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Website: www.geethanjaliinstitutions.com

Geethanjali College of Pharmacy

Approved By AICTE, PCI New Delhi, Permanently Affiliated to JNTUH & Accredited by NBA (B. Pharmacy)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, by DSIR-SIRO & HI/BI of MSME Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal-Malkajgiri District, Telangana State - 501 301.

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S. No.	List of Documents							
1.	JNTUH, Hyderabad (Affiliating University) prescribed syllabus copies showing							
1.	courses that include experimental learning through project work/field							
	work/internship for the year 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21.							
2.	Minutes of the College Academic Committee meetings with approvals for courses that include experimental learning through project work/field work/internship							
	for the year 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21.							

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Geethanjali Cotlege of Pharmacy Cheeryal(V), Keessia(M), Madena, Disc. T.S. 501391.

Sponsored by : TEJA EDUCATIONAL SOCIETY, HYDERABAD.

Office: Sy. No. 33 & 34, Cheeryal (V), Keesara (M), Medchal-Malkajgiri (District), Telangana State - 501 301.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. PHARMACY I YEAR COURSE STRUCTURE AND SYLLABUS

Effective from Academic Year 2017-18 Admitted Batch

I Year I semester

S.	Course Code	Subject	L	Т	Р	Credits
No						
1	PS101	Human Anatomy and Physiology I	3	1	-	3
2	PS102	Pharmaceutical Analysis I	3	1	-	3
3	PS103	Pharmaceutics I	3	1	-	3
4	PS104	Pharmaceutical Inorganic Chemistry-I	3	1	-	3
5	HS105	Communication skills	2	-	-	2
6	BS106/BS107	Remedial Biology# / Remedial Mathematics\$	2 [#] /3 ^{\$}	-	-	2#/3\$
7	PS108	Human Anatomy and Physiology-I lab	-	-	4	2
8	PS109	Pharmaceutical Analysis-I lab	-	-	4	2
9	PS110	Pharmaceutics I lab	-	-	4	2
10	PS111	Pharmaceutical Inorganic Chemistry-I lab	-	-	4	2
11	HS112	Communication skills lab	-	-	2	1
12	BS113	Remedial Biology lab	-	-	2	1
		Total	16/17	4	20	26 [#] /26 ^{\$}

^{*}Applicable ONLY for the students who have studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology (RB) course.

I Year II semester

S.	Course	Subject	L	Т	Р	Credits
No	Code					
1	PS201	Human Anatomy and Physiology II	3	1	-	3
2	PS202	Pharmaceutical Organic Chemistry I	4	1	-	4
3	DS203	Diochemistry	3	1	-	3
4	BS204	Pathophysiology	3	1	-	3
5	CS205	Computer Applications in Pharmacy	3	-	-	3
6	PS206	Human Anatomy and Physiology II lab	-	-	4	2
7	PS207	Pharmaceutical Organic Chemistry I lab	-	5 -	4	2
8	BS208	Biochemistry lab	-	-	4	2
y	CS209	Computer Applications in Pharmacy lab	-	-	2	1
10	*MC200	NSS		-	-	-
		Total	16	4	14	23

^{*}MC - Mandatory Course - Satisfactory/ Unsatisfactory.



^{\$}Applicable CNLY for the students who have studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM) course.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. PHARMACY COURSE STRUCTURE (2016-17)

II YEAR I SEMESTER

S. No	Course	Subject	L	Т	P	Credits
D. 1.0	Code	- Langeet	_			or cure
1	PS301	Pharmaceutical Organic Chemistry – III	4	1	0	4 .
2	PS302	Pharmaceutical Unit Operations – I	4	1	0	4
3	PS303	Hospital and Community Pharmacy	3	1	0	3
4	PS304	Pharmacognosy – I	3	1	0	3
5	PS305	Pharmaceutical Analysis – I	4	1	0	4
6	PS306	Pharmaceutical Organic Chemistry – III Lab	0	0	3	2
7	PS307	Pharmacognosy – I Lab	0	0	3	2
8	PS308	Pharmaceutical Analysis – I Lab	0	0	3	2
9	*MC309	Environmental Science and Technology	3	0	0	0
		Total	21	5	9	24

*MC - Mandatory Course

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Geethanjali College of Pharmacy Effectyal(V), Keesara(M), Medichal Dist. T.S. -501361.

7 ______ B. PHARMACY 2013-14

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD. B. PHARMACY

1 YEAR

Code	Subject	T	C	P	Code	Ċ
R10001,	Remedial Mathematics/ Remedial Biology	4+1/2+1	8/4	0/3	(R10051)	0/4
R10002	Dispensing and General Pharmacy	3+1	6	3	(R10052)	4
R10003	Pharm. Inorganic Chemistry	4+1	8	3	(R10053)	4
R10004	Pharmaceutical Organic Chemistry-I	3+1	6	3	(R10054)	4
R10005	Anatomy, Physiology and Health education	3+1	6	3 =	(R10055)	4
R10006	English	2	4	2	(R10056)	2
*	Total	24/22	38/34	14/17	The state of	18/22

II YEAR I SEMESTER

Code	Subject	T	C	P	Code	· C
R30007(+	Pharmaceutical Unit Operations –I	4+1	4	-	8-1-1	1.5
R30008	Pharmaceutical Organic Chemistry – II	4+1	4	3	(R30057)	2
R30009	Statistical Methods & Computer Applications	4+1	. 4	3	(R30058)	2
R30010	Physical Pharmacy – I	4+1	4	3	(R30059)	2
R30011 o	Anatomy, Physiology & Pathophysiology	4+1	4-	3	(R30060)	2
-	Total	25	20	12	12277	8

II YEAR II SEMESTER

Code	Subject	To	C	P	Code	C
R40012	Pharmaceutical Unit Operations- II	4+1	42	3	(R40061)	2
R40013	Pharmaceutical Biochemistry	. 4+1	4	3	(R40062)	2
R40014	Pharmacognosy-I	4+1	c 49°	3 4	(R40063)	2
R40015	Physical Pharmacy – II	4+1	4	3	(R40064)	2
R40016	Environmental Studies	4+1	4.		i_ later	
	Total	25	20	12		8

III YEAR I SEMESTER

Code	Subject	T.	C	P	Code	. C
R50017	Pharmaceutical Analysis I	4+1	4	3-	(R50065)	2
R50018	Pharmaceutical Microbiology	4+1	4	3. 、	(R50066),	2
R50019	Pharmacognosy-II	4+1	4	3	(R50067)	2
R50020	Pharmaceutical Technology –I	4+1	4	3	(R50068)	2
R50021	Pharmacology -I	4+1	4-		di	5 J
	Total	25	20	12		8

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Geethanjali College of Pharmacy

Geethanjali College of Pharmacy
Cheeryal(V), Keesara(N), Medchal Dist. T.S.-501301.

B. PHARMACY 2013-14

III YEAR II SEMESTER

Code	Subject	T	I C	I p	Code	_
R60022	Medicinal Chemistry – I	3+1	3	3	(R60070)	0
R60023	Pharmaceutical Technology-II	3+1	3	3	(R60071)	2
R60024	Pharmacology II	4+1	4	3	(R60071)	2
R60025	Chemistry of Natural Products	4+1	4.	3	(R60073)	2
R60026	Pharmaceutical Jurisprudence	4+1	4,	-	(1100073)	2
R60069	Advanced Communication Skills Lab	- ;;		3		2
	Total	23	18	15		10

IV YEAR I SEMESTER

Code	Subject	T	I C	Р	Code	С
R70027	Pharmacognosy III	3+1	3,	3	(R70075)	2
R70028	Biopharmaceutics and Pharmacokinetics	3+1	3	3	(R70076)	2
R70029	Pharmacology III	4+1	4	3.	(R70077)	2
R70030	Medicinal Chemistry II	4+1	4.	3.	(R70078)	2
R70031	Pharmacy Administration	4+1	4		(1.11 001 0)	<u>-</u>
R70074	Seminar / Industrial Visit	-		-		2
	Total	23	18	12		10

IV YEAR II SEMESTER

Code	Subject	T	I C	Р	Code	С
R80032	Novel Drug Delivery Systems and Regulatory Affairs	3+1	3	3.	(R80080)	2
R80033	Pharmaceutical Biotechnology	4+1	4.	3	(R80081)	2
R80034	Pharmaceutical Analysis - II	3+1	3 .	3	(R80082)	2
R80035	Human Values and Professional Ethics	4	4 .	-	(1100002)	
R80036	Clinical Pharmacy Practice	4+1	4			<u> </u>
R80079	Project work** & Comprehensive Viva	-	-	-		4
	Total	22	18	9		10

** Suggested areas for project work.

1. Industrial Pharmacy
2. Clinical Pharmacy / Pharmacology
3. Pharmacognosy / Medical Chemistry
4. Pharmaceutical Analysis / Quality Assurance

[PUBLISHED IN THE GAZETTE OF INDIA, No.19, PART III, SECTION 4]

Ministry of Health and Family Welfare (Pharmacy Council of India)

New Delhi, 10th May, 2008.

Pharm.D. Regulations 2008

Regulations framed under section 10 of the Pharmacy Act, 1948 (8 of 1948).

(As approved by the Government of India, Ministry of Health vide, letter No.V.13013/1/2007-PMS, dated the 13th March, 2008 and notified by the Pharmacy Council of India).

No.14-126/2007-PCI.— In exercise of the powers conferred by section 10 of the Pharmacy Act, 1948 (8 of 1948), the Pharmacy Council of India, with the approval of the Central Government, hereby makes the following regulations, namely:-

CHAPTER-I

- 1. Short title and commencement. (1) These regulations may be called the Pharm.D. Regulations 2008.
 - (2) They shall come into force from the date of their publication in the official Gazette.
- 2. Pharm.D. shall consist of a certificate, having passed the course of study and examination as prescribed in these regulations, for the purpose of registration as a pharmacist to practice the profession under the Pharmacy Act, 1948.

CHAPTER-II

- 3. Duration of the course.
 - a) Pharm.D: The duration of the course shall be six academic years (five years of study and one year of internship or residency) full time with each academic year spread over a period of not less than two hundred working days. The period of six years duration is divided into two phases
 - Phase I consisting of First, Second, Third, Fourth and Fifth academic year.
 - Phase II consisting of internship or residency training during sixth year involving posting in speciality units. It is a phase of training wherein a student is exposed to actual pharmacy practice or clinical pharmacy services and acquires skill under supervision so that he or she may become capable of functioning independently.
 - b) Pharm.D. (Post Baccalaureate): The duration of the course shall be for three academic years (two years of study and one year internship or residency) full time with each academic year spread over a period of not less than two hundred working days. The period of three years duration is divided into two phases
 - Phase I consisting of First and Second academic year.
 - Phase II consisting of Internship or residency training during third year involving posting in speciality units. It is a phase of training wherein a student is exposed to actual pharmacy practice or clinical pharmacy services, and acquires skill under supervision so that he or she may become capable of functioning independently.
- 4. Minimum qualification for admission to. -
- a) Pharm.D. Part-I Course A pass in any of the following examinations -
- (1) 10+2 examination with Physics and Chemistry as compulsory subjects along with one of the following subjects:

Mathematics or Biology.

- (2) A pass in D.Pharm course from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act.
- (3) Any other qualification approved by the Pharmacy Council of India as equivalent to any of the above examinations.

Provided that a student should complete the age of 17 years on or before 31st December of the year of admission to the course.

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.

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.

TABLES

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
	Total hours	16	18	6 = (40)

^{*} For Biology

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
	Total Hours	17	9	6 = 32

Third Year:

S.No.	Name of Subject No. hou The		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
	Total hours	16	15	5 = 36

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
	Total hours	15	12	6 = 33

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	-
	Total hours	8	20	4 = 32

^{*} Attending ward rounds on daily basis.

All the Examining Authorities conducting Pharm.D & Pharm.D (Post Baccalaureate) examinations

Sub: Inclusion of Pharmacotherapeutics I & II in IV year for Pharm.D. (Post Baccalaureate) students.

Sir

This has a reference to the subject cited above. In this connection, I am directed to state that the subject of Pharmacotherapeutics I & II be included in the course of study and examination of IVth year for Pharm.D. (Post Baccalaureate) students. A copy of the Pharmacotherapeutics syllabus I & II is enclosed herewith for your ready reference and also available on Council's website "www.pci.nic.in".

Yours faithfully

Sd/-

(ARCHNA MUDGAL)
Registrar-cum-Secretary

PHARM. D. POST BACCALAUREATE PROGRAM

(Inclusion of Pharmacotherapeutics I & II subject in the fourth year of the program)

SYLLABUS FOR PHARMACOTHERAPEUTICS I & II (THEORY)

Theory: 3Hrs/week

• Etiopathogenesis and pharmacotherapy of diseases associated with following systems/ diseases.

1.	Cardiovascular system:	,
	Hypertension, Congestive cardiac	
	failure, Angina Pectoris, Myocardial infarction,	Total = 13 hrs
	Hyperlipidaemias ,	(3+2+2+2+2+2)
	Electrophysiology of heart and	
	Arrhythmias	
2.	Respiratory system: Introduction	
	to Pulmonary function test,	Total = 6
	Asthma, Chronic obstructive	(1+2+2+1)
	airways disease, Drug induced	(1 1 2 1 2 1 1)
	pulmonary diseases	
3.	Endocrine system : Diabetes,	75 4 1 0
	Thyroid diseases, Oral contraceptives, Hormone	
	contraceptives, Hormone replacement therapy, Osteoporosis	(3+2+1+1+1)
4.	General prescribing guidelines	
١.	for	
	a. Paediatric patients	Total = 4hrs
	b. Geriatric patients	(1+1+2)
	c. Pregnancy and breast feeding	
5.	Ophthalmology: Glaucoma,	(3 hrs)
	Conjunctivitis- viral & bacterial	(5 1118)
6.	Introduction to rational drug use	
	Definition, Role of pharmacist	
	Essential drug concept Rational	(1+1)
	drug formulations	1 mine of

7.	Infectious disease: Guidelines for the rational use of antibiotics and surgical Prophylaxis, Tuberculosis, Meningitis, Respiratory tract infections, Gastroenteritis, Endocarditis, Septicemia, Urinary tract infections, Protozoal infection- Malaria, HIV & Opportunistic infections, Fungal infections, Viral infections, Gonarrhoea and Syphillis	Total = 18 hrs. (2+1+1+2+1+1+1+2 +1+2+1+1+1+1)
8.	Musculoskeletal disorders Rheumatoid arthritis, Osteoarthritis,	Total = 6 hrs.
	Gout, Spondylitis, Systemic lupus	(2+1+1+!+1)
	erythematosus.	
9.	Renal system	
	Acute Renal Failure, Chronic Renal	201200 SAC STATE STATE
	Failure, Renal Dialysis, Drug induced	(2+1+1+1)
	renal disorders	i i
10.	Oncology: Basic principles of Cancer	
	therapy, General introduction to cancer	
	chemotherapeutic agents,	
	Chemotherapy of breast cancer,	(2+1+2+1)
	leukemia. Management of	
	chemotherapy nausea and emesis	
11,	Dermatology: Psoriasis, Scabies, Eczema, Impetigo	Total = 4hrs.

PHARMACOTHERAPEUTICS – I & II (PRACTICAL)

Practicals: 3 Hrs./Week

Practicals:

Hospital postings in various departments designed to complement the lectures by providing practical clinical discussion; attending ward rounds; follow up the progress and changes made in drug therapy in allotted patients; case presentation upon discharge. Students are required to maintain a record of cases presented and the same should be submitted at



the end of the course for evaluation. A minimum of 20 cases should be presented and recorded covering most common diseases.

Assignments:

Students are required to submit written assignments on the topics given to them. Topics allotted should cover recent developments in drug therapy of various diseases. A minimum of THREE assignments [1500 – 2000 words] should be submitted for evaluation.

Format of the assignment:

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

Scheme of Practical Examination:

	Sessionals	Annual
Synopsis	05	15
Major Experiment	10	25
Minor Experiment	03	15
Viva	02	15
Max Marks	20	70
Duration	03hrs	04hrs

Note: Total sessional marks is 30 (20 for practical sessional plus 10 marks for regularity, promptness, viva-voce and record maintenance).

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M. Pharmacy (PHARMACEUTICS / PHARMACEUTICAL TECHNOLOGY)

COURSE STRUCTURE AND SYLLABUS Effective from Academic Year 2017-18 Admitted Batch

I Year - I Semester

Category	Course Title	Int. marks	Ext. marks	L	Р	С
Core Course I	Advanced Physical Pharmaceutics	25	75	4		4
Core Course II	Modern Pharmaceutics-I	25	75	4		4
Core Course III	Applied Biopharmaceutics and Pharmacokinetics	25	75	4		4
Core Elective I	Modern Pharmaceutical Analytical Techniques Intellectual Property Rights	25	75	4	-	4
Open Elective I	 Pharmacoepidemiology and Pharmacoeconomics Drug Regulatory Affairs Herbal Cosmetics Technology Pharmaceutical Validation Pharmaceutical Management 	25	75	4		4
Laboratory I	Advanced physical Pharmaceutics Lab	25	75		6	3
Laboratory II	Applied Biopharmaceutics and Pharmacokinetics Lab	25	75		6	3
Seminar I	Seminar	50			4	2
	Total Credits			20	16	28

I Year - II Semester

Category	Course Title	Int.	Ext.	L	Р	С
330		marks	marks			
Core Course IV	Advanced Drug Delivery Systems	25	75	4		4
Core Course V	Industrial Pharmacy	25	75	4		4
Core Course VI	Modern Pharmaceutics-II	25	75	4		4
Core Elective II	Biostatistics And Research	25	75	4		4
	Methodology					
The same of the sa	2. Stability of Drugs and Dosage Forms	,				
Open Elective II	Screening Methods in Pharmacology	25	75	4	-	4
	2. Nano Based Drug Delivery Systems					
	3. Nutraceuticals					
	4. Entrepreneurship management					
	5. Clinical Research And					
	Pharmacovigilance			İ		
Laboratory III	Advanced Drug Delivery Systems Lab	25	75		6	3
Laboratory IV	Modern Pharmaceutics Lab	25	75	 	6	3
Seminar II	Seminar	50		T	4	2
Total Credits				20	16	28



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD M. Pharmacy (PHARMACEUTICS / PHARMACEUTICAL TECHNOLOGY)

COURSE STRUCTURE AND SYLLABUS

I Year - I Semester

Category	Course Title	Int.	Ext.	L	Р	С
Core Course I	Applied District	marks	marks			
Core Course II	Applied Biopharmaceutics and Pharmacokinetics	25	75	4		4
Core Course III	Advanced Physical Pharmaceutics	25	75	4		4
	Advanced Pharmaceutical Technology –I	25	75	4		1
Core Elective I	 Modern Pharmaceutical Analytical Technique Intellectual Property Rights and Regulatory Affairs 	25	75	4		4
Open Elective I	 Pharmacoepidemiology, Pharmacoeconomics and Pharmacovigilance Drug Regulatory Affairs (National & International) Herbal Cosmetic Technology Separation Methods Pharmaceutical Management – I 	25	75	4		4
Laboratory II	Modern Pharmaceutical Analytical Techniques Lab	25	75	4		4
Seminar I	Advanced physical Pharmaceutics Lab	25	75		4	2
Jennal I	Seminar	50			4	2
	Total Credits			24	8	28

I Year - II Semester

Category	Course Title	Int.	Ext.	L	Р	С
Core Course IV	Advanced Drug Delivery Systems	marks	marks			
Core Course V	Industrial Pharmacy	25	75	4		4
Core Course VI	Advanced Discovery	25	75	4		4
Core Elective II	Advanced Pharmaceutical Technology II	25	75	4		4
	Biostatistics And Research Methodology Screening Methods & Clinical Research	25	75	4	-	4
Open Elective II	Stability of Drugs and Dosage Forms Nano Based Drug Delivery Systems Nutraceuticals Pharmaceutical Management-II	25	75	4		4
Laboratory III	Advanced Drug Delivery Systems Lab					
Laboratory IV	Advanced Pharmaceutical Technology Lab	25	75	4		4
Seminar II	Seminar Seminar	25	75		4	2
Total Credits	Ceminal	50			4	2
Trouto				24	8	28

Il Year - I Semester

Comprehensive View V	int. marks	Ext. marks	L	Р	С
Comprehensive Viva-Voce Project work Review I		100			4
	50			24	12
Total Credits				24	16

Il Year - Il Semester

Course IItle	Int	Ext.	L	P	G
Project work Review II	marks	marks			_
Project Evaluation (Viva-Voce)	50			8	4
		150		16	12
Total Credits				24	16



PRINCIPALS

Goothaniali College of Pharmacy

(Reprodict Responsibility, Medicial Dist. 15: 501:00)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M. Pharmacy (PHARMACEUTICAL ANALYSIS & QUALITY ASSURANCE) / (QUALITY ASSURANCE)

COURSE STRUCTURE AND SYLLABUS Effective from Academic Year 2017-18 Admitted Batch

I Year - I Semester

Category	Course Title	Int. marks	Ext. marks	L	Р	С
Core Course I	Advanced Pharmaceutical Analysis	25	75	4		4
Core Course II	Food Analysis	25	75	4		4
Core Course III	Modern Pharmaceutical Analytical Techniques	25	75	4		4
Core Elective I	Pharmaceutical Validation Intellectual Property Rights	25	75	4	-	4
Open Elective I	Drug Regulatory Affairs Pharmacoepidemiology and Pharmacoeconomics Pharmaceutical Management Herbal Cosmetics Technology Pharmaceutical Formulation Technology	25	75	4	lan y	4
Laboratory I	Modern Pharmaceutical Analytical Techniques Lab	25	75	-	-6	3
Laboratory II	Advanced Pharmaceutical Analysis Lab	25	75		6	3
Seminar I	Seminar	50			4	2
	Total Credits	0.1		20	16	28
I Year – II Semes	ster					

I Year - II Semester

Category	4	Course Title	Int. marks	Ext. marks	L	Р	С
Core Course IV	Adv	vanced Instrumental Analysis	25	75	4		4
Core Course V	Qua	ality Control and Quality Assurance	25	75	4		4
Core Course VI	Mod	dern Bio analytical Techniques	25	75	4		4
Core Elective II	1. 2.	Biostatistics And Research Methodology Spectral Analysis	25	75	4		4
Open Elective II	1. 2. 3. 4. 5.	Screening Methods in Pharmacology Stability of Drugs and Dosage Forms Entrepreneurship management Nano Based Drug Delivery Systems Herbal & Cosmetics Analysis	25	75	4		4
Laboratory III	Adv	anced Instrumental Analysis Lab	25	75	-	6	4
Laboratory IV	Qua	ality Control and Quality Assurance Lab	25	75		6	2
Seminar II	Ser	ninar	50			4	2
-		Total Credits			20	16	28



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE / QA COURSE STRUCTURE AND SYLLABUS

I Year - I Semester

Category	Course Title	Int. marks	Ext. marks	L	Р	С
Core Course I	Separation Techniques	25	75	4		4
Core Course II	Advanced Pharmaceutical Analysis – I	25	75	4		4
Core Course III	Quality Control of Bulk Drugs and Formulations	25	75	4		4
Core Elective I	Modern Pharmaceutical Analytical Technique Intellectual Property Rights and Regulatory Affairs	25	75	4		4
Open Elective I	 Pharmacoepidemiology, Pharmacoeconomics and Pharmacovigilance Drug Regulatory Affairs (National And International) Herbal Cosmetics Technology Pharmaceutical Management – I Advanced Physical Pharmaceutics 	25	75	4		4
Laboratory I	Modern Pharmaceutical Analytical Techniques Lab	25	75	4		4
Laboratory II	Advanced Pharmaceutical Analysis-I Lab	25	75		4	2
Seminar I	Seminar	50			4	2
	Total Credits			24	8	28

I Year - II Semester

1 Year – II Semes					-	
Category	Course Title	Int.	Ext.	L	P	С
		marks	marks			
Core Course IV	Advanced Pharmaceutical Analysis – II	25	75	4		4
Core Course V	Spectral Analysis	25	75	4		4
Core Course VI	Quality Assurance	25	75	4		4
Core Elective II	Biostatistics And Research Methodology	25	75	4		4
	2. Screening Methods & Clinical Research			1		
Open Elective II	Stability of Drugs and Dosage Forms	25	75	4		4
	Nano Based Drug Delivery Systems					
	3. Nutraceuticals					
	Pharmaceutical Product development and					
	Management					
	5. Pharmaceutical Management-II					
Laboratory III	Advanced Pharmaceutical Analysis - II Lab	25	75	4		4
Laboratory IV	Spectral Analysis Lab	25	75		4	2
Seminar II	Seminar	50			4	2
Total Credits				24	8	28

II Year - I Semester

Course Title	Int. marks	Ext. marks	L	Р	С
Comprehensive Viva-Voce		100			4
Project work Review I	50			24	12
Total Credits				24	16

Il Year - Il Semester

Course Title	Int. marks	Ext. marks	L	Р	С
Project work Review II	50			8	4
Project Evaluation (Viva-Voce)		150		16	12
Total Credits				24	16



PRINCIPAL:
Geothaniali College of Pharmacy
Cheerval(Y), Keesara(M), Medchal Dist, 1.5.:591301.



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M. Pharmacy (PHARMACEUTICAL MANAGEMENT AND REGULATORY AFFAIRS)

COURSE STRUCTURE AND SYLLABUS Effective from Academic Year 2017-18 Admitted Batch

I Year - I Semester

Category	Course Title	Int.	Ext.	L	Р	С
		marks	marks			
Core Course I	Pharmaceutical Management – I (General and	25	75	4		4
	Personnel)					
Core Course II	Drug Regulatory Affairs	25	75	4		4
Core Course III	Modern Pharmaceutical Analytical Techniques	25	75	4		4
Core Elective I	Total Quality Management	25	75	4	-#	4
	2. Intellectual Property Rights			A		E j
Open Elective I	Pharmacoepidemiology and	25	75	4	1 T	4
	Pharmacoeconomics			1	P.	
	2. Herbal Cosmetics Technology		71	18		
	3. Phytochemistry	1900				
	4. Pharmaceutical Formulation Technology		Part			
	5. Pharmaceutical Validation					
Laboratory I	Modern Pharmaceutical Analytical Techniques	25	75		6	3
	Lab	1				
Laboratory II	Pharmaceutical Management Lab	25	75		6	3
Seminar I	Seminar	50			4	2
0	Total Credits			20	16	28

I Year - II Semester

Category	Course Title	Int. marks	Ext. marks	L	Р	С
Core Course IV	Pharmaceutical Management –II (Production, Marketing, Finance and Project)	25	75	4		4
Core Course V	Analytical Method Validation and Copyrights and Trademarks	25	75	4		4
Core Course VI	Pharmaceutical Market Research and Analysis	25	75	4		4
Core Elective II	Biostatistics And Research Methodology Stability of Drugs and Dosage Forms	25	75	4		4
Open Elective II	 Screening Methods in Pharmacology Nano Based Drug Delivery Systems Nutraceuticals Advanced Drug Delivery Systems Clinical Research and Pharmacovigilance 	25	75	4		4
Laboratory III	Analytical Method Validation Lab	25	75		6	3
Laboratory IV	Pharmaceutical Market Research and Analysis Lab	25	75		6	3
Seminar II	Seminar	50			4	2
Total Credits				20	16	28





Category	Course Title	Int. marks	Ext. marks	L	Р	С
Core Course I	Pharmaceutical Management –I (General and Personnel)	25	75	4		- 4
Core Course II	Total Quality Management	25	75	4		4
Core Course III	Drug Regulatory Affairs (National and International Aspects)	25	75	4		4
Core Elective I	 Modern Pharmaceutical Analytical Technique Intellectual Property Rights and Regulatory Affairs 	25	75	4		4
Open Elective I	 Pharmacoepidemiology, Pharmacoeconomics and Pharmacovigilance Herbal Cosmetics Technology Advanced Pharmaceutical Technology –! Industrial Pharmaceutics Separation Techniques 	25	75	4	-	4
Laboratory I	Modern Pharmaceutical Analytical Techniques Lab	25	75	4		4
Laboratory II	Pharmaceutical Management Lab	25	75		4	2
Seminar I	Seminar	50			4	2
	Total Credite			24	8	28

I Year - II Samester

Category	Course Title	Int. marks	Ext. marks	L.	Р	C
Core Course IV	Pharmaceutical Management –II (Production, Marketing, Finance and Project)	25	75	4		4
Core Course V	Analytical Method Validation and Copyrights and frademarks	25	75	4		4
Core Course VI	Pharmaceutical Market Research and Analysis	25	75	4		4
Core Elective II	Biostatistics And Research Methodology Screening Methods & Clinical Research	25	75	4		4
Open Elective II	 Stability of Drugs and Dosage Forms Nano Based Drug Delivery Systems Nutraceuticals Advanced Drug Delivery Systems Advanced Pharmaceutical Technology -II 	25	75	4	-	4
Laboratory III	Analytical Method Validation Lab	25	75	4		4
Laboratory IV	Pharmaceutical Market Research and Analysis Lab	25	75		4	2
Seminar II	Seminar	50			4	2
Total Credits				24	8	28

II Year - I Semester

Course Title	Int.	Ext. marks	L	Р	С
Comprehensive Viva-Voce		100			A
Project work Review I	50	100		24	12
Total Credits				24	16

il Year - II Semester

Course Title	Int. marks	EXt.	L	Ь	C
Project work Review II	50			8	4
Project Evaluation (Viva-Voce)		150		10	12
Total Credits				24	16

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GEETHANJALI COLLEGE OF PHARMACY

Cheeryal (V), Keesara (M), Medchal (D)

Dt: 14/06/2017

CIRCULAR

Subject: College Academic Committee meeting for the A.Y.2017-18- Reg.

The College Academic Committee meeting is scheduled on 15/06/2017 at 3.00 P.M in Board room. All Board members are requested to attend the same.

AGENDA POINTS

- Consideration of the important communications, policy decisions received from the University, State Government, AICTE/PCI, etc., from time to time.
- To pass the annual budget of the College (including clearance of all University dues).
- To monitor the students' Performance and faculty development programs
- To approve the increase/reduction of intake, courses, new and closure.
- To discuss about experiential learning courses in B.Pharmacy, Pharm D, Pharm D(PB) and M. Pharmacy programmes
- Approval of performance appraisal of faculty.
- To monitor and advice for Industry Institute Interactions.
- To monitor the steps taken for Students Training and Placement Activities.

GEETHANJALI COLLEGE OF PHARMACY

Cheeryal (V), Keesara (M), RR (D)

Date: 14/06/2017

COLLEGE ACADEMIC COMMITTEE (CAC) MINUTES OF MEETING

Ref: GCPK/CAC/MOM/03

DATE AND TIME OF THE MEETING: 14/06/2017 at 3.00 P.M.

The 3rd meeting of the College Academic Committee (CAC) of GCPK was held on 09th June 2017 at Board Room, GCPK. The meeting was chaired by Dr. M. Ravi Kumar, Principal and Chair Person, CAC, GCPK. The list of members who attended the meeting is enclosed.

The meeting commenced with a word of welcome by Dr. M. Ravi Kumar, Principal and Chair Person. He explained the members about the functions of CAC. All agendas were placed before board to discuss and take action.

1. Agenda: Curriculum Revision & Academic Regulation.

Resolution:

The Chairperson reported that the references or opinions on the revised curriculum were received from the Jawaharlal Nehru Technological University Hyderabad and the same is to be followed by the college. The member in-charge discussed about the changes made in regulation and syllabus must be included according to PCI for B.Pharmacy Ist year (2017-21 Batch), academic calendars given by the university and college for all the years batch wise are to be implemented and followed accordingly.

2. Agenda: Discussion about experiential learning courses in B.Pharmacy, Pharm D, Pharm D (PB) and M. Pharmacy programmes

The chair person person discussed about experiential learning courses in B.Pharmacy, Pharm

- D, Pharm D (PB) and M. Pharmacy programmes with all members. The members approved and the list of courses are enclosed in Annexure A
- 3. Agenda: Training and Placement cell

Resolution:

The chair person suggested to conductance of guest lectures, workshops, seminars, industrial visits & educational tours for students. He also proposed a team for organizing campus placement drives and off – campus interviews.

4. Agenda: Discussion regarding the upcoming National Conference Dravyaka in the college.

Resolution:

The chair person discussed about the topic to be introduced in the 9th National Conference "DRAVYAKA" which is proposed to be held in the 2nd week of March 2018.

The chair person suggested the active participation of all faculty and student members.

5. Agenda: Discussion about National Pharmacy Week held in November.

Resolution:

The chair person discussed about 56th National pharmacy week to be held on 18-11-2017 to 24-11-2018.

The chair person planned to conduct pharma rally in Cheeryal village and informed to all faculty members and students to participate and make it a grand success.

6. Agenda: Discussion regarding Awards for classes and students:

Resolution:

Chairperson proposed to give prize/appreciation certificate for academic toppers. The chair person informed all faculty members to encourage and motivate students to participate actively in academics/extracurricular activities.

7. Agenda: Discussion to attain new approvals to the college.

Resolution:

The member secretary discussed regarding implementing DSIR SIRO approval to the college. Primary endeavor of DSIR is to promote R&D by the industries, support a larger cross section of small and medium industrial units to develop state-of-the art globally competitive technologies.

Board Chair Person: Dr. M. Ravi Kumar, Professor & Principal

Board Members:

S.No.	Name	Designation	Nature	Signature
1	Dr. M. Ravi Ku nar	Professor & Principal	Coordinator	burburk T
2	Dr. M. Srinivas	HOD, Pharmaceutical Chemistry	Member Incharge	- Market
3	Dr. B. Battacharya	HOD, Pharmacology	Member	BISh Zity
4	Dr. T. Mangilal	HOD, Pharmaceutics	Member	ON X
5	Dr. Bharat Bhushan Mohapatra	HOD, Pharmacognosy	Member	Brahyaba
6	Dr. R. Sivakumar	Incharge, Exam branch	Member	.630
7	Dr. B. Rambabu	HOD, PharmD	Member	ABSENT

Copy to: Principal/Secretary for kind Information

Dr. M. Ravi Kumar

(Chair Person)

GEETHANJALI COLLEGE OF PHARMACY

Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State- 501301

ANNEXURE-A

The following courses that include experiential learning through project work and field work (Industry Training) for B. Pharmacy (Program Code: Z51R; JNTUH Regulation: R13) are approved by the College Academic Committee for the Academic Year 2017-18.

S.No.	Year of Study	Name of the Course	Course Code
1		Dispensing and General Pharmacy	R1002
2		Pharm. Inorganic Chemistry	R1003
3		Pharmaceutical Organic Chemistry-I	R1004
4		Anatomy, Physiology and Health Education	R1005
5	T T/	Dispensing and General Pharmacy Lab	R10052
6	I Year	Pharm. Inorganic Chemistry Lab	R10053
7		Pharmaceutical Organic Chemistry-I Lab	R10054
8		Anatomy, Physiology and Health Education Lab	R10055
9		Pharmaceutical Unit Operations- I	R3007
10		Pharmaceutical Organic Chemistry - II	R3008
11		Statistical Methods and Computer Applications	R3009
12	-	Physical Pharmacy – I	R3010
13	1	Anatomy, Physiology and Pathophysiology	R3011
14	1	Pharmaceutical Organic Chemistry-II Lab	R30057
15	1	Statistical Methods and Computer Applications	R30058
16	1	Physical Pharmacy – I Lab	R30059
17	II Year	Anatomy, Physiology & Pathophysiology-Lab	R30060
18		Pharmaceutical Unit Operations -II	R40012
19	1	Pharmaceutical Biochemistry	R40013
20	1	Pharmacognosy-I	R40014
21	1	Physical Pharmacy-II	R40015
22	1	Pharmaceutical Unit Operations- II Lab	R40061
23	1	Pharmaceutical Biochemistry Lab	R40062
24	1	Pharmacognosy-I Lab	R40063
25		Physical Pharmacy-II Lab	R40064
26		Pharmaceutical Analysis-I	R50017
27	III Vaan	Pharmaceutical Microbiology	R50018
28	- III Year	Phannacognosy=II	R50019
29		Pharmaceutical Technology-I	R50020



30		Pharmacology-I	R50021
31		Pharmaceutical Analysis-I Lab	R50065
32		Pharmaceutical Microbiology Lab	R50066
33		pharmacognosy- II lab	R50067
34		Pharmaceutical Technology-I Lab	R50068
35		Medicinal Chemistry-I	R60022
36		Pharmaceutical Technology-II	R60023
37		Pharmacology-II	R60024
38		Chemistry of Natural Products	R60025
39		Medicinal Chemistry-I Lab	R60070
40		Pharmaceutical Technology-II Lab	R60071
41		Pharmacology-II Lab	R60072
42		Chemistry of Natural Products Lab	R60073
43		Pharmacognosy-III	R70027
44		Biopharmaceutics &Pharmacokinetics	R70028
45		Pharmacology-III	R70029
46		Medicinal Chemistry-II	R70030
47		Seminar/Industrial Visit	R70074
48		Pharmacognosy-III Lab	R70075
49		Biopharmaceutics & Pharmacokinetics Lab	R70076
50		Pharmacology-III Lab	R70077
51		Medicinal Chemistry-II Lab	R70078
52	IV Year	Novel Drug Delivery Systems & Regulatory	
		Affairs	R80032
53		Pharmaceutical Biotechnology	R80033
54		Pharmaceutical Analysis – II	R80034
55		Clinical Pharmacy Practice	R80036
56		Project Work & Comprehensive Viva	R80079
57		Novel Drug Delivery Systems & Regulatory	
		Affairs Lab	R80080
58		Pharmaceutical Biotechnology Lab	K80081
59		Pharmaccutical Analysis – II Lab	R80082



 The following courses that include experiential learning through internship for Pharm. D (PB) (Program Code: Z55T; JNTUH Regulation: R08) are approved by the College Academic Committee for the Academic Year 2017-18.

S.No.	Year of Study	Name of the Course	Course Code
1		Pharmacotherapeutics-III	PD.C41
2		Hospital Pharmacy	PD.C42
3		Clinical Pharmacy	PD.C43
4		Biostastics & Research Methodology	PD.C44
5		Biopharmaceutics & Pharmacokinetics	PD.C45
6	I Year	Clinical Toxicology	PD.C46
7	- 1001	Pharmacotherapeutics-III Lab	PD.C47
8		Hospital Pharmacy Lab	PD.C48
9		Clinical Pharmacy Lab	PD.C49
10		Biopharmaceutics & Pharmacokinetics Lab	PD.C410
11		Pharmacotherapeutics I&II	PD.C411
12		Pharmacotherapeutics I&II LAB	PD.C412
13		Clinical Research	PD.C51
14		Pharmacoepidemology & Pharmacoeconomics	PD.C52
15	II Year	Clinical Pharmacokinetics &	
16	II I Cai	Pharmacotherapeutic Drug Monitoring	PD.C53
		Clerkship	PD.C54
17		Project Work	PD.C55
18	III Year	Internship	PD.C61

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The following courses that include experiential learning through Project work for M. Pharm-Pharmaceutics (Program Code: Z51S03; JNTUH Regulation: R15) are approved by the College Academic Committee for the Academic Year 2017-18.

S.N	Year of		Course
0.	Study	Name of the Course	Code
1			MPT.C1
		Applied Bio Pharmaceutics and Pharmacokinetics	11
2			MPT.C1
		Advanced Physical Pharmaceutics	12
3			MPT.C1
		Advanced Pharmaceutical Technology-I	13
4		M 1 DI C 1A 1C 1T 1	MPT.C1
_		Modern Pharmaceutical Analytical Technique	14
5		Intellectual Duaments Dialeta and Dansletams Affains	MPT.C1
6		. Intellectual Property Rights and Regulatory Affairs	MPT.C1
0		Pharmacoepidemiology, Pharmacoeconomics And Pharmacovigilance	16
7		Filarmacovignance	MPT.C1
'		Drug Regulatory Affairs (National & International)	17
8		Drug Regulatory Arrans (National & International)	MPT.C1
		3. Herbal Cosmetic Technology	18
9		3. Herotal Cosmode Technology	MPT.C1
		4. Separation Methods	19
10			MPT.C1
	I Year	5. Pharmaceutical Management – I	20
11			MPT.C1
		Modern Pharmaceutical Analytical Techniques	21
12			MPT.C1
		Advanced Physical Pharmaceutics Lab	22
13			MPT.C1
		Seminar	23
14			MPT.C1
		Advanced Drug Delivery System	21
15		T 1 (117)	MPT.C1
1.0		Industrial Pharmacy	22
16		A dryan and Dhamman aution! To always and H	MPT.C1
17		Advanced Pharmaceutical Technology II	23
1/		Riostatistics and Research Mathadalass	MPT.C1
18		Biostatistics and Research Methodology	MPT.C1
10		Screening Methods & Clinical Research	25
19		Stability of Drugs and Dosage Forms	MPT.C1
		Smoning of Drugs and Dosage Forms	26
20		Nano Based Drug Delivery Systems	MPT.C1
		2.000 2.000 2.00 201101 3 3 5 5 6 110	27



21		N	1 mm 64
21		Nutraceuticals	MPT.C1
			28
22		Pharmaceutical Management-II	MPT.C1
			29
23		Advanced Drug Delivery Systems Lab	MPT.C1
			30
24			MPT.C1
		Advanced Pharmaceutical Technology Lab	31
25			
			MPT.C1
		Seminar	32
26			MPT.C2
		Comprehensive Viva-Voce	11
27		-	MPT.C2
	II Year	Project Work Review I	12
28	11 rear		MPT.C2
		Project Work Review II	21
29			MPT.C2
		Project Evaluation (Viva-voce)	22

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The following courses that include experiential learning through Project work for M. Pharm-Pharmaceutical Regulatory Affairs (Program Code: Z51S13; JNTUH Regulation: R15) are approved by the College Academic Committee for the Academic Year 2017-18.

S.N o.	Year of Study	Name of the Course	Cour se Code
1	v	Pharmaceutical Management –I (General and Personnel)	M.P1 11
2		Total Quality Management	M.P1 12
3		Drug Regulator Affairs (National and International Aspects)	M.P1 13
4		Modern Pharmaceutical Analytical Technique	M.P1 14
5		Intellectual Property Rights and Regulatory Affairs	M.P1 15
6		Pharmacoepidemiology, Pharmacoeconomics And Pharmacovigilance	M.P1 16
7		Herbal Cosmetics Technology	M.P1 17
8		Advanced Pharmaceutical Technology –	M.P1 18
9		Industrial Pharmaceutics	M.P1 19
10	I Year	Separation Techniques	M.P1 20
11	TTCar	Modern Pharmaceutical Analytical Techniques Lab	M.P1 21
12		Pharmaceutical Management Lab	M.P1 22
13		Seminar	M.P1 23
14		Pharmaceutical Management –II (Production, Marketing, Finance and Project)	M.P1 21
15		Analytical Method Validation and Copyrights and Trademarks	M.P1 22
16		Pharmaceutical Market Research and Analysis	M.P1 23
17		Biostatistics and Research Methodology	M.P1 24
18		Screening Methods & Clinical Research	M.P1 25
19		Stability of Drugs and Dosage Forms	M.P1 27
20		Nano Based Drug Delivery Systems	M.P1 28



Nutraceuticals M.P1 29				1 1 D1
Advanced Drug Delivery Systems M.P1 30	21		Nutraceuticals	M.P1
Advanced Pharmaceutical Technology -II M.P1 31	0.55.09655			29
Advanced Pharmaceutical Technology -II M.P1 31	22		Advanced Drug Delivery Systems	M.P1
Advanced Pharmaceutical Technology -II 31 31 31 32	22		Tidvanoed Diag Democry against	30
23 Analytical Method Validation Lab M.P1 32	- 22	-	A decorated Dharmacoutical Tachnology -II	
Analytical Method Validation Lab M.P1 32	23		Advanced Pharmaceutical Technology -11	4.000,0200,0000,000
24 32 25 Pharmaceutical Market Research and Analysis Lab M.P1 33 33				
Pharmaceutical Market Research and Analysis Lab M.P1 33	24		Analytical Method Validation Lab	
Seminar 33)	32
Seminar M.P1 34	25		Pharmaceutical Market Research and Analysis Lab	M.P1
27	23			33
27	26		Seminar	M.P1
28 Project Work Review I M.P2 12 12 29 Project Work Review II M.P2 21 21 M.P3	20		2 111	34
28 Project Work Review I M.P2 12 12 12 21 21 21 21 21 21 21 21 21 21 21 21 21 21	27		Comprehensive Viva-Voce	M.P2
29 II Year Project Work Review II M.P2 21	21		Comprehensive viva vece	11
Project Work Review II Project Work Review II M.P2 21	28		Project Work Review I	M.P2
Project work Review II 141.12 21	20		Troject West 110 / 10 W 2	12
21	20	II Year	Project Work Review II	M.P2
Project Evaluation (Viva-Voce) M.P2	29		Troject ii sik kevieli ii	21
JU I I I I I I I I I I I I I I I I I I I	30		Project Evaluation (Viva-Voce)	M.P2
22	30		110Joor Diamation (11.4 10.00)	22

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reservative received the describibilities (1.5.-501301).

The following courses that include experiential learning through Project work for M. Pharm-Pharmaceutical Analysis (Program Code: Z51S12; JNTUH Regulation: R15) are approved by the College Academic Committee for the Academic Year 2017-18.

S.N o.	Year of Study	Name of the Course	Course Code
1	Study	2,000	MPA.C1
		Separation Techniques	11
2		•	MPA.C1
_		Advanced Instrumental Analysis	12
3			MPA.C1
		Quality Control of Bulk Drugs and Formulations	13
4			MPA.C1
		Modern Pharmaceutical Analytical Techniques	14
5			MPA.C1
		Intellectual Property Rights and Regulatory Affairs	15
6		Pharmacoepidimology, Pharmacoeconomics And	MPA.C1
		Pharmacovigilance	16
7			MPA.C1
		Drug Regulatory Affairs	17
8			MPA.C1
		Herbal Cosmetics Technology	18
9			MPA.C1
		Pharmaceutical Management-1	19
10			MPA.C1
	I Year	Advanced Physical Pharmaceutics	20
11			MPA.C1
		Modern Pharmaceutical Analytical Techniques Lab	21
12		Advanced Instrumental Analysis Lab	MPA.C1 22
13		Seminar I	MPA.C1
			23
14			MPA.C1
		Advanced Pharmaceutical Analysis -Ii	21
15			MPA.C1
		Spectral Analysis	22
16		Quality Assurance	MPA.C1
			23
17		Biostatistics and Research Methodology	MPA.C1
			24
18		Screening Methods and Clinical Reasearch	MPA.C1
			25
19		Stability of Drug Dosage Forms	MPA.C1
			26
20		Nano Based Drug Delivery System	MPA.C1
		-	27

21		Nutraceuticals	MPA.C1
			28
22		Pharmaceutical Product Development and Management	MPA.C1
			29
23		Pharmaceutical Management-II	MPA.C1
			30
24		Advanced Pharmaceutical Analysis -Ii Lab	MPA.C1
		*	34
25		Spectral Analysis Lab	MPA.C1
			31
26		Seminar II	MPA.C13
			2
27		Comprehensive Viva-Voce	M.P211
28	II Year	Project Work Review I	M.P212
29	11 Year	Project Work Review II	M.P221
30		Project Evaluation (Viva-Voce)	M.P222



