Lecture 32	Addition and deletion of drug from hospital formulary.	Text Book
19-08-2022	Lecture 33	<b>c) Therapeutic drug monitoring</b> Need for Therapeutic Drug Monitoring	Text Book
20-08-2022	Lecture 34	Factors to be considered for the TDM	Text Book
22-08-2022	Lecture 35	Indian scenario for Therapeutic Drug Monitoring.	Text Book
23-08-2022	Lecture 36	<b>d) Medication adherence</b> Causes of medication non-adherence	Text Book
25-08-2022	Lecture 37	Pharmacist role in the medication adherence	Text Book
26-08-2022	Lecture 38	Monitoring of patient medication adherence.	Text Book
27-08-2022	Lecture 39	<b>e) Patient medication history interview</b> Need for the patient medication history interview	Text Book
29-08-2022	Lecture 40	Medication interview forms	Text Book
30-08-2022	Lecture 41	<b>f) Community pharmacy management</b> Financial, materials	Text Book
01-09-2022	Lecture 42	Staff, and infrastructure requirements	Text Book
02-09-2022	Lecture 43	<b>Unit-3 Pharmacy and therapeutic committee</b> Organization, functions	Text Book
03-09-2022	Lecture 44	Policies of the pharmacy and therapeutic committee in including drugs into formulary	Text Book
12-09-2022	Lecture 45	Inpatient and outpatient prescription	Text Book
13-09-2022	Lecture 46	Automatic stop order and emergency drug list preparation.	Text Book

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15-09-2022	Lecture 47	<b>c) Patient counseling</b> Definition of patient counseling	Text Book
16-09-2022	Lecture 48	Steps involved inpatient counseling	Text Book
17-09-2022	Lecture 49	Special cases that require the pharmacist	Text Book
19-09-2022	Lecture 50	<b>d) Education and training program in the hospital</b>	Text Book
20-09-2022	Lecture 51	Role of pharmacist in the education and training program	Text Book
22-09-2022	Lecture 52	Internal and external training program	Text Book
23-09-2022	Lecture 53	Services to the nursing homes/clinics	Text Book
24-09-2022	Lecture 54	Code of ethics for community pharmacy	Text Book
26-09-2022	Lecture 55	Role of pharmacist in the interdepartmental communication.	Text Book
27-09-2022	Lecture 56	Role of pharmacist in the community health education.	Text Book
29-09-2022	Lecture 57	<b>d) Prescribed medication order and communication skills</b> Prescribed medication order.	Text Book
30-09-2022	Lecture 58	Interpretation and legal requirements	Text Book
01-10-2022	Lecture 59	Communication skills- communication with prescribers and patients	Text Book
03-10-2022	Lecture 60	<b>Unit-4 a) Budget preparation and implementation</b> Budget preparation and implementation	Text Book
04-10-2022	Lecture 61	<b>b) Clinical Pharmacy</b> Introduction to Clinical Pharmacy	Text Book
06-10-2022	Lecture 62	Concept of clinical pharmacy, functions and responsibilities of clinical pharmacist	Text Book
07-10-2022	Lecture 63	Drug therapy monitoring - medication chart review, clinical review, pharmacist intervention	Text Book
08-10-2022	Lecture 64	Ward round participation, Genetic pattern of inheritance	Text Book
10-10-2022	Lecture 65	Medication history and pharmaceutical care.	Text Book
11-10-2022	Lecture 66	Dosing pattern and drug therapy based on Pharmacokinetic & Disease pattern.	Text Book
13-10-2022	Lecture 67	<b>c) Over the counter (OTC) sales</b> Introduction and sale of over the counter, Rational use of common over the counter medications.	Text Book
14-10-2022	Lecture 68	<b>Unit-5a) Drug store management and inventory control</b> Organization of drugstore, types of materials stocked and storage condition	Text Book
15-10-2022	Lecture 69	Purchase and inventory control: principles, purchase order, procurement and stocking	Text Book
17-10-2022	Lecture 70	Economic order quantity, Reorder quantity level	Text Book

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18-10-2022	Lecture 71	Methods used for the analysis of the drug expenditure	Text Book
20-10-2022	Lecture 72	<b>b) Investigational use of drugs</b> Description, principles involved	Text Book
24-10-2022	Lecture 73	Classification, control, identification,	Text Book
25-10-2022	Lecture 74	Role of hospital pharmacist, advisory committee.	Text Book
27-10-2022	Lecture 75	<b>c) Interpretation of Clinical Laboratory Tests</b> Blood chemistry, hematology, and urinalysis	Text Book
28-10-2022	Lecture 76	Hematology, and urinalysis	Text Book

*M. Mani*

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*[Signature]*

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### CLASS TIME TABLE AY: 2022-23

**Class: Pharm.D I Year (2022-2023)**

**Class Teacher: Dr. D. Subhasri**

**W.e.f- 26/12/2022**

DAY/ TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:10	12:10- 1:00	1:00 – 01:50	1:50– 2:40	2:40- 3:30	3:30- 4:20
MON	PIC	MBC	POC	<b>L U N C H</b>	HAP	LIBRARY/ SPORTS		
TUE	CEUTICS	POC	PIC		CEUTICS	CEUTICS LAB		
WED	POC	PIC	HAP		RM/RB	POC LAB		
THU	CEUTICS	POC	MBC		PIC	PIC LAB		
FRI	MBC	RM/RB	HAP		RM/RB	HAP LAB		
SAT	HAP	RM/RB	CEUTICS		MBC	MBC LAB		

S. No	Name of The Faculty	Designation	Name of The Subject (Hrs)	Program
1.	Dr. D. Subha Sri	Assistant Professor	Pharmaceutical Inorganic Chemistry-(PIC) (4)	Pharm. D
2.	Dr. A. Jyotsna	Assistant Professor	Pharmaceutical Organic Chemistry-(POC) (4)	Pharm. D
3.	Dr. M.S.V. Sudeep	Assistant Professor	Pharmaceutics (4)	Pharm. D
4.	Dr. Naga Phani Sharma	Assistant Professor	Human Anatomy and Physiology-(HAP) (4)	Pharm. D
5.	Dr. N. HemaMadhuri	Assistant Professor	Medicinal Biochemistry-(MBC) (4)	Pharm. D
6.	Mr. A. Seshu	Assistant Professor	Remedial Mathematics-(RM) (4)	Pharm. D
7.	Mr. V. UmaSankar	Associate Professor	Remedial Biology-(RB) (4)	Pharm. D
8.	Dr. D. Subha Sri	Assistant Professor	Pharmaceutical Inorganic Chemistry Lab-(PIC) (3)	Pharm. D
9.	Dr. A. Jyotsna	Assistant Professor	Pharmaceutical Organic Chemistry Lab-(POC) (3)	Pharm. D
10.	Dr. M.S.V. Sudeep	Assistant Professor	Pharmaceutics Lab (3)	Pharm. D
11.	Dr. Naga Phani Sharma	Assistant Professor	Human Anatomy and Physiology Lab-(HAP) (3)	Pharm. D
12.	Dr. N. HemaMadhuri	Assistant Professor	Medicinal Biochemistry Lab-(MBC) (1)	Pharm. D
13.	Mr. V. UmaSankar	Associate Professor	Remedial Biology -(RB) (4)	Pharm. D

*Avanaji*  
**Time Table Incharge**

**Principal**



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## b) Pharm.D. (Post Baccalaureate) Course -

A pass in B.Pharm from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act:

Provided that there shall be reservation of seats for the students belonging to the Scheduled Castes, Scheduled Tribes and other Backward Classes in accordance with the instructions issued by the Central Government/State Government/Union Territory Administration as the case may be from time to time.

5. Number of admissions in the above said programmes shall be as prescribed by the Pharmacy Council of India from time to time and presently be restricted as below –
  - i) Pharm.D. Programme – 30 students.
  - ii) Pharm.D. (Post Baccalaureate) Programme – 10 students.
6. Institutions running B.Pharm programme approved under section 12 of the Pharmacy Act, will only be permitted to run Pharm.D. programme. Pharm.D. (Post Baccalaureate) programme will be permitted only in those institutions which are permitted to run Pharm.D. programme.
7. Course of study. – The course of study for Pharm.D. shall include the subjects as given in the Tables below. The number of hours in a week, devoted to each subject for its teaching in theory, practical and tutorial shall not be less than that noted against it in columns (3), (4) and (5) below.

## T A B L E S

### First Year :

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
1.1	Human Anatomy and Physiology	3	3	1
1.2	Pharmaceutics	2	3	1
1.3	Medicinal Biochemistry	3	3	1
1.4	Pharmaceutical Organic Chemistry	3	3	1
1.5	Pharmaceutical Inorganic Chemistry	2	3	1
1.6	Remedial Mathematics/ Biology	3	3*	1
	<b>Total hours</b>	<b>16</b>	<b>18</b>	<b>6 = (40)</b>

\* For Biology

# APPENDIX-A

(See regulation 8)

## PHARM.D. SYLLABUS

### First Year

#### HUMAN ANATOMY & PHYSIOLOGY (THEORY)

Theory : 3 Hrs. /Week

1. **Scope and Objectives:** This course is designed to impart a fundamental knowledge on the structure and functions of the human body. It also helps in understanding both homeostasis mechanisms and homeostatic imbalances of various body systems. Since a medicament, which is produced by pharmacist, is used to correct the deviations in human body, it enhances the understanding of how the drugs act on the various body systems in correcting the disease state of the organs.
2. **Upon completion of the course the student shall be able to:**
  - a. describe the structure (gross and histology) and functions of various organs of the human body;
  - b. describe the various homeostatic mechanisms and their imbalances of various systems;
  - c. identify the various tissues and organs of the different systems of the human body;
  - d. perform the hematological tests and also record blood pressure, heart rate, pulse and Respiratory volumes;
  - e. appreciate coordinated working pattern of different organs of each system; and
  - f. appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body

#### 3. Course materials:

##### Text books

- a. Tortora Gerard J. and Nicholas, P. Principles of anatomy and physiology  
Publisher Harpercollins college New York.
- b. Wilson, K.J.W. Ross and Wilson's foundations of anatomy and physiology.  
Publisher: Churchill Livingstone, Edinburg.

##### Reference books

- a. Guyton arthur, C. *Physiology of human body*. Publisher: Holtsaunders.
- b. Chatterjee, C.C. *Human physiology*. Volume 1&11. Publisher: medical allied agency, Calcutta.
- c. Peter L. Williams, Roger Warwick, Mary Dyson and Lawrence, H.
- d. *Gray's anatomy*. Publisher: Churchill Livingstone, London.




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#### 4. Lecture wise program :

##### Topics

- 1 Scope of anatomy and physiology, basic terminologies used in this subject (Description of the body as such planes and terminologies)
- 2 Structure of cell – its components and their functions.
- 3 Elementary tissues of the human body: epithelial, connective, Muscular and nervous tissues-their sub-types and characteristics
- 4 a) Osseous system - structure, composition and functions of the Skeleton. (done in practical classes - 6hrs)  
b) Classification of joints, Types of movements of joints and disorders of joints (Definitions only)
- 5 Haemopoetic System
  - a) Composition and functions of blood
  - b) Haemopoiesis and disorders of blood components (definition of disorder)
  - c) Blood groups
  - d) Clotting factors and mechanism
  - e) Platelets and disorders of coagulation
- 6 Lymph
  - a) Lymph and lymphatic system, composition, formation and circulation.
  - b) Spleen: structure and functions, Disorders
  - c) Disorders of lymphatic system (definition only)
- 7 Cardiovascular system
  - a) Anatomy and functions of heart
  - b) Blood vessels and circulation (Pulmonary, coronary and systemic circulation)
  - c) Electrocardiogram (ECG)
  - d) Cardiac cycle and heart sounds
  - e) Blood pressure – its maintenance and regulation
  - f) Definition of the following disorders  
Hypertension, Hypotension, Arteriosclerosis, Atherosclerosis, Angina, Myocardial infarction, Congestive heart failure, Cardiac arrhythmias
- 8 Respiratory system
  - a) Anatomy of respiratory organs and functions
  - b) Mechanism / physiology of respiration and regulation of respiration
  - c) Transport of respiratory gases
  - d) Respiratory volumes and capacities, and Definition of: Hypoxia, Asphyxia, Dybarism, Oxygen therapy and resuscitation.
- 9 Digestive system
  - a) Anatomy and physiology of GIT
  - b) Anatomy and functions of accessory glands of GIT
  - c) Digestion and absorption
  - d) Disorders of GIT (definitions only)




  
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- 10 Nervous system
  - a) Definition and classification of nervous system
  - b) Anatomy, physiology and functional areas of cerebrum
  - c) Anatomy and physiology of cerebellum
  - d) Anatomy and physiology of mid brain
  - e) Thalamus, hypothalamus and Basal Ganglia
  - f) Spinal cord: Structure & reflexes – mono-poly-planter
  - g) Cranial nerves – names and functions
  - h) ANS – Anatomy & functions of sympathetic & parasympathetic N.S.
- 11 Urinary system
  - a) Anatomy and physiology of urinary system
  - b) Formation of urine
  - c) Renin Angiotensin system – Juxtaglomerular apparatus - acid base Balance
  - d) Clearance tests and micturition
- 12 Endocrine system
  - a) Pituitary gland
  - b) Adrenal gland
  - c) Thyroid and Parathyroid glands
  - d) Pancreas and gonads
- 13 Reproductive system
  - a) Male and female reproductive system
  - b) Their hormones – Physiology of menstruation
  - c) Spermatogenesis & Oogenesis
  - d) Sex determination (genetic basis)
  - e) Pregnancy and maintenance and parturition
  - f) Contraceptive devices
- 14 Sense organs
  - a) Eye
  - b) Ear
  - c) Skin
  - d) Tongue & Nose
- 15 Skeletal muscles
  - a) Histology
  - b) Physiology of Muscle contraction
  - c) Physiological properties of skeletal muscle and their disorders (definitions)
- 16 Sports physiology
  - a) Muscles in exercise, Effect of athletic training on muscles and muscle performance,
  - b) Respiration in exercise, CVS in exercise, Body heat in exercise, Body fluids and salts in exercise,
  - c) Drugs and athletics



  
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HUMAN ANATOMY AND PHYSIOLOGY				
I PHARM D				
Week no.	Lecture No.	Topics	Teaching Aid	Date
<b>Unit-1</b>	<b>Scope of anatomy and physiology</b>			
Week-1	L1	Scope of anatomy and physiology	Chalk and Talk	17-01-2023
	L2	Terminologies	Chalk and Talk	18-02-2023
<b>Unit-2</b>	<b>Structure of cell</b>			
	L3	Structure of cell – Introduction	Chalk and Talk	20-01-2023
	L4	Cell components and their functions	Chalk and Talk	21-01-2023
	L5	Cell components and their functions	Chalk and Talk	24-01-2023
	L6	Revision	Google Meet	25-01-2023
<b>Unit-3</b>	<b>Elementary tissues</b>			
Week-2	L7	Elementary tissues of the human body - Introduction	Chalk and Talk	25-01-2023
	L8	Epithelial	Chalk and Talk	27-01-2023
	L9	Connective	Powerpoint	28-01-2023
	L10	Muscular	Chalk and Talk	31-01-2023
	L11	Nervous tissues	Chalk and Talk	01-02-2023
	L12	Sub-types and characteristics of tissues	Power point	03-02-2023
	L13	Revision	Google Meet	04-02-2023
<b>Unit-4</b>	<b>Osseous System</b>			
Week-3	L14	Introduction to Osseous System	Chalk and Talk	04-02-2023
	L15	structure and composition	LCD	07-02-2023
	L16	functions of the Skeleton	Chalk and Talk	08-02-2023
	L17	Classification of joints	Power point	10-02-2023
	L18	Types of movements of joints	Chalk and Talk	11-02-2023
Week-4	L19	disorders of joints	Chalk and Talk	14-02-2023
	L20	Revision	Google Meet	15-02-2023
<b>Unit-5</b>	<b>Haemopoietic system</b>			
	L21	Introduction to Haemopoietic system	Chalk and Talk	15-02-2023
	L22	Composition of Blood	Chalk and Talk	17-02-2023
	L23	Functions of blood	Chalk and Talk	21-02-2023
	L24	Haemopoiesis	Chalk and Talk	22-02-2023
Week-5	L25	disorders of blood components	Chalk and Talk	24-02-2023
	L26	Blood groups	LCD	25-02-2023

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	L27	Introduction to Clotting Factors	Chalk and Talk	28-02-2023
	L28	Mechanism of clotting Factors	Chalk and Talk	01-03-2023
	L29	introduction to Platelets	Chalk and Talk	03-03-2023
	L30	Platelets Mechanism and importance	Power point	04-03-2023
Week-6	L31	Disorders of Coagulation	Chalk and Talk	07-03-2023
	L32	Revision	Google meet	10-03-2023
<b>Unit-6</b>	<b>Lymph</b>			
	L33	Introduction to lymph	Chalk and Talk	10-03-2023
	L34	lymphatic system	Chalk and Talk	11-03-2023
	L35	Composition	Chalk and Talk	14-03-2023
	L36	Formation	Chalk and Talk	15-03-2023
	L37	Circulation	LCD	17-03-2023
	L38	Introduction to Spleen	Chalk and Talk	18-03-2023
Week-7	L39	Structure of Spleen	Power point	21-03-2023
	L40	Functions of Spleen	Chalk and Talk	24-03-2023
	L41	Disorders of Spleen	Chalk and Talk	25-03-2023
	L42	Disorders of lymphatic system	Chalk and Talk	28-03-2023
	L43	Revision	Google meet	29-03-2023
<b>Unit-7</b>	<b>Cardiovascular system</b>			
	L44	Introduction to Cardiovascular system	Chalk and Talk	29-03-2023
	L45	Anatomy of heart	Power point	31-03-2023
Week-8	L46	Functions of heart	Chalk and Talk	01-04-2023
	L47	Blood vessels	Chalk and Talk	11-04-2023
	L48	Circulation of blood	Power point	12-04-2023
	L49	Pulmonary circulation	Chalk and Talk	15-04-2023
	L50	Coronary circulation	Chalk and Talk	18-04-2023
Week-9	L51	Systemic circulation	Power point	19-04-2023
	L52	Electrocardiogram	Chalk and Talk	21-04-2023
	L53	Cardiac cycle	Power point	25-04-2023
	L54	Normal Heart sounds	Chalk and Talk	25-04-2023
	L55	Abnormal heart sounds	Chalk and Talk	26-04-2023
	L56	Introduction to Blood pressure	Chalk and Talk	28-04-2023
Week-10	L57	Regulation of BP	Chalk and Talk	29-04-2023
	L58	Maintainance of BP	Chalk and Talk	02-05-2023
	L59	Hypertension	Chalk and Talk	03-05-2023
	L60	Hypotension	Chalk and Talk	05-05-2023

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Week-11	L61	Arteriosclerosis	Chalk and Talk	06-05-2023
	L62	Atherosclerosis	Chalk and Talk	09-05-2023
	L63	Angina	Chalk and Talk	10-05-2023
	L64	Myocardial infarction	Chalk and Talk	12-05-2023
	L65	Congestive heart failure	LCD	13-05-2023
	L66	Cardiac arrhythmias	Chalk and Talk	16-05-2023
	L67	Revision	Chalk and Talk	17-05-2023
<b>Unit-8</b>	<b>Respiratory system</b>			
Week-12	L68	Introduction to respiratory system	Chalk and Talk	17-05-2023
	L69	Anatomy of respiratory organs	Power point	19-05-2023
	L70	Functions of respiratory organs	Chalk and Talk	20-05-2023
	L71	Mechanism of respiratory organs	Chalk and Talk	23-05-2023
	L72	Physiology of respiration	Chalk and Talk	24-05-2023
Week-13	L73	Regulation of respiration	Chalk and Talk	26-05-2023
	L74	Transport of respiratory gases	LCD	27-05-2023
	L75	Respiratory volumes	Chalk and Talk	30-05-2023
	L76	Respiratory capacities	Chalk and Talk	31-05-2023
	L77	Hypoxia	Chalk and Talk	02-06-2023
	L78	Asphyxia	Power point	03-06-2023
Week-14	L79	Dysbarism	Chalk and Talk	06-06-2023
	L80	Oxygen therapy	Chalk and Talk	07-06-2023
	L81	Resuscitation	Chalk and Talk	09-06-2023
	L82	Revision	Google meet	10-06-2023
	L83	Revision test		13-06-2023
<b>Unit-9</b>	<b>Digestive system</b>			
	L84	Introduction to Digestive system	Chalk and Talk	14-06-2023
Week-15	L85	Anatomy and physiology of GIT	Chalk and Talk	14-06-2023
	L86	Anatomy and functions of accessory glands of GIT	Power point	16-06-2023
	L87	Digestion and absorption	Chalk and Talk	17-06-2023
	L88	Disorders of GIT	Chalk and Talk	20-06-2023
	L89	Revision	LCD	20-06-2023
<b>Unit-10</b>	<b>Nervous system</b>			
	L90	Introduction Nervous system	Chalk and Talk	20-06-2023
Week-16	L91	Definition and classification of nervous system	Chalk and Talk	23-06-2023

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	L92	Anatomy, physiology and functional areas of cerebrum	Power point	24-06-2023
	L93	Anatomy and physiology of cerebellum	Chalk and Talk	04-07-2023
	L94	Anatomy and physiology of mid brain	Chalk and Talk	05-07-2023
	L95	Thalamus, hypothalamus and Basal Ganglia	Power point	07-07-2023
	L96	spinal cord	Chalk and Talk	08-07-2023
Week-17	L97	Cranial nerves	Chalk and Talk	11-07-2023
	L98	ANS	Chalk and Talk	12-07-2023
	L99	Revision	LCD	14-07-2023
<b>Unit-11</b>	<b>Urinary system</b>			
	L100	Introduction to Urinary system	Chalk and Talk	14-07-2023
	L101	Anatomy and physiology of urinary system	Power point	15-07-2023
	L102	Formation of urine	Chalk and LCD	15-07-2023
Week-18	L103	Renin Angiotensin system	Chalk and Talk	18-07-2023
	L104	Clearance tests and micturition	Chalk and Talk	19-07-2023
	L105	Revision	Google meet	21-07-2023
<b>Unit-12</b>	<b>Endocrine System</b>			
	L106	Introduction to Endocrine System	Chalk and Talk	21-07-2023
	L107	Pituitary gland	Chalk and Talk	22-07-2023
	L108	Adrenal gland	Power point	25-07-2023
Week-19	L109	Thyroid and Parathyroid glands	Chalk and Talk	26-07-2023
	L110	Pancreas and gonads	LCD	28-07-2023
	L111	Revision	Google meet	01-08-2023
<b>Unit-13</b>	<b>Reproductive system</b>			
	L112	Introduction to Reproductive system	Chalk and Talk	01-08-2023
	L113	Male and female reproductive system	Power point	02-08-2023
	L114	Physiology of menstruation	Chalk and Talk	02-08-2023
Week-20	L115	Spermatogenesis & Oogenesis	Power point	04-08-2023
	L116	Sex determination	Chalk and Talk	05-08-2023
	L117	Pregnancy and maintenance and parturition	Chalk and Talk	08-08-2023
	L118	Contraceptive devices	Chalk and LCD	09-08-2023
	L119	Revision	Google meet	11-08-2023
<b>Unit-14</b>	<b>Sense Organs</b>			
	L120	Introduction to Sense Organs	Chalk and Talk	11-08-2023

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Week-21	L121	Eye	Chalk and Talk	12-08-2023
	L122	Ear	Power point	16-08-2023
	L123	Skin	Chalk and Talk	18-08-2023
	L124	Tongue & Nose	LCD	19-08-2023
	L125	Revision	Google meet	22-08-2023
<b>Unit-15</b>	<b>Skeletal Muscles</b>			
	L126	Introduction to Skeletal Muscles	Chalk and Talk	22-08-2023
Week-22	L127	Histology	Chalk and Talk	23-08-2023
	L128	Physiology of Muscle contraction	Chalk and Talk	25-08-2023
	L129	Physiological properties of skeletal muscle	Power point	26-08-2023
	L130	Disorders of skeletal muscle	Chalk and Talk	29-08-2023
	L131	Revision	Google meet	30-08-2023
<b>Unit-16</b>	<b>Sports Physiology</b>			
	L132	Introduction to Sports Physiology	Chalk and Talk	30-08-2023
Week-23	L133	Muscles in exercise	Chalk and Talk	01-09-2023
	L134	Effect of athletic training on muscles	Chalk and Talk	02-09-2023
	L135	muscle performance	Power point	05-09-2023
	L136	Respiration in exercise	Chalk and Talk	08-09-2023
	L137	CVS in exercise	Chalk and Talk	08-09-2023
	L138	Body heat in exercise	Chalk and Talk	09-09-2023
Week-24	L139	Body fluids in exercise	LCD	09-09-2023
	L140	Salts in exercise	Chalk and Talk	12-09-2023
	L141	Drugs	Chalk and Talk	12-09-2023
	L142	Athletics	Chalk and Talk	13-09-2023
	L143	Tests used to detect Drugs	Power point	13-09-2023
	L144	Importance of exercise	Chalk and Talk	15-09-2023
	L145	Effect of exercises on muscles	Chalk and Talk	15-09-2023
	L146	Effect of exercises on Joint	Chalk and Talk	16-09-2023
	L147	Revision	Google meet	16-09-2023

*Phani*  
Signature of the Faculty



*[Signature]*  
Principal

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### CLASS TIME TABLE AY: 2022-23

**Class: Pharm.D III year (2022-2023)**

**W.e. f -01/08/202**

**Class Teacher: Mrs.Ch.Geetha**

DAY/TIME	9:30– 10:30	10:30– 11:20	11:20– 12:10	12:10 -1:00	1:00– 01:50	1:50– 2:40	2:40– 3:30	3:30– 4:20
MON	COL-II	PF	MC	L U N C H	PJ	MC LAB		
TUE	MC	PJ	COL-II		PT- II	PT-IILAB		
WED	MC	PT-II	PF		PA	PALAB		
THU	PF	MC	PA		COL-II	PFLAB		
FRI	HOSPITAL VISIT				HOSPITAL VISIT			
SAT	PJ	PA	PT-II		PF	COL-IILAB		

S. No	Name of The Faculty	Designation	Name of The Subject (Hrs)	Program
1.	Dr.Arun Satyadev	Professor	Medicinal chemistry-(MC) (4)	Pharm. D
2.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis-(PA) (3)	Pharm. D
3.	Dr.V.C.Randeep Raj	Associate Professor	Pharmacotherapy –II-(PT-II) (3)	Pharm. D
4.	Dr.N.HemaMadhuri	Assistant Professor	Pharmaceutical Jurisprudence-(PJ) (3)	Pharm. D
5.	Mrs.B.Ramavathi	Assistant Professor	Pharmacology-II (COL-II) (3)	Pharm. D
6.	Dr.B.Tejasree	Assistant Professor	Pharmaceutical Formulation (PF) (3)	Pharm. D
7.	Dr.ArunSatyadev	Professor	Medicinal chemistry Lab(MC) (3)	Pharm. D
8.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis Lab(PA) (3)	Pharm. D
9.	Dr.V.C.Randeep Raj	Associate Professor	Pharmacotherapy -II Lab (PT-II) (3)	Pharm. D
10.	Mrs.B.Ramavathi	Assistant Professor	Pharmacology-II Lab- (COL-II) (3)	Pharm. D
11.	Dr.B.Tejasree	Assistant Professor	Formulation Lab-(PF) (3)	Pharm. D

*Anaraji*  
Time Table Incharge

*Principal*  
Principal



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**Second Year:**

S.No	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
2.1	Pathophysiology	3	-	1
2.2	Pharmaceutical Microbiology	3	3	1
2.3	Pharmacognosy & Phytopharmaceuticals	3	3	1
2.4	Pharmacology-I	3	-	1
2.5	Community Pharmacy	2	-	1
2.6	Pharmacotherapeutics-I	3	3	1
	<b>Total Hours</b>	<b>17</b>	<b>9</b>	<b>6 = 32</b>

**Third Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
3.1	Pharmacology-II	3	3	1
3.2	Pharmaceutical Analysis	3	3	1
3.3	Pharmacotherapeutics-II	3	3	1
3.4	Pharmaceutical Jurisprudence	2	-	-
3.5	Medicinal Chemistry	3	3	1
3.6	Pharmaceutical Formulations	2	3	1
	<b>Total hours</b>	<b>16</b>	<b>15</b>	<b>5 = 36</b>



### 3.4 PHARMACEUTICAL JURISPRUDENCE (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope of the Subject:** (4-6 lines): This course exposes the student to several important legislations related to the profession of pharmacy in India. The Drugs and Cosmetics Act, along with its amendments are the core of this course. Other acts, which are covered, include the Pharmacy Act, dangerous drugs, medicinal and toilet preparation Act etc. Besides this the new drug policy, professional ethics, DPCO, patent and design Act will be discussed.
2. **Objectives of the Subject:** Upon completion of the subject student shall be able to (Know, do, and appreciate) –
  - a. practice the Professional ethics;
  - b. understand the various concepts of the pharmaceutical legislation in India;
  - c. know the various parameters in the Drug and Cosmetic Act and rules;
  - d. know the Drug policy, DPCO, Patent and design act;
  - e. understand the labeling requirements and packaging guidelines for drugs and cosmetics;
  - f. be able to understand the concepts of Dangerous Drugs Act, Pharmacy Act and Excise duties Act; and
  - g. other laws as prescribed by the Pharmacy Council of India from time to time including International Laws.

**Text books (Theory)**

Mithal , B M. Textbook of Forensic Pharmacy. Calcutta :National; 1988.

**Reference books (Theory)**

- a. Singh, KK, editor. Beotra's the Laws of Drugs, Medicines & cosmetics. Allahabad: Law Book House; 1984.
- b. Jain, NK. A Textbook of forensic pharmacy. Delhi: Vallabh prakashan ; 1995.
- c. Reports of the Pharmaceutical enquiry Committee
- d. I.D.M.A., Mumbai. DPCO 1995
- e. Various reports of Amendments.
- f. Deshapande, S.W. The drugs and magic remedies act 1954 and rules 1955. Mumbai: Susmit Publications; 1998.
- g. Eastern Book Company .The narcotic and psychotropic substances act 1985, Lucknow: Eastern; 1987.

**3. Detailed syllabus and lecture wise schedule:**

**Title of the topic**

1. **Pharmaceutical Legislations** – A brief review.
2. Principle and Significance of professional ethics. Critical study of the code of pharmaceutical ethics drafted by PCI.
3. **Drugs and Cosmetics Act, 1940, and its rules 1945.**  
Objectives, Legal definition, Study of Schedule's with reference to Schedule B, C&C1, D, E1, F&F1, F2, F3, FF, G, H, J, K, M, N, P, R, V, W, X, Y.  
Sales, Import, labeling and packaging of Drugs And Cosmetics  
Provisions Relating to Indigenous Systems.  
Constitution and Functions of DTAB, DCC, SDL.  
Qualification and duties –Govt. analyst and Drugs Inspector.



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4. **Pharmacy Act –1948.**  
Objectives Legal Definitions, General Study, Constitution and Functions of State & Central Council, Registration & Procedure, ER.
5. **Medicinal and Toilet Preparation Act –1955.**  
Objectives, Legal Definitions, Licensing, Bonded and Non Bonded Laboratory, Ware Housing, Manufacture of Ayurvedic, Homeopathic, Patent & Proprietary Preparations.
6. **Narcotic Drugs and Psychotropic substances Act-1985 and Rules.** Objectives, Legal Definitions, General Study, Constitution and Functions of narcotic & Psychotropic Consultative Committee, National Fund for Controlling the Drug Abuse, Prohibition, Control and regulations, Schedules to the Act.
7. **Study of Salient Features of Drugs and magic remedies Act and its rules.**
8. **Study of essential Commodities Act Relevant to drugs price control Order.**
9. **Drug Price control Order & National Drug Policy (Current).**
10. **Prevention Of Cruelty to animals Act-1960.**
11. **Patents & design Act-1970.**
12. **Brief study of prescription and Non-prescription Products.**

#### 4. Assignments:


##### Format of the assignment

1. Minimum & Maximum number of pages
2. It shall be a computer draft copy
3. Reference(s) shall be included at the end.
4. Name and signature of the student
5. Assignment can be a combined presentation at the end of the academic year.
6. Time allocated for presentation may be 8+2 Min

##### Case studies relating to

1. Drugs and Cosmetics Act and rules along with its amendments, Dangerous Drugs Act, Medicinal and Toilet preparation Act, New Drug Policy, Professional Ethics, Drugs (Price control) Order, Patent and Design Act.
2. Various prescription and non-prescription products.
3. Medical and surgical accessories.
4. Diagnostic aids and appliances available in the market.



  
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PHARMACEUTICAL JURISPRUDENCE				
YEAR: III PHARM D				
Week .No	Lecture No.	Topics	Teaching Aid	DATE
<b>Unit-1</b>	<b>Pharmaceutical Legislations</b>			
Week-1	L1	Pharmaceutical Legislations	Chalk and Talk	08-08-2022
	L2	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	09-08-2022
	L3	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	10-08-2022
	L4	professional ethics		
	L5	Principle of professional ethics	Chalk and Talk	16-08-2022
	L6	Signature of professional ethics	Chalk and Talk	17-08-2022
Week-2	L7	Signature of professional ethics	Chalk and Talk	22-08-2022
<b>Unit-2</b>	<b>Pharmaceutical constitution of India</b>			
	L8	Critical study on PCI	Chalk and Talk	23-08-2022
	L9	Critical study on PCI	Chalk and Talk	24-08-2022
	L10	The code of pharmaceutical ethics drafted by PCI.	Power point	29-08-2022
	L11	The code of pharmaceutical ethics drafted by PCI.	Chalk and Talk	30-08-2022
	L12	Revision	Google meet	31-08-2022
<b>Unit-3</b>	<b>Drugs and Cosmetics Act, 1940</b>			
Week-3	L13	Drugs and Cosmetics Act , 1940	Chalk and Talk	31-08-2022
	L14	Drugs and Cosmetics Act , 1940	Power point	05-09-2022
	L15	Drugs and Cosmetics Act , 1940	Chalk and Talk	06-09-2022
	L16	Its rules 1945	Power point	07-09-2022
	L17	Objectives	Chalk and Talk	12-09-2022

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	L18	Legal definition	Chalk and Talk	13-09-2022
Week-4	L19	Study of Schedule's with reference	Chalk and Talk	14-09-2022
	L20	Schedule B	Chalk and Talk	19-09-2022
	L21	Schedule B	Chalk and Talk	20-09-2022
	L22	Schedule C&C1	Power point	21-09-2022
	L23	Schedule C&C1	Chalk and Talk	26-09-2022
	L24	Schedule C&C1	Chalk and Talk	27-09-2022
	Week-5	L25	Schedule D	Power point
L26		Schedule D	Chalk and Talk	10-10-2022
L27		Schedule E1	Chalk and Talk	10-10-2022
L28		Schedule E1	Chalk and Talk	11-10-2022
L29		Schedule F&F1	LCD	11-10-2022
L30		Schedule F&F1	Chalk and Talk	12-10-2022
Week-6	L31	Schedule F2	Chalk and Talk	12-10-2022
	L32	Schedule F3	Chalk and Talk	17-10-2022
	L33	Schedule FF	Chalk and Talk	18-10-2022
	L34	Schedule FF	Chalk and Talk	19-10-2022
	L35	Schedule G	Power point	25-10-2022
	L36	Schedule G	Chalk and Talk	26-10-2022
Week-7	L37	Schedule H	Chalk and Talk	07-11-2022
	L38	Schedule H	Chalk and Talk	09-11-2022
	L39	Schedule J	Power point	14-11-2022
	L40	Schedule J	Chalk and	14-11-2022

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	L41	Schedule K	Chalk and Talk	15-11-2022
	L42	Schedule K	Power point	15-11-2022
Week-8	L43	Schedule M	Chalk and Talk	16-11-2022
	L44	Schedule M	Chalk and Talk	16-11-2022
	L45	Schedule N	Chalk and Talk	21-11-2022
	L46	Schedule N	Chalk and Talk	21-11-2022
	L47	Schedule P	Chalk and Talk	22-11-2022
	L48	Schedule P	Chalk and Talk	22-11-2022
Week-9	L49	Schedule R	Power point	23-11-2022
	L50	Schedule R	Chalk and Talk	23-11-2022
	L51	Schedule V	LCD	28-11-2022
	L52	Schedule V	Chalk and Talk	28-11-2022
	L53	Schedule W	Chalk and Talk	29-11-2022
	L54	Schedule W	Power point	29-11-2022
Week-10	L55	Schedule X	Chalk and Talk	30-11-2022
	L56	Schedule X	Chalk and Talk	05-12-2022
	L57	Schedule Y	Chalk and Talk	05-12-2022
	L58	Schedule Y	Power point	06-12-2022
	L59	Sales	Chalk and Talk	06-12-2022
	L60	Sales	Chalk and Talk	07-12-2022
Week-11	L61	Import	Chalk and Talk	07-12-2022
	L62	Labelling	Power point	12-12-2022



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	L63	Packinging of drugs and cosmetics	Chalk and Talk	12-12-2022
	L64	Provisions Relating to Indigenous Systems	Chalk and Talk	13-12-2022
	L65	Provisions Relating to Indigenous Systems	Chalk and Talk	13-12-2022
	L66	Provisions Relating to Indigenous Systems	Chalk and Talk	14-12-2022
Week-12	L67	Constitution and Functions of DTAB	Chalk and Talk	14-12-2022
	L68	Constitution and Functions of DTAB	Power point	19-12-2022
	L69	Constitution and Functions of DCC	Chalk and Talk	20-12-2022
	L70	Constitution and Functions of DCC	Chalk and Talk	21-12-2022
	L71	Constitution and Functions of CDL	Power point	21-12-2022
	L72	Constitution and Functions of CDL	Chalk and Talk	26-12-2022
Week-13	L73	Qualification and duties –Govt. analyst	Chalk and Talk	27-12-2022
	L74	Qualification and duties –Govt. analyst	Chalk and Talk	28-12-2022
	L75	Qualification and duties –Govt. analyst	LCD	28-12-2022
	L76	Drugs Inspector	Chalk and Talk	01-01-2023
	L77	Drugs Inspector	Chalk and Talk	01-01-2023
	L78	Drugs Inspector	Chalk and Talk	02-01-2023
Week-14	L79	Revision	Google meet	
<b>Unit-4</b>	<b>Pharmacy Act –1948</b>			
	L80	Pharmacy Act –1948	Chalk and Talk	03-01-2023
	L81	Objectives Legal Definitions	Chalk and Talk	03-01-2023
	L82	General Study	Chalk and Talk	04-01-2023
	L83	Constitution and Functions of State	Power point	09-01-2023
	L84	Constitution and Functions of State	Chalk and	09-01-2023

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			Talk	
Week-15	L85	Central Council	Chalk and Talk	10-01-2023
	L86	Central Council	LCD	10-01-2023
	L87	Registration	Chalk and Talk	11-01-2023
	L88	Registration	Power point	11-01-2023
	L89	Procedure, ER	Chalk and Talk	18-01-2023
	L90	Procedure, ER	Chalk and Talk	18-01-2023
Week-16	L91	Revision	Google meet	18-01-2023
<b>Unit-5</b>	<b>Medicinal and Toilet Preparation Act –1955</b>			
Week-17	L92	Medicinal and Toilet Preparation Act –1955	Chalk and Talk	30-01-2023
	L93	Medicinal and Toilet Preparation Act –1956	Power point	30-01-2023
	L94	Medicinal and Toilet Preparation Act –1957	Chalk and Talk	31-01-2023
	L95	Objectives, Legal Definitions	Power point	31-01-2023
	L96	Objectives, Legal Definitions	Chalk and Talk	01-02-2023
	L97	Licensing, Bonded and Non Bonded Laboratory	LCD	01-02-2023
Week-17	L98	Licensing, Bonded and Non Bonded Laboratory	Chalk and Talk	06-02-2023
	L99	Licensing, Bonded and Non Bonded Laboratory	Power point	07-02-2023
	L100	Ware Housing	Chalk and Talk	08-02-2023
	L101	Ware Housing	Chalk and Talk	13-02-2023
	L102	Manufacture of Ayurvedic	Chalk and Talk	14-02-2023
Week-18	L103	Manufacture of Ayurvedic	LCD	15-02-2023
	L104	Homeopathic	Chalk and Talk	20-02-2023
	L105	Homeopathic	Chalk and Talk	21-02-2023

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	L106	Patent & Proprietary Preparations	Chalk and Talk	22-02-2023
	L107	Patent & Proprietary Preparations	Chalk and Talk	27-02-2023
	L108	Revision	Google meet	27-02-2023
<b>Unit-6</b>	<b>Narcotic Drugs and Psychotropic substances Act-1985 and Rules</b>			
Week-19	L109	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	28-02-2023
	L110	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	01-03-2023
	L111	Narcotic Drugs and Psychotropic substances Act-1985 and rules	Power point	06-03-2023
	L112	Objectives, Legal Definitions, General Study	Chalk and Talk	07-03-2023
	L113	Abuse, Prohibition, Control and regulations, Schedules to the Act.	Google meet	13-03-2023
<b>Unit-7</b>	<b>Study of Salient Features of Drugs and magic remedies Act and its rules.</b>			
	L114	Study of Salient Features of Drugs and magic remedies Act and its rules.	Chalk and Talk	14-03-2023
Week-20	L115	Study of Salient Features of Drugs and magic remedies Act and its rules.	Google meet	15-03-2023
<b>Unit-8</b>	<b>Study of essential Commodities Act Relevant to drugs price control Order</b>			
	L116	Study of essential Commodities Act Relevant to drugs price control Order.	Chalk and Talk	27-03-2023
<b>Unit-9</b>	<b>Drug Price control Order &amp; National Drug Policy</b>			
	L117	Drug Price control Order & National Drug Policy	Chalk and Talk	28-03-2023
<b>Unit-10</b>	<b>Prevention Of Cruelty to animals Act-1960</b>			
	L118	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk	29-03-2023
	L119	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk	01-04-2023
<b>Unit-11</b>	<b>Patents &amp; design Act-1970</b>			
	L120	Patents & design Act-1970.	Chalk and Talk	06-04-2023
Week-21	L121	Patents & design Act-1970.	Power point	13-04-2023



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	L122	Revision	Chalk and Talk	13-04-2023
<b>Unit-12</b>	<b>Brief study of prescription and Non-prescription Products</b>			
	L123	Brief study of prescription Products	Chalk and Talk	14-04-2023
	L124	Brief study of prescription Products	Power point	14-04-2023
	L125	Non-prescription Products.	Chalk and Talk	15-04-2023
	L126	Non-prescription Products.	Power point	15-04-2023

*N. Hema Devi*  
Signature of the Faculty

  
Principal



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## CLASS TIME TABLE AY: 2022-23

Class: Pharm.D IV year (2022-2023)

W.e.f-01/08/2022

Class Teacher: Dr.B.Teja Sree

DAY/ TIME	9:30- 10:30	10:3 – 11:20	11:20– 12:10	12:10- 1:00	1:00– 01:50	1:50–2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	L U N C H	PT- III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	BPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	Name of The Faculty	Designation	Name of The Subject (Hrs)	Program
1.	Mrs.Ch. Geetha	Assistant Professor	Biostatistics and Research Methodology-(BRM) (4)	Pharm. D
2.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy-(CP) (3)	Pharm. D
3.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy-(HP) (2)	Pharm. D
4.	Dr.B. TejaSree	Assistant Professor	Clinical Toxicology (CT)(2)	Pharm. D
5.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics – III (PT-III) (3)	Pharm. D
7.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab (CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab (HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab(BPPK) (3)	Pharm. D
10.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics - III – (PT-III) Lab (3)	Pharm. D

*Ananaji*  
Time Table Incharge



Principal

*Principal*  
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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

## HOSPITAL PHARMACY (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope:** In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug dispensing, manufacturing of parenteral preparations, drug information, patient counselling, and therapeutic drug monitoring for improved patient care.
2. **Objectives:** Upon completion of the course, the student shall be able to –
  - a. know various drug distribution methods;
  - b. know the professional practice management skills in hospital pharmacies;
  - c. provide unbiased drug information to the doctors;
  - d. know the manufacturing practices of various formulations in hospital set up;
  - e. appreciate the practice based research methods; and
  - f. appreciate the stores management and inventory control.

**Text books: (latest editions)**

- a. Hospital pharmacy by William .E. Hassan
- b. A text book of Hospital Pharmacy by S.H.Merchant & Dr. J.S. Qadry. Revised by R.K.Goyal & R.K. Parikh

**References:**


- a. WHO consultative group report.
- b. R.P.S. Vol.2. Part –B; Pharmacy Practice section.
- c. Handbook of pharmacy – health care. Edt. Robin J Harman. The Pharmaceutical press.

**3. Lecture wise programme :**

**Topics**

- 1 **Hospital - its Organisation and functions**
- 2 **Hospital pharmacy-Organisation and management**
  - a) Organizational structure-Staff, Infrastructure & work load statistics
  - b) Management of materials and finance
  - c) Roles & responsibilities of hospital pharmacist
- 3 **The Budget – Preparation and implementation**
- 4 **Hospital drug policy**
  - a) Pharmacy and Therapeutic committee (PTC)
  - b) Hospital formulary
  - c) Hospital committees
    - Infection committee
    - Research and ethical committee
  - d) developing therapeutic guidelines
  - e) Hospital pharmacy communication - Newsletter



  
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**5 Hospital pharmacy services**

- a) Procurement & warehousing of drugs and Pharmaceuticals
- b) Inventory control  
Definition, various methods of Inventory Control  
ABC, VED, EOQ, Lead time, safety stock
- c) Drug distribution in the hospital
  - i) Individual prescription method
  - ii) Floor stock method
  - iii) Unit dose drug distribution method
- d) Distribution of Narcotic and other controlled substances
- e) Central sterile supply services – Role of pharmacist

**6 Manufacture of Pharmaceutical preparations**

- a) Sterile formulations – large and small volume parenterals
- b) Manufacture of Ointments, Liquids, and creams
- c) Manufacturing of Tablets, granules, capsules, and powders
- d) Total parenteral nutrition

**7 Continuing professional development programs**

Education and training

**8 Radio Pharmaceuticals – Handling and packaging**

**9 Professional Relations and practices of hospital pharmacist**



  
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<b>HOSPITAL PHARMACY</b>				
<b>YEAR: IV PHARM D</b>				
Week No.	Lecture No.	TOPIC	Teaching Aid	Date
<b>Unit-1</b>	<b>Scope of Hospital Pharmacy</b>			
Week-1	L1	Scope and objectives of Hospital pharmacy	Chalk and Talk	17-08-2022
	L2	Organisation of Hospital	Chalk and Talk	18-08-2022
	L3	Functions of Hospital	Power Point	24-08-2022
<b>Unit-2</b>	<b>Hospital pharmacy</b>			
Week-2	L4	Hospital pharmacy-Introduction	Chalk and Talk	25-08-2022
	L5	Organizational structure-Staff, Infrastructure	Power Point	31-08-2022
	L6	Organizational structure-work load statistics	Chalk and Talk	01-09-2022
	L7	Management of materials and finance	Power Point	07-09-2022
	L8	Management of materials and finance	Chalk and Talk	08-09-2022
	L9	Roles & responsibilities of hospital pharmacist	Power Point	14-09-2022
L10	Roles & responsibilities of hospital pharmacist	Chalk and Talk	15-09-2022	
<b>Unit-3</b>	<b>The Budget</b>			
Week-3	L11	Introduction of Budget	Chalk and Talk	21-09-2022
	L12	Preparation of Budget	Chalk and Talk	22-09-2022
	L13	Implementation of Budget	LCD	12-10-2022
<b>Unit-4</b>	<b>Hospital drug policy</b>			
Week-3	L14	Hospital drug policy -Introduction	Chalk and Talk	13-10-2022
	L15	Pharmacy and Therapeutic committee (PTC)	Power Point	19-10-2022
	L16	Pharmacy and Therapeutic committee (PTC)	Chalk and Talk	20-10-2022
	L17	Hospital formulary	Chalk and	26-10-2022

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			Talk	
	L18	Hospital formulary	LCD	27-10-2022
	L19	Hospital committees-Introduction	Chalk and Talk	09-11-2022
Week-4	L20	Infection committee	Chalk and Talk	10-11-2022
	L21	Infection committee	Chalk and Talk	16-11-2022
	L22	Research and ethical committee	Power Point	17-11-2022
	L23	Research and ethical committee	Chalk and Talk	23-11-2022
	L24	Developing therapeutic guidelines	LCD	24-11-2022
	L25	Developing therapeutic guidelines	Chalk and Talk	30-11-2022
Week-5	L26	Hospital pharmacy communication - Introduction	Power Point	01-12-2022
	L27	Hospital pharmacy communication - Newsletter	Chalk and Talk	07-12-2022
	L28	Hospital pharmacy communication - Newsletter	Chalk and Talk	08-12-2022
<b>Unit-5</b>	<b>Hospital pharmacy services</b>			
	L29	Hospital pharmacy services - Introduction	Chalk and Talk	14-12-2022
	L30	Procurement & warehousing of drugs	Chalk and Talk	14-12-2022
	L31	Procurement & warehousing of drugs	LCD	15-12-2022
Week-6	L32	Procurement & warehousing of Pharmaceuticals	Chalk and Talk	15-12-2022
	L33	Procurement & warehousing of Pharmaceuticals	Power Point	21-12-2022
	L34	Procurement & warehousing of Pharmaceuticals	Chalk and Talk	21-12-2022
	L35	Inventory control-Introduction	Chalk and Talk	22-12-2022
	L36	Definition, various methods of Inventory Control	LCD	22-12-2022
	L37	ABC, VED	Power Point	28-12-2022
Week-7	L38	EOQ, Lead time, safety stock	Chalk and Talk	28-12-2022



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	L39	EOQ, Lead time, safety stock	Chalk and Talk	29-12-2022
	L40	EOQ, Lead time, safety stock	Chalk and Talk	29-12-2022
	L41	Drug distribution in the hospital - Introduction	LCD	04-01-2023
	L42	Individual prescription method	Chalk and Talk	04-01-2023
	L43	Individual prescription method	Chalk and Talk	05-01-2023
Week-8	L44	Floor stock method	Chalk and Talk	05-01-2023
	L45	Floor stock method	LCD	11-01-2023
	L46	Unit dose drug distribution method	Chalk and Talk	11-01-2023
	L47	Unit dose drug distribution method	Chalk and Talk	12-01-2023
	L48	Distribution of Narcotic	LCD	12-01-2023
	L49	Distribution of Narcotic	Chalk and Talk	18-01-2023
Week-9	L50	Distribution of other controlled substances	Chalk and Talk	18-01-2023
	L51	Distribution of other controlled substances	Chalk and Talk	19-01-2023
	L52	Central sterile supply services – Role of pharmacist	Power Point	19-01-2023
	L53	Central sterile supply services – Role of pharmacist	Chalk and Talk	01-02-2023
<b>Unit-6</b>	<b>Manufacture of Pharmaceutical preparations</b>			
	L54	Manufacture of Pharmaceutical preparations- Introduction	Chalk and Talk	01-02-2023
	L55	Sterile formulations – large and small volume parenterals	Chalk and Talk	02-02-2023
Week-10	L56	Sterile formulations – large and small volume parenterals	Chalk and Talk	02-02-2023
	L57	Manufacture of Ointments	LCD	08-02-2023
	L58	Manufacture of Ointments	Chalk and Talk	08-02-2023
	L59	Manufacture of Liquids	Power Point	09-02-2023
	L60	Manufacture of Liquids	Chalk and	09-02-2023

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			Talk	
	L61	Manufacture of creams	Chalk and Talk	15-02-2023
Week-11	L62	Manufacture of creams	LCD	15-02-2023
	L63	Manufacturing of Tablets	Chalk and Talk	16-02-2023
	L64	Manufacturing of Tablets	Chalk and Talk	16-02-2023
	L65	Manufacturing of Tablets	LCD	22-02-2023
	L66	Manufacturing of granules	Chalk and Talk	22-02-2023
	L67	Manufacturing of granules		23-02-2023
	Week-12	L68	Manufacturing of granules	Chalk and Talk
L69		Manufacturing of capsules	Power point	01-03-2023
L70		Manufacturing of capsules	Chalk and Talk	01-03-2023
L71		Manufacturing of powders	Chalk and Talk	02-03-2023
L72		Manufacturing of powders	Chalk and Talk	02-03-2023
L73		Total parenteral nutrition	Chalk and Talk	09-03-2023
Week-13	L74	Total parenteral nutrition	Chalk and Talk	09-03-2023
	L75	Total parenteral nutrition	Power point	15-03-2023
<b>Unit-7</b>	<b>Continuing professional development programs</b>			
	L76	Continuing professional development programs - Introduction	Chalk and Talk	15-03-2023
	L77	Continuing professional development programs - Education and training	Chalk and Talk	16-03-2023
	L78	Continuing professional development programs - Education and training	Chalk and Talk	16-03-2023
	L79	Continuing professional development programs - Education and training	Power point	23-03-2023
<b>Unit-8</b>		Radio Pharmaceuticals		
Week-14	L80	Radio Pharmaceuticals – Introduction	Chalk and Talk	23-03-2023

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	L81	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	29-03-2023
	L82	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	29-03-2023
	L83	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	05-04-2023
<b>Unit-9</b>	<b>Professional Relations and practices of hospital pharmacist</b>			
	L84	Professional Relations of hospital pharmacist	Chalk and Talk	05-04-2023
	L85	Professional Relations of hospital pharmacist	LCD	06-04-2023
<b>Week-15</b>	L86	Professional Relations of hospital pharmacist	Chalk and Talk	06-04-2023
	L87	Professional Relations of hospital pharmacist	Power point	12-04-2023
	L88	Professional Practices of hospital pharmacist	Chalk and Talk	12-04-2023
	L89	Professional Practices of hospital pharmacist	Google meet	13-04-2023

*V. Anugantkar*  
Signature of the Faculty



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Cherukupally (Village), Chittivalasa (SO), Bhogapuram (Mandal), Vizianagaram (Dist) -531162.  
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### CLASS TIME TABLE AY: 2022-23

Class: Pharm.D IV year (2022-2023)

W.e.f--01/08/2022

Class Teacher: Dr.B.Teja Sree

DAY/ TIME	9:30- 10:30	10:3 – 11:20	11:20– 12:10	12:10- 1:00	1:00– 01:50	1:50–2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	L U N C H	PT- III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	BPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	Name of The Faculty	Designation	Name of The Subject (Hrs)	Program
1.	Mrs.Ch. Geetha	Assistant Professor	Biostatistics and Research Methodology-(BRM) (4)	Pharm. D
2.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy-(CP) (3)	Pharm. D
3.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy-(HP) (2)	Pharm. D
4.	Dr.B. TejaSree	Assistant Professor	Clinical Toxicology (CT)(2)	Pharm. D
5.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics – III (PT-III) (3)	Pharm. D
7.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab (CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab (HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab(BPPK) (3)	Pharm. D
10.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics - III – (PT-III) Lab (3)	Pharm. D

*Avanaji*  
TimeTable Incharge

*Principal*  
Principal

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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

## CLINICAL PHARMACY (THEORY)

**Theory : 3 Hrs. /Week**

### 1. Objectives of the Subject :

Upon completion of the subject student shall be able to (Know, do, appreciate) –

- a. monitor drug therapy of patient through medication chart review and clinical review;
- b. obtain medication history interview and counsel the patients;
- c. identify and resolve drug related problems;
- d. detect, assess and monitor adverse drug reaction;
- e. interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states; and
- f. retrieve, analyse, interpret and formulate drug or medicine information.

### Text books (Theory)

- a. Practice Standards and Definitions - The Society of Hospital Pharmacists of Australia.
- b. Basic skills in interpreting laboratory data - Scott LT, American Society of Health System Pharmacists Inc.
- c. Biopharmaceutics and Applied Pharmacokinetics - Leon Shargel, Prentice Hall publication.
- d. A text book of Clinical Pharmacy Practice; Essential concepts and skills, Dr.G.Parthasarathi etal, Orient Orient Langram Pvt.Ltd. ISSN8125026

### References

- a. Australian drug information -Procedure manual. The Society of Hospital Pharmacists of Australia.
- b. Clinical Pharmacokinetics - Rowland and Tozer, Williams and Wilkins Publication.
- c. Pharmaceutical statistics. Practical and clinical applications. Sanford Bolton, Marcel Dekker, Inc.

### 2. Detailed syllabus and lecture wise schedule:

#### Title of the topic


1. **Definitions, development and scope of clinical pharmacy**
2. **Introduction to daily activities of a clinical pharmacist**
  - a. Drug therapy monitoring (medication chart review, clinical review, pharmacist interventions)
  - b. Ward round participation
  - c. Adverse drug reaction management
  - d. Drug information and poisons information
  - e. Medication history
  - f. Patient counseling
  - g. Drug utilisation evaluation (DUE) and review (DUR)
  - h. Quality assurance of clinical pharmacy services



  
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3. **Patient data analysis**  
The patient's case history, its structure and use in evaluation of drug therapy & Understanding common medical abbreviations and terminologies used in clinical practices.
4. **Clinical laboratory tests used in the evaluation of disease states, and interpretation of test results**
  - a. Haematological, Liver function, Renal function, thyroid function tests
  - b. Tests associated with cardiac disorders
  - c. Fluid and electrolyte balance
  - d. Microbiological culture sensitivity tests
  - e. Pulmonary Function Tests
5. **Drug & Poison information**
  - a. Introduction to drug information resources available
  - b. Systematic approach in answering DI queries
  - c. Critical evaluation of drug information and literature
  - d. Preparation of written and verbal reports
  - e. Establishing a Drug Information Centre
  - f. Poisons information- organization & information resources
6. **Pharmacovigilance**
  - a. Scope, definition and aims of pharmacovigilance
  - b. Adverse drug reactions - Classification, mechanism, predisposing factors, causality assessment [different scales used]
  - c. Reporting, evaluation, monitoring, preventing & management of ADRs
  - d. Role of pharmacist in management of ADR.
7. Communication skills, including patient counselling techniques, medication history interview, presentation of cases.
8. Pharmaceutical care concepts
9. Critical evaluation of biomedical literature
10. Medication errors



  
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CLINICAL PHARMACY				
YEAR: IV PHARM.D				
Week No.	Lecture No.	Topics to be covered	Teaching Aid	Dates
<b>Unit 1</b>		<b>Introduction to clinical pharmacy</b>		
Week 1	L1	Definitions of clinical pharmacy	Chalk and Talk	16-08-2022
	L2	Development of clinical pharmacy	Chalk and Talk	17-08-2022
	L3	Development of clinical pharmacy	Chalk and Talk	22-08-2022
	L4	Scope of clinical pharmacy	Chalk and Talk	23-08-2022
	L5	Scope of clinical pharmacy	Google meet	24-08-2022
<b>Unit 2</b>		<b>Introduction to daily activities of a clinical pharmacist</b>		
	L6	Introduction to daily activities of a clinical pharmacist	Chalk and Talk	29-08-2022
Week 2	L7	Drug therapy monitoring	Chalk and Talk	30-08-2022
	L8	Medication chart review	Chalk and Talk	05-09-2022
	L9	Medication chart review	Power point	06-09-2022
	L10	Clinical review	Chalk and Talk	07-09-2022
	L11	Clinical review	Chalk and Talk	12-09-2022
	L12	Pharmacist interventions	Power point	13-09-2022
Week 3	L13	Pharmacist interventions	Chalk and Talk	14-09-2022
	L14	Ward round participation	Chalk and Talk	19-09-2022
	L15	Ward round participation	LCD	20-09-2022
	L16	Ward round participation	Chalk and Talk	21-09-2022
	L17	Adverse drug reaction management	Chalk and Talk	26-09-2022
	L18	Types of drug management	Power point	27-09-2022
Week 4	L19	Drug information	Chalk and Talk	28-09-2022

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	L20	Poisons information	Chalk and Talk	10-10-2022
	L21	Poisons information	Chalk and Talk	11-10-2022
	L22	Poisons information	LCD	12-10-2022
	L23	Medication history	Chalk and Talk	25-10-2022
	L24	Medication history	Chalk and Talk	26-10-2022
Week 5	L25	Patient counseling	Power point	07-11-2022
	L26	Patient counseling	Chalk and Talk	07-11-2022
	L27	Drug utilisation evaluation	Chalk and Talk	08-11-2022
	L28	Drug utilisation evaluation	Chalk and Talk	08-11-2022
	L29	Drug utilisation evaluation (DUE) and review (DUR)	Power point	09-11-2022
	L30	Drug utilisation evaluation (DUE) and review (DUR)	Chalk and Talk	09-11-2022
Week 6	L31	Drug utilisation evaluation (DUE) and review (DUR)	Chalk and Talk	14-11-2022
	L32	Quality assurance of clinical pharmacy services	Power point	14-11-2022
	L33	Quality assurance of clinical pharmacy services	Chalk and Talk	15-11-2022
	L34	Clinical pharmacy services	Chalk and Talk	15-11-2022
	L35	Clinical pharmacy services	Google meet	16-11-2022
<b>Unit 3</b>	<b>Introduction to Patient data analysis</b>			
	L36	Patient data analysis	Chalk and Talk	16-11-2022
Week 7	L37	The patient's case history, its structure	Power point	21-11-2022
	L38	Use in evaluation of drug therapy	Chalk and Talk	21-11-2022
	L39	Understanding common medical abbreviations	Chalk and Talk	22-11-2022
	L40	Understanding common medical abbreviations	Power point	22-11-2022
	L41	Terminologies used in clinical Practices	Chalk and Talk	23-11-2022



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	L42	Terminologies used in clinical Practices	Google meet	23-11-2022
<b>Unit 4</b>	<b>Introduction to Clinical laboratory tests</b>			
Week 8	L43	Clinical laboratory tests used in the evaluation of disease states	Chalk and Talk	28-11-2022
	L44	Clinical laboratory tests used in the evaluation of disease states	Chalk and Talk	28-11-2022
	L45	Interpretation of test results	Power point	29-11-2022
	L46	Haematological functions tests	Chalk and Talk	29-11-2022
	L47	Liver function tests	Chalk and Talk	30-11-2022
	L48	Liver function tests	Chalk and Talk	30-11-2022
Week 9	L49	Renal function tests	LCD	05-12-2022
	L50	Renal function tests	Chalk and Talk	05-12-2022
	L51	Thyroid function tests	Chalk and Talk	06-12-2022
	L52	Thyroid function tests	Chalk and Talk	06-12-2022
	L53	Tests associated with cardiac disorders	LCD	07-12-2022
	L54	Tests associated with cardiac disorders	Chalk and Talk	07-12-2022
Week 10	L55	Fluid and electrolyte balance	Power point	12-12-2022
	L56	Fluid and electrolyte balance	Chalk and Talk	12-12-2022
	L57	Microbiological culture sensitivity tests	Chalk and Talk	13-12-2022
	L58	Microbiological culture sensitivity tests	Chalk and Talk	13-12-2022
	L59	Microbiological culture sensitivity tests	Chalk and Talk	14-12-2022
	L60	Pulmonary Function Tests	Chalk and Talk	14-12-2022
Week 12	L61	Pulmonary Function Tests	Power point	19-12-2022
	L62	Pulmonary Function Tests	Chalk and Talk	19-12-2022
<b>Unit 5</b>	<b>Introduction to Drug &amp; Poison information</b>			
	L63	Drug & Poison information	Chalk and Talk	20-12-2022

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			Talk	
	L64	Introduction to drug information resources available	Chalk and Talk	20-12-2022
	L65	Introduction to drug information resources available	Chalk and Talk	21-12-2022
	L66	Systematic approach in answering DI queries	Chalk and Talk	21-12-2022
Week 13	L67	Systematic approach in answering DI queries	Google meet	22-12-2022
	L68	Critical evaluation of drug information and literature	Chalk and Talk	22-12-2022
	L69	Critical evaluation of drug information and literature	LCD	26-12-2022
	L70	Critical evaluation of drug information and literature	Chalk and Talk	26-12-2022
	L71	Preparation of written reports	Power point	27-12-2022
	L72	Preparation of written reports	Chalk and Talk	28-12-2022
Week 14	L73	Preparation of written reports	Google meet	28-12-2022
	L74	Verbal reports	Chalk and Talk	02-01-2023
	L75	Establishing a Drug Information Centre	Chalk and Talk	03-01-2023
	L76	Establishing a Drug Information Centre	Chalk and Talk	04-01-2023
	L77	Establishing a Drug Information Centre	Chalk and Talk	09-01-2023
	L78	Establishing a Drug Information Centre	Chalk and Talk	10-01-2023
Week 15	L79	Poisons information	Chalk and Talk	11-01-2023
	L80	Poisons information	Chalk and Talk	30-01-2023
	L81	organization & information resources	Chalk and Talk	31-01-2023
	L82	organization & information resources	Chalk and Talk	01-02-2023
	L83	organization & information resources	Chalk and Talk	06-02-2023
<b>Unit 6</b>	<b>Introduction to Pharmacovigilance</b>			
	L84	Pharmacovigilance	Chalk and Talk	06-02-2023
Week	L85	Scope and definition	Chalk and Talk	07-02-2023

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16			Talk	
	L86	Scope and definition	LCD	07-02-2023
	L87	Aims of pharmacovigilance	Chalk and Talk	08-02-2023
	L88	Aims of pharmacovigilance	Chalk and Talk	08-02-2023
	L89	Adverse drug reactions	Chalk and Talk	13-02-2023
Week 17	L90	Adverse drug reactions	Power point	14-02-2023
	L91	Classification and mechanism	Chalk and Talk	15-02-2023
	L92	Classification and mechanism	Chalk and Talk	20-02-2023
	L93	Classification and mechanism	Chalk and Talk	21-02-2023
	L94	Predisposing factors	Power point	22-02-2023
	L95	Predisposing factors	Chalk and Talk	22-02-2023
Week 18	L96	Causality assessment	Chalk and Talk	27-02-2023
	L97	Causality assessment	Power point	28-02-2023
	L98	Reporting, evaluation	Chalk and Talk	28-02-2023
	L99	Reporting, evaluation	Power point	01-03-2023
	L100	Monitoring, preventing & management of ADRs	Chalk and Talk	06-03-2023
Unit 7	<b>Introduction to Communication skills</b>			
	L101	Monitoring, preventing & management of ADRs	Chalk and Talk	06-03-2023
Week 19	L102	Monitoring, preventing & management of ADRs	Chalk and Talk	13-03-2023
	L103	Communication skills	Chalk and Talk	14-03-2023
	L104	Including patient counselling techniques	Google meet	15-03-2023
	L105	Including patient counselling techniques	Chalk and Talk	15-03-2023
	L106	Medication history interview	Chalk and Talk	20-03-2023
	L107	Presentation of cases	Chalk and	21-03-2023

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			Talk	
<b>Unit 8</b>	<b>Introduction to Pharmaceutical care concepts</b>			
	L108	Pharmaceutical care concepts	Chalk and Talk	22-03-2023
Week 20	L109	Pharmaceutical care concepts	Chalk and Talk	22-03-2023
	L110	Pharmaceutical care concepts	Google meet	27-03-2023
<b>Unit 9</b>	<b>Introduction to Critical evaluation of biomedical literature</b>			
	L111	Critical evaluation of biomedical literature	Chalk and Talk	28-03-2023
	L112	Critical evaluation of biomedical literature	Power point	29-03-2023
	L113	Critical evaluation of biomedical literature	Chalk and Talk	29-03-2023
	L114	Critical evaluation of biomedical literature	Google meet	03-04-2023
<b>Unit 10</b>	<b>Introduction to Medication errors</b>			
Week 21	L115	Medication errors	Chalk and Talk	05-04-2023
	L116	Medication errors	Chalk and Talk	10-04-2023
	L117	Types of Medication errors	Power point	11-04-2023
	L118	Types of Medication errors	Chalk and Talk	12-04-2023
	L119	Management of Medication errors	LCD	13-04-2023
	L120	Management of Medication errors	Chalk and Talk	13-04-2023

  
Signature of the Faculty

  
Principal



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## CLASS TIME TABLE AY: 2021-22

CLASS: I B.Pharm IISem (PCI Regulation)  
SECTION- A (2021 Admitted Batch)

w.e.f: 27/06/2022

CLASS TEACHER: Mrs. L. Divya Sri				Batch A: Roll 01-25			Batch B: Roll 26-55		
DAY/ TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:20	12:00 1:00	1:00 - 1:50	1:50 2:40	2:40 3:30	3:30 – 4:20	
MON	POC-I	PATHO	BIOCHEM	<b>L U N C H</b>	HAP-II	Batch A: POC-I Lab Batch B: BIOCHEM Lab			
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A: BIOCHEM Lab Batch B: POC-II Lab			
WED	HAP-II	CA	PATHO		POC-I	Batch A: HAP-II Lab Batch B :CA Lab			
THU	BIOCHEM	PATHO	CA		TUTORIAL (OC)	Batch A :CA Lab Batch B :HAP-II Lab			
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP- II	TUTORIAL (HAP)	
SAT	CA	BIOCHEM	HAP-II		PATHO	POC-I	ES	L/S	

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAMME
1.	Mrs. B. Poornima	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. Y.Pavani	Assistant Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mr. Vamsi Krishna Yadav	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) (5)	B. Pharm
4.	Mrs. I. Adi Lakshmi	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Mrs. Y. Anveshi Dhananjaya	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. M. Geethanjali	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mrs. B. Poornima	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Lab (6)	B. Pharm
8.	Mrs. Y.Pavani	Assistant Professor	Pharmaceutical Biochemistry Lab (BIOCHEM) (6)	B. Pharm
9.	Mr. Vamsi Krishna Yadav	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. M. Geethanjali	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Mrs. B. Poornima	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Tutorial (1)	B. Pharm
12.	Mr. Vamsi Krishna Yadav	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports (1)	B. Pharm

B. Blogyasei  
Time Table Incharge



  
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## CLASS TIME TABLE AY: 2021-22

CLASS:I B.Pharm IISem (PCI Regulation)  
SECTION- B (2021 Admitted Batch)

w.e.f: 27/06/2022

CLASS TEACHER: Mrs. B. MeherJyotiBatch C:Roll 56-80 Batch D : Roll- 81-A7								
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:2- 12:10	12:1 0 1:00	1:00 – 01:50	1:50- 2:40	2:40- 3:30	3:30 – 4:20
MON	POC-1	HAP-II	BIOCHEM	L U N C H	PATHO	BATCH C-HAP-II LAB BATCH D –CA LAB		
TUE	CA	PATHO	POC-1		HAP-II	BATCH C-CA LAB BATCH D-HAP-II LAB		
WED	PATHO	CA	HAP-II		BIOCHEM	BATCH C-POC1 LAB BATCH D-BIOCHEM LAB		
THU	POC1	BIOCHEM	ES		CA	BATCH C- BIOCHEM LAB BATCH D-POC1 LAB		
FRI	BIOCHEM	POC-1	PATHO		TUTORIAL (HAP)	POC1	ES	(L/S)
SAT	HAP-II	PATIIO	BIOCHEM		ES	CA	HAP- II	TUTORIAL (OC)

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAMME
1.	Mr. A. Naga Srinivas	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. B. Rama Madhuri	Assistant Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mr. B. Yerni Kumar	Assistant Professor	Human Anatomy and Physiology-II (HAP-II)(5)	B. Pharm
4.	Mrs.I. Adi Lakshmi	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Mr. Vinay Ramji	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. B. Aruna	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mr. A. Naga Srinivas	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) Lab (6)	B. Pharm
8.	Mrs. B. Rama Madhuri	Assistant Professor	Pharmaceutical Biochemistry (BIOCHEM) Lab (6)	B. Pharm
9.	Mr. B. Yerni Kumar	Assistant Professor	Human Anatomy and Physiology-II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. B. Aruna	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Mr. A. Naga Srinivas	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)(Tutorial (1)	B. Pharm
12.	Mr. B. Yerni Kumar	Assistant Professor	Human Anatomy and Physiology-II (HAP-II)Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports(1)	B. Pharm

B. Bhargava  
Time Table Incharge



Principal

PRINCIPAL

Avanthi Institute of Pharmaceutical Sciences

Avanthi Institute of Pharmaceutical Sciences  
Cherukupally (V), Bhogapuram Mandal  
Vizianagaram Dt., - 531162

**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>

## BP 206 T. ENVIRONMENTAL SCIENCES (Theory)

30 hours

**Scope:** Environmental Sciences is the scientific study of the environmental system and the status of its inherent or induced changes on organisms. It includes not only the study of physical and biological characters of the environment but also the social and cultural factors and the impact of man on environment.

**Objectives:** Upon completion of the course the student shall be able to:

1. Create the awareness about environmental problems among learners.
2. Impart basic knowledge about the environment and its allied problems.
3. Develop an attitude of concern for the environment.
4. Motivate learner to participate in environment protection and environment improvement.
5. Acquire skills to help the concerned individuals in identifying and solving environmental problems.
6. Strive to attain harmony with Nature

### Course content:

#### Unit-I

10hours

The Multidisciplinary nature of environmental studies

Natural Resources

Renewable and non-renewable resources:

Natural resources and associated problems

a) Forest resources; b) Water resources; c) Mineral resources; d) Food resources; e) Energy resources; f) Land resources: Role of an individual in conservation of natural resources.

#### Unit-II

10hours

Ecosystems

- Concept of an ecosystem.
- Structure and function of an ecosystem.
- Introduction, types, characteristic features, structure and function of the ecosystems: Forest ecosystem; Grassland ecosystem; Desert ecosystem; Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

#### Unit- III

10hours

Environmental Pollution: Air pollution; Water pollution; Soil pollution





**Recommended Books (Latest edition):**

1. Y.K. Sing, Environmental Science, New Age International Pvt, Publishers, Bangalore
2. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
3. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India,
4. Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
5. Clark R.S., Marine Pollution, Clarendon Press Oxford
6. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumbai, 1196p
7. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
8. Down of Earth, Centre for Science and Environment



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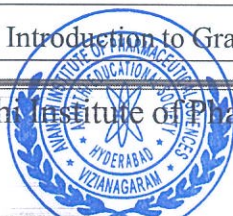
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## B.PHARMACY LECTURE PLAN SECTION-A

<b>COURSE NAME: Environmental Science</b>	<b>COURSE CODE :BP206T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION:PCI</b>

Date	Lecture No.	Topic Name	Source
28-06-2022	Lecture 1	Introduction of all the topics to be covered	Text Book
30-06-2022	Lecture 2	Unit-1 The multidisciplinary nature of Environmental Studies	Text Book
01-07-2022	Lecture 3	Natural Resources	Text Book
02-07-2022	Lecture 4	Renewable Sources	Text Book
02-07-2022	Lecture 5	Non-renewable Resources	Text Book
07-07-2022	Lecture 6	Forest Resources and its associated Problems	Text Book
08-07-2022	Lecture 7	Water Resources and its associated Problems	Text Book
09-07-2022	Lecture 8	Mineral Resources and its associated problems	Text Book
14-07-2022	Lecture 9	Food Resources and its Associated Problems	Text Book
15-07-2022	Lecture 10	Energy Resources and its Associated Problems	Text Book
16-07-2022	Lecture 11	Land Resources and its associated problems	Text Book
21-07-2022	Lecture 12	Role of an individual in conservation of natural Resources	Text Book
22-07-2022	Lecture 13	Unit-2 Ecosystems	Text Book
23-07-2022	Lecture 14	Concept of an Ecosystem	Text Book
28-07-2022	Lecture 15	Structure of an Ecosystem	Text Book
01-08-2022	Lecture 16	Function of an Ecosystem	Text Book
02-08-2022	Lecture 17	Introduction to Ecosystem	Text Book
11-08-2022	Lecture 18	Definition of Ecosystem	Text Book
23-08-2022	Lecture 19	Types of Ecosystem	Text Book
26-08-2022	Lecture 20	Characteristic Features of an Ecosystem	Text Book
27-08-2022	Lecture 21	Introduction to Forest Ecosystem	Text Book
30-08-2022	Lecture 22	Brief view on Forest Ecosystem	Text Book
02-09-2022	Lecture 23	Continuation of Forest Ecosystem	Text Book
03-09-2022	Lecture 24	Introduction to Grassland Ecosystem	Text Book





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06-09-2022	Lecture 25	Brief view on Grassland Ecosystem	Text Book
10-09-2022	Lecture 26	Continuation of Grassland Ecosystem	Text Book
13-09-2022	Lecture 27	Introduction to Desert Ecosystem	Text Book
16-09-2022	Lecture 28	Brief view on Desert Ecosystem	Text Book
17-09-2022	Lecture 29	Continuation of Desert Ecosystem	Text Book
19-09-2022	Lecture 30	Introduction to aquatic Ecosystem	Text Book
23-09-2022	Lecture 31	Aquatic Ecosystem	Text Book
24-09-2022	Lecture 32	Unit-3 Environmental Pollution	Text Book
27-09-2022	Lecture 33	Introduction to Pollution	Text Book
27-09-2022	Lecture 34	Brief view on environmental Pollution	Text Book
30-09-2022	Lecture 35	Air Pollution	Text Book
01-10-2022	Lecture 36	Prevention of Air Pollution	Text Book
04-10-2022	Lecture 37	Water Pollution	Text Book
07-10-2022	Lecture 38	Prevention of Water Pollution	Text Book
08-10-2022	Lecture 39	Soil Pollution & Prevention of Soil Pollution	Text Book
11-10-2022	Lecture 40	Revision	Text Book

*Anveshi*  
Signature of the Faculty



*Principal*  
Principal  
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### B.PHARMACY LECTUREPLAN SECTION-B

<b>COURSENAME: Environmental Science</b>	<b>COURSECODE : BP206T</b>
<b>YEAR/ SEM : I B. Pharm II Sem</b>	<b>REGULATION: PCI</b>

Date	Lecture No.	Topic Name	Source
28-06-2022	Lecture 1	Introduction of all the topics to be covered	Text Book
30-06-2022	Lecture 2	Unit-1 The multidisciplinary nature of Environmental Studies	Text Book
01-07-2022	Lecture 3	Natural Resources	Text Book
02-07-2022	Lecture 4	Renewable Resources Non-renewable Resources	Text Book
02-07-2022	Lecture 5	Non-renewable Resources	Text Book
07-07-2022	Lecture 6	Forest Resources and its associated Problems	Text Book
08-07-2022	Lecture 7	Water Resources and its associated Problems	Text Book
09-07-2022	Lecture 8	Mineral Resources and its associated problems	Text Book
14-07-2022	Lecture 9	Food Resources and its associated Problems	Text Book
15-07-2022	Lecture 10	Energy Resources and its associated Problems	Text Book
16-07-2022	Lecture 11	Land Resources and its associated problems	Text Book
21-07-2022	Lecture 12	Role of an individual in conservation of natural resources	Text Book
22-07-2022	Lecture 13	Unit-2 Ecosystems	Text Book
23-07-2022	Lecture 14	Concept of an Ecosystem	Text Book
30-07-2022	Lecture 15	Structure of an Ecosystem	Text Book
01-08-2022	Lecture 16	Function of an Ecosystem	Text Book
02-08-2022	Lecture 17	Introduction to Ecosystem	Text Book
04-08-2022	Lecture 18	Definition of Ecosystem	Text Book
05-08-2022	Lecture 19	Types of Ecosystem	Text Book
06-08-2022	Lecture 20	Characteristic Features of an Ecosystem	Text Book
11-08-2022	Lecture 21	Introduction to Forest Ecosystem	Text Book
12-08-2022	Lecture 22	Brief view on Forest Ecosystem	Text Book

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13-08-2022	Lecture 23	Continuation of Forest Ecosystem	Text Book
25-08-2022	Lecture 24	Introduction to Grassland Ecosystem	Text Book
26-08-2022	Lecture 25	Brief view on Grassland Ecosystem	Text Book
01-09-2022	Lecture 26	Continuation of Grassland Ecosystem	Text Book
02-09-2022	Lecture 27	Introduction to Desert Ecosystem	Text Book
03-09-2022	Lecture 28	Brief view on Desert Ecosystem	Text Book
09-09-2022	Lecture 29	Continuation of Desert Ecosystem	Text Book
10-09-2022	Lecture 30	Introduction to aquatic Ecosystem	Text Book
15-09-2022	Lecture 31	Aquatic Ecosystem	Text Book
16-09-2022	Lecture 32	Unit - 3 Environmental Pollution	Text Book
17-09-2022	Lecture 33	Introduction to Pollution	Text Book
22-09-2022	Lecture 34	Brief view on environmental Pollution	Text Book
23-09-2022	Lecture 35	Air Pollution	Text Book
24-09-2022	Lecture 36	Prevention of Air Pollution	Text Book
30-09-2022	Lecture 37	Water Pollution	Text Book
01-10-2022	Lecture 38	Prevention of Water Pollution	Text Book
06-10-2022	Lecture 39	Soil Pollution	Text Book
07-10-2022	Lecture 40	Prevention of Soil Pollution	Text Book

Signature of the Faculty



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## CLASS TIME TABLE AY: 2021-22

CLASS: I B.Pharm IISem (PCI Regulation)  
SECTION- A (2021 Admitted Batch)

w.e.f: 27/06/2022

CLASS TEACHER: Mrs. L. Divya Sri				Batch A: Roll 01-25		Batch B: Roll 26-55		
DAY/ TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:20	12:00 1:00	1:00 - 1:50	1:50 2:40	2:40 3:30	3:30 – 4:20
MON	POC-I	PATHO	BIOCHEM	<b>L U N C H</b>	HAP-II	Batch A: POC-I Lab Batch B: BIOCHEM Lab		
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A: BIOCHEM Lab Batch B: POC-II Lab		
WED	HAP-II	CA	PATHO		POC-I	Batch A: HAP-II Lab Batch B: CA Lab		
THU	BIOCHEM	PATHO	CA		TUTORIAL (OC)	Batch A: CA Lab Batch B: HAP-II Lab		
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP-II	TUTORIAL (HAP)
SAT	CA	BIOCHEM	HAP-II		PATHO	POC-I	ES	L/S

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAMME
1.	Mrs. B. Poornima	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. Y.Pavani	Assistant Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mr. Vamsi Krishna Yadav	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) (5)	B. Pharm
4.	Mrs. I. Adi Lakshmi	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Mrs. Y. Anveshi Dhananjaya	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. M. Geethanjali	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mrs. B. Poornima	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Lab (6)	B. Pharm
8.	Mrs. Y.Pavani	Assistant Professor	Pharmaceutical Biochemistry Lab (BIOCHEM) (6)	B. Pharm
9.	Mr. Vamsi Krishna Yadav	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. M. Geethanjali	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Mrs. B. Poornima	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Tutorial (1)	B. Pharm
12.	Mr. Vamsi Krishna Yadav	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports (1)	B. Pharm

*B. Bhogpati*  
Time Table Incharge



*[Signature]*  
Principal  
PRINCIPAL

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## CLASS TIME TABLE AY: 2021-22

CLASS:I B.Pharm IISem (PCI Regulation)  
SECTION- B (2021 Admitted Batch)

w.e.f: 27/06/2022

CLASS TEACHER: Mrs. B. MeherJyotiBatch C:Roll 56-80 Batch D : Roll- 81-A7								
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:2- 12:10	12:1 0 1:00	1:00 – 01:50	1:50- 2:40	2:40- 3:30	3:30 – 4:20
MON	POC-1	HAP-II	BIOCHEM	L U N C H	PATHO	BATCH C-HAP-II LAB BATCH D –CA LAB		
TUE	CA	PATHO	POC-1		HAP-II	BATCH C-CA LAB BATCH D-HAP-II LAB		
WED	PATHO	CA	HAP-II		BIOCHEM	BATCH C-POC1 LAB BATCH D-BIOCHEM LAB		
THU	POC1	BIOCHEM	ES		CA	BATCH C- BIOCHEM LAB BATCH D-POC1 LAB		
FRI	BIOCHEM	POC-1	PATHO		TUTORIAL (HAP)	POC1	ES	(L/S)
SAT	HAP II	PATHO	BIOCHEM		ES	CA	HAP- II	TUTORIAL (OC)

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAMME
1.	Mr. A. Naga Srinivas	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. B. Rama Madhuri	Assistant Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mr. B. Yerni Kumar	Assistant Professor	Human Anatomy and Physiology-II (HAP-II)(5)	B. Pharm
4.	Mrs.I. Adi Lakshmi	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Mr. Vinay Ramji	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. B. Aruna	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mr. A. Naga Srinivas	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) Lab (6)	B. Pharm
8.	Mrs. B. Rama Madhuri	Assistant Professor	Pharmaceutical Biochemistry (BIOCHEM) Lab (6)	B. Pharm
9.	Mr. B. Yerni Kumar	Assistant Professor	Human Anatomy and Physiology-II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. B. Aruna	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Mr. A. Naga Srinivas	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)(Tutorial (1)	B. Pharm
12.	Mr. B. Yerni Kumar	Assistant Professor	Human Anatomy and Physiology-II (HAP-II)Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports(1)	B. Pharm

B. Bhogipsa  
Time Table Incharge



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**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>



## BP 201T. HUMAN ANATOMY AND PHYSIOLOGY-II (Theory)

45 Hours

**Scope:** This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It also helps in understanding both homeostatic mechanisms. The subject provides the basic knowledge required to understand the various disciplines of pharmacy.

**Objectives:** Upon completion of this course the student should be able to:

1. Explain the gross morphology, structure and functions of various organs of the human body.
2. Describe the various homeostatic mechanisms and their imbalances.
3. Identify the various tissues and organs of different systems of human body.
4. Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume.
5. Appreciate coordinated working pattern of different organs of each system
6. Appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body.

### Course Content:

#### Unit I

10 hours

- **Nervous system**

Organization of nervous system, neuron, neuroglia, classification and properties of nerve fibre, electrophysiology, action potential, nerve impulse, receptors, synapse, neurotransmitters.

Central nervous system: Meninges, ventricles of brain and cerebrospinal fluid. structure and functions of brain (cerebrum, brain stem, cerebellum), spinal cord (gross structure, functions of afferent and efferent nerve tracts, reflex activity)

#### Unit II

06 hours

- **Digestive system**

Anatomy of GI Tract with special reference to anatomy and functions of stomach, ( Acid production in the stomach, regulation of acid production through parasympathetic nervous system, pepsin role in protein digestion) small intestine



  
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and large intestine, anatomy and functions of salivary glands, pancreas and liver, movements of GIT, digestion and absorption of nutrients and disorders of GIT.

- **Energetics**

Formation and role of ATP, Creatinine Phosphate and BMR.

### Unit III

- **Respiratory system**

**10 hours**

Anatomy of respiratory system with special reference to anatomy of lungs, mechanism of respiration, regulation of respiration

Lung Volumes and capacities transport of respiratory gases, artificial respiration, and resuscitation methods.

- **Urinary system**

Anatomy of urinary tract with special reference to anatomy of kidney and nephrons, functions of kidney and urinary tract, physiology of urine formation, micturition reflex and role of kidneys in acid base balance, role of RAS in kidney and disorders of kidney.

### Unit IV

**10 hours**

- **Endocrine system**

Classification of hormones, mechanism of hormone action, structure and functions of pituitary gland, thyroid gland, parathyroid gland, adrenal gland, pancreas, pineal gland, thymus and their disorders.

### Unit V

**09 hours**

- **Reproductive system**

Anatomy of male and female reproductive system, Functions of male and female reproductive system, sex hormones, physiology of menstruation, fertilization, spermatogenesis, oogenesis, pregnancy and parturition

- **Introduction to genetics**

Chromosomes, genes and DNA, protein synthesis, genetic pattern of inheritance



  
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### B.PHARMACY LECTUREPLAN SECTION-A

<b>COURSE NAME:</b> Human Anatomy & Physiology - II	<b>COURSECODE :</b> BP201T
<b>YEAR/ SEM:</b> I B. Pharm II Sem	<b>REGULATION:</b> PCI

Date	Lecture No.	Topic Name	Source
27-06-2022	Lecture 1	Introduction of all the topics to be covered	Text Book
28-06-2022	Lecture 2	Unit-1 Nervous System	Text Book
29-06-2022	Lecture 3	Organization of nervous system	Text Book
01-07-2022	Lecture 4	Structure & Function of neuron	Text Book
02-07-2022	Lecture 5	Neuroglial Cells	Text Book
04-07-2022	Lecture 6	Classification and properties of nerve fibre	Text Book
05-07-2022	Lecture 7	Electrophysiology & Action potential	Text Book
06-07-2022	Lecture 8	Nerve impulse & Receptors	Text Book
08-07-2022	Lecture 9	Synapse & Neurotransmitters	Text Book
09-07-2022	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
11-07-2022	Lecture 11	Cerebrospinal fluid	Text Book
12-07-2022	Lecture 12	structure and functions of brain (cerebrum) brain stem, and cerebellum)	Text Book
13-07-2022	Lecture 13	structure and functions of brain stem	Text Book
15-07-2022	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
16-07-2022	Lecture 15	Structure of spinal cord	Text Book
18-07-2022	Lecture 16	Functions of afferent and efferent nerve tracts, reflex activity.	Text Book
19-07-2022	Lecture 17	Unit-2 Digestive System	Text Book
20-07-2022	Lecture 18	Anatomy of GI Tract	Text Book
22-07-2022	Lecture 19	Functions of stomach	Text Book
23-07-2022	Lecture 20	Acid production in the stomach	Text Book
25-07-2022	Lecture 21	Regulation of acid production through parasympathetic nervous system	Text Book
26-07-2022	Lecture 22	Pepsin role in protein digestion	Text Book

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27-07-2022	Lecture 23	Small intestine	Text Book
28-07-2022	Lecture 24	Large intestine	Text Book
29-07-2022	Lecture 25	Anatomy& Functions of salivary glands	Text Book
30-07-2022	Lecture 26	Anatomy& Functions of pancreas	Text Book
01-08-2022	Lecture 27	Anatomy& Functions of Liver	Text Book
02-08-2022	Lecture 28	Movements of GIT	Text Book
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06-08-2022	Lecture 31	Formation and role of ATP, Creatinine Phosphate and BMR.	Text Book
08-08-2022	Lecture 32	Unit- 3 Respiratory System	Text Book
10-08-2022	Lecture 33	Anatomy of Respiratory system with reference to lungs	Text Book
11-08-2022	Lecture 34	Mechanism of respiration	Text Book
12-08-2022	Lecture 35	Regulation of respiration	Text Book
13-08-2022	Lecture 36	Lung Volumes and capacities	Text Book
16-08-2022	Lecture 37	Transport of respiratory gases	Text Book
17-08-2022	Lecture 38	Artificial respiration	Text Book
19-08-2022	Lecture 39	Resuscitation methods	Text Book
20-08-2022	Lecture 40	Urinary system	Text Book
22-08-2022	Lecture 41	Anatomy of urinary tract with reference to anatomy of kidney	Text Book
23-08-2022	Lecture 42	Structure & Functions of Nephrons	Text Book
24-08-2022	Lecture 43	Functions of kidney and Urinary tract	Text Book
25-08-2022	Lecture 44	Physiology of Urine formation	Text Book
26-08-2022	Lecture 45	Micturition reflex & Role of kidneys in acid base balance	Text Book
27-08-2022	Lecture 46	Role of RAS in kidney	Text Book
29-08-2022	Lecture 47	Disorders of kidney.	Text Book
30-08-2022	Lecture 48	Unit-4 Endocrine system	Text Book
01-09-2022	Lecture 49	Classification of hormones	Text Book
02-09-2022	Lecture 50	Mechanism of hormone action	Text Book

Vamsi

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### B.PHARMACY LECTUREPLAN SECTION-B

<b>COURSE NAME: Human Anatomy &amp; Physiology - II</b>	<b>COURSECODE : BP201T</b>
<b>YEAR/ SEM : I B. Pharm II Sem</b>	<b>REGULATION : PCI</b>

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25-07-2022	Lecture 22	Pepsin role in protein digestion	Text Book
26-07-2022	Lecture 23	Small intestine	Text Book
27-07-2022	Lecture 24	Large intestine	Text Book
29-07-2022	Lecture 25	Anatomy& Functions of salivary glands	Text Book
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05-09-2022	Lecture 48	Unit-4 Endocrine system	Text Book
06-09-2022	Lecture 49	Classification of hormones	Text Book

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07-09-2022	Lecture 50	Mechanism of hormone action	Text Book
10-09-2022	Lecture 51	Structure and Functions of Pituitary gland	Text Book
12-09-2022	Lecture 52	Structure and Functions of Thyroid gland	Text Book
13-09-2022	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
14-09-2022	Lecture 54	Structure and Functions of Adrenal gland	Text Book
16-09-2022	Lecture 55	Structure and Functions of Pancreas	Text Book
17-09-2022	Lecture 56	Structure and Functions of Pineal gland	Text Book
17-09-2022	Lecture 57	Thymus and their disorders	Text Book
19-09-2022	Lecture 58	Unit-5 Reproductive system	Text Book
20-09-2022	Lecture 59	Anatomy of male and female reproductive system	Text Book
21-09-2022	Lecture 60	Functions of male and female reproductive system	Text Book
21-09-2022	Lecture 61	Sex hormones	Text Book
01-10-2022	Lecture 62	Physiology of Menstruation	Text Book
07-10-2022	Lecture 63	Fertilization & Spermatogenesis	Text Book
08-10-2022	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
10-10-2022	Lecture 65	Chromosomes & genes & DNA	Text Book
13-10-2022	Lecture 66	Protein Synthesis	Text Book
15-10-2022	Lecture 67	Genetic pattern of inheritance	Text Book

  
Signature of the Faculty



  
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## CLASS TIME TABLE AY: 2021-22

**CLASS: III B.Pharm I Sem (PCI Regulation)**  
**SECTION – A (2019 Admitted Batch)**

w.e.f: 02/11/2021

CLASS TEACHER – Dr.M.Sowmya				Batch A: Roll 01-25			Batch B: Roll 26 - 50		
DAY/TIME	9:30 - 10:30	10:30 – 11:20	11:20 – 12:10	12:10 -1:00	1:00 – 01:50	1:50 2:40	2:40 – 3:30	3:30 – 4:20	
MON	MC-II	COLOGY-II	IP-I	<b>L U N C H</b>	COGNOSY - II	BATCH A - IP-I LAB BATCH B - COLOGY-II LAB			
TUE	PJ	MC-II	COLOGY-II		TUTORIAL (IP-I)	BATCH A - COLOGY-II LAB BATCH B - IP-I LAB			
WED	IP-I	COGNOSY - II	MC-II		COLOGY - II	BATCH A – LIBRARY/SPORTS BATCH B – COGNOSY - II LAB			
THU	PJ	COLOGY-II	COGNOSY - II		IP-I	BATCH A – COGNOSY - II LAB BATCH B – LIBRARY/SPORTS			
FRI	COLOGY-II	COGNOSY - II	PJ		MC-II	PJ	TUTORIAL (MC-II)	LIBRARY/SPORTS	
SAT	COGNOSY - II	MC-II	PJ		IP-I	STI	TUTORIAL (COL)	LIBRARY /SPORTS	

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	PROGRAMME
1.	Dr. M.Sowmya	Associate Professor	Medicinal Chemistry – II (MC-II) (5)	B. Pharm
2.	Mrs. Y. Anveshi Dhananjaya	Assistant Professor	Pharmacology (COLOGY-II) (5)	B. Pharm
3.	Mr.K.B.K.Raju	Assistant Professor	Industrial Pharmacy – I (IP-I) (4)	B. Pharm
4.	Mr. A. Nanaji	Associate Professor	Pharmacognosy – II (5)	B. Pharm
5.	Mrs. M. Geethanjali	Assistant Professor	Pharmaceutical Jurisprudence (PJ) (5)	B. Pharm
6.	Mrs. Y. Anveshi Dhananjaya	Assistant Professor	Pharmacology Lab (6)	B. Pharm
7.	Mr.K.B.K.Raju	Assistant Professor	Industrial Pharmacy – I Lab (6)	B. Pharm
8.	Mr. A. Nanaji	Associate Professor	Pharmacognosy – II (COGNOSY-II) Lab (6)	B. Pharm
10.	Mrs. Y. Anveshi Dhananjaya	Assistant Professor	Pharmacology (COLOGY-II) Tutorial (1)	B. Pharm
11.	Mr.K.B.K.Raju	Assistant Professor	Industrial Pharmacy – I (IP-I) Tutorial (1)	B. Pharm
12.	Dr. M.Sowmya	Associate Professor	Student Teacher Interaction (STI) (1)	B. Pharm
13.	Mr. R.Ramana	Librarian	Library (2)	B. Pharm
14.	Mr. D.Koteswara Rao	Physical Director	Sports (2)	B. Pharm

*B. Bhagyeswari*  
Time Table Incharge



*[Signature]*  
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## CLASS TIME TABLE AY: 2021-22

**CLASS: III B.Pharm I Sem (PCI Regulation)**

**SECTION – B (2019 Admitted Batch)**

**w.e.f: 02/11/2021**

Class Teacher – Mrs. L. Divya Sri				Batch C: Roll 51-75			Batch D: Roll 76-A3	
DAY/ TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:10	12:10 -1:00	1:00 – 01:50	1:50– 2:40	2:40 – 3:30	3:30 – 4:20
MON	IP-I	COGNOSY - II	MC-II	<b>L U N C H</b>	COLOGY-II	BATCH C – COGNOSY - II LAB BATCH D – LIBRARY/SPORTS		
TUE	COLOGY-II	COGNOSY - II	PJ		MC-II	BATCH C – LIBRARY/SPORTS BATCH D – COGNOSY - II LAB		
WED	MC-II	COLOGY- II	IP-I		TUTORIAL (COLOGY)	BATCH C - IP-I LAB BATCH D - COLOGY LAB		
THU	COGNOSY - II	MC-II	IP-I		PJ	BATCH C - COLOGY LAB BATCH D - IP-I LAB		
FRI	PJ	MC-II	COLOGY- II		COGNOSY - II	IP-I	TUTORIAL (IP-I)	LIBRARY/ SPORTS
SAT	PJ	IP-I	COGNOSY - II		COLOGY-II	PJ	STI	TUTORIAL (MC-II)

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	DEPARTMENT
1.	Dr. M. Sowmya	Associate Professor	Medicinal Chemistry – II (MC-II) (5)	B. Pharm
2.	Mr. Vinay Ramji	Assistant Professor	Pharmacology-II (COLOGY-II) (5)	B. Pharm
3.	Mrs. L. Divya Sri	Associate Professor	Industrial Pharmacy – I (IP-I) (5)	B. Pharm
4.	Mrs. B. Poornima	Associate Professor	Pharmacognosy – II (COGNOSY-II) (5)	B. Pharm
5.	Mrs. K. Venkata Radhika	Associate Professor	Pharmaceutical Jurisprudence (PJ) (5)	B. Pharm
6.	Mr. Vinay Ramji	Assistant Professor	Pharmacology (COLOGY-II) Lab (6)	B. Pharm
7.	Mrs. L. Divya Sri	Associate Professor	Industrial Pharmacy – I (IP-I) Lab (6)	B. Pharm
8.	Mrs. B. Poornima	Associate Professor	Pharmacognosy – II (COGNOSY-II) Lab (6)	B. Pharm
9.	Mrs. M. Sowmya	Associate Professor	Medicinal Chemistry – II (MC-II) Tutorial(1)	B. Pharm
10.	Mr. Vinay Ramji	Assistant Professor	Pharmacology Tutorial (1)	B. Pharm
11.	Mrs. L. Divya Sri	Associate Professor	Industrial Pharmacy – I (IP-I) Tutorial (1)	B. Pharm
12.	Mrs. L. Divya Sri	Associate Professor	Student Teacher Interaction (STI) (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr.D.Koteswara Rao	Physical Director	Sports (1)	B. Pharm

**B. Bhagyalaxmi**  
Time Table Incharge



**Principal**

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**Table-IV: Course of study for semester IV**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP401T	Pharmaceutical Organic Chemistry III– Theory	3	1	4
BP402T	Medicinal Chemistry I – Theory	3	1	4
BP403T	Physical Pharmaceutics II – Theory	3	1	4
BP404T	Pharmacology I – Theory	3	1	4
BP405T	Pharmacognosy and Phytochemistry I– Theory	3	1	4
BP406P	Medicinal Chemistry I – Practical	4	-	2
BP407P	Physical Pharmaceutics II – Practical	4		2
BP408P	Pharmacology I – Practical	4	-	2
BP409P	Pharmacognosy and Phytochemistry I – Practical	4	-	2
<b>Total</b>		<b>31</b>	<b>5</b>	<b>28</b>

**Table-V: Course of study for semester V**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP501T	Medicinal Chemistry II – Theory	3	1	4
BP502T	Industrial PharmacyI– Theory	3	1	4
BP503T	Pharmacology II – Theory	3	1	4
BP504T	Pharmacognosy and Phytochemistry II– Theory	3	1	4
BP505T	Pharmaceutical Jurisprudence – Theory	3	1	4
BP506P	Industrial PharmacyI – Practical	4	-	2
BP507P	Pharmacology II – Practical	4	-	2
BP508P	Pharmacognosy and Phytochemistry II – Practical	4	-	2
<b>Total</b>		<b>27</b>	<b>5</b>	<b>26</b>

## BP 505 T. PHARMACEUTICAL JURISPRUDENCE (Theory)

45 Hours

**Scope:** This course is designed to impart basic knowledge on important legislations related to the profession of pharmacy in India.

**Objectives:** Upon completion of the course, the student shall be able to understand:

1. The Pharmaceutical legislations and their implications in the development and marketing of pharmaceuticals.
2. Various Indian pharmaceutical Acts and Laws
3. The regulatory authorities and agencies governing the manufacture and sale of pharmaceuticals
4. The code of ethics during the pharmaceutical practice

### Course Content:

#### UNIT-I

10 Hours

##### Drugs and Cosmetics Act, 1940 and its rules 1945:

Objectives, Definitions, Legal definitions of schedules to the Act and Rules

Import of drugs – Classes of drugs and cosmetics prohibited from import, Import under license or permit. Offences and penalties.

Manufacture of drugs – Prohibition of manufacture and sale of certain drugs,

Conditions for grant of license and conditions of license for manufacture of drugs, Manufacture of drugs for test, examination and analysis, manufacture of new drug, loan license and repacking license.

#### UNIT-II

10 Hours

##### Drugs and Cosmetics Act, 1940 and its rules 1945.

Detailed study of Schedule G, H, M, N, P,T,U, V, X, Y, Part XII B, Sch F & DMR (OA)

Sale of Drugs – Wholesale, Retail sale and Restricted license. Offences and penalties

Labeling & Packing of drugs- General labeling requirements and specimen labels for drugs and cosmetics, List of permitted colors. Offences and penalties.

Administration of the Act and Rules – Drugs Technical Advisory Board, Central drugs Laboratory, Drugs Consultative Committee, Government drug analysts, Licensing authorities, controlling authorities, Drugs Inspectors

#### UNIT-III

10 Hours

- **Pharmacy Act –1948:** Objectives, Definitions, Pharmacy Council of India; its constitution and functions, Education Regulations, State and Joint state pharmacy councils; constitution and functions, Registration of Pharmacists, Offences and



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#### Penalties

- **Medicinal and Toilet Preparation Act –1955:** Objectives, Definitions, Licensing, Manufacture In bond and Outside bond, Export of alcoholic preparations, Manufacture of Ayurvedic, Homeopathic, Patent & Proprietary Preparations. Offences and Penalties.
- **Narcotic Drugs and Psychotropic substances Act-1985 and Rules:** Objectives, Definitions, Authorities and Officers, Constitution and Functions of narcotic & Psychotropic Consultative Committee, National Fund for Controlling the Drug Abuse, Prohibition, Control and Regulation, opium poppy cultivation and production of poppy straw, manufacture, sale and export of opium, Offences and Penalties

#### UNIT-IV

08 Hours

- **Study of Salient Features of Drugs and Magic Remedies Act and its rules:** Objectives, Definitions, Prohibition of certain advertisements, Classes of Exempted advertisements, Offences and Penalties
- **Prevention of Cruelty to animals Act-1960:** Objectives, Definitions, Institutional Animal Ethics Committee, CPCSEA guidelines for Breeding and Stocking of Animals, Performance of Experiments, Transfer and acquisition of animals for experiment, Records, Power to suspend or revoke registration, Offences and Penalties
- **National Pharmaceutical Pricing Authority:** Drugs Price Control Order (DPCO)-2013. Objectives, Definitions, Sale prices of bulk drugs, Retail price of formulations, Retail price and ceiling price of scheduled formulations, National List of Essential Medicines (NLEM)

#### UNIT-V


07 Hours

- **Pharmaceutical Legislations** – A brief review, Introduction, Study of drugs enquiry committee, Health survey and development committee, Hathi committee and Mudaliar committee
- **Code of Pharmaceutical ethics** Definition, Pharmacist in relation to his job, trade, medical profession and his profession, Pharmacist's oath
- **Medical Termination of Pregnancy Act**
- **Right to Information Act**
- **Introduction to Intellectual Property Rights (IPR)**

#### Recommended books: (Latest Edition)

1. Forensic Pharmacy by B. Suresh



  
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2. Text book of Forensic Pharmacy by B.M. Mithal
3. Hand book of drug law-by M.L. Mehra
4. A text book of Forensic Pharmacy by N.K. Jain
5. Drugs and Cosmetics Act/Rules by Govt. of India publications.
6. Medicinal and Toilet preparations act 1955 by Govt. of India publications.
7. Narcotic drugs and psychotropic substances act by Govt. of India publications
8. Drugs and Magic Remedies act by Govt. of India publication
9. Bare Acts of the said laws published by Government. Reference books (Theory)



  
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### B.PHARMACY

### LECTUREPLAN

### SECTION-A

<b>COURSENAME:</b> Pharmaceutical Jurisprudence	<b>COURSECODE :</b> BP505T
<b>YEAR/SEM:</b> III B. Pharm I Sem	<b>REGULATION:</b> PCI

Date	Lecture No.	Topic Name	Source
02-11-2021	Lecture 1	Introduction of all the topics to be covered	Text Book
04-11-2021	Lecture 2	Unit-1 Drug & Cosmetic Act-1940&Its Rules 1945: Objectives.	Text Book
05-11-2021	Lecture 3	D&C Act-Definitions and Legal definitions.	Text Book
06-11-2021	Lecture 4	Import of drugs-Classes of drugs & cosmetics prohibited from import.	Text Book
09-11-2021	Lecture 5	Import under License or permit.	Text Book
11-11-2021	Lecture 6	Offences and penalties.	Text Book
12-11-2021	Lecture 7	Manufacture of drugs- Prohibition of Manufacture & Sale of certain drugs.	Text Book
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19-11-2021	Lecture 13	Study of schedules P,T,U,V,X,Y	Text Book
20-11-2021	Lecture 14	Study of Part XIIB Schiff & DMR(OA)	Text Book
23-11-2021	Lecture 15	Sale of drugs -Wholesale ;Retail Drugs	Text Book
23-11-2021	Lecture 16	Restricted License & offences and penalties	Text Book
25-11-2021	Lecture 17	Labeling & Packaging of drugs- General labeling requirements	Text Book
25-11-2021	Lecture 18	Specimen labels for drugs and cosmetics	Text Book
26-11-2021	Lecture 19	List of permitted colors , offences & penalties	Text Book
26-11-2021	Lecture 20	Administration of the act and rules-Drug Technical Advisory Board	Text Book
27-11-2021	Lecture 21	Central drug laboratory; drug consultative committee; Licensing authorities	Text Book

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30-11-2021	Lecture 22	Government drug Analysts, controlling authorities ,Drug inspectors	Text Book
30-11-2021	Lecture 23	Unit3:PharmacyAct1948: Objectives, definitions.	Text Book
02-12-2021	Lecture 24	Pharmacy council of India–constitution& functions; Education regulations	Text Book
03-12-2021	Lecture 25	State and Joint state pharmacy councils-constitution and functions	Text Book
03-12-2021	Lecture 26	Registration of Pharmacists; offences and penalties	Text Book
04-12-2021	Lecture 27	Medicinal&ToiletPreparationAct-1955:Objectives, definitions Licensing	Text Book
04-12-2021	Lecture 28	Manufacture inbound and outside bond &Export of alcoholic preparations	Text Book
07-12-2021	Lecture 29	Manufacture of Ayurvedic	Text Book
09-12-2021	Lecture 30	Manufacture of Homeopathic	Text Book
09-12-2021	Lecture 31	Patent &proprietary preparations &offences and penalties	Text Book
10-12-2021	Lecture 32	Narcotic drugs &Psychotropic substances act -1985 and rules: Introduction	Text Book
10-12-2021	Lecture 33	Objectives ;definitions	Text Book
11-12-2021	Lecture 34	authorities; officers	Text Book
11-12-2021	Lecture 35	Constitution of narcotic &psychotropic consultative committee	Text Book
12-12-2021	Lecture 36	Functions of narcotic& psychotropic consultative committee	Text Book
12-12-2021	Lecture 37	National fund for controlling the drug abuse	Text Book
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17-12-2021	Lecture 41	Manufacture of opium	Text Book
17-12-2021	Lecture 42	Sale and export of opium; offences and penalties	Text Book
18-12-2021	Lecture 43	Unit:4 – Drug &Magic remedies act-Introduction	Text Book
18-12-2021	Lecture 44	Drug &Magic remedies act-Objectives; definitions	Text Book
19-12-2021	Lecture 45	Prohibition of certain advertisements	Text Book
21-12-2021	Lecture 46	Classes of exempted advertisements; offences &penalties	Text Book
21-12-2021	Lecture 47	Prevention of cruelty to animalsact-1960:Objectives; definitions	Text Book



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23-12-2021	Lecture 48	IAEC	Text Book
23-12-2021	Lecture 49	CPCSEA	Text Book
24-12-2021	Lecture 50	Guidelines for breeding & stocking of animals	Text Book
24-12-2021	Lecture 51	Performance of experiments	Text Book
28-12-2021	Lecture 52	Transfer and acquisition of animals for experiment	Text Book
30-12-2021	Lecture 53	Record for experiments on animals	Text Book
31-12-2021	Lecture 54	Power to suspend or revoke registrations; offences penalties	Text Book
02-01-2022	Lecture 55	National Pharmaceutical Pricing authority: DPCO 2013	Text Book
02-01-2022	Lecture 56	DPCO 2013-Objectives	Text Book
04-01-2022	Lecture 57	DPCO 2013-definitions	Text Book
04-01-2022	Lecture 58	Sale prices of bulk drugs	Text Book
05-01-2022	Lecture 59	Retail price of formulations;	Text Book
05-01-2022	Lecture 60	Retail price of scheduled formulations	Text Book
08-01-2022	Lecture 61	Ceiling price of scheduled formulations	Text Book

*M. Geethajay*  
Signature of the Faculty



*Principal*  
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### B.PHARMACY LECTUREPLAN SECTION-B

<b>COURSENAME:</b> Pharmaceutical Jurisprudence	<b>COURSECODE :BP505T</b>
<b>YEAR/ SEM: III B. Pharm-I-Sem</b>	<b>REGULATION:PCI</b>

Date	Lecture No.	Topic Name	Source
02-11-2021	Lecture 1	<b>Introduction of all the topics to be covered</b>	Text Book
04-11-2021	Lecture 2	<b>Unit-1 Drug &amp; Cosmetic Act-1940 &amp; Its Rules 1945: Objectives.</b>	Text Book
05-11-2021	Lecture 3	D&C Act-Definitions and Legal definitions.	Text Book
06-11-2021	Lecture 4	Import of drugs-Classes of drugs & cosmetics Prohibited from import.	Text Book
09-11-2021	Lecture 5	Import under License or permit.	Text Book
11-11-2021	Lecture 6	Offences and penalties.	Text Book
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		Committee ;Licensing authorities	
25-08-2022	Lecture 22	Government drug Analysts, controlling authorities, Drug inspectors	Text Book
26-08-2022	Lecture 23	<b>Unit 3: Pharmacy Act1948:</b> Objectives, definitions.	Text Book
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14-10-2022	Lecture 47	Prevention of cruelty to animal act-1960: Objectives; definitions	Text Book
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18-10-2022	Lecture 49	CPCSEA	Text Book
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04-11-2022	Lecture 61	Ceiling price of scheduled formulations	Text Book
04-11-2022	Lecture 62	NLEM	Text Book
05-11-2022	Lecture 63	Unit-5: Pharmaceutical Legislation-Introduction	Text Book
10-11-2022	Lecture 64	Brief review on Legislation	Text Book
11-11-2022	Lecture 65	Introduction of DEC	Text Book
11-11-2022	Lecture 66	Study of DEC	Text Book
12-11-2022	Lecture 67	Introduction of Health survey & Development Committee	Text Book
15-11-2022	Lecture 68	Study of Health survey & Development Committee	Text Book
17-11-2022	Lecture 69	Hathi committee	Text Book
18-11-2022	Lecture 70	Mudaliar committee	Text Book
18-11-2022	Lecture 71	Code of Pharmaceutical ethics Definition	Text Book
19-11-2022	Lecture 72	Pharmacist in relation to his job; trade	Text Book
22-11-2022	Lecture 73	Pharmacist in relation to his job; medical profession; Pharmacist oath	Text Book



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25-11-2022	Lecture 74	Introduction to MTP act& Medical termination of pregnancy act	Text Book
26-11-2022	Lecture 75	Right to information act	Text Book
26-11-2022	Lecture 76	Introduction to IPR& Continuation of Intellectual Property Rights	Text Book

*Radhika*

Signature of the Faculty



  
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## CLASS TIME TABLE AY: 2021-22

**CLASS: IV B.PHARM I SEM (PCI REGULATION)**  
**(2018 Admitted Batch)**

**w.e.f: 06/10/2021**

Class Teacher: Mrs.B.Aruna				BatchA: Roll 01-25			Batch B:Roll 26-50	
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10 1:00	1:00 – 01:50	1:50 – 2:40	2:40 – 3:30	3:30- 4:20
MON	IMA	IP-II	GPAT	<b>L U N C H</b>	NDDS	Batch-A- IMA LAB Batch-B- PROJECT Batch- C- LIB/SPORTS		
TUE	NDDS	IMA	IP-II		GPAT	Batch-A- LIB/SPORTS Batch-B- IMA LAB Batch-C- PROJECT		
WED	IP-II	PP	IMA		GPAT	Batch-A- PROJECT Batch-B- LIB/SPORTS Batch-C- IMA LAB		
THU	NDDS	IP-II	PP		TUTORIAL (IMA)	GPAT	PROJECT	
FRI	PP	IMA	NDDS		PP	GPAT	PROJECT	
SAT	IP-II	NDDS	PP		IMA	GPAT	PROJECT	

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAMME
1.	Mrs. B.Aruna	Assistant Professor	Instrumental Methods of Analysis (IMA) (5)	B. Pharm
2.	Mr. M.Suresh Kumar	Associate Professor	Industrial Pharmacy – II (IP-II) (5)	B. Pharm
3.	Mr. M.Vasu	Assistant Professor	Pharmacy Practice (PP) (5)	B. Pharm
4.	Mrs. I. Adi Lakshmi	Assistant Professor	Novel Drug Delivery Systems (NDDS) (5)	B. Pharm
5.		Associate Professor	GPAT (6)	B. Pharm
6.	Mrs. B.Aruna	Assistant Professor	Instrumental Methods of Analysis (IMA) Lab (6)	B. Pharm
7.	Mrs. B.Aruna	Assistant Professor	Instrumental Methods of Analysis (IMA) Tutorial (1)	B. Pharm
8.	Mrs. B.Aruna	Assistant Professor	Student Teacher Interaction (STI) (1)	B. Pharm
9.	Mr. R.Ramana	Librarian	Library (1)	B. Pharm
10.	Mr. D.Koteswara Rao	Physical Director	Sports (1)	B. Pharm

*B. Bhagyan*  
Time Table Incharge



*Principal*  
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**Table-VI: Course of study for semester VI**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP601T	Medicinal Chemistry III – Theory	3	1	4
BP602T	Pharmacology III – Theory	3	1	4
BP603T	Herbal Drug Technology – Theory	3	1	4
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	3	1	4
BP605T	Pharmaceutical Biotechnology – Theory	3	1	4
BP606T	Quality Assurance –Theory	3	1	4
BP607P	Medicinal chemistry III – Practical	4	-	2
BP608P	Pharmacology III – Practical	4	-	2
BP609P	Herbal Drug Technology – Practical	4	-	2
<b>Total</b>		<b>30</b>	<b>6</b>	<b>30</b>

**Table-VII: Course of study for semester VII**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP701T	Instrumental Methods of Analysis – Theory	3	1	4
BP702T	Industrial PharmacyII – Theory	3	1	4
BP703T	Pharmacy Practice – Theory	3	1	4
BP704T	Novel Drug Delivery System – Theory	3	1	4
BP705P	Instrumental Methods of Analysis – Practical	4	-	2
BP706PS	Practice School*	12	-	6
<b>Total</b>		<b>28</b>	<b>5</b>	<b>24</b>

\* Non University Examination (NUE)

## BP 703T. PHARMACY PRACTICE (Theory)

45 Hours

**Scope:** In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug information, and therapeutic drug monitoring for improved patient care. In community pharmacy, students will be learning various skills such as dispensing of drugs, responding to minor ailments by providing suitable safe medication, patient counselling for improved patient care in the community set up.

**Objectives:** Upon completion of the course, the student shall be able to

1. know various drug distribution methods in a hospital
2. appreciate the pharmacy stores management and inventory control
3. monitor drug therapy of patient through medication chart review and clinical review
4. obtain medication history interview and counsel the patients
5. identify drug related problems
6. detect and assess adverse drug reactions
7. interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states
8. know pharmaceutical care services
9. do patient counseling in community pharmacy;
10. appreciate the concept of Rational drug therapy.

### Unit I:

10 Hours

#### a) Hospital and it's organization

Definition, Classification of hospital- Primary, Secondary and Tertiary hospitals, Classification based on clinical and non- clinical basis, Organization Structure of a Hospital, and Medical staffs involved in the hospital and their functions.

#### b) Hospital pharmacy and its organization

Definition, functions of hospital pharmacy, Organization structure, Location, Layout and staff requirements, and Responsibilities and functions of hospital pharmacists.

#### c) Adverse drug reaction

Classifications - Excessive pharmacological effects, secondary pharmacological effects, idiosyncrasy, allergic drug reactions, genetically determined toxicity, toxicity following sudden withdrawal of drugs, Drug interaction- beneficial interactions, adverse interactions, and pharmacokinetic drug interactions, Methods for detecting



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drug interactions, spontaneous case reports and record linkage studies, and Adverse drug reaction reporting and management.

**d) Community Pharmacy**

Organization and structure of retail and wholesale drug store, types and design, Legal requirements for establishment and maintenance of a drug store, Dispensing of proprietary products, maintenance of records of retail and wholesale drug store.

**Unit II:**

**10 Hours**

**a) Drug distribution system in a hospital**

Dispensing of drugs to inpatients, types of drug distribution systems, charging policy and labelling, Dispensing of drugs to ambulatory patients, and Dispensing of controlled drugs.

**b) Hospital formulary**

Definition, contents of hospital formulary, Differentiation of hospital formulary and Drug list, preparation and revision, and addition and deletion of drug from hospital formulary.

**c) Therapeutic drug monitoring**

Need for Therapeutic Drug Monitoring, Factors to be considered during the Therapeutic Drug Monitoring, and Indian scenario for Therapeutic Drug Monitoring.

**d) Medication adherence**

Causes of medication non-adherence, pharmacist role in the medication adherence, and monitoring of patient medication adherence.

**e) Patient medication history interview**

Need for the patient medication history interview, medication interview forms.

**f) Community pharmacy management**

Financial, materials, staff, and infrastructure requirements.

**Unit III:**

**10 Hours**

**a) Pharmacy and therapeutic committee**

Organization, functions, Policies of the pharmacy and therapeutic committee in including drugs into formulary, inpatient and outpatient prescription, automatic stop order, and emergency drug list preparation.

**b) information services**

**Drug**



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Drug and Poison information centre, Sources of drug information, Computerised services, and storage and retrieval of information.

**c) Patient counseling**

Definition of patient counseling; steps involved in patient counseling, and Special cases that require the pharmacist

**d) Education and training program in the hospital**

Role of pharmacist in the education and training program, Internal and external training program, Services to the nursing homes/clinics, Code of ethics for community pharmacy, and Role of pharmacist in the interdepartmental communication and community health education.

**e) Prescribed medication order and communication skills**

Prescribed medication order- interpretation and legal requirements, and Communication skills- communication with prescribers and patients.

**Unit IV 8 Hours**

**a) Budget preparation and implementation**

Budget preparation and implementation

**b) Clinical Pharmacy**

Introduction to Clinical Pharmacy, Concept of clinical pharmacy, functions and responsibilities of clinical pharmacist, Drug therapy monitoring - medication chart review, clinical review, pharmacist intervention, Ward round participation, Medication history and Pharmaceutical care.

Dosing pattern and drug therapy based on Pharmacokinetic & disease pattern.

**c) Over the counter (OTC) sales**

Introduction and sale of over the counter, and Rational use of common over the counter medications.

**Unit V 7 Hours**

**a) Drug store management and inventory control**

Organisation of drug store, types of materials stocked and storage conditions, Purchase and inventory control: principles, purchase procedure, purchase order, procurement and stocking, Economic order quantity, Reorder quantity level, and Methods used for the analysis of the drug expenditure

**b) Investigational use of drugs**



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Description, principles involved, classification, control, identification, role of hospital pharmacist, advisory committee.

**c) Interpretation of Clinical Laboratory Tests**

Blood chemistry, hematology, and urinalysis


**Recommended Books (Latest Edition):**

1. Merchant S.H. and Dr. J.S.Quadry. *A textbook of hospital pharmacy*, 4th ed. Ahmadabad: B.S. Shah Prakakshan; 2001.
2. Parthasarathi G, Karin Nyfort-Hansen, Milap C Nahata. *A textbook of Clinical Pharmacy Practice- essential concepts and skills*, 1<sup>st</sup> ed. Chennai: Orient Longman Private Limited; 2004.
3. William E. Hassan. *Hospital pharmacy*, 5th ed. Philadelphia: Lea & Febiger; 1986.
4. Tipnis Bajaj. *Hospital Pharmacy*, 1<sup>st</sup> ed. Maharashtra: Career Publications; 2008.
5. Scott LT. *Basic skills in interpreting laboratory data*, 4th ed. American Society of Health System Pharmacists Inc; 2009.
6. Parmar N.S. *Health Education and Community Pharmacy*, 18th ed. India: CBS Publishers & Distributers; 2008.

**Journals:**

1. Therapeutic drug monitoring. ISSN: 0163-4356
2. Journal of pharmacy practice. ISSN : 0974-8326
3. American journal of health system pharmacy. ISSN: 1535-2900 (online)
4. Pharmacy times (Monthly magazine)



  
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### B.PHARMACY LECTUREPLAN

<b>COURSE NAME: Pharmacy Practice</b>	<b>COURSECODE :BP703T</b>
<b>YEAR/ SEM: IV B. Pharm I Sem</b>	<b>REGULATION:PCI</b>

Date	Lecture No.	Topic Name	Source
06-10-2021	Lecture 1	Introduction of all the topics to be covered	Text Book
07-10-2021	Lecture 2	<b>Unit-1</b> Hospital & its organization	Text Book
08-10-2021	Lecture 3	Definition, Classification of hospital- Primary, Secondary and Tertiary hospitals	Text Book
08-10-2021	Lecture 4	Classification based on clinical and non- clinical basis	Text Book
09-10-2021	Lecture 5	Organization Structure of a Hospital	Text Book
13-10-2021	Lecture 6	Medical staffs involved in the hospital and their functions.	Text Book
14-10-2021	Lecture 7	a)Hospital pharmacy and its organization Definition, functions of hospital pharmacy	Text Book
15-10-2021	Lecture 8	Organization structure	Text Book
15-10-2021	Lecture 9	Location, Layout and staff requirements	Text Book
16-10-2021	Lecture 10	Responsibilities and functions of hospital pharmacists.	Text Book
20-10-2021	Lecture 11	b)Adverse drug reaction Classifications - Excessive pharmacological effects	Text Book
21-10-2021	Lecture 12	Secondary pharmacological effects, idiosyncrasy	Text Book
22-10-2021	Lecture 13	Allergic drug reactions, genetically determined toxicity	Text Book
22-10-2021	Lecture 14	Toxicity following sudden withdrawal of drugs	Text Book
23-10-2021	Lecture 15	Interaction- beneficial interactions ,adverse interactions	Text Book
27-10-2021	Lecture 16	Pharmacokinetic drug interactions, Methods for detecting drug reactions	Text Book
28-10-2021	Lecture 17	Spontaneous case reports & Record linkage studies	Text Book
29-10-2021	Lecture 18	Adverse drug reaction reporting& management	Text Book
30-10-2021	Lecture 19	c) Community Pharmacy Organization and structure of retail and wholesale drug store	Text Book
03-11-2021	Lecture 20	Types and design	Text Book
04-11-2021	Lecture 21	Legal requirements for establishment and maintenance of a drug store	Text Book



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05-11-2021	Lecture 22	Dispensing of proprietary products	Text Book
05-11-2021	Lecture 23	Maintenance of records of retail and wholesale drug store.	Text Book
06-11-2021	Lecture 24	<b>Unit -2</b> a) Drug distribution system in a hospital Dispensing of drugs to inpatients	Text Book
10-11-2021	Lecture 25	Types of drug distribution systems	Text Book
11-11-2021	Lecture 26	charging policy and labeling	Text Book
12-11-2021	Lecture 27	Dispensing of drugs to ambulatory patients	Text Book
12-11-2021	Lecture 28	Dispensing of controlled drugs.	Text Book
13-11-2021	Lecture 29	b) Hospital formulary Definition, contents of hospital formulary	Text Book
17-11-2021	Lecture 30	Differentiation of hospital formulary and Drug list	Text Book
18-11-2021	Lecture 31	Preparation and revision	Text Book
19-11-2021	Lecture 32	Addition and deletion of drug from hospital formulary.	Text Book
19-11-2021	Lecture 33	c) Therapeutic drug monitoring Need for Therapeutic Drug Monitoring	Text Book
20-11-2021	Lecture 34	Factors to be considered for the TDM	Text Book
24-11-2021	Lecture 35	Indian scenario for Therapeutic Drug Monitoring.	Text Book
25-11-2021	Lecture 36	d) Medication adherence Causes of medication non-adherence	Text Book
26-11-2021	Lecture 37	Pharmacist role in the medication adherence	Text Book
27-11-2021	Lecture 38	Monitoring of patient medication adherence.	Text Book
01-12-2021	Lecture 39	e) Patient medication history interview Need for the patient medication history interview	Text Book
02-12-2021	Lecture 40	Medication interview forms	Text Book
03-12-2021	Lecture 41	f) Community pharmacy management Financial, materials	Text Book
03-12-2021	Lecture 42	staff, and infrastructure requirements	Text Book
04-12-2021	Lecture 43	<b>Unit-3</b> Pharmacy and therapeutic Committee Organization, functions	Text Book
08-12-2021	Lecture 44	Policies of the pharmacy and therapeutic committee in including drugs into formulary	Text Book
09-12-2021	Lecture 45	Inpatient and outpatient prescription	Text Book
10-12-2021	Lecture 46	Automatic stop order and emergency drug list preparation.	Text Book



  
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11-12-2021	Lecture 47	Patient counseling Definition of patient counseling	Text Book
15-12-2021	Lecture 48	Steps involved inpatient counseling	Text Book
16-12-2021	Lecture 49	Special cases that require the pharmacist	Text Book
17-12-2021	Lecture 50	Education and training program in the hospital	Text Book
17-12-2021	Lecture 51	Role of pharmacist in the education and training program	Text Book
18-12-2021	Lecture 52	Internal and external training program	Text Book
22-12-2021	Lecture 53	Services to the nursing homes/clinics	Text Book
23-12-2021	Lecture 54	Code of ethics for community pharmacy	Text Book
24-12-2021	Lecture 55	Role of pharmacist in the interdepartmental communication.	Text Book
24-12-2021	Lecture 56	Role of pharmacist in the community health education.	Text Book
29-12-2021	Lecture 57	d)Prescribed medication order and communication skills Prescribed medication order-	Text Book
30-12-2021	Lecture 58	Interpretation and legal requirements	Text Book
31-12-2021	Lecture 59	Communication skills- communication with prescribers and patients	Text Book
31-12-2021	Lecture 60	Unit-4 a) Budget preparation and implementation Budget preparation and implementation	Text Book
01-01-2022	Lecture 61	b) Clinical Pharmacy Introduction to Clinical Pharmacy	Text Book
03-01-2022	Lecture 62	Concept of clinical pharmacy	Text Book
04-01-2022	Lecture 63	Functions and responsibilities of clinical pharmacist	Text Book
05-01-2022	Lecture 64	Drug therapy monitoring - medication chart review, clinical review,	Text Book
06-01-2022	Lecture 65	Pharmacist intervention, Ward round participation,	Text Book
07-01-2022	Lecture 66	Genetic pattern of inheritance	Text Book
07-01-2022	Lecture 67	Medication history and Pharmaceutical care.	Text Book
08-01-2022	Lecture 68	Dosing pattern and drug therapy based on Pharmacokinetic & disease pattern.	Text Book
09-01-2022	Lecture 69	c) Over the counter (OTC) sales Introduction and sale of over the counter,	Text Book
10-01-2022	Lecture 70	Rational use of common over the counter medications.	Text Book
10-01-2022	Lecture 71	Unit-5 Drug store management and inventory control Organization of drug store, types of materials stocked and storage conditions	Text Book



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11-01-2022	Lecture 72	Purchase and inventory control: principles	Text Book
11-01-2022	Lecture 73	purchase order, procurement and stocking	Text Book
12-01-2022	Lecture 74	Economic order quantity, Reorder quantity level	Text Book
12-01-2022	Lecture 75	Methods used for the analysis of the drug expenditure	Text Book

  
Signature of the Faculty



  
Principal  
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## DEPARTMENT OF PHARMACY PRACTICE CLASS TIME TABLE AY: 2021-2022

CLASS:PHARM.D IYEAR (2021 ADMITTED BATCH)

W.e.f- 14/02/2022

CLASS TEACHER – Dr.D.Subhasri

DAY/TIME	9:30 - 10:30	10:30 - 11:20	11:20 - 12:10	12:10- 1:00	1:00 - 01:50	1:50- 2:40	2:40- 3:30	3:30- 4:20
MON	PIC	MBC	POC	<b>L U N C H</b>	HAP	LIBRARY/ SPORTS		
TUE	CEUTICS	POC	PIC		CEUTICS	CEUTICS LAB		
WED	POC	PIC	HAP		RM/RB	POC LAB		
THU	CEUTICS	POC	MBC		PIC	PIC LAB		
FRI	MBC	RM/RB	HAP		RM/RB	HAP LAB		
SAT	HAP	RM/RB	CEUTICS		MBC	MBC LAB		

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Dr.D. Subha Sri	Assistant Professor	Pharmaceutical Inorganic Chemistry-(PIC) (4)	Pharm. D
2.	Dr.A. Jyotsna	Assistant Professor	Pharmaceutical Organic Chemistry-(POC) (4)	Pharm. D
3.	Dr.M.S.V. Sudeep	Assistant Professor	Pharmaceutics (4)	Pharm. D
4.	Dr.S.Sravani Cirija	Assistant Professor	Human Anatomy and Physiology-(HAP) (4)	Pharm. D
5.	Dr.S. Dhana Lakshmi	Assistant Professor	Medicinal Biochemistry-(MBC) (4)	Pharm. D
6.	Mr.A.Seshu	Assistant Professor	Remedial Mathematics-(RM) (4)	Pharm. D
7.	Mr.V.UmaSankar	Associate Professor	Remedial Biology-(RB) (4)	Pharm. D
8.	Dr.D. Subha Sri	Assistant Professor	Pharmaceutical Inorganic Chemistry Lab-(PIC) (3)	Pharm. D
9.	Dr.A. Jyotsna	Assistant Professor	Pharmaceutical Organic Chemistry Lab-(POC) (3)	Pharm. D
10.	Dr.M.S.V. Sudeep	Assistant Professor	Pharmaceutics Lab (3)	Pharm. D
11.	Dr.S.Sravani Girija	Assistant Professor	Human Anatomy and Physiology Lab-(HAP) (3)	Pharm. D
12.	Dr.S. Dhana Lakshmi	Assistant Professor	Medicinal Biochemistry Lab-(MBC) (1)	Pharm. D
13.	Mr.V.UmaSankar	Associate Professor	Remedial Biology --(RB) (4)	Pharm. D

*B. Bhagyamri*  
Time Table Incharge

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## b) Pharm.D. (Post Baccalaureate) Course -

A pass in B.Pharm from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act:

Provided that there shall be reservation of seats for the students belonging to the Scheduled Castes, Scheduled Tribes and other Backward Classes in accordance with the instructions issued by the Central Government/State Government/Union Territory Administration as the case may be from time to time.

5. Number of admissions in the above said programmes shall be as prescribed by the Pharmacy Council of India from time to time and presently be restricted as below –
  - i) Pharm.D. Programme – 30 students.
  - ii) Pharm.D. (Post Baccalaureate) Programme – 10 students.
6. Institutions running B.Pharm programme approved under section 12 of the Pharmacy Act, will only be permitted to run Pharm.D. programme. Pharm.D. (Post Baccalaureate) programme will be permitted only in those institutions which are permitted to run Pharm.D. programme.
7. Course of study. – The course of study for Pharm.D. shall include the subjects as given in the Tables below. The number of hours in a week, devoted to each subject for its teaching in theory, practical and tutorial shall not be less than that noted against it in columns (3), (4) and (5) below.

## T A B L E S

### First Year :

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
1.1	Human Anatomy and Physiology	3	3	1
1.2	Pharmaceutics	2	3	1
1.3	Medicinal Biochemistry	3	3	1
1.4	Pharmaceutical Organic Chemistry	3	3	1
1.5	Pharmaceutical Inorganic Chemistry	2	3	1
1.6	Remedial Mathematics/ Biology	3	3*	1
	<b>Total hours</b>	<b>16</b>	<b>18</b>	<b>6 = (40)</b>

\* For Biology



## APPENDIX-A (See regulation 8) PHARM.D. SYLLABUS

### First Year

#### HUMAN ANATOMY & PHYSIOLOGY (THEORY)

**Theory : 3 Hrs. /Week**

1. **Scope and Objectives:** This course is designed to impart a fundamental knowledge on the structure and functions of the human body. It also helps in understanding both homeostasis mechanisms and homeostatic imbalances of various body systems. Since a medicament, which is produced by pharmacist, is used to correct the deviations in human body, it enhances the understanding of how the drugs act on the various body systems in correcting the disease state of the organs.
2. **Upon completion of the course the student shall be able to:**
  - a. describe the structure (gross and histology) and functions of various organs of the human body;
  - b. describe the various homeostatic mechanisms and their imbalances of various systems;
  - c. identify the various tissues and organs of the different systems of the human body;
  - d. perform the hematological tests and also record blood pressure, heart rate, pulse and Respiratory volumes;
  - e. appreciate coordinated working pattern of different organs of each system; and
  - f. appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body

#### 3. **Course materials:**


##### **Text books**

- a. Tortora Gerard J. and Nicholas, P. Principles of anatomy and physiology  
Publisher Harpercollins college New York.
- b. Wilson, K.J.W. Ross and Wilson's foundations of anatomy and physiology.  
Publisher: Churchill Livingstone, Edinburg.

##### **Reference books**

- a. Guyton arthur, C. *Physiology of human body*. Publisher: Holtsaunders.
- b. Chatterjee, C.C. *Human physiology*. Volume 1&11. Publisher: medical allied agency, Calcutta.
- c. Peter L. Williams, Roger Warwick, Mary Dyson and Lawrence, H.
- d. *Gray's anatomy*. Publisher: Churchill Livingstone, London.




  
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#### 4. Lecture wise program :

##### Topics

- 1 Scope of anatomy and physiology, basic terminologies used in this subject (Description of the body as such planes and terminologies)
- 2 Structure of cell – its components and their functions.
- 3 Elementary tissues of the human body: epithelial, connective, Muscular and nervous tissues-their sub-types and characteristics
- 4
  - a) Osseous system - structure, composition and functions of the Skeleton. (done in practical classes - 6hrs)
  - b) Classification of joints, Types of movements of joints and disorders of joints (Definitions only)
- 5 Haemopoetic System
  - a) Composition and functions of blood
  - b) Haemopoiesis and disorders of blood components (definition of disorder)
  - c) Blood groups
  - d) Clotting factors and mechanism
  - e) Platelets and disorders of coagulation
- 6 Lymph
  - a) Lymph and lymphatic system, composition, formation and circulation.
  - b) Spleen: structure and functions, Disorders
  - c) Disorders of lymphatic system (definition only)
- 7 Cardiovascular system
  - a) Anatomy and functions of heart
  - b) Blood vessels and circulation (Pulmonary, coronary and systemic circulation)
  - c) Electrocardiogram (ECG)
  - d) Cardiac cycle and heart sounds
  - e) Blood pressure – its maintenance and regulation
  - f) Definition of the following disorders  
Hypertension, Hypotension, Arteriosclerosis, Atherosclerosis, Angina, Myocardial infarction, Congestive heart failure, Cardiac arrhythmias
- 8 Respiratory system
  - a) Anatomy of respiratory organs and functions
  - b) Mechanism / physiology of respiration and regulation of respiration
  - c) Transport of respiratory gases
  - d) Respiratory volumes and capacities, and Definition of: Hypoxia, Asphyxia, Dybarism, Oxygen therapy and resuscitation.
- 9 Digestive system
  - a) Anatomy and physiology of GIT
  - b) Anatomy and functions of accessory glands of GIT
  - c) Digestion and absorption
  - d) Disorders of GIT (definitions only)



  
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- 10 Nervous system
  - a) Definition and classification of nervous system
  - b) Anatomy, physiology and functional areas of cerebrum
  - c) Anatomy and physiology of cerebellum
  - d) Anatomy and physiology of mid brain
  - e) Thalamus, hypothalamus and Basal Ganglia
  - f) Spinal cord: Structure & reflexes – mono-poly-planter
  - g) Cranial nerves – names and functions
  - h) ANS – Anatomy & functions of sympathetic & parasympathetic N.S.
- 11 Urinary system
  - a) Anatomy and physiology of urinary system
  - b) Formation of urine
  - c) Renin Angiotensin system – Juxtaglomerular apparatus - acid base Balance
  - d) Clearance tests and micturition
- 12 Endocrine system
  - a) Pituitary gland
  - b) Adrenal gland
  - c) Thyroid and Parathyroid glands
  - d) Pancreas and gonads
- 13 Reproductive system
  - a) Male and female reproductive system
  - b) Their hormones – Physiology of menstruation
  - c) Spermatogenesis & Oogenesis
  - d) Sex determination (genetic basis)
  - e) Pregnancy and maintenance and parturition
  - f) Contraceptive devices
- 14 Sense organs
  - a) Eye
  - b) Ear
  - c) Skin
  - d) Tongue & Nose
- 15 Skeletal muscles
  - a) Histology
  - b) Physiology of Muscle contraction
  - c) Physiological properties of skeletal muscle and their disorders (definitions)
- 16 Sports physiology
  - a) Muscles in exercise, Effect of athletic training on muscles and muscle performance,
  - b) Respiration in exercise, CVS in exercise, Body heat in exercise, Body fluids and salts in exercise,
  - c) Drugs and athletics



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HUMANANATOMYANDPHYSIOLOGY				
I PHARM D				
Week No.	Lecture No.	Topics	Teaching Aid	Date
<b>Unit-1</b>	<b>Scope of Anatomy and Physiology</b>			
Week-1	L1	Scope of anatomy and physiology	Chalk and Talk	14-02-2022
	L2	Terminologies	Chalk and Talk	14-02-2022
<b>Unit-2</b>	<b>Structure of cell</b>			
	L3	Structure of cell-Introduction	Chalk and Talk	16-02-2022
	L4	Cell components and their functions	Chalk and Talk	18-02-2022
	L5	Cell components and their functions	Chalk and Talk	18-02-2022
	L6	Revision	Google Meet	19-02-2022
<b>Unit-3</b>	<b>Elementary tissues</b>			
Week-2	L7	Elementary tissues of the human body	Chalk and Talk	19-02-2022
	L8	Epithelial Tissues	Chalk and Talk	21-02-2022
	L9	Connective Tissues	Power point	21-02-2022
	L10	Muscular Tissues	Chalk and Talk	23-02-2022
	L11	Nervous tissues	Chalk and Talk	23-02-2022
	L12	Sub-types and characteristics of soft tissues	Power point	25-02-2022
	L13	Revision	Google Meet	25-02-2022
<b>Unit-4</b>	<b>Osseous System</b>			
Week-3	L14	Introduction to Osseous System	Chalk and Talk	26-02-2022
	L15	Structure and composition	LCD	26-02-2022
	L16	Functions of the Skeleton	Chalk and Talk	28-02-2022
	L17	Classification of joints	Power point	28-02-2022
	L18	Types of movements of joints	Chalk and Talk	02-03-2022
Week-4	L19	Disorders of joints	Chalk and Talk	02-03-2022
	L20	Revision	Google Meet	04-03-2022
<b>Unit-5</b>	<b>Haemopoietic system</b>			
	L21	Introduction to Haemopoietic system	Chalk and Talk	04-03-2022
	L22	Composition of Blood	Chalk and Talk	05-03-2022
	L23	Functions of blood	Chalk and Talk	05-03-2022
	L24	Haemopoiesis	Chalk and Talk	07-03-2022
Week-5	L25	Disorders of blood components	Chalk and Talk	07-03-2022
	L26	Blood groups	LCD	09-03-2022



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	L27	Introduction to Clotting Factors	Chalk and Talk	11-03-2022
	L28	Mechanism of clotting Factors	Chalk and Talk	11-03-2022
	L29	Introduction to Platelets	Chalk and Talk	12-03-2022
	L30	Platelets Mechanism and importance	Power point	12-03-2022
Week-6	L31	Disorders of Coagulation	Chalk and Talk	14-03-2022
	L32	Revision	Google meet	16-03-2022
<b>Unit-6</b>	<b>Lymph</b>			
	L33	Introduction to lymph	Chalk and Talk	18-03-2022
	L34	Lymphatic system	Chalk and Talk	18-03-2022
	L35	Composition	Chalk and Talk	21-03-2022
	L36	Formation	Chalk and Talk	21-03-2022
Week-7	L37	Circulation	LCD	23-03-2022
	L38	Introduction to Spleen	Chalk and Talk	23-03-2022
	L39	Structure of Spleen	Power point	25-03-2022
	L40	Functions of Spleen	Chalk and Talk	25-03-2022
	L41	Disorders of Spleen	Chalk and Talk	26-03-2022
	L42	Disorders of lymphatic system	Chalk and Talk	26-03-2022
	L43	Revision	Google meet	28-03-2022
<b>Unit-7</b>	<b>Cardiovascular system</b>			
Week-8	L44	Introduction to Cardiovascular system	Chalk and Talk	30-03-2022
	L45	Anatomy of heart	Power point	01-04-2022
	L46	Functions of heart	Chalk and Talk	01-04-2022
	L47	Blood vessels	Chalk and Talk	04-04-2022
	L48	Circulation of blood	Power point	06-04-2022
Week-9	L49	Pulmonary circulation	Chalk and Talk	08-04-2022
	L50	Coronary circulation	Chalk and Talk	08-04-2022
	L51	Systemic circulation	Power point	09-04-2022
	L52	Electrocardiogram	Chalk and Talk	09-04-2022
	L53	Cardiac cycle	Power point	11-04-2022
	L54	Normal Heart sounds	Chalk and Talk	13-04-2022
Week-10	L55	Abnormal heart sounds	Chalk and Talk	13-04-2022
	L56	Introduction to Blood pressure	Chalk and Talk	16-04-2022
	L57	Regulation of BP	Chalk and Talk	16-04-2022
	L58	Maintenance of BP	Chalk and Talk	18-04-2022
	L59	Hypertension	Chalk and Talk	20-04-2022
	L60	Hypotension	Chalk and Talk	22-04-2022



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Week-11	L61	Arteriosclerosis	Chalk and Talk	23-04-2022
	L62	Atherosclerosis	Chalk and Talk	02-05-2022
	L63	Angina	Chalk and Talk	02-05-2022
	L64	Myocardial infarction	Chalk and Talk	04-05-2022
	L65	Congestive heart failure	LCD	04-05-2022
	L66	Cardiac arrhythmias	Chalk and Talk	06-05-2022
	L67	Revision	Chalk and Talk	06-05-2022
<b>Unit-8</b>	<b>Respiratory system</b>			
Week-12	L68	Introduction to respiratory system	Chalk and Talk	07-05-2022
	L69	Anatomy of respiratory organs	Power point	09-05-2022
	L70	Functions of respiratory organs	Chalk and Talk	11-05-2022
	L71	Mechanism of respiratory organs	Chalk and Talk	11-05-2022
	L72	Physiology of respiration	Chalk and Talk	13-05-2022
Week-13	L73	Regulation of respiration	Chalk and Talk	13-05-2022
	L74	Transport of respiratory gases	LCD	14-05-2022
	L75	Respiratory volumes	Chalk and Talk	18-05-2022
	L76	Respiratory capacities	Chalk and Talk	18-05-2022
	L77	Hypoxia	Chalk and Talk	20-05-2022
	L78	Asphyxia	Power point	21-05-2022
Week-14	L79	Dybarism	Chalk and Talk	21-05-2022
	L80	Oxygen therapy	Chalk and Talk	23-05-2022
	L81	Resuscitation	Chalk and Talk	23-05-2022
	L82	Revision	Google meet	25-05-2022
	L83	Revision test		25-05-2022
<b>Unit-9</b>	<b>Digestive system</b>			
	L84	Introduction to Digestive system	Chalk and Talk	27-05-2022
Week-15	L85	Anatomy and physiology of GIT	Chalk and Talk	28-05-2022
	L86	Anatomy and functions of accessory glands of GIT	Power point	30-05-2022
	L87	Digestion and absorption	Chalk and Talk	01-06-2022
	L88	Disorders of GIT	Chalk and Talk	01-06-2022
	L89	Revision	LCD	03-06-2022
<b>Unit-10</b>	<b>Nervous system</b>			
	L90	Introduction to Nervous system	Chalk and Talk	04-06-2022
Week-16	L91	Definition and classification of nervous system	Chalk and Talk	06-06-2022



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Week-17	L92	Anatomy, physiology and functional areas of cerebrum	Power point	08-06-2022
	L93	Anatomy and physiology of cerebellum	Chalk and Talk	10-06-2022
	L94	Anatomy and physiology of midbrain	Chalk and Talk	11-06-2022
	L95	Thalamus, hypothalamus and Basal Ganglia	Power point	13-06-2022
	L96	Spinal cord	Chalk and Talk	15-06-2022
	L97	Cranial nerves	Chalk and Talk	15-06-2022
Week-17	L98	ANS	Chalk and Talk	17-06-2022
	L99	Revision	Google meet	17-06-2022
<b>Unit-11</b>	<b>Urinary system</b>			
Week-18	L100	Introduction to Urinary system	Chalk and Talk	18-06-2022
	L101	Anatomy and physiology of urinary system	Power point	20-06-2022
	L102	Formation of urine	Chalk and Talk	22-06-2022
Week-18	L103	Renin Angiotensin system	Chalk and Talk	24-06-2022
	L104	Clearancetests and micturition	Chalk and Talk	25-06-2022
	L105	Revision	Google meet	27-06-2022
<b>Unit-12</b>	<b>Endocrine System</b>			
Week-19	L106	Introduction to Endocrine System	Chalk and Talk	29-06-2022
	L107	Pituitary gland	Chalk and Talk	01-07-2022
	L108	Adrenal gland	Power point	02-07-2022
	L109	Thyroid and Parathyroid glands	Chalk and Talk	04-07-2022
	L110	Pancreas and gonads	LCD	06-07-2022
	L111	Revision	Google meet	08-07-2022
<b>Unit-13</b>	<b>Reproductive system</b>			
Week-20	L112	Introduction to Reproductive system	Chalk and Talk	09-07-2022
	L113	Male and female reproductive system	Power point	18-07-2022
	L114	Physiology of menstruation	Chalk and Talk	20-07-2022
	L115	Spermatogenesis and Oogenesis	Power point	22-07-2022
	L116	Sex determination	Chalk and Talk	23-07-2022
	L117	Pregnancy and maintenance and parturition	Chalk and Talk	25-07-2022
	L118	Contraceptive devices	Chalk and LCD	27-07-2022
	L119	Revision	Google meet	29-07-2022
<b>Unit-14</b>	<b>Sense Organs</b>			
	L120	Introduction to Sense Organs	Chalk and Talk	30-07-2022



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Week-21	L121	Eye	Chalk and Talk	01-08-2022
	L122	Ear	Power point	03-08-2022
	L123	Skin	Chalk and Talk	05-08-2022
	L124	Tongue and Nose	LCD	06-08-2022
	L125	Revision	Google meet	10-08-2022
<b>Unit-15</b>	<b>Skeletal Muscles</b>			
Week-22	L126	Introduction to Skeletal Muscles	Chalk and Talk	13-08-2022
	L127	Histology	Chalk and Talk	17-08-2022
	L128	Physiology of Muscle contraction	Chalk and Talk	19-08-2022
	L129	Physiological properties of skeletal muscle	Power point	20-08-2022
	L130	Disorders of skeletal muscle	Chalk and Talk	22-08-2022
	L131	Revision	Google meet	24-08-2022
<b>Unit-16</b>	<b>Sports Physiology</b>			
Week-23	L132	Introduction to Sports Physiology	Chalk and Talk	26-08-2022
	L133	Muscles in exercise	Chalk and Talk	27-08-2022
	L134	Effect of athletic training on muscles	Chalk and Talk	29-08-2022
	L135	Muscle performance	Power point	02-09-2022
	L136	Respiration in exercise	Chalk and Talk	03-09-2022
	L137	CVS in exercise	Chalk and Talk	07-09-2022
	L138	Body heat in exercise	Chalk and Talk	09-09-2022
	Week-24	L139	Body fluids in exercise	LCD
L140		Salts in exercise	Chalk and Talk	12-09-2022
L141		Drugs	Chalk and Talk	14-09-2022
L142		Athletics	Chalk and Talk	16-09-2022
L143		Tests used to detect drugs	Power point	17-09-2022
L144		Importance of exercise	Chalk and Talk	19-09-2022
L145		Effect of exercises on muscles	Chalk and Talk	21-09-2022
L146		Effect of exercises on Joint	Google meet	23-09-2022
L147		Revision	Google meet	24-09-2022

*Sravani G*  
Signature of the Faculty



*[Signature]*  
Principal  
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ESTD : 2005

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## DEPARTMENT OF PHARMACY PRACTICE

### CLASS TIME TABLE AY: 2021-2022

CLASS: PHARM.D III YEAR (2019 ADMITTED BATCH)

W.e.f -04/10/2021

CLASS TEACHER: Mrs.CH.GEETHA

DAY/ TIME	9:30 – 10:30	10:30– 11:20	11:20 - 12:10	12:10 -1:00	1:00– 01:50	1:50– 2:40	2:40-3:30	3:30-4:20
MON	COL-II	PF	MC	L U N C H	PJ		MC LAB	
TUE	MC	PJ	COL-II		PT- II		PT- II LAB	
WED	MC	PT-II	PF		PA		PA LAB	
THU	PF	MC	PA		COL- II		PF LAB	
FRI	HOSPITAL VISIT							
SAT	PJ	PA	PT-II	L U N C H	PF		COL-II LAB	

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Dr.S. Arun Satya Dev	Professor	Medicinal chemistry-(MC) (4)	Pharm. D
2.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis- (PA) (3)	Pharm. D
3.	Dr.V.C.Randeep Raj	Associate Professor	Pharmacotherapy –II-(PT-II) (3)	Pharm. D
4.	Dr.S. Dhana Lakshmi	Assistant Professor	Pharmaceutical Jurisprudence-(PJ) (3)	Pharm. D
5.	Mrs.B.Ramavathi	Associate Professor	Pharmacology-II (COL-II) (3)	Pharm. D
6.	Dr.B.Tejasree	Assistant Professor	Pharmaceutical Formulation- (PF) (3)	Pharm. D
7.	Dr.S. Arun Satya Dev	Professor	Medicinal chemistry Lab- (MC) (3)	Pharm. D
8.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis Lab-(PA) (3)	Pharm. D
9.	Dr.V.C.Randeep Raj	Associate Professor	Pharmacotherapy -II Lab- (PT-II) (3)	Pharm. D
10.	Mrs.B.Ramavathi	Associate Professor	Pharmacology-II Lab- (COL-II) (3)	Pharm. D
11.	Dr.B.Tejasree	Assistant Professor	Formulation Lab-(PF) (3)	Pharm. D

**B. Bhagyathi**  
Time Table Incharge



**Principal**  
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**Second Year:**

S.No	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
2.1	Pathophysiology	3	-	1
2.2	Pharmaceutical Microbiology	3	3	1
2.3	Pharmacognosy & Phytopharmaceuticals	3	3	1
2.4	Pharmacology-I	3	-	1
2.5	Community Pharmacy	2	-	1
2.6	Pharmacotherapeutics-I	3	3	1
	<b>Total Hours</b>	<b>17</b>	<b>9</b>	<b>6 = 32</b>

**Third Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
3.1	Pharmacology-II	3	3	1
3.2	Pharmaceutical Analysis	3	3	1
3.3	Pharmacotherapeutics-II	3	3	1
3.4	Pharmaceutical Jurisprudence	2	-	-
3.5	Medicinal Chemistry	3	3	1
3.6	Pharmaceutical Formulations	2	3	1
	<b>Total hours</b>	<b>16</b>	<b>15</b>	<b>5 = 36</b>

### 3.4 PHARMACEUTICAL JURISPRUDENCE (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope of the Subject:** (4-6 lines): This course exposes the student to several important legislations related to the profession of pharmacy in India. The Drugs and Cosmetics Act, along with its amendments are the core of this course. Other acts, which are covered, include the Pharmacy Act, dangerous drugs, medicinal and toilet preparation Act etc. Besides this the new drug policy, professional ethics, DPCO, patent and design Act will be discussed.
2. **Objectives of the Subject:** Upon completion of the subject student shall be able to (Know, do, and appreciate) –
  - a. practice the Professional ethics;
  - b. understand the various concepts of the pharmaceutical legislation in India;
  - c. know the various parameters in the Drug and Cosmetic Act and rules;
  - d. know the Drug policy, DPCO, Patent and design act;
  - e. understand the labeling requirements and packaging guidelines for drugs and cosmetics;
  - f. be able to understand the concepts of Dangerous Drugs Act, Pharmacy Act and Excise duties Act; and
  - g. other laws as prescribed by the Pharmacy Council of India from time to time including International Laws.

**Text books (Theory)**

Mithal , B M. Textbook of Forensic Pharmacy. Calcutta :National; 1988.

**Reference books (Theory)**

- a. Singh, KK, editor. Beotra's the Laws of Drugs, Medicines & cosmetics. Allahabad: Law Book House; 1984.
- b. Jain, NK. A Textbook of forensic pharmacy. Delhi: Vallabh prakashan ; 1995.
- c. Reports of the Pharmaceutical enquiry Committee
- d. I.D.M.A., Mumbai. DPCO 1995
- e. Various reports of Amendments.
- f. Deshapande, S.W. The drugs and magic remedies act 1954 and rules 1955. Mumbai: Susmit Publications; 1998.
- g. Eastern Book Company .The narcotic and psychotropic substances act 1985, Lucknow: Eastern; 1987.

**3. Detailed syllabus and lecture wise schedule:**

**Title of the topic**

1. **Pharmaceutical Legislations** – A brief review.
2. Principle and Significance of professional ethics. Critical study of the code of pharmaceutical ethics drafted by PCI.
3. **Drugs and Cosmetics Act, 1940, and its rules 1945.**  
Objectives, Legal definition, Study of Schedule's with reference to Schedule B, C&C1, D, E1, F&F1, F2, F3, FF, G, H, J, K, M, N, P, R, V, W, X, Y.  
Sales, Import, labeling and packaging of Drugs And Cosmetics  
Provisions Relating to Indigenous Systems.  
Constitution and Functions – Govt, Analyst, DCC, CDL.  
Qualification and duties – Govt, Analyst and Drugs Inspector.



  
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4. **Pharmacy Act –1948.**  
Objectives Legal Definitions, General Study, Constitution and Functions of State & Central Council, Registration & Procedure, ER.
5. **Medicinal and Toilet Preparation Act –1955.**  
Objectives, Legal Definitions, Licensing, Bonded and Non Bonded Laboratory, Ware Housing, Manufacture of Ayurvedic, Homeopathic, Patent & Proprietary Preparations.
6. **Narcotic Drugs and Psychotropic substances Act-1985 and Rules.** Objectives, Legal Definitions, General Study, Constitution and Functions of narcotic & Psychotropic Consultative Committee, National Fund for Controlling the Drug Abuse, Prohibition, Control and regulations, Schedules to the Act.
7. **Study of Salient Features of Drugs and magic remedies Act and its rules.**
8. **Study of essential Commodities Act Relevant to drugs price control Order.**
9. **Drug Price control Order & National Drug Policy (Current).**
10. **Prevention Of Cruelty to animals Act-1960.**
11. **Patents & design Act-1970.**
12. **Brief study of prescription and Non-prescription Products.**

#### 4. Assignments:

##### Format of the assignment

1. Minimum & Maximum number of pages
2. It shall be a computer draft copy
3. Reference(s) shall be included at the end.
4. Name and signature of the student
5. Assignment can be a combined presentation at the end of the academic year.
6. Time allocated for presentation may be 8+2 Min

##### Case studies relating to

1. Drugs and Cosmetics Act and rules along with its amendments, Dangerous Drugs Act, Medicinal and Toilet preparation Act, New Drug Policy, Professional Ethics, Drugs (Price control) Order, Patent and Design Act.
2. Various prescription and non-prescription products.
3. Medical and surgical accessories.
4. Diagnostic aids and appliances available in the market.



  
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PHARMACEUTICAL JURISPRUDENCE				
YEAR: III PHARM D				
Week No	Lecture No.	Topics	Teaching Aid	DATE
<b>Unit-1</b>	<b>Pharmaceutical Legislations</b>			
Week-1	L1	Pharmaceutical Legislations	Chalk and Talk	04-10-2021
	L2	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	04-10-2021
	L3	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	05-10-2021
	L4	Professional ethics	Powerpoint	05-10-2021
	L5	Principle of professional ethics	Chalk and Talk	18-10-2021
	L6	Signature of professional ethics	Chalk and Talk	18-10-2021
Week-2	L7	Signature of professional ethics	Chalk and Talk	25-10-2021
<b>Unit-2</b>	<b>Pharmaceutical constitution of India</b>			
	L8	Critical study on PCI	Chalk and Talk	25-10-2021
	L9	Critical study on PCI	Chalk and Talk	26-10-2021
	L10	code of pharmaceutical ethics	Power point	26-10-2021
	L11	code of pharmaceutical ethics	Chalk and Talk	26-10-2021
	L12	Revision	Google meet	01-11-2021
<b>Unit-3</b>	<b>Drugs and Cosmetics Act, 1940</b>			
Week-3	L13	Drugs and Cosmetics Act , 1940	Chalk and Talk	01-11-2021
	L14	Drugs and Cosmetics Act , 1940	Power point	02-11-2021
	L15	Drugs and Cosmetics Act , 1940	Chalk and Talk	02-11-2021
	L16	Its rules 1945	Power point	08-11-2021
	L17	Objectives	Chalk and Talk	08-11-2021



  
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	L18	Legal definition	Chalk and Talk	09-11-2021
Week-4	L19	Study of Schedule's with reference	Chalk and Talk	09-11-2021
	L20	Schedule B	Chalk and Talk	15-11-2021
	L21	Schedule B	Chalk and Talk	15-11-2021
	L22	Schedule C&C1	Power point	16-11-2021
	L23	Schedule C&C1	Chalk and Talk	16-11-2021
	L24	Schedule C&C1	Chalk and Talk	16-11-2021
	Week-5	L25	Schedule D	Power point
L26		Schedule D	Chalk and Talk	22-11-2021
L27		Schedule E1	Chalk and Talk	23-11-2021
L28		Schedule E1	Chalk and Talk	23-11-2021
L29		Schedule F&F1	LCD	29-11-2021
L30		Schedule F&F1	Chalk and Talk	29-11-2021
Week-6	L31	Schedule F2	Chalk and Talk	30-11-2021
	L32	Schedule F3	Chalk and Talk	30-11-2021
	L33	Schedule FF	Chalk and Talk	06-12-2021
	L34	Schedule FF	Chalk and Talk	06-12-2021
	L35	Schedule G	Power point	07-12-2021
	L36	Schedule G	Chalk and Talk	07-12-2021
Week-7	L37	Schedule H	Chalk and Talk	13-12-2021
	L38	Schedule H	Chalk and Talk	13-12-2021
	L39	Schedule J	Power point	14-12-2021
	L40	Schedule J	Chalk and Talk	14-12-2021

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	L41	Schedule K	Chalk and Talk	28-12-2021
	L42	Schedule K	Power point	28-12-2021
Week-8	L43	Schedule M	Chalk and Talk	03-01-2022
	L44	Schedule M	Chalk and Talk	03-01-2022
	L45	Schedule N	Chalk and Talk	04-01-2022
	L46	Schedule N	Chalk and Talk	04-01-2022
	L47	Schedule P	Chalk and Talk	28-12-2021
	L48	Schedule P	Chalk and Talk	03-01-2022
Week-9	L49	Schedule R	Power point	03-01-2022
	L50	Schedule R	Chalk and Talk	04-01-2022
	L51	Schedule V	LCD	04-01-2022
	L52	Schedule V	Chalk and Talk	10-01-2022
	L53	Schedule W	Chalk and Talk	10-01-2022
	L54	Schedule W	Power point	11-01-2022
Week-10	L55	Schedule X	Chalk and Talk	11-01-2022
	L56	Schedule X	Chalk and Talk	17-01-2022
	L57	Schedule Y	Chalk and Talk	17-01-2022
	L58	Schedule Y	Power point	18-01-2022
	L59	Sales	Chalk and Talk	18-01-2022
	L60	Sales	Chalk and Talk	24-01-2022
Week-11	L61	Import	Chalk and Talk	24-01-2022
	L62	Labelling	Power point	25-01-2022



  
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	L63	Packaging of drugs and cosmetics	Chalk and Talk	25-01-2022
	L64	Provisions Relating to Indigenous Systems	Chalk and Talk	07-02-2022
	L65	Provisions Relating to Indigenous Systems	Chalk and Talk	07-02-2022
	L66	Provisions Relating to Indigenous Systems	Chalk and Talk	08-02-2022
Week-12	L67	Constitution and Functions of DTAB	Chalk and Talk	08-02-2022
	L68	Constitution and Functions of DTAB	Power point	25-01-2022
	L69	Constitution and Functions of DCC	Chalk and Talk	14-02-2022
	L70	Constitution and Functions of DCC	Chalk and Talk	14-02-2022
	L71	Constitution and Functions of CDL	Power point	15-02-2022
	L72	Constitution and Functions of CDL	Chalk and Talk	15-02-2022
Week-13	L73	Qualification and duties –Govt. analyst	Chalk and Talk	21-02-2022
	L74	Qualification and duties –Govt. analyst	Chalk and Talk	21-02-2022
	L75	Qualification and duties –Govt. analyst	LCD	22-02-2022
	L76	Drugs Inspector	Chalk and Talk	22-02-2022
	L77	Drugs Inspector	Chalk and Talk	28-02-2022
	L78	Drugs Inspector	Chalk and Talk	28-02-2022
Week-14	L79	Revision	Google meet	07-03-2022
Unit-4	<b>Pharmacy Act –1948</b>			
	L80	Pharmacy Act –1948	Chalk and Talk	07-03-2022
	L81	Objectives Legal Definitions	Chalk and Talk	07-03-2022
	L82	General Study	Chalk and Talk	08-03-2022
	L83	Constitution and Functions of State	Power point	08-03-2022
	L84	Constitution and Functions of State	Chalk and Talk	21-03-2022

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Week-15	L85	Central Council	Chalk and Talk	04-04-2022
	L86	Central Council	LCD	04-04-2022
	L87	Registration	Chalk and Talk	05-04-2022
	L88	Registration	Power point	05-04-2022
	L89	Procedure, ER	Chalk and Talk	11-04-2022
	L90	Procedure, ER	Chalk and Talk	11-04-2022
Week-16	L91	Revision	Google meet	12-04-2022
<b>Unit-5</b>	<b>Medicinal and Toilet Preparation Act –1955</b>			
Week-17	L92	Medicinal and Toilet Preparation Act –1955	Chalk and Talk	12-04-2022
	L93	Medicinal and Toilet Preparation Act –1956	Power point	18-04-2022
	L94	Medicinal and Toilet Preparation Act –1957	Chalk and Talk	18-04-2022
	L95	Objectives, Legal Definitions	Power point	19-04-2022
	L96	Objectives, Legal Definitions	Chalk and Talk	19-04-2022
	L97	Licensing, Bonded and Non Bonded Laboratory	LCD	25-04-2022
Week-17	L98	Licensing, Bonded and Non Bonded Laboratory	Chalk and Talk	25-04-2022
	L99	Licensing, Bonded and Non Bonded Laboratory	Power point	26-04-2022
	L100	Ware Housing	Chalk and Talk	26-04-2022
	L101	Ware Housing	Chalk and Talk	02-05-2022
	L102	Manufacture of Ayurvedic drugs	Chalk and Talk	02-05-2022
Week-18	L103	Manufacture of Ayurvedic drugs	LCD	09-05-2022
	L104	Homeopathic	Chalk and Talk	09-05-2022
	L105	Homeopathic	Chalk and Talk	10-05-2022



  
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	L106	Patent & Proprietary Preparations	Chalk and Talk	10-05-2022
	L107	Patent & Proprietary Preparations	Chalk and Talk	16-05-2022
	L108	Revision	Google meet	16-05-2022
<b>Unit-6</b>	<b>Narcotic Drugs and Psychotropic substances Act-1985 and Rules</b>			
Week-19	L109	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	17-05-2022
	L110	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	17-05-2022
	L111	Narcotic Drugs and Psychotropic substances Act-1985 and rules	Power point	23-05-2022
	L112	Objectives, Legal Definitions, General Study	Chalk and Talk	23-05-2022
	L113	Abuse, Prohibition, Control and regulations, Schedules to the Act.	Google meet	24-05-2022
<b>Unit-7</b>	<b>Study of Salient Features of Drugs and magic remedies Act and its rules.</b>			
	L114	Study of Salient Features of Drugs and magic remedies Act and its rules.	Chalk and Talk	30-05-2022
Week-20	L115	Study of Salient Features of Drugs and magic remedies Act and its rules.	Google meet	30-05-2022
<b>Unit-8</b>	<b>Study of essential Commodities Act Relevant to drugs price control Order</b>			
	L116	Study of essential Commodities Act Relevant to drugs price control Order.	Chalk and Talk	31-05-2022
<b>Unit-9</b>	<b>Drug Price control Order &amp; National Drug Policy</b>			
	L117	Drug Price control Order & National Drug Policy	Chalk and Talk	31-05-2022
<b>Unit-10</b>	<b>Prevention Of Cruelty to animals Act-1960</b>			
	L118	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk	13-06-2022
	L119	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk	13-06-2022
<b>Unit-11</b>	<b>Patents &amp; design Act-1970</b>			
	L120	Patents & design Act-1970.	Chalk and Talk	14-06-2022
Week-21	L121	Patents & design Act-1970.	Power point	14-06-2022



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**DEPARTMENT OF PHARMACY PRACTICE**  
**CLASS TIME TABLE AY: 2021-2022**

**CLASS: PHARM.D IVYEAR (2018 ADMITTED BATCH)**  
**CLASS TEACHER: Dr.B.TEJA SREE**

W.e.f-16/08/2021

DAY/ TIME	9:30- 10:30	10:3 – 11:20	11:20– 12:10	12:10- 1:00	1:00– 01:50	1:50– 2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	<b>L U N C H</b>	PT- III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	EPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	<b>HOSPITAL ROSTER</b>							
SAT	<b>HOSPITAL ROSTER</b>							

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Mrs.Ch. Geetha	Assistant Professor	Biostatistics and Research Methodology-(BRM) (4)	Pharm. D
2.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy-(CP) (3)	Pharm. D
3.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy-(HP) (2)	Pharm. D
4.	Dr.B. TejaStee	Assistant Professor	Clinical Toxicology-(CT) (2)	Pharm. D
5.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr.T. Rushi	Assistant Professor	Pharmacotheapeutics – III-(PT-III) (3)	Pharm. D
7.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab-(CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab-(HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab-(BPPK) (3)	Pharm. D
10.	Dr.T. Rushi	Assistant Professor	Pharmacotheapeutics - III – (PT-III)Lab (3)	Pharm. D

*B. Bhagya*  
Time Table Incharge



*JV* Principal  
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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoeconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

## HOSPITAL PHARMACY (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope:** In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug dispensing, manufacturing of parenteral preparations, drug information, patient counselling, and therapeutic drug monitoring for improved patient care.
2. **Objectives:** Upon completion of the course, the student shall be able to –
  - a. know various drug distribution methods;
  - b. know the professional practice management skills in hospital pharmacies;
  - c. provide unbiased drug information to the doctors;
  - d. know the manufacturing practices of various formulations in hospital set up;
  - e. appreciate the practice based research methods; and
  - f. appreciate the stores management and inventory control.

### **Text books: (latest editions)**

- a. Hospital pharmacy by William .E. Hassan
- b. A text book of Hospital Pharmacy by S.H.Merchant & Dr. J.S. Qadry. Revised by R.K.Goyal & R.K. Parikh

### **References:**


- a. WHO consultative group report.
- b. R.P.S. Vol.2. Part –B; Pharmacy Practice section.
- c. Handbook of pharmacy – health care. Edt. Robin J Harman. The Pharmaceutical press.

### **3. Lecture wise programme :**

#### **Topics**

- 1 **Hospital - its Organisation and functions**
- 2 **Hospital pharmacy-Organisation and management**
  - a) Organizational structure-Staff, Infrastructure & work load statistics
  - b) Management of materials and finance
  - c) Roles & responsibilities of hospital pharmacist
- 3 **The Budget – Preparation and implementation**
- 4 **Hospital drug policy**
  - a) Pharmacy and Therapeutic committee (PTC)
  - b) Hospital formulary
  - c) Hospital committees
    - Infection committee
    - Research and ethical committee
  - d) developing therapeutic guidelines
  - e) Hospital pharmacy communication - Newsletter



  
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**5 Hospital pharmacy services**

- a) Procurement & warehousing of drugs and Pharmaceuticals
- b) Inventory control  
Definition, various methods of Inventory Control  
ABC, VED, EOQ, Lead time, safety stock
- c) Drug distribution in the hospital
  - i) Individual prescription method
  - ii) Floor stock method
  - iii) Unit dose drug distribution method
- d) Distribution of Narcotic and other controlled substances
- e) Central sterile supply services – Role of pharmacist

**6 Manufacture of Pharmaceutical preparations**

- a) Sterile formulations – large and small volume parenterals
- b) Manufacture of Ointments, Liquids, and creams
- c) Manufacturing of Tablets, granules, capsules, and powders
- d) Total parenteral nutrition


**7 Continuing professional development programs**

Education and training

**8 Radio Pharmaceuticals – Handling and packaging**

**9 Professional Relations and practices of hospital pharmacist**



  
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<b>HOSPITAL PHARMACY</b>				
<b>YEAR: IV PHARM D</b>				
Week No.	Lecture No.	TOPIC	Teaching Aid	Date
<b>Unit-1</b>	<b>Scope of Hospital Pharmacy</b>			
Week-1	L1	Scope and objectives of Hospital pharmacy	Chalk and Talk	06-10-2021
	L2	Organisation of Hospital	Chalk and Talk	07-10-2021
	L3	Functions of Hospital	Power Point	21-10-2021
<b>Unit-2</b>	<b>Hospital pharmacy</b>			
	L4	Hospital pharmacy-Introduction	Chalk and Talk	21-10-2021
	L5	Organizational structure-Staff, Infrastructure	Power Point	21-10-2021
	L6	Organizational structure-work load statistics	Chalk and Talk	21-10-2021
Week-2	L7	Management of materials and finance	Power Point	27-10-2021
	L8	Management of materials and finance	Chalk and Talk	28-10-2021
	L9	Roles & responsibilities of hospital pharmacist	Power Point	03-11-2021
	L10	Roles & responsibilities of hospital pharmacist	Chalk and Talk	03-11-2021
<b>Unit-3</b>	<b>The Budget</b>			
	L11	Introduction of Budget	Chalk and Talk	21-09-2022
	L12	Preparation of Budget	Chalk and Talk	22-09-2022
	L13	Implementation of Budget	LCD	12-10-2022
<b>Unit-4</b>	<b>Hospital drug policy</b>			
Week-3	L14	Hospital drug policy -Introduction	Chalk and Talk	11-11-2021
	L15	Pharmacy and Therapeutic committee (PTC)	Power Point	17-11-2021
	L16	Pharmacy and Therapeutic committee (PTC)	Chalk and Talk	18-11-2021
	L17	Hospital formulary	Chalk and Talk	24-11-2021

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	L18	Hospital formulary	LCD	24-11-2021
	L19	Hospital committees-Introduction	Chalk and Talk	25-11-2021
Week-4	L20	Infection committee	Chalk and Talk	25-11-2021
	L21	Infection committee	Chalk and Talk	01-12-2021
	L22	Research and ethical committee	Power Point	01-12-2021
	L23	Research and ethical committee	Chalk and Talk	02-12-2021
	L24	Developing therapeutic guidelines	LCD	08-12-2021
	L25	Developing therapeutic guidelines	Chalk and Talk	09-12-2021
Week-5	L26	Hospital pharmacy communication - Introduction	Power Point	09-12-2021
	L27	Hospital pharmacy communication - Newsletter	Chalk and Talk	15-12-2021
	L28	Hospital pharmacy communication - Newsletter	Chalk and Talk	15-12-2021
Unit-5	<b>Hospital pharmacy services</b>			
	L29	Hospital pharmacy services - Introduction	Chalk and Talk	16-12-2021
	L30	Procurement & warehousing of drugs	Chalk and Talk	16-12-2021
	L31	Procurement & warehousing of drugs	LCD	29-12-2021
Week-6	L32	Procurement & warehousing of Pharmaceuticals	Chalk and Talk	29-12-2021
	L33	Procurement & warehousing of Pharmaceuticals	Power Point	30-12-2021
	L34	Procurement & warehousing of Pharmaceuticals	Chalk and Talk	30-12-2021
	L35	Inventory control-Introduction	Chalk and Talk	05-01-2022
	L36	Definition, various methods of Inventory Control	LCD	06-01-2022
	L37	ABC,VED	Power Point	06-01-2022
Week-7	L38	EOQ, Lead time, safety stock	Chalk and Talk	19-01-2022



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	L39	EOQ, Lead time, safety stock	Chalk and Talk	19-01-2022
	L40	EOQ, Lead time, safety stock	Chalk and Talk	19-01-2022
	L41	Drug distribution in the hospital - Introduction	LCD	27-01-2022
	L42	Individual prescription method	Chalk and Talk	27-01-2022
	L43	Individual prescription method	Chalk and Talk	02-02-2022
Week-8	L44	Floor stock method	Chalk and Talk	03-02-2022
	L45	Floor stock method	LCD	03-02-2022
	L46	Unit dose drug distribution method	Chalk and Talk	09-02-2022
	L47	Unit dose drug distribution method	Chalk and Talk	09-02-2022
	L48	Distribution of Narcotic	LCD	10-02-2022
Week-9	L49	Distribution of Narcotic	Chalk and Talk	16-02-2022
	L50	Distribution of other controlled substances	Chalk and Talk	16-02-2022
	L51	Distribution of other controlled substances	Chalk and Talk	17-02-2022
	L52	Central sterile supply services – Role of pharmacist	Power Point	17-02-2022
	L53	Central sterile supply services – Role of pharmacist	Chalk and Talk	23-02-2022
Unit-6	<b>Manufacture of Pharmaceutical preparations</b>			
	L54	Manufacture of Pharmaceutical preparations- Introduction	Chalk and Talk	24-02-2022
	L55	Sterile formulations – large and small volume parenterals	Chalk and Talk	02-03-2022
Week-10	L56	Sterile formulations – large and small volume parenterals	Chalk and Talk	03-03-2022
	L57	Manufacture of Ointments	LCD	09-03-2022
	L58	Manufacture of Ointments	Chalk and Talk	09-03-2022
	L59	Manufacture of Liquids	Power Point	24-02-2022
	L60	Manufacture of Liquids	Chalk and talk	02-03-2022



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	L61	Manufacture of creams	Chalk and Talk	10-03-2022
Week-11	L62	Manufacture of creams	LCD	10-03-2022
	L63	Manufacturing of Tablets	Chalk and Talk	23-03-2022
	L64	Manufacturing of Tablets	Chalk and Talk	24-03-2022
	L65	Manufacturing of Tablets	LCD	24-03-2022
	L66	Manufacturing of granules	Chalk and Talk	30-03-2022
	L67	Manufacturing of granules	Chalk and Talk	30-03-2022
Week-12	L68	Manufacturing of granules	Chalk and Talk	31-03-2022
	L69	Manufacturing of capsules	Power point	06-04-2022
	L70	Manufacturing of capsules	Chalk and Talk	07-04-2022
	L71	Manufacturing of powders	Chalk and Talk	13-04-2022
	L72	Manufacturing of powders	Chalk and Talk	13-04-2022
	L73	Total parenteral nutrition	Chalk and Talk	30-03-2022
Week-13	L74	Total parenteral nutrition	Chalk and Talk	20-04-2022
	L75	Total parenteral nutrition	Power point	20-04-2022
<b>Unit-7</b>	<b>Continuing professional development programs</b>			
	L76	Continuing professional development programs - Introduction	Chalk and Talk	21-04-2022
	L77	Continuing professional development programs - Education and training	Chalk and Talk	27-04-2022
	L78	Continuing professional development programs - Education and training	Chalk and Talk	28-04-2022
	L79	Continuing professional development programs - Education and training	Power point	04-05-2022
<b>Unit-8</b>	<b>Radio Pharmaceuticals</b>			
Week-14	L80	Radio Pharmaceuticals – Introduction	Chalk and Talk	05-05-2022



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	L81	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	12-05-2022
	L82	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	18-05-2022
	L83	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	19-05-2022
<b>Unit-9</b>	<b>Professional Relations and practices of hospital pharmacist</b>			
	L84	Professional Relations of hospital pharmacist	Chalk and Talk	25-05-2022
	L85	Professional Relations of hospital pharmacist	LCD	26-05-2022
<b>Week-15</b>	L86	Professional Relations of hospital pharmacist	Chalk and Talk	01-06-2022
	L87	Professional Relations of hospital pharmacist	Power point	02-06-2022
	L88	Professional Practices of hospital pharmacist	Chalk and Talk	15-06-2022
	L89	Professional Practices of hospital pharmacist	Google meet	16-06-2022

*V. UmaSankar*

Signature of the Faculty

*[Signature]*  
Principal

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**CLASS TIME TABLE AY: 2021-2022**

**CLASS: PHARM.D IV YEAR (2018 ADMITTED BATCH)**  
**CLASS TEACHER: Dr.B.TEJA SREE**

W.e.f-16/08/2021

DAY/ TIME	9:30- 10:30	10:3 – 11:20	11:20– 12:10	12:10- 1:00	1:00– 01:50	1:50– 2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	L U N C H	PT-III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	EPPK LAB		
THU	BRM	PT-III	CT		HP	PT-III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
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4.	Dr.B. TejaSree	Assistant Professor	Clinical Toxicology-(CT) (2)	Pharm. D
5.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics – III-(PT-III) (3)	Pharm. D
7.	Dr V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab-(CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab-(HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab-(BPPK) (3)	Pharm. D
10.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics - III – (PT-III)Lab (3)	Pharm. D

*B. Bhargava*  
 Time Table Incharge



*Principal*  
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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoeconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

## CLINICAL PHARMACY (THEORY)

**Theory : 3 Hrs. /Week**

### 1. Objectives of the Subject :

- Upon completion of the subject student shall be able to (Know, do, appreciate) –
- monitor drug therapy of patient through medication chart review and clinical review;
  - obtain medication history interview and counsel the patients;
  - identify and resolve drug related problems;
  - detect, assess and monitor adverse drug reaction;
  - interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states; and
  - retrieve, analyse, interpret and formulate drug or medicine information.

### Text books (Theory)

- Practice Standards and Definitions - The Society of Hospital Pharmacists of Australia.
- Basic skills in interpreting laboratory data - Scott LT, American Society of Health System Pharmacists Inc.
- Biopharmaceutics and Applied Pharmacokinetics - Leon Shargel, Prentice Hall publication.
- A text book of Clinical Pharmacy Practice; Essential concepts and skills, Dr.G.Parthasarathi etal, Orient Orient Langram Pvt.Ltd. ISSN8125026

### References


- Australian drug information -Procedure manual. The Society of Hospital Pharmacists of Australia.
- Clinical Pharmacokinetics - Rowland and Tozer, Williams and Wilkins Publication.
- Pharmaceutical statistics. Practical and clinical applications. Sanford Bolton, Marcel Dekker, Inc.

### 2. Detailed syllabus and lecture wise schedule:

#### Title of the topic

- Definitions, development and scope of clinical pharmacy**
- Introduction to daily activities of a clinical pharmacist**
  - Drug therapy monitoring (medication chart review, clinical review, pharmacist interventions)
  - Ward round participation
  - Adverse drug reaction management
  - Drug information and poisons information
  - Medication history
  - Patient counseling
  - Drug utilisation evaluation (DUE) and review (DUR)
  - Quality assurance of clinical pharmacy services



  
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3. **Patient data analysis**  
The patient's case history, its structure and use in evaluation of drug therapy & Understanding common medical abbreviations and terminologies used in clinical practices.
4. **Clinical laboratory tests used in the evaluation of disease states, and interpretation of test results**
  - a. Haematological, Liver function, Renal function, thyroid function tests
  - b. Tests associated with cardiac disorders
  - c. Fluid and electrolyte balance
  - d. Microbiological culture sensitivity tests
  - e. Pulmonary Function Tests
5. **Drug & Poison information**
  - a. Introduction to drug information resources available
  - b. Systematic approach in answering DI queries
  - c. Critical evaluation of drug information and literature
  - d. Preparation of written and verbal reports
  - e. Establishing a Drug Information Centre
  - f. Poisons information- organization & information resources
6. **Pharmacovigilance**
  - a. Scope, definition and aims of pharmacovigilance
  - b. Adverse drug reactions - Classification, mechanism, predisposing factors, causality assessment [different scales used]
  - c. Reporting, evaluation, monitoring, preventing & management of ADRs
  - d. Role of pharmacist in management of ADR.
7. Communication skills, including patient counselling techniques, medication history interview, presentation of cases.
8. Pharmaceutical care concepts
9. Critical evaluation of biomedical literature
10. Medication errors



  
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CLINICAL PHARMACY				
YEAR: IV PHARM D				
Week No.	Lecture No.	Topics to be covered	Teaching Aid	Dates
<b>Unit 1</b>		<b>Introduction to clinical pharmacy</b>		
Week 1	L1	Definitions of clinical pharmacy	Chalk and Talk	04-10-2021
	L2	Development of clinical pharmacy	Chalk and Talk	05-10-2021
	L3	Development of clinical pharmacy	Chalk and Talk	06-10-2021
	L4	Scope of clinical pharmacy	Chalk and Talk	06-10-2021
	L5	Scope of clinical pharmacy	Google meet	11-10-2021
<b>Unit 2</b>		<b>Introduction to daily activities of a clinical pharmacist</b>		
	L6	Introduction to daily activities of a clinical pharmacist	Chalk and Talk	18-10-2021
Week 2	L7	Drug therapy monitoring	Chalk and Talk	18-10-2021
	L8	Medication chart review	Chalk and Talk	19-10-2021
	L9	Medication chart review	Power point	20-10-2021
	L10	Clinical review	Chalk and Talk	25-10-2021
	L11	Clinical review	Chalk and Talk	26-10-2021
	L12	Pharmacist interventions	Power point	27-10-2021
Week 3	L13	Pharmacist interventions	Chalk and Talk	27-10-2021
	L14	Ward round participation	Chalk and Talk	01-11-2021
	L15	Ward round participation	LCD	01-11-2021
	L16	Ward round participation	Chalk and Talk	02-11-2021
	L17	Adverse drug reaction management	Chalk and Talk	03-11-2021
	L18	Types of drug management	Power point	08-11-2021
Week 4	L19	Drug information	Chalk and Talk	09-11-2021

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	L20	Poisons information	Chalk and Talk	09-11-2021
	L21	Poisons information	Chalk and Talk	09-11-2021
	L22	Poisons information	LCD	10-11-2021
	L23	Medication history	Chalk and Talk	10-11-2021
	L24	Medication history	Chalk and Talk	15-11-2021
Week 5	L25	Patient counseling	Power point	16-11-2021
	L26	Patient counseling	Chalk and Talk	17-11-2021
	L27	Drug utilisation evaluation	Chalk and Talk	17-11-2021
	L28	Drug utilisation evaluation	Chalk and Talk	22-11-2021
	L29	Drug utilisation evaluation (DUE) and review	Power point	22-11-2021
	L30	Drug utilisation evaluation (DUE) and review	Chalk and Talk	23-11-2021
Week 6	L31	Drug utilisation evaluation (DUE) and review	Chalk and Talk	24-11-2021
	L32	Quality assurance of clinical pharmacy services	Power point	29-11-2021
	L33	Quality assurance of clinical pharmacy services	Chalk and Talk	30-11-2021
	L34	Clinical pharmacy services	Chalk and Talk	30-12-2021
	L35	Clinical pharmacy services	Google meet	01-12-2021
<b>Unit 3</b>	<b>Introduction to Patient data analysis</b>			
	L36	Patient data analysis	Chalk and Talk	01-12-2021
Week 7	L37	The patient's case history, its structure	Power point	06-12-2021
	L38	Use in evaluation of drug therapy	Chalk and Talk	07-12-2021
	L39	Understanding common medical abbreviations	Chalk and Talk	07-12-2021
	L40	Understanding common medical abbreviations	Power point	08-12-2021
	L41	Terminologies used in clinical Practices	Chalk and Talk	08-12-2021

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	L42	Terminologies used in clinical Practices	Google meet	13-12-2021
<b>Unit 4</b>	<b>Introduction to Clinical laboratory tests</b>			
Week 8	L43	Clinical laboratory tests used in the evaluation of disease states	Chalk and Talk	14-12-2021
	L44	Clinical laboratory tests used in the evaluation of disease states	Chalk and Talk	15-12-2021
	L45	Interpretation of test results	Power point	28-12-2021
	L46	Haematological functions tests	Chalk and Talk	29-12-2021
	L47	Liver function tests	Chalk and Talk	03-01-2022
	L48	Liver function tests	Chalk and Talk	04-01-2022
Week 9	L49	Renal function tests	LCD	05-01-2022
	L50	Renal function tests	Chalk and Talk	10-01-2022
	L51	Thyroid function tests	Chalk and Talk	11-01-2022
	L52	Thyroid function tests	Chalk and Talk	17-01-2022
	L53	Tests associated with cardiac disorders	LCD	05-01-2022
	L54	Tests associated with cardiac disorders	Chalk and Talk	18-01-2022
Week 10	L55	Fluid and electrolyte balance	Power point	18-01-2022
	L56	Fluid and electrolyte balance	Chalk and Talk	19-01-2022
	L57	Microbiological culture sensitivity tests	Chalk and Talk	19-01-2022
	L58	Microbiological culture sensitivity tests	Chalk and Talk	24-01-2022
	L59	Microbiological culture sensitivity tests	Chalk and Talk	25-01-2022
	L60	Pulmonary Function Tests	Chalk and Talk	31-01-2022
Week 12	L61	Pulmonary Function Tests	Power point	01-02-2022
	L62	Pulmonary Function Tests	Chalk and Talk	02-02-2022
<b>Unit 5</b>	<b>Introduction to Drug &amp; Poison information</b>			
	L63	Drug & Poison information	Chalk	07-02-2022





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			Talk	
	L64	Introduction to drug information resources available	Chalk and Talk	08-02-2022
	L65	Introduction to drug information resources available	Chalk and Talk	
	L66	Systematic approach in answering DI queries	Chalk and Talk	09-02-2022
Week 13	L67	Systematic approach in answering DI queries	Google meet	14-02-2022
	L68	Critical evaluation of drug information and literature	Chalk and Talk	14-02-2022
	L69	Critical evaluation of drug information and literature	LCD	15-02-2022
	L70	Critical evaluation of drug information and literature	Chalk and Talk	16-02-2022
	L71	Preparation of written reports	Power point	21-02-2022
	L72	Preparation of written reports	Chalk and Talk	22-02-2022
Week 14	L73	Preparation of written reports	Google meet	23-02-2022
	L74	Verbal reports	Chalk and Talk	28-02-2022
	L75	Establishing a Drug Information Centre	Chalk and Talk	02-03-2022
	L76	Establishing a Drug Information Centre	Chalk and Talk	02-03-2022
	L77	Establishing a Drug Information Centre	Chalk and Talk	07-03-2022
	L78	Establishing a Drug Information Centre	Chalk and Talk	08-03-2022
Week 15	L79	Poisons information	Chalk and Talk	08-03-2022
	L80	Poisons information	Chalk and Talk	09-03-2022
	L81	organization & information resources	Chalk and Talk	09-03-2022
	L82	organization & information resources	Chalk and Talk	21-03-2022
	L83	organization & information resources	Chalk and Talk	22-03-2022
<b>Unit 6</b>	<b>Pharmacovigilance</b>			
Week 17	L84	Pharmacovigilance	Chalk and Talk	23-03-2022
	L85	Scope and definition	Chalk and Talk	23-03-2022
	L86	Scope and definition	LCD	29-03-2022
	L87	Aims of pharmacovigilance	Chalk and Talk	30-03-2022

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Week 18	L89	Adverse drug reactions	Chalk and Talk	05-04-2022
	L90	Adverse drug reactions	Power point	06-04-2022
	L91	Classification and mechanism	Chalk and Talk	11-04-2022
	L92	Classification and mechanism	Chalk and Talk	12-04-2022
	L93	Classification and mechanism	Chalk and Talk	13-04-2022
	L94	Predisposing factors	Power point	13-04-2022
Week 19	L95	Predisposing factors	Chalk and Talk	18-04-2022
	L96	Causality assessment	Chalk and Talk	18-04-2022
	L97	Causality assessment	Power point	19-04-2022
	L98	Reporting, evaluation	Chalk and Talk	20-04-2022
Week 20	L99	Reporting, evaluation	Power point	25-04-2022
	L100	Monitoring, preventing & management of ADRs	Chalk and Talk	26-04-2022
	L101	Monitoring, preventing & management of ADRs	Chalk and Talk	26-04-2022
	L102	Monitoring, preventing & management of ADRs	Chalk and Talk	27-04-2022
Week 21	L89	Adverse drug reactions	Chalk and Talk	05-04-2022
	L90	Adverse drug reactions	Power point	06-04-2022
	L91	Classification and mechanism	Chalk and Talk	11-04-2022
	L92	Classification and mechanism	Chalk and Talk	12-04-2022
<b>Unit 7</b>	<b>Introduction to Communication skills</b>			
Week 22	L103	Communication skills	Chalk and Talk	02-05-2022
	L104	Including patient counselling techniques	Google meet	04-05-2022
	L105	Including patient counselling techniques	Chalk and Talk	09-05-2022
	L106	Medication history interview	Chalk and Talk	10-05-2022
	L107	Presentation of cases	Chalk and Talk	10-05-2022



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	L122	Revision	Chalk and Talk	21-06-2021
<b>Unit-12</b>	<b>Brief study of prescription and Non-prescription Products</b>			
	L123	Brief study of prescription Products	Chalk and Talk	22-06-2021
	L124	Brief study of prescription Products	Power point	28-06-2021
	L125	Non-prescription Products.	Chalk and Talk	29-06-2021
	L126	Non-prescription Products.	Power point	05-07-2021

*S. Dhavalapuri*  
Signature of the Faculty

*S. Dhavalapuri*  
Principal  
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## DEPARTMENT OF PHARMACY CLASS TIME TABLE AY: 2020-2021

**CLASS: I B.Pharm II Sem (PCI Regulation)  
SECTION- A (2020 Admitted Batch)**

w.e.f: 22/06/2021

CLASS TEACHER: Mrs. L. Divya Sri				Batch A: Roll 01-25		Batch B: Roll 26-55		
DAY/ TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:20	12:00 1:00	1:00 - 1:50	1:50 2:40	2:40 3:30	3:30 – 4:20
MON	POC-I	PATHO	BIOCHEM	<b>L U N C H</b>	HAP-II	Batch A: POC-I Lab Batch B: BIOCHEM Lab		
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A: BIOCHEM Lab Batch B: POC-II Lab		
WED	HAP-II	CA	PATHO		POC-I	Batch A: HAP-II Lab Batch B: CA Lab		
THU	BIOCHEM	PATHO	CA		TUTORIAL (OC)	Batch A: CA Lab Batch B: HAP-II Lab		
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP- II	TUTORIAL (HAP)
SAT	CA	BIOCHEM	HAP-II		PATHO	POC-I	ES	L/S

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAM
1.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mr. Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) (5)	B. Pharm
4.	Mrs. B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Ms.K. Rohini	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. K. Venkata Radhika	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Lab (6)	B. Pharm
8.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry Lab (BIOCHEM) (6)	B. Pharm
9.	Mr. Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. K. Venkata Radhika	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Tutorial (1)	B. Pharm
12.	Mr. Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports (1)	B. Pharm

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## CLASS TIME TABLE AY: 2020-2021

CLASS:I B.Pharm IISem (PCI Regulation)  
SECTION- B (2020 Admitted Batch)

w.e.f: 22/06/2021

CLASS TEACHER: Mrs. B. MeherJyoti				Batch C:Roll 56-80		Batch D : Roll- 81-B0		
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:2- 12:10	12:10 1:00	1:00 - 01:50	1:50- 2:40	2:40- 3:30	3:30 - 4:20
MON	POC-1	HAP-II	BIOCHE M	<b>L U N C H</b>	PATHO	BATCH C-HAP-II LAB BATCH D -CA LAB		
TUE	CA	PATHO	POC-1		HAP-II	BATCH C-CA LAB BATCH D-HAP-II LAB		
WED	PATHO	BIOCHEM	HAP-II		CA	BATCH C-POC1 LAB BATCH D-BIOCHEM LAB		
THU	POC1	BIOCHEM	ES		CA	BATCH C- BIOCHEM LAB BATCH D-POC1 LAB		
FRI	BIOCHEM	POC-1	PATHO		TUTORIA L (HAP)	POC1	ES	(L/S)
SAT	HAP-II	PATHO	BIOCHE M		ES	CA	HAP- II	TUTORIA L (OC)

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAM
1.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs.B. Poornima	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mrs. Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II)(5)	B. Pharm
4.	Mrs.B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Ms. K. Rohini	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs.B. Rama Madhuri	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) Lab (6)	B. Pharm
8.	Mrs.B. Poornima	Associate Professor	Pharmaceutical Biochemistry (BIOCHEM) Lab (6)	B. Pharm
9.	Mrs.Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs.B. Rama Madhuri	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)(Tutorial (1)	B. Pharm
12.	Mr.Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II)Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports(1)	B. Pharm



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**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>



## **BP 206 T. ENVIRONMENTAL SCIENCES (Theory)**

**30 hours**

**Scope:** Environmental Sciences is the scientific study of the environmental system and the status of its inherent or induced changes on organisms. It includes not only the study of physical and biological characters of the environment but also the social and cultural factors and the impact of man on environment.

**Objectives:** Upon completion of the course the student shall be able to:

1. Create the awareness about environmental problems among learners.
2. Impart basic knowledge about the environment and its allied problems.
3. Develop an attitude of concern for the environment.
4. Motivate learner to participate in environment protection and environment improvement.
5. Acquire skills to help the concerned individuals in identifying and solving environmental problems.
6. Strive to attain harmony with Nature.

### **Course content:**

#### **Unit-I**

**10hours**

The Multidisciplinary nature of environmental studies

Natural Resources

Renewable and non-renewable resources:

Natural resources and associated problems

a) Forest resources; b) Water resources; c) Mineral resources; d) Food resources; e) Energy resources; f) Land resources: Role of an individual in conservation of natural resources.

#### **Unit-II**

**10hours**

Ecosystems

- Concept of an ecosystem.
- Structure and function of an ecosystem.
- Introduction, types, characteristic features, structure and function of the ecosystems: Forest ecosystem; Grassland ecosystem; Desert ecosystem; Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

#### **Unit- III**

**10hours**

Environmental Pollution: Air pollution; Water pollution; Soil pollution

**Recommended Books (Latest edition):**

1. Y.K. Sing, Environmental Science, New Age International Pvt, Publishers, Bangalore
2. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
3. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India,
4. Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
5. Clark R.S., Marine Pollution, Clarendon Press Oxford
6. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumbai, 1196p
7. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
8. Down of Earth, Centre for Science and Environment



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## B. PHARMACY LECTURE PLAN SECTION-A

<b>COURSE NAME: Environmental Science</b>	<b>COURSE CODE: BP206T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION: PCI</b>

Date	Lecture No	Topic Name	Source
22-06-2021	Lecture 1	Introduction of all the topics to be covered	Text Book
25-06-2021	Lecture 2	Unit-1 The multidisciplinary nature of Environmental Studies	Text Book
26-06-2021	Lecture 3	Natural Resources	Text Book
29-06-2021	Lecture 4	Renewable Sources	Text Book
02-07-2021	Lecture 5	Non-renewable Resources	Text Book
03-07-2021	Lecture 6	Forest Resources and its associated Problems	Text Book
13-07-2021	Lecture 7	Water Resources and its associated Problems	Text Book
16-07-2021	Lecture 8	Mineral Resources and its associated problems	Text Book
17-07-2021	Lecture 9	Food Resources and its Associated Problems	Text Book
20-07-2021	Lecture 10	Energy Resources and its Associated Problems	Text Book
23-07-2021	Lecture 11	Land Resources and its associated problems	Text Book
24-07-2021	Lecture 12	Role of an individual in conservation of natural Resources	Text Book
27-07-2021	Lecture 13	Unit-2 Ecosystems	Text Book
30-07-2021	Lecture 14	Concept of an Ecosystem	Text Book
31-07-2021	Lecture 15	Structure of an Ecosystem	Text Book
03-08-2021	Lecture 16	Function of an Ecosystem	Text Book
06-08-2021	Lecture 17	Introduction to Ecosystem	Text Book
07-08-2021	Lecture 18	Definition of Ecosystem	Text Book
07-08-2021	Lecture 19	Types of Ecosystem	Text Book
13-08-2021	Lecture 20	Characteristic Features of an Ecosystem	Text Book
14-08-2021	Lecture 21	Introduction to Forest Ecosystem	Text Book

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17-08-2021	Lecture 22	Brief view on Forest Ecosystem	Text Book
20-08-2021	Lecture 23	Continuation of Forest Ecosystem	Text Book
21-08-2021	Lecture 24	Introduction to Grassland Ecosystem	Text Book
31-08-2021	Lecture 25	Brief view on Grassland Ecosystem	Text Book
03-09-2021	Lecture 26	Continuation of Grassland Ecosystem	Text Book
04-09-2021	Lecture 27	Introduction to Desert Ecosystem	Text Book
07-09-2021	Lecture 28	Brief view on Desert Ecosystem	Text Book
07-09-2021	Lecture 29	Continuation of Desert Ecosystem	Text Book
11-09-2021	Lecture 30	Introduction to aquatic Ecosystem	Text Book
14-09-2021	Lecture 31	Aquatic Ecosystem	Text Book
17-09-2021	Lecture 32	Unit-3 Environmental Pollution	Text Book
18-09-2021	Lecture 33	Introduction to Pollution	Text Book
21-09-2021	Lecture 34	Brief view on environmental Pollution	Text Book
24-09-2021	Lecture 35	Air Pollution	Text Book
25-09-2021	Lecture 36	Prevention of Air Pollution	Text Book
28-09-2021	Lecture 37	Water Pollution	Text Book
01-10-2021	Lecture 38	Prevention of Water Pollution	Text Book
01-10-2021	Lecture 39	Soil Pollution & Prevention of Soil Pollution	Text Book

*K. Polivi*

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*Principal*

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## B. PHARMACY LECTURE PLAN SECTION-B

<b>COURSE NAME: Environmental Science</b>	<b>COURSE CODE: BP206T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION: PCI</b>

Date	Lecture No	Topic Name	Source
03-06-2021	Lecture 1	Introduction of all the topics to be covered	Text Book
04-06-2021	Lecture 2	Unit-1 The multidisciplinary nature of Environmental Studies	Text Book
05-06-2021	Lecture 3	Natural Resources	Text Book
10-06-2021	Lecture 4	Renewable Resources Non-renewable Resources	Text Book
11-06-2021	Lecture 5	Non –renewable Resources	Text Book
12-06-2021	Lecture 6	Forest Resources and its associated Problems	Text Book
17-06-2021	Lecture 7	Water Resources and its associated Problems	Text Book
18-06-2021	Lecture 8	Mineral Resources and its associated problems	Text Book
19-06-2021	Lecture 9	Food Resources and its associated Problems	Text Book
24-06-2021	Lecture 10	Energy Resources and its associated Problems	Text Book
26-06-2021	Lecture 11	Land Resources and its associated problems	Text Book
01-07-2021	Lecture 12	Role of an individual in conservation of natural resources	Text Book
02-07-2021	Lecture 13	Unit–2 Ecosystems	Text Book
03-07-2021	Lecture 14	Concept of an Ecosystem	Text Book
15-07-2021	Lecture 15	Structure of an Ecosystem	Text Book
16-07-2021	Lecture 16	Function of an Ecosystem	Text Book
17-07-2021	Lecture 17	Introduction to Ecosystem	Text Book
22-07-2021	Lecture 18	Definition of Ecosystem	Text Book
24-07-2021	Lecture 19	Types of Ecosystems	Text Book

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29-07-2021	Lecture 20	Characteristic Features of an Ecosystem	Text Book
30-07-2021	Lecture 21	Introduction to Forest Ecosystem	Text Book
31-07-2021	Lecture 22	Brief view on Forest Ecosystem	Text Book
05-08-2021	Lecture 23	Continuation of Forest Ecosystem	Text Book
12-08-2021	Lecture 24	Introduction to Grassland Ecosystem	Text Book
13-08-2021	Lecture 25	Introduction to Pollution	Text Book
19-08-2021	Lecture 26	Brief view on environmental Pollution	Text Book
21-08-2021	Lecture 27	Air Pollution	Text Book
02-09-2021	Lecture 28	Prevention of Air Pollution	Text Book
03-09-2021	Lecture 29	Water Pollution	Text Book
09-09-2021	Lecture 30	Prevention of Water Pollution	Text Book
11-09-2021	Lecture 31	Soil Pollution	Text Book
01-10-2021	Lecture 32	Prevention of Soil Pollution	Text Book

  
Signature of the Faculty



  
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## DEPARTMENT OF PHARMACY CLASS TIME TABLE AY: 2020-2021

CLASS: I B.Pharm II Sem (PCI Regulation)  
SECTION- A (2020 Admitted Batch)

w.e.f: 22/06/2021

CLASS TEACHER: Mrs. L. Divya Sri				Batch A: Roll 01-25		Batch B: Roll 26-55		
DAY/ TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:20	12:00 1:00	1:00 - 1:50	1:50 2:40	2:40 3:30	3:30 – 4:20
MON	POC-I	PATHO	BIOCHEM	L U N C H	HAP-II	Batch A: POC-I Lab Batch B: BIOCHEM Lab		
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A: BIOCHEM Lab Batch B: POC-II Lab		
WED	HAP-II	CA	PATHO		POC-I	Batch A: HAP-II Lab Batch B :CA Lab		
THU	BIOCHEM	PATHO	CA		TUTORIAL (OC)	Batch A :CA Lab Batch B :HAP-II Lab		
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP-II	TUTORIAL (HAP)
SAT	CA	BIOCHEM	HAP-II		PATHO	POC-I	ES	L/S

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAM
1.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mr. Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) (5)	B. Pharm
4.	Mrs. B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Ms.K. Rohini	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. K. Venkata Radhika	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Lab (6)	B. Pharm
8.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry Lab (BIOCHEM) (6)	B. Pharm
9.	Mr. Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. K. Venkata Radhika	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Tutorial (1)	B. Pharm
12.	Mr. Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports (1)	B. Pharm

Time Table Incharge



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## CLASS TIME TABLE AY: 2020-2021

CLASS:I B.Pharm IISem (PCI Regulation)  
SECTION- B (2020 Admitted Batch)

w.e.f: 22/06/2021

CLASS TEACHER: Mrs. B. MeherJyoti				Batch C:Roll 56-80		Batch D : Roll- 81-B0		
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:2- 12:10	12:10 1:00	1:00 - 01:50	1:50- 2:40	2:40- 3:30	3:30 - 4:20
MON	POC-I	HAP-II	BIOCHE M	L U N C H	PATHO	BATCH C-HAP-II LAB BATCH D -CA LAB		
TUE	CA	PATHO	POC-I		HAP-II	BATCH C-CA LAB BATCH D-HAP-II LAB		
WED	PATHO	BIOCHEM	HAP-II		CA	BATCH C-POC1 LAB BATCH D-BIOCHEM LAB		
THU	POC1	BIOCHEM	ES		CA	BATCH C- BIOCHEM LAB BATCH D-POC1 LAB		
FRI	BIOCHEM	POC-I	PATHO		TUTORIA L (HAP)	POC1	ES	(L/S)
SAT	HAP-II	PATHO	BIOCHE M		ES	CA	HAP- II	TUTORIA L (OC)

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAM
1.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs.B. Poornima	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mrs. Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II)(5)	B. Pharm
4.	Mrs.B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Ms. K. Rohini	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs.B. Rama Madhuri	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) Lab (6)	B. Pharm
8.	Mrs.B. Poornima	Associate Professor	Pharmaceutical Biochemistry (BIOCHEM) Lab (6)	B. Pharm
9.	Mrs.Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs.B. Rama Madhuri	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)(Tutorial (1)	B. Pharm
12.	Mr.Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II)Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports(1)	B. Pharm

  
Time Table Incharge



  
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**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>

## **BP 201T. HUMAN ANATOMY AND PHYSIOLOGY-II (Theory)**

**45 Hours**

**Scope:** This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It also helps in understanding both homeostatic mechanisms. The subject provides the basic knowledge required to understand the various disciplines of pharmacy.

**Objectives:** Upon completion of this course the student should be able to:

1. Explain the gross morphology, structure and functions of various organs of the human body.
2. Describe the various homeostatic mechanisms and their imbalances.
3. Identify the various tissues and organs of different systems of human body.
4. Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume.
5. Appreciate coordinated working pattern of different organs of each system
6. Appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body.

### **Course Content:**

#### **Unit I**

**10 hours**

- **Nervous system**

Organization of nervous system, neuron, neuroglia, classification and properties of nerve fibre, electrophysiology, action potential, nerve impulse, receptors, synapse, neurotransmitters.

Central nervous system: Meninges, ventricles of brain and cerebrospinal fluid. structure and functions of brain (cerebrum, brain stem, cerebellum), spinal cord (gross structure, functions of afferent and efferent nerve tracts, reflex activity)

#### **Unit II**

**06 hours**

- **Digestive system**

Anatomy of GI Tract with special reference to anatomy and functions of stomach, ( Acid production in the stomach, regulation of acid production through parasympathetic nervous system, pepsin role in protein digestion) small intestine

and large intestine, anatomy and functions of salivary glands, pancreas and liver, movements of GIT, digestion and absorption of nutrients and disorders of GIT.

- **Energetics**

Formation and role of ATP, Creatinine Phosphate and BMR.

### **Unit III**

- **Respiratory system**

**10 hours**

Anatomy of respiratory system with special reference to anatomy of lungs, mechanism of respiration, regulation of respiration

Lung Volumes and capacities transport of respiratory gases, artificial respiration, and resuscitation methods.

- **Urinary system**

Anatomy of urinary tract with special reference to anatomy of kidney and nephrons, functions of kidney and urinary tract, physiology of urine formation, micturition reflex and role of kidneys in acid base balance, role of RAS in kidney and disorders of kidney.

### **Unit IV**

**10 hours**

- **Endocrine system**

Classification of hormones, mechanism of hormone action, structure and functions of pituitary gland, thyroid gland, parathyroid gland, adrenal gland, pancreas, pineal gland, thymus and their disorders.

### **Unit V**

**09 hours**

- **Reproductive system**

Anatomy of male and female reproductive system, Functions of male and female reproductive system, sex hormones, physiology of menstruation, fertilization, spermatogenesis, oogenesis, pregnancy and parturition

- **Introduction to genetics**

Chromosomes, genes and DNA, protein synthesis, genetic pattern of inheritance



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### B. PHARMACY LECTURE PLAN SECTION-A

<b>COURSE NAME:</b> Human Anatomy & Physiology	<b>COURSE CODE:</b> BP201T
<b>YEAR/ SEM:</b> I B. Pharm IISem	<b>REGULATION:</b> PCI (R14)

Date	Lecture No.	Topic Name	Source
21-06-2021	Lecture 1	Introduction of all the topics to be covered	Text Book
23-06-2021	Lecture 2	Unit-1 Nervous System	Text Book
24-06-2021	Lecture 3	Organization of nervous system	Text Book
25-06-2021	Lecture 4	Structure & Function of neuron	Text Book
26-06-2021	Lecture 5	Neuroglial Cells	Text Book
28-06-2021	Lecture 6	Classification and properties of nerve fibre	Text Book
28-06-2021	Lecture 7	Electrophysiology & Action potential	Text Book
30-06-2021	Lecture 8	Nerve impulse & Receptors	Text Book
01-07-2021	Lecture 9	Synapse & Neurotransmitters	Text Book
02-07-2021	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
03-07-2021	Lecture 11	Cerebrospinal fluid	Text Book
12-07-2021	Lecture 12	structure and functions of brain (cerebrum) brain stem, and cerebellum)	Text Book
14-07-2021	Lecture 13	structure and functions of brain stem	Text Book

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14-07-2021	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
15-07-2021	Lecture 15	Structure of spinal cord	Text Book
16-07-2021	Lecture 16	Functions of afferent and efferent nerve tracts, reflex activity.	Text Book
17-07-2021	Lecture 17	Unit-2 Digestive System	Text Book
19-07-2021	Lecture 18	Anatomy of GI Tract	Text Book
21-07-2021	Lecture 19	Functions of stomach	Text Book
22-07-2021	Lecture 20	Acid production in the stomach	Text Book
23-07-2021	Lecture 21	Regulation of acid production through parasympathetic nervous system	Text Book
24-07-2021	Lecture 22	Pepsin role in protein digestion	Text Book
26-07-2021	Lecture 23	Small intestine	Text Book
26-07-2021	Lecture 24	Large intestine	Text Book
28-07-2021	Lecture 25	Anatomy& Functions of salivary glands	Text Book
29-07-2021	Lecture 26	Anatomy& Functions of pancreas	Text Book
30-07-2021	Lecture 27	Anatomy& Functions of Liver	Text Book
31-07-2021	Lecture 28	Movements of GIT	Text Book
02-08-2021	Lecture 29	Digestion and Absorption of Nutrients	Text Book
04-08-2021	Lecture 30	Disorders of GIT.	Text Book
05-08-2021	Lecture 31	Formation and role of ATP, Creatinine Phosphateand BMR.	Text Book
06-08-2021	Lecture 32	Unit-3 Respiratory System	Text Book

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07-08-2021	Lecture 33	Anatomy of Respiratory system with reference to lungs	Text Book
09-08-2021	Lecture 34	Mechanism of respiration	Text Book
11-08-2021	Lecture 35	Regulation of respiration	Text Book
12-08-2021	Lecture 36	Lung Volumes and capacities	Text Book
13-08-2021	Lecture 37	Transport of respiratory gases	Text Book
14-08-2021	Lecture 38	Artificial respiration	Text Book
16-08-2021	Lecture 39	Resuscitation methods	Text Book
18-08-2021	Lecture 40	Urinary system	Text Book
19-08-2021	Lecture 41	Anatomy of urinary tract with reference to anatomy of kidney	Text Book
20-08-2021	Lecture 42	Structure & Functions of Nephrons	Text Book
21-08-2021	Lecture 43	Functions of kidney and Urinary tract	Text Book
01-09-2021	Lecture 44	Physiology of Urine formation	Text Book
02-09-2021	Lecture 45	Micturition reflex & Role of kidneys in acid base balance	Text Book
03-09-2021	Lecture 46	Role of RAS in kidney	Text Book
04-09-2021	Lecture 47	Disorders of kidney.	Text Book
06-09-2021	Lecture 48	Unit-4 Endocrine system	Text Book
08-09-2021	Lecture 49	Classification of hormones	Text Book
09-09-2021	Lecture 50	Mechanism of hormone action	Text Book
11-09-2021	Lecture 51	Structure and Functions of Pituitary gland	Text Book

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13-09-2021	Lecture 52	Structure and Functions of Thyroid gland	Text Book
15-09-2021	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
16-09-2021	Lecture 54	Structure and Functions of Adrenal gland	Text Book
17-09-2021	Lecture 55	Structure and Functions of Pancreas	Text Book
18-09-2021	Lecture 56	Structure and Functions of Pineal gland	Text Book
20-09-2021	Lecture 57	Thymus and their disorders	Text Book
22-09-2021	Lecture 58	Unit-5 Reproductive system	Text Book
23-09-2021	Lecture 59	Anatomy of male and female reproductive system	Text Book
24-09-2021	Lecture 60	Functions of male and female reproductive system	Text Book
25-09-2021	Lecture 61	Sex hormones	Text Book
27-09-2021	Lecture 62	Physiology of Menstruation	Text Book
29-09-2021	Lecture 63	Fertilization & Spermatogenesis	Text Book
30-09-2021	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
01-10-2021	Lecture 65	Chromosomes & genes & DNA	Text Book
01-10-2021	Lecture 66	Protein Synthesis	Text Book
04-10-2021	Lecture 67	Genetic pattern of inheritance	Text Book

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## B. PHARMACY LECTURE PLAN SECTION-B

<b>COURSE NAME: Human Anatomy &amp; Physiology</b>	<b>COURSE CODE: BP201T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION: PCI</b>

Date	Lecture No.	Topic Name	Source
21-06-2021	Lecture 1	Introduction of all the topics to be covered	Text Book
21-06-2021	Lecture 2	Unit-1 Nervous System	Text Book
22-06-2021	Lecture 3	Organization of nervous system	Text Book
23-06-2021	Lecture 4	Structure & Function of neuron	Text Book
26-06-2021	Lecture 5	Neuroglial Cells	Text Book
26-06-2021	Lecture 6	classification and properties of nerve fibre	Text Book
28-06-2021	Lecture 7	Electrophysiology & Action potential	Text Book
29-06-2021	Lecture 8	Nerve impulse & Receptors	Text Book
30-06-2021	Lecture 9	Synapse & Neurotransmitters	Text Book
03-07-2021	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
03-07-2021	Lecture 11	cerebrospinal fluid	Text Book
12-07-2021	Lecture 12	structure and functions of brain (cerebrum) brainstem, and cerebellum)	Text Book
12-07-2021	Lecture 13	structure and functions of brain stem	Text Book
13-07-2021	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
14-07-2021	Lecture 15	Structure of spinal cord	Text Book
17-07-2021	Lecture 16	Functions of afferent and efferent nerves, reflex activity.	Text Book
19-07-2021	Lecture 17	Unit-2 Digestive System	Text Book
20-07-2021	Lecture 18	Anatomy of GI Tract	Text Book
21-07-2021	Lecture 19	Functions of stomach	Text Book

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24-07-2021	Lecture 20	Acid production in the stomach	Text Book
26-07-2021	Lecture 21	Regulation of acid production through parasympathetic nervous system	Text Book
27-07-2021	Lecture 22	Pepsin role in protein digestion	Text Book
27-07-2021	Lecture 23	Small intestine	Text Book
28-07-2021	Lecture 24	Large intestine	Text Book
28-07-2021	Lecture 25	Anatomy & Functions of salivary glands	Text Book
31-07-2021	Lecture 26	Anatomy & Functions of pancreas	Text Book
02-08-2021	Lecture 27	Anatomy & Functions of Liver	Text Book
02-08-2021	Lecture 28	Movements of GIT	Text Book
03-08-2021	Lecture 29	Digestion and Absorption of Nutrients	Text Book
04-08-2021	Lecture 30	Disorders of GIT.	Text Book
04-08-2021	Lecture 31	Formation and role of ATP, Creatinine Phosphate and BMR.	Text Book
07-08-2021	Lecture 32	Unit-3 Respiratory System	Text Book
07-08-2021	Lecture 33	Anatomy of Respiratory system with reference to lungs	Text Book
09-08-2021	Lecture 34	Mechanism of respiration	Text Book
11-08-2021	Lecture 35	Regulation of respiration	Text Book
11-08-2021	Lecture 36	Lung Volumes and capacities	Text Book
14-08-2021	Lecture 37	Transport of respiratory gases	Text Book
16-08-2021	Lecture 38	Artificial respiration	Text Book
17-08-2021	Lecture 39	Resuscitation methods	Text Book
18-08-2021	Lecture 40	Urinary system	Text Book

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18-08-2021	Lecture 41	Anatomy of urinary tract with reference to anatomy of kidney	Text Book
21-08-2021	Lecture 42	Structure & Functions of Nephrons	Text Book
31-08-2021	Lecture 43	Functions of kidney and Urinary tract	Text Book
31-08-2021	Lecture 44	Physiology of Urine formation	Text Book
01-09-2021	Lecture 45	Micturition reflex & Role of kidneys in acid base balance	Text Book
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11-09-2021	Lecture 51	Structure and Functions of Pituitary gland	Text Book
11-09-2021	Lecture 52	Structure and Functions of Thyroid gland	Text Book
13-09-2021	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
14-09-2021	Lecture 54	Structure and Functions of Adrenal gland	Text Book
14-09-2021	Lecture 55	Structure and Functions of Pancreas	Text Book
15-09-2021	Lecture 56	Structure and Functions of Pineal gland	Text Book
18-09-2021	Lecture 57	Thymus and their disorders	Text Book
20-09-2021	Lecture 58	Unit-5 Reproductive system	Text Book
20-09-2021	Lecture 59	Anatomy of male and female reproductive system	Text Book
21-09-2021	Lecture 60	Functions of male and female reproductive system	Text Book
22-09-2021	Lecture 61	Sex hormones	Text Book

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25-09-2021	Lecture 62	Physiology of Menstruation	Text Book
27-09-2021	Lecture 63	Fertilization & Spermatogenesis	Text Book
27-09-2021	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
28-09-2021	Lecture 65	Chromosomes & genes & DNA	Text Book
29-09-2021	Lecture 66	Protein Synthesis	Text Book
04-10-2021	Lecture 67	Genetic pattern of inheritance	Text Book

*Anveshi*

Signature of the Faculty



*[Signature]*  
Principal

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## DEPARTMENT OF PHARMACY CLASS TIME TABLE AY: 2020-2021

**CLASS: III B.Pharm I Sem (PCI Regulation)  
(2018 Admitted Batch)**

w.e.f: 02/11/2020

CLASS TEACHER – Dr.M.Sowmya		Batch A: Roll 01-25			Batch B: Roll 25 - 50			
DAY/ TIME	9:30 - 10:30	10:30 – 11:20	11:20 – 12:10	12:10 -1:00	1:00 – 01:50	1:50 2:40	2:40 –3:30	3:30 – 4:20
MON	MC-II	COLOGY- II	IP-I	<b>L U N C H</b>	COGNOS Y - II	BATCH A - IP-I LAB BATCH B - COLOGY-II LAB BATCH C - COGNOSY - II LAB		
TUE	PJ	MC-II	COLOGY- II		TUTORIA L (IP-I)	BATCH A - COGNOSY - II LAB BATCH B - IP-I LAB BATCH C - COLOGY-II LAB		
WED	IP-I	COGNOSY - II	MC-II		COLOGY- II	BATCH A - COLOGY-II LAB BATCH B - COGNOSY - II LAB BATCH C - IP-I LAB		
THU	PJ	COLOGY- II	COGNOSY - II		IP-I	STI	TUTORIAL (COG)	IP-I
FRI	COLOGY-II	COGNOSY - II	PJ		MC-II	PJ	TUTORIAL (MC-II)	LIBRARY/ SPORTS
SAT	COGNOSY - II	MC-II	PJ		IP-I	STI	TUTORIAL (COL)	LIBRARY /SPORTS

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Dr. M.Sowmya	Associate Professor	Medicinal Chemistry – II (MC-II) (5)	B. Pharm
2.	Mrs. Y. Anveshi Dhananjaya	Assistant Professor	Pharmacology (COLOGY-II) (5)	B. Pharm
3.	Mr.K.B.K.Raju	Assistant Professor	Industrial Pharmacy – I (IP-I) (5)	B. Pharm
4.	Mr. A. Nanaji	Associate Professor	Pharmacognosy – II (5)	B. Pharm
5.	Mrs. M. Geethanjali	Associate Professor	Pharmaceutical Jurisprudence (5)	B. Pharm
6.	Mrs. Y. Anveshi Dhananjaya	Assistant Professor	Pharmacology Lab (6)	B. Pharm
7.	Mr.K.B.K.Raju	Assistant Professor	Industrial Pharmacy – I Lab (6)	B. Pharm
8.	Mr. A. Nanaji	Associate Professor	Pharmacognosy – II (COGNOSY-II) Lab (6)	B. Pharm
9.	Mr. A. Nanaji	Associate Professor	Pharmacognosy - II Tutorial-(1)	B. Pharm
10.	Mrs. Y. Anveshi Dhananjaya	Assistant Professor	Pharmacology (COLOGY-II) Tutorial (1)	B. Pharm
11.	Mr.K.B.K.Raju	Assistant Professor	Industrial Pharmacy – I (IP-I) Tutorial (1)	B. Pharm
12.	Dr. M.Sowmya	Associate Professor	Student Teacher Interaction (STI) (1)	B. Pharm
13.	Mr. R.Ramana	Librarian	Library (2)	B. Pharm
14.	Mr. D.Koteswara Rao	Physical Director	Sports (2)	B. Pharm

Time Table Incharge

Principal

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**Table-IV: Course of study for semester IV**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP401T	Pharmaceutical Organic Chemistry III– Theory	3	1	4
BP402T	Medicinal Chemistry I – Theory	3	1	4
BP403T	Physical Pharmaceutics II – Theory	3	1	4
BP404T	Pharmacology I – Theory	3	1	4
BP405T	Pharmacognosy and Phytochemistry I– Theory	3	1	4
BP406P	Medicinal Chemistry I – Practical	4	-	2
BP407P	Physical Pharmaceutics II – Practical	4		2
BP408P	Pharmacology I – Practical	4	-	2
BP409P	Pharmacognosy and Phytochemistry I – Practical	4	-	2
<b>Total</b>		<b>31</b>	<b>5</b>	<b>28</b>

**Table-V: Course of study for semester V**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP501T	Medicinal Chemistry II – Theory	3	1	4
BP502T	Industrial PharmacyI– Theory	3	1	4
BP503T	Pharmacology II – Theory	3	1	4
BP504T	Pharmacognosy and Phytochemistry II– Theory	3	1	4
BP505T	Pharmaceutical Jurisprudence – Theory	3	1	4
BP506P	Industrial PharmacyI – Practical	4	-	2
BP507P	Pharmacology II – Practical	4	-	2
BP508P	Pharmacognosy and Phytochemistry II – Practical	4	-	2
<b>Total</b>		<b>27</b>	<b>5</b>	<b>26</b>

## **BP 505 T. PHARMACEUTICAL JURISPRUDENCE (Theory)**

**45 Hours**

**Scope:** This course is designed to impart basic knowledge on important legislations related to the profession of pharmacy in India.

**Objectives:** Upon completion of the course, the student shall be able to understand:

1. The Pharmaceutical legislations and their implications in the development and marketing of pharmaceuticals.
2. Various Indian pharmaceutical Acts and Laws
3. The regulatory authorities and agencies governing the manufacture and sale of pharmaceuticals
4. The code of ethics during the pharmaceutical practice

### **Course Content:**

#### **UNIT-I**

**10 Hours**

##### **Drugs and Cosmetics Act, 1940 and its rules 1945:**

Objectives, Definitions, Legal definitions of schedules to the Act and Rules

Import of drugs – Classes of drugs and cosmetics prohibited from import, Import under license or permit. Offences and penalties.

Manufacture of drugs – Prohibition of manufacture and sale of certain drugs,

Conditions for grant of license and conditions of license for manufacture of drugs, Manufacture of drugs for test, examination and analysis, manufacture of new drug, loan license and repacking license.

#### **UNIT-II**

**10 Hours**

##### **Drugs and Cosmetics Act, 1940 and its rules 1945.**

Detailed study of Schedule G, H, M, N, P, T, U, V, X, Y, Part XII B, Sch F & DMR (OA)

Sale of Drugs – Wholesale, Retail sale and Restricted license. Offences and penalties

Labeling & Packing of drugs- General labeling requirements and specimen labels for drugs and cosmetics, List of permitted colors. Offences and penalties.

Administration of the Act and Rules – Drugs Technical Advisory Board, Central drugs Laboratory, Drugs Consultative Committee, Government drug analysts, Licensing authorities, controlling authorities, Drugs Inspectors

#### **UNIT-III**

**10 Hours**

- **Pharmacy Act –1948:** Objectives, Definitions, Pharmacy Council of India; its constitution and functions, Education Regulations, State and Joint state pharmacy councils; constitution and functions, Registration of Pharmacists, Offences and

#### Penalties

- **Medicinal and Toilet Preparation Act –1955:** Objectives, Definitions, Licensing, Manufacture In bond and Outside bond, Export of alcoholic preparations, Manufacture of Ayurvedic, Homeopathic, Patent & Proprietary Preparations. Offences and Penalties.
- **Narcotic Drugs and Psychotropic substances Act-1985 and Rules:** Objectives, Definitions, Authorities and Officers, Constitution and Functions of narcotic & Psychotropic Consultative Committee, National Fund for Controlling the Drug Abuse, Prohibition, Control and Regulation, opium poppy cultivation and production of poppy straw, manufacture, sale and export of opium, Offences and Penalties

#### UNIT-IV

**08 Hours**

- **Study of Salient Features of Drugs and Magic Remedies Act and its rules:** Objectives, Definitions, Prohibition of certain advertisements, Classes of Exempted advertisements, Offences and Penalties
- **Prevention of Cruelty to animals Act-1960:** Objectives, Definitions, Institutional Animal Ethics Committee, CPCSEA guidelines for Breeding and Stocking of Animals, Performance of Experiments, Transfer and acquisition of animals for experiment, Records, Power to suspend or revoke registration, Offences and Penalties
- **National Pharmaceutical Pricing Authority:** Drugs Price Control Order (DPCO)-2013. Objectives, Definitions, Sale prices of bulk drugs, Retail price of formulations, Retail price and ceiling price of scheduled formulations, National List of Essential Medicines (NLEM)

#### UNIT-V

**07 Hours**

- **Pharmaceutical Legislations –** A brief review, Introduction, Study of drugs enquiry committee, Health survey and development committee, Hathi committee and Mudaliar committee
- **Code of Pharmaceutical ethics** Definition, Pharmacist in relation to his job, trade, medical profession and his profession, Pharmacist's oath
- **Medical Termination of Pregnancy Act**
- **Right to Information Act**
- **Introduction to Intellectual Property Rights (IPR)**

#### **Recommended books: (Latest Edition)**

1. Forensic Pharmacy by B. Suresh

2. Text book of Forensic Pharmacy by B.M. Mithal
3. Hand book of drug law-by M.L. Mehra
4. A text book of Forensic Pharmacy by N.K. Jain
5. Drugs and Cosmetics Act/Rules by Govt. of India publications.
6. Medicinal and Toilet preparations act 1955 by Govt. of India publications.
7. Narcotic drugs and psychotropic substances act by Govt. of India publications
8. Drugs and Magic Remedies act by Govt. of India publication
9. Bare Acts of the said laws published by Government. Reference books (Theory)





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### B. PHARMACY LECTURE PLAN

<b>COURSE NAME:</b> Pharmaceutical Jurisprudence	<b>COURSE CODE:</b> BP505T
<b>YEAR/SEM:</b> III B. Pharm I Sem	<b>REGULATION:</b> PCI

Date	Lecture No.	Topic Name	Source
03-11-2020	Lecture 1	Introduction of all the topics to be covered	Text Book
05-11-2020	Lecture 2	Unit-1 Drug & Cosmetic Act-1940 & Its Rules 1945: Objectives.	Text Book
06-11-2020	Lecture 3	D&C Act-Definitions and Legal definitions.	Text Book
07-11-2020	Lecture 4	Import of drugs-Classes of drugs & cosmetics prohibited from import.	Text Book
10-11-2020	Lecture 5	Import under License or permit.	Text Book
12-11-2020	Lecture 6	Offences and penalties.	Text Book
13-11-2020	Lecture 7	Manufacture of drugs- Prohibition of Manufacture & Sale of certain drugs.	Text Book
13-11-2020	Lecture 8	Conditions for grant of License and condition of License for manufacture of drugs.	Text Book
17-11-2020	Lecture 9	Manufacture of drugs for test, examination and analysis.	Text Book
19-11-2020	Lecture 10	Manufacture of new drug	Text Book
20-11-2020	Lecture 11	Loan license and repackaging license	Text Book
21-11-2020	Lecture 12	Unit-2 Drug & Cosmetic Act-1940 & Its Rules 1945: Detailed study on schedule G,H,M,N	Text Book
24-11-2020	Lecture 13	Study of schedules P,T,U,V,X,Y	Text Book
26-11-2020	Lecture 14	Study of Part XIIB Schiff & DMR(OA)	Text Book
27-11-2020	Lecture 15	Sale of drugs -Wholesale ;Retail Drugs	Text Book

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28-11-2020	Lecture 16	Restricted License & offences and penalties	Text Book
01-12-2020	Lecture 17	Labeling & Packaging of drugs- General labeling requirements	Text Book
01-12-2020	Lecture 18	Specimen labels for drugs and cosmetics	Text Book
04-12-2020	Lecture 19	List of permitted colors, offences & penalties	Text Book
05-12-2020	Lecture 20	Administration of the act and rules- Drug Technical Advisory Board	Text Book
08-12-2020	Lecture 21	Central drug laboratory; drug consultative committee; Licensing authorities	Text Book
10-12-2020	Lecture 22	Government drug Analysts, controlling authorities, Drug inspectors	Text Book
11-12-2020	Lecture 23	Unit 3: Pharmacy Act 1948: Objectives, definitions.	Text Book
11-12-2020	Lecture 24	Pharmacy council of India- constitution & functions; Education regulations	Text Book
12-12-2020	Lecture 25	State and Joint state pharmacy councils- constitution and functions	Text Book
15-12-2020	Lecture 26	Registration of Pharmacists; offences and penalties	Text Book
17-12-2020	Lecture 27	Medicinal & Toilet Preparation Act-1955: Objectives, definitions Licensing	Text Book
18-12-2020	Lecture 28	Manufacture inbound and outside bond & Export of alcoholic preparations	Text Book
19-12-2020	Lecture 29	Manufacture of Ayurvedic	Text Book
22-12-2020	Lecture 30	Manufacture of Homeopathic	Text Book
24-12-2020	Lecture 31	Patent & proprietary preparations & offences and penalties	Text Book
26-12-2020	Lecture 32	Narcotic drugs & Psychotropic substances act -1985 and rules: Introduction	Text Book
29-12-2020	Lecture 33	Objectives; definitions	Text Book
29-12-2020	Lecture 34	authorities; officers	Text Book

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02-01-2021	Lecture 35	Constitution of narcotic & psychotropic consultative committee	Text Book
05-01-2021	Lecture 36	Functions of narcotic & psychotropic consultative committee	Text Book
07-01-2021	Lecture 37	National fund for controlling the drug abuse	Text Book
08-01-2021	Lecture 38	prohibition, control regulation	Text Book
09-01-2021	Lecture 39	Opium poppy cultivation	Text Book
19-01-2021	Lecture 40	Production of poppy straw	Text Book
21-01-2021	Lecture 41	Manufacture of opium	Text Book
22-01-2021	Lecture 42	Sale and export of opium; offences and penalties	Text Book
23-01-2021	Lecture 43	Unit:4 – Drug & Magic remedies act-Introduction	Text Book
02-02-2021	Lecture 44	Drug & Magic remedies act-Objectives; definitions	Text Book
04-02-2021	Lecture 45	Prohibition of certain advertisements	Text Book
05-02-2021	Lecture 46	Classes of exempted advertisements; offences & penalties	Text Book
06-02-2021	Lecture 47	Prevention of cruelty to animals act-1960: Objectives; definitions	Text Book
09-02-2021	Lecture 48	IAEC	Text Book
09-02-2021	Lecture 49	CPCSEA	Text Book
11-02-2021	Lecture 50	Guidelines for breeding & stocking of animals	Text Book
12-02-2021	Lecture 51	Performance of experiments	Text Book
13-02-2021	Lecture 52	Transfer and acquisition of animals for experiment	Text Book
16-02-2021	Lecture 53	Record for experiments on animals	Text Book
18-02-2021	Lecture 54	Power to suspend or revoke registrations; offences penalties	Text Book
19-02-2021	Lecture 55	National Pharmaceutical Pricing authority: DPCO 2013	Text Book

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20-02-2021	Lecture 56	DPCO 2013-Objectives	Text Book
20-02-2021	Lecture 57	DPCO 2013-definitions	Text Book
02-03-2021	Lecture 58	Sale prices of bulk drugs	Text Book
04-03-2021	Lecture 59	Retail price of formulations;	Text Book
05-03-2021	Lecture 60	Retail price of scheduled formulations	Text Book
06-03-2021	Lecture 61	Ceiling price of scheduled formulations	Text Book

*M. Geethanjali*

Signature of the Faculty



*[Signature]*  
Principal

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## DEPARTMENT OF PHARMACY PRACTICE CLASS TIME TABLE AY: 2020-2021

CLASS: PHARM. D I YEAR (2021 ADMITTED BATCH)

W.e.f- 20/09/2020

CLASS TEACHER – Dr. D. Subhasri

DAY/TIME	9:30 - 10:30	10:30 - 11:20	11:20 - 12:10	12:10- 1:00	1:00 - 01:50	1:50- 2:40	2:40- 3:30	3:30- 4:20
MON	PIC	MBC	POC	<b>L U N C H</b>	HAP	LIBRARY/ SPORTS		
TUE	CEUTICS	POC	PIC		CEUTICS	CEUTICS LAB		
WED	POC	PIC	HAP		RM/RB	POC LAB		
THU	CEUTICS	POC	MBC		PIC	PIC LAB		
FRI	MBC	RM/RB	HAP		RM/RB	HAP LAB		
SAT	HAP	RM/RB	CEUTICS		MBC	MBC LAB		

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Dr.D. Subha Sri	Assistant Professor	Pharmaceutical Inorganic Chemistry-(PIC) (4)	Pharm. D
2.	Dr.A. Jyotsna	Assistant Professor	Pharmaceutical Organic Chemistry-(POC) (4)	Pharm. D
3.	Dr.M.S.V. Sudeep	Assistant Professor	Pharmaceutics (4)	Pharm. D
4.	Dr.S.Sravani Girija	Assistant Professor	Human Anatomy and Physiology-(HAP) (4)	Pharm. D
5.	Dr.S. Dhana Lakshmi	Assistant Professor	Medicinal Biochemistry-(MBC) (4)	Pharm. D
6.	Mr.A.Seshu	Assistant Professor	Remedial Mathematics-(RM) (4)	Pharm. D
7.	Mr.V.UmaSankar	Associate Professor	Remedial Biology-(RB) (4)	Pharm. D
8.	Dr.D. Subha Sri	Assistant Professor	Pharmaceutical Inorganic Chemistry Lab-(PIC) (3)	Pharm. D
9.	Dr.A. Jyotsna	Assistant Professor	Pharmaceutical Organic Chemistry Lab-(POC) (3)	Pharm. D
10.	Dr.M.S.V. Sudeep	Assistant Professor	Pharmaceutics Lab (3)	Pharm. D
11.	Dr.S.Sravani Girija	Assistant Professor	Human Anatomy and Physiology Lab-(HAP) (3)	Pharm. D
12.	Dr.S. Dhana Lakshmi	Assistant Professor	Medicinal Biochemistry Lab-(MBC) (1)	Pharm. D
13.	Mr.V.UmaSankar	Associate Professor	Remedial Biology –(RB) (4)	Pharm. D

  
Time Table Incharge



  
Principal

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## b) Pharm.D. (Post Baccalaureate) Course -

A pass in B.Pharm from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act:

Provided that there shall be reservation of seats for the students belonging to the Scheduled Castes, Scheduled Tribes and other Backward Classes in accordance with the instructions issued by the Central Government/State Government/Union Territory Administration as the case may be from time to time.

5. Number of admissions in the above said programmes shall be as prescribed by the Pharmacy Council of India from time to time and presently be restricted as below –
  - i) Pharm.D. Programme – 30 students.
  - ii) Pharm.D. (Post Baccalaureate) Programme – 10 students.
6. Institutions running B.Pharm programme approved under section 12 of the Pharmacy Act, will only be permitted to run Pharm.D. programme. Pharm.D. (Post Baccalaureate) programme will be permitted only in those institutions which are permitted to run Pharm.D. programme.
7. Course of study. – The course of study for Pharm.D. shall include the subjects as given in the Tables below. The number of hours in a week, devoted to each subject for its teaching in theory, practical and tutorial shall not be less than that noted against it in columns (3), (4) and (5) below.

## T A B L E S

### First Year :

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
1.1	Human Anatomy and Physiology	3	3	1
1.2	Pharmaceutics	2	3	1
1.3	Medicinal Biochemistry	3	3	1
1.4	Pharmaceutical Organic Chemistry	3	3	1
1.5	Pharmaceutical Inorganic Chemistry	2	3	1
1.6	Remedial Mathematics/ Biology	3	3*	1
	<b>Total hours</b>	<b>16</b>	<b>18</b>	<b>6 = (40)</b>

\* For Biology

**APPENDIX-A**  
**(See regulation 8)**  
**PHARM.D. SYLLABUS**

**First Year**

**1.1 HUMAN ANATOMY & PHYSIOLOGY (THEORY)**

**Theory : 3 Hrs. /Week**

1. **Scope and Objectives:** This course is designed to impart a fundamental knowledge on the structure and functions of the human body. It also helps in understanding both homeostasis mechanisms and homeostatic imbalances of various body systems. Since a medicament, which is produced by pharmacist, is used to correct the deviations in human body, it enhances the understanding of how the drugs act on the various body systems in correcting the disease state of the organs.
2. **Upon completion of the course the student shall be able to:**
  - a. describe the structure (gross and histology) and functions of various organs of the human body;
  - b. describe the various homeostatic mechanisms and their imbalances of various systems;
  - c. identify the various tissues and organs of the different systems of the human body;
  - d. perform the hematological tests and also record blood pressure, heart rate, pulse and Respiratory volumes;
  - e. appreciate coordinated working pattern of different organs of each system; and
  - f. appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body
3. **Course materials:**

**Text books**

  - a. Tortora Gerard J. and Nicholas, P. Principles of anatomy and physiology Publisher Harpercollins college New York.
  - b. Wilson, K.J.W. Ross and Wilson's foundations of anatomy and physiology. Publisher: Churchill Livingstone, Edinburg.

**Reference books**

  - a. Guyton arthur, C. *Physiology of human body*. Publisher: Holtsaunders.
  - b. Chatterjee, C.C. *Human physiology*. Volume 1&11. Publisher: medical allied agency, Calcutta.
  - c. Peter L. Williams, Roger Warwick, Mary Dyson and Lawrence, H.
  - d. *Gray's anatomy*. Publisher: Churchill Livingstone, London.

#### 4. Lecture wise program :

##### Topics

- 1 Scope of anatomy and physiology, basic terminologies used in this subject (Description of the body as such planes and terminologies)
- 2 Structure of cell – its components and their functions.
- 3 Elementary tissues of the human body: epithelial, connective, Muscular and nervous tissues-their sub-types and characteristics
- 4 a) Osseous system - structure, composition and functions of the Skeleton. (done in practical classes - 6hrs)  
b) Classification of joints, Types of movements of joints and disorders of joints (Definitions only)
- 5 Haemopoetic System  
a) Composition and functions of blood  
b) Haemopoiesis and disorders of blood components (definition of disorder)  
c) Blood groups  
d) Clotting factors and mechanism  
e) Platelets and disorders of coagulation
- 6 Lymph  
a) Lymph and lymphatic system, composition, formation and circulation.  
b) Spleen: structure and functions, Disorders  
c) Disorders of lymphatic system (definition only)
- 7 Cardiovascular system  
a) Anatomy and functions of heart  
b) Blood vessels and circulation (Pulmonary, coronary and systemic circulation)  
c) Electrocardiogram (ECG)  
d) Cardiac cycle and heart sounds  
e) Blood pressure – its maintenance and regulation  
f) Definition of the following disorders  
Hypertension, Hypotension, Arteriosclerosis, Atherosclerosis, Angina, Myocardial infarction, Congestive heart failure, Cardiac arrhythmias
- 8 Respiratory system  
a) Anatomy of respiratory organs and functions  
b) Mechanism / physiology of respiration and regulation of respiration  
c) Transport of respiratory gases  
d) Respiratory volumes and capacities, and Definition of: Hypoxia, Asphyxia, Dybarism, Oxygen therapy and resuscitation.
- 9 Digestive system  
a) Anatomy and physiology of GIT  
b) Anatomy and functions of accessory glands of GIT  
c) Digestion and absorption  
d) Disorders of GIT (definitions only)



- 10 Nervous system
  - a) Definition and classification of nervous system
  - b) Anatomy, physiology and functional areas of cerebrum
  - c) Anatomy and physiology of cerebellum
  - d) Anatomy and physiology of mid brain
  - e) Thalamus, hypothalamus and Basal Ganglia
  - f) Spinal cord: Structure & reflexes – mono-poly-planter
  - g) Cranial nerves – names and functions
  - h) ANS – Anatomy & functions of sympathetic & parasympathetic N.S.
- 11 Urinary system
  - a) Anatomy and physiology of urinary system
  - b) Formation of urine
  - c) Renin Angiotensin system – Juxtaglomerular apparatus - acid base Balance
  - d) Clearance tests and micturition
- 12 Endocrine system
  - a) Pituitary gland
  - b) Adrenal gland
  - c) Thyroid and Parathyroid glands
  - d) Pancreas and gonads
- 13 Reproductive system
  - a) Male and female reproductive system
  - b) Their hormones – Physiology of menstruation
  - c) Spermatogenesis & Oogenesis
  - d) Sex determination (genetic basis)
  - e) Pregnancy and maintenance and parturition
  - f) Contraceptive devices
- 14 Sense organs
  - a) Eye
  - b) Ear
  - c) Skin
  - d) Tongue & Nose
- 15 Skeletal muscles
  - a) Histology
  - b) Physiology of Muscle contraction
  - c) Physiological properties of skeletal muscle and their disorders (definitions)
- 16 Sports physiology
  - a) Muscles in exercise, Effect of athletic training on muscles and muscle performance,
  - b) Respiration in exercise, CVS in exercise, Body heat in exercise, Body fluids and salts in exercise,
  - c) Drugs and athletics



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HUMAN ANATOMY AND PHYSIOLOGY				
I PHARM D				
Week no.	LectureNo.	Topics	Teaching Aid	Date
<b>Unit-1</b>	<b>Scope of anatomy and physiology</b>			
Week-1	L1	Scope of anatomy and physiology	Chalk and Talk	20-02-2020
	L2	Terminologies	Chalk and Talk	20-02-2020
<b>Unit-2</b>	<b>Structure of cell</b>			
	L3	Structure of cell – Introduction	Chalk and Talk	24-02-2020
	L4	Cell components and their functions	Chalk and Talk	24-02-2020
	L5	Cell components and their functions	Chalk and Talk	26-02-2020
	L6	Revision	Google Meet	26-02-2020
<b>Unit-3</b>	<b>Elementary tissues</b>			
Week-2	L7	Elementary tissues of the human body -Introduction	Chalk and Talk	28-02-2020
	L8	Epithelial	Chalk and Talk	28-02-2020
	L9	Connective	Powerpoint	29-02-2020
	L10	Muscular	Chalk and Talk	29-02-2020
	L11	Nervous tissues	Chalk and Talk	02-03-2020
	L12	Sub-types and characteristics of tissues	Power point	02-03-2020
	L13	Revision	Google Meet	04-03-2020
<b>Unit-4</b>	<b>Osseous System</b>			
Week-3	L14	Introduction to Osseous System	Chalk and Talk	04-03-2020
	L15	structure and composition	LCD	06-03-2020
	L16	Functions of the Skeleton	Chalk and Talk	06-03-2020
	L17	Classification of joints	Power point	07-03-2020
	L18	Types of movements of joints	Chalk and Talk	07-03-2020
Week-4	L19	Disorders of joints	Chalk and Talk	09-03-2020
	L20	Revision	Google Meet	09-03-2020
<b>Unit-5</b>	<b>Haemopoietic system</b>			
	L21	Introduction to Haemopoietic system	Chalk and Talk	11-03-2020
	L22	Composition of Blood	Chalk and Talk	11-03-2020
	L23	Functions of blood	Chalk and Talk.	13-03-2020
	L24	Haemopoiesis	Chalk and Talk	13-03-2020
Week-5	L25	disorders of blood components	Chalk and Talk	14-03-2020
	L26	Blood groups	LCD	14-03-2020



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	L27	Introduction to Clotting Factors	Chalk and Talk	16-03-2020
	L28	Mechanism of clotting Factors	Chalk and Talk	16-03-2020
	L29	introduction to Platelets	Chalk and Talk	18-03-2020
	L30	Platelets Mechanism and importance	Power point	18-03-2020
Week-6	L31	Disorders of Coagulation	Chalk and Talk	20-03-2020
	L32	Revision	Google meet	20-03-2020
<b>Unit-6</b>	<b>Lymph</b>			
	L33	Introduction to lymph	Chalk and Talk	21-03-2020
	L34	lymphatic system	Chalk and Talk	21-03-2020
	L35	Composition	Chalk and Talk	23-03-2020
	L36	Formation	Chalk and Talk	23-03-2020
Week-7	L37	Circulation	LCD	25-03-2020
	L38	Introduction to Spleen	Chalk and Talk	27-03-2020
	L39	Structure of Spleen	Power point	27-03-2020
	L40	Functions of Spleen	Chalk and Talk	28-03-2020
	L41	Disorders of Spleen	Chalk and Talk	28-03-2020
	L42	Disorders of lymphatic system	Chalk and Talk	30-03-2020
	L43	Revision	Google meet	30-03-2020
<b>Unit-7</b>	<b>Cardiovascular system</b>			
Week-8	L44	Introduction to Cardiovascular system	Chalk and Talk	01-04-2020
	L45	Anatomy of heart	Power point	01-04-2020
	L46	Functions of heart	Chalk and Talk	01-04-2020
	L47	Blood vessels	Chalk and Talk	03-04-2020
	L48	Circulation of blood	Power point	03-04-2020
Week-9	L49	Pulmonary circulation	Chalk and Talk	03-04-2020
	L50	Coronary circulation	Chalk and Talk	04-04-2020
	L51	Systemic circulation	Power point	04-04-2020
	L52	Electrocardiogram	Chalk and Talk	04-04-2020
	L53	Cardiac cycle	Power point	06-04-2020
	L54	Normal Heart sounds	Chalk and Talk	06-04-2020
Week-10	L55	Abnormal heart sounds	Chalk and Talk	06-04-2020
	L56	Introduction to Blood pressure	Chalk and Talk	08-04-2020
	L57	Regulation of BP	Chalk and Talk	08-04-2020
	L58	Maintainance of BP	Chalk and Talk	08-04-2020
	L59	Hypertension	Chalk and Talk	10-04-2020
	L60	Hypotension	Chalk and Talk	10-04-2020



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Week-11	L61	Arteriosclerosis	Chalk and Talk	11-04-2020
	L62	Atherosclerosis	Chalk and Talk	11-04-2020
	L63	Angina	Chalk and Talk	11-04-2020
	L64	Myocardial infarction	Chalk and Talk	13-04-2020
	L65	Congestive heart failure	LCD	13-04-2020
	L66	Cardiac arrhythmias	Chalk and Talk	13-04-2020
	L67	Revision	Chalk and Talk	13-04-2020
<b>Unit-8</b>	<b>Respiratory system</b>			
Week-12	L68	Introduction to respiratory system	Chalk and Talk	15-04-2020
	L69	Anatomy of respiratory organs	Power point	15-04-2020
	L70	Functions of respiratory organs	Chalk and Talk	15-04-2020
	L71	Mechanism of respiratory organs	Chalk and Talk	17-04-2020
	L72	Physiology of respiration	Chalk and Talk	17-04-2020
Week-13	L73	Regulation of respiration	Chalk and Talk	17-04-2020
	L74	Transport of respiratory gases	LCD	18-04-2020
	L75	Respiratory volumes	Chalk and Talk	18-04-2020
	L76	Respiratory capacities	Chalk and Talk	18-04-2020
	L77	Hypoxia	Chalk and Talk	20-04-2020
	L78	Asphyxia	Power point	20-04-2020
Week-14	L79	Dybarism	Chalk and Talk	22-04-2020
	L80	Oxygen therapy	Chalk and Talk	22-04-2020
	L81	Resuscitation	Chalk and Talk	22-04-2020
	L82	Revision	Google meet	24-04-2020
	L83	Revision test		
<b>Unit-9</b>	<b>Digestive system</b>			
	L84	Introduction to Digestive system	Chalk and Talk	25-04-2020
Week-15	L85	Anatomy and physiology of GIT	Chalk and Talk	25-04-2020
	L86	Anatomy and functions of accessory glands of GIT	Power point	25-04-2020
	L87	Digestion and absorption	Chalk and Talk	27-04-2020
	L88	Disorders of GIT	Chalk and Talk	27-04-2020
	L89	Revision	LCD	27-04-2020
<b>Unit-10</b>	<b>Nervous system</b>			
	L90	Introduction Nervous system	Chalk and Talk	29-04-2020
Week-16	L91	Definition and classification of nervous system	Chalk and Talk	29-04-2020



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	L92	Anatomy, physiology and functional areas of cerebrum	Power point	29-04-2020
	L93	Anatomy and physiology of cerebellum	Chalk and Talk	29-04-2020
	L94	Anatomy and physiology of mid brain	Chalk and Talk	02-05-2020
	L95	Thalamus, hypothalamus and Basal Ganglia	Power point	02-05-2020
	L96	spinal cord	Chalk and Talk	04-05-2020
Week-17	L97	Cranial nerves	Chalk and Talk	04-05-2020
	L98	ANS	Chalk and Talk	06-05-2020
	L99	Revision	Google meet	06-05-2020
<b>Unit-11</b>	<b>Urinary system</b>			
	L100	Introduction to Urinary system	Chalk and Talk	08-05-2020
	L101	Anatomy and physiology of urinary system	Power point	08-05-2020
	L102	Formation of urine	Chalk and LCD	08-05-2020
Week-18	L103	Renin Angiotensin system	Chalk and Talk	09-05-2020
	L104	Clearance tests and micturition	Chalk and Talk	09-05-2020
	L105	Revision	Google meet	09-05-2020
<b>Unit-12</b>	<b>Endocrine System</b>			
	L106	Introduction to Endocrine System	Chalk and Talk	11-05-2020
	L107	Pituitary gland	Chalk and Talk	11-05-2020
	L108	Adrenal gland	Power point	11-05-2020
Week-19	L109	Thyroid and Parathyroid glands	Chalk and Talk	13-05-2020
	L110	Pancreas and gonads	LCD	13-05-2020
	L111	Revision	Google meet	13-05-2020
<b>Unit-13</b>	<b>Reproductive system</b>			
	L112	Introduction to Reproductive system	Chalk and Talk	15-05-2020
	L113	Male and female reproductive system	Power point	15-05-2020
	L114	Physiology of menstruation	Chalk and Talk	15-05-2020
Week-20	L115	Spermatogenesis & Oogenesis	Power point	16-05-2020
	L116	Sex determination	Chalk and Talk	16-05-2020
	L117	Pregnancy and maintenance and parturition	Chalk and Talk	18-05-2020
	L118	Contraceptive devices	Chalk and LCD	18-05-2020
	L119	Revision	Google meet	18-05-2020
<b>Unit-14</b>	<b>Sense Organs</b>			
	L120	Introduction to Sense Organs	Chalk and Talk	20-05-2020

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Vizianagaram Dt., - 531162

Avanthi Institute of Pharmaceutical Sciences





# AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Approved by AICTE, PCI, Recognized by the Govt. of A.P. & Affiliated to JNTU-K Kakinada)

Cherukupally (Village), Chittivalasa (SO), Bhogapuram (Mandal), Vizianagaram (Dist) -531162.

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Week-21	L121	Eye	Chalk and Talk	20-05-2020
	L122	Ear	Power point	20-05-2020
	L123	Skin	Chalk and Talk	22-05-2020
	L124	Tongue & Nose	LCD	22-05-2020
	L125	Revision	Google meet	22-05-2020
<b>Unit-15</b>	<b>Skeletal Muscles</b>			
	L126	Introduction to Skeletal Muscles	Chalk and Talk	23-05-2020
Week-22	L127	Histology	Chalk and Talk	23-05-2020
	L128	Physiology of Muscle contraction	Chalk and Talk	25-05-2020
	L129	Physiological properties of skeletal muscle	Power point	27-05-2020
	L130	Disorders of skeletal muscle	Chalk and Talk	29-05-2020
	L131	Revision	Google meet	30-05-2020
<b>Unit-16</b>	<b>Sports Physiology</b>			
	L132	Introduction to Sports Physiology	Chalk and Talk	03-06-2020
Week-23	L133	Muscles in exercise	Chalk and Talk	03-06-2020
	L134	Effect of athletic training on muscles	Chalk and Talk	10-06-2020
	L135	muscle performance	Power point	12-06-2020
	L136	Respiration in exercise	Chalk and Talk	13-06-2020
	L137	CVS in exercise	Chalk and Talk	15-06-2020
	L138	Body heat in exercise	Chalk and Talk	17-06-2020
	L139	Body fluids in exercise	LCD	19-06-2020
Week-24	L140	Salts in exercise	Chalk and Talk	20-06-2020
	L141	Drugs	Chalk and Talk	22-06-2020
	L142	Athletics	Chalk and Talk	24-06-2020
	L143	Tests used to detect Drugs	Power point	26-06-2020
	L144	Importance of exercise	Chalk and Talk	27-06-2020
	L145	Effect of exercises on muscles	Chalk and Talk	27-06-2020
	L146	Effect of exercises on Joint	Google meet	29-06-2020
	L147	Revision	Google meet	29-06-2020

  
Signature of the Faculty



  
Principal  
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**DEPARTMENT OF PHARMACY PRACTICE**

**CLASS TIME TABLE AY: 2020-2021**

**CLASS: PHARM.D III YEAR (2018 ADMITTED BATCH)**  
**CLASS TEACHER: Mrs. CH. GEETHA**

**W.e.f -16/11/2020**

DAY/ TIME	9:30 – 10:30	10:30– 11:20	11:20 - 12:10	12:10 -1:00	1:00– 01:50	1:50– 2:40	2:40-3:30	3:30-4:20
MON	COL-II	PF	MC	<b>L U N C H</b>	PJ	MC LAB		
TUE	MC	PJ	COL-II		PT- II	PT- II LAB		
WED	MC	PT-II	PF		PA	PA LAB		
THU	PF	MC	PA		COL- II	PF LAB		
FRI	<b>HOSPITAL VISIT</b>							
SAT	PJ	PA	PT-II	L U N C H	PF	COL-II LAB		

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Dr.S. Arun Satya Dev	Professor	Medicinal chemistry-(MC) (4)	Pharm. D
2.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis- (PA) (3)	Pharm. D
3.	Dr.V.C.Randeep Raj	Associate Professor	Pharmacotherapy –II-(PT-II) (3)	Pharm. D
4.	Dr.S. Dhana Lakshmi	Assistant Professor	Pharmaceutical Jurisprudence-(PJ) (3)	Pharm. D
5.	Mrs.B.Ramavathi	Assistant Professor	Pharmacology-II (COL-II) (3)	Pharm. D
6.	Dr. Sravani Girija	Assistant Professor	Pharmaceutical Formulation- (PF) (3)	Pharm. D
7.	Dr.S. Arun Satya Dev	Professor	Medicinal chemistry Lab- (MC) (3)	Pharm. D
8.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis Lab-(PA) (3)	Pharm. D
9.	Dr.V.C.Randeep Raj	Associate Professor	Pharmacotherapy -II Lab- (PT-II) (3)	Pharm. D
10.	Mrs.B.Ramavathi	Assistant Professor	Pharmacology-II Lab- (COL-II) (3)	Pharm. D
11.	Dr. Sravani Girija	Assistant Professor	Formulation Lab-(PF) (3)	Pharm. D

**Time Table Incharge**



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**Second Year:**

S.No	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
2.1	Pathophysiology	3	-	1
2.2	Pharmaceutical Microbiology	3	3	1
2.3	Pharmacognosy & Phytopharmaceuticals	3	3	1
2.4	Pharmacology-I	3	-	1
2.5	Community Pharmacy	2	-	1
2.6	Pharmacotherapeutics-I	3	3	1
	<b>Total Hours</b>	<b>17</b>	<b>9</b>	<b>6 = 32</b>

**Third Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
3.1	Pharmacology-II	3	3	1
3.2	Pharmaceutical Analysis	3	3	1
3.3	Pharmacotherapeutics-II	3	3	1
3.4	Pharmaceutical Jurisprudence	2	-	-
3.5	Medicinal Chemistry	3	3	1
3.6	Pharmaceutical Formulations	2	3	1
	<b>Total hours</b>	<b>16</b>	<b>15</b>	<b>5 = 36</b>



### 3.4 PHARMACEUTICAL JURISPRUDENCE (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope of the Subject:** (4-6 lines): This course exposes the student to several important legislations related to the profession of pharmacy in India. The Drugs and Cosmetics Act, along with its amendments are the core of this course. Other acts, which are covered, include the Pharmacy Act, dangerous drugs, medicinal and toilet preparation Act etc. Besides this the new drug policy, professional ethics, DPCO, patent and design Act will be discussed.
2. **Objectives of the Subject:** Upon completion of the subject student shall be able to (Know, do, and appreciate) –
  - a. practice the Professional ethics;
  - b. understand the various concepts of the pharmaceutical legislation in India;
  - c. know the various parameters in the Drug and Cosmetic Act and rules;
  - d. know the Drug policy, DPCO, Patent and design act;
  - e. understand the labeling requirements and packaging guidelines for drugs and cosmetics;
  - f. be able to understand the concepts of Dangerous Drugs Act, Pharmacy Act and Excise duties Act; and
  - g. other laws as prescribed by the Pharmacy Council of India from time to time including International Laws.

**Text books (Theory)**

Mithal , B M. Textbook of Forensic Pharmacy. Calcutta :National; 1988.

**Reference books (Theory)**

- a. Singh, KK, editor. Beotra's the Laws of Drugs, Medicines & cosmetics. Allahabad: Law Book House; 1984.
- b. Jain, NK. A Textbook of forensic pharmacy. Delhi: Vallabh prakashan ; 1995.
- c. Reports of the Pharmaceutical enquiry Committee
- d. I.D.M.A., Mumbai. DPCO 1995
- e. Various reports of Amendments.
- f. Deshapande, S.W. The drugs and magic remedies act 1954 and rules 1955. Mumbai: Susmit Publications; 1998.
- g. Eastern Book Company .The narcotic and psychotropic substances act 1985, Lucknow: Eastern; 1987.

**3. Detailed syllabus and lecture wise schedule:**

**Title of the topic**

1. **Pharmaceutical Legislations** – A brief review.
2. Principle and Significance of professional ethics. Critical study of the code of pharmaceutical ethics drafted by PCI.
3. **Drugs and Cosmetics Act, 1940, and its rules 1945.**  
Objectives, Legal definition, Study of Schedule's with reference to Schedule B, C&C1, D, E1, F&F1, F2, F3, FF, G, H, J, K, M, N, P, R, V, W, X, Y.  
Sales, Import, labeling and packaging of Drugs And Cosmetics Provisions Relating to Indigenous Systems.  
Constitution and Functions of DTAB, DCC, CDL.  
Qualification and duties – Govt. analyst and Drugs Inspector.



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4. **Pharmacy Act –1948.**  
Objectives Legal Definitions, General Study, Constitution and Functions of State & Central Council, Registration & Procedure, ER.
5. **Medicinal and Toilet Preparation Act –1955.**  
Objectives, Legal Definitions, Licensing, Bonded and Non Bonded Laboratory, Ware Housing, Manufacture of Ayurvedic, Homeopathic, Patent & Proprietary Preparations.
6. **Narcotic Drugs and Psychotropic substances Act-1985 and Rules.** Objectives, Legal Definitions, General Study, Constitution and Functions of narcotic & Psychotropic Consultative Committee, National Fund for Controlling the Drug Abuse, Prohibition, Control and regulations, Schedules to the Act.
7. **Study of Salient Features of Drugs and magic remedies Act and its rules.**
8. **Study of essential Commodities Act Relevant to drugs price control Order.**
9. **Drug Price control Order & National Drug Policy (Current).**
10. **Prevention Of Cruelty to animals Act-1960.**
11. **Patents & design Act-1970.**
12. **Brief study of prescription and Non-prescription Products.**

#### 4. Assignments:


##### Format of the assignment

1. Minimum & Maximum number of pages
2. It shall be a computer draft copy
3. Reference(s) shall be included at the end.
4. Name and signature of the student
5. Assignment can be a combined presentation at the end of the academic year.
6. Time allocated for presentation may be 8+2 Min

##### Case studies relating to

1. Drugs and Cosmetics Act and rules along with its amendments, Dangerous Drugs Act, Medicinal and Toilet preparation Act, New Drug Policy; Professional Ethics, Drugs (Price control) Order, Patent and Design Act.
2. Various prescription and non-prescription products.
3. Medical and surgical accessories.
4. Diagnostic aids and appliances available in the market.



  
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PHARMACEUTICAL JURISPRUDENCE				
YEAR: III PHARM D				
Week No	Lecture No.	Topics	Teaching Aid	DATE
<b>Unit-1</b>	<b>Pharmaceutical Legislations</b>			
Week-1	L1	Pharmaceutical Legislations	Chalk and Talk	16-11-2020
	L2	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	16-11-2020
	L3	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	17-11-2020
	L4	professional ethics	Chalk and Talk	23-11-2020
	L5	Principle of professional ethics	Chalk and Talk	23-11-2020
	L6	Signature of professional ethics	Chalk and Talk	24-11-2020
Week-2	L7	Signature of professional ethics	Chalk and Talk	24-11-2020
<b>Unit-2</b>	<b>Pharmaceutical constitution of India</b>			
	L8	Critical study on PCI	Chalk and Talk	30-11-2020
	L9	Critical study on PCI	Chalk and Talk	30-11-2020
	L10	The code of pharmaceutical ethics drafted by PCI	Powerpoint	30-11-2020
	L11	The code of pharmaceutical ethics drafted by PCI.	Chalk and Talk	01-12-2020
	L12	Revision	Googlemeet	01-12-2020
<b>Unit-3</b>	<b>Drugs and Cosmetics Act, 1940</b>			
Week-3	L13	Drugs and Cosmetics Act , 1940	Chalk and Talk	07-12-2020
	L14	Drugs and Cosmetics Act , 1940	Powerpoint	07-12-2020
	L15	Drugs and Cosmetics Act , 1940	Chalk and Talk	07-12-2020
	L16	Its rules 1945	Powerpoint	08-12-2020
	L17	Objectives	Chalk and Talk	08-12-2020

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	L18	Legal definition	Chalk andTalk	08-12-2020
Week-4	L19	Study of Schedule's with reference	Chalk andTalk	14-12-2020
	L20	Schedule B	Chalk andTalk	14-12-2020
	L21	Schedule B	Chalk andTalk	14-12-2020
	L22	Schedule C&C1	Powerpoint	15-12-2020
	L23	Schedule C&C1	Chalk andTalk	15-12-2020
	L24	Schedule C&C1	Chalk andTalk	15-12-2020
	Week-5	L25	Schedule D	Powerpoint
L26		Schedule D	Chalk andTalk	21-12-2020
L27		Schedule E1	Chalk andTalk	21-12-2020
L28		Schedule E1	Chalk andTalk	21-12-2020
L29		Schedule F&F1	Chalk andTalk	21-12-2020
L30		Schedule F&F1	Chalk andTalk	22-12-2020
Week-6	L31	Schedule F2	LCD	22-12-2020
	L32	Schedule F3	Chalk andTalk	22-12-2020
	L33	Schedule FF	Chalk andTalk	22-12-2020
	L34	Schedule FF	Chalk andTalk	22-12-2020
	L35	Schedule G	Powerpoint	26-12-2020
	L36	Schedule G	Chalk andTalk	26-12-2020
Week-7	L37	Schedule H	Chalk andTalk	26-12-2020
	L38	Schedule H	Chalk andTalk	26-12-2020
	L39	Schedule J	Powerpoint	29-12-2020
	L40	Schedule J	Chalk and Talk	29-12-2020

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	L41	Schedule K	Chalk andTalk	04-01-2021
	L42	Schedule K	Power point	04-01-2021
Week-8	L43	Schedule M	Chalk andTalk	05-01-2021
	L44	Schedule M	Chalk andTalk	05-01-2021
	L45	Schedule N	Chalk andTalk	05-01-2021
	L46	Schedule N	Chalk andTalk	11-01-2021
	L47	Schedule P	Chalk andTalk	11-01-2021
	L48	Schedule P	Chalk andTalk	11-01-2021
Week-9	L49	Schedule R	Powerpoint	18-01-2021
	L50	Schedule R	Chalk andTalk	18-01-2021
	L51	Schedule V	LCD	18-01-2021
	L52	Schedule V	Chalk andTalk	19-01-2021
	L53	Schedule W	Chalk andTalk	19-01-2021
	L54	Schedule W	Powerpoint	19-01-2021
Week-10	L55	Schedule X	Chalk andTalk	19-01-2021
	L56	Schedule X	Chalk andTalk	19-01-2021
	L57	Schedule Y	Chalk andTalk	25-01-2021
	L58	Schedule Y	Powerpoint	25-01-2021
	L59	Sales	Chalk andTalk	01-02-2021
	L60	Sales	Chalk andTalk	01-02-2021
Week-11	L61	Import	Chalk andTalk	09-02-2021
	L62	Labelling	Powerpoint	09-02-2021

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	L63	Packaging of drugs and cosmetics	Chalk and Talk	13-02-2021
	L64	Provisions Relating to Indigenous Systems	Chalk and Talk	13-02-2021
	L65	Provisions Relating to Indigenous Systems	Chalk and Talk	16-02-2021
	L66	Provisions Relating to Indigenous Systems	Chalk and Talk	16-02-2021
Week-12	L67	Constitution and Functions of DTAB	Chalk and Talk	16-02-2021
	L68	Constitution and Functions of DTAB	Power point	22-02-2021
	L69	Constitution and Functions of DCC	Chalk and Talk	22-02-2021
	L70	Constitution and Functions of DCC	Chalk and Talk	22-02-2021
	L71	Constitution and Functions of CDL	Power point	22-02-2021
	L72	Constitution and Functions of CDL	Chalk and Talk	23-02-2021
Week-13	L73	Qualification and duties –Govt. analyst	Chalk and Talk	23-02-2021
	L74	Qualification and duties –Govt. analyst	Chalk and Talk	01-03-2021
	L75	Qualification and duties –Govt. analyst	LCD	01-03-2021
	L76	Drugs Inspector	Chalk and Talk	02-03-2021
	L77	Drugs Inspector	Chalk and Talk	02-03-2021
	L78	Drugs Inspector	Chalk and Talk	08-03-2021
Week-14	L79	Revision	Google meet	08-03-2021
<b>Unit-4</b>	<b>Pharmacy Act –1948</b>			
	L80	Pharmacy Act –1948	Chalk andTalk	09-03-2021
	L81	Objectives Legal Definitions	Chalk andTalk	09-03-2021

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Week-15	L82	General Study	Chalk andTalk	09-03-2021
	L83	Constitution and Functions of State	Powerpoint	15-03-2021
	L84	Constitution and Functions of State	Chalk and	15-03-2021
	L85	Central Council	Chalk andTalk	16-03-2021
	L86	Central Council	LCD	22-03-2021
	L87	Registration	Chalk andTalk	23-03-2021
	L88	Registration	Powerpoint	30-03-2021
	L89	Procedure, ER	Chalk andTalk	05-04-2021
	L90	Procedure, ER	Chalk andTalk	06-04-2021
Week-16	L91	Revision	Googlemeet	12-04-2021
	<b>Unit-5</b>	<b>Medicinal and Toilet Preparation Act –1955</b>		
	L92	Medicinal and Toilet Preparation Act – 1955	Chalk andTalk	13-04-2021
	L93	Medicinal and Toilet Preparation Act – 1956	Powerpoint	19-04-2021
	L94	Medicinal and Toilet Preparation Act – 1957	Chalk andTalk	20-04-2021
	L95	Objectives, Legal Definitions	Powerpoint	20-04-2021
	L96	Objectives, Legal Definitions	Chalk andTalk	26-04-2021
Week-17	L97	Licensing, Bonded and Non-Bonded Laboratory	LCD	26-04-2021
	L98	Licensing, Bonded and Non-Bonded Laboratory	Chalk andTalk	27-04-2021
	L99	Licensing, Bonded and Non-Bonded Laboratory	Powerpoint	27-04-2021
	L100	Ware Housing	Chalk andTalk	03-05-2021

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	L101	Ware Housing	Chalk and Talk	04-05-2021
	L102	Manufacture of Ayurvedic	Chalk andTalk	10-05-2021
Week- 18	L103	Manufacture of Ayurvedic	LCD	11-05-2021
	L104	Homeopathic	Chalk andTalk	17-05-2021
	L105	Homeopathic	Chalk andTalk	18-05-2021
	L106	Patent &Proprietary Preparations	Chalk andTalk	24-05-2021
	L107	Patent &Proprietary Preparations	Chalk andTalk	24-05-2021
	L108	Revision	Googlemeet	24-05-2021
	<b>Unit-6</b>	<b>Narcotic Drugs and Psychotropic substancesAct-1985 and Rules</b>		
		L109	Narcotic Drugs and Psychotropic substancesAct-1985	Chalk andTalk
Week- 19	L110	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	25-05-2021
	L111	Narcotic Drugs and Psychotropic substancesAct-1985 and rules	Powerpoint	25-05-2021
	L112	Objectives, Legal Definitions, General Study	Chalk and Talk	31-05-2021
	L113	Abuse, Prohibition, Control and regulations,Schedules to the Act.	Googlemeet	31-05-2021
	<b>Unit-7</b>	<b>Study of Salient Features of Drugs and magicremedies Act and its rules.</b>		
Week- 20	L114	Study of Salient Features of Drugs and magicremedies Act and its rules.	Chalk andTalk	01-06-2021
	L115	Study of Salient Features of Drugs and magicremedies Act and its rules.	Googlemeet	01-06-2021
	<b>Unit-8</b>	<b>Study of essential Commodities Act Relevant to drugs price control Order</b>		
	L116	Study of essential Commodities Act Relevant todrugs price control Order.	Chalk andTalk	07-06-2021
	<b>Unit-9</b>	<b>Drug Price control Order &amp; National DrugPolicy</b>		

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	L117	Drug Price control Order & National Drug Policy	Chalk and Talk	08-06-2021
	<b>Unit-10</b>	<b>Prevention Of Cruelty to animals Act-1960</b>		
	L118	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk	14-06-2021
	L119	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk	14-06-2021
	<b>Unit-11</b>	<b>Patents &amp; design Act-1970</b>		
	L120	Patents & design Act-1970.	Chalk and Talk	15-06-2021
Week-21	L121	Patents & design Act-1970.	Powerpoint	15-06-2021
	L122	Revision	Chalk and Talk	21-06-2021
	<b>Unit-12</b>	<b>Brief study of prescription and Non-prescription Products</b>		
	L123	Brief study of prescription Products	Chalk and Talk	22-06-2021
	L124	Brief study of prescription Products	Powerpoint	28-06-2021
	L125	Non-prescription Products.	Chalk and Talk	29-06-2021
	L126	Non-prescription Products.	Powerpoint	05-07-2021

*S. Phanalaxari*  
Signature of the Faculty



*[Signature]*  
Principal  
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ESTD : 2005

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**DEPARTMENT OF PHARMACY PRACTICE**  
**CLASS TIME TABLE AY: 2020-2021**

**CLASS: PHARM.D IV YEAR (2017 ADMITTED BATCH)**  
**CLASS TEACHER: Dr. Harini Priya**

W.e.f-04/11/2020

DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10- 1:00	1:00- 01:50	1:50- 2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	L U N C H	PT- III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	BPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Mrs.Ch. Geetha	Assistant Professor	Biostatistics and Research Methodology-(BRM) (4)	Pharm. D
2.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy-(CP) (3)	Pharm. D
3.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy-(HP) (2)	Pharm. D
4.	Dr. Harini Priya	Assistant Professor	Clinical Toxicology-(CT) (2)	Pharm. D
5.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics – III-(PT-III) (3)	Pharm. D
7.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab-(CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab-(HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab-(BPPK) (3)	Pharm. D
10.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics - III – (PT-III)Lab (3)	Pharm. D

Time Table Incharge



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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoeconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

## 4.2 HOSPITAL PHARMACY (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope:** In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug dispensing, manufacturing of parenteral preparations, drug information, patient counselling, and therapeutic drug monitoring for improved patient care.
2. **Objectives:** Upon completion of the course, the student shall be able to –
  - a. know various drug distribution methods;
  - b. know the professional practice management skills in hospital pharmacies;
  - c. provide unbiased drug information to the doctors;
  - d. know the manufacturing practices of various formulations in hospital set up;
  - e. appreciate the practice based research methods; and
  - f. appreciate the stores management and inventory control.

**Text books: (latest editions)**

- a. Hospital pharmacy by William .E. Hassan
- b. A text book of Hospital Pharmacy by S.H.Merchant & Dr. J.S. Qadry. Revised by R.K.Goyal & R.K. Parikh

**References:**


- a. WHO consultative group report.
- b. R.P.S. Vol.2. Part –B; Pharmacy Practice section.
- c. Handbook of pharmacy – health care. Edt. Robin J Harman. The Pharmaceutical press.

**3. Lecture wise programme :**

**Topics**

- 1 **Hospital - its Organisation and functions**
- 2 **Hospital pharmacy-Organisation and management**
  - a) Organizational structure-Staff, Infrastructure & work load statistics
  - b) Management of materials and finance
  - c) Roles & responsibilities of hospital pharmacist
- 3 **The Budget – Preparation and implementation**
- 4 **Hospital drug policy**
  - a) Pharmacy and Therapeutic committee (PTC)
  - b) Hospital formulary
  - c) Hospital committees
    - Infection committee
    - Research and ethical committee
  - d) developing therapeutic guidelines
  - e) Hospital pharmacy communication - Newsletter



  
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**5 Hospital pharmacy services**

- a) Procurement & warehousing of drugs and Pharmaceuticals
- b) Inventory control  
Definition, various methods of Inventory Control  
ABC, VED, EOQ, Lead time, safety stock
- c) Drug distribution in the hospital
  - i) Individual prescription method
  - ii) Floor stock method
  - iii) Unit dose drug distribution method
- d) Distribution of Narcotic and other controlled substances
- e) Central sterile supply services – Role of pharmacist

**6 Manufacture of Pharmaceutical preparations**

- a) Sterile formulations – large and small volume parenterals
- b) Manufacture of Ointments, Liquids, and creams
- c) Manufacturing of Tablets, granules, capsules, and powders
- d) Total parenteral nutrition

**7 Continuing professional development programs**

Education and training

**8 Radio Pharmaceuticals – Handling and packaging****9 Professional Relations and practices of hospital pharmacist****4.2 HOSPITAL PHARMACY (PRACTICAL)****Practical : 3 Hrs./Week**

1. Assessment of drug interactions in the given prescriptions
2. Manufacture of parenteral formulations, powders.
3. Drug information queries.
4. Inventory control

**List of Assignments:**

1. Design and Management of Hospital pharmacy department for a 300 bedded hospital.
2. Pharmacy and Therapeutics committee – Organization, functions, and limitations.
3. Development of a hospital formulary for 300 bedded teaching hospital
4. Preparation of ABC analysis of drugs sold in one month from the pharmacy.
5. Different phases of clinical trials with elements to be evaluated.
6. Various sources of drug information and systematic approach to provide unbiased drug information.
7. Evaluation of prescriptions generated in hospital for drug interactions and find out the suitable management.



  
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<b>HOSPITAL PHARMACY</b>				
<b>YEAR: IV PHARM D</b>				
<b>Week No.</b>	<b>Lecture No.</b>	<b>TOPIC</b>	<b>TeachingAid</b>	<b>Date</b>
<b>Unit-1</b>	<b>Scope of Hospital Pharmacy</b>			
Week-1	L1	Scope and objectives of Hospital pharmacy	Chalk andTalk	04-11-2020
	L2	Organization of Hospital	Chalk andTalk	04-11-2020
	L3	Functions of Hospital	PowerPoint	05-11-2020
<b>Unit-2</b>	<b>Hospital pharmacy</b>			
Week-2	L4	Hospital pharmacy-Introduction	Chalk andTalk	05-11-2020
	L5	Organizational structure-Staff, Infrastructure	Power Point	11-11-2020
	L6	Organizational structure-work load statistics	Chalk andTalk	12-11-2020
	L7	Management of materials and finance	Power Point	12-11-2020
	L8	Management of materials and finance	Chalk andTalk	18-11-2020
	L9	Roles & responsibilities of hospital pharmacist	PowerPoint	18-11-2020
	L10	Roles & responsibilities of hospital pharmacist	Chalk andTalk	19-11-2020
<b>Unit-3</b>	<b>The Budget</b>			
Week-3	L11	Introduction of Budget	Chalk andTalk	25-11-2020
	L12	Preparation of Budget	Chalk andTalk	25-11-2020
	L13	Implementation of Budget	LCD	25-11-2020
<b>Unit-4</b>	<b>Hospital drug policy</b>			
Week-3	L14	Hospital drug policy -Introduction	Chalk andTalk	26-11-2020
	L15	Pharmacy and Therapeutic committee (PTC)	PowerPoint	26-11-2020



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	L16	Pharmacy and Therapeutic committee (PTC)	Chalk andTalk	02-12-2020
	L17	Hospital formulary	Chalk and Talk	02-12-2020
	L18	Hospital formulary	LCD	03-12-2020
	L19	Hospital committees-Introduction	Chalk andTalk	03-12-2020
Week-4	L20	Infection committee	Chalk andTalk	09-12-2020
	L21	Infection committee	Chalk andTalk	09-12-2020
	L22	Research and ethical committee	Power Point	10-12-2020
	L23	Research and ethical committee	Chalk andTalk	16-12-2020
	L24	Developing therapeutic guidelines	LCD	16-12-2020
	L25	Developing therapeutic guidelines	Chalk andTalk	17-12-2020
Week-5	L26	Hospital pharmacy communication -Introduction	PowerPoint	17-12-2020
	L27	Hospital pharmacy communication -Newsletter	Chalk andTalk	22-12-2020
	L28	Hospital pharmacy communication - Newsletter	Chalk andTalk	22-12-2020
Unit-5	<b>Hospital pharmacy services</b>			
	L29	Hospital pharmacy services - Introduction	Chalk andTalk	23-12-2020
	L30	Procurement & warehousing of drugs	Chalk andTalk	23-12-2020
	L31	Procurement & warehousing of drugs	LCD	23-12-2020
Week-6	L32	Procurement & warehousing ofPharmaceuticals	Chalk andTalk	29-12-2020
	L33	Procurement & warehousing ofPharmaceuticals	PowerPoint	29-12-2020
	L34	Procurement & warehousing ofPharmaceuticals	Chalk andTalk	29-12-2020
	L35	Inventory control-Introduction	Chalk andTalk	30-12-2020
	L36	Definition, various methods of Inventory Control	LCD	30-12-2020
	L37	ABC, VED	PowerPoint	06-01-2021
Week-7	L38	EOQ, Lead time, safety stock	Chalk andTalk	06-01-2021



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	L39	EOQ, Lead time, safety stock	Chalk andTalk	07-01-2021
	L40	EOQ, Lead time, safety stock	Chalk andTalk	07-01-2021
	L41	Drug distribution in the hospital - Introduction	LCD	20-01-2021
	L42	Individual prescription method	Chalk andTalk	20-01-2021
	L43	Individual prescription method	Chalk andTalk	21-01-2021
Week-8	L44	Floor stock method	Chalk andTalk	21-01-2021
	L45	Floor stock method	LCD	27-01-2021
	L46	Unit dose drug distribution method	Chalk andTalk	27-01-2021
	L47	Unit dose drug distribution method	Chalk andTalk	27-01-2021
	L48	Distribution of Narcotic	LCD	28-01-2021
	L49	Distribution of Narcotic	Chalk andTalk	03-02-2021
Week-9	L50	Distribution of other controlled substances	Chalk andTalk	03-02-2021
	L51	Distribution of other controlled substances	Chalk andTalk	04-02-2021
	L52	Central sterile supply services – Role of pharmacist	PowerPoint	10-02-2021
	L53	Central sterile supply services – Role of pharmacist	Chalk andTalk	11-02-2021
Unit-6	<b>Manufacture of Pharmaceutical preparations</b>			
	L54	Manufacture of Pharmaceutical preparations- Introduction	Chalk andTalk	18-02-2021
	L55	Sterile formulations – large and small volume parenterals	Chalk andTalk	21-02-2021
Week-10	L56	Sterile formulations – large and small volume parenterals	Chalk andTalk	25-02-2021
	L57	Manufacture of Ointments	LCD	03-03-2021
	L58	Manufacture of Ointments	Chalk andTalk	04-03-2021
	L59	Manufacture of Liquids	PowerPoint	10-03-2021
	L60	Manufacture of	Chalk and Talk	11-03-2021



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11-03-2021





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	L61	Manufacture of creams	Chalk andTalk	17-03-2021
Week -11	L62	Manufacture of creams	LCD	18-03-2021
	L63	Manufacturing of Tablets	Chalk andTalk	24-03-2021
	L64	Manufacturing of Tablets	Chalk andTalk	25-03-2021
	L65	Manufacturing of Tablets	LCD	31-03-2021
	L66	Manufacturing of granules	Chalk andTalk	01-04-2021
	L67	Manufacturing of granules	Chalk andTalk	07-04-2021
	Week -12	L68	Manufacturing of granules	Chalk andTalk
L69		Manufacturing of capsules	Powerpoint	15-04-2021
L70		Manufacturing of capsules	Chalk andTalk	16-04-2021
L71		Manufacturing of powders	Chalk andTalk	22-04-2021
L72		Manufacturing of powders	Chalk andTalk	28-04-2021
L73		Total parenteral nutrition	Chalk andTalk	29-04-2021
Week -13	L74	Total parenteral nutrition	Chalk andTalk	05-05-2021
	L75	Total parenteral nutrition	Powerpoint	06-05-2021
<b>Unit-7</b>	<b>Continuing professional development programs</b>			
	L76	Continuing professional development programs - Introduction	Chalk andTalk	12-05-2021
	L77	Continuing professional development programs - Education and training	Chalk andTalk	13-05-2021
	L78	Continuing professional development programs - Education and training	Chalk andTalk	19-05-2021
	L79	Continuing professional development programs - Education and training	Powerpoint	20-05-2021
<b>Unit-8</b>		<b>Radio Pharmaceuticals</b>		
Week -14	L80	Radio Pharmaceuticals - Introduction	Chalk andTalk	27-05-2021

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	L81	Handling and packaging of RadioPharmaceuticals	Chalk andTalk	02-06-2021
	L82	Handling and packaging of RadioPharmaceuticals	Chalk andTalk	03-06-2021
	L83	Handling and packaging of RadioPharmaceuticals	Chalk andTalk	09-06-2021
<b>Unit -9</b>	<b>Professional Relations and practices of hospital pharmacist</b>			
	L84	Professional Relations of hospital pharmacist	Chalk andTalk	10-06-2021
	L85	Professional Relations of hospital pharmacist	LCD	16-06-2021
<b>Week -15</b>	L86	Professional Relations of hospital pharmacist	Chalk and Talk	17-06-2021
	L87	Professional Relations of hospital pharmacist	Power point	23-06-2021
	L88	Professional Practices of hospital pharmacist	Chalk and Talk	24-06-2021
	L89	Professional Practices of hospital pharmacist	Google meet	30-06-2021

*V. Umabakar*

Signature of the Faculty



*[Signature]*

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**DEPARTMENT OF PHARMACY PRACTICE**  
**CLASS TIME TABLE AY: 2020-2021**

**CLASS: PHARM.D IV YEAR (2017 ADMITTED BATCH)**  
**CLASS TEACHER: Dr. Harini Priya**

**W.e.f-04/11/2020**

DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10- 1:00	1:00- 01:50	1:50- 2:40	2:40- 3:30	3:30-4:20
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TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	BPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
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6.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics – III-(PT-III) (3)	Pharm. D
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9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab-(BPPK) (3)	Pharm. D
10.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics - III – (PT-III)Lab (3)	Pharm. D

  
**Time Table Incharge**



  
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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

### 4.3 CLINICAL PHARMACY (THEORY)

**Theory : 3 Hrs. /Week**

#### 1. Objectives of the Subject :

Upon completion of the subject student shall be able to (Know, do, appreciate) –

- a. monitor drug therapy of patient through medication chart review and clinical review;
- b. obtain medication history interview and counsel the patients;
- c. identify and resolve drug related problems;
- d. detect, assess and monitor adverse drug reaction;
- e. interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states; and
- f. retrieve, analyse, interpret and formulate drug or medicine information.

#### Text books (Theory)

- a. Practice Standards and Definitions - The Society of Hospital Pharmacists of Australia.
- b. Basic skills in interpreting laboratory data - Scott LT, American Society of Health System Pharmacists Inc.
- c. Biopharmaceutics and Applied Pharmacokinetics - Leon Shargel, Prentice Hall publication.
- d. A text book of Clinical Pharmacy Practice; Essential concepts and skills, Dr.G.Parthasarathi etal, Orient Orient Langram Pvt.Ltd. ISSN8125026

#### References


- a. Australian drug information -Procedure manual. The Society of Hospital Pharmacists of Australia.
- b. Clinical Pharmacokinetics - Rowland and Tozer, Williams and Wilkins Publication.
- c. Pharmaceutical statistics. Practical and clinical applications. Sanford Bolton, Marcel Dekker, Inc.

#### 2. Detailed syllabus and lecture wise schedule:

##### Title of the topic

1. **Definitions, development and scope of clinical pharmacy**
2. **Introduction to daily activities of a clinical pharmacist**
  - a. Drug therapy monitoring (medication chart review, clinical review, pharmacist interventions)
  - b. Ward round participation
  - c. Adverse drug reaction management
  - d. Drug information and poisons information
  - e. Medication history
  - f. Patient counseling
  - g. Drug utilisation evaluation (DUE) and review (DUR)
  - h. Quality assurance of clinical pharmacy services



  
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3. **Patient data analysis**  
The patient's case history, its structure and use in evaluation of drug therapy & Understanding common medical abbreviations and terminologies used in clinical practices.
4. **Clinical laboratory tests used in the evaluation of disease states, and interpretation of test results**
  - a. Haematological, Liver function, Renal function, thyroid function tests
  - b. Tests associated with cardiac disorders
  - c. Fluid and electrolyte balance
  - d. Microbiological culture sensitivity tests
  - e. Pulmonary Function Tests
5. **Drug & Poison information**
  - a. Introduction to drug information resources available
  - b. Systematic approach in answering DI queries
  - c. Critical evaluation of drug information and literature
  - d. Preparation of written and verbal reports
  - e. Establishing a Drug Information Centre
  - f. Poisons information- organization & information resources
6. **Pharmacovigilance**
  - a. Scope, definition and aims of pharmacovigilance
  - b. Adverse drug reactions - Classification, mechanism, predisposing factors, causality assessment [different scales used]
  - c. Reporting, evaluation, monitoring, preventing & management of ADRs
  - d. Role of pharmacist in management of ADR.
7. Communication skills, including patient counselling techniques, medication history interview, presentation of cases.
8. Pharmaceutical care concepts
9. Critical evaluation of biomedical literature
10. Medication errors


#### 4.3 CLINICAL PHARMACY (PRACTICAL)

##### Practical : 3 Hrs./Week

Students are expected to perform 15 practicals in the following areas covering the topics dealt in theory class.

- a. Answering drug information questions (4 Nos)
- b. Patient medication counselling (4 Nos)
- c. Case studies related to laboratory investigations (4 Nos)
- d. Patient medication history interview (3 Nos)



  
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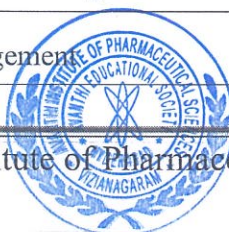
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CLINICAL PHARMACY				
YEAR: IV PHARM.D				
Week No.	Lecture No.	Topics to be covered	TeachingAid	Dates
Unit 1	Introduction to clinical pharmacy			
Week 1	L1	Definitions of clinical pharmacy	Chalk andTalk	02-11-2020
	L2	Development of clinical pharmacy	Chalk andTalk	02-11-2020
	L3	Development of clinical pharmacy	Chalk andTalk	03-11-2020
	L4	Scope of clinical pharmacy	Chalk andTalk	09-11-2020
	L5	Scope of clinical pharmacy	Googlemeet	09-11-2020
Unit 2	Introduction to daily activities of a clinical pharmacist			
	L6	Introduction to daily activities of a clinical pharmacist	Chalk andTalk	10-11-2020
Week 2	L7	Drug therapy monitoring	Chalk andTalk	10-11-2020
	L8	Medication chart review	Chalk andTalk	16-11-2020
	L9	Medication chart review	Power point	16-11-2020
	L10	Clinical review	Chalk andTalk	16-11-2020
	L11	Clinical review	Chalk andTalk	17-11-2020
	L12	Pharmacist interventions	Powerpoint	17-11-2020
Week 3	L13	Pharmacist interventions	Chalk andTalk	18-11-2020
	L14	Ward round participation	Chalk andTalk	23-11-2020
	L15	Ward round participation	LCD	23-11-2020
	L16	Ward round participation	Chalk andTalk	24-11-2020
	L17	Adverse drug reaction management	Chalk andTalk	24-11-2020
	L18	Types of drug management	Powerpoint	25-11-2020



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Week 4	L19	Drug information	Chalk andTalk	25-11-2020
	L20	Poisons information	Chalk andTalk	30-11-2020
	L21	Poisons information	Chalk andTalk	30-11-2020
	L22	Poisons information	LCD	01-12-2020
	L23	Medication history	Chalk andTalk	01-12-2020
	L24	Medication history	Chalk andTalk	01-12-2020
	Week 5	L25	Patient counseling	Powerpoint
L26		Patient counseling	Chalk andTalk	02-12-2020
L27		Drug utilization evaluation	Chalk andTalk	07-12-2020
L28		Drug utilization evaluation	Chalk andTalk	14-12-2020
L29		Drug utilization evaluation (DUE) and review(DUR)	Powerpoint	15-12-2020
L30		Drug utilization evaluation (DUE) and review(DUR)	Chalk andTalk	15-12-2020
Week 6	L31	Drug utilization evaluation (DUE) and review(DUR)	Chalk andTalk	15-12-2020
	L32	Quality assurance of clinical pharmacy services	Powerpoint	16-12-2020
	L33	Quality assurance of clinical pharmacy services	Chalk andTalk	16-12-2020
	L34	Clinical pharmacy services	Chalk andTalk	21-12-2020
	L35	Clinical pharmacy services	Googlemmeet	22-12-2020
<b>Unit 3</b>	<b>Introduction to Patient data analysis</b>			
	L36	Patient data analysis	Chalk andTalk	23-12-2020
Week 7	L37	The patient's case history, its structure	Powerpoint	28-12-2020
	L38	Use in evaluation of drug therapy	Chalk andTalk	29-12-2020
	L39	Understanding common medical abbreviations	Chalk andTalk	30-12-2020
	L40	Understanding common medical abbreviations	Powerpoint	30-12-2020



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	L41	Terminologies used in clinical Practices	Chalk andTalk	04-01-2021
	L42	Terminologies used in clinical Practices	Googlemmeet	04-01-2021
<b>Unit 4</b>	<b>Introduction to Clinical laboratory tests</b>			
Week 8	L43	Clinical laboratory tests used in the evaluationof disease states	Chalk andTalk	05-01-2021
	L44	Clinical laboratory tests used in the evaluationof disease states	Chalk andTalk	05-01-2021
	L45	Interpretation of test results	Powerpoint	18-01-2021
	L46	Haematological functions tests	Chalk andTalk	19-01-2021
	L47	Liver function tests	Chalk andTalk	19-01-2021
	L48	Liver function tests	Chalk andTalk	20-01-2021
Week 9	L49	Renal function tests	LCD	25-01-2021
	L50	Renal function tests	Chalk andTalk	25-01-2021
	L51	Thyroid function tests	Chalk andTalk	27-01-2021
	L52	Thyroid function tests	Chalk andTalk	27-01-2021
	L53	Tests associated with cardiac disorders	LCD	01-02-2021
	L54	Tests associated with cardiac disorders	Chalk andTalk	01-02-2021
Week 10	L55	Fluid and electrolyte balance	Powerpoint	02-02-2021
	L56	Fluid and electrolyte balance	Chalk andTalk	02-02-2021
	L57	Microbiological culture sensitivity tests	Chalk andTalk	03-02-2021
	L58	Microbiological culture sensitivity tests	Chalk andTalk	03-02-2021
	L59	Microbiological culture sensitivity tests	Chalk and Talk	08-02-2021
	L60	Pulmonary Function Tests	Chalk andTalk	09-02-2021
Week 12	L61	Pulmonary Function Tests	Powerpoint	09-02-2021
	L62	Pulmonary Function Tests	Chalk andTalk	09-02-2021



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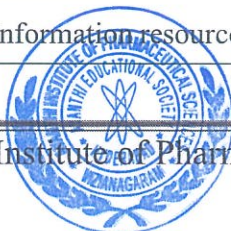
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Unit 5	Introduction to Drug & Poison information			
	L63	Drug & Poison information	Chalk and Talk	10-02-2021
	L64	Introduction to drug information resources available	Chalk and Talk	10-02-2021
	L65	Introduction to drug information resources available	Chalk and Talk	15-02-2021
	L66	Systematic approach in answering DI queries	Chalk and Talk	15-02-2021
Week 13	L67	Systematic approach in answering DI queries	Google meet	16-02-2021
	L68	Critical evaluation of drug information and literature	Chalk and Talk	16-02-2021
	L69	Critical evaluation of drug information and literature	LCD	17-02-2021
	L70	Critical evaluation of drug information and literature	Chalk and Talk	17-02-2021
	L71	Preparation of written reports	Power point	22-02-2021
	L72	Preparation of written reports	Chalk and Talk	23-02-2021
Week 14	L73	Preparation of written reports	Google meet	24-02-2021
	L74	Verbal reports	Chalk and Talk	01-03-2021
	L75	Establishing a Drug Information Centre	Chalk and Talk	02-03-2021
	L76	Establishing a Drug Information Centre	Chalk and Talk	03-03-2021
	L77	Establishing a Drug Information Centre	Chalk and Talk	08-03-2021
	L78	Establishing a Drug Information Centre	Chalk and Talk	09-03-2021
Week 15	L79	Poisons information	Chalk and Talk	10-03-2021
	L80	Poisons information	Chalk and Talk	15-03-2021
	L81	organization & information resources	Chalk and Talk	16-03-2021
	L82	organization & information resources	Chalk and Talk	17-03-2021

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	L83	organization & information resources	Chalk and Talk	22-03-2021
<b>Unit 6</b>	<b>Introduction to Pharmacovigilance</b>			
	L84	Pharmacovigilance	Chalk and Talk	23-03-2021
<b>Week 16</b>	L85	Scope and definition	Chalk and Talk	24-03-2021
	L86	Scope and definition	LCD	24-03-2021
	L87	Aims of pharmacovigilance	Chalk andTalk	30-03-2021
	L88	Aims of pharmacovigilance	Chalk andTalk	31-03-2021
	L89	Adverse drug reactions	Chalk andTalk	05-04-2021
	L90	Adverse drug reactions	Powerpoint	06-04-2021
<b>Week 17</b>	L91	Classification and mechanism	Chalk andTalk	07-04-2021
	L92	Classification and mechanism	Chalk andTalk	07-04-2021
	L93	Classification and mechanism	Chalk andTalk	12-04-2021
	L94	Predisposing factors	Powerpoint	19-04-2021
	L95	Predisposing factors	Chalk andTalk	20-04-2021
	L96	Causality assessment	Chalk andTalk	26-04-2021
<b>Week 18</b>	L97	Causality assessment	Powerpoint	27-04-2021
	L98	Reporting, evaluation	Chalk andTalk	28-04-2021
	L99	Reporting, evaluation	Powerpoint	03-05-2021
	L100	Monitoring, preventing & management of ADRs	Chalk andTalk	04-05-2021
	L101	Monitoring, preventing & management of ADRs	Chalk andTalk	05-05-2021
	L102	Monitoring, preventing & management of ADRs	Chalk andTalk	10-05-2021
<b>Unit 7</b>	<b>Introduction to Communication skills</b>			
	L103	Communication skills	Chalk andTalk	11-05-2021



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Week 19	L104	Including patient counselling techniques	Googlemeet	17-05-2021
	L105	Including patient counselling techniques	Chalk andTalk	18-05-2021
	L106	Medication history interview	Chalk andTalk	19-05-2021
	L107	Presentation of cases	Chalk and Talk	24-05-2021
<b>Unit 8</b>	<b>Introduction to Pharmaceutical care concepts</b>			
	L108	Pharmaceutical care concepts	Chalk andTalk	25-05-2021
Week 20	L109	Pharmaceutical care concepts	Chalk andTalk	25-05-2021
	L110	Pharmaceutical care concepts	Googlemeet	31-05-2021
<b>Unit 9</b>	<b>Introduction to Critical evaluation of biomedical literature</b>			
	L111	Critical evaluation of biomedical literature	Chalk andTalk	01-06-2021
	L112	Critical evaluation of biomedical literature	Powerpoint	02-06-2021
	L113	Critical evaluation of biomedical literature	Chalk andTalk	07-06-2021
	L114	Critical evaluation of biomedical literature	Googlemeet	08-06-2021
<b>Unit 10</b>	<b>Introduction to Medication errors</b>			
Week 21	L115	Medication errors	Chalk andTalk	09-06-2021
	L116	Medication errors	Chalk andTalk	14-06-2021
	L117	Types of Medication errors	Powerpoint	15-06-2021
	L118	Types of Medication errors	Chalk andTalk	16-06-2021
	L119	Management of Medication errors	LCD	21-06-2021
	L120	Management of Medication errors	Chalk andTalk	22-06-2021

Signature of the Faculty



Principal  
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## DEPARTMENT OF PHARMACY CLASS TIME TABLE AY: 2019-2020

CLASS: I B.Pharm II Sem (PCI Regulation)  
SECTION- A (2019 Admitted Batch)

w.e.f: 23/06/2020

CLASS TEACHER: Mrs. L. Divya Sri				Batch A: Roll 01-25		Batch B: Roll 26-55		
DAY/ TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:20	12:00 1:00	1:00 - 1:50	1:50 2:40	2:40 3:30	3:30 – 4:20
MON	POC-I	PATHO	BIOCHEM	<b>L U N C H</b>	HAP-II	Batch A: POC-I Lab Batch B: BIOCHEM Lab		
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A: BIOCHEM Lab Batch B: POC-II Lab		
WED	HAP-II	CA	PATHO		POC-I	Batch A: HAP-II Lab Batch B :CA Lab		
THU	BIOCHEM	PATHO	CA		TUTOPIAL (OC)	Batch A :CA Lab Batch B :HAP-II Lab		
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP-II	TUTORIAL (HAP)
SAT	CA	BIOCHEM	HAP II		PATHO	POC-I	ES	L/S

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	DEPARTMENT
1.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mrs. N. Reshma	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) (5)	B. Pharm
4.	Mrs. B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Mr. V. H. S. Reddy	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. K. Venkata Radhika	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Lab (6)	B. Pharm
8.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry Lab (BIOCHEM) (6)	B. Pharm
9.	Mrs. N. Reshma	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. K. Venkata Radhika	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Tutorial (1)	B. Pharm
12.	Mrs. N. Reshma	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports (1)	B. Pharm

*B. Chaitanya*  
Time Table Incharge



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## CLASS TIME TABLE AY: 2019-20

CLASS: I B. Pharm II Sem (PCI Regulation)  
SECTION- B (2019 Admitted Batch)

w.e.f: 23/06/2020

CLASS TEACHER: Mrs. B. MeherJyoti				Batch C: Roll 56-80					Batch D : Roll- 81-B <sub>0</sub>			
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:2- 12:10	12:10 1:00	1:00 - 01:50	1:50- 2:40	2:40- 3:30	3:30 - 4:20				
MON	POC-1	HAP-II	BIOCHE M	L U N C H	PATHO	BATCH C-HAP-II LAB BATCH D -CA LAB						
TUE	CA	PATHO	POC-1		HAP-II	BATCH C-CA LAB BATCH D-HAP-II LAB						
WED	PATHO	BIOCHEM	HAP-II		CA	BATCH C-POC1 LAB BATCH D-BIOCHEM LAB						
THU	POC1	BIOCHEM	ES		CA	BATCH C- BIOCHEM LAB BATCH D-POC1 LAB						
FRI	BIOCHEM	POC-1	PATHO		TUTORIA L (HAP)	POC1	ES	(L/S)				
SAT	HAP-II	PATHO	BIOCHE M		ES	CA	HAP- II	TUTORIA L (OC)				

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	DEPARTMENT
1.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs.B. Poornima	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mrs. Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II)(5)	B. Pharm
4.	Mrs.B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Mr. V. H. S. Reddy	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs.B. Rama Madhuri	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) Lab (6)	B. Pharm
8.	Mrs.B. Poornima	Associate Professor	Pharmaceutical Biochemistry (BIOCHEM) Lab (6)	B. Pharm
9.	Mrs.Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs.B. Rama Madhuri	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)(Tutorial (1)	B. Pharm
12.	Mr.Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II)Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports(1)	B. Pharm

*B. Chaitanya*  
Time Table Incharge



*Principal*  
Principal  
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**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>

## BP 206 T. ENVIRONMENTAL SCIENCES (Theory)

30 hours

**Scope:** Environmental Sciences is the scientific study of the environmental system and the status of its inherent or induced changes on organisms. It includes not only the study of physical and biological characters of the environment but also the social and cultural factors and the impact of man on environment.

**Objectives:** Upon completion of the course the student shall be able to:

1. Create the awareness about environmental problems among learners.
2. Impart basic knowledge about the environment and its allied problems.
3. Develop an attitude of concern for the environment.
4. Motivate learner to participate in environment protection and environment improvement.
5. Acquire skills to help the concerned individuals in identifying and solving environmental problems.
6. Strive to attain harmony with Nature.

### Course content:

#### Unit-I

10hours

The Multidisciplinary nature of environmental studies

Natural Resources

Renewable and non-renewable resources:

Natural resources and associated problems

a) Forest resources; b) Water resources; c) Mineral resources; d) Food resources; e) Energy resources; f) Land resources: Role of an individual in conservation of natural resources.

#### Unit-II

10hours

Ecosystems

- Concept of an ecosystem.
- Structure and function of an ecosystem.
- Introduction, types, characteristic features, structure and function of the ecosystems: Forest ecosystem; Grassland ecosystem; Desert ecosystem; Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

#### Unit- III

10hours

Environmental Pollution: Air pollution; Water pollution; Soil pollution



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**Recommended Books (Latest edition):**

1. Y.K. Sing, Environmental Science, New Age International Pvt, Publishers, Bangalore
2. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
3. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India,
4. Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
5. Clark R.S., Marine Pollution, Clarendon Press Oxford
6. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumbai, 1196p
7. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
8. Down of Earth, Centre for Science and Environment



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## B. PHARMACY LECTURE PLAN SECTION-A

<b>COURSE NAME: Environmental Science</b>	<b>COURSE CODE: BP206T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION: PCI</b>

Date	Lecture No	Topic Name	Source
23-06-2020	Lecture 1	Introduction of all the topics to be covered	Text Book
27-06-2020	Lecture 2	Unit-1 The multidisciplinary nature of Environmental Studies	Text Book
30-06-2020	Lecture 3	Natural Resources	Text Book
03-07-2020	Lecture 4	Renewable Sources	Text Book
04-07-2020	Lecture 5	Non-renewable Resources	Text Book
07-07-2020	Lecture 6	Forest Resources and its associated Problems	Text Book
10-07-2020	Lecture 7	Water Resources and its associated Problems	Text Book
11-07-2020	Lecture 8	Mineral Resources and its associated problems	Text Book
14-07-2020	Lecture 9	Food Resources and its Associated Problems	Text Book
17-07-2020	Lecture 10	Energy Resources and its Associated Problems	Text Book
18-07-2020	Lecture 11	Land Resources and its associated problems	Text Book
21-07-2020	Lecture 12	Role of an individual in conservation of natural Resources	Text Book
24-07-2020	Lecture 13	Unit-2 Ecosystems	Text Book
25-07-2020	Lecture 14	Concept of an Ecosystem	Text Book
28-07-2020	Lecture 15	Structure of an Ecosystem	Text Book
01-08-2020	Lecture 16	Function of an Ecosystem	Text Book
04-08-2020	Lecture 17	Introduction to Ecosystem	Text Book
07-08-2020	Lecture 18	Definition of Ecosystem	Text Book
11-08-2020	Lecture 19	Types of Ecosystems	Text Book
14-08-2020	Lecture 20	Characteristic Features of an Ecosystem	Text Book

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18-08-2020	Lecture 21	Introduction to Forest Ecosystem	Text Book
21-08-2020	Lecture 22	Brief view on Forest Ecosystem	Text Book
25-08-2020	Lecture 23	Continuation of Forest Ecosystem	Text Book
28-08-2020	Lecture 24	Introduction to Grassland Ecosystem	Text Book
01-09-2020	Lecture 25	Brief view on Grassland Ecosystem	Text Book
04-09-2020	Lecture 26	Continuation of Grassland Ecosystem	Text Book
08-09-2020	Lecture 27	Introduction to Desert Ecosystem	Text Book
08-09-2020	Lecture 28	Brief view on Desert Ecosystem	Text Book
11-09-2020	Lecture 29	Continuation of Desert Ecosystem	Text Book
12-09-2020	Lecture 30	Introduction to aquatic Ecosystem	Text Book
12-09-2020	Lecture 31	Aquatic Ecosystem	Text Book
15-09-2020	Lecture 32	Unit-3 Environmental Pollution	Text Book
18-09-2020	Lecture 33	Introduction to Pollution	Text Book
19-09-2020	Lecture 34	Brief view on environmental Pollution	Text Book
22-09-2020	Lecture 35	Air Pollution	Text Book
25-09-2020	Lecture 36	Prevention of Air Pollution	Text Book
26-09-2020	Lecture 37	Water Pollution	Text Book
29-09-2020	Lecture 38	Prevention of Water Pollution	Text Book
03-10-2020	Lecture 39	Soil Pollution & Prevention of Soil Pollution	Text Book

*V. H. S Reddy*  
Signature of the Faculty



*JVS*

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PRINCIPAL

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## B. PHARMACY LECTURE PLAN SECTION-B

<b>COURSE NAME: Environmental Science</b>	<b>COURSE CODE: BP206T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION: PCI</b>

Date	Lecture No.	Topic Name	Source
04-06-2020	Lecture 1	Introduction of all the topics to be covered	Text Book
05-06-2020	Lecture 2	Unit-1 The multidisciplinary nature of Environmental Studies	Text Book
06-06-2020	Lecture 3	Natural Resources	Text Book
11-06-2020	Lecture 4	Renewable Resources Non-renewable Resources	Text Book
12-06-2020	Lecture 5	Non-renewable Resources	Text Book
13-06-2020	Lecture 6	Forest Resources and its associated Problems	Text Book
18-06-2020	Lecture 7	Water Resources and its associated Problems	Text Book
19-06-2020	Lecture 8	Mineral Resources and its associated problems	Text Book
20-06-2020	Lecture 9	Food Resources and its associated Problems	Text Book
25-06-2020	Lecture 10	Energy Resources and its associated Problems	Text Book
26-06-2020	Lecture 11	Land Resources and its associated problems	Text Book
27-06-2020	Lecture 12	Role of an individual in conservation of natural resources	Text Book
02-07-2020	Lecture 13	Unit-2 Ecosystems	Text Book
03-07-2020	Lecture 14	Concept of an Ecosystem	Text Book
04-07-2020	Lecture 15	Structure of an Ecosystem	Text Book
09-07-2020	Lecture 16	Function of an Ecosystem	Text Book
10-07-2020	Lecture 17	Introduction to Ecosystem	Text Book

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11-07-2020	Lecture 18	Definition of Ecosystem	Text Book
16-07-2020	Lecture 19	Types of Ecosystems	Text Book
17-07-2020	Lecture 20	Characteristic Features of an Ecosystem	Text Book
18-07-2020	Lecture 21	Introduction to Forest Ecosystem	Text Book
23-07-2020	Lecture 22	Brief view on Forest Ecosystem	Text Book
24-07-2020	Lecture 23	Continuation of Forest Ecosystem	Text Book
07-08-2020	Lecture 24	Introduction to Grassland Ecosystem	Text Book
08-08-2020	Lecture 25	Introduction to Pollution	Text Book
21-08-2020	Lecture 26	Brief view on environmental Pollution	Text Book
10-09-2020	Lecture 27	Air Pollution	Text Book
12-09-2020	Lecture 28	Prevention of Air Pollution	Text Book
18-09-2020	Lecture 29	Water Pollution	Text Book
24-09-2020	Lecture 30	Prevention of Water Pollution	Text Book
26-09-2020	Lecture 31	Soil Pollution	Text Book
03-10-2020	Lecture 32	Prevention of Soil Pollution	Text Book

*V. S. H. Reddy*  
Signature of the Faculty



*JVS*

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## DEPARTMENT OF PHARMACY CLASS TIME TABLE AY: 2019-2020

CLASS: I B.Pharm II Sem (PCI Regulation)  
SECTION- A (2019 Admitted Batch)

w.e.f: 23/06/2020

CLASS TEACHER: Mrs. L. Divya Sri				Batch A: Roll 01-25		Batch B: Roll 26-55			
DAY/ TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:20	12:00 1:00	1:00 - 1:50	1:50 2:40	2:40 3:30	3:30 – 4:20	
MON	POC-I	PATHO	BIOCHEM	L U N C H	HAP-II	Batch A: POC-I Lab Batch B: BIOCHEM Lab			
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A: BIOCHEM Lab Batch B: POC-II Lab			
WED	HAP-II	CA	PATHO		POC-I	Batch A: HAP-II Lab Batch B :CA Lab			
THU	BIOCHEM	PATHO	CA		TUTORIAL (OC)	Batch A :CA Lab Batch B :HAP-II Lab			
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP-II	TUTORIAL (HAP)	
SAT	CA	BIOCHEM	HAP-II		PATHO	POC-I	ES	L/S	

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	DEPARTMENT
1.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mrs. N. Reshma	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) (5)	B. Pharm
4.	Mrs. B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Mr. V. H. S. Reddy	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. K. Venkata Radhika	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Lab (6)	B. Pharm
8.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry Lab (BIOCHEM) (6)	B. Pharm
9.	Mrs. N. Reshma	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. K. Venkata Radhika	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Tutorial (1)	B. Pharm
12.	Mrs. N. Reshma	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports (1)	B. Pharm

*B. chaitanya*  
Time Table Incharge



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## CLASS TIME TABLE AY: 2019-20

CLASS: I B. Pharm II Sem (PCI Regulation)  
SECTION- B (2019 Admitted Batch)

w.e.f: 23/06/2020

CLASS TEACHER: Mrs. B. MeherJyoti				Batch C: Roll 56-80				Batch D : Roll- 81-80			
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:2- 12:10	12:10 1:00	1:00 - 01:50	1:50- 2:40	2:40- 3:30	3:30 - 4:20			
MON	POC-I	HAP-II	BIOCHE M	L U N C H	PATHO	BATCH C-HAP-II LAB BATCH D -CA LAB					
TUE	CA	PATHO	POC-I		HAP-II	BATCH C-CA LAB BATCH D-HAP-II LAB					
WED	PATHO	BIOCHEM	HAP-II		CA	BATCH C-POCI LAB BATCH D-BIOCHEM LAB					
THU	POCI	BIOCHEM	ES		CA	BATCH C- BIOCHEM LAB BATCH D-POCI LAB					
FRI	BIOCHEM	POC-I	PATHO		TUTORIA L (HAP)	POCI	ES	(L S)			
SAT	HAP-II	PATHO	BIOCHE M		ES	CA	HAP- II	TUTORIA L (OC)			

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	DEPARTMENT
1.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. B. Poorhima	Associate Professor	Pharmaceutical Biochemistry (BIOCHEM) (5)	B. Pharm
3.	Mrs. Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) (5)	B. Pharm
4.	Mrs. B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Mr. V. H. S. Reddy	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. B. Rama Madhuri	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) Lab (6)	B. Pharm
8.	Mrs. B. Poorhima	Associate Professor	Pharmaceutical Biochemistry (BIOCHEM) Lab (6)	B. Pharm
9.	Mrs. Anveshi Dhananjaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. B. Rama Madhuri	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. Purnima Yadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) Tutorial (1)	B. Pharm
12.	Mr. Vinay Ramji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. Koteswar Rao	Physical Director	Sports (1)	B. Pharm

*B. Chaitanya*  
Time Table Incharge



*[Signature]*  
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**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>



## BP 201T. HUMAN ANATOMY AND PHYSIOLOGY-II (Theory)

45 Hours

**Scope:** This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It also helps in understanding both homeostatic mechanisms. The subject provides the basic knowledge required to understand the various disciplines of pharmacy.

**Objectives:** Upon completion of this course the student should be able to:

1. Explain the gross morphology, structure and functions of various organs of the human body.
2. Describe the various homeostatic mechanisms and their imbalances.
3. Identify the various tissues and organs of different systems of human body.
4. Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume.
5. Appreciate coordinated working pattern of different organs of each system
6. Appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body.

### Course Content:

#### Unit I

10 hours

- **Nervous system**

Organization of nervous system, neuron, neuroglia, classification and properties of nerve fibre, electrophysiology, action potential, nerve impulse, receptors, synapse, neurotransmitters.

Central nervous system: Meninges, ventricles of brain and cerebrospinal fluid. structure and functions of brain (cerebrum, brain stem, cerebellum), spinal cord (gross structure, functions of afferent and efferent nerve tracts, reflex activity)

#### Unit II

06 hours

- **Digestive system**

Anatomy of GI Tract with special reference to anatomy and functions of stomach, ( Acid production in the stomach, regulation of acid production through parasympathetic nervous system, pepsin role in protein digestion) small intestine



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and large intestine, anatomy and functions of salivary glands, pancreas and liver, movements of GIT, digestion and absorption of nutrients and disorders of GIT.

- **Energetics**

Formation and role of ATP, Creatinine Phosphate and BMR.

### Unit III

- **Respiratory system** **10 hours**

Anatomy of respiratory system with special reference to anatomy of lungs, mechanism of respiration, regulation of respiration

Lung Volumes and capacities transport of respiratory gases, artificial respiration, and resuscitation methods.

- **Urinary system**

Anatomy of urinary tract with special reference to anatomy of kidney and nephrons, functions of kidney and urinary tract, physiology of urine formation, micturition reflex and role of kidneys in acid base balance, role of RAS in kidney and disorders of kidney.

### Unit IV

**10 hours**

- **Endocrine system**

Classification of hormones, mechanism of hormone action, structure and functions of pituitary gland, thyroid gland, parathyroid gland, adrenal gland, pancreas, pineal gland, thymus and their disorders.

### Unit V

**09 hours**

- **Reproductive system**

Anatomy of male and female reproductive system, Functions of male and female reproductive system, sex hormones, physiology of menstruation, fertilization, spermatogenesis, oogenesis, pregnancy and parturition

- **Introduction to genetics**

Chromosomes, genes and DNA, protein synthesis, genetic pattern of inheritance





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## B. PHARMACY LECTURE PLAN SECTION-A

<b>COURSE NAME:</b> Human Anatomy & Physiology	<b>COURSE CODE:</b> BP201T
<b>YEAR/ SEM:</b> I B. Pharm II Sem	<b>REGULATION:</b> PCI

Date	Lecture No.	Topic Name	Source
22-06-2020	Lecture 1	Introduction of all the topics to be covered	Text Book
24-06-2020	Lecture 2	Unit-1 Nervous System	Text Book
26-06-2020	Lecture 3	Organization of nervous system	Text Book
27-06-2020	Lecture 4	Structure & Function of neuron	Text Book
29-06-2020	Lecture 5	Neuroglial Cells	Text Book
01-07-2020	Lecture 6	Classification and properties of nerve fibre	Text Book
02-07-2020	Lecture 7	Electrophysiology & Action potential	Text Book
03-07-2020	Lecture 8	Nerve impulse & Receptors	Text Book
03-07-2020	Lecture 9	Synapse & Neurotransmitters	Text Book
04-07-2020	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
06-07-2020	Lecture 11	Cerebrospinal fluid	Text Book
08-07-2020	Lecture 12	structure and functions of brain (cerebrum) brain stem, and cerebellum)	Text Book
09-07-2020	Lecture 13	structure and functions of brain stem	Text Book
10-07-2020	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
11-07-2020	Lecture 15	Structure of spinal cord	Text Book
13-07-2020	Lecture 16	Functions of afferent and efferent nerve tracts, reflex activity.	Text Book
15-07-2020	Lecture 17	Unit-2 Digestive System	Text Book
16-07-2020	Lecture 18	Anatomy of GI Tract	Text Book
17-07-2020	Lecture 19	Functions of stomach	Text Book



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18-07-2020	Lecture 20	Acid production in the stomach	Text Book
20-07-2020	Lecture 21	Regulation of acid production through parasympathetic nervous system	Text Book
22-07-2020	Lecture 22	Pepsin role in protein digestion	Text Book
23-07-2020	Lecture 23	Small intestine	Text Book
24-07-2020	Lecture 24	Large intestine	Text Book
25-07-2020	Lecture 25	Anatomy & Functions of salivary glands	Text Book
27-07-2020	Lecture 26	Anatomy & Functions of pancreas	Text Book
29-07-2020	Lecture 27	Anatomy & Functions of Liver	Text Book
30-07-2020	Lecture 28	Movements of GIT	Text Book
01-08-2020	Lecture 29	Digestion and Absorption of Nutrients	Text Book
03-08-2020	Lecture 30	Disorders of GIT.	Text Book
05-08-2020	Lecture 31	Formation and role of ATP, Creatinine Phosphate and BMR.	Text Book
06-08-2020	Lecture 32	Unit-3 Respiratory System	Text Book
07-08-2020	Lecture 33	Anatomy of Respiratory system with reference to lungs	Text Book
08-08-2020	Lecture 34	Mechanism of respiration	Text Book
09-08-2020	Lecture 35	Regulation of respiration	Text Book
10-08-2020	Lecture 36	Lung Volumes and capacities	Text Book
12-08-2020	Lecture 37	Transport of respiratory gases	Text Book
13-08-2020	Lecture 38	Artificial respiration	Text Book
14-08-2020	Lecture 39	Resuscitation methods	Text Book
14-08-2020	Lecture 40	Urinary system	Text Book
17-08-2020	Lecture 41	Anatomy of urinary tract with reference to anatomy of kidney	Text Book
19-08-2020	Lecture 42	Structure & Functions of Nephrons	Text Book
20-08-2020	Lecture 43	Functions of kidney and Urinary tract	Text Book
21-08-2020	Lecture 44	Physiology of Urine formation	Text Book
21-08-2020	Lecture 45	Micturition reflex & Role of kidneys in acid base balance	Text Book
24-08-2020	Lecture 46	Role of RAS in kidney	Text Book



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26-08-2020	Lecture 47	Disorders of kidney.	Text Book
27-08-2020	Lecture 48	Unit-4 Endocrine system	Text Book
28-08-2020	Lecture 49	Classification of hormones	Text Book
30-08-2020	Lecture 50	Mechanism of hormone action	Text Book
31-08-2020	Lecture 51	Structure and Functions of Pituitary gland	Text Book
02-09-2020	Lecture 52	Structure and Functions of Thyroid gland	Text Book
03-09-2020	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
07-09-2020	Lecture 54	Structure and Functions of Adrenal gland	Text Book
09-09-2020	Lecture 55	Structure and Functions of Pancreas	Text Book
10-09-2020	Lecture 56	Structure and Functions of Pineal gland	Text Book
11-09-2020	Lecture 57	Thymus and their disorders	Text Book
12-09-2020	Lecture 58	Unit-5 Reproductive system	Text Book
14-09-2020	Lecture 59	Anatomy of male and female reproductive system	Text Book
17-09-2020	Lecture 60	Functions of male and female reproductive system	Text Book
18-09-2020	Lecture 61	Sex hormones	Text Book
21-09-2020	Lecture 62	Physiology of Menstruation	Text Book
24-09-2020	Lecture 63	Fertilization & Spermatogenesis	Text Book
26-09-2020	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
30-09-2020	Lecture 65	Chromosomes & genes & DNA	Text Book
01-10-2020	Lecture 66	Protein Synthesis	Text Book
03-10-2020	Lecture 67	Genetic pattern of inheritance	Text Book

*Reshma*

Signature of the Faculty



*[Signature]*  
Principal

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## B. PHARMACY LECTURE PLAN SECTION-B

<b>COURSE NAME: Human Anatomy &amp; Physiology</b>	<b>COURSE CODE: BP201T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION: PCI</b>

Date	Lecture No.	Topic Name	Source
22-06-2020	Lecture 1	Introduction of all the topics to be covered	Text Book
24-06-2020	Lecture 2	Unit-1 Nervous System	Text Book
26-06-2020	Lecture 3	Organization of nervous system	Text Book
27-06-2020	Lecture 4	Structure & Function of neuron	Text Book
29-06-2020	Lecture 5	Neuroglial Cells	Text Book
01-07-2020	Lecture 6	classification and properties of nerve fibre	Text Book
02-07-2020	Lecture 7	Electrophysiology & Action potential	Text Book
03-07-2020	Lecture 8	Nerve impulse & Receptors	Text Book
03-07-2020	Lecture 9	Synapse & Neurotransmitters	Text Book
04-07-2020	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
06-07-2020	Lecture 11	cerebrospinal fluid	Text Book
08-07-2020	Lecture 12	structure and functions of brain (cerebrum) brain stem, and cerebellum)	Text Book
09-07-2020	Lecture 13	structure and functions of brain stem	Text Book
10-07-2020	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
11-07-2020	Lecture 15	Structure of spinal cord	Text Book
13-07-2020	Lecture 16	Functions of afferent and efferent nerves, reflex activity.	Text Book
15-07-2020	Lecture 17	Unit-2 Digestive System	Text Book
16-07-2020	Lecture 18	Anatomy of GI Tract	Text Book
17-07-2020	Lecture 19	Functions of stomach	Text Book
17-07-2020	Lecture 20	Acid production in the stomach	Text Book
20-07-2020	Lecture 21	parasympathetic nervous system	Text Book



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20-07-2020	Lecture 22	Pepsin role in protein digestion	Text Book
22-07-2020	Lecture 23	Small intestine	Text Book
23-07-2020	Lecture 24	Large intestine	Text Book
24-07-2020	Lecture 25	Anatomy & Functions of salivary glands	Text Book
25-07-2020	Lecture 26	Anatomy & Functions of pancreas	Text Book
27-07-2020	Lecture 27	Anatomy & Functions of Liver	Text Book
29-07-2020	Lecture 28	Movements of GIT	Text Book
30-07-2020	Lecture 29	Digestion and Absorption of Nutrients	Text Book
01-08-2020	Lecture 30	Disorders of GIT.	Text Book
03-08-2020	Lecture 31	Formation and role of ATP, Creatinine Phosphate and BMR.	Text Book
05-08-2020	Lecture 32	Unit-3 Respiratory System	Text Book
06-08-2020	Lecture 33	Anatomy of Respiratory system with reference to lungs	Text Book
07-08-2020	Lecture 34	Mechanism of respiration	Text Book
08-08-2020	Lecture 35	Regulation of respiration	Text Book
09-08-2020	Lecture 36	Lung Volumes and capacities	Text Book
10-08-2020	Lecture 37	Transport of respiratory gases	Text Book
12-08-2020	Lecture 38	Artificial respiration	Text Book
13-08-2020	Lecture 39	Resuscitation methods	Text Book
14-08-2020	Lecture 40	Urinary system	Text Book
14-08-2020	Lecture 41	Anatomy of urinary tract with reference to anatomy of kidney	Text Book
17-08-2020	Lecture 42	Structure & Functions of Nephrons	Text Book
19-08-2020	Lecture 43	Functions of kidney and Urinary tract	Text Book
20-08-2020	Lecture 44	Physiology of Urine formation	Text Book
21-08-2020	Lecture 45	Micturition reflex & Role of kidneys in acid base balance	Text Book
21-08-2020	Lecture 46	Role of RAS in kidney	Text Book
24-08-2020	Lecture 47	Disorders of kidney.	Text Book
20-07-2020	Lecture 48	Unit-4 Endocrine system	Text Book
22-07-2020	Lecture 49	Classification of hormones	Text Book



  
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30-08-2020	Lecture 50	Mechanism of hormone action	Text Book
31-08-2020	Lecture 51	Structure and Functions of Pituitary gland	Text Book
02-09-2020	Lecture 52	Structure and Functions of Thyroid gland	Text Book
03-09-2020	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
07-09-2020	Lecture 54	Structure and Functions of Adrenal gland	Text Book
09-09-2020	Lecture 55	Structure and Functions of Pancreas	Text Book
10-09-2020	Lecture 56	Structure and Functions of Pineal gland	Text Book
11-09-2020	Lecture 57	Thymus and their disorders	Text Book
12-09-2020	Lecture 58	Unit-5 Reproductive system	Text Book
14-09-2020	Lecture 59	Anatomy of male and female reproductive system	Text Book
17-09-2020	Lecture 60	Functions of male and female reproductive system	Text Book
18-09-2020	Lecture 61	Sex hormones	Text Book
21-09-2020	Lecture 62	Physiology of Menstruation	Text Book
24-09-2020	Lecture 63	Fertilization & Spermatogenesis	Text Book
26-09-2020	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
30-09-2020	Lecture 65	Chromosomes & genes & DNA	Text Book
01-10-2020	Lecture 66	Protein Synthesis	Text Book
03-10-2020	Lecture 67	Genetic pattern of inheritance	Text Book

*Jyothi*

Signature of the Faculty

*JV*

Principal



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**CLASS TIME TABLE AY:2019-2020**

**CLASS: IV B.PHARM I SEM (R13 REGULATION)**  
**(2016Admitted Batch)**


w.e.f: 05/11/2019

Class Teacher: Mr.M.Vasu				BatchA: Roll 01-25			Batch B:Roll 26-50	
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10 1:00	1:00 – 01:50	1:50 – 2:40	2:40 – 3:30	3:30- 4:20
MON	PA-II	BA&T	GPAT	<b>L U N C H II</b>	CNP	BATCH-A- PA-II LAB BATCH-B- BA&T LAB BATCH- C- CNP LAB		
TUE	BA&T	PA-II	CNP		GPAT	BATCH-A- CNP LAB BATCH-B- PA-II LAB BATCH-C- BA&T LAB		
WED	CNP	BA&T	PA-II		GPAT	BATCH-A- BA&T LAB BATCH-B- CNP LAB BATCH-C- PA-II LAB		
THU	HCP	PJ	PA-II		TUTORIAL (CNP)	GPAT	BA&T	PJ
FRI	CNP	PA-II	BA&T		HCP	GPAT	HCP	PJ
SAT	HCP	PJ	HCP		TUTORIAL ( PA-II)	GPAT	CNP	PJ

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGARMME
1.	Mrs. K. VenkataRadhika	Assistant Professor	Pharmaceutical Analysis (PA-II) (5)	B. Pharm
2.	Mr. M. Vasu	Assistant Professor	Bioassays & Toxicology (BA&T) (5)	B. Pharm
3.	Mr. B. Yerni Kumar	Associate Professor	Chemistry and Natural Products (CNP) (5)	B. Pharm
4.	Mrs. L. Divya Sri	Associate Professor	Hospital and Community Pharmacy (HCP) (5)	B. Pharm
5.	Mr. Vamsi Krishna Yadav		Pharmaceutical Jurispredence (PJ) (5)	
6.		Associate Professor	GPAT (6)	B. Pharm
7.	Mrs. K. VenkataRadhika	Assistant Professor	Pharmaceutical Analysis (PA-II) Lab (9)	B. Pharm
8.	Mr. M. Vasu	Assistant Professor	Bioassays & Toxicology (BA&T) Lab (9)	B. Pharm
9.	Mr. B. Yerni Kumar	Assistant Professor	Chemistry and Natural Products (CNP) (9)	B. Pharm
10.	Mr. R.Ramana	Librarian	Library (1)	B. Pharm
11.	Mr. D.KoteswaraRao	Physical Director	Sports (1)	B. Pharm

*B. chaitanya*  
 Time Table Incharge



  
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#### IV Year I Semester

S. No.	Sub Code	Subject	L	T	P	Credits
1	PHR16411	Pharmaceutical Analysis -II	4	1	-	4
2	PHR16412	Biopharmaceutics & Pharmacokinetics	4	1	-	4
3	PHR16413	Chemistry of Natural Products	4	1	-	4
4	PHR16414	Hospital & Community Pharmacy	4	1	-	3
5	PHR16415	Pharmaceutical Jurisprudence	4	1	-	3
6	PHR16416	Pharmaceutical Analysis – II Lab	-	-	3	2
7	PHR16417	Biopharmaceutics & Pharmacokinetics Lab	-	-	3	2
8	PHR16418	Chemistry of Natural Products Lab	-	-	3	2
9		Project Commencement	-	-	-	-
		<b>Total</b>	<b>20</b>	<b>5</b>	<b>9</b>	<b>24</b>

#### IV Year II Semester

S. No.	Sub Code	Subject	L	T	P	Credits
1	PHR16421	Bioassays & Toxicology	4	1	-	3
2	PHR16422	Clinical Pharmacy, Therapeutics & Pharmaco vigilance	4	1	-	3
3	PHR16423	Controlled release & Novel Drug Delivery Systems	4	1	-	4
4	PHR16424	Quality Assurance, GMP, GLP	4	1	-	2
5	PHR16425	Bioassays & Toxicology Lab	-	-	3	2
6	PHR16426	Seminar on selected topic	-	-	-	2
7	PHR16427	Project Work *	-	-	-	8
8.	PHR16428	Comprehensive Viva voce	-	-	-	4
		<b>Total</b>	<b>16</b>	<b>4</b>	<b>3</b>	<b>28</b>

**\*Project work evaluation includes dissertation, seminar and viva voce**

## IV Year –I SEMESTER

T	P	C
3+1	0	3

## PHARMACEUTICAL JURISPRUDENCE

## UNIT-I

## Introduction

- a. Pharmaceutical Legislations - A brief review
- b. Drugs & Pharmaceutical Industry - A brief review
- c. Pharmaceutical Education - A brief review.
- d. Pharmaceutical ethics & policy

LO : To understand Pharmaceutical Legislations, Drugs & Pharmaceutical Industry, Pharmaceutical Education and Pharmaceutical ethics & policy

## UNIT-II

Pharmacy Act 1948 and Drugs (Price control) order.

LO : To understand rules prescribed order, Pharmacy act, Drugs (Price control) order.

## UNIT-III

Drugs and Cosmetics Act 1940 and Rules 1945

LO : To understand rules, schedules of Drugs and Cosmetics Act in detail.

## UNIT-IV

Medicinal & Toilet Preparations (Excise Duties) Act 1955

Narcotic Drugs & Psychotropic Substances Act 1985 & A.P. N. D. P.S Rules 1986

LO : To understand and procedures under medicinal and toilet preparations act and Narcotic Drugs & Psychotropic Substances Act.

## UNIT-V

Drugs and Magic Remedies (Objectionable Advertisements) Act 1954 and Rules 1955.

LO : To understand the rules and procedures under drugs and magic remedies.

## UNIT-VI

A study of the salient features of the following.

- a. Prevention of Cruelty to animals Act 1960.



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- b. AP State Shops & Establishments Act 1988 & Rules 1990.
- c. Factories Act 1948.
- d. WTO, GATT and The Indian Patents Act 1970
- e. Pharmaceutical Policy 2002.

LO : To understand the salient features of the above.

#### TEXT BOOKS

1. B.M.Mithal, Text book of Forensic Pharmacy, publ by Vallabh Prakashan.
2. Prof. Suresh Kumar J.N, Text book of Forensic Pharmacy by Frontline publications.
3. C.K.Kokate & S.B.Gokhale, Textbook of Forensic Pharmacy.

#### REFERENCE BOOK

1. Bare Acts and Rules Publ by Govt of India/state Govt from time to time.
2. AIR – reported judgments of Supreme Court of India and other High Courts.
3. Pharmaceutical policy of India
4. Notification from NPPA
5. Vijay Malik, Drugs & Cosmetics act 1940 and Rules, Eastern Law House Co. Delhi, Kolkata.
6. K.Samphat, Pharmaceutical Jurisprudence (Forensic Pharmacy).



  
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## B. PHARMACY LECTURE PLAN

<b>COURSENAME:</b> Pharmaceutical Jurisprudence	<b>COURSECODE :</b> PHR16415
<b>YEAR/SEM:</b> IV B. Pharm I Sem	<b>REGULATION:</b> JNTU.K R16

Date	Lecture No.	Topic Name	Source
05-11-2019	Lecture 1	Introduction of all the topics to be covered	Text Book
07-11-2019	Lecture 2	Unit -1 Introduction Pharmaceutical Legislations	Text Book
08-11-2019	Lecture 3	Pharmaceutical Legislations- A brief review	Text Book
08-11-2019	Lecture 4	Drugs & Pharmaceutical Industry- A brief review	Text Book
12-11-2019	Lecture 5	Pharmaceutical Education- A brief review	Text Book
14-11-2019	Lecture 6	Pharmaceutical ethics & policy	Text Book
15-11-2019	Lecture 7	Unit -2 Pharmacy Act 1948 and Drugs (Price control) order	Text Book
15-11-2019	Lecture 8	Introduction to Pharmacy Act	Text Book
16-11-2019	Lecture 9	Rules and regulations in Pharmacy Act	Text Book
19-11-2019	Lecture 10	Offences and Penalties in Pharmacy Act	Text Book
21-11-2019	Lecture 11	Drug Price control order	Text Book
22-11-2019	Lecture 12	Drug Price control order	Text Book
22-11-2019	Lecture 13	Unit-3 Drugs and Cosmetics Act 1940 and Rules 1945	Text Book
23-11-2019	Lecture 14	Introduction to Drug and cosmetic act 1940	Text Book
26-11-2019	Lecture 15	Continuation to Drug and cosmetic act	Text Book
28-11-2019	Lecture 16	Rules in Drug and cosmetic act	Text Book
29-11-2019	Lecture 17	Continuation to drug and cosmetic act & rules 1945	Text Book
29-11-2019	Lecture 18	Unit-4 Medicinal & Toilet Preparations (Excise Duties) Act 1955 Narcotic Drugs & Psychotropic Substances Act 1985 & A.P. N. D. P.S Rules 1986	Text Book
30-11-2019	Lecture 19	Continuation to medicinal & Toilet preparations	Text Book

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03-12-2019	Lecture 20	In bond and out bond	Text Book
05-12-2019	Lecture 21	Excise duty officer	Text Book
06-12-2019	Lecture 22	Rules followed by Excise duty officer in In bond	Text Book
06-12-2019	Lecture 23	Unit-5 Narcotic Drugs & Psychotropic Substances Act 1985 & A.P. N. D. P.S Rules 1986	Text Book
07-12-2019	Lecture 24	Continuation to Narcotic Drugs & Psychotropic Substances Act 1985 & A.P. N. D. P.S Rules 1986	Text Book
10-12-2019	Lecture 25	Rules in Narcotic Drugs & Psychotropic Substances Act 1985 & A.P. N. D. P.S Rules 1986	Text Book
12-12-2019	Lecture 26	Narcotic & Psychotropic substances & Consultative committee	Text Book
17-12-2019	Lecture 27	Narcotic & Psychotropic substances & Consultative committee	Text Book
19-12-2019	Lecture 28	Excise duty officer	Text Book
20-12-2019	Lecture 29	Guidelines for breeding of animals	Text Book
20-12-2019	Lecture 30	Guidelines for stocking of animals	Text Book
21-12-2019	Lecture 31	Rules in CPCSEA Act	Text Book
24-12-2019	Lecture 32	Rules involved in Cruelty to animals act	Text Book
26-12-2019	Lecture 33	Prevention of Cruelty to animals Act 1960	Text Book
27-12-2019	Lecture 34	Rules in CPCSEA Act	Text Book
27-12-2019	Lecture 35	IAEC	Text Book
28-12-2019	Lecture 36	Prevention of Cruelty to animals Act 1960	Text Book
31-12-2019	Lecture 37	The Poisons Act	Text Book
02-01-2020	Lecture 38	The Poisons Act	Text Book
03-01-2020	Lecture 39	The Poisons Act	Text Book
03-01-2020	Lecture 40	The Medical Termination of Pregnancy Act	Text Book
07-01-2020	Lecture 41	The Medical Termination of Pregnancy Act	Text Book

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09-01-2020	Lecture 42	The Medical Termination of Pregnancy Act	Text Book
10-01-2020	Lecture 43	AP State Shops & Establishments Act 1988 & Rules 1990	Text Book
10-01-2020	Lecture 44	AP State Shops & Establishments Act 1988 & Rules 1990	Text Book
11-01-2020	Lecture 45	Continuation to AP State Shops & Establishments Act 1988 & Rules 1990	Text Book
21-01-2020	Lecture 46	Rules in AP State Shops & Establishments Act 1988 & Rules 1990	Text Book
23-01-2020	Lecture 47	Rules in AP State Shops & Establishments Act 1988 & Rules 1990	Text Book
24-01-2020	Lecture 48	Revision	Text Book
24-01-2020	Lecture 49	Factories Act 1948	Text Book
25-01-2020	Lecture 50	Factories Act 1948	Text Book
28-01-2020	Lecture 51	WTO, GATT and the Indian Patents Act, 1970	Text Book
30-01-2020	Lecture 52	WTO, GATT and the Indian Patents Act, 1970	Text Book
31-01-2020	Lecture 53	WTO, GATT and the Indian Patents Act, 1970	Text Book
31-01-2020	Lecture 54	WTO, GATT and the Indian Patents Act, 1970	Text Book
06-02-2020	Lecture 55	National Pharmaceutical Pricing authority: DPCO 2013	Text Book
07-02-2020	Lecture 56	DPCO 2013	Text Book
18-02-2020	Lecture 57	DPCO 2013-definitions	Text Book
28-02-2020	Lecture 58	Sale prices of bulk drugs	Text Book
28-02-2020	Lecture 59	Sale prices of bulk drugs	Text Book
06-03-2020	Lecture 60	Pharmaceutical Policy 2002	Text Book
06-03-2020	Lecture 61	Pharmaceutical Policy 2002	Text Book

  
Signature of the Faculty

  
Principal



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## DEPARTMENT OF PHARMACY PRACTICE CLASS TIME TABLE AY: 2019-2020

CLASS: PHARM. D I YEAR (2019 ADMITTED BATCH)

W.e.f- 16/09/2019

CLASS TEACHER – Dr. D. Subhasri

DAY/TIME	9:30 - 10:30	10:30 - 11:20	11:20 - 12:10	12:10- 1:00	1:00 - 01:50	1:50- 2:40	2:40- 3:30	3:30- 4:20
MON	PIC	MBC	POC	<b>L U N C H</b>	HAP	LIBRARY/ SPORTS		
TUE	CEUTICS	POC	PIC		CEUTICS	CEUTICS LAB		
WED	POC	PIC	HAP		RM/RB	POC LAB		
THU	CEUTICS	POC	MBC		PIC	PIC LAB		
FRI	MBC	RM/RB	HAP		RM/RB	HAP LAB		
SAT	HAP	RM/RB	CEUTICS		MBC	MBC LAB		

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Dr.D. Subha Sri	Assistant Professor	Pharmaceutical Inorganic Chemistry-(PIC) (4)	Pharm. D
2.	Dr. Arun Satya Dev	Assistant Professor	Pharmaceutical Organic Chemistry-(POC) (4)	Pharm. D
3.	Dr.M.S.V. Sudeep	Assistant Professor	Pharmaceutics (4)	Pharm. D
4.	Dr.S.Sravani Girija	Assistant Professor	Human Anatomy and Physiology-(HAP) (4)	Pharm. D
5.	Dr.S. Dhana Lakshmi	Assistant Professor	Medicinal Biochemistry-(MBC) (4)	Pharm. D
6.	Mr.A.Seshu	Assistant Professor	Remedial Mathematics-(RM) (4)	Pharm. D
7.	Mr.V.UmaSankar	Associate Professor	Remedial Biology-(RB) (4)	Pharm. D
8.	Dr.D. Subha Sri	Assistant Professor	Pharmaceutical Inorganic Chemistry Lab-(PIC) (3)	Pharm. D
9.	Dr.A. Jyotsna	Assistant Professor	Pharmaceutical Organic Chemistry Lab-(POC) (3)	Pharm. D
10.	Dr.M.S.V. Sudeep	Assistant Professor	Pharmaceutics Lab (3)	Pharm. D
11.	Dr.S.Sravani Girija	Assistant Professor	Human Anatomy and Physiology Lab-(HAP) (3)	Pharm. D
12.	Dr.S. Dhana Lakshmi	Assistant Professor	Medicinal Biochemistry Lab-(MBC) (1)	Pharm. D
13.	Mr.V.UmaSankar	Associate Professor	Remedial Biology -(RB) (4)	Pharm. D

*B. Chaitanya*  
Time Table Incharge



*J. V.*  
Principal

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## b) Pharm.D. (Post Baccalaureate) Course -

A pass in B.Pharm from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act:

Provided that there shall be reservation of seats for the students belonging to the Scheduled Castes, Scheduled Tribes and other Backward Classes in accordance with the instructions issued by the Central Government/State Government/Union Territory Administration as the case may be from time to time.

5. Number of admissions in the above said programmes shall be as prescribed by the Pharmacy Council of India from time to time and presently be restricted as below –
  - i) Pharm.D. Programme – 30 students.
  - ii) Pharm.D. (Post Baccalaureate) Programme – 10 students.
6. Institutions running B.Pharm programme approved under section 12 of the Pharmacy Act, will only be permitted to run Pharm.D. programme. Pharm.D. (Post Baccalaureate) programme will be permitted only in those institutions which are permitted to run Pharm.D. programme.
7. Course of study. – The course of study for Pharm.D. shall include the subjects as given in the Tables below. The number of hours in a week, devoted to each subject for its teaching in theory, practical and tutorial shall not be less than that noted against it in columns (3), (4) and (5) below.

## T A B L E S

### First Year :

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
1.1	Human Anatomy and Physiology	3	3	1
1.2	Pharmaceutics	2	3	1
1.3	Medicinal Biochemistry	3	3	1
1.4	Pharmaceutical Organic Chemistry	3	3	1
1.5	Pharmaceutical Inorganic Chemistry	2	3	1
1.6	Remedial Mathematics/ Biology	3	3*	1
	<b>Total hours</b>	<b>16</b>	<b>18</b>	<b>6 = (40)</b>

\* For Biology

**APPENDIX-A**  
(See regulation 8)  
**PHARM.D. SYLLABUS**

**First Year**

**1.1 HUMAN ANATOMY & PHYSIOLOGY (THEORY)**

**Theory : 3 Hrs. /Week**

1. **Scope and Objectives:** This course is designed to impart a fundamental knowledge on the structure and functions of the human body. It also helps in understanding both homeostasis mechanisms and homeostatic imbalances of various body systems. Since a medicament, which is produced by pharmacist, is used to correct the deviations in human body, it enhances the understanding of how the drugs act on the various body systems in correcting the disease state of the organs.
2. **Upon completion of the course the student shall be able to:**
  - a. describe the structure (gross and histology) and functions of various organs of the human body;
  - b. describe the various homeostatic mechanisms and their imbalances of various systems;
  - c. identify the various tissues and organs of the different systems of the human body;
  - d. perform the hematological tests and also record blood pressure, heart rate, pulse and Respiratory volumes;
  - e. appreciate coordinated working pattern of different organs of each system; and
  - f. appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body

**3. Course materials:**

**Text books**

- a. Tortora Gerard J. and Nicholas, P. Principles of anatomy and physiology  
Publisher Harpercollins college New York.
- b. Wilson, K.J.W. Ross and Wilson's foundations of anatomy and physiology.  
Publisher: Churchill Livingstone, Edinburg.

**Reference books**

- a. Guyton arthur, C. *Physiology of human body*. Publisher: Holtsaunders.
- b. Chatterjee, C.C. *Human physiology*. Volume 1&11. Publisher: medical allied agency, Calcutta.
- c. Peter L. Williams, Roger Warwick, Mary Dyson and Lawrence, H.
- d. *Gray's anatomy*. Publisher: Churchill Livingstone, London.



  
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#### 4. Lecture wise program :

##### Topics

- 1 Scope of anatomy and physiology, basic terminologies used in this subject (Description of the body as such planes and terminologies)
- 2 Structure of cell – its components and their functions.
- 3 Elementary tissues of the human body: epithelial, connective, Muscular and nervous tissues-their sub-types and characteristics
- 4 a) Osseous system - structure, composition and functions of the Skeleton. (done in practical classes - 6hrs)  
b) Classification of joints, Types of movements of joints and disorders of joints (Definitions only)
- 5 Haemopoetic System
  - a) Composition and functions of blood
  - b) Haemopoiesis and disorders of blood components (definition of disorder)
  - c) Blood groups
  - d) Clotting factors and mechanism
  - e) Platelets and disorders of coagulation
- 6 Lymph
  - a) Lymph and lymphatic system, composition, formation and circulation.
  - b) Spleen: structure and functions, Disorders
  - c) Disorders of lymphatic system (definition only)
- 7 Cardiovascular system
  - a) Anatomy and functions of heart
  - b) Blood vessels and circulation (Pulmonary, coronary and systemic circulation)
  - c) Electrocardiogram (ECG)
  - d) Cardiac cycle and heart sounds
  - e) Blood pressure – its maintenance and regulation
  - f) Definition of the following disorders  
Hypertension, Hypotension, Arteriosclerosis, Atherosclerosis, Angina, Myocardial infarction, Congestive heart failure, Cardiac arrhythmias
- 8 Respiratory system
  - a) Anatomy of respiratory organs and functions
  - b) Mechanism / physiology of respiration and regulation of respiration
  - c) Transport of respiratory gases
  - d) Respiratory volumes and capacities, and Definition of: Hypoxia, Asphyxia, Dybarism, Oxygen therapy and resuscitation.
- 9 Digestive system
  - a) Anatomy and physiology of GIT
  - b) Anatomy and functions of accessory glands of GIT
  - c) Digestion and absorption
  - d) Disorders of GIT (definitions only)



- 10 Nervous system
  - a) Definition and classification of nervous system
  - b) Anatomy, physiology and functional areas of cerebrum
  - c) Anatomy and physiology of cerebellum
  - d) Anatomy and physiology of mid brain
  - e) Thalamus, hypothalamus and Basal Ganglia
  - f) Spinal cord: Structure & reflexes – mono-poly-planter
  - g) Cranial nerves – names and functions
  - h) ANS – Anatomy & functions of sympathetic & parasympathetic N.S.
- 11 Urinary system
  - a) Anatomy and physiology of urinary system
  - b) Formation of urine
  - c) Renin Angiotensin system – Juxtaglomerular apparatus - acid base Balance
  - d) Clearance tests and micturition
- 12 Endocrine system
  - a) Pituitary gland
  - b) Adrenal gland
  - c) Thyroid and Parathyroid glands
  - d) Pancreas and gonads
- 13 Reproductive system
  - a) Male and female reproductive system
  - b) Their hormones – Physiology of menstruation
  - c) Spermatogenesis & Oogenesis
  - d) Sex determination (genetic basis)
  - e) Pregnancy and maintenance and parturition
  - f) Contraceptive devices
- 14 Sense organs
  - a) Eye
  - b) Ear
  - c) Skin
  - d) Tongue & Nose
- 15 Skeletal muscles
  - a) Histology
  - b) Physiology of Muscle contraction
  - c) Physiological properties of skeletal muscle and their disorders (definitions)
- 16 Sports physiology
  - a) Muscles in exercise, Effect of athletic training on muscles and muscle performance,
  - b) Respiration in exercise, CVS in exercise, Body heat in exercise, Body fluids and salts in exercise,
  - c) Drugs and athletics





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HUMAN ANATOMY AND PHYSIOLOGY				
I PHARM D				
Week no.	Lecture No.	Topics	Teaching Aid	Date
<b>Unit-1</b>	<b>Scope of anatomy and physiology</b>			
Week-1	L1	Scope of anatomy and physiology	Chalk and Talk	16-09-2019
	L2	Terminologies	Chalk and Talk	16-09-2019
<b>Unit-2</b>	<b>Structure of cell</b>			
	L3	Structure of cell – Introduction	Chalk and Talk	20-09-2019
	L4	Cell components and their functions	Chalk and Talk	20-09-2019
	L5	Cell components and their functions	Chalk and Talk	21-09-2019
	L6	Revision	Google Meet	23-09-2019
<b>Unit-3</b>	<b>Elementary tissues</b>			
Week-2	L7	Elementary tissues of the human body - Introduction	Chalk and Talk	25-09-2019
	L8	Epithelial	Chalk and Talk	25-09-2019
	L9	Connective	Power point	27-09-2019
	L10	Muscular	Chalk and Talk	28-09-2019
	L11	Nervous tissues	Chalk and Talk	28-09-2019
	L12	Sub-types and characteristics of tissues	Power point	30-09-2019
	L13	Revision	Google Meet	30-09-2019
<b>Unit-4</b>	<b>Osseous System</b>			
Week-3	L14	Introduction to Osseous System	Chalk and Talk	04-10-2019
	L15	structure and composition	LCD	04-10-2019
	L16	Functions of the Skeleton	Chalk and Talk	05-10-2019
	L17	Classification of joints	Power point	12-10-2019
	L18	Types of movements of joints	Chalk and Talk	14-10-2019
Week-4	L19	Disorders of joints	Chalk and Talk	14-10-2019
	L20	Revision	Google Meet	16-10-2019
<b>Unit-5</b>	<b>Haemopoietic system</b>			
	L21	Introduction to Haemopoietic system	Chalk and Talk	18-10-2019
	L22	Composition of Blood	Chalk and Talk	18-10-2019
	L23	Functions of blood	Chalk and Talk	18-10-2019
	L24	Hemopoiesis	Chalk and Talk	19-10-2019
Week-5	L25	disorders of blood components	Chalk and Talk	19-10-2019
	L26	Blood groups	LCD	21-10-2019

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Week-11	L61	Arteriosclerosis	Chalk and Talk	06-12-2019
	L62	Atherosclerosis	Chalk and Talk	06-12-2019
	L63	Angina	Chalk and Talk	07-12-2019
	L64	Myocardial infarction	Chalk and Talk	07-12-2019
	L65	Congestive heart failure	LCD	16-12-2019
	L66	Cardiac arrhythmias	Chalk and Talk	18-12-2019
	L67	Revision	Chalk and Talk	18-12-2019
<b>Unit-8</b>	<b>Respiratory system</b>			
Week-12	L68	Introduction to respiratory system	Chalk and Talk	20-12-2019
	L69	Anatomy of respiratory organs	Power point	21-12-2019
	L70	Functions of respiratory organs	Chalk and Talk	23-12-2019
	L71	Mechanism of respiratory organs	Chalk and Talk	23-12-2019
	L72	Physiology of respiration	Chalk and Talk	23-12-2019
Week-13	L73	Regulation of respiration	Chalk and Talk	27-12-2019
	L74	Transport of respiratory gases	LCD	28-12-2019
	L75	Respiratory volumes	Chalk and Talk	30-12-2019
	L76	Respiratory capacities	Chalk and Talk	30-12-2019
	L77	Hypoxia	Chalk and Talk	30-12-2019
	L78	Asphyxia	Power point	03-01-2020
Week-14	L79	Dysbarism	Chalk and Talk	04-01-2020
	L80	Oxygen therapy	Chalk and Talk	04-01-2020
	L81	Resuscitation	Chalk and Talk	04-01-2020
	L82	Revision	Google meet	06-01-2020
	L83	Revision test		06-01-2020
<b>Unit-9</b>	<b>Digestive system</b>			
	L84	Introduction to Digestive system	Chalk and Talk	08-01-2020
Week-15	L85	Anatomy and physiology of GIT	Chalk and Talk	08-01-2020
	L86	Anatomy and functions of accessory glands of GIT	Power point	10-01-2020
	L87	Digestion and absorption	Chalk and Talk	17-01-2020
	L88	Disorders of GIT	Chalk and Talk	17-01-2020
	L89	Revision	LCD	18-01-2020
<b>Unit-10</b>	<b>Nervous system</b>			
	L90	Introduction Nervous system	Chalk and Talk	20-01-2020
Week-16	L91	Definition and classification of nervous system	Chalk and Talk	22-01-2020

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	L92	Anatomy, physiology and functional areas of cerebrum	Power point	24-01-2020
	L93	Anatomy and physiology of cerebellum	Chalk and Talk	25-01-2020
	L94	Anatomy and physiology of mid brain	Chalk and Talk	27-01-2020
	L95	Thalamus, hypothalamus and Basal Ganglia	Power point	29-01-2020
	L96	spinal cord	Chalk and Talk	31-01-2020
Week-17	L97	Cranial nerves	Chalk and Talk	01-02-2020
	L98	ANS	Chalk and Talk	03-02-2020
	L99	Revision	Google meet	05-02-2020
<b>Unit-11</b>	<b>Urinary system</b>			
	L100	Introduction to Urinary system	Chalk and Talk	07-02-2020
	L101	Anatomy and physiology of urinary system	Power point	08-02-2020
	L102	Formation of urine	Chalk and LCD	10-02-2020
Week-18	L103	Renin Angiotensin system	Chalk and Talk	12-02-2020
	L104	Clearance tests and micturition	Chalk and Talk	14-02-2020
	L105	Revision	Google meet	15-02-2020
<b>Unit-12</b>	<b>Endocrine System</b>			
Week-19	L106	Introduction to Endocrine System	Chalk and Talk	19-02-2020
	L107	Pituitary gland	Chalk and Talk	22-02-2020
	L108	Adrenal gland	Power point	24-02-2020
	L109	Thyroid and Parathyroid glands	Chalk and Talk	26-02-2020
	L110	Pancreas and gonads	LCD	28-02-2020
	L111	Revision	Google meet	29-02-2020
<b>Unit-13</b>	<b>Reproductive system</b>			
Week-20	L112	Introduction to Reproductive system	Chalk and Talk	02-03-2020
	L113	Male and female reproductive system	Power point	04-03-2020
	L114	Physiology of menstruation	Chalk and Talk	06-03-2020
	L115	Spermatogenesis & Oogenesis	Power point	07-03-2020
	L116	Sex determination	Chalk and Talk	16-03-2020
	L117	Pregnancy and maintenance and parturition	Chalk and Talk	18-03-2020
	L118	Contraceptive devices	Chalk and LCD	20-03-2020
	L119	Revision	Google meet	21-03-2020
<b>Unit-14</b>	<b>Sense Organs</b>			
	L120	Introduction to Sense Organs	Chalk and Talk	23-03-2020

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Week-21	L121	Eye	Chalk and Talk	25-03-2020
	L122	Ear	Power point	27-03-2020
	L123	Skin	Chalk and Talk	28-03-2020
	L124	Tongue & Nose	LCD	30-03-2020
	L125	Revision	Google meet	01-04-2020
Unit-15	<b>Skeletal Muscles</b>			
	L126	Introduction to Skeletal Muscles	Chalk and Talk	03-04-2020
Week-22	L127	Histology	Chalk and Talk	04-04-2020
	L128	Physiology of Muscle contraction	Chalk and Talk	06-04-2020
	L129	Physiological properties of skeletal muscle	Power point	08-04-2020
	L130	Disorders of skeletal muscle	Chalk and Talk	11-04-2020
	L131	Revision	Google meet	13-04-2020
Unit-16	<b>Sports Physiology</b>			
Week-23	L132	Introduction to Sports Physiology	Chalk and Talk	15-04-2020
	L133	Muscles in exercise	Chalk and Talk	17-04-2020
	L134	Effect of athletic training on muscles	Chalk and Talk	18-04-2020
	L135	muscle performance	Power point	20-04-2020
	L136	Respiration in exercise	Chalk and Talk	22-04-2020
	L137	CVS in exercise	Chalk and Talk	24-04-2020
	L138	Body heat in exercise	Chalk and Talk	25-04-2020
	L139	Body fluids in exercise	LCD	27-04-2020
Week-24	L140	Salts in exercise	Chalk and Talk	29-04-2020
	L141	Drugs	Chalk and Talk	02-05-2020
	L142	Athletics	Chalk and Talk	04-05-2020
	L143	Tests used to detect Drugs	Power point	06-05-2020
	L144	Importance of exercise	Chalk and Talk	08-05-2020
	L145	Effect of exercises on muscles	Chalk and Talk	09-05-2020
	L146	Effect of exercises on Joint	Google meet	11-05-2020
	L147	Revision	Google meet	13-05-2020

*Sravani G.*  
Signature of the Faculty

*[Signature]*  
Principal

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## DEPARTMENT OF PHARMACY PRACTICE

### CLASS TIME TABLE AY: 2019-2020

CLASS: PHARM.D III YEAR (2017 ADMITTED BATCH)  
CLASS TEACHER: Mrs. CH. GEETHA

W.e.f -10/06/2019

DAY/ TIME	9:30 – 10:30	10:30– 11:20	11:20 – 12:10	12:10 -1:00	1:00– 01:50	1:50– 2:40	2:40-3:30	3:30-4:20
MON	COL-II	PF	MC	L U N C H	PJ	MC LAB		
TUE	MC	PJ	COL-II		PT- II	PT- II LAB		
WED	MC	PT-II	PF		PA	PA LAB		
THU	PF	MC	PA		COL- II	PF LAB		
FRI	HOSPITAL VISIT							
SAT	PJ	PA	PT-II	L U N C H	PF	COL-II LAB		

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Dr.S. Arun Satya Dev	Professor	Medicinal chemistry-(MC) (4)	Pharm. D
2.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis-(PA) (3)	Pharm. D
3.	Dr. V.C.Randeep Raj	Associate Professor	Pharmacotherapy –II-(PT-II) (3)	Pharm. D
4.	Dr.S. Dhana Lakshmi	Assistant Professor	Pharmaceutical Jurisprudence-(PJ) (3)	Pharm. D
5.	Mrs.B.Ramavathi	Assistant Professor	Pharmacology-II (COL-II) (3)	Pharm. D
6.	Dr.D. Subha Sri	Assistant Professor	Pharmaceutical Formulation-(PF) (3)	Pharm. D
7.	Dr.S. Arun Satya Dev	Professor	Medicinal chemistry Lab-(MC) (3)	Pharm. D
8.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis Lab-(PA) (3)	Pharm. D
9.	Dr. V.C.Randeep Raj	Associate Professor	Pharmacotherapy -II Lab-(PT-II) (3)	Pharm. D
10.	Mrs.B.Ramavathi	Assistant Professor	Pharmacology-II Lab-(COL-II) (3)	Pharm. D
11.	Dr.D. Subha Sri	Assistant Professor	Formulation Lab-(PF) (3)	Pharm. D

*B. Chaitanya*  
Time Table Incharge



*[Signature]*  
Principal

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**Second Year:**

S.No	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
2.1	Pathophysiology	3	-	1
2.2	Pharmaceutical Microbiology	3	3	1
2.3	Pharmacognosy & Phytopharmaceuticals	3	3	1
2.4	Pharmacology-I	3	-	1
2.5	Community Pharmacy	2	-	1
2.6	Pharmacotherapeutics-I	3	3	1
	<b>Total Hours</b>	<b>17</b>	<b>9</b>	<b>6 = 32</b>

**Third Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
3.1	Pharmacology-II	3	3	1
3.2	Pharmaceutical Analysis	3	3	1
3.3	Pharmacotherapeutics-II	3	3	1
3.4	Pharmaceutical Jurisprudence	2	-	-
3.5	Medicinal Chemistry	3	3	1
3.6	Pharmaceutical Formulations	2	3	1
	<b>Total hours</b>	<b>16</b>	<b>15</b>	<b>5 = 36</b>

### 3.4 PHARMACEUTICAL JURISPRUDENCE (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope of the Subject:** (4-6 lines): This course exposes the student to several important legislations related to the profession of pharmacy in India. The Drugs and Cosmetics Act, along with its amendments are the core of this course. Other acts, which are covered, include the Pharmacy Act, dangerous drugs, medicinal and toilet preparation Act etc. Besides this the new drug policy, professional ethics, DPCO, patent and design Act will be discussed.
2. **Objectives of the Subject:** Upon completion of the subject student shall be able to (Know, do, and appreciate) –
  - a. practice the Professional ethics;
  - b. understand the various concepts of the pharmaceutical legislation in India;
  - c. know the various parameters in the Drug and Cosmetic Act and rules;
  - d. know the Drug policy, DPCO, Patent and design act;
  - e. understand the labeling requirements and packaging guidelines for drugs and cosmetics;
  - f. be able to understand the concepts of Dangerous Drugs Act, Pharmacy Act and Excise duties Act; and
  - g. other laws as prescribed by the Pharmacy Council of India from time to time including International Laws.

**Text books (Theory)**

Mithal , B M. Textbook of Forensic Pharmacy. Calcutta :National; 1988.

**Reference books (Theory)**

- a. Singh, KK, editor. Beotra's the Laws of Drugs, Medicines & cosmetics. Allahabad: Law Book House; 1984.
- b. Jain, NK. A Textbook of forensic pharmacy. Delhi: Vallabh prakashan ; 1995.
- c. Reports of the Pharmaceutical enquiry Committee
- d. I.D.M.A., Mumbai. DPCO 1995
- e. Various reports of Amendments.
- f. Deshpande, S.W. The drugs and magic remedies act 1954 and rules 1955. Mumbai: Susmit Publications; 1998.
- g. Eastern Book Company .The narcotic and psychotropic substances act 1985, Lucknow: Eastern; 1987.

**3. Detailed syllabus and lecture wise schedule:**

**Title of the topic**

1. **Pharmaceutical Legislations** – A brief review.
2. Principle and Significance of professional ethics. Critical study of the code of pharmaceutical ethics drafted by PCI.
3. **Drugs and Cosmetics Act, 1940, and its rules 1945.**  
Objectives, Legal definition, Study of Schedule's with reference to Schedule B, C&C1, D, E1, F&F1, F2, F3, FF, G, H, J, K, M, N, P, R, V, W, X, Y.  
Sales, Import, labeling and packaging of Drugs And Cosmetics Provisions Relating to Indigenous Systems.  
Constitution and Functions of DTAB, DCC, CDL.  
Qualification and duties –Govt. analyst and Drugs Inspector.



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4. **Pharmacy Act –1948.**  
Objectives Legal Definitions, General Study, Constitution and Functions of State & Central Council, Registration & Procedure, ER.
5. **Medicinal and Toilet Preparation Act –1955.**  
Objectives, Legal Definitions, Licensing, Bonded and Non Bonded Laboratory, Ware Housing, Manufacture of Ayurvedic, Homeopathic, Patent & Proprietary Preparations.
6. **Narcotic Drugs and Psychotropic substances Act-1985 and Rules.** Objectives, Legal Definitions, General Study, Constitution and Functions of narcotic & Psychotropic Consultative Committee, National Fund for Controlling the Drug Abuse, Prohibition, Control and regulations, Schedules to the Act.
7. **Study of Salient Features of Drugs and magic remedies Act and its rules.**
8. **Study of essential Commodities Act Relevant to drugs price control Order.**
9. **Drug Price control Order & National Drug Policy (Current).**
10. **Prevention Of Cruelty to animals Act-1960.**
11. **Patents & design Act-1970.**
12. **Brief study of prescription and Non-prescription Products.**

#### 4. Assignments:

##### Format of the assignment

1. Minimum & Maximum number of pages
2. It shall be a computer draft copy
3. Reference(s) shall be included at the end.
4. Name and signature of the student
5. Assignment can be a combined presentation at the end of the academic year.
6. Time allocated for presentation may be 8+2 Min

##### Case studies relating to

1. Drugs and Cosmetics Act and rules along with its amendments, Dangerous Drugs Act, Medicinal and Toilet preparation Act, New Drug Policy, Professional Ethics, Drugs (Price control) Order, Patent and Design Act.
2. Various prescription and non-prescription products.
3. Medical and surgical accessories.
4. Diagnostic aids and appliances available in the market.



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PHARMACEUTICAL JURISPRUDENCE				
YEAR: III PHARM D				
Week No	Lecture No.	Topics	Teaching Aid	DATE
Unit-1	Pharmaceutical Legislations			
Week-1	L1	Pharmaceutical Legislations	Chalk and Talk	07-06-2019
	L2	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	07-06-2019
	L3	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	07-06-2019
	L4	professional ethics	Chalk and Talk	10-06-2019
	L5	Principle of professional ethics	Chalk and Talk	10-06-2019
	L6	Signature of professional ethics	Chalk and Talk	10-06-2019
Week-2	L7	Signature of professional ethics	Chalk and Talk	10-06-2019
Unit-2	Pharmaceutical constitution of India			
Week-2	L8	Critical study on PCI	Chalk and Talk	11-06-2019
	L9	Critical study on PCI	Chalk and Talk	11-06-2019
	L10	The code of pharmaceutical ethics drafted by PCI	Power point	17-06-2019
	L11	The code of pharmaceutical ethics drafted by PCI.	Chalk and Talk	17-06-2019
	L12	Revision	Google meet	18-06-2019
Unit-3	Drugs and Cosmetics Act, 1940			
Week-3	L13	Drugs and Cosmetics Act, 1940	Chalk and Talk	24-06-2019
	L14	Drugs and Cosmetics Act, 1940	Power point	24-06-2019
	L15	Drugs and Cosmetics Act, 1940	Chalk and Talk	25-06-2019
	L16	Its rules 1945	Power point	25-06-2019
	L17	Objectives	Chalk and Talk	25-06-2019

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	L18	Legal definition	Chalk andTalk	01-07-2019
Week-4	L19	Study of Schedule's with reference	Chalk andTalk	01-07-2019
	L20	Schedule B	Chalk andTalk	02-07-2019
	L21	Schedule B	Chalk andTalk	02-07-2019
	L22	Schedule C&C1	Power point	08-07-2019
	L23	Schedule C&C1	Chalk andTalk	08-07-2019
	L24	Schedule C&C1	Chalk andTalk	08-07-2019
	Week-5	L25	Schedule D	Powerpoint
L26		Schedule D	Chalk andTalk	09-07-2019
L27		Schedule E1	Chalk andTalk	15-07-2019
L28		Schedule E1	Chalk andTalk	15-07-2019
L29		Schedule F&F1	Chalk andTalk	16-07-2019
L30		Schedule F&F1	Chalk andTalk	16-07-2019
Week-6	L31	Schedule F2	LCD	16-07-2019
	L32	Schedule F3	Chalk andTalk	22-07-2019
	L33	Schedule FF	Chalk andTalk	22-07-2019
	L34	Schedule FF	Chalk andTalk	22-07-2019
	L35	Schedule G	Powerpoint	23-07-2019
	L36	Schedule G	Chalk andTalk	23-07-2019
Week-7	L37	Schedule H	Chalk andTalk	27-07-2019
	L38	Schedule H	Chalk andTalk	27-07-2019
	L39	Schedule J	Powerpoint	30-07-2019
	L40	Schedule J	Chalk and Talk	30-07-2019

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	L41	Schedule K	Chalk andTalk	05-08-2019
	L42	Schedule K	Powerpoint	05-08-2019
Week-8	L43	Schedule M	Chalk andTalk	06-08-2019
	L44	Schedule M	Chalk andTalk	06-08-2019
	L45	Schedule N	Chalk andTalk	12-08-2019
	L46	Schedule N	Chalk andTalk	12-08-2019
	L47	Schedule P	Chalk andTalk	13-08-2019
	L48	Schedule P	Chalk andTalk	13-08-2019
	Week-9	L49	Schedule R	Powerpoint
L50		Schedule R	Chalk andTalk	19-08-2019
L51		Schedule V	LCD	20-08-2019
L52		Schedule V	Chalk andTalk	20-08-2019
L53		Schedule W	Chalk andTalk	26-08-2019
L54		Schedule W	Powerpoint	26-08-2019
Week-10	L55	Schedule X	Chalk andTalk	27-08-2019
	L56	Schedule X	Chalk andTalk	27-08-2019
	L57	Schedule Y	Chalk andTalk	09-09-2019
	L58	Schedule Y	Powerpoint	09-09-2019
	L59	Sales	Chalk andTalk	16-09-2019
	L60	Sales	Chalk andTalk	16-09-2019
Week-11	L61	Import	Chalk andTalk	17-09-2019
	L62	Labelling	Powerpoint	17-09-2019

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	L63	Packinging of drugs and cosmetics	Chalk andTalk	23-09-2019
	L64	Provisions Relating to Indigenous Systems	Chalk andTalk	23-09-2019
	L65	Provisions Relating to Indigenous Systems	Chalk andTalk	24-09-2019
	L66	Provisions Relating to Indigenous Systems	Chalk andTalk	24-09-2019
Week-12	L67	Constitution and Functions of DTAB	Chalk andTalk	30-09-2019
	L68	Constitution and Functions of DTAB	Power point	30-09-2019
	L69	Constitution and Functions of DCC	Chalk andTalk	01-10-2019
	L70	Constitution and Functions of DCC	Chalk andTalk	01-10-2019
	L71	Constitution and Functions of CDL	Powerpoint	01-10-2019
	L72	Constitution and Functions of CDL	Chalk andTalk	01-10-2019
Week-13	L73	Qualification and duties –Govt. analyst	Chalk andTalk	04-10-2019
	L74	Qualification and duties –Govt. analyst	Chalk andTalk	04-10-2019
	L75	Qualification and duties –Govt. analyst	LCD	04-10-2019
	L76	Drugs Inspector	Chalk andTalk	15-10-2019
	L77	Drugs Inspector	Chalk andTalk	15-10-2019
	L78	Drugs Inspector	Chalk andTalk	15-10-2019
Week-14	L79	Revisi on	Googlemmeet	15-10-2019
Unit-4	<b>Pharmacy Act –1948</b>			
	L80	Pharmacy Act –1948	Chalk andTalk	21-10-2019
	L81	Objectives Legal Definitions	Chalk andTalk	21-10-2019
	L82	General Study	Chalk andTalk	22-10-2019
	L83	Constitution and Functions of State	Powerpoint	22-10-2019
	L84	Constitution and Functions of State	Chalk and	22-10-2019

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Week-15	L85	Central Council	Chalk andTalk	28-10-2019
	L86	Central Council	LCD	28-10-2019
	L87	Registration	Chalk andTalk	28-10-2019
	L88	Registration	Powerpoint	28-10-2019
	L89	Procedure, ER	Chalk andTalk	29-10-2019
	L90	Procedure, ER	Chalk andTalk	29-10-2019
Week-16	L91	Revision	Googlemmeet	29-10-2019
Unit-5	<b>Medicinal and Toilet Preparation Act –1955</b>			
Week-17	L92	Medicinal and Toilet Preparation Act – 1955	Chalk andTalk	04-11-2019
	L93	Medicinal and Toilet Preparation Act – 1956	Powerpoint	04-11-2019
	L94	Medicinal and Toilet Preparation Act – 1957	Chalk andTalk	04-11-2019
	L95	Objectives, Legal Definitions	Powerpoint	05-11-2019
	L96	Objectives, Legal Definitions	Chalk andTalk	05-11-2019
	L97	Licensing, Bonded and Non-Bonded Laboratory	LCD	11-11-2019
Week-18	L98	Licensing, Bonded and Non-Bonded Laboratory	Chalk andTalk	11-11-2019
	L99	Licensing, Bonded and Non-Bonded Laboratory	Powerpoint	12-11-2019
	L100	Ware Housing	Chalk andTalk	18-11-2019
	L101	Ware Housing	Chalk andTalk	19-11-2019
	L102	Manufacture of Ayurvedic	Chalk andTalk	19-11-2019
	L103	Manufacture of Ayurvedic	LCD	25-11-2019
Week-18	L104	Homeopathic	Chalk andTalk	26-11-2019
	L105	Homeopathic	Chalk andTalk	26-11-2019

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	L106	Patent & Proprietary Preparations	Chalk and Talk	09-12-2019
	L107	Patent & Proprietary Preparations	Chalk and Talk	10-12-2019
	L108	Revision	Googlemet	16-12-2019
<b>Unit-6</b>	<b>Narcotic Drugs and Psychotropic substances Act-1985 and Rules</b>			
Week-19	L109	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	17-12-2019
	L110	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	23-12-2019
	L111	Narcotic Drugs and Psychotropic substances Act-1985 and rules	Powerpoint	24-12-2019
	L112	Objectives, Legal Definitions, General Study	Chalk and Talk	30-12-2019
	L113	Abuse, Prohibition, Control and regulations, Schedules to the Act.	Googlemet	31-12-2019
<b>Unit-7</b>	<b>Study of Salient Features of Drugs and magic remedies Act and its rules.</b>			
	L114	Study of Salient Features of Drugs and magic remedies Act and its rules.	Chalk and Talk	06-01-2020
Week-20	L115	Study of Salient Features of Drugs and magic remedies Act and its rules.	Googlemet	07-01-2020
<b>Unit-8</b>	<b>Study of essential Commodities Act Relevant to drugs price control Order</b>			
	L116	Study of essential Commodities Act Relevant to drugs price control Order.	Chalk and Talk	21-01-2020
<b>Unit-9</b>	<b>Drug Price control Order &amp; National Drug Policy</b>			
	L117	Drug Price control Order & National Drug Policy	Chalk and Talk	27-01-2020
<b>Unit-10</b>	<b>Prevention Of Cruelty to animals Act-1960</b>			
	L118	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk	28-01-2020
	L119	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk	03-02-2020
<b>Unit-11</b>	<b>Patents &amp; design Act-1970</b>			
	L120	Patents & design Act-1970.	Chalk and Talk	04-02-2020
Week-21	L121	Patents & design Act-1970.	Powerpoint	10-02-2020

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	L122	Revision	Chalk andTalk	11-02-2020
Unit-12	<b>Brief study of prescription and Non-prescription Products</b>			
	L123	Brief study of prescription Products	Chalk andTalk	17-02-2020
	L124	Brief study of prescription Products	Powerpoint	18-02-2020
	L125	Non-prescription Products.	Chalk andTalk	24-02-2020
	L126	Non-prescription Products.	Powerpoint	25-02-2020

*S. Dhana Lakshmi*  
Signature of the Faculty



Principal

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## DEPARTMENT OF PHARMACY PRACTICE CLASS TIME TABLE AY: 2019-2020

CLASS: PHARM.D IV YEAR (2016 ADMITTED BATCH)  
CLASS TEACHER: Dr. V. C. Randeep Raj

W.e.f-10/06/2019

DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10- 1:00	1:00- 01:50	1:50- 2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	L U N C H	PT- III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	BPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Mrs.Ch. Geetha	Assistant Professor	Biostatistics and Research Methodology-(BRM) (4)	Pharm. D
2.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy-(CP) (3)	Pharm. D
3.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy-(HP) (2)	Pharm. D
4.	Dr. D. Subha Sri	Assistant Professor	Clinical Toxicology-(CT) (2)	Pharm. D
5.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics – III-(PT-III) (3)	Pharm. D
7.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab-(CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab-(HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab-(BPPK) (3)	Pharm. D
10.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics - III – (PT-III)Lab (3)	Pharm. D

*B. Chaitanya*  
Time Table Incharge



*for*  
Principal

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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

## 4.2 HOSPITAL PHARMACY (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope:** In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug dispensing, manufacturing of parenteral preparations, drug information, patient counselling, and therapeutic drug monitoring for improved patient care.
2. **Objectives:** Upon completion of the course, the student shall be able to –
  - a. know various drug distribution methods;
  - b. know the professional practice management skills in hospital pharmacies;
  - c. provide unbiased drug information to the doctors;
  - d. know the manufacturing practices of various formulations in hospital set up;
  - e. appreciate the practice based research methods; and
  - f. appreciate the stores management and inventory control.

**Text books: (latest editions)**

- a. Hospital pharmacy by William .E. Hassan
- b. A text book of Hospital Pharmacy by S.H.Merchant & Dr. J.S. Qadry. Revised by R.K.Goyal & R.K. Parikh

**References:**

- a. WHO consultative group report.
- b. R.P.S. Vol.2. Part –B; Pharmacy Practice section.
- c. Handbook of pharmacy – health care. Edt. Robin J Harman. The Pharmaceutical press.

**3. Lecture wise programme :**

**Topics**

- 1 **Hospital - its Organisation and functions**
- 2 **Hospital pharmacy-Organisation and management**
  - a) Organizational structure-Staff, Infrastructure & work load statistics
  - b) Management of materials and finance
  - c) Roles & responsibilities of hospital pharmacist
- 3 **The Budget – Preparation and implementation**
- 4 **Hospital drug policy**
  - a) Pharmacy and Therapeutic committee (PTC)
  - b) Hospital formulary
  - c) Hospital committees
    - Infection committee
    - Research and ethical committee
  - d) developing therapeutic guidelines
  - e) Hospital pharmacy communication - Newsletter



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**5 Hospital pharmacy services**

- a) Procurement & warehousing of drugs and Pharmaceuticals
- b) Inventory control  
Definition, various methods of Inventory Control  
ABC, VED, EOQ, Lead time, safety stock
- c) Drug distribution in the hospital
  - i) Individual prescription method
  - ii) Floor stock method
  - iii) Unit dose drug distribution method
- d) Distribution of Narcotic and other controlled substances
- e) Central sterile supply services – Role of pharmacist

**6 Manufacture of Pharmaceutical preparations**

- a) Sterile formulations – large and small volume parenterals
- b) Manufacture of Ointments, Liquids, and creams
- c) Manufacturing of Tablets, granules, capsules, and powders
- d) Total parenteral nutrition

**7 Continuing professional development programs**

Education and training

**8 Radio Pharmaceuticals – Handling and packaging****9 Professional Relations and practices of hospital pharmacist****4.2 HOSPITAL PHARMACY (PRACTICAL)**

**Practical : 3 Hrs./Week**

1. Assessment of drug interactions in the given prescriptions
2. Manufacture of parenteral formulations, powders.
3. Drug information queries.
4. Inventory control

**List of Assignments:**

1. Design and Management of Hospital pharmacy department for a 300 bedded hospital.
2. Pharmacy and Therapeutics committee – Organization, functions, and limitations.
3. Development of a hospital formulary for 300 bedded teaching hospital
4. Preparation of ABC analysis of drugs sold in one month from the pharmacy.
5. Different phases of clinical trials with elements to be evaluated.
6. Various sources of drug information and systematic approach to provide unbiased drug information.
7. Evaluation of prescriptions generated in hospital for drug interactions and find out the suitable management.



*JW*  
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<b>HOSPITAL PHARMACY</b>				
<b>YEAR: IV PHARM D</b>				
<b>Week No.</b>	<b>Lecture No.</b>	<b>TOPIC</b>	<b>TeachingAid</b>	<b>Date</b>
<b>Unit-1</b>	<b>Scope of Hospital Pharmacy</b>			
<b>Week-1</b>	L1	Scope and objectives of Hospital pharmacy	Chalk andTalk	12-06-2019
	L2	Organization of Hospital	Chalk andTalk	12-06-2019
	L3	Functions of Hospital	Power Point	13-06-2019
<b>Unit-2</b>	<b>Hospital pharmacy</b>			
<b>Week-2</b>	L4	Hospital pharmacy-Introduction	Chalk andTalk	19-06-2019
	L5	Organizational structure-Staff, Infrastructure	Power Point	19-06-2019
	L6	Organizational structure-work load statistics	Chalk andTalk	20-06-2019
	L7	Management of materials and finance	Power Point	26-06-2019
	L8	Management of materials and finance	Chalk andTalk	27-06-2019
	L9	Roles & responsibilities of hospital pharmacist	Power Point	03-07-2019
	L10	Roles & responsibilities of hospital pharmacist	Chalk andTalk	03-07-2019
<b>Unit-3</b>	<b>The Budget</b>			
<b>Week-3</b>	L11	Introduction of Budget	Chalk andTalk	04-07-2019
	L12	Preparation of Budget	Chalk andTalk	04-07-2019
	L13	Implementation of Budget	LCD	10-07-2019
<b>Unit-4</b>	<b>Hospital drug policy</b>			
<b>Week-3</b>	L14	Hospital drug policy -Introduction	Chalk andTalk	11-07-2019
	L15	Pharmacy and Therapeutic committee	PowerPoint	11-07-2019
	L16	Pharmacy and Therapeutic committee	Chalk andTalk	17-07-2019
	L17	Hospital formulary	Chalk and Talk	17-07-2019

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	L18	Hospital formulary	LCD	18-07-2019
	L19	Hospital committees-Introduction	Chalk andTalk	24-07-2019
Week-4	L20	Infection committee	Chalk andTalk	24-07-2019
	L21	Infection committee	Chalk andTalk	24-07-2019
	L22	Research and ethical committee	Power Point	25-07-2019
	L23	Research and ethical committee	Chalk andTalk	31-07-2019
	L24	Developing therapeutic guidelines	LCD	31-07-2019
	L25	Developing therapeutic guidelines	Chalk andTalk	01-08-2019
Week-5	L26	Hospital pharmacy communication -Introduction	Power Point	07-08-2019
	L27	Hospital pharmacy communication -Newsletter	Chalk andTalk	08-08-2019
	L28	Hospital pharmacy communication -Newsletter	Chalk andTalk	08-08-2019
<b>Unit-5</b>	<b>Hospital pharmacy services</b>			
Week-6	L29	Hospital pharmacy services - Introduction	Chalk andTalk	14-08-2019
	L30	Procurement & warehousing of drugs	Chalk andTalk	14-08-2019
	L31	Procurement & warehousing of drugs	LCD	21-08-2019
	L32	Procurement & warehousing ofPharmaceuticals	Chalk andTalk	28-08-2019
	L33	Procurement & warehousing ofPharmaceuticals	PowerPoint	29-08-2019
	L34	Procurement & warehousing ofPharmaceuticals	Chalk andTalk	11-09-2019
	L35	Inventory control-Introduction	Chalk andTalk	11-09-2019
	L36	Definition, various methods of InventoryControl	LCD	12-09-2019
	L37	ABC, VED	PowerPoint	12-09-2019
Week-7	L38	EOQ, Lead time, safety stock	Chalk andTalk	18-09-2019

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	L39	EOQ, Lead time, safety stock	Chalk andTalk	18-09-2019
	L40	EOQ, Lead time, safety stock	Chalk andTalk	18-09-2019
	L41	Drug distribution in the hospital - Introduction	LCD	19-09-2019
	L42	Individual prescription method	Chalk andTalk	25-09-2019
	L43	Individual prescription method	Chalk andTalk	25-09-2019
Week-8	L44	Floor stock method	Chalk andTalk	25-09-2019
	L45	Floor stock method	LCD	26-09-2019
	L46	Unit dose drug distribution method	Chalk andTalk	03-10-2019
	L47	Unit dose drug distribution method	Chalk andTalk	03-10-2019
	L48	Distribution of Narcotic	LCD	16-10-2019
Week-9	L49	Distribution of Narcotic	Chalk andTalk	17-10-2019
	L50	Distribution of other controlled substances	Chalk andTalk	23-10-2019
	L51	Distribution of other controlled substances	Chalk andTalk	23-10-2019
	L52	Central sterile supply services – Role of pharmacist	PowerPoint	24-10-2019
Unit-6	L53	Central sterile supply services – Role of pharmacist	Chalk andTalk	24-10-2019
	<b>Manufacture of Pharmaceutical preparations</b>			
Week-10	L54	Manufacture of Pharmaceutical preparations- Introduction	Chalk andTalk	30-10-2019
	L55	Sterile formulations – large and small volume parenteral	Chalk andTalk	31-10-2019
	L56	Sterile formulations – large and small volume parenteral	Chalk andTalk	31-10-2019
	L57	Manufacture of Ointments	LCD	06-11-2019
	L58	Manufacture of Ointments	Chalk andTalk	07-11-2019
	L59	Manufacture of Liquids	PowerPoint	13-11-2019
	L60	Manufacture of Liquids	Chalk and Talk	14-11-2019

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	L61	Manufacture of creams	Chalk andTalk	20-11-2019
Week -11	L62	Manufacture of creams	LCD	21-11-2019
	L63	Manufacturing of Tablets	Chalk andTalk	27-11-2019
	L64	Manufacturing of Tablets	Chalk andTalk	28-11-2019
	L65	Manufacturing of Tablets	LCD	11-12-2019
	L66	Manufacturing of granules	Chalk andTalk	12-12-2019
	L67	Manufacturing of granules	Chalk andTalk	12-12-2019
	Week 12	L68	Manufacturing of granules	Chalk andTalk
L69		Manufacturing of capsules	Powerpoint	19-12-2019
L70		Manufacturing of capsules	Chalk andTalk	26-12-2019
L71		Manufacturing of powders	Chalk andTalk	02-01-2020
L72		Manufacturing of powders	Chalk andTalk	08-01-2020
L73		Total parenteral nutrition	Chalk andTalk	09-01-2020
Week -13	L74	Total parenteral nutrition	Chalk andTalk	22-01-2020
	L75	Total parenteral nutrition	Powerpoint	23-01-2020
Unit -7	<b>Continuing professional development programs</b>			
	L76	Continuing professional development programs - Introduction	Chalk andTalk	29-01-2020
	L77	Continuing professional development programs - Education and training	Chalk andTalk	30-01-2020
	L78	Continuing professional development programs - Education and training	Chalk andTalk	05-02-2020
	L79	Continuing professional development programs - Education and training	Powerpoint	06-02-2020

*V. Uma Sankar*  
Signature of the Faculty

*Principal*  
Principal

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## DEPARTMENT OF PHARMACY PRACTICE CLASS TIME TABLE AY: 2019-2020

CLASS: PHARM.D IV YEAR (2016 ADMITTED BATCH)  
CLASS TEACHER: Dr. V. C. Randeep Raj

W.e.f-10/06/2019

DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10- 1:00	1:00- 01:50	1:50- 2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	L U N C H	PT- III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	BPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Mrs.Ch. Geetha	Assistant Professor	Biostatistics and Research Methodology-(BRM) (4)	Pharm. D
2.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy-(CP) (3)	Pharm. D
3.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy-(HP) (2)	Pharm. D
4.	Dr. D. Subha Sri	Assistant Professor	Clinical Toxicology-(CT) (2)	Pharm. D
5.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics – III-(PT-III) (3)	Pharm. D
7.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab-(CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab-(HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab-(BPPK) (3)	Pharm. D
10.	Dr.T. Rushi	Assistant Professor	Pharmacotherapeutics - III – (PT-III)Lab (3)	Pharm. D

*B. Chaitanya*  
Time Table Incharge



*J.V.*  
Principal

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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoeconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

### 4.3 CLINICAL PHARMACY (THEORY)

**Theory : 3 Hrs. /Week**

#### 1. Objectives of the Subject :

Upon completion of the subject student shall be able to (Know, do, appreciate) –

- a. monitor drug therapy of patient through medication chart review and clinical review;
- b. obtain medication history interview and counsel the patients;
- c. identify and resolve drug related problems;
- d. detect, assess and monitor adverse drug reaction;
- e. interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states; and
- f. retrieve, analyse, interpret and formulate drug or medicine information.

#### Text books (Theory)

- a. Practice Standards and Definitions - The Society of Hospital Pharmacists of Australia.
- b. Basic skills in interpreting laboratory data - Scott I.T, American Society of Health System Pharmacists Inc.
- c. Biopharmaceutics and Applied Pharmacokinetics - Leon Shargel, Prentice Hall publication.
- d. A text book of Clinical Pharmacy Practice; Essential concepts and skills, Dr.G.Parthasarathi etal, Orient Orient Langram Pvt.Ltd. ISSN8125026

#### References

- a. Australian drug information -Procedure manual. The Society of Hospital Pharmacists of Australia.
- b. Clinical Pharmacokinetics - Rowland and Tozer, Williams and Wilkins Publication.
- c. Pharmaceutical statistics. Practical and clinical applications. Sanford Bolton, Marcel Dekker, Inc.

#### 2. Detailed syllabus and lecture wise schedule:

##### Title of the topic

1. **Definitions, development and scope of clinical pharmacy**
2. **Introduction to daily activities of a clinical pharmacist**
  - a. Drug therapy monitoring (medication chart review, clinical review, pharmacist interventions)
  - b. Ward round participation
  - c. Adverse drug reaction management
  - d. Drug information and poisons information
  - e. Medication history
  - f. Patient counseling
  - g. Drug utilisation evaluation (DUE) and review (DUR)
  - h. Quality assurance of clinical pharmacy services



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CLINICAL PHARMACY				
YEAR: IV PHARMLD				
Week No.	Lecture No.	Topics to be covered	Teaching Aid	Dates
Unit 1	Introduction to clinical pharmacy			
Week 1	L1	Definitions of clinical pharmacy	Chalk and Talk	10-06-2019
	L2	Development of clinical pharmacy	Chalk and Talk	11-06-2019
	L3	Development of clinical pharmacy	Chalk and Talk	12-06-2019
	L4	Scope of clinical pharmacy	Chalk and Talk	17-06-2019
	L5	Scope of clinical pharmacy	Googlemeet	17-06-2019
Unit 2	Introduction to daily activities of a clinical pharmacist			
Week 2	L6	Introduction to daily activities of a clinical pharmacist	Chalk and Talk	18-06-2019
	L7	Drug therapy monitoring	Chalk and Talk	18-06-2019
	L8	Medication chart review	Chalk and Talk	19-06-2019
	L9	Medication chart review	Power point	19-06-2019
	L10	Clinical review	Chalk and Talk	24-06-2019
	L11	Clinical review	Chalk and Talk	24-06-2019
	L12	Pharmacist interventions	Powerpoint	25-06-2019
Week 3	L13	Pharmacist interventions	Chalk and Talk	26-06-2019
	L14	Ward round participation	Chalk and Talk	01-07-2019
	L15	Ward round participation	LCD	01-07-2019
	L16	Ward round participation	Chalk and Talk	02-07-2019
	L17	Adverse drug reaction management	Chalk and Talk	02-07-2019

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	L18	Types of drug management	Powerpoint	03-07-2019
<b>Week 4</b>	L19	Drug information	Chalk andTalk	08-07-2019
	L20	Poisons information	Chalk andTalk	09-07-2019
	L21	Poisons information	Chalk andTalk	10-07-2019
	L22	Poisons information	LCD	15-07-2019
	L23	Medication history	Chalk andTalk	16-07-2019
	L24	Medication history	Chalk andTalk	17-07-2019
	L25	Patient counseling	Powerpoint	22-07-2019
	L26	Patient counseling	Chalk andTalk	23-07-2019
	L27	Drug utilisation evaluation	Chalk andTalk	24-07-2019
	L28	Drug utilization evaluation	Chalk andTalk	24-07-2019
<b>Week 5</b>	L29	Drug utilization evaluation (DUE) and review(DUR)	Powerpoint	29-07-2019
	L30	Drug utilization evaluation (DUE) and review(DUR)	Chalk andTalk	30-07-2019
	L31	Drug utilization evaluation (DUE) and review(DUR)	Chalk andTalk	30-07-2019
	L32	Quality assurance of clinical pharmacy services	Powerpoint	31-07-2019
	L33	Quality assurance of clinical pharmacy services	Chalk andTalk	05-08-2019
<b>Week 6</b>	L34	Clinical pharmacy services	Chalk andTalk	05-08-2019
	L35	Clinical pharmacy services	Google meet	06-08-2019
<b>Unit 3</b>	<b>Introduction to Patient data analysis</b>			
	L36	Patient data analysis	Chalk andTalk	07-08-2019
	L37	The patient's case history, its structure	Powerpoint	12-08-2019
<b>Week</b>	L38	Use in evaluation of drug therapy	Chalk andTalk	14-08-2019

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7	L39	Understanding common medical abbreviations	Chalk andTalk	19-08-2019
	L40	Understanding common medical abbreviations	Powerpoint	20-08-2019
	L41	Terminologies used in clinical Practices	Chalk andTalk	21-08-2019
	L42	Terminologies used in clinical Practices	Googlemmeet	26-08-2019
<b>Unit 4</b>	<b>Introduction to Clinical laboratory tests</b>			
Week 8	L43	Clinical laboratory tests used in the evaluationof disease states	Chalk andTalk	27-08-2019
	L44	Clinical laboratory tests used in the evaluationof disease states	Chalk andTalk	28-08-2019
	L45	Interpretation of test results	Powerpoint	09-09-2019
	L46	Hematological functions tests	Chalk andTalk	10-09-2019
	L47	Liver function tests	Chalk andTalk	11-09-2019
	L48	Liver function tests	Chalk andTalk	16-09-2019
Week 9	L49	Renal function tests	LCD	17-09-2019
	L50	Renal function tests	Chalk andTalk	18-09-2019
	L51	Thyroid function tests	Chalk andTalk	18-09-2019
	L52	Thyroid function tests	Chalk andTalk	18-09-2019
	L53	Tests associated with cardiac disorders	LCD	23-09-2019
	L54	Tests associated with cardiac disorders	Chalk andTalk	24-09-2019
Week10	L55	Fluid and electrolyte balance	Powerpoint	25-09-2019
	L56	Fluid and electrolyte balance	Chalk andTalk	25-09-2019
	L57	Microbiological culture sensitivity tests	Chalk andTalk	30-09-2019
	L58	Microbiological culture sensitivity tests	Chalk andTalk	30-09-2019
	L59	Microbiological culture sensitivity tests	Chalk andTalk	01-10-2019

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	L60	Pulmonary Function Tests	Chalk andTalk	01-10-2019
Week12	L61	Pulmonary Function Tests	Powerpoint	09-10-2019
	L62	Pulmonary Function Tests	Chalk andTalk	14-10-2019
<b>Unit 5</b>	<b>Introduction to Drug &amp; Poison information</b>			
	L63	Drug & Poison information	Chalk andTalk	15-10-2019
	L64	Introduction to drug information resources available	Chalk andTalk	1-10-2019
	L65	Introduction to drug information resources available	Chalk andTalk	21-10-2019
	L66	Systematic approach in answering DI queries	Chalk andTalk	22-10-2019
Week13	L67	Systematic approach in answering DI queries	Google meet	23-10-2019
	L68	Critical evaluation of drug information and literature	Chalk andTalk	28-10-2019
	L69	Critical evaluation of drug information and literature	LCD	29-10-2019
	L70	Critical evaluation of drug information and literature	Chalk andTalk	30-10-2019
	L71	Preparation of written reports	Power point	04-11-2019
	L72	Preparation of written reports	Chalk andTalk	05-11-2019
Week14	L73	Preparation of written reports	Google meet	0-11-2019
	L74	Verbal reports	Chalk and Talk	11-11-2019
	L75	Establishing a Drug Information Centre	Chalk and Talk	12-11-2019
	L76	Establishing a Drug Information Centre	Chalk and Talk	13-11-2019
	L77	Establishing a Drug Information Centre	Chalk and Talk	18-11-2019
	L78	Establishing a Drug Information Centre	Chalk and Talk	19-11-2019
Week 15	L79	Poisons information	Chalk and Talk	20-11-2019
	L80	Poisons information	Chalk and Talk	25-11-2019
	L81	organization & information resources	Chalk and Talk	26-11-2019
	L82	organization & information resources	Chalk and Talk	27-11-2019
	L83	organization & information resources	Chalk and Talk	09-12-2019
<b>Unit 6</b>	<b>Introduction to Pharmacovigilance</b>			

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	L84	Pharmacovigilance	Chalk and Talk	10-12-2019
Week 16	L85	Scope and definition	Chalk and Talk	11-12-2019
	L86	Scope and definition	LCD	16-12-2019
	L87	Aims of pharmacovigilance	Chalk andTalk	17-12-2019
	L88	Aims of pharmacovigilance	Chalk andTalk	18-12-2019
	L89	Adverse drug reactions	Chalk andTalk	23-12-2019
	L90	Adverse drug reactions	Powerpoint	24-12-2019
	Week17	L91	Classification and mechanism	Chalk andTalk
L92		Classification and mechanism	Chalk andTalk	31-12-2019
L93		Classification and mechanism	Chalk andTalk	06-01-2020
L94		Predisposing factors	Powerpoint	07-01-2020
L95		Predisposing factors	Chalk andTalk	08-01-2020
L96		Causality assessment	Chalk andTalk	20-01-2020
Week 18	L97	Causality assessment	Powerpoint	21-01-2020
	L98	Reporting, evaluation	Chalk andTalk	22-01-2020
	L99	Reporting, evaluation	Powerpoint	27-01-2020
	L100	Monitoring, preventing & management of ADRs	Chalk andTalk	28-01-2020
	L101	Monitoring, preventing & management of ADRs	Chalk andTalk	29-01-2020
	L102	Monitoring, preventing & management of ADRs	Chalk andTalk	03-02-2020
Unit 7	<b>Introduction to Communication skills</b>			
	L103	Communication skills	Chalk andTalk	04-02-2020

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Week 19	L104	Including patient counselling techniques	Googlemeet	05-02-2020
	L105	Including patient counselling techniques	Chalk andTalk	10-02-2020
	L106	Medication history interview	Chalk andTalk	11-02-2020
	L107	Presentation of cases	Chalk andTalk	12-02-2020
Unit 8	Introduction to Pharmaceutical care concepts			
Week20	L108	Pharmaceutical care concepts	Chalk andTalk	17-02-2020
	L109	Pharmaceutical care concepts	Chalk andTalk	18-02-2020
	L110	Pharmaceutical care concepts	Googlemeet	19-02-2020
Unit 9	Introduction to Critical evaluation of biomedical literature			
	L111	Critical evaluation of biomedical literature	Chalk andTalk	24-02-2020
	L112	Critical evaluation of biomedical literature	Powerpoint	25-02-2020
	L113	Critical evaluation of biomedical literature	Chalk andTalk	02-03-2020
	L114	Critical evaluation of biomedical literature	Googlemeet	02-03-2020
Unit10	Introduction to Medication errors			
Week21	L115	Medication errors	Chalk and Talk	03-03-2020
	L116	Medication errors	Chalk andTalk	11-03-2020
	L117	Types of Medication errors	Power point	16-03-2020
	L118	Types of Medication errors	Chalk andTalk	17-03-2020
	L119	Management of Medication errors	LCD	18-03-2020
	L120	Management of Medication errors	Chalk andTalk	23-03-2020

  
Signature of the Faculty

  
Principal

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## CLASS TIME TABLE AY: 2018-2019

**CLASS: I B.Pharm IISem (PCI Regulation)**  
**SECTION- A (2018 Admitted Batch)**

w.e.f: 18/02/2019

CLASS TEACHER: Mrs. L. Divya Sri				Batch A: Roll 01-25		Batch B: Roll 26-55		
DAY/TIME	9:30 – 10:30	10:30 – 11:20	11:20 – 12:20	12:00 – 1:00	1:00 – 1:50	1:50 – 2:40	2:40 – 3:30	3:30 – 4:20
MON	POC-I	PATHO	BIOCHEM	<b>L U N C H</b>	HAP-II	Batch A: POC-I Lab Batch B: BIOCHEM Lab		
TUE	BIOCHEM	HAP-II	POC-I		ES	Batch A: BIOCHEM Lab Batch B: POC-II Lab		
WED	HAP-II	CA	PATHO		POC-I	Batch A: HAP-II Lab Batch B: CA Lab		
THU	BIOCHEM	PATHO	CA		TUTORIAL (OC)	Batch A: CA Lab Batch B: HAP-II Lab		
FRI	PATHO	POC-I	CA		BIOCHEM	ES	HAP-II	TUTORIAL (HAP)
SAT	CA	BIOCHEM	HAP-II		PATIIO	POC-I	ES	L/S

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGRAMME
1.	Ms. D. PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mr. VinayRamji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) (5)	B. Pharm
4.	Mrs. B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Ms.K. Rohini	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs. K. VenkataRadhika	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Ms. D. PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Lab (6)	B. Pharm
8.	Mrs. L. Divya Sri	Associate Professor	Pharmaceutical Biochemistry Lab (BIOCHEM) (6)	B. Pharm
9.	Mr. VinayRamji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs. K. VenkataRadhika	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I)Tutorial (1)	B. Pharm
12.	Mr. VinayRamji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. KoteswarRao	Physical Director	Sports (1)	B. Pharm

*A.H.V. Sankar*  
Time Table Incharge



*[Signature]*  
Principal

Avanthi Institute of Pharmaceutical Sciences  
Cherukupally (V), Bhogapuram Mandal  
Vizianagaram Dt., - 531162



**CLASS TIME TABLE AY: 2018-2019**

**CLASS:IB.PharmIISem (PCI Regulation)**  
**SECTION- B (2018 Admitted Batch)**

**w.e.f: 18/02/2019**

<b>CLASS TEACHER: Mrs. B. MeherJyotiBatch C:Roll 56-80</b>									<b>Batch D : Roll- 81-B<sub>0</sub></b>		
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:2- 12:10	12:10 1:00	1:00 – 01:50	1:50- 2:40	2:40- 3:30	3:30 – 4:20			
MON	POC-1	HAP-II	BIOCHE M	<b>L U N C H</b>	PATHO	BATCH C-HAP-II LAB BATCH D –CA LAB					
TUE	CA	PATHO	POC-1		HAP-II	BATCH C-CA LAB BATCH D-HAP-II LAB					
WED	PATHO	BIOCHEM	HAP-II		CA	BATCH C-POC1 LAB BATCH D-BIOCHEM LAB					
THU	POC1	BIOCHEM	ES		CA	BATCH C- BIOCHEM LAB BATCH D-POC1 LAB					
FRI	BIOCHEM	POC-1	PATHO		TUTORIA L (HAP)	POC1	ES	(L/S)			
SAT	HAP-II	PATHO	BIOCHE M		ES	CA	HAP- II	TUTORIA L (OC)			

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT (Hrs)	PROGARMME
1.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry-I (POC-I) (5)	B. Pharm
2.	Mrs.B. Poornima	Associate Professor	Pharmaceutical Biochemistry(BIOCHEM) (5)	B. Pharm
3.	Mrs. AnveshiDhananjay a	Assistant Professor	Human Anatomy and Physiology- II (HAP-II)(5)	B. Pharm
4.	Mrs.B. MeherJyoti	Assistant Professor	Pathophysiology (PATHO) (5)	B. Pharm
5.	Ms. K. Rohini	Assistant Professor	Environmental Sciences (ES) (3)	B. Pharm
6.	Mrs.B. Rama Madhuri	Assistant Professor	Computer Applications (CA) (4)	B. Pharm
7.	Mr. S. Chandra Sekhar	Associate Professor	Pharmaceutical Organic Chemistry- I (POC-I) Lab (6)	B. Pharm
8.	Mrs.B. Poornima	Associate Professor	Pharmaceutical Biochemistry (BIOCHEM) Lab (6)	B. Pharm
9.	Mrs.AnveshiDhana njaya	Assistant Professor	Human Anatomy and Physiology- II (HAP-II) Lab (6)	B. Pharm
10.	Mrs.B. Rama Madhuri	Assistant Professor	Computer Applications (CA) Lab (6)	B. Pharm
11.	Ms. D. PurnimaYadav	Associate Professor	Pharmaceutical Organic Chemistry- I (POC-I)(Tutorial (1)	B. Pharm
12.	Mr.VinayRamji	Assistant Professor	Human Anatomy and Physiology- II (HAP-II)Tutorial (1)	B. Pharm
13.	Mr. R. Ramana	Librarian	Library (1)	B. Pharm
14.	Mr. KoteswarRao	Physical Director	Sports(1)	B. Pharm

*A.H.V. Senthil*  
**Time Table Incharge**



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**Avanthi Institute of Pharmaceutical Sciences**  
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**Table-II: Course of study for semester II**

<b>Course Code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
<b>Total</b>		<b>32</b>	<b>4</b>	<b>29</b>

\*Non University Examination (NUE)

**Table-III: Course of study for semester III**

<b>Course code</b>	<b>Name of the course</b>	<b>No. of hours</b>	<b>Tutorial</b>	<b>Credit points</b>
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
<b>Total</b>		<b>28</b>	<b>4</b>	<b>24</b>

## BP 201T. HUMAN ANATOMY AND PHYSIOLOGY-II (Theory)

45 Hours

**Scope:** This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body. It also helps in understanding both homeostatic mechanisms. The subject provides the basic knowledge required to understand the various disciplines of pharmacy.

**Objectives:** Upon completion of this course the student should be able to:

1. Explain the gross morphology, structure and functions of various organs of the human body.
2. Describe the various homeostatic mechanisms and their imbalances.
3. Identify the various tissues and organs of different systems of human body.
4. Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume.
5. Appreciate coordinated working pattern of different organs of each system
6. Appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body.

### Course Content:

#### Unit I

10 hours

- **Nervous system**

Organization of nervous system, neuron, neuroglia, classification and properties of nerve fibre, electrophysiology, action potential, nerve impulse, receptors, synapse, neurotransmitters.

Central nervous system: Meninges, ventricles of brain and cerebrospinal fluid. structure and functions of brain (cerebrum, brain stem, cerebellum), spinal cord (gross structure, functions of afferent and efferent nerve tracts, reflex activity)

#### Unit II

06 hours

- **Digestive system**

Anatomy of GI Tract with special reference to anatomy and functions of stomach, ( Acid production in the stomach, regulation of acid production through parasympathetic nervous system, pepsin role in protein digestion) small intestine





and large intestine, anatomy and functions of salivary glands, pancreas and liver, movements of GIT, digestion and absorption of nutrients and disorders of GIT.

- **Energetics**

Formation and role of ATP, Creatinine Phosphate and BMR.

### **Unit III**

- **Respiratory system** **10 hours**

Anatomy of respiratory system with special reference to anatomy of lungs, mechanism of respiration, regulation of respiration

Lung Volumes and capacities transport of respiratory gases, artificial respiration, and resuscitation methods.

- **Urinary system**

Anatomy of urinary tract with special reference to anatomy of kidney and nephrons, functions of kidney and urinary tract, physiology of urine formation, micturition reflex and role of kidneys in acid base balance, role of RAS in kidney and disorders of kidney.

### **Unit IV**

**10 hours**

- **Endocrine system**

Classification of hormones, mechanism of hormone action, structure and functions of pituitary gland, thyroid gland, parathyroid gland, adrenal gland, pancreas, pineal gland, thymus and their disorders.

### **Unit V**

**09 hours**

- **Reproductive system**

Anatomy of male and female reproductive system, Functions of male and female reproductive system, sex hormones, physiology of menstruation, fertilization, spermatogenesis, oogenesis, pregnancy and parturition

- **Introduction to genetics**

Chromosomes, genes and DNA, protein synthesis, genetic pattern of inheritance



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www.avanthipharma.ac.in, principal@avanthipharma.ac.in

## B. PHARMACY LECTUREPLAN SECTION-A

<b>COURSE NAME:</b> Human Anatomy & Physiology	<b>COURSECODE :BP201T</b>
<b>YEAR/ SEM: I B. Pharm IISem</b>	<b>REGULATION: PCI</b>

Date	Lecture No.	Topic Name	Source
24-09-2018	Lecture 1	Introduction of all the topics to be covered	Text Book
25-09-2018	Lecture 2	Unit-1 Nervous System	Text Book
26-09-2018	Lecture 3	Organization of nervous system	Text Book
28-09-2018	Lecture 4	Structure & Function of neuron	Text Book
29-09-2018	Lecture 5	Neuroglial Cells	Text Book
01-10-2018	Lecture 6	Classification and properties of nerve fibre	Text Book
03-10-2018	Lecture 7	Electrophysiology & Action potential	Text Book
05-10-2018	Lecture 8	Nerve impulse & Receptors	Text Book
08-10-2018	Lecture 9	Synapse & Neurotransmitters	Text Book
09-10-2018	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
10-10-2018	Lecture 11	Cerebrospinal fluid	Text Book
12-10-2018	Lecture 12	structure and functions of brain (cerebrum) brain stem, and cerebellum)	Text Book
13-10-2018	Lecture 13	structure and functions of brain stem	Text Book
15-10-2018	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
16-10-2018	Lecture 15	Structure of spinal cord	Text Book
17-10-2018	Lecture 16	Functions of afferent and efferent nerve tracts, reflex activity.	Text Book
22-10-2018	Lecture 17	Unit-2 Digestive System	Text Book
23-10-2018	Lecture 18	Anatomy of GI Tract	Text Book
24-10-2018	Lecture 19	Functions of stomach	Text Book
26-10-2018	Lecture 20	Acid production in the stomach	Text Book
27-10-2018	Lecture 21	Regulation of acid production through parasympathetic nervous system	Text Book
29-10-2018	Lecture 22	Pepsin role in protein digestion	Text Book

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30-10-2018	Lecture 23	Small intestine	Text Book
31-10-2018	Lecture 24	Large intestine	Text Book
02-11-2018	Lecture 25	Anatomy& Functions of salivary glands	Text Book
03-11-2018	Lecture 26	Anatomy& Functions of pancreas	Text Book
05-11-2018	Lecture 27	Anatomy& Functions of Liver	Text Book
06-11-2018	Lecture 28	Movements of GIT	Text Book
09-11-2018	Lecture 29	Digestion and Absorption of Nutrients	Text Book
10-11-2018	Lecture 30	Disorders of GIT.	Text Book
12-11-2018	Lecture 31	Formation and role of ATP, Creatinine Phosphate and BMR.	Text Book
13-11-2018	Lecture 32	Unit-3 Respiratory System	Text Book
14-11-2018	Lecture 33	Anatomy of Respiratory system with reference to lungs	Text Book
16-11-2018	Lecture 34	Mechanism of respiration	Text Book
17-11-2018	Lecture 35	Regulation of respiration	Text Book
27-11-2018	Lecture 36	Lung Volumes and capacities	Text Book
28-11-2018	Lecture 37	Transport of respiratory gases	Text Book
01-12-2018	Lecture 38	Artificial respiration	Text Book
03-12-2018	Lecture 39	Resuscitation methods	Text Book
04-12-2018	Lecture 40	Urinary system	Text Book
07-12-2018	Lecture 41	Anatomy of urinary tract with reference to anatomy of kidney	Text Book
08-12-2018	Lecture 42	Structure & Functions of Nephrons	Text Book
11-12-2018	Lecture 43	Functions of kidney and Urinary tract	Text Book
12-12-2018	Lecture 44	Physiology of Urine formation	Text Book
14-12-2018	Lecture 45	Micturition reflex & Role of kidneys in acid base balance	Text Book
15-12-2018	Lecture 46	Role of RAS in kidney	Text Book
17-12-2018	Lecture 47	Disorders of kidney.	Text Book
18-12-2018	Lecture 48	Unit-4 Endocrine system	Text Book
19-12-2018	Lecture 49	Classification of hormones	Text Book
21-12-2018	Lecture 50	Mechanism of hormone action	Text Book

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22-12-2018	Lecture 51	Structure and Functions of Pituitary gland	Text Book
24-12-2018	Lecture 52	Structure and Functions of Thyroid gland	Text Book
26-12-2018	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
28-12-2018	Lecture 54	Structure and Functions of Adrenal gland	Text Book
29-12-2018	Lecture 55	Structure and Functions of Pancreas	Text Book
31-12-2018	Lecture 56	Structure and Functions of Pineal gland	Text Book
02-01-2019	Lecture 57	Thymus and their disorders	Text Book
04-01-2019	Lecture 58	Unit-5 Reproductive system	Text Book
05-01-2019	Lecture 59	Anatomy of male and female reproductive system	Text Book
05-01-2019	Lecture 60	Functions of male and female reproductive system	Text Book
07-01-2019	Lecture 61	Sex hormones	Text Book
08-01-2019	Lecture 62	Physiology of Menstruation	Text Book
08-01-2019	Lecture 63	Fertilization & Spermatogenesis	Text Book
09-01-2019	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
11-01-2019	Lecture 65	Chromosomes & genes & DNA	Text Book
11-01-2019	Lecture 66	Protein Synthesis	Text Book
12-01-2019	Lecture 67	Genetic pattern of inheritance	Text Book

Signature of the Faculty

Principal



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## B. PHARMACY LECTURE PLAN SECTION-B

<b>COURSE NAME: Human Anatomy &amp; Physiology</b>	<b>COURSECODE :BP201T</b>
<b>YEAR/ SEM: I B. Pharm II Sem</b>	<b>REGULATION:PCI (R14)</b>

Date	Lecture No.	Topic Name	Source
24-09-2018	Lecture 1	Introduction of all the topics to be covered	Text Book
25-09-2018	Lecture 2	Unit-1 Nervous System	Text Book
26-09-2018	Lecture 3	Organization of nervous system	Text Book
29-09-2018	Lecture 4	Structure & Function of neuron	Text Book
29-09-2018	Lecture 5	Neuroglial Cells	Text Book
01-10-2018	Lecture 6	classification and properties of nerve fibre	Text Book
03-10-2018	Lecture 7	Electrophysiology & Action potential	Text Book
06-10-2018	Lecture 8	Nerve impulse & Receptors	Text Book
06-10-2018	Lecture 9	Synapse & Neurotransmitters	Text Book
08-10-2018	Lecture 10	Central nervous system: Meninges & ventricles of brain	Text Book
09-10-2018	Lecture 11	cerebrospinal fluid	Text Book
10-10-2018	Lecture 12	structure and functions of brain (cerebrum) brain stem, and cerebellum)	Text Book
13-10-2018	Lecture 13	structure and functions of brain stem	Text Book
13-10-2018	Lecture 14	structure and functions of brain ( cerebellum)	Text Book
15-10-2018	Lecture 15	Structure of spinal cord	Text Book
16-10-2018	Lecture 16	Functions of afferent and efferent nerve tracts, reflex activity.	Text Book
17-10-2018	Lecture 17	Unit-2 Digestive System	Text Book
22-10-2018	Lecture 18	Anatomy of GI Tract	Text Book
23-10-2018	Lecture 19	Functions of stomach	Text Book
24-10-2018	Lecture 20	Acid production in the stomach	Text Book
27-10-2018	Lecture 21	Regulation of acid production through parasympathetic nervous system	Text Book

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27-10-2018	Lecture 22	Pepsin role in protein digestion	Text Book
30-10-2018	Lecture 23	Small intestine	Text Book
30-10-2018	Lecture 24	Large intestine	Text Book
03-11-2018	Lecture 25	Anatomy & Functions of salivary glands	Text Book
03-11-2018	Lecture 26	Anatomy & Functions of pancreas	Text Book
05-11-2018	Lecture 27	Anatomy & Functions of Liver	Text Book
06-11-2018	Lecture 28	Movements of GIT	Text Book
10-11-2018	Lecture 29	Digestion and Absorption of Nutrients	Text Book
10-11-2018	Lecture 30	Disorders of GIT.	Text Book
12-11-2018	Lecture 31	Formation and role of ATP, Creatinine Phosphate and BMR.	Text Book
13-11-2018	Lecture 32	Unit-3 Respiratory System	Text Book
14-11-2018	Lecture 33	Anatomy of Respiratory system with reference to lungs	Text Book
17-11-2018	Lecture 34	Mechanism of respiration	Text Book
17-11-2018	Lecture 35	Regulation of respiration	Text Book
26-11-2018	Lecture 36	Lung Volumes and capacities	Text Book
27-11-2018	Lecture 37	Transport of respiratory gases	Text Book
28-11-2018	Lecture 38	Artificial respiration	Text Book
01-12-2018	Lecture 39	Resuscitation methods	Text Book
01-12-2018	Lecture 40	Urinary system	Text Book
03-12-2018	Lecture 41	Anatomy of urinary tract with reference to anatomy of kidney	Text Book
05-12-2018	Lecture 42	Structure & Functions of Nephrons	Text Book
08-12-2018	Lecture 43	Functions of kidney and Urinary tract	Text Book
08-12-2018	Lecture 44	Physiology of Urine formation	Text Book
10-12-2018	Lecture 45	Micturition reflex & Role of kidneys in acid base balance	Text Book
11-12-2018	Lecture 46	Role of RAS in kidney	Text Book
12-12-2018	Lecture 47	Disorders of kidney.	Text Book
15-12-2018	Lecture 48	Unit-4 Endocrine system	Text Book
15-12-2018	Lecture 49	Classification of hormones	Text Book

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17-12-2018	Lecture 50	Mechanism of hormone action	Text Book
18-12-2018	Lecture 51	Structure and Functions of Pituitary gland	Text Book
19-12-2018	Lecture 52	Structure and Functions of Thyroid gland	Text Book
22-12-2018	Lecture 53	Structure and Functions of Parathyroid gland	Text Book
24-12-2018	Lecture 54	Structure and Functions of Adrenal gland	Text Book
26-12-2018	Lecture 55	Structure and Functions of Pancreas	Text Book
29-12-2018	Lecture 56	Structure and Functions of Pineal gland	Text Book
29-12-2018	Lecture 57	Thymus and their disorders	Text Book
31-12-2018	Lecture 58	Unit-5 Reproductive system	Text Book
02-01-2019	Lecture 59	Anatomy of male and female reproductive system	Text Book
05-01-2019	Lecture 60	Functions of male and female reproductive system	Text Book
05-01-2019	Lecture 61	Sex hormones	Text Book
07-01-2019	Lecture 62	Physiology of Menstruation	Text Book
08-01-2019	Lecture 63	Fertilization & Spermatogenesis	Text Book
09-01-2019	Lecture 64	Oogenesis, Pregnancy & Parturition	Text Book
09-01-2019	Lecture 65	Chromosomes & genes & DNA	Text Book
12-01-2019	Lecture 66	Protein Synthesis	Text Book
12-01-2019	Lecture 67	Genetic pattern of inheritance	Text Book

  
Signature of the Faculty

  
Principal



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**CLASS: IV B.PHARM I SEM (R13 REGULATION)**

**(2015 Admitted Batch)**

**w.e.f: 11/06/2018**

Class Teacher: Mrs. K. Venkata Radhika				Batch A: Roll 01-25		Batch B: Roll 26-50		
DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10 1:00	1:00 – 01:50	1:50 – 2:40	2:40 – 3:30	3:30- 4:20
MON	PA-II	BA&T	GPAT	<b>L U N C H</b>	CNP	BATCH-A- PA-II LAB BATCH-B- BA&T LAB BATCH- C- CNP LAB		
TUE	BA&T	PA-II	CNP		GPAT	BATCH-A- CNP LAB BATCH-B- PA-II LAB BATCH-C- BA&T LAB		
WED	CNP	BA&T	PA-II		GPAT	BATCH-A- BA&T LAB BATCH-B- CNP LAB BATCH-C- PA-II LAB		
THU	HCP	PJ	PA-II		TUTORIAL (CNP)	GPAT	BA&T	PJ
FRI	CNP	PA-II	BA&T		HCP	GPAT	HCP	PJ
SAT	HCP	PJ	HCP		TUTORIAL (PA-II)	GPAT	CNP	PJ
S. No	NAME OF THE FACULTY		DESIGNATION	NAME OF THE SUBJECT (Hrs)		PROGARMME		
1.	Mrs. K. Venkata Radhika		Assistant Professor	Pharmaceutical Analysis (PA-II) (5)		B. Pharm		
2.	Mr. M. Vasu		Assistant Professor	Bioassays & Toxicology (BA&T) (5)		B. Pharm		
3.	Mr. B. Yerni Kumar		Associate Professor	Chemistry and Natural Products (CNP) (5)		B. Pharm		
4.	Mrs. L. Divya Sri		Associate Professor	Hospital and Community Pharmacy (HCP) (5)		B. Pharm		
5.	Mr. Vamsi Krishna Yadav			Pharmaceutical Jurispreudence (PJ) (5)				
6.			Associate Professor	GPAT (6)		B. Pharm		
7.	Mrs. K. Venkata Radhika		Assistant Professor	Pharmaceutical Analysis (PA-II) Lab (9)		B. Pharm		
8.	Mr. M. Vasu		Assistant Professor	Bioassays & Toxicology (BA&T) Lab (9)		B. Pharm		
9.	Mr. B. Yerni Kumar		Assistant Professor	Chemistry and Natural Products (CNP) (9)		B. Pharm		
10.	Mr. R.Ramana		Librarian	Library (1)		B. Pharm		
11.	Mr. D.Koteswara Rao		Physical Director	Sports (1)		B. Pharm		

*A. H. V. Sauthon*  
Time Table Incharge

*[Signature]*  
Principal



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**IV Year – I SEMESTER**

S. No.	Subject	T	P	Credits
1	Pharmaceutical Analysis -II	3 +1	-	4
2	Bio assays & Toxicology	3 +1	-	4
3	Chemistry of Natural Products	3 +1	-	4
4	Hospital & Community Pharmacy	3 +1	-	4
5	Pharmaceutical Jurisprudence	3 +1	-	3
6	Pharmaceutical Analysis – II Lab	-	3	2
7	Bio assays& Toxicology Lab	-	3	2
8	Chemistry of Natural Products	-	3	2
9	Project Commencement	-	-	-
<b>Total Credits</b>				<b>25</b>

**IV Year – II SEMESTER**

S. No.	Subject	T	P	Credits
1	Biopharmaceutics & Pharmacokinetics	3 +1	-	4
2	Clinical Pharmacy, Therapeutics & Pharmacovigilance	3 +1	-	3
3	Controlled release & Novel Drug Delivery Systems	3 +1	-	4
4	Quality Assurance, GMP, GLP	3 +1	3	3
5	Biopharmaceutics & Pharmacokinetics Lab	-	3	2
6	Project Work	-	-	4
7	Project Seminar	-	-	4
8	Comprehensive Viva	-	-	2
<b>Total Credits</b>				<b>26</b>

IV Year - I Semester

L T P C  
4 1 0 3

## HOSPITAL & COMMUNITY PHARMACY

### UNIT-I

12

**Hospital Pharmacy:** Organization and structure, organization of a hospital and hospital pharmacy, responsibilities of a hospital pharmacist, pharmacy and therapeutic committee, Budget preparation and implementation hospital formulary, organization of drug store, purchase and inventory control, patient counseling, role of pharmacist in community health care and education.

**LO:** To understand Hospital Pharmacy – organisation structure - Budget preparation and implementation hospital formulary, organization of drug store, purchase and inventory control, patient counseling, role of pharmacist in community health care and education.

### UNIT-II

05

The pharmacy procedural manual, drug distribution, dispensing to out-patients, in-patients and ambulatory

Patient - dispensing of ancillary and controlled substances, Drug Information Center.

**LO:** To understand The pharmacy procedural manual, drug distribution, dispensing to out-patients, in-patients and ambulatory

Patient - dispensing of ancillary and controlled substances, Drug Information Center.

### UNIT-III

05

**Records and Reports:** Prescription filling, drug profile, patient medication profile, cases on drug interaction and adverse reactions, idiosyncratic cases etc.

**LO:** To understand Prescription filling, drug profile, patient medication profile, cases on drug interaction and adverse reactions, idiosyncratic cases



  
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## UNIT-IV

07

### Introduction to community Pharmacy

- Community pharmacy Practice — definition
- The role of the community pharmacy and its relationship to other local health care providers and services to nursing homes and clinics
- Professional responsibilities of community pharmacist (FIP & WHO Model)
- Prescribed medication order - interpretation and legal requirements

**LO:** To understand Community pharmacy – role and relationship, professional responsibilities and prescribed medication order

## UNIT-V

05

### Communication skills - communication with prescribers and patients

#### Over-the-counter (OTC) sales

- Rational use of common OTC medications (Vitamins and tonics, iron preparations, analgesics, NSAIDs, cough mixtures, anti-diarrhoeal preparations)

**LO:** To understand communication with prescribers and patients, Rational use of common OTC medications

## UNIT-VI

16

### 1. Primary health care in community pharmacy

Family planning, First aid, Participation in primary health programs, Smoking cessation, Screening programs, Nutrition, Responding to common ailments


### 2. Community pharmacy management

Financial, materials, staff, infrastructure requirements, drug information resources, in community pharmacies, computer applications in community pharmacy, Education and training

### 3. Home Medicines Review (HMR) program: introduction and guidelines

**LO :** To understand Family planning, First aid, Participation in primary health programs, Smoking cessation, Screening programs, Nutrition, Responding to common ailments and Community pharmacy management and Home Medicines Review (HMR).



  
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### **Text Books**

1. Hospital Pharmacy - Hassan WE. Lee and Febiger publication.
2. Textbook of Hospital Pharmacy - Aliwood MC and Blackwell. Reference books (Latest editions)
3. Avery's Drug Treatment, 4th Edn, 1997, Adis International Limited.
4. Remington Pharmaceutical Sciences,
5. Relevant review articles from recent medical and pharmaceutical literature.
6. Cooper & Gunns Dispensing Pharmacy, CBS, Publ. and Distributors New Delhi.
7. Gupta AK, Health Education and Community Pharmacy, CBS, Publ. and Distributors New Delhi.
8. JS Quadry, Hospital Pharmacy.
9. K.Sampath, Hospital & Clinical Pharmacy, Vikas Publications.
10. Lorria & William, Essential dosage calculations.

### **REFERENCES**

1. Lippincott Williams and Wilkins, Remington Pharmaceutical Sciences.
2. William Hassan, Hospital Pharmacy.
3. R.M Metha, Dispensing Pharmacy.
4. E.A. Rawlkins, Bentley's Text Book of Pharmaceutics, Elbs publ.
5. Hoover, Dispensing of Medication.
6. NK Jain, Health Education and Community Pharmacy by, CBS, Publ. and Distributors New Delhi.



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## B. PHARMACY LECTURE PLAN

<b>COURSE NAME: Hospital &amp; Community Pharmacy Practice</b>	<b>COURSECODE :PHR13414</b>
<b>YEAR/ SEM: IV B. Pharm I Sem</b>	<b>REGULATION: PCI</b>

Date	Lecture No.	Topic Name	Source
14-06-2018	Lecture 1	Introduction of all the topics to be covered	Text Book
15-06-2018	Lecture 2	<b>Unit –1 Hospital Pharmacy</b>	Text Book
15-06-2018	Lecture 3	Organization of a hospital and hospital pharmacy	Text Book
16-06-2018	Lecture 4	Responsibilities of a hospital pharmacist	Text Book
16-06-2018	Lecture 5	Pharmacy and therapeutic committee	Text Book
21-06-2018	Lecture 6	Pharmacy and therapeutic committee	Text Book
22-06-2018	Lecture 7	Budget preparation and implementation hospital	Text Book
22-06-2018	Lecture 8	Hospital formulary	Text Book
23-06-2018	Lecture 9	organization of drug store	Text Book
23-06-2018	Lecture 10	Purchase and inventory control	Text Book
28-06-2018	Lecture 11	Patientcounseling	Text Book
29-06-2018	Lecture 12	Role of pharmacist in community health care and education	Text Book
29-06-2018	Lecture 13	<b>Unit-2 The pharmacy procedural manual</b>	Text Book
30-06-2018	Lecture 14	Drug distribution	Text Book
30-06-2018	Lecture 15	Dispensing to out- patients	Text Book
05-07-2018	Lecture 16	In-patients and ambulatory Patient - dispensing of ancillary and controlled substances	Text Book
06-07-2018	Lecture 17	In-patients and ambulatory Patient	Text Book
06-07-2018	Lecture 18	Dispensing of ancillary and controlled substance	Text Book
07-07-2018	Lecture 19	Drug information center	Text Book
07-07-2018	Lecture 20	Drug information center	Text Book

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12-07-2018	Lecture 21	<b>Unit -3 Records and Reports: Prescription filling</b>	Text Book
13-07-2018	Lecture 22	Drug profile	Text Book
13-07-2018	Lecture 23	Patient medication profile	Text Book
14-07-2018	Lecture 24	Study of Cases on drug interaction	Text Book
14-07-2018	Lecture 25	Study of Cases on drug interaction	Text Book
19-07-2018	Lecture 26	Study of Adverse reactions	Text Book
20-07-2018	Lecture 27	Study of Adverse reactions	Text Book
20-07-2018	Lecture 28	Study of Idiosyncratic cases	Text Book
21-07-2018	Lecture 29	Study of Idiosyncratic cases	Text Book
21-07-2018	Lecture 30	<b>Unit- 4 Introduction to community Pharmacy</b>	Text Book
26-07-2018	Lecture 31	Definition of Community pharmacy Practice	Text Book
27-07-2018	Lecture 32	Definition of Community pharmacy Practice	Text Book
27-07-2018	Lecture 33	Definition of Community pharmacy Practice	Text Book
28-07-2018	Lecture 34	Relationship to other local health care providers and services to nursing homes and clinics	Text Book
28-07-2018	Lecture 35	Relationship to other local health care providers and services to nursing homes and clinics	Text Book
02-08-2018	Lecture 36	<b>Unit -5 Communication skills - communication with prescribers and patients Over-the-counter (OTC) Drugs</b>	Text Book
03-08-2018	Lecture 37	Communication skills	Text Book
03-08-2018	Lecture 38	Communication with prescribers	Text Book
04-08-2018	Lecture 39	Communication with prescribers	Text Book
04-08-2018	Lecture 40	Patients Over-the-counter (OTC) Drugs	Text Book
09-08-2018	Lecture 41	Patients Over-the-counter (OTC) Drugs	Text Book
10-08-2018	Lecture 42	Rational use of common OTC medications (Vitamins)	Text Book

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10-08-2018	Lecture 43	Rational use of common OTC medications (Vitamins)	Text Book
11-08-2018	Lecture 44	Rational use of common OTC medications (Tonics)	Text Book
11-08-2018	Lecture 45	Rational use of common OTC medications (Tonics)	Text Book
16-08-2018	Lecture 46	Rational use of common OTC medications (Iron preparations)	Text Book
17-08-2018	Lecture 47	Rational use of common OTC medications (Iron preparations)	Text Book
17-08-2018	Lecture 48	Rational use of common OTC medications (analgesics)	Text Book
18-08-2018	Lecture 49	Rational use of common OTC medications (analgesics)	Text Book
18-08-2018	Lecture 50	Rational use of common OTC medications (NSAID s)	Text Book
23-08-2018	Lecture 51	Rational use of common OTC medications (NSAID s)	Text Book
24-08-2018	Lecture 52	Rational use of common OTC medications (Cough mixtures)	Text Book
25-08-2018	Lecture 53	Rational use of common OTC medications (Cough mixtures)	Text Book
30-08-2018	Lecture 54	Rational use of common OTC medications (anti-diarrhoeal preparations)	Text Book
31-08-2018	Lecture 55	Rational use of common OTC medications (anti-diarrhoeal preparations)	Text Book
31-08-2018	Lecture 56	<b>Unit -6 Primary health care in community pharmacy</b>	Text Book
01-09-2018	Lecture 57	Creating awareness about Family planning	Text Book
06-09-2018	Lecture 58	Precautions to be taken during First aid	Text Book
07-09-2018	Lecture 59	Participation in primary health programs	Text Book
08-09-2018	Lecture 60	Participation in primary health programs	Text Book
13-09-2018	Lecture 61	Introduction class on Smoking cessation	Text Book
14-09-2018	Lecture 62	Screening programs & Nutrition	Text Book
20-09-2018	Lecture 63	Responding to common ailments & Financial, materials involved in community pharmacy	Text Book
21-09-2018	Lecture 65	Staff, infrastructure requirements in community pharmacy	Text Book
22-09-2018	Lecture 66	Community pharmacy management in drug information resources	Text Book



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27-09-2018	Lecture 67	Community pharmacy management in community pharmacies	Text Book
28-09-2018	Lecture 68	computer applications in community pharmacy	Text Book
04-10-2018	Lecture 69	Education and training	Text Book
05-10-2018	Lecture 70	Home Medicines Review (HMR) program: introduction	Text Book
06-10-2018	Lecture 71	Home Medicines Review (HMR) program: guidelines	Text Book

Signature of the Faculty

Principal



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ESTD : 2005

**DEPARTMENT OF PHARMACY PRACTICE**

**CLASS TIME TABLE AY: 2018-2019**

**CLASS: PHARM.D III YEAR (2016 ADMITTED BATCH)**  
**CLASS TEACHER: Mrs. CH. GEETHA**

**W.e.f -11/06/2018**

DAY/ TIME	9:30 – 10:30	10:30– 11:20	11:20 - 12:10	12:10 -1:00	1:00– 01:50	1:50– 2:40	2:40-3:30	3:30-4:20
MON	COL-II	PF	MC	<b>L U N C H</b>	PJ	MC LAB		
TUE	MC	PJ	COL-II		PT- II	PT- II LAB		
WED	MC	PT-II	PF		PA	PA LAB		
THU	PF	MC	PA		COL- II	PF LAB		
FRI	<b>HOSPITAL VISIT</b>							
SAT	PJ	PA	PT-II	L U N C H	PF	COL-II LAB		

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Dr.S. Arun Satya Dev	Professor	Medicinal chemistry-(MC) (4)	Pharm. D
2.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis-(PA) (3)	Pharm. D
3.	Dr.V.C.Randeep Raj	Associate Professor	Pharmacotherapy –II-(PT-II) (3)	Pharm. D
4.	Dr.S. Dhana Lakshmi	Assistant Professor	Pharmaceutical Jurisprudence-(PJ) (3)	Pharm. D
5.	Mrs.B.Ramavathi	Assistant Professor	Pharmacology-II (COL-II) (3)	Pharm. D
6.	Dr. G Sravani Girija	Assistant Professor	Pharmaceutical Formulation-(PF) (3)	Pharm. D
7.	Dr.S. Arun Satya Dev	Professor	Medicinal chemistry Lab-(MC) (3)	Pharm. D
8.	Mrs.Ch.Geetha	Assistant Professor	Pharmaceutical Analysis Lab-(PA) (3)	Pharm. D
9.	Dr.V.C.Randeep Raj	Associate Professor	Pharmacotherapy -II Lab-(PT-II) (3)	Pharm. D
10.	Mrs.B.Ramavathi	Assistant Professor	Pharmacology-II Lab-(COL-II) (3)	Pharm. D
11.	Dr. G Sravani Girija	Assistant Professor	Formulation Lab-(PF) (3)	Pharm. D

*A.H.V. Sarathoddi*  
 Time Table Incharge



**Principal**

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**Second Year:**

S.No	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
2.1	Pathophysiology	3	-	1
2.2	Pharmaceutical Microbiology	3	3	1
2.3	Pharmacognosy & Phytopharmaceuticals	3	3	1
2.4	Pharmacology-I	3	-	1
2.5	Community Pharmacy	2	-	1
2.6	Pharmacotherapeutics-I	3	3	1
	<b>Total Hours</b>	<b>17</b>	<b>9</b>	<b>6 = 32</b>

**Third Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
3.1	Pharmacology-II	3	3	1
3.2	Pharmaceutical Analysis	3	3	1
3.3	Pharmacotherapeutics-II	3	3	1
3.4	Pharmaceutical Jurisprudence	2	-	-
3.5	Medicinal Chemistry	3	3	1
3.6	Pharmaceutical Formulations	2	3	1
	<b>Total hours</b>	<b>16</b>	<b>15</b>	<b>5 = 36</b>

### 3.4 PHARMACEUTICAL JURISPRUDENCE (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope of the Subject:** (4-6 lines): This course exposes the student to several important legislations related to the profession of pharmacy in India. The Drugs and Cosmetics Act, along with its amendments are the core of this course. Other acts, which are covered, include the Pharmacy Act, dangerous drugs, medicinal and toilet preparation Act etc. Besides this the new drug policy, professional ethics, DPCO, patent and design Act will be discussed.
2. **Objectives of the Subject:** Upon completion of the subject student shall be able to (Know, do, and appreciate) –
  - a. practice the Professional ethics;
  - b. understand the various concepts of the pharmaceutical legislation in India;
  - c. know the various parameters in the Drug and Cosmetic Act and rules;
  - d. know the Drug policy, DPCO, Patent and design act;
  - e. understand the labeling requirements and packaging guidelines for drugs and cosmetics;
  - f. be able to understand the concepts of Dangerous Drugs Act, Pharmacy Act and Excise duties Act; and
  - g. other laws as prescribed by the Pharmacy Council of India from time to time including International Laws.

**Text books (Theory)**

Mithal , B M. Textbook of Forensic Pharmacy. Calcutta :National; 1988.

**Reference books (Theory)**

- a. Singh, KK, editor. Beotra's the Laws of Drugs, Medicines & cosmetics. Allahabad: Law Book House; 1984.
- b. Jain, NK. A Textbook of forensic pharmacy. Delhi: Vallabh prakashan ; 1995.
- c. Reports of the Pharmaceutical enquiry Committee
- d. I.D.M.A., Mumbai. DPCO 1995
- e. Various reports of Amendments.
- f. Deshapande, S.W. The drugs and magic remedies act 1954 and rules 1955. Mumbai: Susmit Publications; 1998.
- g. Eastern Book Company .The narcotic and psychotropic substances act 1985, Lucknow: Eastern; 1987.

**3. Detailed syllabus and lecture wise schedule:**

**Title of the topic**

1. **Pharmaceutical Legislations** – A brief review.
2. Principle and Significance of professional ethics. Critical study of the code of pharmaceutical ethics drafted by PCI.
3. **Drugs and Cosmetics Act, 1940, and its rules 1945.**  
Objectives, Legal definition, Study of Schedule's with reference to Schedule B, C&C1, D, E1, F&F1, F2, F3, FF, G, H, J, K, M, N, P, R, V, W, X, Y.  
Sales, Import, labeling and packaging of Drugs And Cosmetics  
Provisions Relating to Indigenous Systems.  
Constitution and Functions of DTAB, DCC, CDL.  
Qualification and duties –Govt. analyst and Drugs Inspector.



  
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4. **Pharmacy Act –1948.**  
Objectives Legal Definitions, General Study, Constitution and Functions of State & Central Council, Registration & Procedure, ER.
5. **Medicinal and Toilet Preparation Act –1955.**  
Objectives, Legal Definitions, Licensing, Bonded and Non Bonded Laboratory, Ware Housing, Manufacture of Ayurvedic, Homeopathic, Patent & Proprietary Preparations.
6. **Narcotic Drugs and Psychotropic substances Act-1985 and Rules.** Objectives, Legal Definitions, General Study, Constitution and Functions of narcotic & Psychotropic Consultative Committee, National Fund for Controlling the Drug Abuse, Prohibition, Control and regulations, Schedules to the Act.
7. **Study of Salient Features of Drugs and magic remedies Act and its rules.**
8. **Study of essential Commodities Act Relevant to drugs price control Order.**
9. **Drug Price control Order & National Drug Policy (Current).**
10. **Prevention Of Cruelty to animals Act-1960.**
11. **Patents & design Act-1970.**
12. **Brief study of prescription and Non-prescription Products.**

#### 4. Assignments:


##### Format of the assignment

1. Minimum & Maximum number of pages
2. It shall be a computer draft copy
3. Reference(s) shall be included at the end.
4. Name and signature of the student
5. Assignment can be a combined presentation at the end of the academic year.
6. Time allocated for presentation may be 8+2 Min

##### Case studies relating to

1. Drugs and Cosmetics Act and rules along with its amendments, Dangerous Drugs Act, Medicinal and Toilet preparation Act, New Drug Policy, Professional Ethics, Drugs (Price control) Order, Patent and Design Act.
2. Various prescription and non-prescription products.
3. Medical and surgical accessories.
4. Diagnostic aids and appliances available in the market.



  
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PHARMACEUTICAL JURISPRUDENCE				
YEAR: III PHARM D				
Week .No	Lecture No.	Topics	Teaching Aid	DATE
Unit-1	Pharmaceutical Legislations			
Week-1	L1	Pharmaceutical Legislations	Chalk and Talk	11-06-2018
	L2	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	11-06-2018
	L3	Detailed explanation on Pharmaceutical Legislations	Chalk and Talk	12-06-2018
	L4	professional ethics	Chalk and Talk	12-06-2018
	L5	Principle of professional ethics	Chalk and Talk	18-06-2018
	L6	Signature of professional ethics	Chalk and Talk	18-06-2018
Week-2	L7	Signature of professional ethics	Chalk and Talk	19-06-2018
Unit-2	Pharmaceutical constitution of India			
	L8	Critical study on PCI	Chalk and Talk	19-06-2018
	L9	Critical study on PCI	Chalk and Talk	25-06-2018
	L10	The code of pharmaceutical ethics drafted by PCI	Power point	25-06-2018
	L11	The code of pharmaceutical ethics drafted by PCI.	Chalk and Talk	26-06-2018
	L12	Revision	Google meet	26-06-2018
Unit-3	Drugs and Cosmetics Act, 1940			
Week-3	L13	Drugs and Cosmetics Act , 1940	Chalk and Talk	02-07-2018
	L14	Drugs and Cosmetics Act , 1940	Power point	02-07-2018
	L15	Drugs and Cosmetics Act , 1940	Chalk and Talk	02-07-2018
	L16	Its rules 1945	Power point	03-07-2018

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	L17	Objectives	Chalk and Talk	03-07-2018
Week-4	L18	Legal definition	Chalk and Talk	09-07-2018
	L19	Study of Schedule's with reference	Chalk and Talk	09-07-2018
	L20	Schedule B	Chalk and Talk	10-07-2018
	L21	Schedule B	Chalk and Talk	10-07-2018
	L22	Schedule C&C1	Power point	16-07-2018
	L23	Schedule C&C1	Chalk and Talk	16-07-2018
	L24	Schedule C&C1	Chalk and Talk	17-07-2018
Week-5	L25	Schedule D	Power point	17-07-2018
	L26	Schedule D	Chalk and Talk	23-07-2018
	L27	Schedule E1	Chalk and Talk	23-07-2018
	L28	Schedule E1	Chalk and Talk	24-07-2018
	L29	Schedule F&F1	Chalk and Talk	24-07-2018
	L30	Schedule F&F1	Chalk and Talk	30-07-2018
Week-6	L31	Schedule F2	LCD	30-07-2018
	L32	Schedule F3	Chalk and Talk	31-07-2018
	L33	Schedule FF	Chalk and Talk	31-07-2018
	L34	Schedule FF	Chalk and Talk	06-08-2018
	L35	Schedule G	Power point	06-08-2018
Week-7	L36	Schedule G	Chalk and Talk	07-08-2018
	L37	Schedule H	Chalk and Talk	07-08-2018

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Week-8	L38	Schedule H	Chalk and Talk	07-08-2018
	L39	Schedule J	Power point	13-08-2018
	L40	Schedule J	Chalk and	13-08-2018
	L41	Schedule K	Chalk and Talk	14-08-2018
	L42	Schedule K	Power point	14-08-2018
	L43	Schedule M	Chalk and Talk	20-08-2018
	L44	Schedule M	Chalk and Talk	20-08-2018
	L45	Schedule N	Chalk and Talk	27-08-2018
	L46	Schedule N	Chalk and Talk	27-08-2018
	L47	Schedule P	Chalk and Talk	28-08-2018
Week-9	L48	Schedule P	Chalk and Talk	28-08-2018
	L49	Schedule R	Power point	10-09-2018
	L50	Schedule R	Chalk and Talk	10-09-2018
	L51	Schedule V	LCD	11-09-2018
	L52	Schedule V	Chalk and Talk	11-09-2018
	L53	Schedule W	Chalk and Talk	17-09-2018
Week-10	L54	Schedule W	Power point	17-09-2018
	L55	Schedule X	Chalk and Talk	18-09-2018
	L56	Schedule X	Chalk and Talk	18-09-2018
	L57	Schedule Y	Chalk and Talk	24-09-2018
	L58	Schedule Y	Power point	24-09-2018
	L59	Sales	Chalk and Talk	25-09-2018

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Week-11	L60	Sales	Chalk and Talk	25-09-2018
	L61	Import	Chalk and Talk	01-10-2018
	L62	Labelling	Power point	01-10-2018
	L63	Packaging of drugs and cosmetics	Chalk and Talk	08-10-2018
	L64	Provisions Relating to Indigenous Systems	Chalk and Talk	08-10-2018
	L65	Provisions Relating to Indigenous Systems	Chalk and Talk	09-10-2018
	L66	Provisions Relating to Indigenous Systems	Chalk and Talk	09-10-2018
Week-12	L67	Constitution and Functions of DTAB	Chalk and Talk	15-10-2018
	L68	Constitution and Functions of DTAB	Power point	15-10-2018
	L69	Constitution and Functions of DCC	Chalk and Talk	22-10-2018
	L70	Constitution and Functions of DCC	Chalk and Talk	22-10-2018
	L71	Constitution and Functions of CDL	Power point	23-10-2018
	L72	Constitution and Functions of CDL	Chalk and Talk	23-10-2018
Week-13	L73	Qualification and duties –Govt. analyst	Chalk and Talk	24-10-2018
	L74	Qualification and duties –Govt. analyst	Chalk and Talk	24-10-2018
Week-14	L75	Qualification and duties –Govt. analyst	LCD	30-10-2018
	L76	Drugs Inspector	Chalk and Talk	30-10-2018
	L77	Drugs Inspector	Chalk and Talk	05-11-2018
	L78	Drugs Inspector	Chalk and Talk	05-11-2018
	L79	Revision	Google meet	05-11-2018
Unit-4	<b>Pharmacy Act –1948</b>			







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Week-15	L80	Pharmacy Act –1948	Chalk and Talk	12-11-2018
	L81	Objectives Legal Definitions	Chalk and Talk	12-11-2018
	L82	General Study	Chalk and Talk	13-11-2018
	L83	Constitution and Functions of State	Power point	13-11-2018
	L84	Constitution and Functions of State	Chalk and	13-11-2018
	L85	Central Council	Chalk and Talk	19-11-2018
	L86	Central Council	LCD	19-11-2018
	L87	Registration	Chalk and Talk	20-11-2018
	L88	Registration	Power point	20-11-2018
	L89	Procedure, ER	Chalk and Talk	26-11-2018
Week-16	L90	Procedure, ER	Chalk and Talk	26-11-2018
	L91	Revision	Google meet	27-11-2018
<b>Unit-5</b>				
<b>Medicinal and Toilet Preparation Act –1955</b>				
L92	Medicinal and Toilet Preparation Act –1955	Chalk and Talk	27-11-2018	
L93	Medicinal and Toilet Preparation Act –1956	Power point	10-12-2018	
L94	Medicinal and Toilet Preparation Act –1957	Chalk and Talk	10-12-2018	
L95	Objectives, Legal Definitions	Power point	11-12-2018	
L96	Objectives, Legal Definitions	Chalk and Talk	11-12-2018	
L97	Licensing, Bonded and Non Bonded Laboratory	LCD	17-12-2018	
L98	Licensing, Bonded and Non Bonded Laboratory	Chalk and Talk	17-12-2018	

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Week-17	L99	Licensing, Bonded and Non Bonded Laboratory	Power point	18-12-2018
	L100	Ware Housing	Chalk and Talk	18-12-2018
	L101	Ware Housing	Chalk and Talk	24-12-2018
	L102	Manufacture of Ayurvedic	Chalk and Talk	24-12-2018
	L103	Manufacture of Ayurvedic	LCD	24-12-2018
Week-18	L104	Homeopathic	Chalk and Talk	31-12-2018
	L105	Homeopathic	Chalk and Talk	31-12-2018
	L106	Patent & Proprietary Preparations	Chalk and Talk	07-01-2019
	L107	Patent & Proprietary Preparations	Chalk and Talk	07-01-2019
	L108	Revision	Googlemeet	08-01-2019
<b>Unit-6</b>				
<b>Narcotic Drugs and Psychotropic substances Act-1985 and Rules</b>				
Week-19	L109	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	21-01-2019
	L110	Narcotic Drugs and Psychotropic substances Act-1985	Chalk and Talk	22-01-2019
	L111	Narcotic Drugs and Psychotropic substances Act-1985 and rules	Powerpoint	28-01-2019
	L112	Objectives, Legal Definitions, General Study	Chalk and Talk	29-01-2019
	L113	Abuse, Prohibition, Control and regulations, Schedules to the Act.	Googlemeet	04-02-2019
<b>Unit-7</b>				
<b>Study of Salient Features of Drugs and magic remedies Act and its rules</b>				
Week-20	L114	Study of Salient Features of Drugs and magic remedies Act and its rules.	Chalk and Talk	05-02-2019
	L115	Study of Salient Features of Drugs and magic remedies Act and its rules.	Googlemeet	11-02-2019



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<b>Unit-8</b>			
<b>Study of essential Commodities Act Relevant to drugs price control Order</b>			
Unit-9	L116	Study of essential Commodities Act Relevant to drugs price control Order.	Chalk and Talk 12-02-2019
		<b>Drug Price control Order &amp; National Drug Policy</b>	
	L117	Drug Price control Order & National Drug Policy	Chalk and Talk 18-02-2019
<b>Unit-10</b>			
<b>Prevention Of Cruelty to animals Act-1960</b>			
Week-21	L118	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk 18-02-2019
	L119	Prevention Of Cruelty to animals Act-1960.	Chalk and Talk 19-02-2019
	<b>Unit-11</b>		
<b>Patents &amp; design Act-1970</b>			
Week-21	L120	Patents & design Act-1970.	Chalk and Talk 25-02-2019
	L121	Patents & design Act-1970.	Powerpoint 25-02-2019
	L122	Revision	Chalk and Talk 11-03-2019
<b>Unit-12</b>			
<b>Brief study of prescription and Non-prescription Products</b>			
Week-21	L123	Brief study of prescription Products	Chalk and Talk 12-03-2019
	L124	Brief study of prescription Products	Powerpoint 18-03-2019
	L125	Non-prescription Products.	Chalk and Talk 19-03-2019
	L126	Non-prescription Products.	Powerpoint 25-03-2019

*S. Dhanalaxmi*  
Signature of the Faculty

  
Principal



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**DEPARTMENT OF PHARMACY PRACTICE**  
**CLASS TIME TABLE AY: 2018-2019**

**CLASS: PHARM.D IV YEAR (2015 ADMITTED BATCH)**  
**CLASS TEACHER: Dr. S Dhana Lakshmi**

W.e.f-11/06/2018

DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10- 1:00	1:00- 01:50	1:50- 2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	L U N C H	PT- III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	BPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Mrs.Ch. Geetha	Assistant Professor	Biostatistics and Research Methodology-(BRM) (4)	Pharm. D
2.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy-(CP) (3)	Pharm. D
3.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy-(HP) (2)	Pharm. D
4.	Dr.S. Dhana Lakshmi	Assistant Professor	Clinical Toxicology-(CT) (2)	Pharm. D
5.	Mr. P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr. S Dhana Lakshmi	Assistant Professor	Pharmacotherapeutics – III-(PT-III) (3)	Pharm. D
7.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab-(CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab-(HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab-(BPPK) (3)	Pharm. D
10.	Dr. S Dhana Lakshmi	Assistant Professor	Pharmacotherapeutics - III – (PT-III)Lab (3)	Pharm. D

*A.H.V. Sathish*  
Time Table Incharge



Principal  
*Jr*  
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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

## 4.2 HOSPITAL PHARMACY (THEORY)

**Theory : 2 Hrs. /Week**

1. **Scope:** In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug dispensing, manufacturing of parenteral preparations, drug information, patient counselling, and therapeutic drug monitoring for improved patient care.
2. **Objectives:** Upon completion of the course, the student shall be able to –
  - a. know various drug distribution methods;
  - b. know the professional practice management skills in hospital pharmacies;
  - c. provide unbiased drug information to the doctors;
  - d. know the manufacturing practices of various formulations in hospital set up;
  - e. appreciate the practice based research methods; and
  - f. appreciate the stores management and inventory control.

**Text books: (latest editions)**

- a. Hospital pharmacy by William .E. Hassan
- b. A text book of Hospital Pharmacy by S.H.Merchant & Dr. J.S. Qadry. Revised by R.K.Goyal & R.K. Parikh

**References:**


- a. WHO consultative group report.
- b. R.P.S. Vol.2. Part –B; Pharmacy Practice section.
- c. Handbook of pharmacy – health care. Edt. Robin J Harman. The Pharmaceutical press.

**3. Lecture wise programme :**

**Topics**

- 1 **Hospital - its Organisation and functions**
- 2 **Hospital pharmacy-Organisation and management**
  - a) Organizational structure-Staff, Infrastructure & work load statistics
  - b) Management of materials and finance
  - c) Roles & responsibilities of hospital pharmacist
- 3 **The Budget – Preparation and implementation**
- 4 **Hospital drug policy**
  - a) Pharmacy and Therapeutic committee (PTC)
  - b) Hospital formulary
  - c) Hospital committees
    - Infection committee
    - Research and ethical committee
  - d) developing therapeutic guidelines
  - e) Hospital pharmacy communication - Newsletter



  
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**5 Hospital pharmacy services**

- a) Procurement & warehousing of drugs and Pharmaceuticals
- b) Inventory control  
Definition, various methods of Inventory Control  
ABC, VED, EOQ, Lead time, safety stock
- c) Drug distribution in the hospital
  - i) Individual prescription method
  - ii) Floor stock method
  - iii) Unit dose drug distribution method
- d) Distribution of Narcotic and other controlled substances
- e) Central sterile supply services – Role of pharmacist

**6 Manufacture of Pharmaceutical preparations**

- a) Sterile formulations – large and small volume parenterals
- b) Manufacture of Ointments, Liquids, and creams
- c) Manufacturing of Tablets, granules, capsules, and powders
- d) Total parenteral nutrition

**7 Continuing professional development programs**

Education and training

**8 Radio Pharmaceuticals – Handling and packaging****9 Professional Relations and practices of hospital pharmacist****4.2 HOSPITAL PHARMACY (PRACTICAL)**


**Practical : 3 Hrs./Week**

1. Assessment of drug interactions in the given prescriptions
2. Manufacture of parenteral formulations, powders.
3. Drug information queries.
4. Inventory control

**List of Assignments:**

1. Design and Management of Hospital pharmacy department for a 300 bedded hospital.
2. Pharmacy and Therapeutics committee – Organization, functions, and limitations.
3. Development of a hospital formulary for 300 bedded teaching hospital
4. Preparation of ABC analysis of drugs sold in one month from the pharmacy.
5. Different phases of clinical trials with elements to be evaluated.
6. Various sources of drug information and systematic approach to provide unbiased drug information.
7. Evaluation of prescriptions generated in hospital for drug interactions and find out the suitable management.



  
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<b>HOSPITAL PHARMACY</b>				
<b>YEAR: IV PHARM D</b>				
<b>Week No.</b>	<b>Lecture No.</b>	<b>TOPIC</b>	<b>Teaching Aid</b>	<b>Date</b>
<b>Unit-1</b>	<b>Scope of Hospital Pharmacy</b>			
<b>Week-1</b>	L1	Scope and objectives of Hospital pharmacy	Chalk and Talk	13-06-2018
	L2	Organization of Hospital	Chalk and Talk	14-06-2018
	L3	Functions of Hospital	Power Point	14-06-2018
<b>Unit-2 Hospital pharmacy</b>				
<b>Week-2</b>	L4	Hospital pharmacy-Introduction	Chalk and Talk	20-06-2018
	L5	Organizational structure-Staff, Infrastructure	Power Point	21-06-2018
	L6	Organizational structure-work load statistics	Chalk and Talk	21-06-2018
	L7	Management of materials and finance	Power Point	27-06-2018
	L8	Management of materials and finance	Chalk and Talk	27-06-2018
	L9	Roles & responsibilities of hospital pharmacist	Power Point	28-06-2018
	L10	Roles & responsibilities of hospital pharmacist	Chalk and Talk	04-07-2018
<b>Unit-3 The Budget</b>				
<b>Week-3</b>	L11	Introduction of Budget	Chalk and Talk	05-07-2018
	L12	Preparation of Budget	Chalk and Talk	11-07-2018
	L13	Implementation of Budget	LCD	12-07-2018
<b>Unit-4 Hospital drug policy</b>				
<b>Week-3</b>	L14	Hospital drug policy -Introduction	Chalk and Talk	12-07-2018
	L15	Pharmacy and Therapeutic committee (PTC)	Power Point	18-07-2018

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	L16	Pharmacy and Therapeutic committee (PTC)	Chalk and Talk	19-07-2018
	L17	Hospital formulary	Chalk and Talk	
	L18	Hospital formulary	LCD	25-07-2018
	L19	Hospital committees-Introduction	Chalk and Talk	26-07-2018
Week-4	L20	Infection committee	Chalk and Talk	01-08-2018
	L21	Infection committee	Chalk and Talk	02-08-2018
	L22	Research and ethical committee	Power Point	08-08-2018
	L23	Research and ethical committee	Chalk and Talk	09-08-2018
	L24	Developing therapeutic guidelines	LCD	16-08-2018
	L25	Developing therapeutic guidelines	Chalk and Talk	16-08-2018
Week-5	L26	Hospital pharmacy communication - Introduction	Power Point	22-08-2018
	L27	Hospital pharmacy communication - Newsletter	Chalk and Talk	23-08-2018
	L28	Hospital pharmacy communication - Newsletter	Chalk and Talk	29-08-2018
Unit-5	<b>Hospital pharmacy services</b>			
	L29	Hospital pharmacy services - Introduction	Chalk and Talk	30-08-2018
	L30	Procurement & warehousing of drugs	Chalk and Talk	12-09-2018
	L31	Procurement & warehousing of drugs	LCD	13-09-2018
Week-6	L32	Procurement & warehousing of Pharmaceuticals	Chalk and Talk	19-09-2018
	L33	Procurement & warehousing of Pharmaceuticals	Power Point	20-09-2018
	L34	Procurement & warehousing of Pharmaceuticals	Chalk and Talk	26-09-2018
	L35	Inventory control-Introduction	Chalk and Talk	27-09-2018
	L36	Definition, various methods of Inventory Control	LCD	03-10-2018

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	L37	ABC,VED	Power Point	04-10-2018
Week-7	L38	EOQ, Lead time, safety stock	Chalk and Talk	10-10-2018
	L39	EOQ, Lead time, safety stock	Chalk and Talk	11-10-2018
	L40	EOQ, Lead time, safety stock	Chalk and Talk	11-10-2018
	L41	Drug distribution in the hospital - Introduction	LCD	24-10-2018
	L42	Individual prescription method	Chalk and Talk	25-10-2018
	L43	Individual prescription method	Chalk and Talk	31-10-2018
	L44	Floor stock method	Chalk and Talk	01-11-2018
	L45	Floor stock method	LCD	08-11-2018
	L46	Unit dose drug distribution method	Chalk and Talk	14-11-2018
	L47	Unit dose drug distribution method	Chalk and Talk	14-11-2018
	L48	Distribution of Narcotic	LCD	15-11-2018
	L49	Distribution of Narcotic	Chalk and Talk	21-11-2018
Week-9	L50	Distribution of other controlled substances	Chalk and Talk	22-11-2018
	L51	Distribution of other controlled substances	Chalk and Talk	28-11-2018
	L52	Central sterile supply services – Role of pharmacist	Power Point	29-11-2018
	L53	Central sterile supply services – Role of pharmacist	Chalk and Talk	29-11-2018
<b>Unit-6</b>				
<b>Manufacture of Pharmaceutical preparations</b>				
	L54	Manufacture of Pharmaceutical preparations- Introduction	Chalk and Talk	12-12-2018
	L55	Sterile formulations – large and small volume parenterals	Chalk and Talk	13-12-2018

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Vizianagaram Dt., - 531162



# AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES

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Week-10	L56	Sterile formulations – large and small volume parenterals	Chalk and Talk	19-12-2018
	L57	Manufacture of Ointments	LCD	20-12-2018
	L58	Manufacture of Ointments	Chalk and Talk	26-12-2018
	L59	Manufacture of Liquids	Power Point	27-12-2018
	L60	Manufacture of Liquids	Chalk and Talk	02-01-2019
	L61	Manufacture of creams	Chalk and Talk	03-01-2019
Week-11	L62	Manufacture of creams	LCD	03-01-2019
	L63	Manufacturing of Tablets	Chalk and Talk	09-01-2019
	L64	Manufacturing of Tablets	Chalk and Talk	10-01-2019
	L65	Manufacturing of Tablets	LCD	10-01-2019
	L66	Manufacturing of granules	Chalk and Talk	23-01-2019
	L67	Manufacturing of granules	Chalk and Talk	23-01-2019
Week-12	L68	Manufacturing of granules	Chalk and Talk	24-01-2019
	L69	Manufacturing of capsules	Power point	24-01-2019
	L70	Manufacturing of capsules	Chalk and Talk	30-01-2019
	L71	Manufacturing of powders	Chalk and Talk	30-01-2019
	L72	Manufacturing of powders	Chalk and Talk	31-01-2019
	L73	Total parenteral nutrition	Chalk and Talk	06-02-2019
Week-13	L74	Total parenteral nutrition	Chalk and Talk	07-02-2019
	L75	Total parenteral nutrition	Power point	07-02-2019
Unit-7	<b>Continuing professional development programs</b>			

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	L76	Continuing professional development programs - Introduction	Chalk and Talk	13-02-2019
	L77	Continuing professional development programs - Education and training	Chalk and Talk	13-02-2019
	L78	Continuing professional development programs - Education and training	Chalk and Talk	14-02-2019
	L79	Continuing professional development programs - Education and training	Power point	20-02-2019
<b>Unit-8</b>				
<b>Radio Pharmaceuticals</b>				
Week-14	L80	Radio Pharmaceuticals – Introduction	Chalk and Talk	20-02-2019
	L81	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	21-02-2019
	L82	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	21-02-2019
	L83	Handling and packaging of Radio Pharmaceuticals	Chalk and Talk	27-02-2019
<b>Unit-9</b>				
<b>Professional Relations and practices of hospital pharmacist</b>				
Week-15	L84	Professional Relations of hospital pharmacist	Chalk and Talk	27-02-2019
	L85	Professional Relations of hospital pharmacist	LCD	28-02-2019
	L86	Professional Relations of hospital pharmacist	Chalk and Talk	13-03-2019
	L87	Professional Relations of hospital pharmacist	Power point	14-03-2019
	L88	Professional Practices of hospital pharmacist	Chalk and Talk	20-03-2019
	L89	Professional Practices of hospital pharmacist	Google meet	21-03-2019

  
Signature of the Faculty

  
Principal

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ESTD : 2005

**DEPARTMENT OF PHARMACY PRACTICE**  
**CLASS TIME TABLE AY: 2018-2019**

**CLASS: PHARM.D IV YEAR (2015 ADMITTED BATCH)**  
**CLASS TEACHER: Dr. S Dhana Lakshmi**

**W.e.f-11/06/2018**

DAY/ TIME	9:30- 10:30	10:30- 11:20	11:20- 12:10	12:10- 1:00	1:00- 01:50	1:50- 2:40	2:40- 3:30	3:30-4:20
MON	CP	BRM	CT	L U N C H	PT- III	CP LAB		
TUE	BPPK	CP	BRM		BPPK	HP LAB		
WED	PT-III	BPPK	HP		CP	BPPK LAB		
THU	BRM	PT- III	CT		HP	PT- III LAB		
FRI	HOSPITAL ROSTER							
SAT	HOSPITAL ROSTER							

S. No	NAME OF THE FACULTY	DESIGNATION	NAME OF THE SUBJECT(Hrs)	DEPARTMENT
1.	Mrs.Ch. Geetha	Assistant Professor	Biostatistics and Research Methodology-(BRM) (4)	Pharm. D
2.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy-(CP) (3)	Pharm. D
3.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy-(HP) (2)	Pharm. D
4.	Dr.S. Dhana Lakshmi	Assistant Professor	Clinical Toxicology-(CT) (2)	Pharm. D
5.	Mr. P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics-(BPPK) (3)	Pharm. D
6.	Dr. S Dhana Lakshmi	Assistant Professor	Pharmacotherapeutics – III-(PT-III) (3)	Pharm. D
7.	Dr.V C Randeep Raj	Associate Professor	Clinical Pharmacy Lab-(CP) (3)	Pharm. D
8.	Mr.V Uma Sankar	Associate Professor	Hospital Pharmacy Lab-(HP) (3)	Pharm. D
9.	Mr.P. Sandeep	Assistant Professor	Biopharmaceutics and Pharmacokinetics Lab-(BPPK) (3)	Pharm. D
10.	Dr. S Dhana Lakshmi	Assistant Professor	Pharmacotherapeutics - III – (PT-III)Lab (3)	Pharm. D

*A.H.V. Sauthoshi*  
 Time Table Incharge



*[Signature]*  
 Principal  
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**Fourth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Practical/Hospital Posting	No. of hours of Tutorial
(1)	(2)	(3)	(4)	(5)
4.1	Pharmacotherapeutics-III	3	3	1
4.2	Hospital Pharmacy	2	3	1
4.3	Clinical Pharmacy	3	3	1
4.4	Biostatistics & Research Methodology	2	-	1
4.5	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6	Clinical Toxicology	2	-	1
	<b>Total hours</b>	<b>15</b>	<b>12</b>	<b>6 = 33</b>

**Fifth Year:**

S.No.	Name of Subject	No. of hours of Theory	No. of hours of Hospital posting*	No. of hours of Seminar
(1)	(2)	(3)	(4)	(5)
5.1	Clinical Research	3	-	1
5.2	Pharmacoepidemiology and Pharmacoeconomics	3	-	1
5.3	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4	Clerkship *	-	-	1
5.5	Project work (Six Months)	-	20	-
	<b>Total hours</b>	<b>8</b>	<b>20</b>	<b>4 = 32</b>

\* Attending ward rounds on daily basis.

### 4.3 CLINICAL PHARMACY (THEORY)

**Theory : 3 Hrs. /Week**

#### 1. Objectives of the Subject :

- Upon completion of the subject student shall be able to (Know, do, appreciate) –
- monitor drug therapy of patient through medication chart review and clinical review;
  - obtain medication history interview and counsel the patients;
  - identify and resolve drug related problems;
  - detect, assess and monitor adverse drug reaction;
  - interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states; and
  - retrieve, analyse, interpret and formulate drug or medicine information.

#### Text books (Theory)

- Practice Standards and Definitions - The Society of Hospital Pharmacists of Australia.
- Basic skills in interpreting laboratory data - Scott LT, American Society of Health System Pharmacists Inc.
- Biopharmaceutics and Applied Pharmacokinetics - Leon Shargel, Prentice Hall publication.
- A text book of Clinical Pharmacy Practice; Essential concepts and skills, Dr.G.Parthasarathi etal, Orient Orient Langram Pvt.Ltd. ISSN8125026

#### References

- Australian drug information -Procedure manual. The Society of Hospital Pharmacists of Australia.
- Clinical Pharmacokinetics - Rowland and Tozer, Williams and Wilkins Publication.
- Pharmaceutical statistics. Practical and clinical applications. Sanford Bolton, Marcel Dekker, Inc.

#### 2. Detailed syllabus and lecture wise schedule:

##### Title of the topic

- Definitions, development and scope of clinical pharmacy**
- Introduction to daily activities of a clinical pharmacist**
  - Drug therapy monitoring (medication chart review, clinical review, pharmacist interventions)
  - Ward round participation
  - Adverse drug reaction management
  - Drug information and poisons information
  - Medication history
  - Patient counseling
  - Drug utilisation evaluation (DUE) and review (DUR)
  - Quality assurance of clinical pharmacy services



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3. **Patient data analysis**  
The patient's case history, its structure and use in evaluation of drug therapy & Understanding common medical abbreviations and terminologies used in clinical practices.
4. **Clinical laboratory tests used in the evaluation of disease states, and interpretation of test results**
  - a. Haematological, Liver function, Renal function, thyroid function tests
  - b. Tests associated with cardiac disorders
  - c. Fluid and electrolyte balance
  - d. Microbiological culture sensitivity tests
  - e. Pulmonary Function Tests
5. **Drug & Poison information**
  - a. Introduction to drug information resources available
  - b. Systematic approach in answering DI queries
  - c. Critical evaluation of drug information and literature
  - d. Preparation of written and verbal reports
  - e. Establishing a Drug Information Centre
  - f. Poisons information- organization & information resources
6. **Pharmacovigilance**
  - a. Scope, definition and aims of pharmacovigilance
  - b. Adverse drug reactions - Classification, mechanism, predisposing factors, causality assessment [different scales used]
  - c. Reporting, evaluation, monitoring, preventing & management of ADRs
  - d. Role of pharmacist in management of ADR.
7. Communication skills, including patient counselling techniques, medication history interview, presentation of cases.
8. Pharmaceutical care concepts
9. Critical evaluation of biomedical literature
10. Medication errors

### 4.3 CLINICAL PHARMACY (PRACTICAL)

**Practical : 3 Hrs./Week**

Students are expected to perform 15 practicals in the following areas covering the topics dealt in theory class.

- a. Answering drug information questions (4 Nos)
- b. Patient medication counselling (4 Nos)
- c. Case studies related to laboratory investigations (4 Nos)
- d. Patient medication history interview (3 Nos)



  
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CLINICAL PHARMACY				
YEAR: IV PHARM.D				
Week No.	Lecture No.	Topics to be covered	Teaching Aid	Dates
<b>Unit 1</b>				
<b>Introduction to clinical pharmacy</b>				
Week 1	L1	Definitions of clinical pharmacy	Chalk and Talk	11-06-2018
	L2	Development of clinical pharmacy	Chalk and Talk	12-06-2018
	L3	Development of clinical pharmacy	Chalk and Talk	13-06-2018
	L4	Scope of clinical pharmacy	Chalk and Talk	18-06-2018
	L5	Scope of clinical pharmacy	Googlemect	18-06-2021
<b>Unit 2</b>				
<b>Introduction to daily activities of a clinical pharmacist</b>				
	L6	Introduction to daily activities of a clinical pharmacist	Chalk and Talk	19-06-2018
Week 2	L7	Drug therapy monitoring	Chalk and Talk	20-06-2018
	L8	Medication chart review	Chalk and Talk	25-06-2018
	L9	Medication chart review	Power point	26-06-2018
	L10	Clinical review	Chalk and Talk	27-06-2018
	L11	Clinical review	Chalk and Talk	02-07-2018
	L12	Pharmacist interventions	Powerpoint	03-07-2018
Week 3	L13	Pharmacist interventions	Chalk and Talk	04-07-2018
	L14	Ward round participation	Chalk and Talk	09-07-2018
	L15	Ward round participation	LCD	10-07-2018
	L16	Ward round participation	Chalk and Talk	11-07-2018
	L17	Adverse drug reaction management	Chalk and Talk	11-07-2018
	L18	Types of drug management	Powerpoint	16-07-2018

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Week4	L19	Drug information	Chalk andTalk	17-07-2018
	L20	Poisons information	Chalk andTalk	18-07-2018
	L21	Poisons information	Chalk andTalk	23-07-2018
	L22	Poisons information	LCD	24-07-2018
	L23	Medication history	Chalk andTalk	25-07-2018
	L24	Medication history	Chalk andTalk	30-07-2018
Week5	L25	Patient counseling	Powerpoint	31-07-2018
	L26	Patient counseling	Chalk andTalk	01-08-2018
	L27	Drug utilization evaluation	Chalk andTalk	06-08-2018
	L28	Drug utilization evaluation	Chalk andTalk	07-08-2018
	L29	Drug utilisation evaluation (DUE) and review (DUR)	Powerpoint	08-08-2018
	L30	Drug utilisation evaluation (DUE) and review (DUR)	Chalk andTalk	13-08-2018
Week6	L31	Drug utilisation evaluation (DUE) and review (DUR)	Chalk andTalk	14-08-2018
	L32	Quality assurance of clinical pharmacy services	Powerpoint	20-08-2018
	L33	Quality assurance of clinical pharmacy services	Chalk andTalk	22-08-2018
	L34	Clinical pharmacy services	Chalk andTalk	27-08-2018
	L35	Clinical pharmacy services	Googlemeet	28-08-2018
<b>Unit 3</b> <b>Introduction to Patient data analysis</b>				
	L36	Patient data analysis	Chalk andTalk	29-08-2018
Week7	L37	The patient's case history, its structure	Powerpoint	29-08-2018
	L38	Use in evaluation of drug therapy	Chalk andTalk	10-09-2018
	L39	Understanding common medical abbreviations	Chalk andTalk	11-09-2018

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	L40	Understanding common medical abbreviations	Power point	12-09-2018
	L41	Terminologies used in clinical Practices	Chalk and Talk	17-09-2018
	L42	Terminologies used in clinical Practices	Google meet	18-09-2018
<b>Unit 4</b> <b>Introduction to Clinical laboratory tests</b>				
Week8	L43	Clinical laboratory tests used in the evaluation of disease states	Chalk and Talk	18-09-2018
	L44	Clinical laboratory tests used in the evaluation of disease states	Chalk and Talk	19-09-2018
	L45	Interpretation of test results	Powerpoint	24-09-2018
	L46	Hematological functions tests	Chalk and Talk	25-09-2018
	L47	Liver function tests	Chalk and Talk	26-09-2018
	L48	Liver function tests	Chalk and Talk	01-10-2018
Week9	L49	Renal function tests	LCD	03-10-2018
	L50	Renal function tests	Chalk and Talk	03-10-2018
	L51	Thyroid function tests	Chalk and Talk	08-10-2018
	L52	Thyroid function tests	Chalk and Talk	09-10-2018
	L53	Tests associated with cardiac disorders	LCD	10-10-2018
	L54	Tests associated with cardiac disorders	Chalk and Talk	15-10-2018
Week10	L55	Fluid and electrolyte balance	Powerpoint	16-10-2018
	L56	Fluid and electrolyte balance	Chalk and Talk	22-10-2018
	L57	Microbiological culture sensitivity tests	Chalk and Talk	23-10-2018
	L58	Microbiological culture sensitivity tests	Chalk and Talk	24-10-2018
	L59	Microbiological culture sensitivity tests	Chalk and Talk	29-10-2018
	L60	Pulmonary Function Tests	Chalk and Talk	30-10-2018

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Week12	L61	Pulmonary Function Tests	Powerpoint	31-10-2018	
	L62	Pulmonary Function Tests	Chalk andTalk	05-11-2018	
<b>Unit 5</b> <b>Introduction to Drug &amp; Poison information</b>					
Week13	L63	Drug & Poison information	Chalk andTalk	05-11-2018	
	L64	Introduction to drug information resources available	Chalk andTalk	06-11-2018	
	L65	Introduction to drug information resources available	Chalk andTalk	12-11-2018	
	L66	Systematic approach in answering DI queries	Chalk andTalk	13-11-2018	
	L67	Systematic approach in answering DI queries	Chalk andTalk	14-11-2018	
	L68	Critical evaluation of drug information and literature	Chalk andTalk	14-11-2018	
	L69	Critical evaluation of drug information and literature	Chalk andTalk	19-11-2018	
	L70	Critical evaluation of drug information and literature	Chalk andTalk	20-11-2018	
	L71	Preparation of written reports	Chalk andTalk	21-11-2018	
	L72	Preparation of written reports	Chalk andTalk	26-11-2018	
	Week14	L73	Preparation of written reports	Chalk andTalk	28-11-2018
		L74	Verbal reports	Chalk andTalk	28-11-2018
		L75	Establishing a Drug Information Centre	Chalk andTalk	10-12-2018
		L76	Establishing a Drug Information Centre	Chalk andTalk	11-12-2018
L77		Establishing a Drug Information Centre	Chalk andTalk	12-12-2018	
L78		Establishing a Drug Information Centre	Chalk andTalk	12-12-2018	
Week 15	L79	Poisons information	Chalk andTalk	17-12-2018	
	L80	Poisons information	Chalk andTalk	18-12-2018	
	L81	organization & information resources	Chalk andTalk	19-12-2018	
	L82	organization & information resources	Chalk andTalk	24-12-2018	

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	L83	organization & information resources	Chalk andTalk	26-12-2018
<b>Unit 6</b>				
<b>Introduction to Pharmacovigilance</b>				
	L84	Pharmacovigilance	Chalk andTalk	31-12-2018
Week 16	L85	Scope and definition	Chalk andTalk	31-12-2018
	L86	Scope and definition	LCD	02-01-2019
	L87	Aims of pharmacovigilance	Chalk andTalk	07-01-2019
	L88	Aims of pharmacovigilance	Chalk andTalk	08-01-2019
	L89	Adverse drug reactions	Chalk andTalk	09-01-2019
	L90	Adverse drug reactions	Powerpoint	21-01-2019
	Week17	L91	Classification and mechanism	Chalk andTalk
L92		Classification and mechanism	Chalk andTalk	22-01-2019
L93		Classification and mechanism	Chalk andTalk	23-01-2019
L94		Predisposing factors	Powerpoint	28-01-2019
L95		Predisposing factors	Chalk andTalk	29-01-2019
L96		Causality assessment	Chalk andTalk	29-01-2019
Week18	L97	Causality assessment	Powerpoint	30-01-2019
	L98	Reporting, evaluation	Chalk andTalk	04-02-2019
	L99	Reporting, evaluation	Powerpoint	05-02-2019
	L100	Monitoring, preventing & management of ADRs	Chalk andTalk	06-02-2019
	L101	Monitoring, preventing & management of ADRs	Chalk andTalk	11-02-2019
	L102	Monitoring, preventing & management of ADRs	Chalk andTalk	12-02-2019
<b>Unit 7</b>				
<b>Introduction to Communication skills</b>				
	L103	Communication skills	Chalk andTalk	12-02-2019

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Week19	L104	Including patient counselling techniques	Googlemmeet	13-02-2019
	L105	Including patient counselling techniques	Chalk andTalk	13-02-2019
	L106	Medication history interview	Chalk andTalk	18-02-2019
	L107	Presentation of cases	Chalk and Talk	19-02-2019
<b>Unit 8</b> <b>Introduction to Pharmaceutical care concepts</b>				
Week20	L108	Pharmaceutical care concepts	Chalk andTalk	20-02-2019
	L109	Pharmaceutical care concepts	Chalk andTalk	20-02-2019
	L110	Pharmaceutical care concepts	Googlemmeet	25-02-2019
<b>Unit 9</b> <b>Introduction to Critical evaluation of biomedical literature</b>				
	L111	Critical evaluation of biomedical literature	Chalk andTalk	25-02-2019
	L112	Critical evaluation of biomedical literature	Powerpoint	26-02-2019
	L113	Critical evaluation of biomedical literature	Chalk andTalk	27-02-2019
	L114	Critical evaluation of biomedical literature	Googlemmeet	11-02-2019
<b>Unit10</b> <b>Introduction to Medication errors</b>				
Week21	L115	Medication errors	Chalk andTalk	12-03-2019
	L116	Medication errors	Chalk andTalk	13-03-2019
	L117	Types of Medication errors	Powerpoint	18-03-2019
	L118	Types of Medication errors	Chalk andTalk	19-03-2019
	L119	Management of Medication errors	LCD	20-03-2019
	L120	Management of Medication errors	Chalk andTalk	25-03-2019

*S. Srinivas*  
Signature of the Faculty

*[Signature]*  
Principal

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