SELF ASSESSMENT REPORT (SAR)

Submitted To

NATIONAL BOARD OF ACCREDITATION

Submitted By

SREE DATTHA INSTITUTE OF PHARMACY

(Approved by AICTE & PCI, New Delhi, Affiliated to JNTU, Hyderabad)
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SAR Contents

PART A: Institutional Information

1. Name and Address of the Institution:

Name of the Institution	**Sree Dattha Institute of Pharmacy**
Address of the Institution	Sheriguda (Village), Ibrahimpatnam (Mandal), R. R. Dist. 501510, Telangana.

2. Name and Address of the Affiliating University:

Name of the Affiliated University	**Jawaharlal Nehru Technological University Hyderabad**
Address of the Affiliated University	Kukatpally, Hyderabad.

3. Year of Establishment of the Institution: 2005

4. Type of the Institution:

- University ☐
- Deemed University ☐
- Autonomous ☐
- Affiliated ☑
- Any Other (Please specify) ☐

5. Ownership Status:

- Central Government ☐
- State Government ☐
- Grant-in-Aid ☐
- Self financing ☐
- Trust ☐
- Society ☑
- Section 25 Company ☐
- Any Other (Please specify) ☐

Provide Details:

6. Other Academic Institutions of the Trust/Society/etc., if any:

Name of the Institution (s)	Year of Establishment	Programs of Study	Location
Sree Dattha Institute of Engineering and Science	2001	B.Tech., M./Tech., MBA, Polytechnic Diploma	Sheriguda (V), Ibrahimpatnam (M), R.R. Dist 501510 Telangana.
Sree Dattha Group of Institutions	2009	B.Tech., M./Tech., MBA	Sheriguda (V), Ibrahimpatnam (M), R.R. Dist 501510 Telangana.
Brindavan Institute of Teacher Education	2008	B.Ed.	Sheriguda (V), Ibrahimpatnam (M), R.R. Dist 501510 Telangana.
Sree Dattha Brindavan Institute of Teacher Education	2010	B.Ed.	Narayanpet, Mehboobnagar Dist., Telangana.

7. Details of all the programs being offered by the Institution under consideration:

S. No.	Program Name	Year of Start	Intake	Increase in intake, if any	Year of increase	AICTE Approval	Accreditation Status*
1.	B.Pharmacy	2005	60	120	2010-11	2005-06	**Applying first time**
2.	M.Pharmacy	2009	10	72	2010-11	2009-10	**Eligible but not applied**
3.	Pharm.D	2011	30	---	---	2018-19	**---**
4.	**Pharm.D(PB)**	**2012**	**10**	**---**	**---**	**2018-19**	**---**

**** Write applicable one:***

1. Applying first time
2. Granted provisional accreditation for two years for the period (specify period)
3. Granted accreditation for 5 years for the period (specify period)
4. Not accredited (specify visit dates, year)
5. Withdrawn (specify visit dates, year)
6. Not eligible for accreditation
7. Eligible but not applied

Note: Add rows as needed.

8. Programs to be considered for Accreditation vide this application:

S. No.	Program Name
1	B.Pharmacy

9. Total number of employees:

A. Regular*Faculty and Staff:

Items		CAY 2018-19		CAY*m*1 2017-18		CAY*m*2 2016-17	
		Min	**Max**	**Min**	**Max**	**Min**	**Max**
Faculty in Pharmacy	**M**	23	26	24	28	26	**29**
	F	30	38	29	32	31	**32**
Faculty in Sciences & Humanities	**M**	01	01	01	01	01	**01**
	F	02	02	02	02	02	**02**
Non-teaching staff	**M**	9	13	12	13	13	**13**
	F	**04**	**04**	**01**	**01**	**01**	**01**

*** Note: Minimum 75% should be Regular/ Full Time faculty and the remaining shall be Contractual Faculty as per AICTE norms and Standards.**

The contractual faculty(doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Student Faculty Ratio.

CAY: Current Academic Year

CAY*m*1: Current Academic Year minus 1 = Current Assessment Year

CAY*m*2: Current Academic Year minus 2 = Current Assessment Year minus 1

B. Contractual Staff (Not covered in Table A):

Items		CAY 2018-19		CAY*m*1 2017-18		CAY*m*2 2016-17	
		Min	**Max**	**Min**	**Max**	**Min**	**Max**
Faculty in Pharmacy	**M**	-	-	-	-	-	**-**
	F	-	-	-	-	-	**-**
Faculty in Science & Humanities	**M**	-	-	-	-	-	**-**
	F	-	-	-	-	-	**-**
Non-teaching staff	**M**	-	-	-	-	-	**-**
	F	**-**	**-**	**-**	**-**	**-**	**-**

10. Total number of Pharmacy students:

UG (B.Pharmacy)

Student Numbers	CAY 2018-19	CAY*m*1 2017-18	CAY*m*2 2016-17
Total no. of boys	**129**	**83**	**95**
Total no. of girls	**156**	**148**	**153**
Total no. of students	**285**	**231**	**248**

PG (M.Pharmacy, Pharm.D & Pharm.D(PB)

Student Numbers	CAY 2018-19	CAY*m*1 2017-18	CAY*m*2 2016-17
Total no. of boys	**58**	**53**	**52**
Total no. of girls	**157**	**165**	**186**
Total no. of students	**215**	**218**	**238**

(Instruction: The data may be categorized in tabular form in case institute runs UG, PG and doctoral programs, Please prepare separate table for each level, if applicable)

11. Vision of the Institution:

To develop this Institute as one of the premier institution in dynamic equilibrium with its social, ecological and economic environment, serving continuously to excellence in education, research and pharmaceutical service to nation.

12. Mission of the Institution:

1. To provide high quality enterprising students with excellent pharmaceutical and technological skills.
2. To create and sustain a community of learning in which students acquire knowledge and learn to apply it professionally with due consideration for ethical and economic issues.
3. To pursue Research and disseminate research findings.
4. To help in building national capabilities in pharmaceutical sciences, education and research

13. Contact Information of the Head of the Institution and NBA coordinator, if designated:

i. Name: Dr. S. A. Sreenivas
Designation: Principal
Mobile No: 9393808082
Email id: principalsdip@sreedattha.ac.in

ii. NBA coordinator, if designated:
Name: Dr. Pratap Kumar Patra
Designation: Professor
Mobile No: 9177261901
Email id: sdip@sreedattha.ac.in

PART B: Criteria Summary

Name of the program: B.Pharmacy

Criteria No.	Criteria	Mark/Weightage
	Program Level Criteria	
1.	Vision, Mission and Educational Objectives	50
2.	Program Curriculum and Teaching – Learning Processes	150
3.	Course Outcome and Program Outcome	100
4.	Students' Performance	180
5.	Faculty Information and Contributions	175
6.	Facilities	120
7.	Continuous Improvement	75
	Institution Level Criteria	
8.	Student Support Systems	50
9.	Governance, Institutional and Financial Resources	100
	Total	**1000**

Note: In the document wherever word 'Semester' has been used, same shall be read as 'Semester or Annual'. The Institutions may use appropriately whichever is applicable to them.

CRITERION 1	Vision, Mission and Program Educational Objectives	50

1. Vision, Mission and Program Educational Objectives (50)

1.1. State the Vision and Mission (5)

(Vision statement typically indicates aspirations and Mission statement states the broad approach to achieve aspirations.)

Vision:

To be a globally recognized pharmacy education and research centre producing budding pharmacists into perfect pharmacists who can integrate science and technology to advance pharmaceutical drug discovery and formulate patient friendly dosage forms, supporting health care.

Mission:

M1: Nurture students into knowledgeable, skillful and ethical professionals

M2: Nurture the faculty to expose all to world-class research and pharmaceutical infrastructure

M3: Sustain high performance by excellence in teaching, research and innovations

M4: Extensive partnerships and collaborations with industries/foreign universities for technology up gradation

M5: Develop skilled pharmacist to support healthcare locally, nationally and globally

1.2. State the Program Educational Objectives (PEOs) (5)

(***State the Program Educational Objectives (3 to 5) of the program seeking accreditation***)

Sl. No.	Programme Educational Objectives
PEO 1	To produce pharmacy graduates with strong fundamental concepts and high technical competence in pharmaceutical sciences who shall be able to use the tools in pharmaceutical arena for success.
PEO 2	To develop a sense of teamwork and awareness amongst students towards the importance of interdisciplinary approach for developing competence in solving complex problems in the area of Pharmaceutical Sciences.
PEO 3	To promote the development of trained human resource in Pharmaceutical Science for spreading of quality education with highly professional and ethical attitude, strong communication skills, effective skills to work in a team.
PEO 4	To generate potential knowledge pools with interpersonal and collaborative skills to identify, assess and formulate problems and execute the solution in closely related pharmaceutical industries.
PEO 5	To train the students to contribute towards health care system and encourage the students to participate in life-long learning process for a highly productive career, and to relate the concepts of Pharmaceutical Sciences towards serving the betterment of the society.

1.3. Indicate where and how the Vision, Mission and PEOs are published and disseminated among stakeholders (15)

(Describe where (websites, curricula, posters etc.) the Vision, Mission and PEOs are published and detail the process which ensures awareness among internal and external stakeholders with effective process implementation)

(Internal stakeholders may include Management, Governing Board Members, faculty, support staff, students etc. and external stakeholders may include employers, industry, alumni, funding agencies, etc.)

All efforts are made to ensure that the Vision, Mission of the college and PEOs of the program are communicated effectively to all stakeholders namely students, faculty, parents, industry, regulating authorities, alumni, management, etc.

The Vision, Mission and PEOs are published and disseminated through the following methods:

- College brochure.
- College website.
- Flexi-boards displayed in prominent places of the college.
- Newsletter
- Directly communicated during Orientation programmes to fresher's/parents, induction programmes to staff members, during Parents-Teachers meeting, whenever necessary during Faculty meetings.

Apart from the above, efforts are also made for PEOs like:

1. The PEOs are informed to students of each year and explained their importance and the objectives to be achieved.
2. The PEOs are circulated to the faculty, non-teaching staff, parents, fellow pharmacy professionals and sought the opinion in achieving the objectives.
3. The PEOs are circulated and informed to the management and governing body members.

1.4. State the process for defining the Vision & Mission and PEOs of the program (10)

(*Articulate the process for defining the Vision, Mission and PEOs of the program)*

The college has established the Vision, Mission and PEOs through

- SWOC analysis involving faculty, support staff, students
- Consultative process involving internal stake holders Management, Governing Board Members, parents
- Feedback from external stake holders employer/industry, alumni, affiliating university, professional bodies

SWOC Analysis: (For defining Vision, Mission and PEOs)

- SWOC analysis is an acronym for *strengths*, *weaknesses*, *opportunities* and *challenges* and is a structured planning method that evaluates those four elements of an organization. It involves specifying the objectives of the institute/program and identifying the internal and external factors that are favorable and unfavorable to achieve the objectives.
- The faculty members and support staff of the department are the key members who knows about the in and out of the institute and program curriculum. Faculties and support staff are asked to record the strengths, weakness, opportunities and challenges of the institute and program and the information is collected. The information given by the faculties are used as a tool to derive Vision, Mission and PEOs.
- Students are the direct beneficiaries. Students seek quality environment at the college, which includes good infrastructure, qualified faculty and conductive learning environment. The teaching-learning process should enhance their capabilities and value addition is expected.

Students are subjected for SWOC analysis and their feedback is recorded. The information provided by them is analyzed and taken as a tool to derive Vision, Mission and PEOs.

Consultative process involving internal stake holders Management, Governing Board Members, parents: (For defining Vision, Mission and PEOs)

- The Management is interested to impart quality education. Hence, has provided the best infrastructure, advanced instruments, qualified faculty and also provide the necessary infrastructure as and when required. They suggest in all the matter for continuous improvement and share major contribution in defining Vision & Mission. The Management and Governing Board members suggestions are taken for defining Vision, Mission and PEOs.
- Parents are one of the important internal stake holders. They wish to have all necessary academic facilities in the institute where their wards are pursuing degree program. The inputs given by parents are hence taken into consideration while defining PEOs.

Feedback from external stake holders involving employer, alumni, affiliating university, professional bodies: (For defining PEOs)

- Input from employers plays a vital role in the formulation and review of the PEOs, which reflect on the success and the relevance of the designed courses. They give us early indications of changes or new trends in the profession. The information is gathered from employers using both formal surveys and informal interactions.
- The alumni provide vital inputs for drafting of our PEOs. The inquiry includes opinion on the current courses, its shortfall, suggestive changes for revising curriculum, any advice they have to give to the current students, and what they have to do for succeeding in their careers.
- The college is affiliated to Jawaharlal Nehru Technological University Hyderabad, Kukatpally, Hyderabad. The university is a body that monitors the academic programmes and approves the award of degree. Therefore, the programme objectives and outcomes of the college should match with that of the university. The changes mentioned by the university are taken into consideration for defining PEOs.
- Professional bodies like IPA, APTI and IACP periodically express the status of industry, which are noted and utilized during formulating the PEOs.

1.5. Establish consistency of PEOs with Mission of the Institute (15)

(*Generate a "Mission of the Institute – PEOs matrix" with justification and rationale of the mapping*)

PEO Statements	M1	M2	M3	M4	M5
PEO1: To produce pharmacy graduates with strong fundamental concepts and high technical competence in pharmaceutical sciences who shall be able to use the tools in pharmaceutical arena for success.	**3**	**1**	**2**	**2**	**3**
PEO2: To develop a sense of teamwork and awareness amongst students towards the importance of interdisciplinary approach for developing competence in solving complex problems in the area of Pharmaceutical Sciences.	**3**	**2**	**3**	**2**	**2**
PEO3: To promote the development of trained human resource in Pharmaceutical Science for spreading of quality education with highly professional and ethical attitude, strong communication skills, effective skills to work in a team.	**2**	**3**	**3**	**2**	**2**
PEO4: To generate potential knowledge pools with interpersonal and collaborative skills to identify, assess and formulate problems and execute the solution in closely related pharmaceutical industries.	**3**	**2**	**3**	**3**	**2**
PEO5: To train the students to contribute towards health care system and encourage the students to participate in life-long learning process for a highly productive career, and to relate the concepts of Pharmaceutical Sciences towards serving the betterment of the society.	**3**	**2**	**3**	**2**	**3**

Note: M1, M2, …, Mn are distinct elements of Mission statement. Enter correlation levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

If there is no correlation, put "-"

Note: In this document wherever the term 'Process' has been used its meaning is process formulation, notification and implementation.

CRITERION 2	Program Curriculum and Teaching–Learning Processes	150

2. Program Curriculum and Teaching-Learning Processes (150)

2.1. Program Curriculum (40)

2.1.1 Delivery of Syllabus Contents and compliance of the curriculum for attainment of POs (10)

(State the contents of the syllabus; about the course/learning material/content/ laboratory experiments/projects etc. also mention identified curriculum gaps, if any)

Note: *In case all POs are being demonstrably met through University Curriculum then 2.1.2 will not be applicable and the weightage of 2.1.1 will be 30.*

1. The curriculum of Undergraduate course in Pharmacy is provided by the Jawaharlal Nehru Technological University, Hyderabad (JNTUH),Telangana. It is a four years (8 Semester) degree Program conducted in semesters.
2. Currently Choice Based Credit System (CBCS)is implemented by JNTU, Hyderabad.
3. The institute follows the curriculum prescribed by JNTU Hyderabad.
4. Syllabus specifies number of lectures and practical in each course.
5. The Teaching & Examination Scheme specifies the duration and marks of both Internal and External Theory and Practical examination.
6. As per the curriculum:
    i. The internal exam constitutes continuous internal assessment comprising of periodic test and continuous evaluation.
    ii. The external exam constitutes end semester examination comprising of theory and practical.
7. As per the CBCS curriculum, the percentage of marks for Semester and Internal examination is 75% and 25% respectively.
8. All subjects/ courses are to be registered by the student in a semester to earn credits which shall be assigned to each subject/ course in an L: T: P: C (lecture periods: tutorial periods: practical periods: credits)
9. Course attainments are calculated after completion of the end semester examination.

10. Program outcome attainments are calculated after completion of all the course attainments of each semester.

The syllabus contents are delivered with the aid of effective audio-visual and multimedia elements and interactive teaching. In addition, to generate interest and enthusiasm among students, innovative teaching and learning techniques are followed in both theory lectures and practical sessions. These include making of charts and models, giving assignments or projects to students based on their area of interest and organizing competitions during practicals. Also weaker students are given additional support by arranging remedial classes for them and by personally getting the University question papers of the concerned subjects solved from them.

Contents of syllabus – courses and modes of teaching

Course code	Course title	Total number of contact hours				Credits/ Marks
		Lecture (L)	Tutorial (T)	Practical (P)	Total	
B.Pharmacy I Year I Semester (R16)						
C101.1	Human Anatomy, Physiology - I	3	1	0	4	4
C101.2	Pharmaceutical Analysis - I	3	1	0	4	4
C101.3	Pharmaceutics I	3	1	0	4	4
C101.4	Pharmaceutical Inorganic Chemistry – I	3	1	0	4	4
C101.6	Communication skill	2	0	0	3	2
C101.6 /C101. 7	Remedial Biology/Remedial mathematics	2	0	0	2	2
C101.8	Human Anatomy, Physiology – I Lab	0	0	4	4	2
C101.9	Pharmaceutics I Lab	0	0	4	4	2
C101.1 0	Pharmaceutics I Lab	0	0	4	4	2
C101.1 1	Pharmaceutical Inorganic Chemistry – I Lab	0	0	4	4	2
C101.1 2	Communication skill Lab	0	0	2	2	1
C101.1 3	Remedial Bilogy Lab	0	0	2	2	1
B.Pharmacy I Year II Semester (R16)						
C201.1	Human Anatomy, Physiology - II	3	1	0	4	4
C201.2	Pharmaceutical Organic Chemistry – I	3	1	0	4	4
C201.3	Biochemistry	3	1	0	4	4
C201.4	Pathophysiology	3	1	0	4	4
C201.5	Computer Application in Parmacy	3	0	0	3	3
C201.6	Environmental Sciences	3	0	0	3	3
C201.7	Human Anatomy, Physiology - II n Lab	0	0	4	4	2
C201.8	Pharmaceutical Organic Chemistry – I Lab	0	0	4	4	2
C201.9	Biochemistry Lab	0	0	4	4	2

C201.10	Computer Application in Parmacy Lab	0	0	2	2	1
C201.11	NSS					
B.Pharmacy II Year I Semester (R16)						
C301.1	Pharmaceutical Organic Chemistry – III	4	1	0	5	4
C301.2	Pharmaceutical Unit Operations – I	4	1	0	5	4
C301.3	Hospital and Community Pharmacy	3	1	0	4	3
C301.4	Pharmacognosy – I	3	1	0	4	3
C301.5	Pharmaceutical Analysis – I	4	1	0	5	4
C301.6	Pharmaceutical Organic Chemistry – III Lab	0	0	3	3	2
C301.7	Pharmacognosy – I Lab	0	0	3	3	2
C301.8	Pharmaceutical Analysis – I Lab	0	0	3	3	2
C301.9	Environmental Science and Technology	3	0		3	0
B.Pharmacy II Year II Semester (R16)						
C401.1	Pharmaceutical Unit Operations – I	4	1	0	5	4
C401.2	Biochemistry	3	1	0	4	3
C401.3	Pharmaceutical Jurisprudence	4	1	0	5	4
C401.4	Physical Pharmacy – II	4	1	0	5	4
C401.5	HS405: Intellectual Property Rights PS405: Herbal Drugs Technology BS405: Green Chemistry	3	0	0	3	3
C401.6	Pharmaceutical Unit Operations – II Lab	0	0	3	3	2
C401.7	Biochemistry Lab	0	0	3	3	2
C401.8	Physical Pharmacy – II Lab	0	0	3	3	2
C401.9	Gender Sensitization Lab	0	0	3	3	0
B.Pharmacy III Year I Semester (R13)						
C501.1	Pharmaceutical Analysis – I	4	1	0	5	4
C501.2	Pharmaceutical. Microbiology	4	1	0	5	4
C501.3	Pharmacognosy-II	4	1	0	5	4
C501.4	Pharm. Technology – I	4	1	0	5	4
C501.5	Pharmacology – I	4	1	0	5	4
C501.6	Pharmaceutical Analysis – I Lab	0	0	3	3	2
C501.7	Pharmaceutical. Microbiology Lab	0	0	3	3	2
C501.8	Pharmacognosy-II Lab	0	0	3	3	2
C501.9	Pharm. Technology – I Lab	0	0	3	3	2
B.Pharmacy III Year II Semester (R13)						
C601.1	Medicinal Chemistry – I	3	1	0	4	3
C601.2	Pharm. Technology – II	3	1	0	4	3
C601.3	Pharmacology – II	4	1	0	5	4
C601.4	Chemistry of Natural Product	4	1	0	5	4
C601.5	Pharmaceutical Jurisprudence	4	1	0	5	4
C601.6	Advance communication Skill Lab	0	0	3	3	2
C601.7	Medicinal Chemistry – I Lab	0	0	3	3	2
C601.8	Pharm. Technology – II Lab	0	0	3	3	2
C601.9	Pharmacology – II Lab	0	0	3	3	2
C601.10	Chemistry of Natural Product Lab	0	0	3	3	2
B.Pharmacy IV Year I Semester (R13)						
C701.1	Pharmacognosy-III	3	1	0	4	3
C701.2	Bio-Pharmaceutics and Pharmacokinetics	3	1	0	4	3

C701.3	Pharmacology – IIII	4	1	0	5	4
C701.4	Medicinal Chemistry – II	4	1	0	5	4
C701.5	Pharmacy Administration	4	1	0	5	4
C701.6	Seminar/Industrial Visit	0	0	0	0	2
C701.7	Pharmacognosy-III Lab	0	0	3	3	2
C701.8	Bio-Pharmaceutics and Pharmacokinetics Lab	0	0	3	3	2
C701.9	Pharmacology – IIII Lab	0	0	3	3	2
C701.10	Medicinal Chemistry – II Lab	0	0	3	3	2
B.Pharmacy IV Year II Semester (R13)						
C801.1	Novel Drug Delivery System	3	1	0	4	3
C801.2	Pharmaceutical Biotechnology	4	1	0	5	4
C801.3	Pharmaceutical Analysis – II	3	1	0	4	4
C801.4	Human Values and Professional Ethics	4	0	0	4	4
C801.5	Clinical Pharmacy Practice	4	1	0	5	0
C801.6	Project Work and Comprehensive Viva	0	0	0	0	4
C801.7	Novel Drug Delivery System Lab	0	0	3	3	2
C801.8	Pharmaceutical Biotechnology Lab	0	0	3	3	2
C801.9	Pharmaceutical Analysis – II Lab	0	0	3	3	2
	Total	147	36	103	287	153/63
	Percentage	51.21	12.54	35.88	100	70.83/29.16

*Note: In 2017-18 B.Pharmacy 1st year follow PCI syllabus and remaining year follow JNTU Hyderabad syllabus.

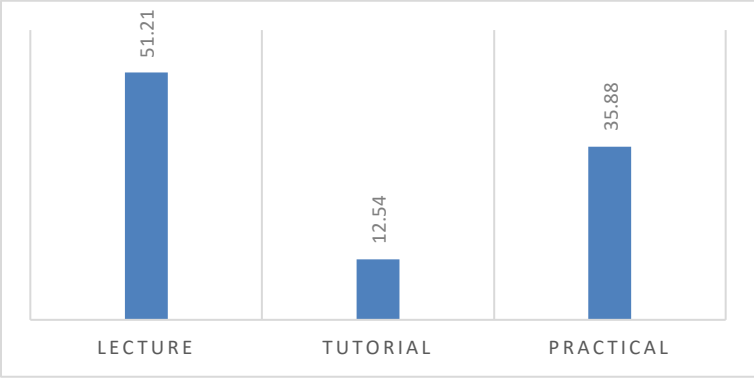


Figure 2-1: Percent contact hours of different components

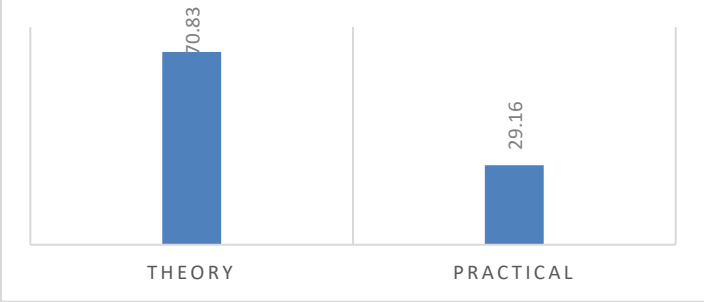


Figure 2-2: Percent credits of theory and practicals

Courses against the program outcomes

Course Code	Course title	Program outcomes										
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO 11
C101.1	Human Anatomy, Physiology - I	√		√	√						√	
C101.2	Pharmaceutical Analysis - I	√		√	√		√	√				√
C101.3	Pharmaceutics I	√			√			√		√		
C101.4	Pharmaceutical Inorganic Chemistry – I	√			√							
C101.6	Communication skill	√			√		√		√			√
C101.6 /C101. 7	Remedial Biology/Remedial mathematics	√	√	√	√	√	√		√			
C101.8	Human Anatomy, Physiology – I Lab	√	√	√	√	√	√	√	√	√		
C101.9	Pharmaceutics I Lab	√	√	√	√	√	√		√			
C101.1 0	Pharmaceutics I Lab	√	√	√	√	√	√		√			
C101.1 1	Pharmaceutical Inorganic Chemistry – I Lab	√	√	√	√	√	√		√			
C101.1 2	Communication skill Lab	√			√							
C101.1 3	Remedial Bilogy Lab	√		√	√							√
C201.1	Human Anatomy, Physiology – II	√	√	√	√	√	√		√			√
C201.2	Pharmaceutical Organic Chemistry – I	√			√			√		√		
C201.3	Biochemistry	√	√	√	√	√	√		√			
C201.4	Pathophysiology	√	√	√	√	√	√		√			√
C201.5	Computer Application in Parmacy	√	√	√	√	√	√		√			
C201.6	Environmental Sciences	√			√							
C201.7	Human Anatomy, Physiology - II n Lab	√	√	√	√					√		
C201.8	Pharmaceutical Organic Chemistry – I Lab	√	√	√	√	√	√	√	√	√	√	√
C201.9	Biochemistry Lab	√			√						√	
C201.1 0	Computer Application in Parmacy Lab	√			√							√
C201.1 1	NSS								√			
C301.7	Pharmacognosy – I Lab	√	√	√	√	√	√		√		√	
C301.8	Pharmaceutical Analysis – I Lab	√	√	√	√	√	√		√			
C301.9	Environmental Science and Technology	√			√	√		√			√	√
C401.1	Pharmaceutical Unit Operations – I	√	√	√	√					√		
C401.2	Biochemistry	√			√							
C401.3	Pharmaceutical Jurisprudence	√	√	√	√	√	√	√	√	√	√	√
C401.4	Physical Pharmacy – II	√		√	√							√

C401.5	HS405: Intellectual Property Rights PS405: Herbal Drugs Technology BS405: Green Chemistry											
C401.6	Pharmaceutical Unit Operations – I I Lab	√	√	√	√	√	√		√			
C401.7	Biochemistry Lab	√	√	√	√	√	√		√			
C401.8	Physical Pharmacy – II Lab	√	√	√	√	√	√		√			
C501.1	Pharmaceutical Analysis – I	√			√							√
C501.2	Pharmaceutical. Microbiology	√			√			√				
C501.3	Pharmacognosy-II	√			√					√	√	
C501.4	Pharm. Technology – I	√		√	√			√				√
C501.5	Pharmacology – I	√			√							
C501.6	Pharmaceutical Analysis – I Lab	√	√	√	√	√	√		√			
C501.7	Pharmaceutical Microbiology Lab	√	√	√	√	√	√	√	√			
C501.8	Pharmacognosy-II Lab	√	√	√	√	√	√		√		√	
C501.9	Pharm. Technology – I Lab	√	√	√	√	√	√	√	√			
C601.1	Medicinal Chemistry – I	√			√			√				
C601.2	Pharm. Technology – II	√		√	√			√				√
C601.3	Pharmacology – II	√			√					√		
C601.4	Chemistry of Natural Product	√			√							√
C601.5	Pharmaceutical Jurisprudence	√	√	√	√	√	√	√	√	√	√	√
C601.6	Advance communication Skill Lab	√	√	√	√	√	√		√			√
C601.6	Medicinal Chemistry – I Lab	√	√	√	√	√	√		√			
C601.7	Pharm. Technology – II Lab	√	√	√	√	√	√	√	√			
C601.8	Pharmacology – II Lab	√	√	√	√	√	√		√	√		
C601.9	Chemistry of Natural Product Lab	√	√	√	√	√	√		√			
C701.1	Pharmacognosy-III	√			√					√	√	
C701.2	Bio-Pharmaceutics and Pharmacokinetics	√		√	√		√	√	√			√
C701.3	Pharmacology – IIII	√			√					√		
C701.4	Medicinal Chemistry – II	√			√							
C701.5	Pharmacy Administration	√	√	√	√		√		√	√	√	√
C701.6	Seminar/Industrial Visit	√	√	√	√	√	√		√			√
C701.7	Pharmacognosy-III Lab	√	√	√	√	√	√		√		√	
C701.8	Bio-Pharmaceutics and Pharmacokinetics Lab	√	√	√	√	√	√		√			
C701.9	Pharmacology – IIII Lab	√	√	√	√	√	√		√	√		
C701.10	Medicinal Chemistry – II Lab	√	√	√	√	√	√		√			
C801.1	Novel Drug Delivery System	√	√	√	√			√				√
C801.2	Pharmaceutical Biotechnology	√			√			√		√		
C801.3	Pharmaceutical Analysis – II	√		√	√							√
C801.4	Human Values and Professional Ethics											
C801.5	Clinical Pharmacy Practice	√	√	√	√	√	√	√	√	√	√	√
C801.6	Project Work and Comprehensive Viva	√	√	√	√	√	√		√			√

C801.7	Novel Drug Delivery System Lab	√	√	√	√	√	√	√	√			
C801.8	Pharmaceutical Biotechnology Lab	√	√	√	√	√	√	√	√			
C801.9	Pharmaceutical Analysis – II Lab	√	√	√	√	√	√		√			

Maximum level is covered by POs 1 and 4 (pharmacy knowledge and modern tool usage) and lowest are POs 9 and 10 (The pharmacist and society and environment and sustainability). A large number of POs are covered by laboratory components.

The compliance of curriculum for attainment of POs is as shown in figure

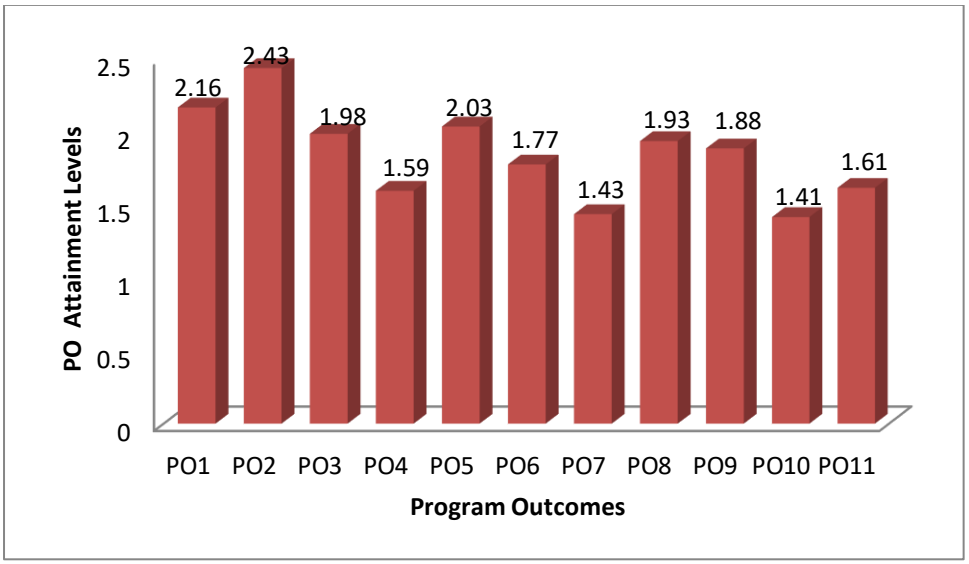


Fig 2.1.1: Compliance of curriculum for attainment of POs

All POs are reasonably attained ranging between 1.41 and 2.43

Contents of each course, projects – Core Pharmacy Courses (Theory)

REMIDIAL MATHEMATICS

Mathematics theory course is designed to give adequate training to the students (hands on experience) about various mathematical principles. The course provides knowledge about the execution of logarithms, trigonometry and differential calculus. Focus to illustrate the differential coefficient rules, differentiation of a sum, product and quotient of functions, differentiation from first principles, differentiation of implicit, geometrical, composite and inverse functions. The course also imparts adequate knowledge regarding the integral calculus, simple integrations, matrices and biomathematics. The course also concentrates on the basic mathematical principles that are commonly used in biological testing such as integers, linear and non-linear graphs; 2D coordinates geometry, equation of line and circle.

The students should able to:

1. Apply both conventional and creative techniques to the solutions of mathematical

problems

2. Solve problems of trigonometry, calculus, matrices.
3. Understand the mathematics comprises a brand array of interconnected concepts related to biomathematics
4. Relate the mathematical tools to a broad range of situations which arise in the wide professional views
5. Apply range of techniques effectively to solve problems including theory deduction, approximation and simulation

REMIDIAL BIOLOGY

Biology theory course concentrates on the morphology, histology, plant modifications, plant taxonomy and plant physiology. Plants belonging to the apocynaceae, solanaceae, umbelliferae, leguminosae, scrophulariaceae and rubiaceae families are included. The course provides adequate knowledge to the students regarding the mitosis and meiosis processes. Significant insight to the modifications in the roots, stems, barks, seeds, woods, leaf, flower and fruits are included. The emphasis is also given to the study of genetic code (heredity), animal cell with study of different systems of frog and rabbit. The students acquire adequate knowledge on the human parasites: *plasmodium, entamoeba, tapewarm,ascaris, leishmania,* anchylostoma, *mosquitoes* and *housefly* and *trypanosome.*

The students should able to:

1) Explain plant kingdom, plant tissues and their functions, mitosis and meiosis, morphology and histology
2) Familiarize with the plant physiology – absorption, transpiration, respiration, photosynthesis, DNA replication.
3) Learn and understand animal tissue, study of different systems of frog.
4) Know the principles of morphology and life-history of human parasites.

DISPENSING &GENERALPHARMACY

Pharmaceutics (Dispensing and General Pharmacy) theory course provides significant insights about prescription, pharmaceutical calculations, dosage form preparations, incompatibility studies, containers and storage. The course design focus on the radio pharmaceuticals, tinctures, extracts and medicinal gases.

The students should able to:

1) Impart knowledge of dispensing the prescriptions and the principles involved in the preparations.
2) Impart skill and confidence in preparing quality dosage formulations of various types.
3) Document, maintain the various records in experimental stage and during manufacture of pharmaceutical preparations.
4) Meet the challenges occur in practicing pharmacy profession.

ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION

Anatomy, physiology and health education theory course is designed to provide elementary knowledge about anatomical features, histological features and physiological functioning of systems and organs. The students acquire knowledge about the generating and transmitting nerve impulses. The course design provides significant understanding about the cardio-vascular system and blood physiology including thrombosis and embolism. The course ensures the ability to assimilate the concepts of cardio-vascular system and blood physiology. It also describes the anatomical features and functioning of respiratory and digestive systems. The emphasis is given to the endocrine systems (thyroid, pancreas, pituitary, parathyroid, adrenal glands & gonads) including their functioning. Focus is given to gain knowledge about the diuretic system. Focus is also given to the appreciation of basic anatomy and physiology of the sensory organs (eye, ear, taste buds, nose and skin). The students also gain adequate knowledge about the inflammation process, oedema and shock. The course also imparts on the nutrional values of vitamins and their deficiency disorders.

The students should be able to:

1. Explain various anatomical terms in human body.
2. Describe the various physiological aspect of the human body.
3. Explain various systems in coordination with importance of various organs and tissues.
4. Explain pathological and diseased process and repair mechanism of various systems
5. Acquire the knowledge regarding health education in human life

PHARMACEUTICAL ORGANIC CHEMISTRY – I

Pharmaceutical organic chemistry theory course provides knowledge on general preparation, nomenclature, physical properties, chemical reactivity and reaction mechanisms on the aliphatic hydrocarbons and aryl diazonium salts. The electronic effects (inductive, electrometric and resonance) and isomerism of organic molecules are focused. The course highlights the reaction progress through the energy diagrams. The characteristic reactions (include stability, electrophilic and addition along with Sayetzeffs and Markonikovs rules.) of alkanes, alkenes and alkynes are included. The chemistry of cycloalkanes, alkyl halides, alcohols and ethers are important additions. The chemical features include preparation and reactivity of carbonyl compounds (aldehydes and ketones), carboxylic acids and their derivatives (acid halides, anhydrides, esters and amides), chemistry of nitrogen compounds (nitro compounds and aryl diazonium salts).

The students should able to:

1. Understand and explain the concepts of hybridization, electronic and steric effects of organic molecules and to appreciate the chemistry of hydrocarbons
2. Acquire knowledge about preparation and reactivity of compounds with functional groups, such as aldehydes and ketones, carboxylic acids, amino and azo compounds

3. Explain the mechanism involved in the substitution, addition, nucleophilic and elimination reactions.
4. Appreciate the reaction orientation rules, such as Sayetzeffs and Markonikovs rules.

PROFESSIOAL COMMUNICATION IN ENGLISH

Professional Communication in English theory course provides communication (verbal and non-verbal),and presentations. The details regarding the variation in the different form of English(spoken English vs written English; formal / informal English (one way/two way);British/American/Indian English) are included. The communicative English course enablesstudents to acquire the knowledge about greetings, polite expressions, agreements anddisagreements. The students develop their skills in the use of thesaurus, vocabularydevelopment, construct of letters, responses, memos, circulars and notices. The training todevelop skill in the preparation of scientific/technical report is another important aspect.

The students should able to:

1. Use English Language effectively in spoken and written forms .
2. Comprehend the given texts and respond appropriately.
3. Communicate confidently in formal and informal contexts.

PHARMACEUTICAL INORGANIC CHEMISTRY

Pharmaceutical inorganic chemistry laboratory course focus to help the students to appreciate the concept of quality control tests in limiting traces of impurities present in pharmaceuticals through limit tests. The complete understanding is illustrated about chemical reaction mechanisms involved in the preparation of pharmaceutical inorganic compounds. A significant amount of knowledge is provided regarding the principle involved in the compound purification. The hands on approach are provided to identify cations and anions present in the inorganic salts through systematic qualitative analysis.

The students should be able to

1. Understand and explain the concepts of quality control tests including impurities.
2. Explain the definitions, preparations and assay procedures of GI active agents, electrolytes.
3. Describe the definitions, preparations and assay procedures of mineral, nutritional and pharmaceutical aids.
4. Explain definitions, preparation and assay method of expectorants and emollients.
5. Acquire knowledge on different types of diagnostic agents, dialysis fluids and dental products

PHARMACEUTICAL ORGANIC CHEMISTRY – II

Pharmaceutical organic chemistry-II laboratory course concentrates on the synthetic strategies involved in the preparation of drug intermediates. The course allows conducting the

synthetic procedures to the students and allowing understanding the reaction mechanism involved in them. The focus is also given to the purification of the heterocyclic drug intermediates.

The students should able to

1. Understand and explain the concepts of nomenclature preparation, reactivity and named reaction involved in carbonyl compounds.
2. Understand the synthesis of higher organic compounds.
3. Understand Nomenclature, basicity of amines, classification, relative reactivity.

PHYSICAL PHARMACY-I

Physical pharmacy theory course focuses on the concepts of phase equilibria, thermodynamics, and colligative properties of solutions, pH and pharmaceutical buffers. The course provides principles involved in the kinetic molecular theory, heat of vaporization, x-ray diffraction, intermolecular forces and polymorphism. The thermodynamics principles such as conservation energy laws; Hess's law of heat summation, entropy, free energy and Gibbs free energy are included. The students also gain the understanding regarding the Arrhenius theory of electrolytic dissociation and Debye-Huckel theory. The students should able to:

1. The student shall know important physical properties of drug molecules.
2. Understand the Phase value & its importance.
3. Explain the different law of thermodynamics.
4. Understand the electrolyte and nonelectrolyte solutions.
5. Understand the importance of pH and drug research.

STATISTICAL METHODS AND COMPUTER APPLICATIONS

Statistical Methods course focuson apply the knowledge of statistical tools for comparative analysis of results in pharmaceutical and clinical studies computer applications theory course focus on evolution, structure and characteristics of computer concepts. The students acquire significant insights about the memory chips, principles of operating systems (MS, DOS, unix and windows), computer viruses and programming in 'C' language and structured query language (SQL). The appropriate measures to ensure students' knowledge about the operators, expressions, data input, output, control statements, library functions and arrays. The course introduces students to MS-word, MS-excel MS-power point and MS-access. Focus is given to provide information about the World Wide Web (www), hyper text manuscript language (html) and e-mail.

The students should able to:

1. Acquire the up-to-date technical knowledge and develop the skills needed for a successful start to careers in pharmacy.
2. Understand the architecture, organization and programming of modern computing systems including C language and SQL.
3. Practice MS Office, MS Word, MS Access and MS Power point.

4. Aware of the rapid rate of change of technology and methodologies in computer science.
5. Understand the principles and design internet and website.

PHARMACEUTICAL UNIT OPERATION

Pharmaceutical engineering-I theory course involves the topic on the construction of instruments, corrosion, unit operations and unit processes. The concepts of fluid flow and heat transfer (conduction, convection, radiation) are included. Humidification, dehumidification and air conditioning along with their applications in pharmacy are highlighted. The principles, applications and limitations of filtration and centrifugation are included.

The students should able to:

1. Explain the concepts of energy transfer, mass transfer, unit operations for the construction, operation and maintenance of pharmaceutical plants.
2. Describe the engineering approaches and alternatives for effective functioning of pharmaceutical plants by avoiding corrosion.
3. Make the student abreast with current principles, fluid flow, heat transfer, material transportation, filtration and centrifugation methodologies.
4. Understand the real time pharmaceutical industry situations for effective learning process of equipment, advantages and limitations.

HOSPITAL AND COMMUNITY PHARMACY

Hospital and Clinic Pharmacy theory course focus on hospital drug policy, therapeutic committee (PTC) and practice of rational drug therapy. Manufacturing of bulk and sterile supplies, storage and handling of radio isotopic pharmaceuticals, budget planning and inventory control are also included. The investigational use of drugs, drug therapy monitoring and adverse drug reaction management is the key areas. The students understand the functioning of drug and poison information centers. The history review, patient counseling; patient compliance and patient data analysis are other components.Various hospital pharmacy services namely out-patient and in-patient services, unit dose drug distribution systems, floor ward stock systems, satellite pharmacy services, central sterile services and bed side pharmacy also given in the course. The focus is given to the mechanism of pharmacokinetic and pharmacodynamics drug- drug interactions and food and drug interactions. Therapeutic aspects of pharmacogenetics also included. The student gain knowledge about the pathophysiology and etiology of gastrointestinal diseases, cardio vascular diseases, respiratory diseases and sexually transmitted diseases.

The students should able to:

1. Know various drugs distribution methods.
2. Know the professional practice managements skills in hospital.
3. Learn the how to Provide unbiased drug information.
4. Appreciate the practice based research methods.
5. Understand the store managements and inventory control

PHARMACOGNOSY-I

Pharmacognosy – Itheory course focus on the systematic description, classification, cultivation, collection, storage and therapeutic uses of crude drugs. The course imparts the knowledge regarding the influence of exogenous and endogenous factors in the variability of drug constituents. Biosynthetic techniques, metabolic pathways, precursor – product sequence, competitive feeding and sequential analysis are also focused. It helps students to assimilate the concepts about carbohydrate synthesis, shikimic acid pathway and isoprenoid biosynthesis. Systematic study of carbohydrates, fixed oils, fats, waxes, tannins, fibers, and drugs from mineral and animal origin, proteins and enzymes is illustrated. Hazards, adulteration and drugs deterioration aspects are included.

The students should able to:

1. Understand the methods for cultivation and collection of crude drugs; medicinal plants, viz., origin, morphology, histology and uses.
2. Evaluate the crude drugs for adulteration and substation
3. Acquire explain of various biosynthetic pathways of medicinal plant constituents
4. Understand the methods of quality control for crude drugs with WHO guidelines..

PHARMACEUTICAL ANALYSIS – I

Pharmaceutical analysis course is focus on calibration of weights and glassware (pipette and burette). Adequate exercises are provided regarding standardization of solutions of different strengths. Knowledge about the principles and methodology involved in the various volumetric analyses such as acidimetry, alkalimetry, oxidation reactions and reduction reactions, iodimetry, iodometry, complexometry, precipitation and non-aqueous titration is imparted. It helps students to acquire knowledge about principles and practice of gravimetric analysis.

The students should be able to

1. Understand and explain the methods assuring the quality and safety of pharmaceuticals.
2. Explain about accuracy, precision and significant figure error concepts.
3. Acquire knowledge on computation of analytical results, physiochemical concepts of analysis, theories of acids and bases, stoichiometry etc.
4. Explain the principles and applications of gravimetric, volumetric and gas analysis techniques.
5. Understand and explain the applications of complexometric, iodometric, redox and non-aqueous titrations.

ENVIRONMENTAL SCIENCE AND TECHNOLOGY

Environmental studies theory course describes the scope and importance of environmental studies, indicators for sustainable development and concepts of biodiversity and ecosystem diversity. It concentrates on environmental pollution, relevance of biotechnology and

nanotechnology in sustainable development, solid and hazardous waste management, green house gas effects: climate change, global warming, ozone layer and ground water depletion. The relationship between the human population and environmental problems and social problems are focused. It helps the students to appreciate the importance of water conservation and disaster management plan. It provides adequate details about the functioning of government regulatory bodies in monitoring and enforcement of environmental regulations. Environment impact assessment (EIA) studies, eco-audit and eco-labeling (ISO: 14000); environmental management plan (EMP), relevance of command control paradigm in environmental governance are also included.

The student should able to:

1. To train students to locate and comprehend relationship between the natural, social, and cultural environmental.
2. To understand the awareness and environmental issues.

BIOCHEMISTRY

Biochemistry theory course is concerned with biochemical organization of the cell and transport processes across cell membrane. The concept of free energy and its biological significance are included. The kinetics and clinical applications of enzymes, isozymes and coenzymes are also focused. Adequate inputs are provided on the metabolic reactions of carbohydrates, lipids and amino acids. Biosynthesis of RNA and DNA, DNA repair mechanism and recombinant DNA processes are part of the course. Qualitative and quantitative analysis of blood components, urine components and their clinical significance are included.

The students should able to:

1. Describe the molecular and functional organisation of a cell, enzymology and its clinical relevance.
2. Explain the structure and biochemical role of carbohydrates, proteins, lipids and metabolic pathway of nutrients.
3. Describe the mechanisms of electron transport chain reactions and cofactors involved in it.
4. Explain the metabolism of neucleotides and its clinical relevance and explain the DNA replication, transcription and translation.

PHARMACEUTICAL JURISPRUDENCE

Pharmaceutical Jurisprudence course deals with pharmaceutical legislation policies, ethics, Acts and their amendments in India. It provides comprehensive knowledge about the pharmacy Act 1948, consumer protection Act 1986, Narcotic and psychotropic substances Act 1985, Drugs and cosmetics Act 1940 and drugs and cosmetic rules 1945. Medicinal and toilet preparations Act 1955, drugs and magic remedies) act 1954, prevention of food adulteration Act 1954, the factories Act 1948 and the amendment also covered. The legal aspects of the manufacture, sale, distribution, import and export of drugs are included in schedules. Specific

labeling and packing requirements are covered for all categories of drugs & cosmetics. The students acquire knowledge regarding the intellectual property rights, Indian patent Act 1970, drug price control order and pharmaceutical policy 2002.

The students should able to:

1. Acquire knowledge on schedule rules, laws and regulations related to drugs and cosmetics.
2. Explain pharmaceutical legislation, history, evolution and growth of pharmaceutical industry.
3. Describe the pharmaceutical education and its regulatory bodies; pharmacy profession in concern to code of ethics.
4. Explain other acts and rules associated with food and factories
5. Explain the intellectual property rights.

PHARMACEUTICAL ANALYSIS - II (INSTRUMENTAL METHODS OF ANALYSIS)

Pharmaceutical analysis-II laboratory course provides knowledge about the various instrumental separation and identification techniques. The separation techniques include paper, thin-layer (TLC) and column chromatography. The students also determine related principles of drug solutions through colorimeter, UV-spectrophotometer and fluorimeter. The focus is given to determination ions present in drugs by turbidimetry, nephelometry, polarography, specific - ion electrode and flame photometer. The course also concentrates on the electrophoresis, potentiometric and conductometric experiments and determination of moisture content.

The students should able to

1. Explain the principles, instrumentation and applications of UV/ Visible spectrophotometry, IR spectroscopy, mass spectroscopy, NMR spectroscopy, flame photometry, nepheloturbidometry, fluorescence spectroscopy.
2. Gain detailed knowledge about separation techniques like column chromatography, thin layer chromatography, paper chromatography, HPLC, GC and gel electrophoretic techniques.
3. Describe the theoretical aspects on electroanalytical methods such as conductometry, amperometry and potentiometry.
4. Ability to interpret the analytical data and identify the structure of the compound
5. An ability to perform separation techniques for subsequent analysis of mixture of components

PHARMACEUTICAL MICROBIOLOGY

Pharmaceutical microbiology theory course involves microbiology techniques and microbes. The course ensures students to understand the biochemical reactions to identify organisms and staining techniques. The physiology and reproduction of microbes (bacteria, actinomycetes, fungi, yeast and viruses) are included. Insights about the microbial genetics,

mutagenesis (physical and chemical), repair mechanism and isolation are also attempted. The concepts of disinfections and sterilization techniques are included. The special emphasis is given to the principles and applications of immunogenetics, serology, bacterial toxins (exotoxins and endotoxins) and toxoids. The course also imparts the principles of infection and communicable diseases (epidemic and endemic diseases). The systematic studies of microbes (*E. coli, Pencilliumsps, Streptomyces sps and Saccharomyces sps*), microbiology of water and milk are also incorporated in the course.

The students should able to:

1. Apply the principles of evaluation of microbiological quality of pharmaceutical preparations.
2. Understand hygienic aspects of non-sterile medicines manufacturing.
3. Acquire knowledge on the principles of sterilization of medicines.
4. Familiar with the classical and modern techniques for the detection and isolation of pathogenic microorganisms in pharmaceutical preparations.
5. Familiar with the classical and modern techniques for the enumeration of microorganisms in pharmaceutical preparations.

MEDICINAL CHEMISTRY-I

Medicinal chemistry theory course deals several topics and physicochemical properties of drugs in their biological activity are also included. The course design covers the nomenclature, classification, mechanism of action, structural activity relationship and therapeutic uses of various categories of drugs. The special emphasis given to the chemical constitution of selective drugs from each pharmaceutical category. The focus is given to the appreciation of bioisosterism, stereochemistry, prodrugs, soft drugs and drug metabolism concepts. The students understand the physiological functions of adrenergic and cholinergic system and the chemistry of adrenergic and cholinergic drugs (includes muscarinic, nicotinic and ganglionic drugs). The cardiovascular drugs such as hypertensives, anti-arrhythmics, vasodilators, anti-hyper lipidemic agents, anti-platelet drugs and synthetic cardiac glycosides are included. The chemistry and medicinal properties of diuretics, positive inotropic agents, hypoglycemic agents, anti-thyroid gents and immuno modulators are included. The chemistry knowledge about the anti-histaminic (H1 & H2), proton pump inhibitors and anti-coagulants also ensured.

The students should able to:

1. Explain the influence of physicochemical properties on drug action.
2. Outline the synthetic route for the selective medicinal compounds of each category and acquire knowledge on the mechanism of action of pharmacodynamics agents.
3. Classify the therapeutic agents and based on the chemical nature.
4. Acquire knowledge about the relationship between the biological activity and structure

of therapeutic agents.

5. Assimilate the therapeutic uses of adrenergic agents, cholinergic agents, anti-hypertensives, anti-hyperlipidemics, anti-platelets, cardiotonics, hypoglycemic agents, anti-thyroid agents, diuretics, antihistamine and anticoagulants.Describe therapeutic uses of specified pharmacodynamics agents.

PHARMACOLOGY –II

Pharmacology laboratory –II theory course deals with the pharmacology of anti-bacterial drugs, antiviral drugs, anti-fungal drugs, anti-protozoal agents, anthelmentic drugs, autocoids, coagulants, anti-coagulants, haematinics and thrombolytic agents. The course also includes the cancer chemotherapy concepts and pharmacological aspects of hormones. The pharmacological study about the contraceptives, oxytocics, uterine relaxants, antithyroid drugs, oral hypoglycemics, glucagon and adrenocortico steroids are also the component of the course. The students also appreciate the bioethics and bioassay of hormones, toxins, vaccines, and other pharmacological principles. The principles of toxicology with special reference to barbiturates, opium and organophosphorus toxicity is given in the design. The course also contains the different phases of clinical trials.

The student should able to:

1. Understand the concepts, mechanism of action, choice of antibiotics and chemotherapeutic agents.
2. Describe the action of histamine, anti-histamines and few local hormones.
3. Recognize the chemistry, synthesis, systemic effects, toxicity and mechanism of prostaglandins, insulin and oral hypoglycemic agents, glucagon, somatostatin etc.
4. Describe the types of toxicities and treatment of toxicities due to barbiturates, narcotics, benzodiazepines, acetaminophen, nitrites and nitrates and cyanide.

CHEMISTRY OF NATURAL PRODUCTS

Pharmaceutical chemistry (Chemistry of natural products) theory deals with the isolation, characterization, chemistry, structural determination and pharmaceutical importance of carbohydrates, proteins, oils and fats, flavanoids, alkaloids, terpenoids and steroids. The course also covers the bile acids, steroidal contraceptives, purines and xanthine derivatives. The structural elucidation and pharmaceutical importance of cardiac glycosides are also covered.

The student should able to:

1. Classify carbohydrates, fats/oils, proteins, terpenoids, flavanoids, alkaloids and steroids based on their structure.
2. Describe extraction, isolation and purification methods of natural compounds.
3. Establish the structure of natural molecules and biomolecules of pharmaceutical importance (carbohydrates, flavanoids, terpenoids etc.)
4. Describe qualitative and quantitative methods for the identification of natural

compounds – alkaloids, purines and xanthines.

5. Appreciate the importance of retro-synthetic analysis in the structural elucidation of compounds.

PHARMACEUTICAL BIO TECHNOLOGY

Pharmaceutical biotechnology laboratory course train various biotechnology techniques and sterility testing of pharmaceuticals, which include the preparation and standardization of cultures. The course also includes the experiments for the microbiological assay of antibiotics and vitamins. The students gain the experimental exposure on the fermentation and immobilization techniques. The course also focuses on the isolation of mutants and extraction of DNA. The preparation of bacterial vaccine, blood products / human normal immunoglobulin injection is ensured in the design.

The students should able to

1. Design a suitable reactor for the industry based on their requirements of yield and cost.
2. Analyze the genetic code and explain the production of proteins using rDNA technology.
3. Explain manufacture, standardization, storage and labeling of passive and active immunization products.
4. Explain the biological / blood products, plasma substitutes regarding collection, processing and storage.
5. Explain production techniques of monoclonal antibodies

SEMINAR

Seminar component of the course provides an opportunity to the student to develop advanced knowledge on the search and manuscript preparation. The students become competent in presentations about the specific topic in scientific and pharmacy fields. It gives a chance to the learning community to describe new trends among group.

Contents of each course, projects – Core Pharmacy Courses (Lab)

PS107 DISPENSING GENERAL AND PHARMACY LAB

General and dispensing pharmacy laboratory course help students to assimilate the concepts of pharmaceutical calculations and applying them in solving problems. Knowledge is imparted on the pharmaceutical incompatibility studies and measures to prevent them. The course focus on the significant knowledge exposure on the principle involved in the preparation of aromatic water, spirits, ointments, pastes, lotions, liniments, throat paint and gargles through specific pharmaceutical preparations. Specific focus is given on the principles and techniques involved in the preparation of solutions, suppositories, granules, syrup and drops. The course design ensures the students ability in specific labeling and packaging procedures.

The students should able to prepare

1. Impart knowledge about the principle, procedure and other data regarding aromatic water, spirits, ointments, pastes, etc.
2. Explain information regarding the dose, labeling and packaging procedures as well as

containers.

3. Plan and conduct other experiments apart from syllabus related to their theory topics.

ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION – I LAB

Anatomy, physiology and health education laboratory course provides significant insights about histological features of the human tissues through permanent slides. It gives adequate knowledge to the students to identify the models and specimen of the human skeletal system and organs. Focus is made to acquire the knowledge on mechanisms and methodology involved in the determination of human blood group, hemoglobin content, bleeding time and clotting time. The students gain knowledge on mechanisms and methodology involved in the determination of RBC count and total WBC count. The practice to gain knowledge on mechanisms and methodology involved in the measurement of blood pressure, vital capacity and erythrocyte sedimentation rate (ESR) are provided.

The students should be able to

1. Identify the different bones of the skeletal system and various models/specimen/slides of human organs and tissues
2. Explain various complete blood picture parameters and mechanisms involved blood experiments
3. Explain various methods

PHARMACEUTICAL ORGANIC CHEMISTRY – I LAB

Pharmaceutical organic chemistry laborotory course is designed to provide knowledge about the various laboratory techniques. Adequate training is imparted on the design and synthesis organic intermediates. Several organic reactions such as oxidation, reduction, acetylation, nitration, esterification, etherification, saponification and halogenation are conducted.

Principles are illustrated, while understanding the factors. The course design also concentrates on the hands-on approach about the systematic qualitative analysis of unknown organic compounds.

The students should able to

1. Understand and adopt synthesis of organic intermediates.
2. Appreciate the reaction mechanism and importance of reactions such as oxidation and reduction, acetylation, esterification and etherification and halogenation.
3. Perform systematic qualitative analysis of unknown organic compounds

REMEDIAL BIOLOGY – I LAB

Biology laboratory course is designed to provide students adequate knowledge on the plant morphology and their modifications through selective species. Sectioning (TS) of plant materials such as cinchona, clove, coriander and linseed are attempted to study their microscopical features. Insights are understood about the histological features of different

human organs/tissues through permanent slides. The students also gain the significant knowledge about the human skeletal and spinal nervous system through the models.

The students should able to

1. To be able to understand the plant parts and their modification.
2. Understand the representative of families – apocynaceae, solancaceae, umbelliferae and rubiaceae.
3. Perform transverse section of cinchona, clove, coriander and linseed.
4. Identify histological study of different organs/tissues through permanent slides.

PHARM. INORGANIC CHEMISTRY LAB

Pharmaceutical inorganic chemistry laboratory course focus to help the students to appreciate the concept of quality control tests in limiting traces of impurities present in pharmaceuticals through limit tests. The complete understanding is illustrated about chemical reaction mechanisms involved in the preparation of pharmaceutical inorganic compounds. A significant amount of knowledge is provided regarding the principle involved in the compound purification. The hands-on approach are provided to identify cations and anions present in the inorganic salts through systematic qualitative analysis.

The students should be able to

1. Appreciate the concept of quality control tests in limiting traces of impurities present in pharmaceuticals by performing limit tests.
2. Understand various chemical reactions through the preparation of inorganic compounds
3. Identify cations and anions present in the inorganic sample through systematic qualitative analysis.

STATISTICAL METHODS AND COMPUTER APPLICATION LAB

Statistical Methods and Computer Application laboratory course is designed to give adequate hands on experience about the execution of DOS commands. The focus is also given to provide students regarding the architecture about the computer. A complete training is imparted on various computer languages (C and SQL). The computer skills on MS Office, MS Word, MS Excel, MS Access and MS Power point are practiced through the well-designedexercises. Appropriate ability in designing and developing the computer tools is imparted.

The students should able to

1. Explain the underlying architecture of computer.
2. Understand the paradigms of program languages and be exposed to at least one language from each model, C and SQL.
3. Develop skills in the exercises based on MS Office, MS Word, MS Excel, MS Access and MS Power point.
4. Understand software development tools.

PHYSICAL PHARMACY – I LAB

Physical pharmacy laboratory course concentrates on the evaluation of various physicochemical properties of the drugs and excipients. It ensures the preparation of buffers and their strength determination of viscosity, surface tension, hydrophilic-lipophilic balance (HLB) and critical miscellar concentration (CMC). The students also gain knowledge about the construction of ternary phase diagram for the three-component system, determination of rate constant, ionization constant, distribution coefficient, particle size distribution, adsorption behavior, flow properties of solids and CST of phenol-water system.

The students should able to

1. Explain Percent composition determination by various methods.
2. Explain pH estimation – colourimetric method & half neturalization methods.
3. Understand explain molar refraction determination.
4. Understand effect of dielectric constant on the solubility of the drug.
5. Understand Heat of neutralization.

PHARMACEUTICAL ORGANIC CHEMISTRY – III LAB

Pharmaceutical organic chemistry-II laboratory course concentrates on the synthetic strategies involved in the preparation of drug intermediates. The course allows conducting the synthetic procedures to the students and allowing understanding the reaction mechanism involved in them. The focus is also given to the purification of the heterocyclic drug intermediates. The students should able to (1) synthesize compounds and drugs, (2) propose reaction mechanisms involved in the synthesis, and (3) adopt the purification strategies for hetero aryl derivatives.

The students should able to

1. Synthesize compounds and drugs.
2. Propose reaction mechanisms involved in the synthesis of heterocyclic compounds.
3. Make them understand and adopt the purification strategies for hetero aryl derivatives.

PHARMACOGNOSY – I LAB

Pharmacognosy laboratory course focus on the macroscopical and microscopical evaluation of plant crude drugs. Also includes study of transverse sections and microscopical study of powdered crude in binary mixtures. Swelling factor and refractive index of crude plant materials are determined. The students acquire knowledge on the isolation and identification active principles from the plant sources; (eg: cineole present in eucalyptus oil), determination of stomatal index, palaside ratio and number and distillation of volatile oils. It also provides training on the measurements of fibers and grains.

The students should also able to

1. Describe morphology and microscopic characteristics of crude drugs and mixture of

crude drug powders.

2. Conduct transverse section of crude plant materials.
3. Isolate and identify chemical constituents using chemical tests.
4. Evaluate quantitative parameters of leaf crude drugs..

PHARMACEUTICAL ANALYSIS – I LAB

Pharmaceutical analysis laboratory course focus on calibration of weights and glasswares (pipette and burette). Adequate exercises are provided regarding standardization of solutions of different strengths. Knowledge about the principles and methodology involved in the various volumetric analyses such as acidimetry, alkalimetry, oxidation reactions and reduction reactions, iodimetry, iodometry, complexometry, precipitation and non-aqueous titration is imparted. It helps students to acquire knowledge about principles and practice of gravimetric analysis.

The students should be able to perform :

1. Understand the importance of calibration and adopt techniques like calibration of weights, pipette and burette.
2. Gain knowledge in standardization of solutions with different strength.
3. Perform volumetric analysis such as acidimetry and alkalimetry, oxidation and reduction reactions, iodimetry, iodometry, complexometry, precipitation and non-aqueous titration.
4. Perform gravimetric analysis by silver salt method.

PHARMACEUTICAL UNIT OPERATIONS – II LAB

Pharmaceutical engineering –II laboratory course concentrates on unit operations such as size reduction, size separation, distillation and drying. The students determine the Reynolds number, heat transfer coefficient, humidity of air, particle size distribution and sieve analysis through experiments. The students verify Strokes law / determine of rate of drying of solid samples and several types of distillation processes. The students will gain knowledge regarding the drawing the symbols and equipments involved in the unit operations and also flow sheet for industrial manufacturing processes. The students should able to

The students should be able to perform :

1. Perform size reduction, size separation, distillation, drying.
2. Draw the symbols and equipment in unit operations and flow sheets.
3. Quantitate heat transfer by radiation and convention
4. Measure humidity of room

BIOCHEMISTRY LAB

Pharmaceutical biochemistry laboratory course concentrates on the qualitative and quantitative determinations of biological samples blood and urine. Qualitative determination of the carbohydrates and proteins are studied. The students conduct of liver function test and

quantitative estimation of glucose, urea, and creatinine present in the blood sample. The focus is also given to train the students regarding the estimation of urine contents such as creatinine.

The students should able to

1. Perform qualitative analysis of carbohydrates, proteins and lipids.
2. Estimate blood glucose and blood cholesterol levels.
3. Estimate creatinine levels in urine and liver function test.

PHARMACEUTICAL MICROBIOLOGY LAB

Pharmaceutical microbiolgy laboratory course focus on training in microbiology techniques.The students should gain understanding regarding the preparation of media required for theconduct of the experiments and the sterilization techniques (dry heat and moist heat) andaseptic conditions. The students use staining techniques and also study bacterial motility. Thecourse also provides hands on training to the students regarding the isolation of cultures,isolation of bacteria from air and preservation of cultures. The course also designed to studybacteriology of milk and water.

The students should able to

The students should be able to:

1. Demonstrate the principles of sterilization by dry and moist heat methods.
2. Prepare various media and aseptic transfer and staining techniques, bacterial motility by hanging drop technique.
3. Acquire knowledge on the principles of biochemical reactions for identification of bacteria.

PHARM. TECHNOLOGY – I LAB

Pharmaceutical technology laboratory course provides knowledge on the granulation, tablet compression and filling processes. Preparation of tablets (coated and uncoated) and medicaments filled hard gelatin capsules are attempted. The manufacture of parenteral, ophthalmic preparations and gels are included in the experiments. The preparation of emulsion and suspensions including the selection of appropriate suspending agent and HLB concept are included. The student's knowledge evaluates the physical stability evaluation (quality control tests) of tablets, capsules, emulsions and suspensions.

The students should able to

1. Perform size reduction, size separation, distillation, drying.
2. Draw the symbols and equipment in unit operations and flow sheets. CO 3. Quantitate heat transfer by radiation and convention
3. Measure humidity of room

ADVANCE COMMUNICATION SKILL LAB

Advance communicative laboratory course focus on the design and execution of various communication skills. The students attempt the construct of procedures, proposals, letters,

memo, job applications, resume, cover letters, analytical reports and talk. It also clarifies the appropriate use of common punctuation marks, bullets, numbers, white space, symbols and abbreviations. The representation of a data in graphs, tables and figures are practiced. This also ensures the students knowledge regarding the phonetics rhythm, intonation, accent difference between international varieties of English. It prepares students for the elocution, debating, group discussion and brain storming. The course also concentrates on the design of web page and electronic publishing. It provides adequate training for the collaborations with network technologies such telemedicine.

The students should able to

1. Practice skills of communication, medium and presentation
2. Practice spoken and written english, communicate through letters and delivery speech.
3. Write essays on our own civilization and Andrew Carnegie

MEDICINAL CHEMISTRY – I LAB

Medicinal chemistry-I laboratory course provides adequate training to students to design and synthesis organic intermediates and the understanding regarding the principle and methodology involved in the synthesis of various medicinal compounds of diverse chemical categories. This course also deals with the purification and characterization of the synthesized compounds. A special focus is given to the characterization of molecules through IR spectroscopy, practice for the isolation and estimation of active principles present in the pharmaceutical formulations.

The students should able to

1. Design and adopt the reaction schemes for the synthesis of various medicinal compounds of diverse chemical categories.
2. Analyse functional groups present in drugs through IR.
3. Estimate the actual amount of drug present in pharmaceutical formulations.

CHEMISTRY OF NATURAL PRODUCT LAB

Pharmaceutical chemistry (Chemistry of natural products) laboratory course involves on the qualitative and quantitative determinations of natural products. Qualitative determination of the carbohydrates, proteins and amino acids are attempted. Qualtitative analysis of alkaloids, triterpenoids and steroids are included. Acid value, saponification value, peroxide value and iodine value of plant products are estimated. Experiments include extraction and estimation of active principles present in the plant materials (eg: atropine and ephedrine).

The student should able to

1. Classify carbohydrates, fats/oils, proteins, terpenoids, flavanoids, alkaloids and steroids based on their structure.
2. Describe extraction, isolation and purification methods of natural compounds.
3. Establish the structure of natural molecules and biomolecules of pharmaceutical importance (carbohydrates, flavanoids, terpenoids etc.)

4. Describe qualitative and quantitative methods for the identification of natural compounds – alkaloids, purines and xanthines.
5. Appreciate the importance of retro-synthetic analysis in the structural elucidation of compounds.

NOVEL DRUG DELIVERY SYSTEM LAB

Dosage formulation design laboratory course concentrates on the various preformulation strategies, the principles, methodology and evaluation (quality control) of microspheres (albumin and alginate) and their particle size characteristics, liposomes, matrix tablets and studying their release pattern. It covers the knowledge about the evaluation of marketed sustained release tablets including their *in vitro* dissolution studies and transdermal formulations. The students also gain practice on the evaluation of solid dispersion of drugs.The course attempts to solve the preformulation problems using analytical methods.

The students should ale to

1. Prepare dosage forms by applying preformulation knowledge.
2. Identify and solve in process practical formulation problems
3. Perform evaluation of prepared dosage forms using analytical methods and interpret them.

PHARMACEUTICAL BIOTECHNOLOGY LAB

Pharmaceutical biotechnology laboratory course train various biotechnology techniques and sterility testing of pharmaceuticals, which include the preparation and standardization of cultures. The course also includes the experiments for the microbiological assay of antibiotics and vitamins. The students gain the experimental exposure on the fermentation and immobilization techniques. The course also focuses on the isolation of mutants and extraction of DNA. The preparation of bacterial vaccine, blood products / human normal immunoglobulin injection is ensured in the design.

The students should able to

1. Study the factors affecting fermentation.
2. Isolate bacterial DNA.
3. Understand immunization products (passive and active), and their application.
4. Isolate and preserve useful microorganisms for industrial applications. CO 5. Conduct microbiological assays of pharmaceutical dosage forms.

PHARMACEUTICAL ANALYSIS II LAB

Pharmaceutical analysis-II laboratory course provides knowledge about the various instrumental separation and identification techniques. The separation techniques include paper, thin-layer (TLC) and column chromatography. The students also determine related principles of drug solutions through colorimeter, UV-spectrophotometer and fluorimeter. The focus is given to determination ions present in drugs by turbidimetry, nephelometry, polarography, specific - ion electrode and flame photometer. The course also concentrates on

the electrophorosis, potentiometric and conductometric experiments and determination of moisture content.

The students should able to

1. Describe the separation techniques like paper, thin layer chromatography and electrophoretic techniques and its applications.
2. Describe the principles of UV/Visible, fluorometry, nepheloturbidometry, IR and flame photometry techniques in the quantitative identification of pharmaceuticals.
3. Explain the principles of conductometric and potentiometric analysis and its applications in analysis.

2.1.2 State the delivery details of the contents beyond the Syllabus for the attainment of POs (20)

(Provide details of the additional course/learning material/content/laboratory experiments/projects etc., arising from the gaps identified in 2.1.1 in a tabular form in the format given below)

Though the Jawaharlal Nehru Technological University, B. Pharmacy is well designed and achieved the program outcomes (PO's), a few gaps are mentioned below as per the format given.

CAY – 2018-19: Contents beyond the Syllabus

Sl. No.	Subject Name, Year/Semester	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	No. of students present	Relevance to POs
1	Pharmaceutical Inorganic Chemistry	Importance of water for injection and sterile water for injection	Time is devoted in the theory classes Given as assignment	31/12/17	Dr. Pratap Kumar Patra	54	3
2	Ph. Inorganic Chemistry	Process of dialysis	The topic was covered by giving the assignment	13/12/17	Ms. Shital Dange	54	9
3	Ph. Inorganic Chemistry Lab	Assay of compounds not mentioned in syllabus	2 experiments conducted (complexometry and acid base titrations)	26/11/17	Ms. Kavitha	54	11
4	Pharmaceutical Organic Chemistry – I	Acidity and basicity of organic molecules	Covered in regular classes (types of reagents)	20/07/17	Mr. G. Suresh Kumar	39	3
5	Pharmaceutical .Organic Chemistry- I	Rules governing electronic configuration	Covered in regular classes	07/07/17	Ms. Shital Dange	39	4

6	Pharmaceutical Analysis – I	Sampling methods	Covered in regular classes (fundamentals of analysis) given seminars	20/07/17	Ms. Alekhya	39	9
7	Pharmaceutical Organic Chemistry – I Lab	Preparation of *p*-nitro acetanilide from acetanilide	Extra experiment conducted	21/08/17	Mr. G. Suresh Kumar	20, 19	2
8	Pharmacognosy –I	Alternative system of medicine	Extra class was conducted	07/09/17	Ms. G. Rupali	60	6
9	Pharm. Biochemistry Lab	Biochemical tests for Urea, sodium, calcium etc.	Extra practical was conducted	26/2/18	Ms. Shital Dange	39	9
10	Medicinal Chemistry – I	Chemistry on new drugs reversible proton pump inhibitors, antihistamines, hypoglycemic	Extra classes were taken	05/08/17	Dr. V. Sivajothi	50	11
11	Physical Pharmacy – I	Software used to construct phase diagram	Demonstration was given	13/07/17	Ms.Akula. Niharika	50	4
12	Pharmacognosy – II	Herbal formulations and herbal cosmetics	Seminars given by the students	23/01/18	Students	50	11
13	Pharmaceutical Chemistry (CNP)	Classification and types of proteins and amino acids	Seminar was arranged	08/02/17	Students	52	3
14	Pharmacology Lab	No hands on experiments	Handling of animals, various routes of drug administration- demo	04/12/17	Mr. M. Vishnu Vardhan Reddy	22	2
15	Pharmaceutical Analysis – II (Instrumental Analysis)	HPLC practical component is required	Demonstration of HPLC usage was conducted	10/9/17	Ms. M. Alekhya	55	4
16	Novel Drug Delivery System	Latest developments in CDDS	Seminars were given by students Students	5/1/17, 6/1/17	Students	55	11

CAY *m1* – 2017-18: Contents beyond the Syllabus

S. No.	Subject Name, Year/Semester	Gap	Action Taken	Date Month-Year	Resource Person with Designation	No. of students present	Relevance to Pos
1	Physical Pharmacy- II	Stability testing – industrial aspects	Seminar was arranged	31-1-17	Dr. S.A. Sreenivas	55	3
2	Pharmacognosy – II	Role of nanoparticles - smart herbal drugs	Seminar was given by Students	02-01-17	Students	45	6
3	Forensic pharmacy	Drug control acts and its regulators	Guest lecture was arranged	29-9-16	Dr. Krishnakumar, Biocon, Banglore	50	11
4	Pharmacology-II	neurological disorder "Narcolepsy"	Seminar was arranged	03-01-16	Students	50	2
5	Biostatistics	Concepts of statistical techniques in excel	Practice session was arranged to students	04-03-17	Mr.B.Ramakrishna Reddy	50	4
6	Biopharmaceutics & Ph. Kinetics	Chronopharmacokinetics	Seminar was arranged	02-02-16	Students	48	2
7	Medicinal chemistry-II	Importance of QSAR	Guest lecture was arranged	12-02-16	Dr. Satya P Gupta, NITTR, Bhopal	60	4
8	Dosage form design	Advances in Nanomedicines	Seminar was Arranged	06-01-17	Students	45	11

CAY *m2* – 2016-17: Contents beyond the Syllabus

S. No.	Subject Name, Year/Sem	Gap	Action Taken	Date Month-Year	Resource Person with Designation	No. of students present	Relevance to Pos
1	Environmental Studies	Awareness to normal pollution and its prevention	Expert talk	04-01-16	Dr Y Anjaneyulu, Rtd. Professor of JNTUH	55	3
2	Pharmacology-II	Screening methods of anti-cancer drugs	Guest lecture was arranged	21-12-15	Dr. J Rajasekhar, Reddy's Lab, Hyd	45	6

3	Pharmacology-II	Drug discovery and Developments	Guest lecture was arranged	07-12-15	Dr. Vadlamudi Rao, St.Peters Institute, Warangal	50	11
4	Pharmacology-II	Screening method Details	Guest lecture was arranged	21-12-16	Mr. AV Krishnamraju, Laila Impex, AP	50	2
5	Forensic Pharmacy	Principles & filing of ANDA	Guest lecture was arranged	27-07-15	Mr. G.S. Radhakrishnan, Mylan labs, Hyd	50	4
6	Forensic Pharmacy	Intellectual property rights	Guest lecture was arranged d	27-07-15	Prof. GB Reddy, OU, Hyd.	48	2
7	Biopharmaceutics and Pharmacokinetics	Bio-simulators in drug discovery	Guest lecture was arrange	30-10-16	Dr. K. Kishan Kakatiya University. Warangal	60	4
8	Pharmaceutical Analysis – II	Principles of LCMS	Guest lecture was arranged	04-01-15	Mr. Praveen Kumar, Actimus Biosciences, Hyd	45	11
9	Pharmaceutical Business Management	Marketing management	Guest lecture was arranged	08-03-16	Dr. C.P. Dwarakanath, Natco Pharma, Hyd	45	4
10	Novel Drug Delivery System	Advances in novel drug delivery systems	Guest lecture was arranged	16-11-15	Prof. M Vittal, OU, Hyd	45	9

Note: Please mention *in detail* whether the Institution has given such inputs and suggestions to the Affiliating University regarding curricular gaps and possible addition of new content/add-on courses in the curriculum, to bridge the gap and to improve attain program outcome(s).

Apart from the above details, we would also like to mention that, the GPAT syllabus is also being merged into the regular syllabus of every course and lesson plan is prepared. A sample copy of the course is also enclosed as Annexure-IV.

2.1.3. Adherence to Academic Calendar (10)

(Demonstrate notified academic calendar & its adherence)

In the beginning of every academic year, an academic calendar is prepared with an objective to plan the academic activities to be undertaken in the coming year based on the University circular. It is finalized by the college examination committee in consultation with the Principal and other committee members. The calendar specifies the number of days available for teaching excluding Holidays, Sundays and Examination days. The calendar specifies minimum number of lectures and practicals to be conducted per semester depending upon weightage in the curriculum. It gives dates for conduction of internal theory and practical examinations. The planned dates are subject to change as per the University circular related to examinations. The teaching plan is prepared adhering to the academic calendar and given to the students in the beginning of the semester. Other activities including various cultural events, extra and co-curricular events, health campaigns and sports events are also planned in advance.

2.2. Teaching-Learning Processes (110)

2.2.1. Initiatives in teaching and learning process (25)

(Implemented teaching-learning process and Initiatives in improving instruction methods, using real world examples, collaborative learning, the quality of laboratory experiments with regard to conduct, record observations, analysis, Feedback collection process; collection, analysis and action taken etc. encouraging bright students, assisting weak students etc. The initiatives, implementation details and impact analysis need to be documented)

The syllabus is prescribed by the JNTU, Hyderabad and hence there is very little scope in going beyond syllabus.

The initiatives in teaching and learning process are done at two levels i.e. for theory classes and practical sessions separately. The mechanism and implementation have been described hereafter.

I. Theory classes:

As the onus on education relies mostly on the theory classes, lots of measures are taken to keep the lectures engaging and interactive. Some of the measures taken are:

1. Multimedia elements such as Power Point, Flash, Movie Maker, Animations etc. have been widely used.
2. Other practices such as think pair and share, flip class. tips to learn better, Model Making, Chart Making, bringing live specimens, Markets Surveys etc. have been employed depending upon the curriculum and its scope.
3. In order to boost the interest of the students in their area of interest, assignments or projects are given to top 10 – 15 students of the class which would help them in making

the right career choice and help in seeking admission in future to an institution of repute.

4. Students whose marks are below the minimum pass marks are encouraged to attend remedial classes and are asked to solve University question papers. These papers are then corrected by the subject in charge and the mistakes and solutions are explained to the students on one-on-one basis.
5. Other than these, course specific activities and approaches are adopted to infuse keen interest and enthusiasm in a subject to keep the students abreast with the changing scenario in the industry and to help them perform to the best of their abilities.

Think-pair-share (TPS) is a collaborative learning strategy in which students work together to solve a problem or answer a question about an assigned reading. This technique requires students to (1) think individually about a topic or answer to a question; and (2) share ideas with classmates. Discussing an answer with a partner serves to maximize participation, focus attention and engage students in comprehending the reading material.

Flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom.

Teaching – learning methods:

Lectures/Presentations: Lectures are the effective ways of achieving the program outcomes (POs) and course outcomes (COs). The course outcomes could not be better achieved without these. Lectures are the best ways to get facts, make students to think and understand the concepts. The teacher is readily available to clear the doubts instantaneously. Thus these make a platform to cover and improve the ability to design, formulate and solve problems. Mode of delivery of lectures is power point presentations.

The course information and peripheral knowledge on the web are made available to promote learning.

Laboratory Component: Laboratory is an important component that allows the students to acquire psychomotor (practical) skills. In addition, students are trained to collect the data, transformation of data as per the scientific principles, analysis, interpretation and drawing conclusions. These skills also allow the students to appreciate the theoretical principles. It is a place where in several PO's can be attained, because of high contact time and 1 to 1 basis.

Educational/Industrial Visits: Visiting of resource centers, work places and research organizations helps to explore all opportunities and have greater impact on the students. These

allow the students to make real-life decisions. These have proved successful in career exploration, decision making and to become life-long learners.

Seminars: These serve as a platform for sharing knowledge/expertise in advanced areas, which results in collaboration and attempt for enhancement of the skills, techniques and modern tools necessary for the practice of pharmacy profession. Several POs can be attained in a seminar method on account of flexibility. Seminars are given be the students.

Guest Lectures/Expert Talks: Expert talks by the eminent persons working in pharmaceutical industries/research organizations/ practicing pharmacists help the students and the faculty to understand current trends in various spheres, which leads to the attainment of POs. External resource persons also add value to the program and help students to realize the link between education and real world in the profession. These talks become a bridge to fill the gaps and also develop rapport for meeting the future need of the industries / research organization / universities. These promote the sense of life-long learning.

Workshops: The College organizes the orientation programs as a first step to introduce the students to the college, of course, profession etc. As a part of this exercise, the college also conducts workshops. These also help in developing self learning process and support the lifelong learning.

II. Practical sessions:

1. Pairing of students: Based on their previous semester practical marks in a similar subject, ranks are assigned to all students in a batch. [In case of a tie in practical marks, the marks obtained in the theory course are considered. In case of the first year students, their marks in HSC are considered]. Then the student assigned rank 1 is paired with that having rank 11, student with rank 2 is paired with that assigned rank 12 and so on. This ensures that a student who is weak in a certain subject is paired with an academically stronger student which helps them in understanding and coping up with practical requirements.
2. Helping academically weaker students: Based on the periodic marks of the students, those securing lower marks are given additional revision turns to help them gain more experience and confidence.
3. Encouraging bright students: Based on their previous semester marks, students showing an aptitude for the subject are encouraged to read/ experiment beyond the scope of the prescribed syllabus to further their interest.

4. Other than these common strategies; course-wise techniques are adopted by the subject teachers to inculcate enthusiasm in their subject. Some of these techniques involve competitions during practicals, real-life problem analysis and solving, making of charts & models etc.

Implementation: The conduct of these teaching methods is well documented in the time tables. The recording of observations, analysis of results and documentation (laboratory manuals) are being implemented scrupulously.

Feedback: Examinations of theory and practicals are periodically conducted and feedback is given individually. Further, feedback is collected from the students at the end of each semester about the delivery of teaching per each subject. Such a feedback helps in improving the capabilities of teachers. On the other hand, students are given rewards and appreciation certificates for achieving academic excellence in each semester wise.

Impact: All these effects gave fruitful results as our students excelled in the national level competitive examinations for higher education. A few institutions are NIPER, BITS-Pilani, BITS-Hyderabad. Several of our students took admissions in the foreign universities such as New Jersy Institute of Technology (NJIT), Massachusells Institute of Technology (MIT), Lamas University, Tiny University, North-Western Polytechnic University, North-Eastern University, Cambell University, School of Pharmacy and California University of Management Sciences. In short, the college opens it doors and keep the faculty open to students at all times.

2.2.2 Quality of internal semester question papers, assignments and evaluation

(Mention the initiatives, implementation details and impact analysis related to quality assurance of semester question papers, assignments that encourage and empower the students to develop skills and higher orders of learning and evaluation)

As per the JNTU Hyderabad regulations, the components allotted to theory are 25% and practical's 33% for internal assessment. The remaining 75% (67% for practicals) is included in university assessment. The university examinations are conducted at a center as allotted by JNTUH.

University Semester examination papers are set by a panel of examiners appointed by the University. The question papers are sent online by Digital Examination Paper Downloading (DEPD) system to the college on the day of examination. Internal periodic examination papers are set by the subject teacher(s). These papers are reviewed by the respective Head of the

Departments and after revision (if any) are submitted in sealed envelope to the examination section. The internal assessment covers following components –

Descriptive – 10 marks

Objective – 10 marks

Assignment – 5 marks

In addition to the internal periodic examination, a class test is conducted. Sometimes students are given assignments in their respective subjects to upgrade their knowledge. These are evaluated by individual faculties with their own perspective.

Though the percentage of internal assessment is low, it is covering a large number of components of assessment. The internal examinations and the prescribed marks are to be complied with the regulation. Therefore, the scope for assessment is narrow.

The internal assessment evaluation is separately compiled and graded to understand the process.

Internal assessment in a Semester

Component	Nature of exam	Quality of question Papers	Items covered
Theory	Objectives	Question paper prepared by following bloom taxonomy	Multiple choice and fill in the blanks questions
	First mid exam	Question paper prepared by following bloom taxonomy	Short essay and long essay questions
	Objectives	Question paper prepared by following bloom taxonomy	Multiple choice and fill in the blanks questions
	Second sessional Exam	Question paper prepared by following bloom taxonomy	Short essay and long essay questions
Practicals	Daily evaluation	Question paper prepared by following bloom taxonomy	Planning, analysis of lab skills, finishing the experiment
	Practical examination	Question paper prepared by following bloom taxonomy	Synopsis, spotting and vivavoce, major experiment and minor experiment
	Laboratory manual	Question paper prepared by following bloom taxonomy	Communication, data Interpretation
Beyond syllabus	Conducting 02 Experiments	-	Communication, data Interpretation
Overall evaluation	External exam – semester wise	Question paper prepared by following bloom taxonomy	Short essay and long essay questions, Communication, data interpretation

In the above context, the scores of the students are listed into different categories.

2017 – 2018 Internal assessment

Year & Semester	Number of candidates									
	Theory					Practicals				
	Above 80%	70-80%	60-70%	50-60%	Below 50%	Above 80%	70-80%	60-70%	50-60%	Below 50%
I/I	1	28	38	09	-	52	20	01	-	-
I/II	**24**	**36**	**11**	**-**	**-**	**24**	**36**	**11**	**-**	**-**
II/I	3	19	11	11	03	23	23	06	05	02
II/II	**2**	**20**	**14**	**16**	**2**	**35**	**3**	**14**	**-**	**-**
III/I	1	16	21	19	4	46	10	2	1	4
III/II	**2**	**8**	**28**	**22**	**5**	**41**	**19**	**6**	**-**	**-**
IV/I	2	12	8	6	5	9	15	2	-	5
IV/II	**-**	**7**	**19**	**13**	**-**	**25**	**8**	**6**	**-**	**-**

2016 – 2017 Internal assessment

Year & Semester	Number of candidates									
	Theory					Practicals				
	Above 80%	70-80%	60-70%	50-60%	Below 50%	Above 80%	70-80%	60-70%	50-60%	Below 50%
I/I	16	26	13	08	05	26	29	09	04	00
I/II	3	18	16	14	1	24	12	12	3	6
II/I	19	12	10	08	09	16	22	19	01	00
II/II	12	16	18	06	06	30	15	13	00	00
III/I	16	15	10	09	12	33	13	11	05	00
III/II	13	17	14	06	12	31	16	07	08	00
IV/I	17	16	12	08	14	26	28	13	00	00
IV/II	18	17	18	07	17	23	29	13	02	00

2015 – 2016 Internal assessment

Year & Semester	Number of candidates									
	Theory					Practicals				
	Above 80%	70-80%	60-70%	50-60%	Below 50%	Above 80%	70-80%	60-70%	50-60%	Below 50%
I	15	11	14	12	06	25	17	06	10	00
II/I	15	09	11	09	18	14	16	20	09	03
II/II	08	11	10	06	27	23	13	16	10	00
III/I	05	14	14	10	24	27	21	18	01	00
III/II	09	15	10	16	17	28	22	16	01	00
IV/I	10	12	20	16	07	24	23	12	05	01
IV/II	12	07	17	17	12	11	16	23	08	07

2.2.3. Quality of Students projects

(Quality of the project is measured in terms of consideration to factors including, but not limited to, cost, type {application, product, research, review etc.} environment, safety, ethics and standards. Processes related to projectidentification, allotment, continuous monitoring, evaluation including demonstration of working prototypes, and to enhance the relevance of projects. Mention Implementation details including details of POs addressed through the projects with justification)

The syllabus include research activity by the undergraduate students in IV year II semester, therefore we have started this activity which can inspire them to think analytically, utilize the scientific principles and solve the given problem.

To execute this research activity, all the fourth year students were given a mini research project under the guidance of respective faculty members. The project was research based. The research work was done in the college in the span of three months. The selection criteria for mini research project was,

1. It should be cost effective
2. Safe and eco-friendly

After the lab work, students submitted a report consisting of the Abstract, Introduction, Rationale, Literature Search, Methodology, Result and Conclusion. The students presented theirwork in the form of seminar and were evaluated by one external examiner deputed by the university. As the criteria for evaluation were Project Sustainability, Quality of Research, Presentation and Defence, the quality of these projects was evaluated based on its reflection on various Program Outcomes like PO1, PO2, PO3, PO5 and PO8. From the results, it was observed that maximum students identified and understood the problem given to them. They

tried their best to solve the project and apply the available scientific knowledge to interpret the data efficiently. Simultaneously it was observed that some students could present the data well and defend their work in a proper technical manner.

Process of project identification: Based on the advancement in pharmaceutical sciences, and gaps identified in the syllabus of JNTUH, a few topics are identified by the teachers. Each teacher gives 5 topics of his/her speciality. A pool of 70 topics of all specializations – pharmaceutics, pharmaceutical chemistry, pharmacognosy, pharmacology and pharmaceutical analysis are collected. The topics cover wide range of components, product, research, review, applications of pharmaceutical sciences, pharmacopoeial standards, safety, ethics etc. In addition, students are given a chance to select their own topic in consultation with the teacher (facilitator). These topics were displayed on the notice board and allowed the selection. The topic, student name, facilitator name and date of seminar presentation are finalized and displayed in the notice board.

Continuous monitoring: The students interact with teachers and begin the process. Throughout the period, the teacher facilitates the student in achieving the desired objectives, in terms of verifying the authenticity of the materials, organizing and written document. In addition, the students also prepare PowerPoint presentations, which will be moderated by the teacher for approval to oral presentation. The time duration of the presentation scheduled is 30 minutes (20 minutes for presentation and 10 minutes for open discussion) for each student.

Evaluation: The written document (project writing and assignment) will be evaluated by two teachers. During the oral presentation, two teachers along with all students will witness the proceedings. The student is encouraged to use audio visual aids and blend of teaching aids. The oral presentation is evaluated by two teachers. Finally each student is given a 'word' grade.

Seminars

List of B.Pharmacy Seminar components –
CAY 2018-2019

Roll No.	Name of student	Title	Guide	Date of Seminar	Review of PO's
15U21R0001	GAVALE SAI KIRAN	High through put screening	Dr. Pratap Kumar Patra	29-1-17	1,4&7
15U21R0002	NALLA LAXMI SOWMYA	Antisence oligo nuclotide therapy	Dr Ravi Shankar	2-1-17	1,4&7
15U21R0003	ASRA FATHIMA	Role of antioxidants in the treatment of various ailments	Drsattanathan	2-1-17	1,4&,7
15U21R0004	T LEELA VENKATA SATHYA NARAYANA	Biopharmaceutics in referentivemedicin	Mrs. Mary RatnaAnitha	2-1-17	1,3,4,7&11
15U21R0005	ROKKALA PRAVALIKA	Asperger syndrome	Mr. V. Pradeep Kumar	3-2-17	1,4&9

15U21R0006	ANUGU NIKHITHA REDDY	Enhancement of dissolution rate of poorly water soluble drugs	Mrspamukuntla Deepika	3-2-17	1,3,4,7&11
15U21R0007	RAPOLU PRAKRUTHI	Derivative spectroscopy principle and applications	Mr. N. Sai sreekanth	6-1-18	1,3,4&11
15U21R0008	PULAGAM MANIMALA	Pathophysiology and therapy of dengue fever	Mrs. Rupali Gawande	6-2-18	1,4&9
15U21R0009	KAMBALAPALLY VENKAT RAM REDDY	Hydrotropy and its application in pharmacy	Mr. Aswin Reddy	6-1-18	1,3,4&11
15U21R0010	KANCHARLA SRILEKHA	Dendrimers as drug carriers	Mr. Shaik muneeruddin	3-1-18	1,3,4,7&11
15U21R0011	PALABATLA AKHILA	Biosimulations: computerised tool in the drug development	Ms. Bangaru Mamatha	5-1-18	1,4&7
15U21R0012	MANNEM SRAVANI	Pelletization preparation characterisation and application	Mr. M. Vishnu Vardhan Reddy	3-1-18	1,3,4,7&11
15U21R0013	DEVANAKA KAVYA	Implications of aldose reductase inhibitors in the treatment of type 2 diabetes	Ms. Gundeboinaswathi	6-2-18	1,4&7
15U21R0014	SARA MARIYAM	Neutraceuticals in prevention of diseases	Ms. K Janaki	29-1-18	1-11
15U21R0015	BADRIPALLY NARESH	Protein and peptide drug delivery across skin	Ms. Akula Niharika	31-1-18	1,3,4,7&11
15U21R0016	GANDHETI ESTHERRANI	Recent advances in the treatment of hypertension	Mr. K Kiran	9-1-18	1,4&9
15U21R0017	MAMMIDALA SAHITHI	Plants and phytochemicals for huntingtons disease	Ms. Mangaraikavitha	9-1-18	1,4,9&10
15U21R0019	KASIREDDY ANUSHA	Polymers and modifications of polymers for colon targeted drug deliver	Ms. Vogotijansilaxmi	30-1-18	1,3,4,7&11
15U21R0020	RAMANAMONI MAHESH	Nano emulsions	Mr. Mathangi Praveen Kumar	6-1-18	1,3,4,7&11
15U21R0021	KONGARI GEETHANJALI	Importance of mannich bases in medicinal chemistry	Mr. SuvanpuramRajshekar	10-2-18	1,4,&7
15U21R0022	MOHAMMED NASEER UDDIN	Molecular modifications of known drugs lead to the development of new medicinal agents	Mr. G Abhilash	2-1-18	1,4&7
15U21R0023	NIDA AFREEN	Multi functionalmesosporous silica nano particles as a carrier of chemo therapeutic agent	Mr. Kiran kumarmudi	3-1-18	1,3,4,7&11
15U21R0024	SIMREEN	Buccal drug delivery system	Ms. Rudraksha Renuka	3-1-18	1,3,4,7&11

15U21R0025	KARNE VINDHYA	Luekemia and lymphoma	Ms. KommuManasa	23-1-18	1,4&9
15U21R0026	S KOKIL	High frequency titrations	Mrs. Pallam Naga Chandrika	23-1-18	1,3,4&11
15U21R0027	PADAM BHARGAVI	Anti tubercular agents targets therapeutic approach and MOA	Ms. AithaGoni Kalpana	29-1-18	1,4&,7
15U21R0028	NAUSHEEN BEGUM	Prodrug concept and applications	Ms. P. Alivelu	2-1-18	1-11
15U21R0029	D SPANDANA	Cyclodextrin based nano sponges for pharmaceutical use	Ms. Nousu Chaitanya venkatamma	5-2-18	1,3,4,7&11
15U21R0030	PANDI ASHWINI	Importance of benztriazole nucleus in medicinal chemistry	VLD Spandanaonduu	3-2-18	1,4&7
15U21R0031	KADARI KRISHNA SAI	Alzheimers disease	MRS. MARY RATNA ANITH	30-1-18	1,4&9
15U21R0032	MANURI SHEKAR	Monogenic diseases and their treatment	Dr. V. Sivajothi	23-1-18	1-11
15U21R0033	GANNA BHAVANI	Tablet coating	Dr. K. S. Nagesh	10-2-18	1,3,4,7 &11
15U21R0034	BOJJURI MOUNISHA	Psoriasis	Dr. Pratap Kumar Patra	23-1-18	1,4 & 9
15U21R0035	TUMMALA SINDHU	Lipid based drug delivery systems	Dr Ravi shankar	2-1-18	1,3,4,7&11
15U21R0037	GHOUSE MOHD NOOR	Derivatisation in HPLC	Drsattanathan	31-1-18	1,3,4&11
15U21R0038	MALTUMKAR NAVYASRI	Incretin based therapeutics	Mrs. Mary RatnaAnitha	6-2-18	1,4&7
15U21R0039	LATTIPALLY NAGARJUN	Magnetic colloids as drug vehicles	Mr. V. Pradeep Kumar	23-2-18	1,3,4,7&11
15U21R0040	G AKSHITHA	Analytical separation involving solvent extraction	Mrs M. Alekhya	3-1-18	1,3,4&11
15U21R0041	GORREMUCHU SRIKANTH	Implications of aldose reductas inhibitors in the treatment of type 2 diabetes	Mr. Lingeshwara Rao	31-1-18	1,4&7
15U21R0042	M DIVYA	Nitric oxide modulators	Mrs. Rupali Gawande	29-1-18	1,4&9
15U21R0043	THOTA SHEKAR	Emulgels, a novel approach for topical drug delivery of hydrophobic drugs	Mr. Aswin Reddy	6-1-18	1,3,4,7&11
15U21R0044	MUMMADI MADHUSUDANREDDY	Mechanism of resistance by anticancer drugs	Mr. B Srivathsava	29-1-18	1,4&7
15U21R0045	EDULA MOUNIKA	Bio analytical method validation	Ms. Bangaru Mamatha	5-1-18	1,3,4&11
15U21R0047	GATTUPALLY NITHIN REDDY	Drug discovery and development in modern era	Mr. M. Vishnu Vardhan Reddy	5-2-18	1,4&9
15U21R0048	MATHAPU MOUNIKA	Pathophysiology and therapy of hiatus hernia	Ms. Shital Dange	30-1-18	1,4&9

15U21R0049	MOHAMMAD TOSIF	Recent advancements in the treatment of obesity	Ms. K Janaki	23-1-18	1-11
15U21R0050	MUDDAWAR MAHESH KUMAR	Cellulitis and its treatment	Ms. Akula Niharika	10-2-18	1,3,4,7 &11
15U21R0051	PATEL SANGEETHA	Cloud point extraction-in quantitative analysis	Mr. K Kiran	23-1-18	1,4 & 9
15U21R0052	GOTHI GANESH	Herbal skin care cosmetics products: manufacturing and evaluation	Mr. G Suresh Kumar	2-1-18	1,3,4,7&11
15U21R0053	GAIKWAD PAVANKALYAN	Systemic lupus erythematous (SLE) and its treatment	Ms. MadisettiGowthami	31-1-18	1,3,4&11
15U21R0054	CHENNA SOUMYA	Chromogenic reagents-application in quantification of amine group containing drugs	Mr. Mathangi Praveen Kumar	6-2-18	1,4&7
15U21R0055	ANUGU VARSHITHA	Natural excipients in pharmaceutical dosage form	Mr. SuvanpuramRajshekar	23-2-18	1,3,4,7&11
15U21R0057	SANGEM PRANAYA	Cloud point extraction-in quantitative analysis	Mr. G Abhilash	3-1-18	1,3,4&11
15U21R0058	G CHARAN TEJA	Herbal skin care cosmetics products: manufacturing and evaluation	MsSreeHariniMallireddy	31-1-18	1,4&7
15U21R0059	D SAI KUMAR	Systemic lupus erythematous (SLE) and its treatment	Mr. Dharavath Balaji	30-1-18	1,4&9
15U21R0061	SUMESH KUMAR YADAV	Chromogenic reagents-application in quantification of amine group containing drugs	Ms. Rudraksha Renuka	23-1-18	1-11
15U21R0062	L. AKSHAY KUMAR	Natural excipients in pharmaceutical dosage form	Ms. KommuManasa	10-2-18	1,3,4,7 &11
15U21R0063	K. SHRAVYA REDDY	Chemometry and its application in pharmaceutical analysis	Mr. Krishnamachary	23-1-18	1,4 & 9
15U21R0064	P.RANJITH	Microencapsulation as a novel drug delivery technique	Ms. AithaGoni Kalpana	2-1-18	1,3,4,7&11
15U21R0066	NIMMALA SANKEERTHANA	Global warming – causes and reductive measures to reduce global warming	MR. M VISHNU VARDHAN REDDY	31-1-18	1,3,4&11
15U21R0067	S BHANUCHANDER	Application of animal cell culture	MS. BANGARU MAMATHA	6-2-18	1,4&7
15U21R0068	KANDUNOORI ASHRITHA	Ayurgenomics	Dr. V. Sivajothi	23-2-18	1,3,4,7&11
15U21R0069	SORTHE YOGESH BABU	Phytochemicals as radioprotective agent	MS. BANGARU MAMATHA	3-1-18	1,3,4&11

2.2.4 Initiatives related to Industry and/or Hospital interaction (20)

*(*Give details of the industry/ hospital involvement in the program such as industry-attached laboratories, partial delivery of appropriate courses by industry experts and/or collaborative initiatives with the hospitals etc. Mention the initiatives, implementation details and impact analysis)

Initiatives: Institute always strives to impart education of international standards as envisaged in the mission statement.

In addition to the regular compliance to the JNTU Hyderabad approved syllabus, several initiatives have been taken to foster the growth of the students.

With an aim to provide hands-on training to the pharmacy students on recent technologies using commercially viable machineries, equipments, sophisticated process, validated documents, job training, career opportunities, campus recruitments, innovative idea generation Programs and awards, in the premises of Institute.

First year B.Pharm students are encouraged to undergo Blood Bank training to learn the practices in Blood Bank and Second year B.Pharm. students are encouraged to undergo Community Pharmacy training in a Pharmacy Shop. Sample Copy of the training certificate is enclosed as Annexure-IV.

The institute is equipped with sophisticated equipments and instruments required in the research projects. Students and faculty members of the college have an easy access to the research facilities available in the institute.

Students can avail quality lectures from the highly experienced industry professionals. They can think upon the recent challenges the corporates are facing and can approach the industry. It keeps them updated on the current industrial trends and creates ample of job opportunities for them.

They also learn how to make their methodologies tangible in real life situations. Stepping beyond a merely theoretical approach, they need to put across the skills with the help of their professors to transfer ideas and strategies into practice.

It is a win-win situation to both the Institute and Industry with such novel ideas in place.

The college has also established active interactions with other leading Pharma Industries for imparting four-week industrial training to III Year B. Pharmacy students. It also organizes Industrial Visits and facilitates campus placement drives for the Final Year B.Pharmacy students. The industry-institute interaction also supports research activities by providing gift samples of APIs and in some cases generously donating sophisticated equipments required for the same.

The college also organizes lectures in Hospital Pharmacy coupled with Hospital visits to make the students acquainted with the current trends in this arena. Also lectures on specialized topics are arranged, such as Marrow Donor lecture arranged in collaboration with Gleneagles Global Hospital, LB Nagar. The college has signed Memorandum of Understanding with

pharmaceutical industries and hospitals (Gleneagles Global Hospital, LB Nagar) to facilitate activities such as placement drives, health campaigns etc. undertaken by the college.

Implementation details: All the students are led by the faculty to visit industrial exhibition held in January 2015 on the eve of 65th Indian Pharmaceutical Congress, held at Hyderabad. 68th This expo has build up the updating of analytical instruments. A list of advanced topics covered under guest lecturers as well as industrial visits made for last three years is given below.

Guest lectures

2017 – 2018	2016 – 2017	2015 – 2016
BCS System – regulatory benefit by Dr Nalini Sastry, NIPER, Hyd. **Date : 14/03/2018**	Drug design by Dr. Satya P. Gupta, FNASc Professor, Dept. of Applied Sciences, NITTTR, Bhopal, MP. **Date : 14/09/2016**	Generic drug profiling in US by Mr. G. Singarvelan Radhakrishnan, Manager, Mylan Labs, Hyd. **Date : 12/10/2015**
Novel techniques in enhancement of oral Bioavailability of drugs by Dr R Nagaraju, Sri PadmavatiMahila University, Tirupati, AP. **Date : 11/07/2018**	Stability Studies – Ind. Aspects by Dr. Krishna Kumar, Sr. Manager Quality, Biocon, Bengaluru, Karnataka. **Date : 10/03/2017**	Introduction to IPR & University perspectives by Prof. G.B. Reddy, Dept. of Law, OU, Hyd. **Date : 04/01/2016**
Polymeric systems for BCS class-II drugs by Dr CVS Subrahmanyam, GRCP, Hyd. **Date : 04/11/2018**	Expert talk on regulatory affairs by Dr S. Eswara Reddy, Deputy Drugs Controller of India, Ahmedabad. **Date : 08/08/2017**	Regulatory overview of profiling –Biosimulation by Dr. Stephen Amato, North Eastern University, UK. **Date : 14/03/2016**

Industrial Visits for three years CAY, CAY *m1*, CAY *m2*:

Title	Professional societies	Date	Achievements/ Benefits
Medicinal Plants Visit	Centre for Medicinal & Aromatic Plants, Secunderabad.	26-07-2018	Value addition, real time appreciation
Industrial Visit – Production	Dr. Reddy's Laboratories, Hyd.	23-08-2018	Value addition, real time appreciation
Science visit	Birla Planetorium, Hyd.	23-08-2017	Value addition, real time appreciation
Animal House Visit	CCMB, Hyd.	23-09-2017	Value addition, real time appreciation
Production Visit	Eluru Formulations, Hyd.	27-12-2017	Value addition, real time appreciation
Analytical visit	StarTech Laboratories, Hyd.	07-02-2016	Value addition, real time appreciation
Industrial visit	Bio Analytical Lab Expo, Hyd.	06-11-2016	Value addition, real time appreciation
Industrial visit	Centre for Informatics, Hyd.	04-03-2015	Value addition, real time appreciation
Medicinal Plants Visit	Forest academy, Hyd.	06-02-2015	Value addition, real time appreciation

Industrial visit	Bio-leo Laboratories, Hyd.	10-02-2017	Value addition, real time appreciation
Production Visit	Eluru formulations, Hyd.	13-02-2017	Value addition, real time appreciation
Industrial Visit (Production)	ZindaTilismath, Hyd.	04-08-2018	Value addition, real time appreciation
Visit	Youth Convention, Ramakrishna Mutt, Hyd.	10-09-2018	Value addition, real time appreciation

Impact analysis: The students have expressed their happiness for organizing them, expressed satisfaction over the events. These guest lectures supported them for improving the knowledge base and motivate for higher studies.

These helped the students to understand real-time appreciation and value addition.

The students considered it as essential for appreciating and understanding the formulation and manufacturing, as they had already completed the theory part and formulation aspects in the college laboratory. Now they had understood real life situation of large scale production.

2.2.5 Initiatives related to skill Development programs/industry internship/ summer training (10)

(Mention the initiatives, implementation details and impact analysis)

Initiatives: College Training and Placement Cell facilitates arrangements for four weeks in-plant training to be undergone by the III Year Pharmacy students. At the beginning of Semester-VIII, the Cell gives orientation to the students regarding the purpose of In-plant training and procedure to approach industries for the same. The Cell facilitates issue of official appeal letters to the students which need to be submitted to industries.

The Cell further coordinates with industries for the confirmation of accommodation of training. On completion of the training, the students are asked to submit a report of the same and appear for a short individual interactive session with the Training Cell regarding their observations and experiences during the training. Students are evaluated based on the above criteria and top three reports are issued a Certificate of Merit which is handed over to them during the annual gathering function.

Students are benefitted from the practical In-Plant training activity since they have related topics such as Pilot-Plant scale up techniques in their subsequent final year syllabus. The issue of Certificate of Merit additionally motivates the students to strive for active participation in this co-curricular activity.

Implementation: A list of students, their summer industrial training for the last three years is listed below. The industries covered are: formulations, and biological products. A list of students undergone skill development program in drug testing laboratories, Hyderabad, is also included.

Academic Year 2015-2016: Industry internship and summer training

S. No	Hall Ticket Number	Name	Name of the Industry
1	12U21R0002	G. Prasanna	Bridge pharmaceutical limited, Hyderabad
2	12U21R0003	B. Pavanii	Bridge pharmaceutical limited, Hyderabad
3	12U21R0004	K. Bharath Kumar	Sanzyme Ltd, Hyderabad
4	12U21R0007	J. Geethanjali	Sanzyme Ltd, Hyderabad
5	12U21R0010	Shahnaaz Fathima	Bindu pharmaceutical Private Limited, Hyderabad
6	12U21R0012	K. Rajkumari	Bindu pharmaceutical Private Limited, Hyderabad
7	12U21R0015	ShameenUnnia Begum	Bindu pharmaceutical Private Limited, Hyderabad
8	12U21R0016	G. Bhargavi	Hippo labs Pvt. Ltd., Hyderaba Hyderabad
9	12U21R0020	A. Sagar	Bindu pharmaceutical Private Limited, Hyderabad
10	12U21R0021	VippulaAnitha	Hippo labs Pvt. Ltd., Hyderabad
11	12U21R0021	M. Suresh	Bridge pharmaceutical Limited, Hyderabad
12	12U21R0025	A.BinduBrunalika	Sanzyme Ltd, Hyderabad
13	12U21R0026	K. Shiva Kumar	Bridge pharmaceutical Limited, Hyderabad
14	12U21R0027	K. Prashanth	Sanzyme Ltd, Hyderabad
15	12U21R0030	G. Tarun Kumar	Bridge pharmaceutical Limited, Hyderabad
16	12U21R0031	S. venkatesh	Sanzyme Ltd, Hyderabad
17	12U21R0032	G. Ananda Babu	Bridge pharmaceutical Limited, Hyderabad
18	12U21R0033	K. Srujana	Goldfish pharma Pvt. Ltd, Hyderabad
19	12U21R0034	T. Bhaskar Yadav	Goldfish pharma Pvt. Ltd, Hyderabad
20	12U21R0035	D. P. Ojaswini	Goldfish pharma Pvt. Ltd, Hyderabad
21	12U21R0035	CH. Mounika	Goldfish pharma Pvt. Ltd, Hyderabad
22	12U21R0037	S. Ravali Reddy	Bridge pharmaceutical Limited
23	12U21R0038	G. Saisheethal	Goldfish pharma Pvt. Ltd, Hyderabad
24	12U21R0039	B. Naveen	Goldfish pharma Pvt. Ltd, Hyderabad
25	12U21R0040	P. Vinitha	Hippo labs Pvt. Ltd., Hyderabad
28	12U21R0041	E. Ramesh	Goldfish pharma Pvt. Ltd, Hyderabad
29	12U21R0041	R. Ramesh	Goldfish pharma Pvt. Ltd, Hyderabad
30	12U21R0044	K. Krisha	Hippo labs Pvt. Ltd., Hyderabad
31	12U21R0045	P. Anil Kumar	Sanzyme Ltd, Hyderabad

32	12U21R0046	U. Giri	Sanzyme Ltd, Hyderabad
33	12U21R0048	Ramavath Hanuma	Goldfish pharma Pvt. Ltd, Hyderabad
34	12U21R0049	P.Vishnu	Sanzyme Ltd, Hyderabad
35	12U21R0051	R. Krishna Kumar	Sanzyme Ltd, Hyderabad
36	12U21R0052	K. Anil	Goldfish pharma Pvt. Ltd, Hyderabad
37	12U21R0053	N. Raj Kunar	Sanzyme Ltd, Hyderabad
38	12U21R0054	K.Sujatha	Goldfish pharma Pvt. Ltd, Hyderabad
39	12U21R0055	Y. Sai Kiran	Goldfish pharma Pvt. Ltd, Hyderabad
40	12U21R0056	B. Sai Bharathi	Bridge pharmaceutical Limited, Hyderabad
41	12U21R0058	B. Sharon	Bridge pharmaceutical, Limited Hyderabad
42	12U21R0060	G. Govardhan	Sanzyme Ltd, Hyderabad
43	12U21R0061	B. Srikanth	Sanzyme Ltd, Hyderabad
44	12U21R0062	GouttamNithinKumReddy	Goldfish pharma Pvt. Ltd, Hyderabad
45	12U21R0064	D. Sravani	Goldfish pharma Pvt. Ltd, Hyderabad
46	12U21R0066	Mohammed Saidam Baba	Bridge pharmaceutical, Limited, Hyderabad

Academic Year 2016-2017: Industry internship and summer training

S. No	HT.NO	Name of the Student	Name of the Industry
1.	131E1R0002	P.MANIKRUSHNA	Bridge pharmaceutical limited, Hyderabad
2.	131E1R0007	SALAHUDDIN	Hetero drugs limited, Hyderabad
3.	131E1R0009	C.SRIKANTH	Aurobindo, Hyderabad
4.	131E1R0012	K.VAMSHI KUMAR	Aurobindo, Hyderabad
5.	13U21R0002	S.MANISHA	Aurobindo, Hyderabad
6.	13U21R0003	MOHD.ABDUL ALEEM	Bridge pharmaceutical limited, Hyderabad
7.	13U21R0005	VOORE SANDEEP	Hetero drugs limited, Hyderabad
8.	13U21R0007	BEEMAGONI SWATHI	Aurobindo, Hyderabad
9.	13U21R0008	MONDKER SAI PRIYA	Aurobindo, Hyderabad
10.	13U21R0009	K SAI PRIYANKA	Aurobindo, Hyderabad
11.	13U21R0010	SRIRAMDAS JYOTHIRMAI	Aurobindo, Hyderabad
12.	13U21R0011	G SHALINI REDDY	Aurobindo, Hyderabad
13.	13U21R0012	G NIHARIKA REDDY	Hetero drugs limited, Hyderabad
14.	13U21R0013	C HARISHANKAR	Aurobindo, Hyderabad
15.	13U21R0014	K. GNANA SWARUPINI	Bridge pharmaceutical limited, Hyderabad
16.	13U21R0015	R SATYENDRANATH	Bridge pharmaceutical limited, Hyderabad

17.	13U21R0016	T L N NEHA	Hetero drugs limited, Hyderabad
18.	13U21R0017	P SHIVAKRISHNA REDDY	Bridge pharmaceutical limited, Hyderabad
19.	13U21R0018	V.S. HIRANI	Bridge pharmaceutical limited, Hyderabad
20.	13U21R0019	YEDULLA MOUNIKA	Aurobindo, Hyderabad
21.	13U21R0021	P CHANAKYA	Bridge pharmaceutical limited, Hyderabad
22.	13U21R0023	BANDELA RANI	Aurobindo, Hyderabad
23.	13U21R0024	T SAI CHARAN	Hetero drugs limited, Hyderabad
24.	13U21R0025	V PREM PRAKASH	Aurobindo, Hyderabad
25.	13U21R0026	POLU RAMMOHAN REDDY	Aurobindo, Hyderabad
26.	13U21R0027	K DIVYA	Aurobindo, Hyderabad
27.	13U21R0028	ADALA MOUNIKA	Hetero drugs limited, Hyderabad
28.	13U21R0029	SHAISTA NAAZ SIDDIQUI	Hetero drugs limited, Hyderabad
29.	13U21R0030	UMRA NAAZ	Aurobindo, Hyderabad
30.	13U21R0031	SIRISANAGANDLA ASWINI	Aurobindo, Hyderabad
31.	13U21R0032	BARKAM SANTHOSH	Bridge pharmaceutical limited, Hyderabad
32.	13U21R0034	A ANJINI THIRAPATHA RAO	Bridge pharmaceutical limited, Hyderabad
33.	13U21R0035	B RAMESH	Hetero drugs limited, Hyderabad
34.	13U21R0036	YELLUR SPANDANA	Natco pharmaceutical limited, Hyderabad
35.	13U21R0037	L RAMULU	Natco pharmaceutical limited, Hyderabad
36.	13U21R0038	MIDDELA KRISHNA	Natco pharmaceutical limited, Hyderabad
37.	13U21R0039	CHENGOLI ARUN KUMAR	Natco pharmaceutical limited , Hyderabad
38.	13U21R0040	G NAGESH	Natco pharmaceutical limited, Hyderabad
39.	13U21R0041	ANGOTHU RAGYA	Natco pharmaceutical limited, Hyderabad
40.	13U21R0042	GORENKALA KOTESHWAR	Natco pharmaceutical limited, Hyderabad
41.	13U21R0043	MOODAVATH RAVINDAR	Natco pharmaceutical limited, Hyderabad
42.	13U21R0044	DHIRAVATH RAVINDER	Natco pharmaceutical limited, Hyderabad
43.	13U21R0046	DANAVATH BALU	Natco pharmaceutical limited, Hyderabad
44.	13U21R0047	BODDUPALLY MURAHARI	MSN Pharmachem Pvt. Ltd., Hyderabad
45.	13U21R0048	M MOULIKA	MSN Pharmachem Pvt. Ltd., Hyderabad
46.	13U21R0049	KHANZODE SURAJ	MSN Pharmachem Pvt. Ltd., Hyderabad
47.	13U21R0050	N R SAIKIRAN	MSN Pharmachem Pvt. Ltd., Hyderabad
48.	13U21R0052	B ANUSHA	MSN Pharmachem Pvt. Ltd., Hyderabad
49.	13U21R0053	RAGIRI MAHESH	MSN Pharmachem Pvt. Ltd., Hyderabad
50.	13U21R0054	BAIRU PRAVEEN	MSN Pharmachem Pvt. Ltd., Hyderabad
51.	13U21R0055	BOORA RAJKUMAR	MSN Pharmachem Pvt. Ltd., Hyderabad

52.	13U21R0056	THATIPALLY NETHAJI	MSN Pharmachem Pvt. Ltd., Hyderabad
53.	13U21R0058	N.SULTANA	MSN Pharmachem Pvt. Ltd., Hyderabad
54.	13U21R0060	T.KARTHIK	MSN Pharmachem Pvt. Ltd., Hyderabad
55.	13U21R0061	SYED SHAH NAWAZ	Aurobindo, Hyderabad
56.	13U21R0062	POOLA PPRIYANKA	MSN Pharmachem Pvt. Ltd., Hyderabad

Academic Year 2017-2018: Industry internship and summer training

S. No	HT.NO	Name of the Student	Name of the Industry
1.	14U21R0001	DILLI DEEPIKA	Bindu pharmaceutical private limited, Hyderabad
2.	14U21R0002	SALLA NAGA PRIYA	Bindu pharmaceutical private limited, Hyderabad
3.	14U21R0003	BOLLU RAJESHWARI	Hippo labs pvt. Ltd., Hyderabad
4.	14U21R0004	C.SHIRISHA	Bindu pharmaceutical private limited, Hyderabad
5.	14U21R0005	D.SUMALATHA	Hippo labs pvt. Ltd., Hyderabad
6.	14U21R0006	GANKIDI NAVIKA	Bridge pharmaceutical limited, Hyderabad
7.	14U21R0007	GADILA GODAVARI	Sanzyme ltd, Hyderabad
8.	14U21R0008	BOJJA BHAVANA	Bridge pharmaceutical limited, Hyderabad
9.	14U21R0009	D.NAVYA	Sanzyme ltd, Hyderabad
10.	14U21R0010	SUPRAJA	Bridge pharmaceutical limited, Hyderabad
11.	14U21R0011	NAGAMANI	Sanzyme ltd, Hyderabad
12.	14U21R0012	K.NAVYA	Bridge pharmaceutical limited, Hyderabad
13.	14U21R0013	K.V.PRAVALIKA PRIYA	Goldfish pharma pvt. Ltd, Hyderabad
14.	14U21R0014	M.MANJUNATH	Goldfish pharma pvt. Ltd, Hyderabad
15.	14U21R0015	A.YADAGIRI	Goldfish pharma pvt. Ltd, Hyderabad
16.	14U21R0016	K.MAMATHA	Goldfish pharma pvt. Ltd, Hyderabad
17.	14U21R0017	P.SANTHOSHI	Bridge pharmaceutical limited, Hyderabad
18.	14U21R0018	E.SHIRISHA	Goldfish pharma pvt. Ltd, Hyderabad
19.	14U21R0019	A.KALYANI	Goldfish pharma pvt. Ltd, Hyderabad
20.	14U21R0020	B.SANTHOSH	Hippo labs pvt. Ltd., Hyderabad
21.	14U21R0022	HEMANTH KUMAR	Goldfish pharma pvt. Ltd, Hyderabad
22.	14U21R0023	V.KAVYA SRI	Goldfish pharma pvt. Ltd, Hyderabad
23.	14U21R0024	K.MADHAVI	Hippo labs pvt. Ltd., Hyderabad
24.	14U21R0026	D.KARTHIK	Sanzyme ltd, Hyderabad
25.	14U21R0027	SK.HEENA	Sanzyme ltd, Hyderabad
26.	14U21R0028	M.KAVYA	Goldfish pharma pvt. Ltd, Hyderabad
27.	14U21R0029	V.ANAND	Sanzyme ltd, Hyderabad
28.	14U21R0031	G.SINDHUJA	Sanzyme ltd, Hyderabad

29.	14U21R0032	G.RAKESH	Goldfish pharma pvt. Ltd, Hyderabad
30.	14U21R0033	JITHENDER SHARMA	Sanzyme ltd, Hyderabad
31.	14U21R0034	P.ATTAF HUSSAIN KHAN	Goldfish pharma pvt. Ltd, Hyderabad
32.	14U21R0035	M.SURESH	Goldfish pharma pvt. Ltd, Hyderabad
33.	14U21R0036	UDAY CHANDRA	Bridge pharmaceutical limited, Hyderabad
34.	14U21R0037	PRABIR BHADRA	Bridge pharmaceutical limited, Hyderabad
35.	14U21R0038	MOHITH KUMAR	Sanzyme ltd, Hyderabad
36.	14U21R0039	G.SHEKAR	Goldfish pharma pvt. Ltd, Hyderabad
37.	14U21R0043	M.HARITHA	Goldfish pharma pvt. Ltd, Hyderabad
38.	14U21R0044	RAVI SHANKAR CHAUDHARY	Bridge pharmaceutical limited, Hyderabad
39.	14U21R0048	RAKESH KUMAR	Bridge pharmaceutical limited, Hyderabad

Academic Year 2018-2019: Industry internship and summer training

S. NO	Hall ticket	Name of the candidate	Name of the Industry
1.	15U21R0001	GAVALE SAI KIRAN	Sai Advantium Pharma Ltd,Hyd
2.	15U21R0002	NALLA LAXMI SOWMYA	Sai Advantium Pharma Ltd,Hyd
3.	15U21R0003	ASRA FATHIMA	Sanvil Laboratories Pvt.Ltd
4.	15U21R0004	T LEELA VENKATA SATHYA NARAYANA	Anu Pharma Private Limited, Hyd
5.	15U21R0005	ROKKALA PRAVALIKA	Sai Advantium Pharma Ltd,Hyd
6.	15U21R0006	ANUGU NIKHITHA REDDY	Inchem laboratories Pvt.Ltd
7.	15U21R0007	RAPOLU PRAKRUTHI	Sai Advantium Pharma Ltd,Hyd
8.	15U21R0008	PULAGAM MANIMALA	Inchem laboratories Pvt.Ltd
9.	15U21R0009	KAMBALAPALLY VENKAT RAM REDDY	Inchem laboratories Pvt.Ltd
10.	15U21R0010	KANCHARLA SRILEKHA	Sai Advantium Pharma Ltd,Hyd
11.	15U21R0011	PALABATLA AKHILA	Inchem laboratories Pvt.Ltd
12.	15U21R0012	MANNEM SRAVANI	Inchem laboratories Pvt.Ltd
13.	15U21R0013	DEVANAKA KAVYA	Inchem laboratories Pvt.Ltd
14.	15U21R0014	SARA MARIYAM	Sanvil Laboratories Pvt.Ltd
15.	15U21R0015	BADRIPALLY NARESH	Anu Pharma Private Limited, Hyd
16.	15U21R0016	GANDHETI ESTHERRANI	Inchem laboratories Pvt.Ltd
17.	15U21R0017	MAMMIDALA SAHITHI	Sanvil Laboratories Pvt.Ltd
18.	15U21R0019	KASIREDDY ANUSHA	Inchem laboratories Pvt.Ltd
19.	15U21R0020	RAMANAMONI MAHESH	Anu Pharma Private Limited, Hyd

20.	15U21R0021	KONGARI GEETHANJALI	Anu Pharma Private Limited, Hyd
21.	15U21R0022	MOHAMMED NASEER UDDIN	Anu Pharma Private Limited, Hyd
22.	15U21R0023	NIDA AFREEN	Anu Pharma Private Limited, Hyd
23.	15U21R0024	SIMREEN	Sanvil Laboratories Pvt.Ltd
24.	15U21R0025	KARNE VINDHYA	Inchem laboratories Pvt.Ltd
25.	15U21R0026	S KOKIL	Anu Pharma Private Limited, Hyd
26.	15U21R0027	PADAM BHARGAVI	Sai Advantium Pharma Ltd,Hyd
27.	15U21R0028	NAUSHEEN BEGUM	Sanvil Laboratories Pvt.Ltd
28.	15U21R0029	D SPANDANA	Inchem laboratories Pvt.Ltd
29.	15U21R0030	PANDI ASHWINI	Inchem laboratories Pvt.Ltd
30.	15U21R0031	KADARI KRISHNA SAI	Sai Advantium Pharma Ltd,Hyd
31.	15U21R0032	MANURI SHEKAR	Anu Pharma Private Limited, Hyd
32.	15U21R0033	GANNA BHAVANI	Anu Pharma Private Limited, Hyd
33.	15U21R0034	BOJJURI MOUNISHA	Inchem laboratories Pvt.Ltd
34.	15U21R0035	TUMMALA SINDHU	Anu Pharma Private Limited, Hyd
35.	15U21R0037	GHOUSE MOHD NOOR	Anu Pharma Private Limited, Hyd
36.	15U21R0038	MALTUMKAR NAVYASRI	Anu Pharma Private Limited, Hyd
37.	15U21R0039	LATTIPALLY NAGARJUN	Anu Pharma Private Limited, Hyd
38.	15U21R0040	G AKSHITHA	Inchem laboratories Pvt.Ltd
39.	15U21R0041	GORREMUCHU SRIKANTH	Anu Pharma Private Limited, Hyd
40.	15U21R0042	M DIVYA	Inchem laboratories Pvt.Ltd
41.	15U21R0043	THOTA SHEKAR	Anu Pharma Private Limited, Hyd
42.	15U21R0044	MUMMADI MADHUSUDANREDDY	Anu Pharma Private Limited, Hyd
43.	15U21R0045	EDULA MOUNIKA	Anu Pharma Private Limited, Hyd
44.	15U21R0047	GATTUPALLY NITHIN REDDY	Anu Pharma Private Limited, Hyd
45.	15U21R0048	MATHAPU MOUNIKA	Anu Pharma Private Limited, Hyd
46.	15U21R0049	MOHAMMAD TOSIF	Anu Pharma Private Limited, Hyd
47.	15U21R0050	MUDDAWAR MAHESH KUMAR	Anu Pharma Private Limited, Hyd
48.	15U21R0051	PATEL SANGEETHA	Anu Pharma Private Limited, Hyd

49.	15U21R0052	GOTHI GANESH	Anu Pharma Private Limited, Hyd
50.	15U21R0053	GAIKWAD PAVANKALYAN	Anu Pharma Private Limited, Hyd
51.	15U21R0054	CHENNA SOUMYA	Sai Advantium Pharma Ltd,Hyd
52.	15U21R0055	ANUGU VARSHITHA	Anu Pharma Private Limited, Hyd
53.	15U21R0057	SANGEM PRANAYA	Anu Pharma Private Limited, Hyd
54.	15U21R0058	G CHARAN TEJA	Anu Pharma Private Limited, Hyd
55.	15U21R0059	D SAI KUMAR	Sai Advantium Pharma Ltd,Hyd
56.	15U21R0062	L. AKSHAY KUMAR	Anu Pharma Private Limited, Hyd
57.	15U21R0063	K. SHRAVYA REDDY	Anu Pharma Pvt. Ltd
58.	15U21R0064	P.RANJITH	Sai Advantium Pharma Ltd,Hyd
59.	15U21R0066	NIMMALA SANKEERTHANA	Anu Pharma Private Limited, Hyd
60.	15U21R0067	S BHANUCHANDER	Anu Pharma Private Limited, Hyd
61.	15U21R0068	KANDUNOORI ASHRITHA	Anu Pharma Private Limited, Hyd
62.	15U21R0069	SORTHE YOGESH BABU	Sai Advantium Pharma Ltd,Hyd

The students are additionally given training on following equipments for skill development:

1. ROTARY TABLET PRESS MACHINE:

The students are demonstrated the working of a rotary tablet press machine in the machine room and asked to perform compression of a conventional tablet formula with evaluation of its quality control parameters.

2. HPLC/HPTLC:

The students are given an understanding of analytical method development using these sophisticated instruments.

3. FTIR:

Different sampling techniques of FTIR analysis are demonstrated to the students.

4. DIGITAL MICROSCOPE:

The students areacquainted with the study of herbal drug microscopy using this instrument.

Impact Analysis:

The training period is long and provided awareness, understanding the processes and real life situations and environment. It allowed the students to understand better the processes during further studies. This also facilitates to attain course outcomes better. It is a unique opportunity to improve sills particularly in drug analysis conducted by drug testing laboratory. The participants were given tasks of analysis.

2.2.6 Continuous Evaluation Process (10)

(Mention the process followed and its effectiveness)

Continuous evaluation is a practice in SDIP, keeping the spirit of semester system. Too many tests and assessments are counter-productive. The main components of evaluation are described below.

Theory evaluation: In a semester period (90 days of instruction), two examinations are conducted with a gap of 40-45 days. These are conducted as per the almanac of the JNTU, Hyderabad. In fact, writing both of these examinations are compulsory for computing the average. Two exams are conducted per day. In SDIP, theory examinations are written with time duration of 1 hour for subjective question test and 20 minutes for objectives, which gives greater opportunity to express.

The pattern is short essay type and long essay type. Each student is given feedback on the performance. Within the short period of 45 days, again each unit is tested in the form of slip test (short answer type). Further, assignments are given to students, which are corrected and feedback is given. Further, attendance of regularity, active interaction in the classroom are given due credit in the evaluation. Therefore, the student is continuously engaged in the academic activity throughout the semester.

Practical Evaluation: In the laboratory setup, the experiments are conducted as per the list given by the JNTUH. A lot of time is spent for acquiring practical skills.

The continuous evaluation provides the opportunity to practice the skill. It normally involves feedback and corrective action, completing the given task in a given time. This is the informal evaluation. The writing of the practical records, submission and evaluation are done regularly. Viva voce is conducted at the end of each experiment (in every day) is another important feature of evaluation. The continuous evaluation is given the weightage of 50%.

Attendance is also given due to weightage.

The above process demonstrated that the evaluation is a continuous process in place in SDIP.

Special efforts are also taken for the holistic development of the students. Students interested in a particular subject are given certain assignments by the respective teachers. This helps them to learn the process of gaining extra knowledge by in depth literature search. After completion of the topic, students are asked to deliver seminar on some small subtopic from the syllabus. This helps them to overcome stage fright and also understand the topic in detail. Students with good drawing or computer skills are encouraged to prepare certain display charts. This helps them in a better understanding of the subject.

In order to motivate the students to participate in research, students from the third year are given Mini Research Projects. The student presents the findings of the same in the form of a poster at the college level. Last year, this work has also been presented at various intercollegiate poster competitions. They have won prizes for the same.

Especially for the final year students, pre-placement talks are organized. The lectures conducted include talks in which students are guided for facing the interview, performing in the aptitude tests, writing resume etc. They are also counselled for Post Graduate studies in India and abroad along with information of the courses available.

Students are encouraged to participate in various Inter and Intra-Collegiate sports events. Special sports hours are allotted in the time table wherein students spend some time playing sports. This helps in their overall development.

2.2.7 Quality of Experiments (20)

(Quality from the equipment set-up and performance perspective)

The syllabus of B. Pharmacy in JNTU, Hyderabad has specified the list of experiments after due consideration of the quality of the experiments. A few experiments are added by the college, in order to further enhance the quality of the experimental skills.

The college has a machine room as well as an instrument room having equipments for pilot-plant scale up studies and sophisticated instruments such as HPLC, Dissolution apparatus, Rotary evaporator,

Rotary Tablet Press Machine and UV Spectrophotometer. College laboratories are well equipped with basic requirements as per the syllabus.

A few highlights are enumerated below.

1. Laboratories are spacious and equipped with the necessary infrastructure that facilitate for the smooth conduct of experiments.
2. The college has the necessary equipments, instruments and apparatus as prescribed the Pharmacy Council of India.
3. The college has procured the necessary equipment in order to conduct the labs as per the specifications of Jawaharlal Nehru Technological University, Hyderabad.
4. The teachers are meritorious, well qualified and experienced for handling the practical/labs work and effective learning.
5. The teachers are continuously striving and actively involved in research work, which is translated into the practicals.
6. The simulation experiments for the pharmacology are conducted regularly using established software. The animal experiments conducted by PG students are being exposed to B. Pharmacy students for enhanced learning of pharmacology.
7. The language laboratory imparts specific skill. A multimedia aided language lab gives stress on experiments: grammatical exercises, phonetics pronunciation, oral presentations, vocabulary building, writing skills and interview skills.
8. Each student is given opportunity to conduct the experiments independently. For this reason, the practical batch size limited to 20 to 22 students.
9. Sufficient number of systems is maintained in the computer lab to enable that each student can get one terminal, so as to work independently in a lab.

10. The sophisticated equipment procured for PG programs are also extended to facilitate the learning by UG students.
11. The staff has been involved in developing laboratory manuals and a few are published. However, the students are expected to consult them, but they have to write the own laboratory manuals or records.

Course Code	Subject	Equipment High/ Medium	Performance High/ Medium	POs										
				1	2	3	4	5	6	7	8	9	10	11
C101.7	Dispensing General and Pharmacy Lab	M	H	√	√	√	√	√	√		√			
C101.8	Anatomy, Physiology and Health Education – I Lab	H	H	√	√	√	√	√	√	√	√	√		
C101.9	Pharmaceutical Organic Chemistry – I Lab	M	H	√	√	√	√	√	√		√			
C101.10	Remedial Biology – I Lab	H	H	√	√	√	√	√	√		√			
C201.6	Pharm. Inorganic Chemistry Lab	M	H	√	√	√	√	√	√		√			
C201.7	Statistical Methods and Computer Application Lab	H	H	√	√	√	√	√	√		√			√
C201.8	Physical Pharmacy – I Lab	M	H	√	√	√	√	√	√		√			
C301.6	Pharmaceutical Organic Chemistry – III Lab	M	H	√	√	√	√	√	√		√			
C301.7	Pharmacognosy – I Lab	H	H	√	√	√	√	√	√		√		√	
C301.8	Pharmaceutical Analysis – I Lab	M	H	√	√	√	√	√	√		√			
C401.6	Pharmaceutical Unit Operations – II Lab	H	M	√	√	√	√	√	√		√			
C401.7	Biochemistry Lab	H	H	√	√	√	√	√	√		√			
C401.8	Physical Pharmacy – II Lab	M	H	√	√	√	√	√	√		√			
C501.6	Pharmaceutical Analysis – I Lab	M	H	√	√	√	√	√	√		√			

C501.7	Pharmaceutical . Microbiology Lab	H	H	√	√	√	√	√	√	√	√			
C501.3	Pharmacognosy -II Lab	H	H	√	√	√	√	√	√		√		√	
C501.4	Pharm. Technology – I Lab	H	H	√	√	√	√	√	√	√	√			
C501.6	Advance communication Skill Lab	H	H	√	√	√	√	√	√		√			√
C601.7	Medicinal Chemistry – I Lab	H	H	√	√	√	√	√	√		√			
C601.8	Pharm. Technology – II Lab	H	M	√	√	√	√	√	√	√	√			
C601.9	Pharmacology – II Lab	H	M	√	√	√	√	√	√		√	√		
C601.10	Chemistry of Natural Product Lab	H	H	√	√	√	√	√	√		√			
C701.7	Pharmacognosy -III Lab	H	H	√	√	√	√	√	√		√		√	
C701.8	Bio-Pharmaceutics and Pharmacokinetics Lab	H	H	√	√	√	√	√	√		√			
C701.9	Pharmacology – IIII Lab	H	M	√	√	√	√	√	√		√	√		
C701.10	Medicinal Chemistry – II Lab	H	H	√	√	√	√	√	√		√			
C801.6	Novel Drug Delivery System Lab	H	H	√	√	√	√	√	√	√	√			
C801.7	Pharmaceutical Biotechnology Lab	H	H	√	√	√	√	√	√	√	√			
C801.8	Pharmaceutical Analysis – II Lab	H	H	√	√	√	√	√	√		√			
	Seminar	H	H	√	√	√	√	√	√		√			√

CRITERION 3	Course Outcomes (COs) and Program Outcomes (POs)	100

3. Course Outcomes (COs) and Program Outcomes (POs) (100)

3.1. Establish the correlation between the courses and the Program Outcomes (20)

3.1.1. Course Outcomes (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses) (05)

Course Name: Ciii Year of Study: YYYY – YY; For ex.

Syllabus prescribed by the **JNTUH** University. These are drafted in the background of Mission Statement, PEOs prepared by the college for the B. Pharmacy programme and program outcomes envisaged by NBA. The following course outcomes for each course in the B. Pharmacy program

B.Pharmacy Ist Year Semester - I

Course code/ Course title	Course outcomes
C101.1 Remedial Biology	The students should be able to understand & explain : CO 1. Explain plant kingdom, plant tissues and their functions, mitosis and meiosis, morphology and histology CO 2. Familiarize with the plant physiology – absorption, transpiration, respiration, photosynthesis, DNA replication. CO 3. Learn and understand animal tissue, study of different systems of frog. CO 4. Know the principles of morphology and life-history of human parasites.
C101.2 Remedial Mathematics	The students should be able to understand & explain : CO 1. Apply both conventional and creative techniques to the solutions of mathematical problems CO 2. Solve problems of trigonometry, calculus, matrices. CO 3. Understand the mathematics comprises a brand array of interconnected concepts related to biomathematics CO 4. Relate the mathematical tools to a broad range of situations which arise in the wide professional views CO 5. Apply range of techniques effectively to solve problems including theory deduction, approximation and simulation
C101.3 Pharmaceutics I (General and Dispensing Pharmacy)	The students should be able to understand & explain : CO 1. Impart knowledge of dispensing the prescriptions and the principles involved in the preparations. CO 2. Impart skill and confidence in preparing quality dosage formulations of various types. CO 3. Document, maintain the various records in experimental stage and during manufacture of pharmaceutical preparations. CO 4. Meet the challenges occur in practicing pharmacy profession.

C101.4 Anatomy Physiology and Health Education -I	The students should be able to understand & explain : CO 1. Explain various anatomical terms in human body. CO 2. Describe the various physiological aspect of the human body. CO 3. Explain various systems in coordination with importance of various organs and tissues. CO 4. Explain pathological and diseased process and repair mechanism of various systems CO 5. Acquire the knowledge regarding health education in human life
C101.5 Pharm. Organic Chemistry-I	The students should be able to understand & explain : CO 1. Understand and explain the concepts of hybridization, electronic and steric effects of organic molecules and to appreciate the chemistry of hydrocarbons CO 2. Acquire knowledge about preparation and reactivity of compounds with functional groups, such as aldehydes and ketones, carboxylic acids, amino and azo compounds CO 3. Explain the mechanism involved in the substitution, addition, nucleophilic and elimination reactions. CO 4. Appreciate the reaction orientation rules, such as Sayetzeffs and Markonikovs rules.
C101.6 Professional communication English	CO1. Use English Language effectively in spoken and written forms . CO2. Comprehend the given texts and respond appropriately. CO3. Communicate confidently in formal and informal contexts.
C101.7 Pharmaceutics-I (General & Dispensing Pharmacy) Lab	The students should be able perform : CO 1. Impart knowledge about the principle, procedure and other data regarding aromatic water, spirits, ointments, pastes, etc. CO 2. Explain information regarding the dose, labeling and packaging procedures as well as containers. CO 3. Plan and conduct other experiments apart from syllabus related to their theory topics.
C101.8 Anatomy Physiology and Health Education Lab	The students should be able perform : CO 1. Identify the different bones of the skeletal system and various models/specimen/slides of human organs and tissues CO 2. Explain various complete blood picture parameters and mechanisms involved blood experiments CO 3. Explain various methods
C101.9 Ph. Org. Chemistry – I Lab	The students should be able perform perform : CO 1. Understand and adopt synthesis of organic intermediates. CO 2. Appreciate the reaction mechanism and importance of reactions such as oxidation and reduction, acetylation, esterification and etherification and halogenation. CO 3. Perform systematic qualitative analysis of unknown organic compounds
C101.10 Biology Lab	The students should be able perform : CO 1. To be able to understand the plant parts and their modification. CO 2. Understand the representative of families – apocynaceae, solancaceae, umbelliferae and rubiaceae. CO 3. Perform transverse section of cinchona, clove, coriander and linseed. CO 4. Identify histological study of different organs/tissues through permanent slides.

B.Pharmacy Ist Year Semester - II

Course code/ Course title	Course outcomes
C201.1 Pharmaceutical Inorganic Chemistry	The students should be able to understand & explain : CO 1. Understand and explain the concepts of quality control tests including impurities. CO 2. Explain the definitions, preparations and assay procedures of GI active agents, electrolytes. CO 3. Describe the definitions, preparations and assay procedures of mineral, nutritional and pharmaceutical aids. CO 4. Explain definitions, preparation and assay method of expectorants and emollients. CO 5. Acquire knowledge on different types of diagnostic agents, dialysis fluids and dental products.
C201.2 Pharm. Organic Chemistry-II	CO1 Understand and explain the concepts of nomenclature preparation, reactivity and named reaction involved in carbonyl compounds. CO2 Understand the synthesis of higher organic compounds. CO3 Understand Nomenclature, basicity of amines, classification, relative reactivity.
C201.3 Physical Pharmacy-I	CO 1. The student shall know important physical properties of drug molecules. CO 2. Understand the Phase value & its importance. CO 3. Explain the different law of thermodynamics. CO 4. Understand the electrolyte and nonelectrolyte solutions. CO 5. Understand the importance of pH and drug research.
C201.4 Statistical methods and computer application	CO 1. Acquire the up-to-date technical knowledge and develop the skills needed for a successful start to careers in pharmacy. CO 2. Understand the architecture, organization and programming of modern computing systems including C language and SQL. CO 3. Practice MS Office, MS Word, MS Access and MS Power point. CO 4. Aware of the rapid rate of change of technology and methodologies in computer science. CO 5. Understand the principles and design internet and website.
C201.5 Anatomy Physiology and Health Education -II	CO 1. Understand and explain cellular structure of nervous cell and function. CO 2. Understand the functions of different parts of brain and spinal cord. CO 3. Understand and explain physiology and functions CNS and ANS. CO 4. Understand and explain Various parts, structures and functions of Respiratory System, Urinary System, Endocrine System, Reproductive Systems. CO 5. Understand basic principles of cell injury, adaptation & process of inflammation.
C201.6 Inorganic Chemistry Lab	The students should be able perform : CO 1. Appreciate the concept of quality control tests in limiting traces of impurities present in pharmaceuticals by performing limit tests. CO 2. Understand various chemical reactions through the preparation of inorganic compounds CO 3. Identify cations and anions present in the inorganic sample through systematic qualitative analysis.
C201.7 Statistical methods Computer Applications Lab	The students should be able perform : CO 1. Explain the underlying architecture of computer. CO 2. Understand the paradigms of program languages and be exposed to at least one language from each model, C and SQL. CO 3. Develop skills in the exercises based on MS Office, MS Word, MS Excel, MS Access and MS Power point.

	CO 4. Understand software development tools.
C201.8 Physical Pharmacy –I Lab	The students should be able perform : CO 1. Explain Percent composition determination by various methods. CO 2. Explain pH estimation – colourimetric method & half neturalization methods. CO 3. Understand explain molar refraction determination. CO 4. Understand effect of dielectric constant on the solubility of the drug. CO 5. Understand Heat of neutralization.

B.Pharmacy IInd Year Semester - I

Course code/ Course title	Course outcomes
C301.1 Pharmaceutical Organic Chemistry – III	The students should be able to understand & explain : CO 1. Understand and adopt synthesis of organic intermediates. CO 2. Appreciate the reaction mechanism and importance of reactions such as oxidation and reduction, acetylation, esterification and etherification and halogenation. CO 3. Perform systematic qualitative analysis of unknown organic compounds
C301.2 Pharmaceutical Unit Operations – I	The students should be able to understand & explain : CO 1. Explain the concepts of energy transfer, mass transfer, unit operations for the construction, operation and maintenance of pharmaceutical plants. CO 2. Describe the engineering approaches and alternatives for effective functioning of pharmaceutical plants by avoiding corrosion. CO 3. Make the student abreast with current principles, fluid flow, heat transfer, material transportation, filtration and centrifugation methodologies. CO 4. Understand the real time pharmaceutical industry situations for effective learning process of equipment, advantages and limitations.
C301.3 Hospital and Community Pharmacy	The students should be able to understand & explain: CO 1. Know various drugs distribution methods. CO 2. Know the professional practice managements skills in hospital. CO 3. Learn the how to Provide unbiased drug information. CO 4. Appreciate the practice based research methods. CO 5. Understand the store managements and inventory control.
C301.4 Pharmacognosy – I	The students should be able to understand & explain: CO 1. Understand the methods for cultivation and collection of crude drugs; medicinal plants, viz., origin, morphology, histology and uses. CO 2. Evaluate the crude drugs for adulteration and substation CO 3. Acquire explain of various biosynthetic pathways of medicinal plant constituents CO 4. Understand the methods of quality control for crude drugs with WHO guidelines.
C301.5 Pharmaceutical Analysis – I	The students should be able to understand & explain: CO 1. Understand and explain the methods assuring the quality and safety of pharmaceuticals. CO 2. Explain about accuracy, precision and significant figure error concepts. CO 3. Acquire knowledge on computation of analytical results, physiochemical concepts of analysis, theories of acids and bases, stoichiometry etc. CO 4. Explain the principles and applications of gravimetric, volumetric and gas analysis techniques.

	CO 5. Understand and explain the applications of complexometric, iodometric, redox and non-aqueous titrations.
C301.6 Pharmaceutical Organic Chemistry – III Lab	The students should be able to perform : CO 1. Synthesize compounds and drugs. CO 2. Propose reaction mechanisms involved in the synthesis of heterocyclic compounds. CO 3. Make them understand and adopt the purification strategies for hetero aryl derivatives.
C301.7 Pharmacognosy – I Lab	The students should be able to perform : CO 1. Describe morphology and microscopic characteristics of crude drugs and mixture of crude drug powders. CO 2. Conduct transverse section of crude plant materials. CO 3. Isolate and identify chemical constituents using chemical tests. CO 4. Evaluate quantitative parameters of leaf crude drugs.
C301.8 Pharmaceutical Analysis – I Lab	The students should be able to perform : CO 1. Understand the importance of calibration and adopt techniques like calibration of weights, pipette and burette. CO 2. Gain knowledge in standardization of solutions with different strength. CO 3. Perform volumetric analysis such as acidimetry and alkalimetry, oxidation and reduction reactions, iodimetry, iodometry, complexometry, precipitation and non-aqueous titration. CO 4. Perform gravimetric analysis by silver salt method.
C301.9 Environmental Science And Technology	The students should be able to understand & explain: CO 1. To train students to locate and comprehend relationship between the natural, social, and cultural environmental. CO 2. To understand the awareness and environmental issues.

B.Pharmacy IInd Year Semester - II

Course code/ Course title	Course outcomes
C401.1 Pharmaceutical Unit Operations – II	The students should be able to understand & explain : CO 1. Explain operations of size reduction, size separation, evaporation, distillation, drying, crystallization, mixing and compaction process. CO 2. Explain available technologies for efficient pharmaceutical manufacturing process. CO 3. Compare the pharmaceutical equipment and process for judicious selection. CO 4. Make the student abreast with current principles and advances in automation of pharmaceutical equipments.
C401.2 **Biochemistry**	The students should be able to understand & explain : CO 1. Describe the molecular and functional organisation of a cell, enzymology and its clinical relevance. CO 2. Explain the structure and biochemical role of carbohydrates, proteins, lipids and metabolic pathway of nutrients. CO 3. Describe the mechanisms of electron transport chain reactions and cofactors involved in it. CO 4. Explain the metabolism of neucleotides and its clinical relevance and explain the DNA replication, transcription and translation.
C401.3	The students should be able to understand & explain: CO 1. Acquire knowledge on schedule rules, laws and regulations related to drugs and cosmetics. CO 2. Explain pharmaceutical legislation, history, evolution and

Pharmaceutical jurisprudence	growth of pharmaceutical industry. CO 3. Describe the pharmaceutical education and its regulatory bodies; pharmacy profession in concern to code of ethics. CO 4. Explain other acts and rules associated with food and factories CO 5. Explain the intellectual property rights.
C401.4 **Physical Pharmacy – II**	The students should be able to understand & explain : CO 1. Describe the process of solubility of solids, distribution phenomena for application in the design of drugs. CO 2. Describe the types of flow (rheology) and their measurement, thixotropic/stability of dispersions, semisolids systems. CO 3. Describe the reaction kinetics, rate, order and factors affecting the rate of reaction, prevent degradation, stabilization of drugs and shelf-life assessment. CO 4. Explain principles and applications of colloids, micromeritics and interfacial phenomena
C401.5 **OE** **Intellectual Property Rights**	Upon completion of the subject, students will be able to : CO 1. Identify different types of Intellectual Properties (IPs), the right of ownership, scope of protection as well as the ways to create and to extract value from IP CO 2. Recognize the crucial role of IP in organizations of different industrial sectors for the purposes of product and technology development CO 3. Identify activities and constitute IP infringements and the remedies available to the IP owner and describe the precautious steps to be taken to prevent infringement of proprietary rights in products and technology development CO 4. Be familiar with the processes of Intellectual Property Management (IPM) and various approaches for IPM and conducting IP and IPM auditing and explain how IP can be managed as a strategic resource and suggest IPM strategy.
C401.6 **OE** **Herbal Drugs Technology**	Upon completion of the subject, students will be able to : CO 1. Understand the pharmacological studies of various crude drugs. Understand acquire the comprehensive knowledge of plant tissue culture techniques. CO 2. Understand apply the different analytical methods to determine the quality and purity of crude drugs. CO 3. Understand the examination and analysis different types of adulterant in crude drugs.
C401.7 **OE** **Green Chemistry**	Upon completion of the subject, students will be able to : CO 1. Understand the synthesis of organic compounds which are benign to environment and human life. CO 2. Understand the applying the principles of green chemistry to chemical related problem and waste reduction. CO 3. Understand the analyze toxicology data, materials properties, and regulatory requirement to choose safer chemicals for product formulations and process chemistry. CO 4. Understand the fundamental of chemical alternative assessment.
C401.8 **Pharmaceutical Unit**	The students should be able to perform : CO 1. Perform size reduction, size separation, distillation, drying. CO 2. Draw the symbols and equipment in unit operations and flow sheets. CO 3. Quantitate heat transfer by radiation and convention

Operations – II Lab	CO 4. Measure humidity of room
C401.9 Biochemistry Lab	The students should be able to perform : CO 1. Perform qualitative analysis of carbohydrates, proteins and lipids. CO 2. Estimate blood glucose and blood cholesterol levels. CO 3. Estimate creatinine levels in urine and liver function test.
C401.10 Physical Pharmacy – II Lab	The students should be able to: CO 1. Evaluate the physicochemical properties of drugs and solvents. CO 2. Study the solid state properties of drugs and excipients. CO 3. Demonstrate the behavior of adsorption, stability, surface phenomena, ionization, distribution, etc.
C401.11 Gender Sensitization Lab	The students should be able to perform : CO 1. Students will have developed a better understanding of important issues related to gender in contemporary India. CO 2. Students will attain a finer grasp of how gender discrimination works in our society and how to counter it. CO 3. Students will acquire insight into the gendered division of labour and its relation to politics and economics. CO 4. Men and women students and professionals will be better equipped to work and live together as equals. CO 5. Students will develop a sense of appreciation of women in all walks of life.

IIIrd Year Semester- I:

Course code/ Course title	Course outcomes
C501.1 Pharmaceutical Analysis – I	The students should be able to understand & explain: CO 1. Understand and explain the methods assuring the quality and safety of pharmaceuticals. CO 2. Explain about accuracy, precision and significant figure error concepts. CO 3. Acquire knowledge on computation of analytical results, physiochemical concepts of analysis, theories of acids and bases, stoichiometry etc. CO 4. Explain the principles and applications of gravimetric, volumetric and gas analysis techniques. CO 5. Understand and explain the applications of complexometric, iodometric, redox and non-aqueous titrations.
C501.2 Pharmaceutical Microbiology	The students should be able to understand & explain : CO 1. Apply the principles of evaluation of microbiological quality of pharmaceutical preparations. CO 2. Understand hygienic aspects of non-sterile medicines manufacturing. CO 3. Acquire knowledge on the principles of sterilization of medicines. CO 4. Familiar with the classical and modern techniques for the detection and isolation of pathogenic microorganisms in pharmaceutical preparations. CO 5. Familiar with the classical and modern techniques for the enumeration of microorganisms in pharmaceutical preparations.
C501.3 Pharmacognosy II	The students should be able to to understand & explain : CO 1. Explain various crude drugs from alkaloids, glycosides and volatile oil CO 2. Isolate and characterize phytoconstituents from crude materials CO 3. Explain biotransformation and immobilization technique CO 4. Learn about herbal and ayurvedic formulation with regulation aspects.

C501.4 Pharmaceutical Technology – I	The students should be able to understand & explain : CO 1. Understand the preformulation and objectives of preformulation CO 2. Understand the formulation and evaluations of semisolids, aerosols, and ophthalmic preparations. CO 3. Know the regulatory provisions related to cosmetics CO 4. Able to formulate, manufacture, packing, labeling and quality control of cosmetic preparations. CO 5. Know the preparation and evaluations of herbal cosmetics
C501.5 Pharmacology- I	The students should be able to understand & explain : CO 1. Explain the structure, mechanism of action, systemic effects, side effects and contra-indications of cholinergic and adrenergic agents. CO 2. Describe the mechanism of action, pharmacokinetics, systemic and electro physiological effects, uses and treatment of toxicity and drug interactions. CO 3. Describe the pharmacology of drugs acting on cardiovascular and respiratory systems. CO 4. Explain drugs and their mechanism of action for various gastro intestinal drugs.
C501.6 Pharmaceutical Analysis Lab – I	The students should be able to perform : CO 1. Understand the importance of calibration and adopt techniques like calibration of weights, pipette and burette. CO 2. Gain knowledge in standardization of solutions with different strength. CO 3. Perform volumetric analysis such as acidimetry and alkalimetry, oxidation and reduction reactions, iodimetry, iodometry, complexometry, precipitation and non-aqueous titration. CO 4. Perform gravimetric analysis by silver salt method.
C501.7 Pharmaceutical Microbiology Lab	The students should be able to: CO 1. Demonstrate the principles of sterilization by dry and moist heat methods. CO 2. Prepare various media and aseptic transfer and staining techniques, bacterial motility by hanging drop technique. CO 3. Acquire knowledge on the principles of biochemical reactions for identification of bacteria.
C501.8 Pharmacognosy II Lab	The students should be able to : CO 1. Determination of TLC for identification of active ingredients CO 2. Acquire knowledge on the principles organoleptic character of crude drugs CO 3. Perform microscopical and macroscopical character of crude drugs
C501.9 Pharmaceutical Technology – I Lab	The students should be able to: CO 1. Perform size reduction, size separation, distillation, drying. CO 2. Draw the symbols and equipment in unit operations and flow sheets. CO 3. Quantitate heat transfer by radiation and convention CO 4. Measure humidity of room

B.Pharmacy IIIrd Year Semester- II :

Course code/ Course title	Course outcomes
C601.1 Medicinal Chemistry - I	The students should be able to understand & explain: CO 1. Explain the influence of physicochemical properties on drug action. CO 2. Outline the synthetic route for the selective medicinal compounds of each category and acquire knowledge on the mechanism of action of pharmacodynamics agents. CO 3. Classify the therapeutic agents and based on the chemical nature. CO 4. Acquire knowledge about the relationship between the biological activity and structure of therapeutic agents. CO 5. Assimilate the therapeutic uses of adrenergic agents, cholinergic agents, anti-hypertensives, anti-hyperlipidemics, anti-platelets, cardiotonics, hypoglycemic agents, anti-thyroid agents, diuretics, antihistamine and anticoagulants.
C601.2 Pharmaceutical Technology II	The students should be able to understand & explain: CO 1. Explain the properties and selection of excipients used in different dosage forms. CO 2. Describe the formulation and preparation of tablets (including coating), capsules, parenterals and ophthalmic products. CO 3. Explain the manufacture of suspensions, emulsions, aerosols and parenterals. CO 4. Explain the quality control and quality analysis of dosage forms. CO 5. Acquire knowledge about packaging materials, their properties and uses.
C601.3 Pharmacology - II	The students should be able to understand & explain : CO 1. Understand the concepts, mechanism of action, choice of antibiotics and chemotherapeutic agents. CO 2. Describe the action of histamine, anti-histamines and few local hormones. CO 3. Recognize the chemistry, synthesis, systemic effects, toxicity and mechanism of prostaglandins, insulin and oral hypoglycemic agents, glucagon, somatostatin etc. CO 4. Describe the types of toxicities and treatment of toxicities due to barbiturates, narcotics, benzodiazepines, acetaminophen, nitrites and nitrates and cyanide.
C601.4 Chemistry of Natural Products	The students should be able to understand & explain : CO 1. Classify carbohydrates, fats/oils, proteins, terpenoids, flavanoids, alkaloids and steroids based on their structure. CO 2. Describe extraction, isolation and purification methods of natural compounds. CO 3. Establish the structure of natural molecules and biomolecules of pharmaceutical importance (carbohydrates, flavanoids, terpenoids etc.) CO 4. Describe qualitative and quantitative methods for the identification of natural compounds – alkaloids, purines and xanthines. CO 5. Appreciate the importance of retro-synthetic analysis in the structural elucidation of compounds.

C601.5 Pharmaceutical Jurisprudence	The students should be able to understand & explain : CO 1. Acquire knowledge on schedule rules, laws and regulations related to drugs and cosmetics. CO 2. Explain pharmaceutical legislation, history, evolution and growth of pharmaceutical industry. CO 3. Describe the pharmaceutical education and its regulatory bodies; pharmacy profession in concern to code of ethics. CO 4. Explain other acts and rules associated with food and factories CO 5. Explain the intellectual property rights.
C601.6 Advance Communication Skills	The students should be able to perform : CO 1. Practice skills of communication, medium and presentation CO 2. Practice spoken and written english, communicate through letters and delivery speech. CO 3. Write essays on our own civilization and Andrew Carnegie.
C601.7 Medicinal Chemistry Lab	The students should be able to: CO 1. Design and adopt the reaction schemes for the synthesis of various medicinal compounds of diverse chemical categories. CO 2. Analyse functional groups present in drugs through IR. CO 3. Estimate the actual amount of drug present in pharmaceutical formulations.
C601.8 Pharmaceutical Technology II Lab	The students should be able to able perform : CO 1. Prepare granules by different methods and compress the tablets by different methods. CO 2. Learn about parts of compression machine and compression of tablets. CO 3. Prepare hard gelatin capsules using hand operated capsule filling machine. CO 4. Prepare disperse system CO 5. Acquire knowledge about formulation of parenterals and sealing of ampoules CO 6. Understand about quality control testing of pharmaceutical products
C601.9 Pharmacology – II Lab	The students should be able to: CO 1. Understand the concepts, mechanism of action, choice of antibiotics and chemotherapeutic agents. CO 2. Describe the action of histamine, anti-histamines and few local hormones. CO 3. Recognize the chemistry, synthesis, systemic effects, toxicity and mechanism of prostaglandins, insulin and oral hypoglycemic agents, glucagon, somatostatin etc. CO 4. Describe the types of toxicities and treatment of toxicities due to barbiturates, narcotics, benzodiazepines, acetaminophen, nitrites and nitrates and cyanide.
C601.10 Chemistry of Natural Products Lab	The students should be able to: CO 1. Classify carbohydrates, fats/oils, proteins, terpenoids, flavanoids, alkaloids and steroids based on their structure. CO 2. Describe extraction, isolation and purification methods of natural compounds. CO 3. Establish the structure of natural molecules and biomolecules of pharmaceutical importance (carbohydrates, flavanoids, terpenoids etc.) CO 4. Describe qualitative and quantitative methods for the identification of natural compounds – alkaloids, purines and xanthines. CO 5. Appreciate the importance of retro-synthetic analysis in the structural elucidation of compounds.

B.Pharmacy IVth Years Semester – I

Course code/ Course title	Course outcomes
C701.1 Pharmacognosy-III Theory	The students should be able to understand & explain : CO 1. Ability to detect the adulteration in crude drugs CO 2. Ability to perform phytochemical screening of various groups of phyto constituents CO 3. Understand the concept of alternative system of medicine CO 4. Understand the status of herbal drug industry and herbal drug research in India
C701.2 Biopharmaceutics & Pharmacokinetics	The students should be able to: CO 1. Able to understand the concepts of biopharmaceutics & pharmacokinetics. CO 2. Determine factors affecting drug absorption, bioavailability and bioequivalence. CO 3. Describe disposition kinetic models, first order and second order. CO 4. Evaluate the PK parameters related to distribution, metabolism and excretion. CO 5. Explain the clinical pharmacokinetics, dose adjustment and TDM.
C701.3 Pharmacology – III	The students should be able to understand & explain : CO 1. Ability to perform experiments on isolated preparations CO 2. Understand the significance of chemotherapeutic agents CO 3. Ability to assess the treatment for poisoning CO 4. Ability to perform multipoint assays
C701.4 Medicinal Chemistry – II	The students should be able to understand & explain : CO 1. Outline the synthetic route for the selective medicinal compounds of each category and acquire knowledge on the mechanism of action of therapeutic agents. CO 2. Explain the influence of the metabolic profile of drugs and their impact on biological system. CO 3. Explain the influence of structural features on biological activity and therapeutic uses of medicinal compounds. CO 4. Appreciate the biochemical role of endogenous substances like vitamins and essential amino acids. CO 5. Describe the therapeutic uses of anaesthetics, analgesics, antiinflammatory agents, chemotherapeutic agents, anticonvulsants, tranquilizers, anti-depressants and CNS stimulants.
C701.5 Pharmacy Administration	CO 1. Understanding on the principles of drug store and community pharmacy administration CO 2. To perform a role in building national economy and national health CO 3. To contribute on the goals of production management for new product development CO 4. To understand the product marketing strategies
C701.6 Seminar	The students should be able to understand & explain : CO 1. Gain more advanced knowledge of the region including research and writing in a seminar format. CO 2. Study on multidisciplinary areas related to pharmacy profession. CO 3. Develop required skills for technical presentation. CO 4. Concentrate on specific topic in scientific and pharmacy fields. CO 5. Describe new trends among group of students and faculties.

C701.7 Pharmacognosy-III Lab	CO 1. Perform the isolation of different chemical constituents from formulation and crude drugs. CO 2. Detection and identification of secondary metabolites. CO 3. Differentiations of secondary metabolites.
C701.8 Biopharmaceutics & Pharmacokinetics Lab	CO 1. Estimation of various pharmacokinetics parameters from given data. CO 2. Understand the dose and physiochemical properties on same API CO 3. Describe absorption studies invitro and inviovo CO 4. Understand the determination of rate of clearance.
C701.9 Pharmacology – III Lab	CO 1. Detection and identification isolation preparation. CO 2. Explain the calculation PA2 value of atropine. CO 3. Perform the various assay eg. Matching assay, two point assay, three point assay, CO 4. Understand the pharmacology of GIT tract
C701.10 Medicinal Chemistry – II Lab	CO 1. Perform estimation of Ascorbic acid and Vit B1. CO 2. Perform estimation of Alkaloids by gravimetry method. CO 3. Understand estimation of ibuprofen and aspirin by volumetric method.

B.Pharmacy IVth Years Semester – II

Course code/ Course title	Course outcomes
C801.1 Novel drug delivery systems and Regulatory affairs	CO 1. Ability to prepare novel drug delivery systems like matrix tablets, transdermal patches, alginate beads etc CO 2. To perform evaluation of novel drug delivery systems CO 3. Understand the importance of drug regulatory agencies
C801.2 Pharmaceutical Biotechnology	The students should be able to: CO 1. Design a suitable reactor for the industry based on their requirements of yield and cost. CO 2. Analyze the genetic code and explain the production of proteins using rDNA technology. CO 3. Explain manufacture, standardization, storage and labeling of passive and active immunization products. CO 4. Explain the biological / blood products, plasma substitutes regarding collection, processing and storage. CO 5. Explain production techniques of monoclonal antibodies.
C801.3 Pharmaceutical Analysis II	The students should be able to: CO 1. Explain the principles, instrumentation and applications of UV/ Visible spectrophotometry, IR spectroscopy, mass spectroscopy, NMR spectroscopy, flame photometry, nepheloturbidometry, fluorescence spectroscopy. CO 2. Gain detailed knowledge about separation techniques like column chromatography, thin layer chromatography, paper chromatography, HPLC, GC and gel electrophoretic techniques. CO 3. Describe the theoretical aspects on electroanalytical methods such as conductometry, amperometry and potentiometry. CO 4. Ability to interpret the analytical data and identify the structure of the compound CO 5. An ability to perform separation techniques for subsequent analysis of mixture of components
C801.4 Human values and Professional Ethics	The students should be able to: CO 1. Identify the core values that shape the ethical behavior of Pharmacist. CO 2. To create an awareness on professional ethics and human values.

	CO 3. To appreciate the rights of others.
C801.5 Clinical Pharmacy Practice	The students should be able to: CO 1. Describe hospital and clinical pharmacy organization. CO 2. Impart knowledge on hospital functions, administration and pharmacy therapeutic committee and rational drug therapy CO 3. Describe overview of hospital formulary i.e., inventory control of drugs, formulations, surgicals and radio isotopes. CO 4. Explain the basic principles of clinical pharmacy. CO 5. Explain diseases, disease systems and treatment.
C801.6 Novel drug delivery systems and Regulatory affairs Lab	The students should be able to: CO 1. Prepare dosage forms by applying preformulation knowledge. CO 2. Identify and solve in process practical formulation problems CO 3. Perform evaluation of prepared dosage forms using analytical methods and interpret them.
C801.7 Pharmaceutical Biotechnology Lab	The students should be able to : CO 1. Study the factors affecting fermentation. CO 2. Isolate bacterial DNA. CO 3. Understand immunization products (passive and active), and their application. CO 4. Isolate and preserve useful microorganisms for industrial applications. CO 5. Conduct microbiological assays of pharmaceutical dosage forms.
C801.8 Pharmaceutical Analysis II Lab	The students should be able to: CO 1. Describe the separation techniques like paper, thin layer chromatography and electrophoretic techniques and its applications. CO 2. Describe the principles of UV/Visible, fluorometry, nepheloturbidometry, IR and flame photometry techniques in the quantitative identification of pharmaceuticals. CO 3. Explain the principles of conductometric and potentiometric analysis and its applications in analysis.

3.1.2 CO-PO matrices of courses selected in 3.1.1 (four matrices to be mentioned; one per semester from 1st to 8th semester; at least one per year) (0 5)

The POs are assigned to each course outcomes, for each course (subject) in each year. The POs matrixing with the course outcomes are made by the individual teacher after thoroughly understanding the program outcomes. These are reviewed three to four times. Each PO was given the high (3), moderate (2) and slight (1) attainment levels. These are assigned based on the feasibility of assessment and their content in the context of the course details. Such course outcomes are made average on the scale of high (3) for each PO and further averaged for consolidated course outcomes. These are documented below for B. Pharmacy first year, and first semester in each subsequent year. These are detailed in the matrixing of the CO=POs (Table 3.1.2). The following are few observations.

Each course outcome satisfied a few POs.

1. Laboratory components satisfied more number of POs compared to theory components.

2. The pharmacy core subjects satisfied more number of POs compared to supportive, mathematical and management subjects.

3. Most of the course outcomes satisfied the POs 1 to 4 (knowledge, practical skills, data analysis, modern tool usage).

4. Laboratory components satisfied other POs from 5 to 11.

3.1.2. CO-PO matrices of courses selected in 3.1.1 (four matrices to be mentioned; one per semester from 1st to 8th semester; atleast one per year) (05)

PROGRAMME OUTCOMES

Based on the B. Pharmacy program's educational objectives, students will achieve the following specific program outcomes. The programme outcomes are given by the NBA as given below.

1. Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.

2. Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.

3. Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

4. Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.

5. Leadership skills: Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.

6. Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).

7. Pharmaceutical Ethics: Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

8. Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

9. The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.

10. Environment and sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

11. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

B. PHARMACY Ist YEAR SEMESTER – I

B.Pharmacy Ist Year Semester - I (Pharmaceutics I (General and Dispensing Pharmacy)

Course code/ Course name	Course outcomes	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
C101.3 Pharmaceutics I (General and Dispensing Pharmacy)	CO 1. Impart knowledge of dispensing the prescriptions and the principles involved in the preparations.	3	-	2	2	-	3	2	-	-	-	3
	CO 2. Impart skill and confidence in preparing quality dosage formulations of various types.	3	-	2	2	-	3	1	-	-	-	3
	CO 3. Document maintain the various records in experimental stage and during manufacture of pharmaceutical preparations.	3	-	2	2	-	3	1	-	-	-	3
	CO 4. Meet the challenges occur in practicing pharmacy profession.	3	-	2	1	-	3	1	-	-	-	3

B.PHARMACY Ist YEAR SEMESTER – II

B.Pharmacy Ist Year Semester – II BS201 Pharmaceutical Inorganic Chemistry

Course code/ Course name	Course outcomes	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
C201.1 Pharmaceutical Inorganic Chemistry	CO 1. Understand and explain the concepts of quality control tests including impurities.	3	-	2	1	-	-	-	-	-	-	-
	CO 2. Explain the definitions, preparations and assay procedures of GI active agents, electrolytes	3	-	2	1	-	-	-	-	-	-	-
	CO 3. Describe the definitions, preparations and assay procedures of mineral, nutritional and pharmaceutical aids	3	-	2	1	-	-	-	-	-	-	-
	CO 4. Explain definitions, preparation and assay method of expectorants and emollients.	3	-	2	1	-	-	-	-	-	-	-
	CO 5. Acquire knowledge on different types of diagnostic agents, dialysis fluids and dental products	3	-	2	1	-	-	-	-	-	-	-

B.PHARMACY IIND YEAR SEMESTER – I

B.Pharmacy IInd Year Semester – I PS301 Pharmaceutical Organic Chemistry – III

Course code/ Course name	Course outcomes	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
C301.1 Pharmaceutical Organic Chemistry – III	CO 1. Understand and adopt synthesis of organic intermediates.	2	-	2	2	-	-	-	-	-	-	-
	CO 2. Appreciate the reaction mechanism and importance of reactions such as oxidation and reduction, acetylation, esterification and etherification and halogenation.	2	-	2	2	-	-	-	-	-	-	-
	CO 3. Perform systematic qualitative analysis of unknown organic compounds	2	-	2	2	-	-	-	-	-	-	-

B.PHARMACY IInd YEAR SEMESTER – II

B.Pharmacy IInd Year Semester – II PS401 Pharmaceutical Unit Operations – II

Course code/ Course name	Course outcomes	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
C401.1 Pharmaceutical Unit Operations – II	CO 1. Explain operations of size reduction, size separation, evaporation, distillation, drying, crystallization, mixing and compaction process.	3	2	3	2	-	-	1	-	2	-	-
	CO 2. Explain available technologies for efficient pharmaceutical manufacturing process.	3	2	3	2	-	-	2	-	3	-	-
	CO 3. Compare the pharmaceutical equipment and process for judicious selection.	3	2	3	2	-	-	1	-	2	-	-
	CO 4. Make the student abreast with current principles and advances in automation of pharmaceutical equipments.	3	2	2	2	-	--	2	--	1	--	--

B.PHARMACY IIIrd YEAR SEMESTER – I

B.Pharmacy III rd Year Semester – I R50017 Pharmaceutical Analysis – I

Course code/ Course name	Course outcomes	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
C501.1 Pharmaceutical Analysis – I	CO 1. Understand and explain the methods assuring the quality and safety of pharmaceuticals.	3	-	2	1	-	-	-	-	-	-	3
	CO 2. Explain about accuracy, precision and significant figure error concepts.	3	-	1	1	-	-	-	-	-	-	2
	CO 3. Acquire knowledge on computation of analytical results, physiochemical concepts of analysis, theories of acids and bases, stoichiometry etc.	3	-	2	2	-	-	-	-	-	-	2
	CO 4. Explain the principles and applications of gravimetric, volumetric and gas analysis techniques.	3	-	2	2	-	-	-	-	-	-	2

	CO 5. Understand and explain the applications	3	-	2	2	-	-	-	-	-	-	2
	of complexometric, iodometric, redox and non-aqueous titrations.											

B.PHARMACY III rd YEAR SEMESTER – II

B.Pharmacy III rd Year Semester – II R6022 Medicinal Chemistry - I

Course code/ Course name	**Course outcomes**	**Program outcomes**										
		1	2	3	4	5	6	7	8	9	10	11
C601.1 Medicinal Chemistry - I	CO 1. Explain the influence of physicochemical properties on drug action.	3	-	-	2	-	-	1	-	-	-	-
	CO 2. Outline the synthetic route for the selective medicinal compounds of each category and acquire knowledge on the mechanism of action of pharmacodynamics agents.	3	-	-	2	-	-	1	-	-	-	-
	CO 3. Classify the therapeutic agents and based on the chemical nature.	3	-	-	2	-	-	1	-	-	-	-
	CO 4. Acquire knowledge about the relationship between the biological activity and structure of therapeutic agents.	3	-	-	2	-	-	1	-	-	-	-
	CO 5. Assimilate the therapeutic uses of adrenergic agents, cholinergic agents, anti-hypertensives, anti-hyperlipidemics, anti-platelets, cardiotonics, hypoglycemic agents, anti-thyroid agents, diuretics, antihistamine and anticoagulants.	3	-	-	2	-	-	1	-	-	-	-
C601.2 Pharmaceutical Technology II	CO 1. Explain the properties and selection of excipients used in different dosage forms.	3	-	2	2	-	-	1	-	-	-	3
	CO 2. Describe the formulation and preparation of tablets (including coating), capsules, parenterals and ophthalmic products.	3	-	2	2	-	-	1	-	-	-	3
	CO 3. Explain the manufacture of suspensions, emulsions, aerosols and parenterals.	3	-	2	2	-	-	1	-	-	-	3
	CO 4. Explain the quality control and quality analysis of dosage forms.	3	-	2	1	-	-	1	-	-	-	3
	CO 5. Acquire knowledge about packaging materials, their properties and uses.	3	-	2	1	-	-	1	-	-	-	3

B. PHARMACY IVth YEAR SEMESTER – I

B. Pharmacy IVth Year Semester – I R70027Pharmacognosy-III Theory

Course code/ Course name	Course outcomes	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
C701.1 Pharmacognosy-III Theory	CO 1. Ability to detect the adulteration in crude drugs	3	2	-	-	-	-	2	-	-	-	-
	CO 2. Ability to perform phytochemical screening of various groups of phyto constituents	3	2	-	-	-	-	2	-	-	-	-
	CO 3. Understand the concept of alternative system of medicine	3	2	-	-	-	-	2	-	-	-	-
	CO 4. Understand the status of herbal drug industry and herbal drug research in India	3	2	-	-	-	-	2	-	-	-	-

B.PHARMACY IVth YEAR SEMESTER – II

B.Pharmacy IVth Year Semester – II R80032 Novel drug delivery systems and Regulatory affairs

Course code/ Course name	Course outcomes	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
C801.1 Novel drug delivery systems and Regulatory affairs	CO 1. Ability to prepare novel drug delivery systems like matrix tablets, transdermal patches, alginate beads etc	3	-	2	2	-	-	-	-	-	-	-
	CO 2. To perform evaluation of novel drug delivery systems	2	-	2	2	-	-	-	-	-	-	-
	CO 3. Understand the importance of drug regulatory agencies	2	-	2	2	-	-	-	-	-	-	-

Note: Correlation levels 1, 2 or 3 as defined below:

1: Slight (Low)
2: Moderate (Medium)
3: Substantial (High)

3.1.3 Course-PO matrix of courses for all years of study (10)

In Table 3.1.2, the matrixing of course outcomes and program outcomes was attempted. This table contained several details and given for four semesters. The details of all semesters are abstracted, made concise analysis and documented in Table 3.1.3. All the information is consistent with the Table 3.1.2. For each course objective, POs are assigned. Then each PO is averaged on the scale of 1 to 3 (slight to high) and reported. Then all such averages of each PO are again averaged to report course outcome averages, again on the scale of 1 to 3 (slight to high). The following are the observations from the Table 3.1.3 1. PO 1 has high attainable value followed by PO 3 and PO 4 for theory subjects. 2. For laboratory components, PO 1 to PO 4 and several other POs are attainable. 3. Laboratory component has become the key course or attaining maximum number of POs. Thus the average level is near 2.5 (against the maximum of 3). In other words, 83% attainable, however measurements may give 100% results or 100% attainability. 4. For most of the theory subjects, the values varied from 2 to 2.3 (against the

maximum 3). In other words, **66 to 83%** is attainable. Given the scope and opportunities for assessment, this level is considered as appropriate and significant. This range falls between the awards of, first class and distinction. 5. These level forms a basis of attainment against which the achieved attainment is analyzed.

Theoretical values for a theory and practical course is obtained by specifying the course outcomes separately. For a single course outcome, several programme outcomes are satisfied. The example is given below for the subject

1.1 B.Pharmacy Ist Year Semester - I

Course code/ Course name		Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
1	C101.3 Pharmaceutics I (General and Dispensing1 Pharmacy)	3	-	2	1.75	-	3	1.25	-	-	-	3
2	C101.4 Anatomy Physiology and Health Education -I	3	2.33	2.33	2	2	2.33	2	2	3	-	-
3	C101.5 Pharm. Organic Chemistry-I	2.5	-	2	2	-	-	-	-	-	-	-
4	C101.6 Professional communication English	3	-	-	2	-	1	-	3	-	-	2
5	C101.7 Pharmaceuti cs-I (General & Dispensing Pharmacy) Lab	3	2.67	2.33	1.67	2	1.67	-	2.7	-	-	-
6	C1018 Anatomy Physiology and Health Education Lab	3	2.33	2.33	2	2	2.33	2	2.33	3	-	-
7	C101.9 Ph. Org. Chemistry – I Lab	3	-	3	1	-	-	-	-	-	1	-

1.2 B.Pharmacy Ist Year Semester - II

Course code/ Course name		Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
1	C201.1 Pharmaceutical Inorganic Chemistry	3	-	2	1	-	-	-	-	-	-	-
2	C201.2 Pharm. Organic Chemistry-II	3	-	3	1	-	-	-	-	-	1	-
3	C201.3 Physical Pharmacy-I	3	-	2	2	-	-	-	-	-	-	3
4	C201.4 Statistical methods and computer application	1	-	3	2	-	-	-	-	-	-	3
5	C201.5 Anatomy Physiology and Health Education -II	3	-	-	-	-	-	-	-	-	-	-
6	C201.6 Inorganic Chemistry Lab	2.67	3	2.67	2.33	2.67	2.33	-	3	-	-	-
7	C201.7 Statistical methods Computer Applications Lab	2	2	3	2	3	2	-	3	-	-	2
8	C201.8 Physical Pharmacy – I Lab	3	-	2	2	-	-	-	-	-	-	3

2.1 B.Pharmacy IInd Year Semester – I

	Course code/ Course name	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
1	C301.1 Pharmaceutical Organic Chemistry – III	2	-	2	2	-	-	-	-	-	-	-
2	C302.2 Pharmaceutical Unit Operations – I	3	2	2.7	2	-	-	1.5	-	2	-	-
3	C301.3 Hospital and Community Pharmacy	3	-	2	2	-	-	-	-	-	-	3
4	C301.4 Pharmacognosy – I	3	-	-	2		-	-	-	1.5	2	-
5	C301.5 Pharmaceutical Analysis – I	3	-	1.8	1.6	-	-	-	-	-	-	2.2
6	C301.6 Pharmaceutical Organic Chemistry – III Lab	2	2.67	3	2	2.67	2	-	2	-	-	-
7	C301.7 Pharmacognosy – I Lab	2	3	2.5	2.25	2	3	-	2.5	-	2.5	-
8	C301.8 Pharmaceutical Analysis – I Lab	2	3	2	2	2	2	-	2	-	-	-

2.2 B.Pharmacy IInd Year Semester – II

	Course code/ Course name	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
1	C401.1 Pharmaceutical Unit Operations – II	3	2	2.7	2	-	-	1.5	-	2	-	-
2	C401.2 Biochemistry	3	-	-	2		-	-	-	1.5	2	-
3	C401.3 Pharmaceutical jurisprudence	3	-	1.8	1.6	-	-	-	-	-	-	2.2
4	C401.4 Physical Pharmacy – II	2.5	-	2	2	-	-	-	-	-	-	-
5	C401.5 OE Intellectual Property Rights	3	-	2	2	-	-	-	-	-	-	-
6	C401.8 Pharmaceutical Unit Operations – II Lab	3	2	2.7	2	-	-	1.5	-	2	-	-
7	C401.9 Biochemistry Lab	2	2.67	3	2	2.67	2	-	2	-	-	-
8	C401.10 Physical Pharmacy – II Lab	2	2.67	3	2	2.67	2	-	2	-	-	-
9	C401.11 Pharmaceutical Unit Operations – II	-	-	-	-	2	-	2	-	-	3	3

3.1 B.Pharmacy III rd Year Semester – I

	Course code/ Course name	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
1	C501.1 Pharmaceutical Analysis – I	3	-	1.8	1.6	-	-	-	-	-	-	2.2
2	C501.2 Pharmaceutical Microbiology	3	-	-	1.2	-	-	2.2	-	-	-	2
3	C501.3 Pharmacognosy II	3	-	-	2	-	-	-	-	1.5	2	-
4	C501.4 Pharmaceutical Technology – I	3	-	2	1	-	-	-	-	-	-	-
5	C501.5 Pharmacology- I	2.75	-	-	1.5	-	-	-	-	-	-	-
6	C501.6 Pharmaceutical Analysis Lab – I	2	3	2.25	2	2	2	-	2	-	-	-
7	C501.7 Pharmaceutical Microbiology Lab	3	2.67	2.6	2	2	2.3	2.3	2.3	-	-	-
8	C501.8Pharmacognosy II Lab	3	2.67	3	2	2	2.3	2.3	2	-	-	-
9	C501.9 Pharmaceutical Technology – I Lab	3	2	2.75	2	-	-	1.5	-	2	-	-

3.2 B.Pharmacy III rd Year Semester – II

	Course code/ Course name	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
1	C601.1 Medicinal Chemistry - I	3	-	-	2	-	-	1	-	-	-	-
2	C601.2 Pharmaceutical Technology II	3	-	2	1.6	-	-	1	-	-	-	3
3	C601.3 Pharmacology - II	3	2	-	-	-	-	2	-	-	-	-
4	C601.4Chemistry of Natural Products	3	2	-	-	-	-	2	-	-	-	-
5	C601.5 Pharmaceutical Jurisprudence	3	-	1.8	1.6	-	-	-	-	-	-	2.2
6	C601.7Medicinal Chemistry Lab	3	-	3	1	-	-	-	-	-	1	-
7	C601.8Pharmaceutical Technology II Lab	3	3	2.5	2	2.5	3	1.4	2	-	-	-
8	C601.9 Pharmacology – II Lab	3	2	-	-	-	-	2	-	-	-	-
9	C601.10Chemistry of Natural Products Lab	3	-	1.8	1.6	-	-	-	-	-	-	2.2

4.1 B.Pharmacy IVth Year Semester – I

	Course code/ Course name	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
1	C701.1Pharmacognosy-III Theory	3	2	-	-	-	-	2	-	-	-	-
2	C701.2 Biopharmaceutics & Pharmacokinetics	3	-	2.4	2	-	1.6	2	1.2	-	-	1
3	C701.3 Pharmacology – III	2.5	-	2	2	-	-	-	-	-	-	-
4	C701.4Medicinal Chemistry – II	2.8	-	-	2	-	-	1	-	-	-	-
5	C701.51Pharmacy Administration	3	2	-	-	-	-	2	-	-	-	-
6	C701.6 Pharmacognosy-III Lab	3	3	3	2	2	-	1	2	-	-	-
7	C701.7 Biopharmaceutics & Pharmacokinetics Lab	3	3	3	2	2.5	3	1.25	2	-	-	-
8	C701.8Pharmacology – III Lab	3	3	3	2.5	2.5	3	1.25	2	-	-	-
9	C701.9 Medicinal Chemistry – II Lab	3	3	3	2	2	-	1	2	-	-	-

4.2 B.Pharmacy IVth Year Semester – II

	Course code/ Course name	Program outcomes										
		1	2	3	4	5	6	7	8	9	10	11
1	C801.1 Novel drug delivery systems and Regulatory affairs	1.6	-	2	2	-	-	-	-	-	-	-
2	C801.2Pharmaceutical Biotechnology	3	-	2	1.6	-	-	2	-	-	-	2.2
3	C801.3 Pharmaceutical Analysis II	2.4	-	2	1.6	-	-	2	-	-	-	2.2
4	C801.5 Clinical Pharmacy	2.8	-	2.4	1.8	-	-	2.4	-	-	-	2.2
5	C801.6 Novel drug delivery systems and Regulatory affairs Lab	3	3	3	2	2	-	1	2	-	-	-
6	C801.7 Pharmaceutical Biotechnology Lab	2.4	-	2	1.6	-	-	2	-	-	-	2.2
7	C801.8 Pharmaceutical Analysis II Lab	3	3	3	2	2	-	1	2	-	-	-

Note: Correlation levels 1, 2 or 3 as defined below:

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

3.2 Attainment of Course Outcomes (40)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

Consolidated: University + Internal Marks 2017-18

(Examples of data collection processes may include, but are not limited to, specific exam/tutorial questions, assignments, laboratory tests, project evaluation, student portfolios (A portfolio is a collection of artifacts that demonstrate skills, personal characteristics, and accomplishments created by the student during study period), internally developed assessment exams, project presentations, oral exams, focus groups etc. It is expected that each theory subject taught should impart specific knowledge and make a foundation for a set of Basic Concepts related to it. Similarly the laboratory experiments should have some predetermined and predefined skills which can be developed during the study)

Data were collected from internal examinations (theory, practicals, seminars, assignments and presentations) and university examinations (theory and practicals). The details are given in the following table

Internal Assessment-Tools

COMPONENT	COMPONENTS OF EVALUATION	NATURE OF EXAM
THEORY (I & II Mid Exam)	**Mid Exam**	
	Objective Exam – 10 marks	Multiple choice questions , fill in the blanks
	Descriptive Exam – 10 marks	Short essay
	Assignments – 5 marks	Students has to submit assignment copy
PRACTICALS	Daily evaluation	Planning, analysis of lab skills, finishing the experiment
	Practical examination	Synopsis, spotting and viva-voce, major experiment and minor experiment Laboratory manual Communication, data interpretation
BEYOND SYLLABUS	Conducting 02 experiments	
OVERALL EVALUATION	External exam – semester wise	

Semester End assessment-Tools

Component	**Name the exams**	**Items used**
Theory	University end exams	Short essays, long essays, numericals
Practicals	University end exams	Synopsis, spotting, major experiment, minor experiment, interpretation, data analysis, viva voce, communication.

Quality of internal semester:

As per the **JNTUH** regulations, the marks allotted to theory are 25 % and practicals 25 % for internal assessment. The remaining 75 % is done at university end assessment. The university end examinations are conducted at a center other than this college. Though the percentage of internal assessment is low, it is to be covering a large number of course objectives. The internal examination and the prescribed marks are to be complied with the regulation. Therefore, the scope for comprehensive assessment is less. In this frame work, the college conducts the following components.

1. Multiple choice questions test
2. Assignments
3. Attendance

The internal assessment evaluation is separately compiled and graded to understand the process. The attainment of course outcomes of all courses are given in the following section. The above description allows us to evaluate the course outcomes achieved. In the present analysis, the targets for assessment were set using the standards prescribed by the JNTUH University, as follows

1. First class with distinction > 70 marks, attainment level is 3 (substantial)
2. First class 60 to 69 marks, attainment level is 2 (moderate)
3. Pass class 50 to 59 marks, attainment level is 1 (low)

The same yardsticks are applied to both sessional and university results. The number of students of all the above three categories are considered (rather than the criteria: as 80% students scoring more than 60% marks of the relevant maximum marks (is considered) for the attainment of 3). The calculation is as follows.

Internal marks: The total internal marks are 25% for theory as per JNTUH University regulations. However, as per NBA suggestion, only 20% marks are considered for calculation. Example: B. Pharmacy I year course (subject) – Pharmaceutics-I (General and Dispensing pharmacy, in 2013-14 year. The following are the marks of theory internal.

3.2.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels (30)

Program shall have set Course Outcome attainment levels for all courses. (The attainment levels shall be set considering average performance levels in the university examination or any higher value set as target for the assessment years. Attainment level is to be measured in terms of student performance in internal assessments with respect the course outcomes of a course in addition to the performance in the University examination)

Example related to attainment levels Vs. targets: (The examples indicated are for reference only. Program may appropriately define levels)

Attainment Level 1: 60% students scoring more than University average percentage marks or set attainment level in the final examination is considered to be attainment of "1" Attainment Level 2: 70% students scoring more than University average percentage marks or set attainment level in the final examination is considered to be attainment of "2" Attainment Level 3: 80% students scoring more than University average percentage marks or set attainment level in the final examination is considered to be attainment of "3" 1. Attainment is measured in terms of actual percentage of students getting set percentage of marks. 2. If targets are

achieved then all the course outcomes are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement. 3. If targets are not achieved the program should put in place an action plan to attain the target in subsequent years.

Measuring CO attainment through Internal Assessments: (The examples indicated are for reference only. Program may appropriately define levels) Target may be stated in terms of percentage of students getting more than class average marks or set by the program in each of the associated COs in the assessment instruments (midterm tests, assignments, mini projects, reports and presentations etc. as mapped with the COs)

Example

Mid-term test 1 addresses C202.1 and C202.2. Out of the maximum 20 marks for this test 12 marks are associated with C202.1 and 8 marks are associated with C202.2.

Examples related to attainment levels Vs. targets:

Attainment Level 1: 60% students scoring more than 60% marks out of the relevant maximum marks is considered to be attainment of "1"

Attainment Level 2: 70% students scoring more than 60% marks out of the relevant maximum marks is considered to be attainment of "2"

Attainment Level 3: 80% students scoring more than 60% marks out of the relevant maximum marks is considered to be attainment of "3"

i. Attainment is measured in terms of actual percentage of students getting set percentage of marks.

ii. If targets are achieved then the C202.1 and C202.2 are attained for that year. Program is expected to set higher targets for the following years as a part of continuous improvement.

iii. If targets are not achieved the program should put in place an action plan to attain the target in subsequent years.

Similar targets and achievement are to be stated for the other mid term tests/internal assessment instruments

Course Outcome Attainment:

For example: Attainment through University Examination: Substantial i.e. 3 Attainment through Internal Assessment: Moderate i.e. 2

Assuming 80% weightage to University examination and 20% weightage to Internal assessment, the attainment calculations will be (80% of University level) + (20% of Internal level) i.e. 80% of 3 + 20% of 2 = 2.4 + 0.4 = 2.8. Note: Weightage of 80% to University exams is only an example. Programs may decide weightages appropriately for University exams and internal assessment with due justification..

	First class with distinction (>70%);Attainment level is 3	First class (60 to 69 %); Attainment level is 2	Pass class 50 to 59%); Attainment level is 1	Total students
No of students	20	31	04	55
No of students X value	20 X 3 = 60	31 X 2 = 62	04 X 1 = 4	
Total	60 + 62 + 4 = 126			
Ratio	126/55 = 2.29			
Value 20% for internal exams	2.29 X 0.20 = 0.45			

For the practical exams the internal marks are 25% as per **JNTUH** University regulations. However, as per NBA suggestion, only 20% is considered for the calculation. The same example of Pharmaceutics-I is considered. The calculation is as follows.

	First class with distinction (>70%);Attainment level is 3	First class (60 to 69 %); Attainment level is 2	Pass class 50 to 59%); Attainment level is 1	Total students
No of students	55	-	-	
No of students X value	55 X 3 = 165	-	-	
Total	165			
Ratio	165 /55 = 3.00			
Value 20% for internal exams	3.00 X 0.20 = 0.60			

For University theory exams, the University marks are 75% as per **JNTUH** University regulations. However, as per NBA suggestion, only 80% is considered for the calculations. The calculation is as follows.

	First class with distinction (>70%);Attainment level is 3	First class (60 to 69 %); Attainment level is 2	Pass class 50 to 59%); Attainment level is 1	Total students
No of students	14	11	06	55
No of students X value	14 X 3 = 42	35 X 2 = 17	06 X 1 = 6	
Total	42 + 35 + 6 = 118			
Ratio	118/55 = 2.14			
Value 20% for internal exams	2.14 X 0.20 = 1.712			

The university theory examinations are conducted in another college. In other words, students of college do not write their theory examination in their parent college.

For University practical exams, the University marks are 66% as per **JNTUH** University regulations. However, as per NBA suggestion, only 80% is considered for the calculation. The calculation is as follows.

	First class with distinction (>70%);Attainment level is 3	**First class (60 to 69 %); Attainment level is 2**	**Pass class 50 to 59%); Attainment level is 1**	**Total students**
No of students	55	-	-	-
No of students X value	55 X 3 = 165	-	-	-
Total	165			
Ratio	165/55 = 3.00			
Value 20% for internal exams	3.00 X 0.80 = 2.40			

For conducting practical examination of University, external examiner is appointed by the **JNTUH** University.

The above calculated values are Tabulated as follows

Subject code	**Subject name**	**University**		**Internal**		**Total**
		100%	**80%**	**100%**	**20%**	
1. 103	Pharmaceutics-I (General and dispensing pharmacy-Theory)	2.14	1.712	2.25	0.45	2.162
	Theoretical attainment = 2.33					
	% attainment of outcomes = 2.16 / 2.33 = 92%					
	(against the scale Max = 3)					
1. 108	Pharmaceutics-I (General and dispensing pharmacy-Laboratory)	2.25	1.80	2.56	0.51	2.31
	Theoretical attainment = 2.56					
	% attainment of outcomes = / 2.56 = 90.33%					
	(against the scale Max = 3)					

Co attainment for batch 2017-2018

1.1 B.Pharmacy Ist Year Semester - I

Course code/ Course name	University attainment		Sessional attainment		Attainment level		%Attainment (Achieved / required) X 100	Attainment in scale 3
	100%	80% (100% X 0.8)	100%	20% (100% X 0.8)	Achieved	Required		
C101.1 Pharmaceutics I	2.21	1.76	2.46	0.49	2.26	2.33	96.84	2.91
C101.2 Anatomy Physiology and Health Education –I	1.48	1.19	2.53	0.51	1.69	1.9	89.06	2.67
C101.3 Pharm. Inorganic Chemistry-I	1.80	1.44	2.80	0.56	2.00	1.88	100	3.00
C101.4 communication skills	1.89	1.51	2.56	0.51	2.03	2.25	90.06	2.70
C101.5 Pharm Analysis I	2.98	2.38	2.68	0.53	2.91	2.91	100	3.00
C101.6 communication skills Lab	2.25	1.80	2.56	0.51	2.31	2.56	90.33	2.71
C101.7 Pharm Analysis Lab	2.40	1.92	2.20	0.44	2.36	2.42	97.52	2.93
C101.8 Pharmaceutics-I Lab	2.87	2.30	2.79	0.56	2.86	2.37	100	3.00
C101.9 Anatomy Physiology and Health Education Lab	2.77	2.22	2.59	0.52	2.73	2.67	100	3.00
C101.10 Pharm. Inorganic Chemistry – I Lab	3.00	2.40	3.00	0.60	3.00	2.56	100	3.00

1.1 B.Pharmacy Ist Year Semester - II

Course code/ Course name	University attainment		Sessional attainment		Attainment level		%Attainment (Achieved / required) X 100	Attainment in scale 3
	100%	80% (100% X 0.8)	100%	20% (100% X 0.8)	Achieved	Required		
C201.1 Pathophysiolgy	1.74	1.40	1.98	0.40	1.79	2.5	71.67	2.15
C201.2 Pharm. Organic Chemistry-I	1.15	0.92	2.51	0.50	1.42	1.9	74.74	2.24
C201.3 Physical Pharmacy-I	1.60	1.28	2.27	0.45	1.73	2.13	81.20	1.88
BS204 Computer Applications in Pharmacy	1.65	1.32	1.88	0.38	1.70	2.1	80.84	2.43
C201.5 Anatomy Physiology and Health Education –II	1.60	1.28	2.46	0.49	1.77	2.2	80.39	2.41
C201.6 Pharm. Organic Chemistry-I Lab	2.43	1.94	2.32	0.46	2.40	2.33	100	3.00
C201.7 Computer Applications in Pharmacy Lab	2.72	2.18*	2.72	0.54	2.72	2.44	100	3.00
C201.8 Physical Pharmacy –I Lab	2.96	2.37	2.72	0.54	2.91	2.41	100	3.00
C201.9 Anatomy Physiology and Health Education –II lab	2.00	1.60	2.31	0.46	2.06	2.10	98.17	2.95
C201.10 En Environmental sciences	1.87	1.50	2.45	0.49	1.99	2.12	93.72	2.81

2.2 B.Pharmacy IInd Year Semester – I

Course code/ Course name	University attainment		Sessional attainment		Attainment level		%Attainment (Achieved / required) X 100	Attainment in scale 3
	100%	80% (100% X 0.8)	100%	20% (100% X 0.8)	Achieved	Required		
C301.1 Pharmaceutical Organic Chemistry – III	1.70	1.36	2.26	0.45	1.81	2.22	81.54	2.45
C301.2 Pharmaceutical Unit Operations – I	1.40	1.12	2.62	0.52	1.64	2.13	76.98	2.31
C301.3 Hospital and Community Pharmacy	1.62	1.29	2.11	0.42	1.71	2.3	74.50	2.24
C301.4 Pharmacognosy – I	1.87	1.50	2.45	0.49	1.99	2.12	93.72	2.81
C301.5 Pharmaceutical Analysis – I	1.38	1.10	2.66	0.53	1.63	2.08	78.56	2.36
C301.6 Pharmaceutical Organic Chemistry – III Lab	2.45	1.96	2.77	0.55	2.51	2.42	100	3.00
C301.7 Pharmacognosy – I Lab	2.66	2.13	2.85	0.57	2.70	2.18	100	3.00
C301.8 Pharmaceutical Analysis – I Lab	2.91	2.33	2.91	0.58	2.91	2.89	100	3.00

2.2 B.Pharmacy IInd Year Semester – II

Course code/ Course name	University attainment		Sessional attainment		Attainment level		%Attainment (Achieved / required) X 100	Attainment in scale 3
	100%	80% (100% X 0.8)	100%	20% (100% X 0.8)	Achieved	Required		
C401.1 Pharmaceutical Unit Operations – II	1.48	1.19	2.13	0.43	1.61	2.12	75.97	2.28
C401.2 Biochemistry	1.19	0.95	2.63	0.53	1.47	1.95	75.58	2.27
C401.3 Pharmaceutical jurisprudence	1.36	1.08	2.35	0.47	1.55	1.88	82.68	2.48
C401.4 Physical Pharmacy – II	1.87	1.50	1.87	0.37	1.87	2.13	87.92	2.64
OE Intellectual Property Rights	2.00	1.60	2.31	0.46	2.06	2.10	98.17	2.95
C401.5 Pharmaceutical Unit Operations – II Lab	3.00	2.40	2.75	0.55	2.95	2.42	100	3.00
C401.6 Biochemistry Lab	2.54	2.03	2.65	0.53	2.56	2.44	100	3.00
C401.7 Physical Pharmacy – II Lab	2.09	1.68	2.02	0.40	2.08	2.12	98.07	2.94
C401.8 Pharmaceutical Unit Operations – II Lab	1.43	1.15	2.31	0.46	1.61	2	80.35	2.41

3.1 B.Pharmacy III rd Year Semester – I

Course code/ Course name	University attainment		Sessional attainment		Attainment level		%Attainment (Achieved / required) X 100	Attainment in scale 3
	100%	80% (100% X 0.8)	100%	20% (100% X 0.8)	Achieved	Required		
C501.1Pharmaceutical Analysis – I	2.00	1.60	2.55	0.51	2.11	2.44	86.51	2.60
C501.2Pharmaceutical Microbiology	1.48	1.19	2.13	0.43	1.61	2.12	75.97	2.28
C501.3 Pharmacognosy II	2.25	1.80	2.56	0.51	2.31	2.56	90.33	2.71
C501.4 Pharmaceutical Technology – I	2.17	1.74	2.11	0.42	2.16	2.22	97.34	2.17
C501.5 Pharmacology- I	1.87	1.50	1.87	0.37	1.87	2.13	87.92	2.64
C501.6 Pharmaceutical Analysis Lab – I	3.00	2.40	2.75	0.55	2.95	2.42	100	3.00
C501.7 Pharmaceutical Microbiology Lab	2.54	2.03	2.65	0.53	2.56	2.44	100	3.00
C501.8 Pharmacognosy II Lab	3.00	2.40	2.95	0.59	2.99	2.62	100	3.00
C501.9 Pharmaceutical Technology – I Lab	2.44	1.95	1.27	0.25	2.21	2	100	3.00

3.1 **B.Pharmacy III rd Year Semester – II**

Course code/ Course name	**University attainment**		**Sessional attainment**		**Attainment level**		**%Attainment (Achieved / required) X 100**	**Attainment in scale 3**
	100%	80% (100% X 0.8)	100%	20% (100% X 0.8)	Achieved	Required		
C601.1 Medicinal Chemistry - I	1.36	1.08	2.35	0.47	1.55	1.88	82.68	2.48
C601.2 Pharmaceutical Technology II	1.40	1.12	2.62	0.52	1.64	2.13	76.98	2.31
C601.3 Pharmacology - II	1.67	1.34	1.68	0.34	1.67	2	83.70	2.51
C601.4Chemistry of Natural Products	1.87	1.50	1.87	0.37	1.87	2.13	87.92	2.64
C601.5 Pharmaceutical Jurisprudence	2.17	1.74	2.11	0.42	2.16	2.22	97.34	2.92
C601.7 Medicinal Chemistry Lab	2.96	2.36	2.80	0.56	2.92	2.47	100	3.00
C601.8 Pharmaceutical Technology II Lab	2.90	2.32	2.52	0.50	2.82	2.14	100	3.00
C601.9 Pharmacology – II Lab	2.90	2.32	3.00	0.60	2.92	2.49	100	3.00
C601.10 Chemistry of Natural Products Lab	2.96	2.36	2.80	0.56	2.92	2.47	100	3.00

4.2 B.Pharmacy IVth Year Semester – I

Course code/ Course name	University attainment		Sessional attainment		Attainment level		%Attainment (Achieved / required) X 100	Attainment in scale 3
	100%	80% (100% X 0.8)	100%	20% (100% X 0.8)	Achieved	Required		
C701.1Pharmacognosy-III Theory	1.89	1.51	1.97	0.39	1.90	2.05	92.86	2.79
C701.2 Biopharmaceutics & Pharmacokinetics	1.75	1.40	2.26	0.45	1.85	2.27	81.56	2.45
C701.3 Pharmacology – III	1.89	1.51	2.56	0.51	2.03	2.25	90.06	2.70
C701.4 Medicinal Chemistry – II	1.48	1.19	2.53	0.51	1.69	1.9	89.06	2.67
C701.5 Pharmacy Administration	1.95	1.56	2.23	0.45	2.00	2.05	97.69	2.93
C701.7 Pharmacognosy-III Lab	2.62	2.09	2.51	0.50	2.59	2.33	100	3.00
C701.8 Biopharmaceutics & Pharmacokinetics Lab	2.90	2.32	2.90	0.58	2.90	2.44	100	3.00
C701.9 Pharmacology – III Lab	2.59	2.07	2.49	0.50	2.57	2.41	100	3.00
C701.10 Medicinal Chemistry – II Lab	2.90	2.32	2.90	0.58	2.90	2.44	100	3.00

4.2 B.Pharmacy IVth Year Semester – II

Course code/ Course name	University attainment		Sessional attainment		Attainment level		%Attainment (Achieved / required) X 100	Attainment in scale 3
	100%	80% (100% X 0.8)	100%	20% (100% X 0.8)	Achieved	Required		
C801.1 Novel drug delivery systems and Regulatory affairs	1.85	1.48	1.79	0.36	1.84	2.12	86.68	2.60
C801.2 Pharmaceutical Biotechnology	1.89	1.51	2.56	0.51	2.03	2.25	90.06	2.70
C801.3 Pharmaceutical Analysis II	2.28	1.83	2.62	0.52	2.35	2.47	95.11	2.85
C801.5 Clinical Pharmacy Practice	1.60	1.28	2.27	0.45	1.73	2.13	81.20	2.44
C901.6 Novel drug delivery systems and Regulatory affairs Lab	2.75	2.20	2.91	0.55	2.75	2.47	100	3.00
C901.7 Pharmaceutical Biotechnology Lab	2.75	2.20	2.73	0.52	2.72	2.14	100	3.00
C801.8 Pharmaceutical Analysis II Lab	2.91	2.33	2.88	0.54	2.86	2.49	100	3.00

3.3 Attainment of Program Outcomes (40)

3.3.1 Describe assessment tools and processes used for assessing the attainment of each PO (10)

*(Describe the assessment tools and processes used to gather the data upon which the evaluation of each the Program Outcome is based indicating the frequency with which these processes are carried out. Describe the assessment processes that demonstrate the degree to which the Program Outcomes are attained and *document the attainment levels)*

The assessment tools and processes to gather data was mentioned in 3.2.1 and 3.2.2. The course outcomes are mapped for each program outcome. The attainment of course outcomes achieved in the years 2015-16 and 2017-18 are translated into program outcomes based on the CO-PO Matrixes and course–PO Matrixes.

The following are the assessments

Assessment Tools:

Several tools are described for assessing course outcomes. The program outcomes are based on the course outcomes. Thus the tools remain the same for assessing the program outcomes. In addition, the tools of survey based on the alumni and exit surveys are considered.

The tools broadly are

- End of course surveys (half yearly
- Student exit surveys
- Alumni surveys – yearly
- Staff surveys – yearly
- Higher education and placement – student publications

Component	Components of Evaluation	Nature of exam
Internal examinations		
Theory	MCQ's	Multiple choice questions
	First sessional exam	Short essay and long essay questions
	MCQ's	Multiple choice questions
	End sessional exam	Short essay and long essay questions
Practicals	Daily evaluation	Planning, analysis of lab skills, finishing the experiment
	Practical examination	Synopsis, spotting and viva-voce, major experiment and minor experiment
	Laboratory manual	Communication, data interpretation
Beyond syllabus	Conducting 02 experiments	
Overall evaluation	External exam – semester wise	
University examinations		
Theory	University end exams	Short essays, long essays, numericals
Practicals	University end exams	Synopsis, spotting, major experiment, minor experiment, interpretation, data analysis, viva voce, communication.

Assessment process:

The assessment tools are direct and indirect methods for evaluating the attainment of POs.

Direct methods: The sessional examinations and the internal assessment, wherein the teacher can focus on the POs. The question papers include, short answers, short essay and long essay type. In addition, slip test are conducted on each unit test. Assignments are given for some extension of syllabus. In case of laboratory examination, synopsis, major experiment, minor experiment, viva voce, reports, etc., are the components. While setting a question paper, each question is framed based on the POs in order to attain them to a large extent. A few POs of minor importance may not be accommodated. It is necessary that a questions has to cover 60% of 'essentials to know', 30% 'better to know' and 10% are 'nice to know'. Therefore, special attempts are made to attain these objectives.

The subjects are also categorized as professional core subjects, basic subjects (mathematics, science, computing, and humanities). Accordingly the POs have assumed adequate importance. Having set the question papers, the answer papers are being evaluated from the same perspectives. The students are given feedback and POs are highlighted. Data are gathered after scrutinizing the answer for course outcomes. The course outcomes are translated to POs. Attainment of Pos is considered from the data of all students.

Indirect methods: Survey is conducted from two levels: alumni and exit survey.

PO evaluation

Frequency of carrying out the process: once in year

The POs are obtained from course outcomes, which composed a number of tools, end examination practicals, slip test, assignments, seminars etc., Each one has uniquely suited to achieve POs. The evaluation summative as well as formative (experience and appreciation, MCQs). The evaluation is spread throughout the program, examinations, job placements data, faculty survey on students and experimental site perceptions. Higher studies records, GPAT scores are a few more tools.

3.3.2. Provide results of evaluation of each PO (30)

Program shall set Program Outcome attainment levels for all POs.

(The attainment levels by direct (student performance) and indirect (surveys) are to be presented through Program level Course-PO matrix as indicated).

The results evaluation is made in two levels:

Student performance (direct) – 80% value

Surveys (indirect) – 20% value

Direct attainment level of PO is determined by taking average across all courses.

Indirect attainment level of PO is determined on the student surveys (alumni).

The following are the observations

The percent attainment are converted into a scale considering the maximum of 3, *i.e.*, high. Form the calculations, results are tabulated as given below, for the academic year of 2015-16, 2016-17 and first semester of 2017-18.

The conclusions are drawn for B. Pharm program;

- 2015 – 2016: About 25 courses (out of 53 courses) obtained the POs to the tune for more than 75%. About 6 POs (PO1, PO2, PO3, PO5, PO6 and PO8) are attained to the tune of 70%, other POs are attained by more than 50%.
- 2016 – 2017: About 30 courses (out of 53 courses) attained the POs to the tune of more than 75%.
- 2017 – 18: About 6 courses (out of 26) attained the POs to the tune of 70% (only first semester results). About 6 POs (PO 1, PO 2, PO 3, PO 5, PO 6 and PO 8) are attained to the tune of more than 70%, other POs are attained by more than 55%.

Course- PO Attainment 2017 – 2018

Course code/ Course name	Program outcomes											Average programme outcomes (max 3.00)
	1	2	3	4	5	6	7	8	9	10	11	
C101.1 Remedial Biology	3	-	2	1.75	-	3	1.25	-	-	-	3	1.8
C101.2 Remedial Mathematics	2.2	-	2.4	1.6	-	-	-	-	-	1.4	-	1.9
C101.3 Pharmaceutics I (General and Dispensing1 Pharmacy)	3	-	2	1.75	-	3	1.25	-	-	-	3	2.33
C101.4 Anatomy Physiology and Health Education -I	3	2.33	2.33	2	2	2.33	2	2	3	-	-	2.37
C101.5 Pharm. Organic Chemistry-I	2.5	-	2	2	-	-	-	-	-	-	-	2.17
C101.6 Professional communication English	3	-	-	2	-	1	-	3	-	-	2	2.2
C101.7 Pharmaceutics-I (General & Dispensing Pharmacy) Lab	3	2.67	2.33	1.67	2	1.67	-	2.7	-	-	-	2.56
C1018 Anatomy Physiology and Health Education Lab	3	2.33	2.33	2	2	2.33	2	2.33	3	-	-	2.37
C101.9 Ph. Org. Chemistry – I Lab	3	-	3	1	-	-	-	-	-	1	-	2.33

C101.10 BS110 Biology Lab	3	-	2	2	-	-	-	-	-	-	3	2.42
C201.1 Pharmaceutical Inorganic Chemistry	3	-	2	1	-	-	-	-	-	-	-	2.0
C201.2 Pharm. Organic Chemistry-II	3	-	3	1	-	-	-	-	-	1	-	1.88
C201.3 Physical Pharmacy-I	3	-	2	2	-	-	-	-	-	-	3	2.5
C201.4 Statistical methods and computer application	1	-	3	2	-	-	-	-	-	-	3	2.25
C201.5 Anatomy Physiology and Health Education -II	3	-	-	-	-	-	-	-	-	-	-	2.0
C201.6 Inorganic Chemistry Lab	2.67	3	2.67	2.33	2.67	2.33	-	3	-	-	-	2.67
C201.7 Statistical methods Computer Applications Lab	2	2	3	2	3	2	-	3	-	-	2	2.37
C201.8 Physical Pharmacy –I Lab	3	-	2	2	-	-	-	-	-	-	3	2.5
C301.1 Pharmaceutical Organic Chemistry – III	2	-	2	2	-	-	-	-	-	-	-	2.13
C302.2 Pharmaceutical Unit Operations – I	3	2	2.7	2	-	-	1.5	-	2	-	-	2.5
C301.3 Hospital and Community Pharmacy	3	-	2	2	-	-	-	-	-	-	3	2.13
C301.4 Pharmacognosy – I	3	-	-	2		-	-	-	1.5	2	-	2.15
C301.5 Pharmaceutical Analysis – I	3	-	1.8	1.6	-	-	-	-	-	-	2.2	2.33

C301.6 Pharmaceutical Organic Chemistry – III Lab	2	2.67	3	2	2.67	2	-	2	-	-	-	2.44
C301.7 Pharmacognosy – I Lab	2	3	2.5	2.25	2	3	-	2.5	-	2.5	-	2.44
C301.8 Pharmaceutical Analysis – I Lab	2	3	2	2	2	2	-	2	-	-	-	2.44
C301.9 Environmental Science And Technology	-	-	-	-	2	-	2	-	-	2	-	2.00
C401.1 Pharmaceutical Unit Operations – II	3	2	2.7	2	-	-	1.5	-	2	-	-	2.13
C401.2 Biochemistry	3	-	-	2		-	-	-	1.5	2	-	2.13
C401.3 Pharmaceutical jurisprudence	3	-	1.8	1.6	-	-	-	-	-	-	2.2	2.15
C401.4 Physical Pharmacy – II	2.5	-	2	2	-	-	-	-	-	-	-	2.17
C401.5 OE Intellectual Property Rights	3	-	2	2	-	-	-	-	-	-	-	2.17
C401.86 Pharmaceutical Unit Operations – II Lab	3	2	2.7	2	-	-	1.5	-	2	-	-	2.14
C401.9 Biochemistry Lab	2	2.67	3	2	2.67	2	-	2	-	-	-	2.33
C401.10 Physical Pharmacy – II Lab	2	2.67	3	2	2.67	2	-	2	-	-	-	2.33
C401.11 Pharmaceutical Unit Operations – II	-	-	-	-	2	-	2	-	-	3	3	2.5

C501.1 Pharmaceutical Analysis – I	3	-	1.8	1.6	-	-	-	-	-	-	2.2	2.15
C501.2 Pharmaceutical Microbiology	3	-	-	1.2	-	-	2.2	-	-	-	2	2.10
C501.3 Pharmacognosy II	3	-	-	2	-	-	-	-	1.5	2	-	2.13
C501.4 Pharmaceutical Technology – I	3	-	2	1	-	-	-	-	-	-	-	2.0
C501.5 Pharmacology- I	2.75	-	-	1.5	-	-	-	-	-	-	-	2.13
C501.6 Pharmaceutical Analysis Lab – I	2	3	2.25	2	2	2	-	2	-	-	-	2.5
C501.7 Pharmaceutical Microbiology Lab	3	2.67	2.6	2	2	2.3	2.3	2.3	-	-	-	2.41
C501.8Pharmacognosy II Lab	3	2.67	3	2	2	2.3	2.3	2	-	-	-	2.41
C501.9 Pharmaceutical Technology – I Lab	3	2	2.75	2	-	-	1.5	-	2	-	-	2.14
C601.1 Medicinal Chemistry – I	3	-	-	2	-	-	1	-	-	-	-	2.0
C601.2 Pharmaceutical Technology II	3	-	2	1.6	-	-	1	-	-	-	3	2.12
C601.3 Pharmacology – II	3	2	-	-	-	-	2	-	-	-	-	2.3
C601.4Chemistry of Natural Products	3	2	-	-	-	-	2	-	-	-	-	2.15
C601.5 Pharmaceutical Jurisprudence	3	-	1.8	1.6	-	-	-	-	-	-	2.2	1.19

C601.6Advance Communication Skills	3	-	3	1	-	-	-	-	-	1	-	1.19
C601.7Medicinal Chemistry Lab	3	-	3	1	-	-	-	-	-	1	-	2.42
C601.8Pharmaceutical Technology II Lab	3	3	2.5	2	2.5	3	1.4	2	-	-	-	2.3
C601.9 Pharmacology – II Lab	3	2	-	-	-	-	2	-	-	-	-	2.3
C601.10Chemistry of Natural Products Lab	3	-	1.8	1.6	-	-	-	-	-	-	2.2	2.15
C701.1Pharmacognosy-III Theory	3	2	-	-	-	-	2	-	-	-	-	2.3
C701.2 Biopharmaceutics & Pharmacokinetics	3	-	2.4	2	-	1.6	2	1.2	-	-	1	1.9
C701.3 Pharmacology – III	2.5	-	2	2	-	-	-	-	-	-	-	2.17
C701.4Medicinal Chemistry – II	2.8	-	-	2	-	-	1	-	-	-	-	1.98
C701.51Pharmacy Administration	3	2	-	-	-	-	2	-	-	-	-	2.3
C701.7Pharmacognosy-III Lab	3	3	3	2	2	-	1	2	-	-	-	2.18
C701.8 Biopharmaceutics & Pharmacokinetics Lab	3	3	3	2	2.5	3	1.25	2	-	-	-	2.47
C701.9Pharmacology – III Lab	3	3	3	2.5	2.5	3	1.25	2	-	-	-	2.53
C701.10 Medicinal Chemistry – II Lab	3	3	3	2	2	-	1	2	-	-	-	2.3
C801.1 Novel drug delivery systems and Regulatory affairs	1.6	-	2	2	-	-	-	-	-	-	-	2.12

C801.2Pharmaceutical Biotechnology	3	-	2	1.6	-	-	2	-	-	-	2.2	2.17
C801.3 Pharmaceutical Analysis II	2.4	-	2	1.6	-	-	2	-	-	-	2.2	2.4
C801.4 Human values and Professional Ethics	-	-	-	-	-	2.5	-	2	2.5	-	2.3	1.91
C801.5 Clinical Pharmacy Practice	2.8	-	2.4	1.8	-	-	2.4	-	-	-	2.2	2.32
C801.6 Novel drug delivery systems and Regulatory affairs Lab	3	3	3	2	2	-	1	2	-	-	-	2.3
C801.7 Pharmaceutical Biotechnology Lab	2.4	-	2	1.6	-	-	2	-	-	-	2.2	2.3
C801.8 Pharmaceutical Analysis II Lab	3	3	3	2	2	-	1	2	-	-	-	2.3
B. Pharm, Direct attainment (3 Max)	2.30	2.42	2.09	1.85	2.09	2.03	1.96	2.16	1.80	1.91	1.70	
B. Pharm, Direct attainment (100%)	76.66	80.78	69.79	61.56	69.80	67.79	65.33	71.84	59.86	63.56	56.50	
B. Pharm, Direct attainment (80%)	61.32	64.62	55.83	49.25	55.84	54.23	52.27	57.47	47.89	50.84	45.20	
B. Pharm, Indirect attainment (20%)	18.9	16.43	15.24	15	16.43	17.14	18.02	16.77	16.11	16.59	18.57	
Total attainment, %	**80.22**	**81.05**	**71.07**	**64.25**	**72.27**	**71.37**	**70.29**	**74.24**	**64.00**	**67.43**	**63.77**	

2016 – 2017

	Program outcomes										
	1	2	3	4	5	6	7	8	9	10	11
B. Pharm, Direct attainment (3 Max)	2.37	2.50	2.17	1.92	2.19	2.12	1.75	2.22	1.89	2.01	1.79
B. Pharm, Direct attainment (100%)	79.12	83.41	72.34	64.10	73.01	70.63	58.18	74.16	63.08	67.07	59.62
B. Pharm, Direct attainment (80%)	63.29	66.73	57.87	51.28	58.41	56.51	46.54	59.33	50.47	53.66	47.69
B. Pharm, Indirect attainment (20%)	18.9	16.43	15.24	15	16.43	17.14	18.02	16.77	16.11	16.59	18.57
Total attainment, %	**82.19**	**83.16**	**73.11**	**66.28**	**74.84**	**73.65**	**64.56**	**76.10**	**66.58**	**70.25**	**66.26**

2015 – 2016

	Program outcomes										
	1	2	3	4	5	6	7	8	9	10	11
B. Pharm, Direct attainment (3 Max)	2.16	2.43	1.98	1.59	2.05	1.77	1.43	1.93	1.88	1.41	1.61
B. Pharm, Direct attainment (100%)	71.96	80.83	66.04	53.07	68.22	59.08	47.56	64.25	62.50	47.11	53.50
B. Pharm, Direct attainment (80%)	57.57	64.67	52.83	42.46	54.58	47.27	38.04	51.40	50.00	37.69	42.80
B. Pharm, Indirect attainment (20%)	18.9	16.43	15.24	15	16.43	17.14	18.02	16.77	16.11	16.59	18.57
Total											
Total attainment, %	**76.47**	**81.10**	**68.07**	**57.46**	**71.01**	**64.41**	**56.06**	**68.17**	**66.11**	**54.28**	**61.37**

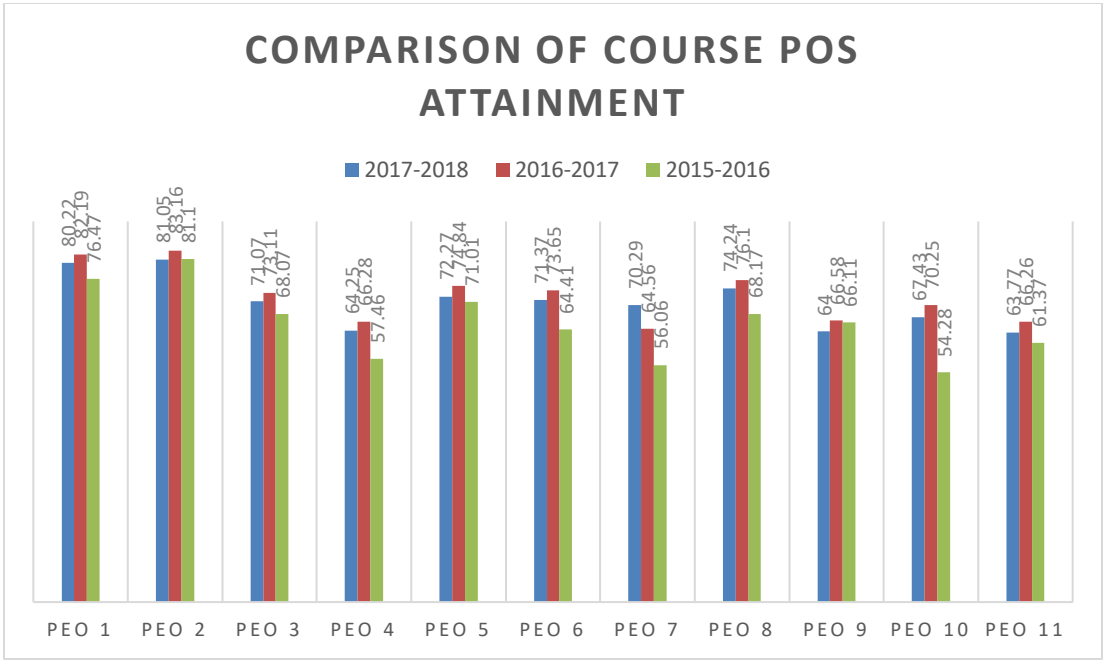

COMPARISON OF COURSE POS ATTAINMENT
2017-2018
2016-2017
2015-2016
80.22
82.19
76.47
81.05
83.16
81.1
71.07
73.11
68.07
64.25
66.28
57.46
72.27
74.84
71.01
71.37
73.65
64.41
70.29
64.56
56.06
74.24
76.1
68.17
64
66.58
66.11
67.43
70.25
54.28
63.77
66.26
61.37
PEO 1
PEO 2
PEO 3
PEO 4
PEO 5
PEO 6
PEO 7
PEO 8
PEO 9
PEO 10
PEO 11

Table 3.3.1d: Comparison of Course POs attainment

PEO	**2017-2018**	**2016-2017**	**2015-2016**
PEO 1	80.22	82.19	76.47
PEO 2	81.05	83.16	81.10
PEO 3	71.07	73.11	68.07
PEO 4	64.25	66.28	57.46
PEO 5	72.27	74.84	71.01
PEO 6	71.37	73.65	64.41
PEO 7	70.29	64.56	56.06
PEO 8	74.24	76.10	68.17
PEO 9	64.00	66.58	66.11
PEO 10	67.43	70.25	54.28
PEO 11	63.77	66.26	61.37

C101, C102 are indicative courses in the first year. Similarly, C409 is final year course. First numeric digit indicates year of study and remaining two digits indicate course nos. in the respective year of study.

1. Direct attainment level of a PO is determined by taking average across all courses addressing that PO.

Fractional numbers may be used for example 1.55.

2. Indirect attainment level of a PO is determined based on the student exit surveys, employer surveys, co-curricular activities, extracurricular activities etc.

Example:

1. It is assumed that a particular PO has been mapped to four coursesC2O1, C3O2, C3O3, C401
2. The attainment level for each of the four courses will be as per the examples shown in 2.2.2
3. PO attainment level will be based on attainment levels of direct assessment and indirect assessment
4. It is assumed that while deciding on overall attainment level 80% weightage may be given to direct assessment and 20% weightage to indirect assessment through surveys from students(largely), employers (to some extent). Program may have different weightages with appropriate justification.
5. Assuming following actual attainment levels:

Direct Assessment

C201 –High (3)

C302 – Medium (2)

C303 – Low (1)

C401 – High (3)

Attainment level will be summation of levels divided by no. of courses 3+2+1+3/4= 9/4=2.25

Indirect Assessment

Surveys, Analysis, customized to an average value as per levels 1, 2 & 3.

Assumed level - 2

PO Attainment level will be 80% of direct assessment + 20% of indirect assessment i.e. 1.8 + 0.4 = 2.2.

The following are the conclusions

The curriculum has approximately weightage of 60% theory and 40% practicals.

Direct assessment: PO 1 through PO 4 are highly achieved. These POs are hard in nature and are appropriately attained through examination and project. PO 5 to PO 11 are attained (>55%). These are known as soft outcomes and needs the Co- and extra curricular activities to attain them.

POs 8, 9, 10 and 11 are fulfilled by providing the necessary co-curricular activities, seminars, conferences, debate, essay writing, games, quizzes, poster presentations, publications, dance, music, workshops, industrial visits, pre-placement training, personality development programmes etc., which are not included in the above calculation as assessment. The POs 8, 9, 10 and 11 are evidenced by the students entered into higher education (both in India and abroad). **Surveys and analysis:** All POs (PO1 to PO11) have high attainability (from 75 to 94%) suggesting the holistic growth of the students, considering all co-curricular and extra curricular activities.

- PO 1, PO 2, PO 3, PO 4 PO 5, PO 6 and PO 8 have nearly identical attainment in three years. In these POs, the attainment achieved is high in 2014-15 compared to 2013-14. The attainment in 2015-16 is nearly same, though the second semester is not completed.
- The PO 7, PO 9, PO 10 and PO 11 have attained nearly 60 to 70% in three years. In these POs, the attainment is higher in 2014-15.
- The improvement attained in POs in 2014-15 is agreeing with the success index indicated in aggregate of 4 years of 2014-15, and also in individual years (Table 3.3.1d).

The indirect attainment of POs is higher compared to direct attainment observed, may be on account of survey and opinion polls.

CRITERION 4	Student's Performance	180

4. Student's Performance (180)

Item	CAY* (2018-19)	CAYm1 (2017-18)	CAY*m*2 (2016-17)	CAY*m*3 (2015-16)
Sanctioned intake of the program (N)	100+115=115	100	100	100
Total number of students admitted in first year (N1)	97+12=109	73	57	67
Number of students admitted in 2nd year in the same batch via lateral entry (N2)	0	0	0	0
Total number of students admitted in the program (N1 + N2)	97+12=109	73	57	67

***PIO approval**

4.1. Enrolment Ratio (20)

Enrolment Ratio= N1/N

Item (Students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year)	Number of students	Marks
>=90% students enrolled	109	20
>=80% students enrolled	-	18
>=70% students enrolled	-	16
>=60% students enrolled	-	12
>=50% students enrolled	-	8
<50% students enrolled	-	0

The Average Students enrolled at the First Year Level on average basis during the previous three academic years starting from current academic year is 109+73+57=239/315*100 = 75.87

Enrolment Ratio=N1/N = 75.87.

4.2. Success Rate in the stipulated period of the program (50)

Year of entry	Number of students admitted in 1st year + admitted via lateral entry in 2nd year (N1 + N2)	Number of students who have successfully graduated without backlogs in any year of study (Without backlog means no compartment or failure in any semester/year of study			
		I Year	II Year	III Year	IV Year
CAY(2018-19)	109				
CAY*m*1(2017-18)	73	14			
CAY*m*2(2016-17)	57	15	17		
CAY*m*3 (2015-16)	67	12	10	10	
CAY*m*4 (LYG) (2014-15)	48	10	8	6	6
CAY*m*5 (LYG*m*1) (2013-14)	62	21	18	13	11
CAY*m*6 (LYG*m*2) (2012-13)	67	18	15	14	13

Year of entry	Number of students admitted in 1st year + admitted via lateral entry in 2nd year (N1 + N2)	Number of students who have successfully graduated (Students with backlog in stipulated period of study)			
		I Year	II Year	III Year	IV Year
CAY (2018-19)	109				
CAY*m*1(2017-18)	73	72			
CAY*m*2 (2016-17)	57	57	52		
CAY*m*3 (2015-16)	67	65	65	63	
CAY*m*4 (LYG) (2014-15)	48	45	40	39	32
CAY*m*5 (LYG*m*1) (2013-14)	62	57	52	52	40
CAY*m*6 (LYG*m*2) (2012-13)	67	60	60	58	43

4.2.1. Success rate without backlogs in any year of study (30)

SI = (Number of students who graduated from the program without backlog)/ {(Number of students admitted in the first year of that batch) plus (lateral entry students admitted in second year of study)}

Average SI = Mean of success index (SI) for past three batches
Success rate without backlogs in any year of study = 30 × Average SI

Item	LYG	LYGm1	LYGm2
	2014-2015	2013-2014	2012-2013
Number of students admitted in the corresponding First Year + admitted in second year via lateral entry	48	62	67
Number of students who have graduated without backlogs in the stipulated period	6	11	13
Success index (SI)	0.125	0.1774	0.1940

Average SI = 0.1654
Success Rate = 30 × 0.1654 = 4.962
Note: If 100% students clear without any backlog then also total marks scored will be 50 as both 4.2.1 & 4.2.2 will be applicable simultaneously.

4.2.2 . Success rate in stipulated period (20)

SI= (Number of students who graduated from the program in the stipulated period of course duration)/ {(Number of students admitted in the first year of that batch) plus (lateral entry students admitted in second year of study)}

Average SI = mean of success index (SI) for past three batches
Success rate = 20 × Average SI

Item	LYG	LYGm1	LYGm2
	2014-2015	2013-2014	2012-2013
Number of students admitted in the corresponding First Year + admitted in second year via lateral entry	48	62	67
Number of students who have graduated without backlogs in the stipulated period	32	40	43
Success index (SI)	0.666	0.629	0.641

Average SI = 0.645
Success rate = 20 × 0.6047 = 12.094

4.3. Academic Performance in Final Year (10)

Academic Performance = Average API

Academic Performance Index(API) = ((Mean of Final Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Final Year/ 10)) x (successful students/number of students appeared in the examination)

Successful students are those who passed in the final year courses

Academic Performance	CAYm1 (2017-18)	CAYm2 (2016-17)	CAYm3 (2015-16)
Mean of CGPA or Mean Percentage of all successful students (X)	66.62	67.25	66.79
Total no. of successful students (Y)	32	40	43
Total no. of students appeared in the examination (Z)	39	58	58
API = x* (Y/Z)	5.46	4.57	4.95
Academic Performance =Average API =(AP1 + AP2+ AP3)/3	4.99		

4.4. Academic Performance in Third Year (10)

Academic Performance = Average API

Academic Performance Index= *((Mean of 3rd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Third Year/ 10)) x (successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the final year

Academic Performance	CAYm1 (2017-18)	CAYm2 (2016-17)	CAYm3 (2015-16)
Mean of CGPA or Mean Percentage of all successful students (X)	54.38	49.86	52.36
Total no. of successful students (Y)	63	39	52
Total no. of students appeared in the examination (Z)	63	40	52
API = x* (Y/Z)	5.26	4.86	4.96
Academic Performance =Average API =(AP1 + AP2+ AP3)/3	5.02		

4.5. Academic Performance in Second Year (10)

Academic Performance = Average API

Academic Performance Index=(API)= *((Mean of 2nd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Second Year/ 10)) x (successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the third year

Academic Performance	CAYm1 (2017-18)	CAYm2 (2016-17)	CAYm3 (2015-16)
Mean of CGPA or Mean Percentage of all successful students (X)	52.38	54.62	53.62
Total no. of successful students (Y)	52	63	40
Total no. of students appeared in the examination (Z)	57	65	45
API = x* (Y/Z)	5.23	5.29	5.23
Academic Performance =Average API =(AP1 + AP2+ AP3)/3	5.25		

4.6. Academic Performance in First Year (20)

Academic Performance=2.0*Average API

Academic Performance Index (API) *=((Mean 1st year grade point average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in first Year/ 10)) * (successful students/number of students appeared in the examination)*

Successful students are those who are permitted to proceed to the second year

Academic Performance	CAYm1 (2017-18)	CAYm2 (2016-17)	CAYm3 (2015-16)
Mean of CGPA or Mean Percentage of all successful students (X)	7.2	58.46	56.86
Total no. of successful students (Y)	72	57	63
Total no. of students appeared in the examination (Z)	73	57	67
API = x* (Y/Z)	0.70	5.62	5.59
Academic Performance =Average API =(AP1 + AP2+ AP3)/3	3.97		
Academic Performance=2.0 * Average API	7.94		

4.7. Placement and Higher Studies (40)

Assessment Points = 40 × (x + y)/N

Item	LYG 2014-2015	LYGm1 2013-2014	LYGm2 2012-2013
Total No. of Final Year Students (N)	39	58	58
Number of students placed in Industries/ hospital/ government sector through on/off campus recruitment or opted for entrepreneurship	11	14	16
No. of students admitted to higher studies with valid scores in various qualifying exams(y)	18	24	24
***x* + y**	29	38	40
Placement Index : (x + y)/N	0.74	0.65	0.68
T = Average of (x + y)/N	0.69		
Assessment = 40 X T	27.6		

4.7.1 Provide the placement data in the below mentioned format with the name of the program and the assessment year:

B Pharmacy – 2013-2014 Admitted Pass out 2016-2017

S.No	Name of the Student Placed	Enrollment no.	Name of the Employer	Appointment letter reference no. with date
1	T. Lakshmi Naga Neha	13U21R0016	Specialist Diagnostic Services PVT.LTD	SDSPL/HR/040/2017 23rd MAY 2017
2	K. Sai Priyanka	13U21R0009	Specialist Diagnostic Services PVT.LTD	SDSPL/HR/041/2017 23rd MAY 2017
3	Vellore Srinivasan Hirani	13U21R0018	Specialist Diagnostic Services PVT.LTD	SDSPL/HR/042/2017 23rd MAY 2017
4	G. Shalini Reddy	13U21R0011	Specialist Diagnostic Services PVT.LTD	SDSPL/HR/043/2017 23rd MAY 2017
5	S. Jyothirmai	13U21R0010	Specialist Diagnostic Services PVT.LTD	SDSPL/HR/044/2017 23rd MAY 2017
6	Mohd Abdul Aleem	13U21R0003	Specialist Diagnostic Services PVT.LTD	SDSPL/HR/045/2017 23rd MAY 2017
7	K. Gnana Swarupini	13U21R0014	Specialist Diagnostic Services PVT.LTD	SDSPL/HR/046/2017 23rd MAY 2017
8	Boora Rajkumar	13U21R0055	Specialist Diagnostic Services PVT.LTD	SDSPL/HR/047/2017 23rd MAY 2017
9	Yellri Spandana	13U21R0036	Evertogen Life Sciences Limited	ELS/HRD/889/2017 19th JUNE 2017
10	P. Ram Mohan Reddy	13U21R0026	Evertogen Life Sciences Limited	ELS/HRD/890/2017 19th JUNE 2017
11	Khanzode Suraj	13U21R0049	Evertogen Life Sciences Limited	ELS/HRD/891/2017 19th JUNE 2017

12	S. Manisha	13U21R0002	Evertogen Life Sciences Limited	ELS/HRD/892/2017 19th JUNE 2017
13	N. Sai Kiran	13U21R0050	Evertogen Life Sciences Limited	ELS/HRD/893/2017 19th JUNE 2017
14	V. Prem Prakash	13U21R0025	Evertogen Life Sciences Limited	ELS/HRD/894/2017 19th JUNE 2017

4.8. Professional Activities (20)

4.8.1. Professional societies / chapters and organizing pharmacy events (5)

(Provide the relevant details)

The Institute is a member for the following Professional Societies:

1. Indian Pharmaceutical Association
2. National Forum of Pharmacy Students
3. Indian Association of Colleges of Pharmacy
4. Association of Pharmaceutical Teachers of India

The Institute regularly organizes programs in association with professional societies to meet the following points:

a. Generating wide spread awareness and educates the public about the pharmacist, the pharmacy profession and its vital role in society.
b. Creating awareness amongst various authorities and do advocacy on various fronts so as to highlight the important role of the pharmacist in health care and well being of the people.
c. Interacting with other health care professionals and highlight the importance and role of the pharmacist in the health care system and move towards better coordination and working together, both private and public.
d. Enhancing the image of pharmacist as a medication expert and an integral part of the health care team, not just dispenser of medication.
e. Creating awareness among the students about harmony of religions, spiritual fulfillment, and all round development of human faculties, social equality and peace for all humanity.

Activities organized for 2018-2019

Sl. No.	Name of the Activity	Date	In Association with	No. of Participants	Remarks
1	Awareness Rally on "Health and Hygiene"	25-09-2018	National Forum of Pharmacy Students	215	Sheriguda Village
2	"Diabetic Checkup Camp"	04-10-2018	National Forum of Pharmacy Students	205	For Campus students
3	IPA-National Elocution Competition 2018 organized by VIPER, Hyderabad	09-11-2018	Indian Pharmaceutical Association	01 student participated	Ms. K. Srilekha stood 7th position

Activities organized for 2017-2018

Sl. No.	Name of the Activity	Date	In Association with	No. of Participants	Remarks
1	Blood Donation Camp	07-04-2017	Indian Red Cross Society, Mehaboobnagar and NFPS	145	Campus staff and students
2	Awareness Rally on "Rationale use of Medicines"	25-09-2017	Indian Pharmaceutical Association	165	Sheriguda Village
3	"Blood Checkup Camp"	15-10-2017	National Forum of Pharmacy Students	205	For Campus students

4.8.2. Publication of technical magazines, newsletters, etc. (5)

` **(List the publications mentioned along with the names of the editors, publishers, etc.)**

a) Student Publications;

For 2018

Sl. No.	Author/Student Name	Name of the Journal
1	D. Deepika V. Kavya Sri D. Karthik	Panacea Journal of Pharmacy and Pharmaceutical Sciences
2	S. Ashwini	European Journal of Biomedical and Pharmaceutical Sciences
3	R. Ragini K. Anoosha P. Anees Afshan Shadab Baig	International Journal of Research in Pharmacology & Pharmacotherapeutics

For 2017

Sl. No.	Author/Student Name	Name of the Journal
1	Avantika Sidda K. Chandralekha	International Journal of Allied Medical Sciences and Clinical Research
2	Sai Priyanka	International Journal of Pharmacy and Analytical Research
3	M. Krishna Yadav	International Journal of Pharmacy and Analytical Research
4	Neela Sai Kiran Sriram Jyothirmai	Asian Journal of Pharmaceutical Analysis and Medicinal Chemistry
5	D. Sowmya Sri K. Ritika Raj G. Navya	International Journal of Research in Pharmacology & Pharmacotherapeutics
6	Padala Srikanth D. Karthik Kumar G. Narender Mallapuraju Rahul Sama Tabassum	International Journal of Research in Pharmacology & Pharmacotherapeutics
7	Pradeep Kumar Ankishetti Abhinav Kulkarni Gande Naresh D. Nandini Baddam Mounika	International Journal of Allied Medical Sciences and Clinical Research

For 2016

Sl. No.	Author/Student Name	Name of the Journal
1	Madhavaram Anvesh	World Journal of Pharmacy and Pharmaceutical Sciences

b) College Newsletter – The College publishes a Newsletter which is posted on the college portal and circulated among the public. The Newsletter consists of

1. Latest news and events
2. Students and faculty achievements
3. Placement drives and its outcome
4. Articles from the student and faculty in the following areas.
   i. cutting edge Technologies and Applications.
   ii Philosophy
   iii. Literature and humor
   iv. Research & Development

The Newsletter is brought by a well constituted editorial board. Newsletter is published once in six months.

4.8.3. Participation in inter-institute events by students of the program of study (10)

(Provide a table indicating those publications, which received awards in the events/conferences organized by other institutes).

Inter-college participation – Achievements and prizes

2018

Student Name	H.T.No	Name of the Event	Date	Achievements/ Benefits
K. Srilekha	15U21R0010	Dravyaka 2K18	04 November 2018	Won 3rd Prize

2017

Student Name	H.T.No	Name of the Event	Date	Achievements/ Benefits
S. Mounika	16U21R0037	BIO-Adhyayan 2K17	23 January 2017	Won 2nd Prize

2016

Student Name	H.T.No	Name of the Event	Date	Achievements/ Benefits
Mammidala Sahithi	15U21R0017	Trend setting innovations in pharmaceutical sciences	18-19Th July 2016	Won 3rd Prize
Palabatla Akhila	15U21R0011	Drug innovations and Discoveries inquisitive technologies	28-29Th September 2016	Won 2nd prize
L. Akshay Kumar	15U21R0062	Innovations in pharmaceutical sciences	29-30Th July 2016	Won 2nd prize

Student Presentations/Participation in Conference/Events

SI. NO	Authour name	Title	Conference name	Conference venue	Year of conference
1	G. Sravani 15U21R0012	Nano Robotics in advances in pharmaceutics	Emerging trends and innovations in pharmaceutical sciences	Jawaharlal Nehru Technological University, Hyderabad.	12-13th October 2017
2	G. Akshitha 15U21R0040	Role of Wheat grass in cancer treatment	Emerging trends and innovations in pharmaceutical sciences	Jawaharlal Nehru Technological University, Hyderabad.	12-13th October 2017

3	G. Ganesh 15U21R0052	Generic Drugs	Emerging trends and innovations in pharmaceutical sciences	Jawaharlal Nehru Technological University, Hyderabad.	12-13th October 2017
4	Srikanth 15U21R0041	Participated	Emerging trends and innovations in pharmaceutical sciences	Jawaharlal Nehru Technological University, Hyderabad.	12-13th October 2017
5	Akhila 15U21R0011	Nano medicines	drug innovations and Discoveries inquisitive technologies	Palamuru University, Mahabubnager , Telangana	28-29th September 2016
6	Akshay 15U21R0062	Parkinsons disease	innovations in pharmaceutical sciences	Gurunanak institutions technical campus, Hyderabad.	29-30th July 2016
7	M.Sahithi 15U21R0017	Revolution in mental health	trend setting innovations in pharmaceutical sciences	Jawaharlal Nehru Technological University, Hyderabad.	18-19th July 2016
8	K. Gowthami Reddy 16U21R0002	Participated	workshop on Pharmacovigilance and drug safety	Lalitha college of pharmacy , Hyderabad	23-24th September, 2016
9	Asra Fathima 15U21R0003	Glaucoma	recent innovations in new drug discovery and challenges in health care system	St. Pauls College of pharmacy, Hyderabad.	17-18th February 2017
10	K. Anusha Redddy 16U21R0008	Participated	Recent advancements in nanoscale particles and colloids in pharmaceutical sciences	Lalitha college of pharmacy , Hyderabad	26-27th February 2016
11	K.Sandhya 16U21R0014	Chemotherapy B_{17} Cancer	Recent trends in industry and academic research in Pharmaceutical Sciences	Vijaya college of pharmacy, Hyderabad	1- 2nd April, 2016

12	Navika 14U21R0006	Participated	Recent developments in pharmaceutical sciences and technology	Science tech foundation, Hyderabad	27 December 2013
13	E. Raj Shekar 16U21R0052	Participated	Recent trends in Pharmaceutical Sciences	Malla reddy college of pharmacy	3 March 2012
14	M. Krupakar 16U21R0045	Participated	Gender Sensitization	Jawaharlal Nehru Technological University, Hyderabad.	12 February 2016
15	V.Archana 16U21R0010	Participated	68 Indian pharmaceutical congress	Andhra University, Visakhapatnam	16-18 December 2016
16	Khaja Majeeduddin 16U21R0016	Participated	Aagama a national level technical fest	Anurag group of institutions	18-19 March 2016
17	B. Sravanthi 16U21R0030	Participated	Recent advancements in nano scale particles and colliods in pharmaceutical instruments	Anurag group of institutions	26-27 February 2016
18	M.Manjunath 14U21R0014	Participated	Current status and future prospects in pharmacy education and research towards industry appliction	Jawaharlal Nehru Technological University, Hyderabad	29-30 November 2013
19	S.Mounika 16U21R0037	Participated	BIO-Adhyayan 2K17	Avanthi Group of institutions	23 January 2017

CRITERION 5	Faculty Information and Contributions	175

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		

5. Faculty Information and Contributions (175)

Table B.5

Note: *Please provide the details for the faculty of the department, cumulative information for all the shifts for all the academic years starting from current year in the above format in Annexure-II.*

*** List of faculty is enclosed as Annexure – II (for 2018-2019, 2017-2018, 2016-2017)**

5.1. STUDENT-FACULTY RATIO (SFR) (20)

(*To be calculated at Department Level;No. of Faculty as per the sanctioned intake)*)

Student Faculty Ratio (SFR) = S/F

B.Pharmacy:

Year	CAY (2018-19)	CAYm1 (2017-18)	CAYm2 (2016-17)
u1	109	73	57
u2	72	55	67
u3	52	65	40
u4	63	39	62
Total No. of Students in the Department (S)	**S1=296**	**S2=232**	**S3=224**
No. of Faculty in the Department (F)	**F1=32**	**F2=32**	**F3=32**
Student Faculty Ratio (SFR)	**SFR1=S1/F1 296/32=9.25**	**SFR2=S2/F2 232/32=7.25**	**SFR3=S3/F3 224/32=7.00**
Average SFR (1:7.83)	**SFR=(SFR1+SFR2+SFR3)/3 = (9.25+7.25+7.00)/3 = 7.83**		

Table B.5.1

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY (2018-2019)	**32**	**-**
CAYm1 (2017-2018)	**32**	**-**
CAYm2 (2016-2017)	**32**	**-**

Table 5.1.1

5.2. FACULTY CADRE PROPORTION (20)

The Reference Faculty Cadre Proportion is 1(F1): 2(F2): 6(F3)

F1: Number of professors required = 1/9 x Number of faculty required to comply with 15:1 Student-Faculty Ratio.

F2: Number of Associate professors required = 2/9 x Number of faculty required to comply with 15:1 Student ratio.

F3: Number of Assistant professors required = 6/9 x Number of faculty required to comply with 15:1Student ratio.

YEAR	PROFESSORS		ASSOCIATE PROFESSOR		ASSISTANT PROFESSOR	
	REQUIRED F1	AVAILABLE	REQUIRED F2	AVAILABLE	REQUIRED F3	AVAILABLE
CAY (2018-2019)	3.5	3	7.11	3	21.33	27
CAY*m*1 (2017-2018)	3.5	6	7.11	3	21.33	27
CAY*m*2 (2016-2017)	3.5	6	7.11	3	21.33	24
Average Numbers	RF1=3.5	AF1=4	RF2=7.11	AF2=7	RF3=21.33	AF3=21

Cadre Ratio Marks= [(AF1/RF1) + (AF2/RF2) × 0.6) + (AF3/RF3) × 0.4)] ×10

= [(4/3.5) + (7/7.11) × 0.6) + (21/21.33)×0.4] ×10

= 25.15

5.3 FACULTY QUALIFICATION (20)

FQ=2 x [{(10X + 4Y)/F}] Where X is no. of regular faculty with Ph.D., Y is no. of Regular faculty with M.PHARM. F is no. of regular faculty required to comply 1:15 Student ratio.

	X	Y	F	FQ =2x [(10X+4Y)/F]
CAY (2018-2019)	6	26	32	10.25
CAY*m*1 (2017-2018)	6	26	32	10.25
CAY*m*2 (2016-2017)	7	25	32	10.62
Average Assessment: 1:10.375	6.33	25.67	32	10.375

5.4. FACULTY RETENTION (20)

Description	2016-2017
No of Faculty Retained	32
Total No Of Faculty	32
% of Faculty Retained	100 %

5.5 Innovations by the Faculty in teaching and learning shall be summarized as per the following description.(15)

Evaluation and inclusive class rooms that lead to effective, efficient and engaging instruction. Any contributions to teaching and learning should satisfy the following criteria:

1. The need for having a language lab is being widely recognised by the English language academia. Training in English Language lab encourage **communication** with activities and exercises essential to oral communication and the understanding of the language.
2. Conducting of tutorial classes made more interactive and improves the learning process.
3. LCD - based classroom teaching allows more scope and time for interaction with students, rather than developing the concepts on the blackboard
4. Assignments on subject topics motivate the students self-learning process.
5. Laboratory manuals prepared by faculty members facilitates the learning by students
6. Usage of Role play, Model Demo, Charts etc. during teaching learning process.

5.6 Faculty as participants in Faculty development/training activities/STTPs (15)

- A Faculty scores maximum five points for participation

- Participation>5 days Faculty development program: 5 points
- Participation in 2 to 5 days Faculty development program: 3 Points

Table 5.6: Faculty as participants in Faculty development/Training activities (15)

Name of the Faculty	Max. 5 per Faculty		
	CAY (2018-2019)	CAYm1 (2017-2018)	CAYm2 (2016-2017)
Mrs. KVLD Spandan	5	-	-
Ms. B. Mamatha	5	-	-
Ms. K Janaki	-	5	-
Dr. Shivakumar Shete	-	5	-
Ms. Shital Dange	-	5	-
Dr. S. A. Sreenivas	-	-	5
Dr. Pratap Kumar Patra	-	-	5
Ms. Akula Niharika	-	-	5
Sum	10	15	15
RF=Number of Faculty required to comply with 15:1 student –Faculty ratio as per 5.1	9.25	7.25	7.0
Assessment=3 x Sum/(0.5 RF)	6.49	8.27	8.58
Avearare assessment over three years (Marks limited to 15) =	7.78		

5.7 Research and Development (40)
5.7.1 Academic Research (10)
REASEARCH PAPER PUBLICATIONS OF FACULTIES

Publication details CAY 2018-19

Sr. No.	Main Author And Others	Title Of The Research Article	Journal Name; ISSN Number	Volume And Page Numbers
1	Jitendra Debata , Pratap Kumar Patra, P. Suresh	RP-HPLC Method Development and Validation of Regorafenib in pure Form and Pharmaceutical Dosage Form	Asian J. Research Chem. ISSN: print-0974-4169	11(4), July–August , 2018
2	Jitendra Debata*, Pratap Kumar Patra, P. Suresh	In Vitro Antioxidant Potency Studies Of Hydro Alcoholic Leaf Extract Of Cassia Uniflora	Indo American journal of pharmaceutical research issn 2349-7750	Vol 8 Issue 01, 2018.

3	A. Niharika*, D. K. Sarangi, D. Ghose, S. K. Mekap, R. Rana.	Formulation And Evaluation Of Metoprolol Succinate And Hydrochlorthiazide Bilayer Tablets By Wet Granulation Method	RJLBPCS E-ISSN : 2454-6348	2018
4	R Ragini*, Shivkumar Shete, K Anoosha, P Anees , Afshan Shadab baig	International Journal of Research in Pharmacology & Pharmacotherapeutics The study of prescription pattern in respiratory tract infection diseases in a tertiary care hospital	Int. J. of Res. in Pharmacology & Pharmacotherapeutics ISSN: 2278-2656	Vol-7(1), 2018 12-19
5	Ms. Shital Shrirang Dange,	A VALIDATED METHOD FOR THE QUANTITATION OF PREGABALIN AND METHYLCOBALAMIN USING DIFFUSE REFLECTANCE INFRARED FOURIER TRANSFORM SPECTROSCOPY IN BULK AND COMBINED TABLET DOSAGE FORM	Indian drugs ISSN: 0019-462X	Accepted for publication
6	Shital Dange*, K. Janaki, D. Deepika, V. Kavya Sri, D. Karthik	IN VITRO ANTIOXIDANT ACTIVITY ON ETHANOLIC EXTRACT OF BLACK GRAPES (VITIS VINIFERA) AND PRELIMINARY PHYTOCHEMICAL SCREENING	Panacea Journal of Pharmacy and Pharmaceutical Sciences ISSN: 2349-7025;	7(3);35-46, 2018

Publication details CAY m1 2017-18

Sl. No.	Main Author And Others	Title Of The Research Article	Journal Name; Issn Number	Volume And Page Numbers
1	Rupali Gawande, Parag Kale, Shital Dange, Shivakumar Shete, Dr.A.G.Namdeo, Dr.S.A.Sreenivas	Comparison Of Analytical Parameter of Genetically Transformed Hairy Roots Of *Withania somnifera* With Normal Roots	International Journal. Of Pharmacy And Analytical Research ISSN 2320-2831 :2320-2831issn:2320-2	Vol-6(2) 2017 , 289-295
2	E. Sravanthi Reddy, Himansu Bhusan Samal, S. A. Sreenivas	Design And Characterization Of Ofloxacin And Dexamethasone Ocular Inserts Using Combination Of Hydrophobic And Hydrophilic Polymers	Asian Journal Of Pharmaceutics P-ISSN: 0973-8398	Jan-Mar 2017 (Suppl) • 11 (1) | S62
3	S. K. Godasu And S. A. Sreenivas	A New Validated Rp-Hplc Method For The Determination Of Metformin Hcl And Empagliflozin In Its Bulk And Pharmaceutical Dosage Forms	International Journal Of Pharmaceutical Sciences And Research P-ISSN: 2320-5148	Vol. 8(5): 2223-2232.

4	PrernaShukla Clinician, Roopaadinarayan, Shrinkhala Singh, Sujhata Ramamurthy, S.A. Sreenivas	Herbal Effect Of Green Tea In Treatment Of Chronic Periodontitis : A Clinical & Microbiological Study	University Journal Of Dental Sciences, An Official Publication Of Aligarh Muslim University, Aligarh. India	No. 3, Vol. 1 27-34
5	P Srikanth, D. Karthik Kumar, G. NarenderMallapuraju Rahul, SamaTabassuam, Dr. P Sneha	Prescription pattern of diabetes mellitus with comorbid condition	International Journal of Research in Pharmacology and Pharmacotherapeutics ISSN 2278:2648	Vol 6 Issue 3 julysep
6	D. Sowmyasri, K. Ritika raj, G. Navya, K. Saisudha, Dr.Sneha	Pharmacist's interventions in the management of patients with chronic kidney disease	International Journal of Research in Pharmacology and Pharmacotherapeutics ISSN 2278:2648	Vol-6(3)2017[267-271]
7	Pratap Patra, Shivkumar Shete, Shital Dange	Phytochemical Investigation and Hepatoprotective Effect of *Scopariadulcis* against carbon tetrachloride induced liver damage in rats	International Journal of Pharmaceutical sciences and Research E ISSN 0975-8232 P ISSN 2320-5148	Accepted
8	Avanthika Sidda*, K.Chandralekha, Dr. Shivkumar Kashinath Shete	Adverse drug reaction study in tertiary care hospital	IJAMSCR ISSN:2347-6567	Volume 5 , Issue 2 | Apr - Jun – 2017 349-361
9	Pradeep Kumar Ankishetti*, Abhinav Kulkarni, Gande Naresh, D. Nandini, Baddam Mounika, Srikanth Sandanala, Shivkumar Shete	Prescription monitoring & the pattern of prescribing drugs in pediatric patients done in a periodic study |	IJAMSCR ISSN:2347-6567	Volume 5 , Issue 2 | Apr - Jun – 2017, 670-677
10	Jasmin Sajini , V. Sivajothi, A. Geethalakshmi*, Anusha N Raj	Formulation and Evaluation of Herbal Eye Gel from *Heliotropium indium* linn leaf extract for Conjunctivitis	Journal of Innovation in Pharmaceutical Sciences	1(2): 15-19 (2017)
11	Asfia Fatima1*, Falak Naaz1, Amatul Ali Sameera1, Najiya Fatima1, Mohd Mohiuddin Shareef1, Musa Khan2, Javed Akhtar Ansari1.	Evaluation of the clinical use of nebulization therapy and antibiotics in inpatients with chronic obstructive pulmonary disease: A randomized prospective study at a tertiary care teaching hospital	Int J Adv Pharmacy Med Bioallied Sci.	Vol. 2017 (2017),1-7.

Publication details CAYm2 2016-17

Sr.No.	Main author and others	Title of the research article	Journal name; ISSN number	Volume and page numbers
1.	Dr.Shivkumar Kashinath Shete and Mrs Shital Dange	Adverse Drug Reactions (Adr's) Monitoring In Dermatology Patients Centre Of Tertiary Care Global Aware Hospital –A CASE STUDY.	WJPPS ISSN 2278 – 4357	Volume 5, Issue 2, 1295-1303
2.	Sameena Alam, Madhavi K Reddy, MV Reddy,	Antiulcer And Antioxidant *Potential Of Zizyphus jujuba Mill* Root Extract In Aspirin And *Ethanol Induced Gastric Ulcers*	International Journal of Phytomedicine 0975-0185	8 (2) 287-293
3.	Lohithasu Duppala, Shabari Girinath K., D. Midhun Kumar, Divvela Hema Naga Durga	Applicability Of Natural Polymers In Transdermal Patches: Overview	Wjpps , ISSN 2278 – 4357	Volume 5, Issue 12, 513-527.
4.	P. Shruti1, K.Venkata Ramana Reddy,P.Srikanth Chowdary, Eslavath Ravindar Naik	Factors Affecting Microspheres Formation	Am. J. PharmTech Res. ISSN: 2249-3387	5(2)
5.	Lohithasu Duppala, Shabari Girinath K.and D. Midhun Kumar	Fast Dissolving Dosage Forms: An Overview	WJPPS ISSN 2278 – 4357	Vol 5, Issue 10,
6.	L. Rajesh Patro, C. Ramesh, D. Ravi, G. Nithin Kumar and K. Raghuvaran Reddy	Formulation And Evaluation Fast Dsissolving Tablets Of Nartriptan Using Super Disintegrants	WJPPS ISSN 2278 – 4357	Volume 5, Issue 02, 798-807
7.	B.Venkateswara Reddy and K.V.RamanaReddy	Formulation And Evaluation Of BuccalMucoadhesive Tablets Of Glipizide	WJPPS ISSN 2278 – 4357	Volume 4, Issue 07, 1804-1821
8.	Dr. Mohammed Abuzar Ghufran, Dr. T. S. Sunil Kumar, Dr.BandariKiran, Dr. D. Shravan Kumar	A Prospective Observational Study On Monitoring, Evaluating And Reporting Of ADRs In A Tertiary Care Hospital	WJPPS ISSN 2278 – 4357	Volume 5, Issue 2, 736-752

9.	Vijayanand P., J. S. Patil and M. Venkata Reddy	Formulation characterization and *in-vitro/in-vivo* evaluation of orodispersible tablets of Nebivolol HCl	Der Pharmacia Sinica, ISSN: 0976-8688	6(4): 103-114
10.	PujariVijayanand, JagadevappaPatil, MandaVenkata Reddy	Formulation, characterization and *in vivo* evaluation of novel edible dosage form containing nebivololHCl	Brazilian Journal of Pharmaceutical Sciences On-line version ISSN 2175-9790	vol. 52, n. 1,
11.	Dr.BandariKiran, Dr.Md.AbuzarGhufran, Dr. T. S. Sunil Kumar, Dr.D.Shravan Kumar	The Drug Utilization Of Cephalosporins In A Tertiary Care Hospital	WJPPS ISSN 2278 – 4357	Volume 5, Issue 01, 1201-1216
12.	B Arunprasath, S A Sreenivas, K V Subrahmanyam , Ashwini , Harika	Formulation and Evaluation of Didanosine Enteric Coated Sustained Release Tablet	International Journal of Pharma Research and Health Sciences e-ISSN: 2348-6465	Volume-3-(4)-2015,Page-817-823

5.7.2. Sponsored Research (10)

Funded research:

Applied:

Sl. No.	Faculty Name	Project Title	Funding Agency	Amount and Duration
1	Dr. S. A. Sreenivas	Faculty Development Program	AICTE	660750, 1 Year
2	Dr. Pratap Kumar Patra	Research Promotion Scheme	AICTE	2176470.59, 3 Years
3	Dr. V. Sivajothi	WOS-A	DST	300000, 2 Years

5.7.3. Consultancy (from Industry) (10)

2017-2018 to 2018-2019

Sl. No.	Faculty Name	Project Title	Funding Agency	Amount and Duration
1	Dr. S. A. Sreenivas	Thiolated Chitosans – Novel polymer for mucoadhesive drug delivery	Chandra Labs, Hyderabad	860750, 2 Year

5.7.4. Honorary Consultancy from Central/State/Local Government Organizations (5)
5.7.5. Development activities (5)
PRODUCT DEVELOPMENT:

1. Merhod development and validation of piper quinine tertraphospate and dihydrophospate and dihydroatromisinenien by RP-HPLC method in pharmaceutical solod dosage form.
2. Formulation and evaluation of different types of microspheres loaded with miconazole.
3. Formulation and evaluation of antiaging cream of *Azadirachta indica* leaves.
4. Preparation and evalution of herbal adhesive bandage
5. Evalution of antihyperlipidemic activity of *Cayenne pepper* on Dexamethasone induced hyperlipidemia in rats

INSTRUCTION MATERIALS:

1) Laboratory manual of medicinal chemistry (in house)
2) Laboratory manual of pharmacology (in house)
3) Laboratory manual of organic chemistry (in house)
4) Laboratory manual of pharmaceutics. (in house)

WORKING MODELS/ CHARTS:

1) In human anatomy and physiology various parts human body models are used to explain the anatomy
2) Various atomic models are prepared on the time of class hours to explain the atomic structures and isomers.
3) Flow charts are used to explain the drug manufacturing steps in pharmaceutics

5.8 Faculty Performance Appraisal and Development System (FPADS) (20)

Faculty of Higher Educational Institutions today has to perform a variety of tasks pertaining to diverse roles. In addition to instructions, faculty needs to innovate and do research for their self-renewal, keep abreast with changes in technology, develop expertise for the effective implementation of curricula. They are also expected to provide services to the hospitals/ industry and community in large for understanding and contributing to the solutions of real life problems in terms of students. Another role is related to the shouldering of administrative responsibilities to co-operate with other faculty, heads-of-departments and the head of Institute. An effective performance appraisal system for faculty is vital for optimizing the contribution of an individual faculty to institutional performance. The assessment is based on

1) A well managed system instituted for all the assessment years
2) Its implementation and effectiveness

Incentives: Teaching staff are sponsored with incentives and on duties for attending International and National conferences such as IPC, APTI, National conventions, national and international workshops. The staff regularly utilizes the opportunities available in Hyderabad. Ladies staff is allowed to have one time Maternity leave (6 months). Staff pursing Ph.D. is allowed to avail on-duty leave for carrying out research works at outside the college, such as to the Universities, CCMB, IICT, OU, JNTU-H and local pharmaceutical industries. At times, chemicals and other faciltities that is required for the research work is also extended.

Professional advancement: Teaching staffs supported with chemicals, infrastructure, etc., to pursue their Ph.D work. Teaching staff also encoruaged to give entrance exams for higher studies and research work.

- Ms. Bangaru Mamtha recently qualified Osmania University, Hyderabad PhD entrance exam (2017) as well as GPAT 2017.
- Mrs. K. VLD Spandana was encourased to do PhD at Osmania University, Hyderbad

Mangament awards monitary appreciation for the faculty who achieve 100% results in the end exam results and also for the faculty who get good feedback among the students.
The faculty appraisal committee is headed by principal. The appraisal form is reviewed by the hierarchy and the increments are given. The increments and promotions also add some encouragement among the working faculty.

5.9. Visiting/Adjunct Faculty (5)

Adjunct faculty also includes experts from Industry, Research Organizations/Universities and other Government Organizations. Provide details of participation and contributions in teaching and learning and /or research by visiting/adjunct faculty for all the assessment years. Provision of visiting/adjunct faculty (1)• Minimum 50 hours interaction in a year will result in 1 mark for that year; 1 marks• x 4 years = 4 marks. Visiting faculty from industry – 03 Visiting faculty from university – 01 Visiting faculty from government (Regulatory Affairs) – 01

Sr. No.	Name of the adjunct faculty	Parent organization	Subject	Duration and number of classes	Target audience
1	Dr. A Padma Laxmi	SDES	Gender Sensitization	(4 hrs/week) 60 hrs per semester	B Pharm II/II
2	Dr. Kandaswami	SDES	Human Values and Professional Ethics	(4 hrs/week) 60 hrs per semester	B Pharm IV/II

CRITERION 6	Facilities	120

6. Facilities (120)

6.1. Availability of adequate, well-equipped classrooms to meet the curriculum requirements (20)

(Facilities for conducting theory classes)

The facilities for conducting theory classes are adequate. For the B.Pharmacy course, for each year, classrooms are separately identified; total 06 lecture halls are available exclusively for B. Pharmacy. Each classroom can accommodate a minimum of 60 students. The classrooms are equipped with chairs and desks. Adequate numbers of tube lights, fans, are installed along with one blackboard. As strength of intake of students is 100, two sections (divisions) are operated. Classrooms are provided with good ventilation and un-interrupted power supply. Exams are conducted in the classrooms. Mentoring of the students is also done in the classrooms.

In addition to classrooms, two tutorial halls are also provided. This tutorial room is used for handling separately for mathematics and biology class work. In addition, discussions with students who are lagging behind the subject are also handled. The seminar hall is provided for conducting guest lectures and for seminar presentations. The conference hall is also available which can accommodate all the B. Pharmacy students at a time. The details of the classrooms along with the facilities available are provided in the table below.

Class/ Tutorial	Room No.	Capacity (per room)	Dimensions with area(SqM)	Rooms /labs equipped with
B. Pharmacy				
Class Room I	F1-109	60	75	Desks, chairs, tube lights, black board.
Class Room II	F2-205	60	75	Desks, chairs, tube lights, black board.
Class Room III	F2-206	60	75	Desks, chairs, tube lights, black board.
Class Room IV	F3-305	60	75	Desks, chairs, tube lights, black board.
Class Room V	F3-306	60	75	Desks, chairs, tube lights, black board.
Class Room VI	F4-402	60	75	Desks, chairs, tube lights, black board.
Class Room VII	F4-403	60	75	Desks, chairs, tube lights, black board.
Class Room VIII	F4-404	60	75	Desks, chairs, tube lights, black board.
Class Room IX	F4-405	60	75	Desks, chairs, tube lights, black board.
Class Room X	F4-406	60	75	Desks, chairs, tube lights, black board.
Class Room XI	F4-407	60	75	Desks, chairs, tube lights, black board.

Tutorial Room I	F1-104	30	35	Desks, chairs, tube lights, black board.
Tutorial Room II	F2-208	30	35	Desks, chairs, tube lights, black board.
Tutorial Room III	F4-411A	30	35	Desks, chairs, tube lights, black board.
Tutorial Room IV	F4-409	30	35	Desks, chairs, tube lights, black board.
Tutorial Room V	F4-410	30	35	Desks, chairs, tube lights, black board.
Tutorial Room VI	F4-411	30	35	Desks, chairs, tube lights, black board.
Seminar Hall	F4-401	200	132	Desks, chairs, tube lights, black board, LCD Screen, podium.
Conference Hall	GF-01	600	528	Desks, chairs, tube lights, black board, LCD Screen, podium.

6.2 Faculty rooms (10)

(Conductive sitting place)

The faculty rooms are available in adequate number. One faculty is accommodated in each lab and other faculties are in the staff room. The staff rooms are provided with necessary infrastructure. Counseling of the students is done in faculty rooms and personal doubts are cleared. The details of the faculty rooms along with the facilities are given in the table below.

Usage	Faculty rooms	Shared/ Exclusive	Number for seating place in each room
B. Pharmacy			
Staff room-09	F3-316	Exclusive	09
Staff room-09	F4-412	Exclusive	09

Faculty members are accomadated in each lab two in number.

6.3. Laboratories including preparation room (wherever applicable), instrument /machine room and computer labs along with equipment and relevant facilities (60)

(Scientific Experiments conducting/Computing facilities; availability, adequacy and effectiveness)

The facilities such as gas, water, drainage, fire extinguishers, first aid boxes, fuming cupboards, exhaust fans, etc., are available in laboratories. The B. Pharmacy students are allowed to use UV spectrophotometer, HPLC etc. The students are allowed to work even after the regular college timings. The laboratory staff works for the students. In all laboratories, excellent electrical and plumbing facilities are provided adequately. Laboratories have un-interrupted power supply. Some of the B. Pharmacy students enroll in summer project works. The number of experiments conducted for each subject in the laboratory is followed as per the JNTU syllabus. The list of laboratories and the contents there in are tabulated below.

Lab Description	Room no.	Batch size	Dimensions with area (SqM)	Availability of manuals	Quality of instruments	Safety measures
Machine Room	G-006	25	75	Available	Excellent	First Aid
Pharmaceutical Organic Chemistry Lab I	F1-102	25	78	Available	Excellent	First Aid
Research Lab I	F1-103	25	80	Available	Excellent	First Aid
Research Lab II	F1-105	25	80	Available	Excellent	First Aid
Computer Lab I	F1-106	25	75	Available	Excellent	First Aid
Pharmaceutical Organic Chemistry Lab II	F1-107	25	75	Available	Excellent	First Aid
Pharmaceutical Analysis Lab	F1-108	25	75	Available	Excellent	First Aid
Pharmacognosy Lab	F2-201	25	75	Available	Excellent	First Aid
Pharmaceutics Lab I	F2-202	25	75	Available	Excellent	First Aid
Pharmaceutics Lab II	F2-203	25	75	Available	Excellent	First Aid
Anatomy Physiology Lab	F2-204	25	75	Available	Excellent	First Aid
Computer Lab II	F2-207	25	75	Available	Excellent	First Aid
Biotechnology Lab	F3-301	25	75	Available	Excellent	First Aid
Pharmaceutics Lab III	F3-302	25	66	Available	Excellent	First Aid
Pharmacy practice Lab	F3-303	25	66	Available	Excellent	First Aid
Pharmacology Lab	F3-304	25	75	Available	Excellent	First Aid
Animal House	F3-307 to 311	25	75	Available	Excellent	First Aid

Note : Give a separate table for instrument room and machine room listing all the instruments/ equipment's present with their make and model, existence of SOP's and Log Books for individual equipment.

The list of equipment available in each laboratory specialization-wise is given below

B. Pharmacy - Pharmaceutics

S.No	Name of the equipment	Code	SOP
1.	Friability apparatus	SDIP/FTA/103/001	Available
2.	Disintegration apparatus	SDIP/103/tablet disintegration apparatus/ 001	Available
3.	Microscopes	SDIP/103/microscope/001 (10)	Available
4.	Desiccator	SDIP/103/Desiccator/001 (01)	Available
5.	Vaccum pump	SDIP/107/5/VP (01)	Available
6.	Humidity Control chamber	SDIP/ humidity control chamber/103/001	Available
7.	Vaccum oven	SDIP/103/vaccum oven/001	Available
8.	Homogenizer	SDIP/103/homogenizer/001	Available
9.	Mechanical stirrer	SDIP/103/mechanical stirrer/001	Available
10.	Multi heating mantle	SDIP/103/multi H M/001	Available
11.	Drying oven	SDIP/hot air oven/103/001	Available
12.	Moisture balance	SDIP/103/moisture balance/001 (01)	Available
13.	Magnetic stirrer	SDIP/103/magnetic stirrer/001 (02)	Available
14.	Dissolution apparatus	SDIP/103/dissolution/001	Available
15.	Anderson pipettes	SDIP/103anderson pipette/001	Available
16.	Distillation set	SDIP/103/distillation apparatus/001	Available
17.	Rotary evaporator	SDIP/103/rotary evaporator/001	Available
18.	Analytical balance	SDIP/2006/410/VST/analytical balance (02)	Available
19.	Hot air oven	SDIP/105/ hot air oven/001 (03)	Available
20.	Electronic balance	SDIP/105/EB/001	Available
21.	HPLC	SDIP/105/85/HPLC/001	Available
22.	Dual λ absorbance detector	SDIP/105/86/HPLC/002	Available
23.	UV spectrophotometer	SDIP/RS/105/003	Available
24.	Auto Cal Fischer tetrameter	SDIP/KF/105/001	Available
25.	TLC chamber	SDIP/105/TLC/003	Available
26.	TLC plate chamber	SDIP/105/TLP/04	Available
27.	Microwave oven	SDIP/MWO/105/001	Available
28.	UV cabinet	SDIP/105/UVC/05	Available
29.	Digital melting point	SDIP/05/digital melting point apparatus/001	Available
30.	Water bath	SDIP/105/WB/08 (02)	Available
31.	Digital PH meter	SDIP/105/DPM/07	Available
32.	Potentiometer	SDIP/105/digital potentiometer/001	Available
33.	Bottle washing machine	SDIP/BWM/202/001	Available
34.	Weighing balance	SDIP/DP/203 (01)	Available
35.	Single punching machine	SDIP/SPM/202/001	Available
36.	Centrifuge	SDIP/CP/202	Available
37.	Double cone mixture	SDIP/DC/202/002	Available
38.	Speed regulator	SDIP/202/H/1	Available
39.	Capsule filling machine	SDIP/CFM/202/001	Available
40.	Tray dryer	SDIP/TD/202/001	Available
41.	Digital ultra-sonic cleaner	SDIP/DUS/203/01	Available
42.	Sieve shaker	SDIP/SS/302/001	Available
43.	Black and white background	SDIP/203/CTA/001	Available
44.	Bulk density apparatus	SDIP/BD/203/44	Available
45.	Ointment filling machine	SDIP/OFM/203/008	Available
46.	Ball mill	SDIP/BM/203	Available
47.	Percolator	SDIP/302/per	Available
48.	Abbes refractor meter	SDIP/RFM/203/005	Available

49.	Polari meter	SDIP/PP/203	Available
50.	Ampoule washing machine	SDIP/203/AWM/006	Available
51.	Digital tablet disintegration test machine	SDIP/DT/302/001	Available
52.	Digital photometer	SDIP/105/digital colorimeter/001	Available
53.	Digital photo colorimeter	SDIP/107/colorimeter/01	Available
54.	All-purpose equipment	SDIP/APQ/302/001	Available
55.	Ampoule sealing and filling machine	SDIP/AFM/203/76	Available
56.	Dissolution apparatus	SDIP/105/dissolution apparatus/002	Available
57.	Heating mantle	SDIP/203/HM/01	Available
58.	Autoclave	SDIP/AC/203/001	Available

B. Pharmacy – Pharmaceutical Biotechnology

S.No	Name of the equipment	Code	SOP
1.	Digital colony counter	SDIP/301/CC/001	Available
2.	Antibiotic zone reader	SDIP/301/ZR/001,002	Available
3.	Trans illuminator	SDIP/ Trans illuminator /301/001	Available
4.	Centrifuge with head	SDIP/centrifuge/301/002	Available
5.	Orbital water bath shaker	SDIP/orbital shaker/301/001	Available
6.	Hot air oven	SDIP/hot air oven/ 301/001	Available
7.	BOD incubator	SDIP/301/incubator/001	Available
8.	Autoclave	SDIP/autoclave/301/001	Available
9.	Cooling centrifuge	SDIP/cooling centrifuge/301/001	Available
10.	Analytical balance	SDIP/301/AB/001 (02)	Available
11.	Heating mantle	SDIP/301/HM/001 (01)	Available
12.	Laminar air flow	SDIP/301/21/laminar air flow	Available
13.	Microscope	SDIP/301/microscope/001-11	Available
14.	Centrifuge	SDIP/301/centrifuge /003	Available
15.	Desiccator	SDIP/301/DSP/001	Available
16.	Microscope (light)	SDIP/301/microscope/001	Available
17.	Borers	SDIP/301/borers/001-5	Available
18.	Filtration assembly	SDIP/UO/202/003	Available
19.	Micro pipette	SDIP/301/micro pipette/001-02	Available
20.	Electronic balance	SDIP/301/EB/001	Available

B. Pharmacy – Machine room

S.No	Name of the equipment	Code	SOP
1.	10 station punching machine	SDIP/TPM/006/001	Available
2.	Tablet coating pan	SDIP/TCP/006/001	Available
3.	BOD incubator	SDIP/BOD/006/001	Available
4.	Dryer (small)	SDIP/dryer (small)/006/001	Available
5.	Dryer (big)	SDIP/dryer (big)/006/001	Available
6.	Centrifuge	SDIP/centrifuge/006/001	Available

B. Pharmacy – Pharmaceutical Chemistry and Pharmaceutical Analysis

S.No	Name of the equipment	Code	SOP
1.	Hot plate	SDIP/hot plate/ 102/001 (03)	Available
2.	Digital conductivity meter	SDIP/102/digital conductivity meter/001 (02)	Available
3.	Heating mantle	SDIP/HM/102/001 (08)	Available

4.	Analytical balance	SDIP/AB/10/001 (08)	Available
5.	Hot air oven	SDIP/hot air oven/102/ 001	Available
6.	Water bath	SDIP/water bath/102/001 (02)	Available
7.	Electric water bath	SDIP/WB/102/001	Available
8.	Vaccum pump	SDIP/402/001	Available
9.	Digital potentiometer	SDIP/102/DP/001 (01)	Available
10.	Fume hood	SDIP/FCP/102/001	Available
11.	Electric balance	SDIP/107/2/EB	Available
12.	Magnetic stirrer	SDIP/107/23/MS/01 (01)	Available
13.	Digital melting point apparatus	SDIP/107/MP/005	Available
14.	Muffle furnace	SDIP/muffle furnace/107/001	Available
15.	Oven	SDIP/ 107/oven/ 003	Available
16.	Six hole heating mantle	SDIP/107/HM six hole/002	Available
17.	Digital PH meter	SDIP/107/PH meter/001	Available
18.	Flame photometer	SDIP/FP/108/002	Available
19.	Digital nephelometer	SDIP/NT/108/004	Available
20.	UV- VS spectrophotometer	SDIP/UV visible/108/001	Available
21.	Vaccum machine	SDIP/VT/108/001	Available
22.	Balance	SDIP/balance/108/001	Available
23.	Suction pump	SDIP/SP/108/001	Available

B. Pharmacy – Pharmacognosy and Phytochemistry

S.No	Name of the equipment	Code	SOP
1.	Projection microscope	SDIP/PCog/projection microscope/201/001	Available
2.	Electrical water bath	SDIP/201/1/WB	Available
3.	Autoclave	.01	Available
4.	Digital colony counter	SDIP/Digital colony counter/201/06	Available
5.	Analytical balance	SDIP/201/AB2/05/SDIP/201/AB2/06	Available
6.	Heating mantle (small)	SDIP/201/heating mantle/06/03	Available
7.	Heating mantle (six hole)	SDIP/201/001 (6 hole)	Available
8.	Electronic balance	SDIP/electronic balance/201/001	Available
9.	BOD incubator	SDIP/BOD incubator/ 201/001	Available
10.	Tissue culture station	SDIP/UV cabinet/201/001	Available
11.	Camera lucida	SDIP/201/camera lucida/004	Available
12.	Microscopes (big)	SDIP/microscope/201/001-027	Available
13.	Vaccum pump	SDIP/ vaccum pump/201/001	Available
14.	Stop clock	SDIP/201/stop clock/003	Available
15.	Desiccator	SDIP/desiccator/201/001	Available
16.	Microscopes (small)	SDIP/201/microscope/01-10	Available
17.	Homogenizer	SDIP/HM/201/001	Available
18.	Grinder	SDIP/201/mixer	Available

B. Pharmacy – Pharmacology

B. Pharmacy components are simulation experiments and are conducted in the computer laboratory (systems).Simulation software experiments are demonstrated. It is aimed at helping the students to understand and remember the principles of bioassays.

S.No	Name of the equipment	Code	SOP
1.	Spirometer	SDIP/204/spirometer/001	Available
2.	Water bath	SDIP/204/WB/002	Available
3.	Heating mantle	SDIP/204/HM/003/01-02	Available
4.	Electronic balance	SDIP/204/EB/004	Available
5.	Microscope	SDIP/204/microscope/001-017	Available
6.	Stethoscope	SDIP/204/stethoscope/006/01-10	Available
7.	Haemocytometer	SDIP/204/haemocytometer/07/1-33	Available
8.	Haemometer	SDIP/204/haemometer/008/1-07	Available
9.	Stop clock	SDIP/204/stop clock/009/1-01	Available
10.	Sphygmanometer	SDIP/204/sphygmanometer/011/1-10	Available
11.	Weighing balance	SDIP/304/4/WB (01)	Available
12.	Plethysmometer	SDIP/304/7/PY	Available
13.	Electroconvulsiometer	SDIP/304/5/CNV	Available
14.	Analgisometer	SDIP/304/4/AN	Available
15.	Student organ bath	SDIP/304/PB/004	Available
16.	Actophotometer	SDIP/304/2/ACT	Available
17.	Heating mantle	SDIP/HM/304/201	Available
18.	Kymography drum	SDIP/304/1/KGD	Available
19.	Aerators	SDIP/304/8/AE	Available
20.	Rota rod	SDIP/304/RR	Available
21.	Temperature controller	SDIP/TC/304/01	Available

6.4. Drug Museum (5)

(Type and quality of collection in the museum with proper labeling and display)

Type and quality of collection in the museum

The pharmaceutical museum contained the show-casing of marketed products such as solid dosage forms (tablets and capsules), different types of packing (strip/ blister), granules, marketed products, injectable formulations, infusion bottles, liquid preparations for humans and animals, aerosols, cosmetic preparations, natural crude extracts and semi-solid ointments. The museum is designed with special care to highlight the displayed products and is located in the corridor near the pharmaceutical lab on 2nd floor, pharmacognosy lab on 2nd floor, APHE lab on 2ndfloor and at the entrance in such a way that they are visible to everyone entering the college respective floors and Labs. The museum is designed to provide separate sections for various categories of products. Regular cleaning schedule is followed for the museum. The products will be updated from time to time with latest developments in the market. The museum is managed by two faculty and two students from each class and are in co-ordination with the house keeping person. The list of products displayed in the drug museum are given in the below table.

Tablets:	**Capsules:**
1.Voveron-50 mg (Diclofenac) 2.Ultracet- 50 mg (Tramadol) 3.Zofer- 4mg (Ondansetron) 4.Larotid-250 mg (Amoxicillin) 5.Norvase-2.5 mg (Amlodipine) 6.Bestochem- 200 mg (Cefixime) 7.Paracip- 500 mg (Paracetamol)	1.Levogel (levocetrizine dihydrochloride capsules) 2.Polybion (capsules of vit-B complex with vit-C, folic acid & biotin) 3.Neurovit (multivitamin & mineral capsules) 4.Megapen capsules (ampicillin & cloxacillin with lactic acid bacillu) 5.Chlorphenaramine maleate 4 mg & pantoprazole HCl 25 mg pellets blend
Animal Products:	**Cosmetics:**
1.Ciprolin-ciprofloxacin & tinidazole (broad spectrum anti-bacterial) 2.Wormizole - albendazole tablets 3.Worex suspension (control of gastro intestinal worms in dogs 4.Mycosal (treating bacterial and micro bacteria in poultry) 6.Liquid paraffin 7.Choloropheniramine maleate injection 8. Iron injection	1.Gentle face wash- Himalaya 2.Shaving foam- Gillete 3.Prickly heat powder- Shower to shower 4.Tooth powder-Farooky 5.Deodrant- Rexona 6.Waterproof mascara- Harmony 7.Body spray-Liberty 8.Cold cream-Ponds 9.Compact- Lakme
Granules-Pellets India:	**Suspension:**
1.Rabeprazole sodium EC 20 mg & itopride HCl SR 50 mg pellets 2.Rabeprazole sodium EC 20 mg & domeperidone SR 30 mg pellets 3.Omeprazole EC 20 mg & domeperidone SR 30 mg pellets 4.Omeprazole EC 8.51 w/w pellets 5.Pantaprazole EC 40 mg & itopride HCl SR 150 mg pellets 6. Pantoprazole EC 40 mg & Cl_2-50 mg, zinc-61.8 mg, folic acid-0.5 mg, vit B 12-15	1.Meftal-spas (dicyclomine Hcl & simethicone suspension) 2.Aristogyl-F (anti-diarrheal suspension) 3.Mebex (mebendazole suspension)

Crude drugs:	Miscellaneous:
1.Nuxvomica seeds 2.Myrobalan seeds 3.Coriander fruit 4.Clove 5.Ashwagandha 6.Cinchona bark 7.Dill fruit 8.Ipecac 9.Cumin 10.Rawoulfia root 11.Belladona leaves 12.Digitalis leaves 13.Senna 14.Datura 15.Arjuna bark 16.Fennel 17.Isapgol seeds 18.Cardamon 19.Blackpepper	1.Boro natural – for dry skin diseases 2.Livon- hair fluid 3.Scalpe-anti-dandruff lotion 4.Digel (antacid) 5.Selenium sulphide lotion 6. Ciprofloxacin HCl & tinidiazole tablets 7.Melatite cream 8.Soframymic eye drops 9.Decomic eye drops 10.Ciprofloxacin eye/ear drops 11.Mycosal 12.Dizytage (200 ml) 13.Bestozyme drops (15 ml) 14.Acecil-sera

6.5. Medicinal Plant Garden (5)

(Area, demarcation, temporary/ permanent arrangement, planting of plants under the shade in demarcated areas, adequacy of the plants)

Types, varieties and number of plants, available in the garden

Institute is situated on 30 acers of land. The Institute is maintaining the medicinal plant garden which includes several types of herbs, xerophytes and shrubs. The garden is managed by the two faculty members and two students from each class under the supervision of a senior faculty. The house keeping people, a gardener is taking care for water pouring, cleaning and providing the pesticides from time to time. The medicinal plants maintained in our garden are listed in the table given below. The plantation has made appropriately under the shade of demarcated areas. At Institute, permanent and temporary medicinal gardens are maintained. The list of plants of permanent and temporary garden is given below.

Permanent:

S.No	Plant name	
	Vernacular Name	Botanical Name
1.	Hibiscus	Hibiscus rosa sinensis
2.	Papaya	Carica papaya
3.	Alove vera	Aloe perfoliata
4.	Brahmi	Bacopa mannieri
5.	Datura	Datura stramonium
6.	Karivepaku	Murraya koenigii
7.	Erraganneru	Nerium oleander
8.	Tulsi	Ocimum sanctum
9.	Vasaka	Adhatoda vasica
10.	Saraswati	Centella asiatica

11.	Lemon	Citrous limon
12.	Mango	Magnifera indica
13.	Guavava	Psidium guajava
14.	Panfuti	Bryophyllum daigremontianum
15.	Badam	Prunus dulcis
16.	Heena	Lawsonia inermis
17.	Rui	Calotropis gigantean
18.	Shatavari	Asparagus racemosus
19.	Oma	Trachyspermum ammi
20.	Sapota	Manilkara zapota

Temporary:

S.No	Plant name	
	Vernacular Name	**Botanical Name**
1.	Paufuti	Brophyllum pinnatum
2.	Tulsi	Ocimum sanctum
3.	Jamun	Syzygium cumini
4.	Alovera	Aloe perfoliata
5.	Oma	Trachyspermum ammi
6.	Vinca	Catharanthus roseus
7.	Vasaka	Justica adhatoda
8.	Kalmegh	Andrographis paniculata
9.	Nerium oleander	Oleander, Kaner
10.	Datura	Datura stramonium
11.	Vetivellu	Vetiveria zizaniades

Overall look and maintenance of the medicinal plant garden:

1. The boundary of the garden is properly demarcated.
2. The medicinal plant garden is permanent and is provided with all-time maintenance facility. A permanent gardener takes care about watering and other requirements.
3. The cultivation of medicinal plants is proper and kept based on the type of plants. Herbs, xerophytes and shrubs are provided with different locations.
4. The plant density of the medicinal plants is maintained properly.

6.6. Non-Teaching Support (20)

Name of the Technical staff	Designation	Date of joining	Qualification		Other technical skills gained	Responsibility
			At joining	Now		
P. Rajeshwari	Lab Technician	10-11-2017	B. Pharmacy	B. Pharmacy	Computer knowledge	Identifying the lab requirements (chemicals, solvents, glass ware and others), preparing the list and getting approval from concerned teachers. Preparing indents for the conduct of regular labs on weekly basis and getting approval from concerned teachers and principal. Receiving the items from the central stores as per the approve indent and storing them. Arranging the chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store in charge.
S. Swathi	Lab Technician	24-10-2017	B. Pharmacy	B. Pharmacy	Computer knowledge	Identifying the lab requirements (chemicals, solvents, glass ware and others), preparing the list and getting approval from concerned teachers. Preparing indents for the conduct of

						regular labs on weekly basis and getting approval from concerned teachers and principal. Receiving the items from the central stores as per the approve indent and storing them. Arranging the chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store in charge.
N. Sujatha	Lab Technician	01-08-2018	B. Pharmacy	B. Pharmacy	Computer knowledge	Identifying the lab requirements (chemicals, solvents, glass ware and others), preparing the list and getting approval from concerned teachers. Preparing indents for the conduct of regular labs on weekly basis and getting approval from concerned teachers and principal. Receiving the items from the central stores as per the approve indent and storing them. Arranging the chemicals and issuing the glass ware to the students for their lab work and maintaining records.

						Proper maintenance of instruments. Assisting the activities of central store in charge.
Y. Anjaneyulu	Lab Technician	15-10-2015	B. Pharmacy	B. Pharmacy	Computer knowledge	Identifying the lab requirements (chemicals, solvents, glass ware and others), preparing the list and getting approval from concerned teachers. Preparing indents for the conduct of regular labs on weekly basis and getting approval from concerned teachers and principal. Receiving the items from the central stores as per the approve indent and storing them. Arranging the chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store in charge.
MD. Nadeem Shareef	Lab Technician	15-10-2015	B. Pharmacy	B. Pharmacy	Computer knowledge	Identifying the lab requirements (chemicals, solvents, glass ware and others), preparing the list and getting approval from concerned teachers. Preparing indents for the conduct of regular labs on

						weekly basis and getting approval from concerned teachers and principal. Receiving the items from the central stores as per the approve indent and storing them. Arranging the chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store in charge.
PV. Srinivas	Lab Technician	01-07-2008	B.Sc	B.Sc	Computer knowledge	Arranging the chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store in charge. Receiving the items from the central stores as per the approve indent and storing them.
N. Harikrishna	Lab Technician	27-08-2016	B.Sc	B.Sc	Computer knowledge	Arranging the chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the

						activities of central store in charge. Receiving the items from the central stores as per the approve indent and storing them.
M. Anand Kumar	Office Incharge	26-06-2014	B.Sc	B.Sc	Computer knowledge	Maintaining records (purchase orders, delivery of items and processing of invoices) as per the act and periodic approvals. Obtaining alcohol permit, receiving and issue its storage as per provisions of the act. Compiling the list of requirements of chemicals, solvents, glassware and other items list forwarded by the lab technician. Preparing the indents and getting approval from the vice president, through principal. Issue of items to the individual labs through the lab technicians for the indents approved by the concerned teachers and principal
R. Sukesh	Exam branch & DTP operator	23-11-2015	B.Sc	B.Sc	Well versed with computer	Maintaining all the systems (computers, laptops, scanners, printers) and updating periodically.

						Making arrangements for installations, repair and other necessary things.
S. Rama Krishna	Librarian	26-10-2016	MLISC	MLISC	Expert in classification systems	Maintaining of all records (purchase of invoices and issue of books). Requesting the quotations from suppliers and forwarding to the purchase department. Follow up of purchase order, receiving the items and arranging them in a specified manner. Proper maintenance of books and journals including binding process. Issue of book sets and books to the students and maintaining their records.
Venkateshwaralu .Y	Lab Assistant	02-06-2012	B.Sc	B.Sc	Computer knowledge	Arranging the chemicals and issuing the glass ware to the students for their lab work and maintaining records. Proper maintenance of instruments. Assisting the activities of central store in charge. Receiving the items from the central stores as per the approve indent and storing them.
Jalander	Chief Accountant	02-02-2005	B.Com	B.Com	Computer knowledge	Preparing and entry of day-to-day expenses. Collecting the

						college fees, exam fees, caution deposits etc. Dispatch and depositing the cheques. Collecting account statements for verification from time to time. Involved in preparation of records for fees fixation.
Vanaja	Junior Accountant	07-06-2008	M.Sc	M.Sc	Well versed with computer	Preparing and entry of day-to-day expenses. Collecting the college fees, exam fees, caution deposits etc. Dispatch and depositing the cheques. Collecting account statements for verification from time to time. Involved in preparation of records for fees fixation.
Lazarus	Office Supernatant	08-04-2010	BA, B.Ed	BA, B.Ed		Administers the day to day activities of the office. Supervise the work of employees in supporting roles.

6.6.1. Availability of adequate and qualified technical supporting staff for program specific laboratories (10)

(Assessment based on the information provided in the preceding table)

Name of the Technical staff	Designation	Date of joining	Qualification		Other technical skills gained
			At Joining	Now	
PV Srinivas	Lab Technician	01-07-2008	B.Sc	B.Sc	Computer knowledge
N.Harikrishna	Lab Technician	27-08-2016	B.Sc	B.Sc	Computer knowledge
P. Rajeshwari	Lab Technician	10-11-2017	B. Pharmacy	B. Pharmacy	Computer knowledge
S. Swathi	Lab Technician	24-10-2017	B. Pharmacy	B. Pharmacy	Computer knowledge

N. Sujatha	Lab Technician	01-08-2018	B. Pharmacy	B. Pharmacy	Computer knowledge
Y. Anajaneyulu	Lab Technician	15-10-2015	B. Pharmacy	B. Pharmacy	Computer knowledge
MD.Nadeem Shareef	Lab Technician	15-10-2015	B. Pharmacy	B. Pharmacy	Computer knowledge
M.Anand Kumar	Store Keeper	26-06-2014	B.Sc	B.Sc	Computer knowledge
R.Sukesh	Exam branch & DTP operator	23-11-2015	B.Sc	B.Sc	Well versed with computer
S.Rama Krishna	Librarian	26-10-2016	MLISC	MLISC	Expert in classification systems
Venkateshwaralu.Y	Lab Assistant	02-06-2012	B.Sc	B.Sc	Computer knowledge
Jalander	Chief Accountant	02-02-2005	B.Com	B.Com	Computer knowledge
Vanaja	Junior Accountant	07-06-2008	M.Sc	M.BA	Well versed with computer
Lazarus	Office Superintendent	08-04-2010	B.A,B.Ed	B.A,B.Ed	

- In addition adequate menial staffs are working for general maintenance and up keeping of the college premises clean.
- Security of the premises is taken care by out-sourcing.
- Vehicles maintenance, drivers and cleaners are available.
- The building is taken care by centralized fire safety personnel, in addition to fire extinguishers in individual labs and stores.
- The electrical and plumbing works are taken care by general maintenance department people.

6.6.2. Incentives, Skill upgrade, and professional advancement (10)

(Assessment based on the information provided in the preceding table)

- College provides incentives for staff. Increments are given to motivate and encourage the staff.
- Technical staff members are encouraged and supported to upgrade their skills by sponsoring the faculty to attend workshops.
- Sponsored to attend training outside the institution for professional advancement.
- Allowing faculty to continue their research work.
- Training program is organized by the college for imparting the necessary skills to non-teaching staff.

Training Program: 2018: Three days (15 to 17, May 2018)

Date	Name of the speaker	Title of topic	Participants
15-11-18	Dr. Pratap Kumar Patra	Measurement of B.P, blood grouping testing/importance	P. Rajeshwari
15-11-18	Mr. B. Gnaneshwar	Maintenance of stores	Siddala Swathi
16-11-18	Mr. K. Kiran	Maintaining of laboratories	Sujatha
16-11-18	Mrs. A.Niharika	Handling and usage of dissolution apparatus	P.V. Srinavas
17-11-18	Ms. B. Mamatha	Handling of laboratory animals	N. Hari Krishna
17-11-18	Mrs. G. Mary Ratna Anitha	Sterilization of equipment's and aseptic transfer	Anand Kumar

Training Program: 2017: Three days (25 to 27, November 2017)

Date	Name of the speaker	Title of topic	Participants
25-11-17	Dr. Pratap Kumar Patra	Measurement of B.P, blood grouping testing/importance	N. Harikrishna
25-11-17	Mrs. Shital Dange	Maintenance of stores	Mohammed Idrees
26-11-17	Mrs. Alekhya	Maintaining of laboratories	P. Rajeshwari
26-11-17	Mrs. A.Niharika	Handling and usage of dissolution apparatus	P.V. Srinavas
27-11-17	Mr. Vishnuwardhan Reddy	Handling of laboratory animals	MD. Nadeem Shareef
27-11-17	Mrs. G Mary Ratna Anitha	Sterilization of equipment's and aseptic transfer	Venkateshwarulu Y

CRITERION 7	Continuous Improvement	75

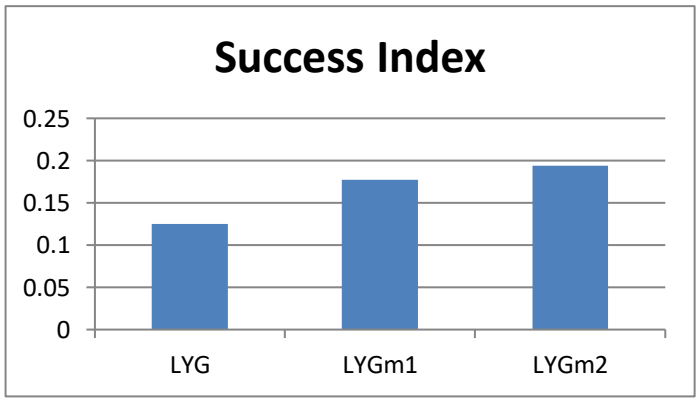
7. Continuous Improvement (75)

7.1. Improvement in Success Index of Students without the backlog (15)

Items	LYG (2017-18)	LYGm1 (2016-17)	LYGm2 (2015-16)
Success index (from4.2.1)	0.125	0.1774	0.1940

SI= (Number of students who graduated from the program without backlog)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry)

Assessment shall be based on improvement trends in success indices. Marks are awarded accordingly.

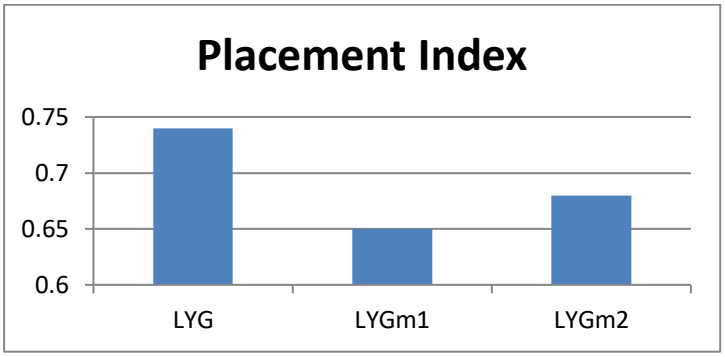


7.2. Improvement in Placement and Higher Studies (15)

Assessment is based on improvement in:

- *Placement: number, quality placement, core industry, pay packages etc.*
- *Higher studies: performance in GPAT etc., and admissions in premier institutions*

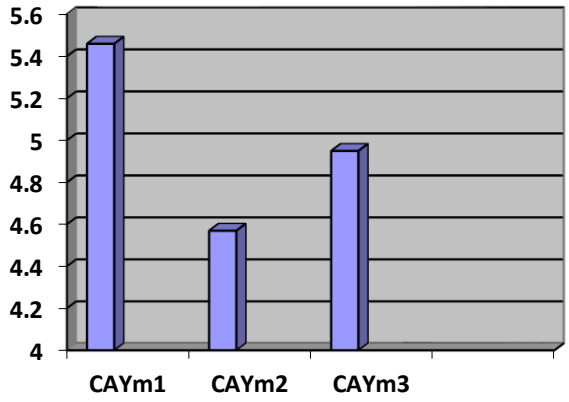
Items	LYG (2017-18)	LYGm1 (2016-17)	LYGm2 (2015-16)
Placement index (from4.7)	0.74	0.65	0.68



7.3. Improvement in the API of the Final Year Students (10)

Academic Performance Index = ((Mean of Final Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Final Year/10)) x (successful students/number of students appeared in the examination) *Successful students are those who passed in all the final year courses*

Academic Performance Index	CAYm1 (2017-18)	CAYm2 (2016-17)	CAYm3 (2015-16)
Mean of CGPA or Percentage of all successful the students (X)	66.62	67.25	66.79
Total no. of successful students (Y)	32	40	43
Total no. of students appeared in the examination (Z)	39	58	58
API = X*Y/Z	5.46	4.57	4.95



7.4. Improvement in the quality of students admitted to the program (15)

Assessment is based on improvement in terms of ranks/score in qualifying state level/national level entrances tests, percentage marks in Physics, Chemistry and Mathematics in 12th Standard and percentage marks of the lateral entry students.

Item		CAYm1 (2017-18)	CAYm2 (2016-17)	CAYm3 (2015-16)
National Level Entrance Examination (Name of the Entrance Examination)	No. of Students admitted	-	-	-
	Opening Score/Rank	-	-	-
	Closing Score/Rank	-	-	-
State Entrance Examination (EAMCET)	No. of Students admitted	73	55	63
	Opening Score/Rank	18350	19947	16843
	Closing Score/Rank	65233	77845	74536
Name of the Entrance Examination for lateral entry or lateral entry details	No. of Students admitted	-	-	-
	Opening Score/Rank	-	-	-
	Closing Score/Rank	-	-	-
Average CBSE/Any other Board Result of admitted students (Physics, Chemistry & Maths)		68.15	66.35	64.36

7.5. Actions taken based on the results of evaluation of each of the POs (20)

Identify the areas of weaknesses in the program based on the analysis of evaluation of POs attainment levels. Measures identified and implemented to improve POs attainment levels for the assessment years.

Actions to be written as per table in 3.3.2.

Examples of analysis and proposed action

Sample 1-Course outcomes for a laboratory course in Pharmaceutical analysis did not measure up, as some of the laboratory instruments are not calibrated, standardized and not optimally used, as there was no laboratory work involving the use of HPLC and UV-visible spectrophotometer.

Action taken-The practical work in Pharmaceutical analysis has been upgraded by inclusion of analytical experiments involving the use of HPLC and UV-visible spectrophotometer with the help of SOPs generated.

Sample 2-In a course on Pharmaceutics theory, student performance has been consistently low with respect to some COs as analysis of answer scripts and discussions with the students revealed that this could be attributed to a weaker course and its delivery on GMP, GLP and Drug Regulatory Affairs.

Action taken-The theory course in Pharmaceutics and its delivery has been strengthened by including specific topics on quality control and quality assurance taught by experts drawn from Industry, Academia and Drug Regulatory Authorities.

Sample 3-In a course of Bio-pharmaceutics theory and practicals, the students' performance has been low with respect to attainment of some COs as it was

revealed that theory and practical component in physical pharmacy is weak and contributed to poor basic concepts and their applications in higher classes.

Action taken- Extra classes were arranged for the students on the emphasis of the basic concepts in physico-chemical properties like PKA, Partition Coefficient, Biopharmaceutical Classification System(BCS) and other terms

POs Attainment Levels and Actions for improvement

PROGRAM OUTCOMES

1. **Pharmacy Knowledge:** Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.
2. **Planning Abilities:** Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.
3. **Problem analysis:** Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.
4. **Modern tool usage:** Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.
5. **Leadership skills:** Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.
6. **Professional Identity:** Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).
7. **Pharmaceutical Ethics:** Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.
8. **Communication:** Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

9. **The Pharmacist and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.
10. **Environment and sustainability:** Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
11. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

POs Attainment Levels and Actions for improvement – CAYm1: 2017-18

- Level 3 – High – > 90% of the set attainment level
- Level 2 – Medium – 80 – 89.99% of the set attainment level
- Level 1 – Low- < 79.99% of the set attainment level

POs	Target Level	Attainment level	Observations
PO1: Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.			
PO1	B.Pharm. I/II Pharmaceutical Inorganic chemistry 2.2	2.0	High

PO2: Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadline.			
PO2	B.Pharm. II/I Pharmaceutical Unit Operation 2.5	2.05	Medium- Different types of filters and centrifuge used is important topic practiced in pharmaceutical industries. Students were finding difficulty to understand exact working.
Action 1: Industrial visit was arranged to students in Jodas pharma at Karkapatla, Hyderabad, so students could understand working of filters and centrifuge. Date of Industrial visit: 13-10-2017			
PO3: Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.			
PO3	B.Pharm. IV/II Novel Drug Delivery Systems and Regulatory affairs 2.12	1.99	High
PO3: Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.			

PO3	B.Pharm II/I Pharmaceutical analysis-I 2.33	1.57	Low- In column chromatography, Preparation and handling of column was not included in theory. It was being observed as poor Knowledge about column chromatography.
Action 1: We arranged demonstration in laboratory along with M. Pharmacy students to understand concept of column chromatography. Date: 27-09-2017			
PO3: Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.			
PO3	B.Pharm III/II Chemistry of Natural Products 2.15	1.55	Low- Classification and types of proteins, amino acids and characterization are not given adequate stress. The therapeutic activity depends on structure and even several protein based drugs are available in the market.
Action 1: Power point presentation was arranged regarding types of proteins, amino acids and their structures. Date:31-03-2018			
PO4: Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.			
PO4	B.Pharm IV/II Pharmaceutical	1.55	Low- Bioinformatics is a modern tool which is used in many fields of science but the topic is new to students so they were finding

	Biotechnology 2.15		difficulty in understanding.
Action 1: We made the students to even go through various website like Pub med, NCTR (national centre for toxicological research) and Net bio through which students could understand topic easily. Date:21-02-2018			
PO4: Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.			
PO4	Pharmaceutical analysis-II 2.42	2.36	High
PO5: Leadership skills: Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well- being.			
PO5	B.Pharm III/II 2.47	1.51	Low- Most of the students lack leadership ability.
Action 1: We encouraged the students to organize various programs like Ganesh festival, Bathukamma, Traditional day every year so that they can improve their leadership abilities, planning abilities and communication skills. Date: 21-02-2018			

PO6: Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).			
PO6	B.Pharm IV/II Human values and Professional Ethics 1.9	2.72	High
PO7: Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).			
PO7	B.Pharm III/I Pharmaceutical Microbiology 2.10	2.06	High
PO8: Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.			
PO8	B.Pharm IV/I Biopharmaceutics and Pharmacokinetics 1.9	1.42	Medium- Though several novel drug delivery systems are available and the advancements are rapid. A few topics are included and they are in brief, there is a need to develop broadly on this new area as a method for lifelong learning.
Action 1: A seminar was arranged on advancement of nano medicine and even encouraged the students to give poster presentation in JNTU conference			

dated on 12th and 13th Oct.2017.

PO9: The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.

PO9	B.Pharm II/I 2.12	1.4	Low- Public were unaware of generic drugs so they were using branded drugs, which are costly.

Action 1: We encouraged students to conduct public awareness programme in Ibrahimpatnam pharmacists day about the usage of generic drugs as these are affordable than branded drugs inspite of having similar therapeutic effects.

Date: 25-09-2018

PO10: Environment and sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO10	B.Pharm III/I Pharmacognosy-II 2.13	1.63	Medium- The process of development of plant tissue culture was mentioned in theory syllabus, but students were finding difficulty to understand.

Action 1: The demonstration was given on plant tissue culture using biotechnological methods in laboratory. This helped the students in understanding the concept of plant biotechnology easily. Date:17-08-2017.

PO11: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing

basis.			
PO11	B.Pharm III/I Pharmaceutical analysis 2.15	1.55	Students lack the knowledge of current trends and recent innovations in the field of pharmacy.
Action 1: We encouraged the students to present paper and poster in IPC and other national conferences. Date: 23-12-2017, 24-12-2017			

POs Attainment Levels and Actions for improvement – CAYm1: 2016-17

POs	**Target Level**	**Attainment level**	**Observations**
PO1: Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.			
PO1	B.Pharm I/I Anatomy Physiology and Health Education 1.9	1.69	Medium- Students were unaware of pharmacy profession and it's scope.
Action 1: We arranged guest lecture of Dr. Veeresh Bantal relating basic science with pharmaceutical science. Date: 15-10-2016			
PO2: Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadline.			

PO2	B.Pharm IV/I Pharmacy Administration 2.05	2.0	High
PO3: Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.			
PO3	Pharmaceutics I 2.33	2.26	High
PO4: Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.			
PO4	Pharmaceutical Organic Chemistry-I 1.88	2.0	High
PO6: Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).			
PO6	B.Pharm IV/II Human values and Professional Ethics 2.13	1.07	Low
Action 1 Awareness programmes on yoga was conducted in our campus to enlighten the importance of Yoga on health.			

PO7: Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).			
PO7	B.Pharm IV/I Pharmacognosy-III 2.05	1.90	High
PO8: Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.			
PO8:	Professional Communication English 2.25	2.03	High
PO9: The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.			
PO9:	B.Pharm II/I Pharmacognosy-I 2.12	1.99	High
PO10: Environment and sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.			
	B.Pharm III/I		Low- The students performance in identification and use of medicinal

PO10	Pharmacognosy-II 2.5	1.78	plants was not up to the mark.
Action 1: We encouraged students for plantation of medicinal plants which helped students for easy identification. Date: 06-08-2016			
PO11: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.			
PO11	Pharmaceutical Jurisprudence 2.22	2.16	High

POs Attainment Levels and Actions for improvement – CAYm1: 2015-16

POs	**Target Level**	**Attainment level**	**Observations**
PO1: Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.			
PO1	B.Pharm I/I Pharmaceutical Organic Chemistry 1.88	2.0	High.

PO1	B.Pharm IV/II Novel Drug Delivery system and Regulatory affairs 2.12	1.99	High.
PO2: Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadline.			
PO2	Chemistry of natural products 2.15	1.55	Low- In the course of Chemistry of natural products students were unable to elucidate the structures of some natural products
Action: Extra assignments were given to the students to remember structures of those natural products.			
PO3: Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.			
PO3	B.Pharm IV/I Pharmacology III 2.17	1.43	Low- In course of Pharmacology III theory students performance has been low with respect to attainment of some co's , as a result analysis of sessional and end semester examination revealed that, understanding and application of basic concepts in

			this subject is weak and contributed to lower values of po attainment
Action: Charts were prepared on various classes of antibiotics and anti cancer drugs in relevance to social health and safety in professional pharmacy practice			
PO4: Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.			
PO4	B.Pharm III/I Pharmacology I 2.13	1.73	Medium- The cause for poor performance in this course was the students had forgotten the Anatomy, Physiology and Pathophysiology taught in the previous semesters, therefore could not understand the Pharmacology
Action: The Anatomy, Physiology and Pathophysiology topics related to Pharmacology I were revised			
PO6: Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).			
PO6	B.Pharm IV/II Pharmaceutics I 2.33	2.26	High
PO7: Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).			

PO7	Pharmaceutical Analysis II 2.42	2.36	High
PO8: Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.			
PO8:	Professional communication english 2.25	2.03	High
PO9: The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.			
PO9:	B.Pharm II/I Pharmacognosy-I 2.15	1.55	Low- - Student performance has been low with respect to attainment of some COs as students found difficulty in understanding the some topics like microscopical evaluation of powdered crude drugs
Action: Demonstration class was arranged in Pharmacognosy lab regarding the differentiation between microscopy (Transverse section) and powdered microscopy			

PO10: Environment and sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.			
PO10	B.Pharm II/II Biochemistry 2.13	1.36	Low- Student performance has been low with respect to attainment of some COs as analysis of answer scripts and discussions with the students revealed that, theory component in this subject is weak and contributed to poor basic concepts and their applications in PO attainment.
Action: Power point presentations were conducted on biomolecules and various biochemical pathways like Kreb's cycle, Glycolysis etc..			
PO11: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.			
PO11	Pharmaceutical microbiology 2.10	2.06	High

CRITERION 8	Student Support Systems	50

8. Student Support System (50)

8.1 Mentoring system at individual levels (5)

Type of mentoring: Professional guidance / career advancement / course work specific / laboratory specific / all-round development

- Number of faculty mentors: 32
- Number of student mentors: 07
- Frequency of meeting: Monthly

(Details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system)

The class teachers are appointed for the first to final year classes. The mentoring team consists of 28 teachers. Each faculty member is assigned a fixed number of students, right at the time of their joining of the Program .i.e. approximately 15 students per mentor.

The faculty conducts periodical meeting with students in order to evaluate their academic performance and proper orientation towards the Program, as well as guide them to rectify any short comings and to solve any problems.

Following issues are discussed with students:

1. Attendance
2. Economic status
3. Behaviour
4. Personal study time table
5. Study pattern
6. Extra hobby classes etc.
7. Difficulty in writing / communication
8. Confidence level
9. In case of any other observations, it is noted and discussed.
10. Students are motivated to participate in co-curricular and extra-curricular activities.

Following information about students is collected by individual mentors and a record maintained

- Students Personal Information
- Previous Record
- Academic Performance
- Competitive Examination Details
- Details of Internship and Industrial Trainings
- Co-Curricular and Extra-Curricular activities.
- The mentors meet the students periodically and monitor their performance and their activities.

- Guidance regarding the lagging issues is provided.

Parents'-Teacher Meeting is held once in each year to brief the progress of their wards to their parents. This process has improved students' academic performance, attendance and participation in co-curricular and extra-curricular activities.

Mentor details 2018-2019

Sl. No.	Name of the mentor	SL.No	Name of the mentor
B Pharmacy I year		**B Pharmacy I year**	
I Semester (2018-19)		**II Semester (2018-19)**	
1	Ms. B.Mamatha	1	Mrs.P.Deepika
2	Mr. S. Soujanya	2	Mrs.Ch. Madhavi
3	Ms. Adilakshmi	3	Mrs.Rupali Kale Gawande
4	Mrs. Y. Sreelatha	4	Ms.M. Kavitha
5	Mrs.B. Shantakumari	5	Mrs.G.Mary Ratna Anitha
6	Mr.B.Ramakrishna Reddy	6	Mrs.A. Kalpana
7	Mr. Buddi Gnaneshakar	7	Mrs. T. Swathi
8	Mr. Rajashekar Suvanapuram	8	Mr.K.Kiran
9	Mrs. R. Renuka	9	Ms. Adilakshmi
10	Mrs. Ramavath Sharada	10	Mrs. Y. Sreelatha
B Pharmacy II year		**B Pharmacy II year**	
I Semester (2018-19)		**II Semester (2018-19)**	
1	Mr. D. Vishwanath	1	Mr. D.Vishwanath
2	Ms. Jhansi Laxmi	2	Mr. M. Kiran
3	Ms. M. Kavitha	3	Mr.G.Abhilash
4	Mrs. T. Swathi	4	Mr.K. Kiran
5	Mr.K.Kiran	5	Dr.Amatul Ali Sameera
B Pharmacy III year		**B Pharmacy III year**	
I Semester (2018-19)		**II Semester (2018-19)**	
1	Mrs. Rupali Gawande	1	Mrs.K.Janaki
2	Mr.Sai Sreekanth	2	Mrs.Dr.V.Sivajyothi
3	Mrs.P.Deepika	3	Ms. B.Mamatha
4	Mr. G, Abhilash	4	Mrs.G. Swathi
5	Mrs.P. Naga handrika	5	Mr. N.D. Sai Sreekanth
B Pharmacy IV year		**B Pharmacy IV year**	
I Semester (2018-19)		**II Semester (2018-19)**	
1	Mrs.K.Janaki	1	Mrs.K.Janaki
2	Dr.V.Sivajyothi	2	Mrs.G.Mary Ratna Anitha
3	Mrs. Ch. Madhavi	3	Mrs.P. Naga Chandrika
4	Mr. M. Praveen Kumar	4	Mr.G.Abhilash
5	Mrs.G.Mary Ratna Anitha	5	Ms. B.Mamatha

8.2 Feedback analysis and reward / corrective measures taken, if any

- Feedback collected for all courses : YES
- Specify the feedback collection process: Hardcopy/Softcopy
- Percentage of students who participated:90%
- Specify the feedback analysis process:
- Basis of reward / corrective measures, if any:
- Number of corrective actions taken in the last three years: 6

(The institution needs to design an effective feedback questionnaire. It needs to justify that the feedback mechanism developed by the institution really helps to evaluate teaching, and finally contributes to the quality of teaching and ensure attainment of set levels for each PO)

Feedback about the teaching staff is collected every semester. The mechanism and implementation is as described hereunder.

METHOD FOLLOWED FOR STUDENTS' FEEDBACK COLLECTION

Preliminary feedback

- This is taken within 4 weeks of commencement of every new semester so as to assess the compatibility between the subject teacher and the class.
- The suggestions/complaints/appreciations from the students are shared with the concerned teacher and HODs.
- The teachers are counseled in case if the feedback is poor by the HOD, senior staff member of the department and Principal.
- The preliminary feedback is not taken as a criterion for adjudging the best teacher.

Final feedback

- This is taken one week before the end of each semester in the questionnaire format.
- The feedback is analysed and a report is generated for each faulty for every subject.
- However, the feedback is not shared with the teachers until the beginning of the following semester.
- The final feedback is used for assessing the teacher for the "BEST TEACHER" award. (50% weightage is given to students' final feedback)
- As a corrective measure against possible prejudices, 10% of worst opinions are not considered while analysing the feedback.

Method followed for collection of feedback

- Students' feedback format was devised after a number of discussions with the faculty and undergoes modifications as and when required.
- All students of each class are given an opportunity to express their opinion with regards to effectiveness in teaching by a teacher, which are detailed in the feedback format.
- The opinions of students are taken within 4 weeks of commencement of each semester which helps the institute to take corrective measures at an early stage. This also helps the teachers in improving their teaching methodology.
- However, the result of the preliminary feedback is not taken as a criterion for adjudging the best teacher and is only utilised by the teacher/s as guidance for improvement.
- There are always possibilities of certain students developing prejudices against a teacher if he/ she is a strict disciplinarian. This may lead to a negative impression about the teacher concerned. This factor is taken into consideration while analysing the final students' feedback.
- As a corrective measure against such prejudices, 10% of worst opinions are not considered while analysing the feedback. However, the experience of the college shows that the feedback is largely based on the teaching efficiency of a faculty irrespective of his/ her strictness.
- By and large this system has been functioning well and is integrated into teaching excellence awards being conferred by the college wherein half the weightage is reserved for students' feedback. By and large this system has been functioning well and is integrated into teaching excellence awards being conferred by the college wherein half the weightage is reserved for students' feedback.
- Students are also encouraged to share their views and suggestion with the mentor to whom they are assigned. If all else fails, students have an easy access to the Principal, wherein they can directly go and complain/ share their views with him.
- Regular meetings of the Principal, Vice Principal and a few students from each class are held to get an update on syllabus completion, teaching methodology, and conduct of teaching, non-teaching and administrative staff, facilities and infrastructure. Prompt action is taken in case of any issues brought to notice by students.

Actions taken:

The following actions are taken on basis of the feedback collected.

Commendatory actions

1. Best teacher award.
2. Letters of appreciation for faculty members receiving more than 90% in their feedback.

Corrective actions

1. Teachers receiving between 50-60 % in their feedback would be counselled.
2. Strict action would be taken against teachers with less than 50% in their feedback.
3. Encouragement in terms of privileges
4. Appreciations through mention in public functions

Feedback analysis and percentage of student participation

Sl.no	Description	Remarks
1	Feedback collected for all courses?	YES
2	Specify the feedback collection process	Hardcopy/Softcopy without revealing the student identity
3	Who collects the feedback?	Separate staff members are identified for collecting feedback
4	When feedback is collected?	After one month of class commencement and Mid of Semester
5	Percentage of students participating	Nearly 70- 90%

Specify the feedback analysis process

S. No	Description	Remarks
1	Is this done manually?	YES, hardcopy/Softcopy
2	What metrics are calculated?	Teaching attitude, attention to learning process
3	What is inferred from the metrics?	Strength & weakness of a teaching process
4	How are the comments used?	To overcome weakness of teacher Used for course corrections

List of corrective actions taken in the last 3 years

Academic years	Letters of appreciation	Memo	Counseled
2017-2018 (Even Semester)	3	-	1
2017-2018 (Odd Semester)	2	-	-
2016-2017 (Even Semester)	4	1	2
2016-2017 (Odd Semester)	2	-	-
2015-2016 (Even Semester)	3	1	1
2015-2016 (Odd Semester)	4	-	-

Any feedback mechanism from alumni, parents and industry
From Alumni

- Alumni fill the feedback forms whenever they got opportunity to visit the department or the institute.
- Alumni feedback during Alumni Day celebrations held annually around march/april each year.
- Feedback is received through e-mail or hard copy.

From Parents

- Parent feedback form is given before vacation and collected at the time of registration at the beginning of the year.
- Parent-institution interaction is arranged in every semester. Feedback is collected in hard copy.

From Industry

- During on campus placements drive from the Industry.
- From industry where our institute alumnus are working.
- From our alumnus who have turned entrepreneurs.
- From industry during academic alliance meets.

Academic year	Feedback source		
	Alumni	Parents	Industry
2017-2018	36	18	3
2016-2017	22	12	5
2015-2016	24	16	3

8.3 Feedback on facilities

(Assessment is based on feedback collection, analysis, and corrective action taken in respect of library, computing facilities, canteen, sports etc.)

For the metrics of facilities (computer, library, sports and canteen), 1 to 10-point questionnaire was used. Along with them, space was provided for expressing the opinion. All students of B. pharmacy are considered for evaluation. The scale is 3 as high, 2 as medium and 1 as low. The 10 points are averaged and converted into percentage. The metric values are given in the table below.

2016-2017: Compilation of responses and converted into percentages

Description	Percentage marks, %
Library	80
Computer	75
Sports	70
Canteen	70
Overall	**73.7**

The responses indicated that the rank order is 73.7%, which can be rated as first class with distinction or 3 on the scale, suggesting 100% attainment.

8.4 Self Learning

(Specify the facilities, materials and scope for self-learning / learning beyond syllabus and creation of facilities for self-learning / learning beyond syllabus)

Scope for self learning beyond the syllabus

1. The students are encouraged to undertake self learning module. They utilize this mode for posters presentation and power points for oral presentation.
2. They are allowed to participate in intercollegiate competitions conducted as national events in Hyderabad and outside and National symposiums.
3. The students compulsorily undertake the seminar component in IV B. Pharmacy II-semester. This course involves the collection of research materials from literature, organizing, formatting and submitting the write-ups as a report (assignment).
4. The students give oral presentation with the help of audiovisual aids. In the evaluation process, two teachers are involved for giving feedback and grade is awarded.
5. The students are encouraged to do a mini research project (involving experimental work). Such projects help the students to secure admissions in foreign university.
6. College timings are much wider than students working hours, giving students the time to consult, learn and do research and publish Research articles and papers.
7. Each laboratory curriculum is augmented by one to three experiments beyond curriculum supplementing the syllabus and giving additional skills.
8. Students are encouraged to utilize facilities to promote synthesis of knowledge by research, while choosing the topic for seminars, industry oriented projects.

Each year sixty students are allowed to undergo the process in the above activities, the teachers of concerned specialization assist and mentor.

Generation of self learning facilities, and availability of materials for learning beyond syllabus

Self learning facilities- Materials

1. The computer laboratory is equipped with internet facility. It is opened to the students in self-learning module. Literature search is being attempted. Downloads are also permitted.
2. The library is open to the students for seminar etc.
3. The library and information centre has been contributing for last 11 yrs for hard bound journals of national and international repute. The back volumes are available.
4. The computer laboratory has scanning and printer facilities. The students are permitted to utilize the facilities.
5. The students are allowed to prepare their power-point material for oral and poster presentation.
6. One class room is exclusively established for providing training by using audiovisual aids.

7. The teacher expert support in the technical matter, while the computer laboratory staff helps the students in the preparation of materials (inventory).
8. Seminar bank is maintained which was given by the students, in the computer lab as a soft copy.
9. The hard bound seminar reports are available in the examination cell, for fast referencing of old work.
10. The library and information centre has excellent collection of books including handbooks which immensely facilitates the self learning by the students.
11. Access to streaming videos from 'You tube, Slide share and author stream' and uploading the projects on to 'You tube, Slide share and author stream' for receiving open critique. Accessibility to popular free access journals and resources online The above facilities go on, not only to strengthen the teaching -learning process for the students, but also generates academic discipline, scientific attitude, innovativeness and inculcates the self-learning.

To enable learning beyond syllabus for UG students, college conducts demonstration experiments by senior faculties to share their knowledge.

List of experiments demonstrated in 2017 – 18

Sl.No.	Classes	Name of the experiment
1	First Year B. Pharmacy	Dissolution apparatus demonstration
2	Second Year B. Pharmacy	Soxhlet apparatus demonstration
3	Third Year B. Pharmacy	Karfischers titration demonstration
4	Fourth Year B. Pharmacy	HPLC demonstration

List of experiments demonstrated in 2016 – 17

Sl.No.	Classes	Name of the experiment
1	First Year B. Pharmacy	Dissolution apparatus demonstration
2	Second Year B. Pharmacy	UV-Visible Spectrophotometer
3	Third Year B. Pharmacy	Karfischers titration demonstration
4	Fourth Year B. Pharmacy	Column Chromatography

Training on self learning systems

Orientation programs and workshops are conducted for one week in the beginning of course i.e., I year B. Pharmacy. The details of the orientation program are:

Dates	Course	Resource persons
05-08-2016	B. Pharmacy	SDIP & SDES
10-08-2017	B. Pharmacy	SDIP & SDES
31-08-2018	B. Pharmacy	SDIP & SDES

The topics include

- Tips to learn better
- Tips to learn to better from lecture
- Tips to learn better from practicals

Evidence of self learning-seminar is an example

The following table provides the details of best and average 10 student seminars for the previous academic years

2015-2016

Name of student	Project Title	Contributions/ Acheivements/ Research output
BEST STUDENT SEMINARS (03No's)		
K. Bharath Kumar 12U21R0004	Phytochemical investigat ion & Antioxidant study of leaf extract of Cassia occidentalis Lin	useful for placements
G. Bhargavi 12U21R0016	Evaluation of mucilage from Atternanthera sessilis as suspending agent in paracetamol suspension	Excellent, value addition, useful for placements
D. P. Ojaswini 12U21R0035	Synthesis & Biochemical Evaluation of novel analogs of Azapeptides.	Excellent, value addition, useful for placements
AVERAGE STUDENT SEMINARS (03 No.'s)		
S. Ravali Reddy 12U21R0037	Formulation & Evaluation of Simvastatin micro particles using different polymer	Value addition and higher studies
E. Ramesh 12U21R0041	Antimicrobial activity of a synthetic analogue of Azatedione derivative	Value addition and higher studies
K.Sujatha 12U21R0054	Plant Anthocyanins as acid base indicator	Value addition and higher studies

2016-2017

Name of student	Project Title	Contributions/Achievements/Research output
BEST STUDENT SEMINARS (02No's)		
Mondker Sai Priya 13U21R0008	Formulation & Evaluation of Antibacterial Herbal Sanitizer of Terminalia Cattapa	Excellent, value addition, useful for placements
G Shalini Reddy 13U21R0011	TLC of three different extracts of Ananas cosmosis	Excellent, value addition, useful for placements
AVERAGE STUDENT SEMINARS (02 No.'s)		
V.S.Hirani 13U21R0018	New stability indicating RP-HPLC method for simultaneous estimation of rilpivarine and doltugravir by RP-HPLC method	Value addition and higher studies
T Sai Charan 13U21R0024	Formulation & Evaluation of Miconozole microspheres	Value addition and higher studies

2017-2018

Name of student	Project Title	Contributions/Achievements/Research output
BEST STUDENT SEMINARS (02No's)		
Salla Naga Priya 14U21R0002	Pharmacognostic and preliminary phytochemical screening of plant Jatropa curcas leaves	Good
C.Shirisha 14U21R0004	Evaluation of Antiulcer activity of ferula asfoetida on stress induced ulcer models in Rats	Good
AVERAGE STUDENT SEMINARS (02 No.'s)		
D.Navya 14U21R0009	Formulation & Evaluation of Floating tablets of Albendazole	Average
M.Manjunath 14U21R0014	Formulation & Evaluation of Herbal Tooth Paste	Average

8.5 Career Guidance, Training, Placement

(Specify the facility, its management and its effectiveness for carrer guidance including counseling for higher studies, campus placement, support, interaction for training/internship/placement, etc)

Career Guidance:

- Arranging personality development sessions by experts of the college on one side, and on the other by industry.
- Periodic motivational lectures by experts.
- Arrange internships with industry.
- Encouraging students to participate the motivation programs

Training: As per the ordinance of PCI, it is mandatory for the students to undertake industrial training for 4 weeks in a pharmaceutical manufacturing unit. The training helps the students to understand the industrial scale operations and the use of the latest

equipment and instruments. On completion of term, the industry issues a certificate to the students; feedback regarding the institute is also collected.

Placements: In the era of globalization and industrialization, SDIP is committed to create talent among students, which would enable them an easy access to the pharmaceutical industry. Hence,SDI is committed to invite pharma industries, CROs and allied healthcare industries for the campus placements. Through our placement cell, SDIP welcomes all the concerned industries to end their search of talent. SDIP believes that our students would surely bring laurels to your companies. Facilities are available to simultaneously conduct written test for students during Campus Placements.

The broad areas at the training and placement cell:

1. At the time of campus recruitment, it is mandatory for students to be present in the formal dress.
2. For pre-placements talks (PPT), students should be present at least 15 minutes before the scheduled time at the venue.
3. Canvassing with the company personnel may disqualify the candidature.
4. For any queries, students should contact the T&P cell only.
5. The data bank on the student's profiles is maintained by the cell and campus recruitment will be done by the respective T&P. The interested students submit their CV directly to the T&P Cell, which will be used for this purpose.
6. For any queries/problems, the students should first discuss with the T&P cell, if necessary.
7. A nice ambience should be maintained by the students during the Placements/Recruitment programme.
8. Our main focus is to get at least one job to the register student. However the condition of second job will depend upon the situation and the response of the company.
9. Those students who do not wish to participate in any recruitment process, must informed to the T&P office in advance, so as to give opportunity to other students.
10. T&P Co-ordinator has to be present throughout the recruitment process in T&P Office, for smooth conduction of interview.

Impact: The Training and placement cell is committed to provide all possible assistance to its graduates and post-graduates to achieve their career goals. A few efforts were reflected in the placement in a few industries as given below.

S. No	Companies
1	Specialist Diagnostic Services Pvt. Ltd, Hyderabad
2	Evertogen Life Sciences Limited
4	Vigi Medsafe Pvt.Ltd, Hyderabad
5	Asian Institute of Gastroenterology Pvt.Ltd, Hyderabad
6	Apollo Hospital Hyderabad
7	PAREXEL International (India) Private Limited, Hyderabad
9	Concorde drugs private limited, Hyderabad
10	PAREXEL International (India) Private Limited, Hyderabad

Following Table reveals the impact of training and placement cell

Sl.No	Pass out Year	No of students selected for job
		UG
1	2014-2015	10
2	2015-2016	16
3	2016-2017	14
4	2017-2018	11

8.6 Entrepreneurship cell

(Describe the facility, its management and its effectiveness in encouraging entrepreneurship and inclubation)

Entrepreneurship cell and incubation facility:

The Entrepreneurship Development Cell aims to improve and generate a culture of innovation and development of entrepreneurial spirit amongst the students and budding entrepreneurs and start their own enterprise. It also attempts to train and equip them with the knowledge and resources they need to build a successful business.

FACILITY:

The Entrepreneurship Cell is attached with the training & placement cell. All the members of the training and placement cells are available throughout the day for the students to help them regarding starting up their own business venture. The activities are not just limited to the current students but even the alumni are encouraged to take benefits of the services offered by the cell.

TRAINING:

The students are exposed to different seminars, workshops and interactive sessions to make them a perfect entrepreneur.

Awareness programs are organized to develop entrepreneurship skills in students and also to familiarize them with various procedures required in converting an idea into a successful business.

Sl.No	Date	Type of program	Name of the speaker	No of participants
1	16/11/2016	Awareness	Mr.Pratap Reddy	38
2	07/03/2017	Awareness	Mr.Sunil Kumar	42
3	11/08/2018	Awareness	Mr.Aiyappa Senthil	45

Successful Entrepreneurs:

Sl.No	Student Name	Pharmacy
1	K.Chandrashekar Reddy	Saraswati medicals
2	S.Ravali Reddy	Decent Medical Hall
3	Akhila	Srinivasa Medicals
4	Prem Prakash	Govind Pharmacy

8.7 Cocurricular and Extracurricular Activities

(Specify the co-curricular and extra-curricular activites)

Our instutution lays stress on beyond academic activities through structured co- and extra-curricular activities integrated and spread over the entire academic year, as they have profound impact in shaping up the overall personality of a student

a) All activities are pre-planned and included in the college diary.
b) All activities are executed by the students with assistance from faculty when needed.

Co-curricular activities

a) Paper publication: Students are encouraged to publish papers of mini projects as well as review articles.

b) Poster presentation: Students as well as faculty are allowed for presenting the papers in national conferences such as IPC and APTI and international conferences and even JNTUH.

Conferences / seminars attended by students

National pharmacy week: The faculty and students are regularly participating in National Pharmacy Week celebrations, under the banners of IPA, APTI.

- Generating widespread awareness/educate the public about the pharmacist and the pharmacy profession and its vital role in society.
- Creating awareness amongst various authorities and do advocacy on various fronts, so as to highlight the important role of the pharmacist in health care and well being of the people.
- Ensuring that the pharmacist is given his due role in India's health care system – Both private and public.
- Interacting with other health care professionals and highlight the importance and role of the pharmacist in the health care system, and move towards better coordination and working together.
- Enhancing the image of pharmacists as the medication experts and an integral part of the health care team, not just dispensers of medication.
- Pharmacist day: 25-09-2015:

Extra-curricular activities:

a) Games: The College has teams in all major games and sports. The teams participate in inter university and state level tournaments and won the prizes. Our institution has been regularly winning the local tournaments.

SDIP sports day: The College conducted sports day in connection to annual day-celebration. The list of events and students who secured the prizes is given below.

2016-2017

Event	Winners	Runners
Throw Ball (Girls)	Akhila Prapulla Manisha Neha Sahithi	Kavya Aishwarya Godhavari Navika Srilekha
Basket Ball(Girls)	Sarala Navya Asra Swathi Ravali	Pavani Shruti Sowmya Prakruthi Bhargavi

Cricket(Boys)	Tarun Akshay Rahul Nitin Shekhar Ramulu Saikiran Tosif Naveen	Arun Naresh Anand Krishna Saidam Rakesh Srikanth Karthik Nagarjun
Basket ball(boys)	Arun Tosif Krishna Srinivas Suresh	Ganesh Nazeer Ravinder Chanakya Charan teja

2017-18

Event	Winners	Runners
Throw Ball (Girls)	Tummala Sindhu Nikhila Sarala Geetanjali Jyothirmayee	Rani Lavanya Sravya Ashritha Akhila
Basket Ball(Girls)	K. Divya T L N Neha Mannem Sravani Asra Fathima	Sneha Nida Simreen Madhavi Heena
Cricket(Boys)	Mohit Prabhir Akshay Rakesh Shadgun Kokil Shekar Yadgiri Chanakya	Yogesh Mahesh Ragya Naresh Ganesh Mallesh Vikas Sudhakar Venkatramana

Basket ball(boys)	Mallesh Vikas Sudhakar Ganesh Nitin	Srikanth Suresh Kokil Praveen Prem Prakash

(b)Cultural Activities: The College has been conducting cultural competitions every year on Traditional day through the following bodies.

The college conducted cultural events in connection to annual day-celebration. Rangoli, essay writing, elocution, singing and dancing competitions are conducted. The list of events and students who secured the prizes is given below.

2016-17

Event	1st Prize	2nd Prize
Rangoli	Neha Moulika	Akhila Pavani
Essay writing	Neha	Ashritha
Elocution	Kavya	PremPrakash
Singing	Varshitha	Manasa
Dancing(Solo)	Pravallika Priya	Moulika
Dancing(group)	Srilekha Swathi Mounika	Akshay Naresh Venkatesh

2017-18

Event	1st Prize	2nd Prize
Rangoli	Shalini Bhavana	Kavya Sravani
Essay writing	Ganesh	Shadgun
Elocution	Akshay	Mohit
Singing	Ashritha	Shena
Dancing(Solo)	Sahithi	Naresh
Dancing(group)	Asra Naresh Divya Sneha	Vikas Mallesh Srikanth

Alumni Day: Held in the month of April every year. Institute of Pharmacy Alumni Association was formed and the following members constitute the association

The composition of the Association:

1. G. Panduranga Reddy
2. G.N.V. Vibhav Reddy
3. Dr. M. Venkata Reddy
4. Prof. M. Sameeruddin khan
5. Dr. S.A. Sreenivas

1. Institute Alumni Association meeting will be held annually in the month of april
2. The students were allowed to speak in a free-environment to share their thoughts.
3. Alumni shared their past thoughts with the gathering and also expressed their views, such as conducting workshops, conferences, cultural programs, etc,, in the college.
4. The new developments in the college were regularly updated through social network (SDIP website, Facebook, etc.,).
5. The alumni are directed to fill Alumni survey forms, exit survey forms, etc., for the purpose of inspection (NBA, AICTE, JNTUH etc.).

Alumni meeting schedules: Once in year

c) NSS Activities: SDIP-NSS activities make students to be socially conscious through promoting. NSS functions effectively by conducting tree planting campaigns and blood donation camps. First Aid awareness programmes and AIDS awareness programmes are also organized. Engaging in social activity to bridge the gap between the fortunate and the less fortunate through empowerment is the main focus of NSS activity. NSS provides an excellent opportunity to the students who desire to serve the community and to develop interpersonal relationships and skills. The students of SDIP associates with SDES College in the campus in such activities.

The various activities include;

- Plantation of Trees
- Road safety Awareness program

Social Awareness campaign

- Legal literacy programme

Guest Lecture on Personality Development & Leadership

Events organized/Participated

- Conducted essay, drawing, elocution competition
- Participation of essay competition.
- Participated Inter college cultural meet
- Attending fire safety training program

d) **Blood Donation Camp:** Institute is regularly conducting blood donation camps.

CRITERION 9	Governance, Institutional Support and Financial Resources	100

9. Governance, Institutional Support and Financial Resources (100)

9.1 Organization, Governance and Transparency (50)

9.1.1. Governing body, administrative setup, functions of various bodies, service rules procedures, recruitment and promotional policies (10)

List the governing, senate, and all other academic and administrative bodies; their memberships, functions, and responsibilities; frequency of the meetings; and attendance therein. A few sample minutes of the meetings and action-taken reports should be annexed.
The published rules, policies and procedures; year of publication and its implementation shall be listed. Also state the extent of awareness among the employees/students.
The following aspects are dealt and recorded below under different headings, for governance and transparency.

A) Governing Body
B) Institutional development and monitoring committee (IDMC)
C) Organizational chart
D) Rules, procedures, recruitment and promotional policies

The details are as follows

A. Governing Body

The following is the composition of the Governing Body of SDIP:

Sl. No.	Name of the Member	Designation	Category
1	Sri G. Pandu Ranga Reddy	Chairman	Society Nominee
2	Sri G.N.V. Vibhav Reddy	Member Secretary	Society Nominee
3	Sri G. Devendra Vikram Reddy	Treasurer	Society Nominee
4	Sri Y. Sreenivasa Murthy	Member	Society Nominee
5	Sri T.S. Anand	Member	Society Nominee
6	AICTE Regional Officer – SCR	Member	AICTE Nominee
7	Deputy Director Commissioner of Technical Education	Member	State Government Nominee
8	Dr. Satla Shobha Rani	Member	University Nominee
9	Prof. Sameeruddin Khan	Member	Director of SDI Campus
10	Dr. M. Venkata Reddy	Member	Director of Institution
11	Dr. S.A. Sreenivas	Member	Principal of Institution
12	Dr. Pratap Kumar Patra	Member	Professor

Powers and Functions of the Governing Body:

The Governing Body, besides being the supreme administrative authority of the college, shall have the following additional functions:

i. To monitor the academic and other related activities of the college.
ii. To consider the recommendations of the staff selection committee.

iii. To consider the important communications, policy decisions received from the University, Government, AICTE, PCI etc.
iv. To monitor the development programmes of students and faculty.
v. To make recommendations on the planning and monitoring the college.
vi. Fixation of the fee and other charges that are payable by the students to the college based on the recommendations of the AICTE, PCI, Govt. of Telangana, University.
vii. Institute scholarships, fellowships, studentships, medals, prizes and certificates based on the recommendations of the Institutional Development and Monitoring Committee (IDMC).
viii. Approve the institution's new programmes of study leading to the award of Degrees based on the recommendations of the IDMC.
ix. Perform such other as may be necessary and deemed fit for the proper development and fulfill the objectives of the college.
x. To pass the annual budget of the college.
xi. To check the audited income and expenditure accounts and approve the same of the college annually.

Sample minutes of the meetings and action taken reports:
Mentioned as Annexure – III

Scheduled Meetings of the Body:

2015-16	2016-17	2017-18	2018-19
10.10.2015	03.12.2016	14.09.2017	21.07.2018
15.06.2016	04.03.2017	10.02.2018	-

B. The Institutional Development and Monitoring Committee (IDMC):

The following is the Composition of the IDMC of SDIP for the year 2016- 2017.

Sl. No.	Name of the Faculty	Nature
1	Dr. S. A. Sreenivas	Chairman
2	Dr. Pratap Kumar Patra	Member, Pharm. Chemistry
3	Dr. K. S. Nagesh	Member, Pharmacology
4	Dr. V. Sivajothi	Member, Pharm. Analysis
5	Ms. Rupali Gawande	Member, Pharmacognosy

Powers and Functions of the Institutional Development and Monitoring Committee (IDMC):

The IDMC shall be the principal academic body of the institute and shall, in addition to all other powers and duties vested in it, have the following powers and duties.

i. To exercise general supervision over the academic work of the institute and to give directions regarding methods of instructions, evaluation, research or improvements in academic standards.
ii. To consider matters of academic interest either on its own initiative or at the instance of the Governing Body and to take proper action thereon.
iii. To make arrangements for the conduct of examinations in conformity with the laws of affiliated University.
iv. To promote research within the institute, acquire reports on such research activities from time to time.
v. To monitor the academic activities as per the academic calendar given by affiliated university.
vi. To make recommendations to the board of management on:
   a) Measures for improvement of standards of teaching, training and research.
   b) Institution of fellowships, travelling fellowships, scholarships, medals, prizes, etc.

c) Establishment or abolition of departments/centers and on bye-laws covering the academic functioning of the institute, discipline, admissions, examinations, award of fellowships, studentships, concessions, attendance, etc.

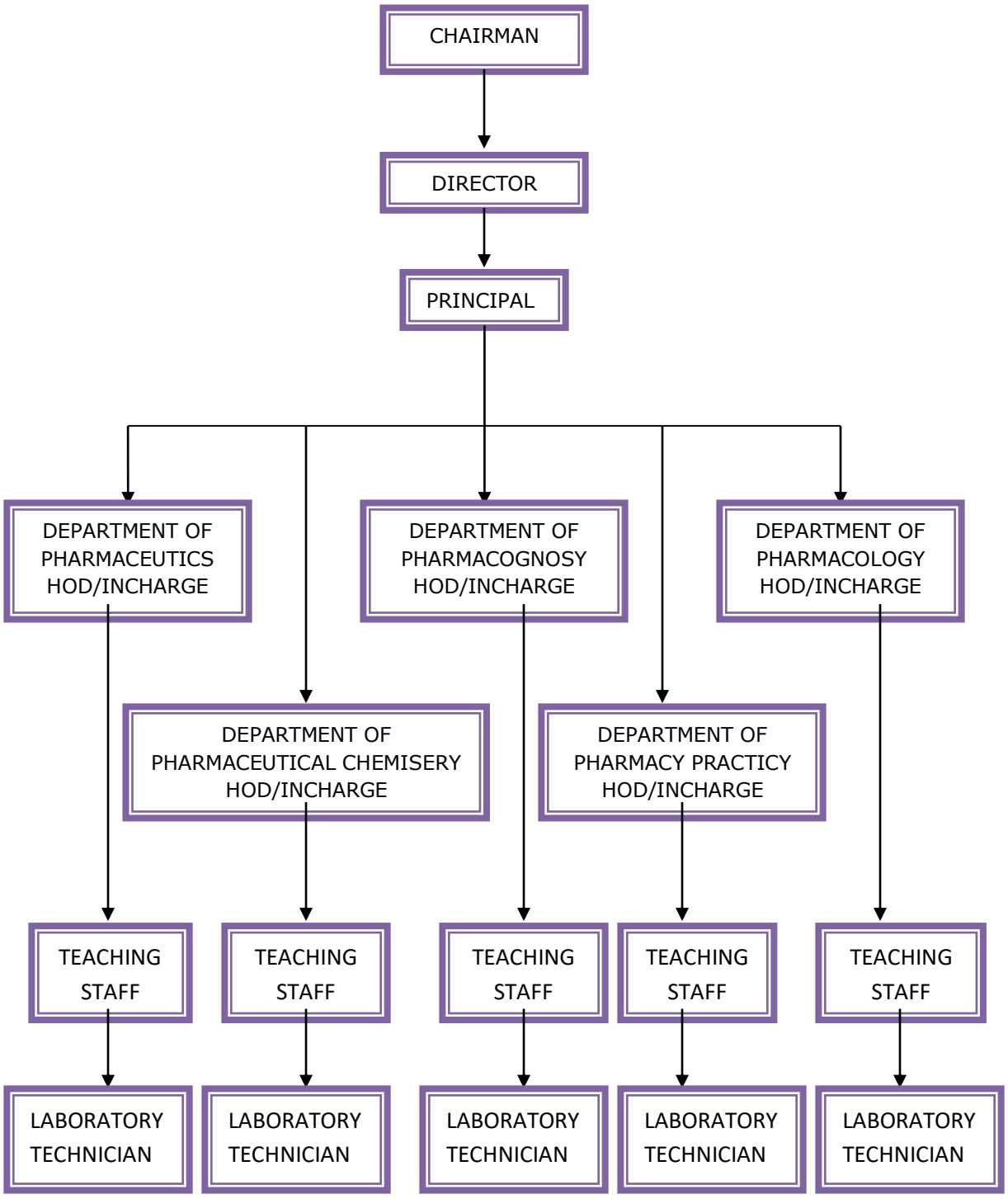
vii. To recommend institution of teaching posts of professors, associate professors and assistant professors to the Governing Body of the college.

Scheduled Meetings of the committee

The following meetings are in addition to Institutional Development and Monitoring Committee (IDMC) meetings and deliberation.

Sl. No.	**Dates of Meeting**			
	2015-16	**2016-17**	**2017-18**	**2018-19**
1	05.06.2015	01.06.2016	12.06.2017	16.06.2018
2	09.08.2015	02.08.2016	23.08.2017	25.08.2018
3	05.01.2016	03.01.2017	06.01.2018	---
4	21.03.2016	18.03.2017	17.03.2018	---

C. The organization chart of the Institution



D. Defined rules, procedures, recruitment, and promotional policies, etc.

Following acts and rules are adopted as guidelines for procedures, recruitment, promotional policies, code of conduct issued from time to time by the regulatory bodies:

- AICTE Norms
- Guideline issued by the affiliated University, Hyderabad
- All other applicable state/central government rules/regulations
- Rules and By-laws of Society
- Norms of Pharmacy Council of India, New Delhi

i) Recruitment for Teaching Staff

Cadre Structure

(a) Director/Principal

(c) Professor

(d) Associate Professor

(e) Assistant Professors

Qualifications

Faculty is recruited based on the requirement and qualifications as prescribed by the AICTE, PCI and Jawaharlal Nehru Technological University, Hyderabad from time to time.

Mode of Selection of Teaching Staff

Direct recruitment to all cadres is based strictly on merit. Invariably in almost all cases, the following procedure is followed:

- Advertisement issued in leading newspapers and also mentioned in the college website.
- Applications are scrutinized four days prior to the interview date and short listed candidates are called for the interview.
- On the day of interview, all the credentials are verified along with demo by the University Staff Selection Committee and the qualifying candidates are recommended by the Committee for recruitment.
- Offer letter or Appointment Order, as applicable, are issued only to those candidates who are recommended by University Staff Selection Committee.

Sometimes, depending on emergency/exigencies of the situation, adhoc appointments are made on temporary basis for specified periods, subject to approval of pending of staff.

Composition of University Selection Committee

1. Secretary/ Chairman of the Society
2. Director
3. Principal
4. Head of the Department
5. Two Subject Experts
6. Two University Nominees
7. One Nominee – SC/ST/Minority/OBC/PHC

ii) Recruitment for Non-Teaching Staff

Non-teaching staff are recruited based on the qualifications prescribed by the State Government.

Mode of Selection of Non – Teaching Staff

All positions are advertised in the news papers or notified in the local notice boards. After scrutiny of received applications, shortlisted candidates are called for the interview and recruited after verifying all original credentials and experience certificates. All recommended applicants (Non-teaching staff) made after selection, are forwarded to Chairman/Secretary for appointment.

iii) Promotion Policy for Teaching Staff

The promotion policy is well defined and made aware among the teaching faculty as Career Advancement Scheme. This is implemented strictly in accordance with AICTE, PCI, Affiliated University, and Government Rules. At the time of joining, through departmental meetings and periodic notices, awareness of rules and procedures is maintained.

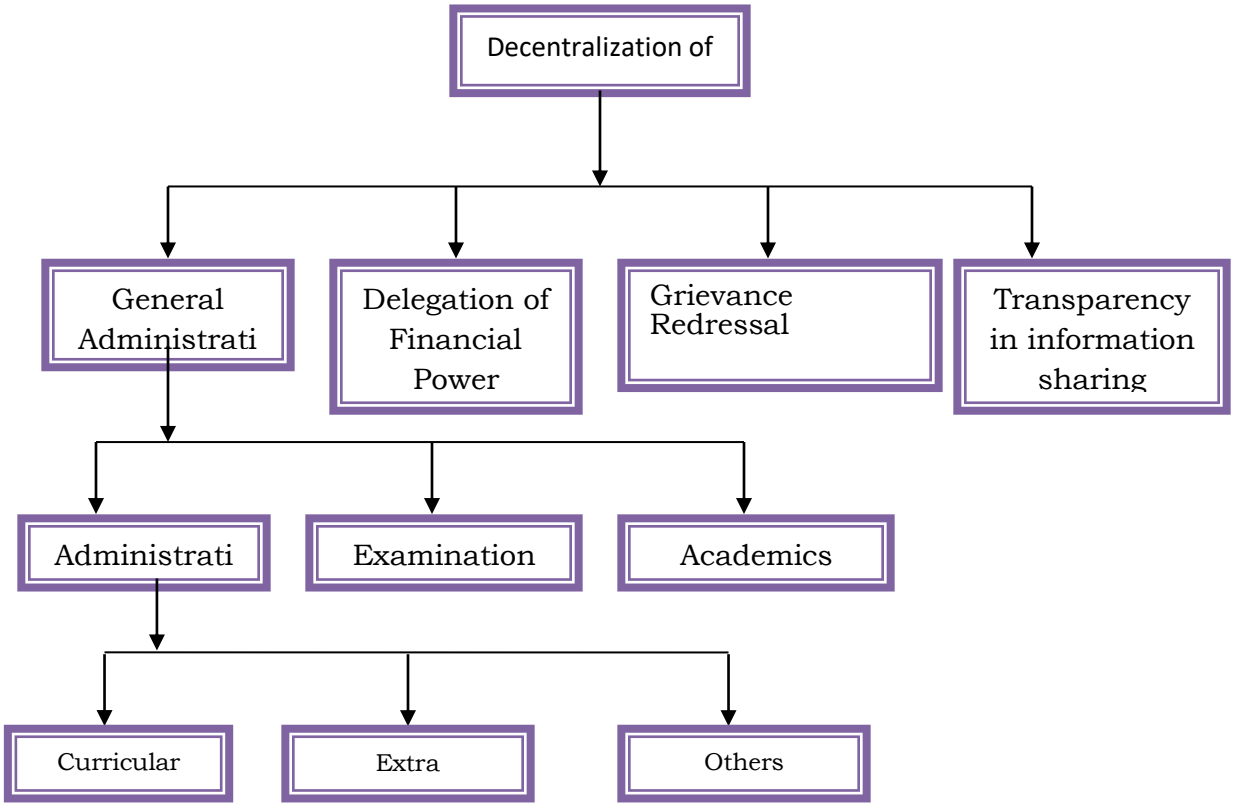
iv) Promotion Policy for Non-Teaching Staff

Time bound promotions given to Non-Teaching Staff. Promotion to higher post through selection procedure.

9.1.2. Decentralisation in working and grievance redressal mechanism (15)

List the names of the faculty members who are administrators/decision makers for various responsibilities. Specify the mechanism and composition of grievance redressal cell.

Decentralization chart



a) Administration

- Principal is assisted by an administrative officer, who is assisted by office assistants looking after correspondence, admissions, HR, scholarships etc.
- Finance is looked after by accountant.
- Administrative officer (management) looks after all the support services and maintenance.

Sl. No.	Administration	Composition
Curricular		
1	B.Pharm. (Academics & Discipline)	Dr. Pratap Kumar Patra Ms. Mary Ratna Anitha
2	Class Time Tables	Mr. D. Vishwanath Ms. A Niharika
3	Library	Mr. G. Abhilash
4	Chemicals and Glassware	Mr. Shaik Muneeruddin Ms. N. Adilakshmi
5	Research Committee	Dr. S. A. Sreenivas Dr. K. S. Nagesh Dr. V. Sivajothi
Co-curricular		
6	Cultural Committee	Ms. K. Janaki Ms. Rupali Gawandel Ms. B. Mamatha
7	Sports Committee	Mr. K. Kiran Ms. Mudi Kiran Ms. P. Deepika Reddy
Others		
8	Training & Placement Committee	Dr. S. A. Sreenivas Ms. Mary Ratna Anitha Mr. D. Vishwanath
9	Alumni Committee	Ms. K. Kavita Ms. V. Jhansi Laxmi

b) Examinations

Examinations are an important factor for assessment of the progress of the learning.

- All the examination matters are dealt by Controller of Examinations, JNTU, Hyderabad.
- Mid examinations are conducted by examinations cell with the help and assistance of class teachers.

Sl. No.	Name of the Faculty	Designation
1	Dr. S. A. Sreenivas	Chief Superintendent (Principal)
2	Mr. K. Kiran	Exam Branch In-charge (Teaching faculty)
3	Mr. R. Sukesh	Exam Branch In-charge (Non-Teaching faculty)

Though all teachers are involved in the examinations, the class teachers assist in compilation of marks, attendance etc.

c) Grievance Redressal Committee

All grievances of staff and students are redressed expeditiously by the committee. Any grievances reported verbally or written are appropriately dealt by the committee.

The grievance redressal committee also identifies the nature of complaint and forward the complaint to any of the following committee for its appropriate action:

i) Anti-Ragging committee

ii) Anti-Sexual harassment cell

iii) Women's development cell

i) Anti-Ragging committee

The committee involves in creating awareness among students and parents. The guidelines, rules, regulations, preventive measures given by AICTE, PCI, University, and Government are strictly followed to curb the menace and at-most care is taken to make the complete campus Ragging free zone.

Composition of **Anti-Ragging committee:**

Composition of the committee:

Sl. No.	Name of the faculty	Designation
1	Dr. S. A. Sreenivas	Chair Person
2	Dr. V. Sivajothi	Faculty
3	Mrs. G. Swathi	Faculty
4	Mrs. Y. Sreelatha	Faculty
5	Mr. M. Praveen Kumar	Faculty
6	All Class Representatives	

As per the regulatory bodies guidelines, the college follow the following procedures:

1. A pledge is administered to the students by the principal/ class incharge.
2. The students submit the affidavit to the college as per the format.
3. An undertaking from the students and parents.
4. An undertaking from the employees.

The salient features of the Prohibition of Ragging Act, 1997, are displayed in the college premises at prominent places.

ii) Anti-Sexual Harassment Committee:

The college has constituted a committee as per the directions of Honorable Supreme Court of India and is known as 'Anti-Sexual Harassment Committee'. The committee conducts meeting once in two months or on the basis of the complaints received.

Composition of the committee:

Sl. No.	Name of the faculty	Designation
1	Ms. Mary Ratna Anitha	Chair Person
2	Ms. P. Naga Chandrika	Faculty
3	Ms. Rupali G	Faculty
4	Ms. Kalpana Goud	Faculty
5	All Class Representatives	

With regard to the Supreme Court Judgment and guidelines issued in 1997 to provide for the effective enforcement of the basic human right of gender equality and guarantee against sexual harassment and abuse, more particularly against harassment at work places. The University Grants Commission (UGC) has issued circulars since 1998 to all the universities, advising them to establish a permanent cell and a committee and to develop guidelines to combat sexual harassment, violence against women and ragging at the universities and colleges. It has further advised the universities to be proactive and they are treated with. Keeping the above guidelines in view, Institute has constituted a committee against sexual harassment.

The sexual harassment includes the

1. Physical contact and advances.
2. A demand or request for sexual favors.
3. Sexually colored remarks.
4. Showing pornography.
5. Any other unwelcome physical, verbal or non-verbal conduct of sexual nature.

Where any of these acts committed in circumstances where-under the victim of such conduct has a reasonable apprehension that in relation to the victim's employment or work, whether drawing salary, or honorarium or voluntary, whether in government, public or private enterprise, such conduct can be humiliating and is punishable.

Role of the committee:

1. The committee shall decide whether the facts contained in the complaint make out a case of "sexual harassment" in light of the definition contained in the policy.
2. The committee shall recommend the penalties/action to be taken against any person found guilty of having sexually harassed the complainant, up to and including termination, from of job.
3. The committee shall recommend the penalties/action to be taken against any person found guilty of having retaliated against/victimized the complainant or any other person assisting her as a result of such complaint having been made or such assistance having been offered.
4. The committee shall monitor the follow-up action to be taken by the

Organization on receipt of the report of committee.

Preventive steps: All employers or persons in-charge of work place, whether in public or private sector, should take appropriate steps to prevent sexual harassment. Without prejudice to the generality of this obligation, they should take the several steps as per the Act.

iii)Women's Development Cell

The activity of women's development cell addresses the problems of women employees and attempt to empower women. The Women's Development Cell purports to conduct activities for the students, teachers and administrators/supporting staff of the college.

Role of the Cell:

- Create awareness on equal opportunity for women that will ultimately lead to improved attitude and behavior.
- Bring about attitudinal and behavioral change in adolescent youth of the female gender.
- Provide a harassment free working atmosphere, by identifying and fixing responsibility on the concerned persons for ensuring equal treatment of and participation by women in all areas.
- Deal appropriately with reported cases of sexual harassment, abuse or discrimination and initiate action against particular grievances in respect of unfair treatment due to gender bias.

Composition of the committee:

Sl. No.	Name of the faculty	Designation
1	Ms. P. Naga Chandrika	Chair Person
2	Ms. Y. Srilatha	Faculty
3	Ms. V. Jhansi laxmi	Faculty
4	Ms. Kalpana Goud	Faculty

9.1.3. Delegation of financial powers (15)

Principal: The principal has the financial powers to spend up to Rs 5,000/- keeping in view of the urgency and needs maintained. This expense might include:

- To permit the reimbursement of travelling (conferences and workshops) and other expenses for official purposes.
- To take care of guests, parents, alumni and stakeholders.
- To sponsor faculty/staff for any academic activities as per norms.
- To authorize any other expenses, he may deem essential.

Staff member: Each staff member handling laboratory work has the financial powers to spend up to Rs 1,000/-, keeping in view of the laboratory needs for conducting experiments (medicines, oils, commodities of domestic market). All such financial decisions are exercised in consultation with the Principal and Secretary.

9.1.4. Transparency and availability of correct/unambiguous information (10)

Information on the policies, rules and processes is made available on website.

- The students joining SDIP are informed about the rules, regulations and procedures at college during orientation program. The same are available in the society manual.
- Periodic reminders are done through circulars and ertain notices are displayed in the notice boards.
- All information relevant or needed by all stakeholders is available in web. Periodic communications are sent to parents/guardians.
- SMS communications are sent to the parents regarding absenteeism, mid marks, monthly attendance, examination absenteeism, etc.

- At the time of joining new staff, personal information qualifications, professional skills and experience are collected and used for strengthening the course and the college. The data of all staff are periodically updated and uploaded in the college website.
- The administrative rules and regulations covering all cadre of staff employed are mentioned in the manual. The employees are given uniform consideration. Transparency is maintained relating to rules followed which include general administration, service conditions, duties, promotion policies, increments, awards and also disciplinary action.
- The programme syllabus book and academic calendars are available in the library which provides transparency in implementing academic plans and current regulations, courses, marks, attendance, examination, etc.
- Recruitment and interview of all staff is done by issuing advertisements and following the regulations of University, AICTE and PCI. Thus reference points are made clear to the staff.
- Communications are displayed in the notice boards. Several boards are available for each department, placement, training, library, etc.

In total, the administration and staff are available to open the communication with students, employers (for placement) etc. To a largest extent, paper work and communications are few and technology (SMS) is employed.

9.2. Budget Allocation, Utilisation, and Public Accounting at Institute level (30)

Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years.

Total Income at Institute level: For CFY, CFYm1, CFYm2 & CFYm3

CFY: Current Financial Year, CFYm1: Current Financial Year minus 1, CFYm2:

Current Financial Year minus 2, CFYm3: Current Financial Year minus 3

Budget allocation and utilization: The details of budget allocation in terms of income earned and expenditure incurred for the last four consequent previous years are given below:

Total Income				**Actual Expenditure (till…):**			**Total No. of students:**
Fee	**Govt.**	**Grant(s)**	**Other sources (Specify)**	**Recurring Including salaries**	**Non recurring**	**Special Projects/ Any other specify**	**Expenditure per student**
For CFY (2018-2019) Under Preparation							
For CFYm1 (2017-2018)							
57580000			588170	30186138	27982032		61280
For CFYm2 (2016-2017)							
48929100			1528647	26300938	24156809		58260
For CFYm3 (2015-2016)							
42585434			8275086	23726909	27133611		57185

Budget expenditure: The details of expenditure into various heads for the last 4 years

Item	Amount in Rupees							
	Budgeted in CFY (2018-19)	Actual Expenses in CFY (till...)	Budgeted in CFYm1 (2017-18)	Expenses in CFYm1 (2017-18)	Budgeted in CFYm2 (2016-17)	Expenses in CFYm2 (2016-17)	Budgeted in CFYm3 (2015-16)	Expenses in CFYm3 (2015-16)
Infrastructural built-up	**Under Preparation**		500000	421086	900000	851805	1200000	1096224
Library			550000	570653	500000	520682	500000	505007
Laboratory Equipment			600000	625478	550000	568524	500000	521364
Laboratory consumables			250000	260520	275000	267785	250000	259651
Teaching and Non-Teaching staff salary			29000000	30186138	26000000	26300938	23000000	23726909
Maintenance an spares			700000	773207	600000	687412	500000	617524
R & D			600000	683935	550000	624434	500000	613445
Training and Travel			400000	384962	350000	349709	300000	324136
Miscellaneous expenses*			600000	591669	550000	565139	500000	559234

Item	Amount in Rupees							
	Budget in CFY (2018-19)	Expenses in CFY (till...)	Budgeted in CFYm1 (2017-18)	Expenses in CFYm1 (2017-18)	Budgeted in CFYm2 (2016-17)	Expenses in CFYm2 (2016-17)	Budgeted in CFYm3 (2015-16)	Expenses in CFYm3 (2015-16)
Others, specify								
Fees and License	**Under Preparation**		500000	525563	500000	525563	500000	524136
Electricity			300000	254969	300000	229133	300000	236808
Housekeeping charges			400000	445688	400000	404584	400000	403558
Internet charges			750000	694380	750000	690240	750000	608045
Others			---	21749922	---	17871799	---	20064479
Total			---	58168170	---	50457747	---	50860520

The major areas are salaries, training and travel research, consumables, fee and licenses, housekeeping maintenance, etc.

Accounting: The accounting of the income and expenditure of the college is handled by two accountant staff. Further a system of internal auditing is arranged as well as engaging the auditor, not associated with the organization, This is a process of accounting is once in every 3 months and compiling for the financial year.

9.2.1. Adequacy of budget allocation (10)

Justify that the budget allocated over the years was adequate.

Institute follows the process of distributing the available financial resources in a manner consistent with our institute's vision, mission, long-term goals, which are transparent to stakeholders. The allocation model is updated annually. Keeping in view of the fact that no budgeting process is perfect and that ideally there would be more funds to allocate, the goals of the process are to:

- recognise the importance of staff to long term success.
- encourage areas to focus on outputs directly related to the strategic plan.
- improve institutional and support facilities to make the learning an environment of vibrate the development.
- increase research and development

The college allocates the available resources based on the forecasted requirements, keeping the curricular and beyond curricular activities, R & D, library, transport, and maintenance in mind. It is the responsibility of institutional development and monitoring committee (IDMC) to ensure that the allocated resources are spent as per their forecasted plans. The emphasis is to increase quality of academic inputs delivered and positively contribute to the institute, in terms of development of new technologies, methods and practices.

9.2.2. Utilisation of allocated funds (15)

State how the budget was utilized during the last three years.

The respective academic and supportive units are informed on allocation of funds under various heads. The guidelines towards making purchase of laboratory equipment, programs conducting, training activities and other miscellaneous.

The institutional development and monitoring committee (IDMC) decides the utilization for the financial year's allocated funds in consultation with the concerned experts including Principal. The utilization is made as per the plans and projections. The priorities are identified. Emphasis is made on increasing the quality of academic inputs that positively contribute to the development. The following is the purchase procedures.

Purchases are done up to the level of allocated funds, however, under some special priority considerations, the purchases can go beyond the allocated funds which will be later ratified by the Governing Body. Delegation of financial powers is promoted to keep the autonomy of the college and to reduce time delays.

Every effort is made for providing the best and updated infra-structural facilities to students and staff. Optimum utilization of this attitude and policy of the management by utilizing the funds in the

lines of the mission statement and objectives Regular auditing and inventory checks (in-house) keep the mechanism free from over or unjust spending.

9.2.3. Availability of the audited statements on the institute's website (5)

Needs to make audited statements available on its website.

Yes, the audited statements are available on SDIP website www.sreedattha.ac.in

9.3. Library and Internet (20)

It is assumed that zero deficiency report was received by the Institution, Effective availability and utilization to be demonstrated.

Library space and ambience, timings and usage, availability of a qualified librarian and other staff, library automation, online access, networking, etc

- Carpet area of library (in m^2) 300 SqM
- Reading space (in m^2) 270 sqm
- Number of seats in reading space 120
- Number of users (issue book) per day 50
- Number of users (reading space) per day : 75
- Timings:
  - During working day **9 am to 5 pm**
  - Weekend, **9 am to 5 pm**
  - Vacation **9 am to 5 pm**

- Number of library staff **02**
- Number of library staff with degree in Library **01**
- Management Computerization for search,
- indexing, issue/return records, bar coding used **Yes**
- Library services on Internet/Intranet **Yes**
- INDEST or other similar membership **BENTHAM, Yes**

9.3.1. Quality of learning resources (hard / soft) (10)

- **Relevance of available resources including e-resources**

Titles and Volumes per title

Number of titles 1295
Number of Volumes 9492

Year	No. of New Titles added	No. of New Volumes added
CFYm2	35	252
CFYm1	267	769
CFY	4	66

E-Jouranls: BENTHAM

List of Library Journals (Hard Copy)

S.No	Name of the Journal
1	Indian Journal of Pharmaceutical Sciences
2	Indian Drugs
3	Pharma Times
4	The Pharma Review
5	Indian Journal of Chemistry Sec - A
6	Indian Journal of Chemistry Sec - B
7	Indian Journal of Heterocyclic Chemistry
8	Indian Journal of Pharmacology
9	Indian Journal of Experimental Biology
10	Indian Journal of Pharmacy Practice
11	Journal of Hospital Pharmacy
12	Medicinal and Aromatic Plants Abstracts
13	Indian Journal of Natural products and Resources
14	Indian Journal of Traditional Knowledge
15	Indian Journal of Pharmaceutical Education and Research
16	Indian Journal of Medical Research
17	Current Science
18	Journal of Biosciences
19	Journal of Genetics
20	Indian Journal of Hospital Pharmacy

- **Accessibility to students (Digital Library and Accessibility)**

- Availability of digital library contents:
- If available, then mention Yes YES
- Number of courses 04
- Number of e- books 265
- Availability of an exclusive server Yes
- Availability over Intranet/Internet Yes
- Availability of exclusive space/room Yes
- Number of users per day 10

Each students is given book bank, *i.e.,* a set of 5 books, one for each subject. By rotation, each student get books of all subjects in each semester. In addition, 2 books are issued for a period of ten days. Further when the books are revised, the revised editions are also procured and made available to the students.

9.3.2. Internet (10)

- Name of the Internet provider – Apollo Online Service Pvt. Ltd., Hyderabad
- Available bandwidth – 100mbps
- Wi Fi availability - Yes
- Internet access in labs, classrooms, library and other offices – Yes
- Security arrangements - Yes

ANNEXURE I: PROGRAM OUTCOMES

1. **Pharmacy Knowledge:** Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.
2. **Planning Abilities:** Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.
3. **Problem analysis:** Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.
4. **Modern tool usage:** Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.
5. **Leadership skills:** Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.
6. **Professional Identity:** Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).
7. **Pharmaceutical Ethics:** Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.
8. **Communication:** Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.
9. **The Pharmacist and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.
10. **Environment and sustainability:** Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
11. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.

Annexure-II
For 2018-2019
For B Pharmacy

Name of Faculty Member	Qualification			Association with the Institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. S. A. Sreenivas	Ph.D.	Kuvempu University	2010	Full time	Principal & Professor	01/07/2015	Pharmacy	Pharmaceutics	4	1	-	-	1
Dr. V. Sivajothi	Ph.D.	Annamalai University	2008	Full time	Professor	07/05/2014	Pharmacy	Pharmaceutical Chemistry	2	-	-	-	-
Dr. K. S. Nagesh	Ph.D.	NIMHANS Karnataka	2009	Full time	Professor	02/11/2014	Pharmacy	Pharmacology	-	-	-	-	-
Dr. Pratap Kumar Patra	Ph.D.	Berhampur University	2016	Full time	Associate Professor	03/12/2012	Pharmacy	Pharmaceutical Chemistry	1	-	-	-	-
Dr Ravi Shankar	Ph.D.	JNTUA	2014	Full time	Associate Professor	12/04/2014	Pharmacy	Pharmaceutics					
Dr Sattanathan	Ph.D.	Annamali University	2012	Full time	Associate Professor	21/02/2014	Pharmacy	Pharmacy practice					
Mrs. Mary Ratna Anitha	M Pharm	JNTUH	2009	Full time	Assistant Professor	01/07/2014	Pharmacy	Pharm. Biotechnology	-	-	-	-	-
Mr. V. Pradeep Kumar	M Pharm	JNTUH	2015	Full time	Assistant Professor	09/06/2015	Pharmacy	PAQA	-	-	-	-	-
Mrs Pamukuntla Deepika	M Pharm	JNTUH	2013	Full time	Assistant Professor	09/06/2015	Pharmacy	pharmacology	-	-	-	-	-
Mrs. Rupali Gawande	M Pharm	Bharati Vidyapeeth University	2009	Full time	Assistant Professor	09/06/2014	Pharmacy	Pharmacognosy	1	-	-	-	-
Mr. Parag	M Pharm	Nagpur Universit	2010	Full Tim	Assistant Professor	28/07/2015	Pharmacy	Quality Assura	-	-	-	-	-

Kale		y		e				nce					
Mr. B. Gnaneshwar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/12/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Bangaru Mamatha	M Pharm	OU	2015	Full time	Assistant Professor	01/12/2015	Pharmacy	Pharmacology	-	-	-	-	-
Ms. Shital Dange	M Pharm	SRTMU	2014	Full time	Assistant Professor	11/09/2015	Pharmacy	Quality Assurance	2	-	-	-	-
Ms. Gundeboina Swathi	M Pharm	JNTUH	2011	Full time	Assistant Professor	11/09/2015	Pharmacy	PAQA	-	-	-	-	-
Ms. K Janaki	M Pharm	JNTUH	2015	Full time	Assistant Professor	17/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Akula Niharika	M Pharm	OU	2013	Full time	Assistant Professor	01/03/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. K Kiran	M Pharm	JNTUH	2015	Full time	Assistant Professor	04/05/2015	Pharmacy	Industrial Pharmacy	-	-	-	-	-
Ms. Mangarai Kavitha	M Pharm	OU	2015	Full time	Assistant Professor	17/07/2016	Pharmacy	Pharmaceutical chemistry	1	-	-	-	-
Mr. Mathangi Praveen Kumar	M.Pharm	OU	2015	Full time	Assistant Professor	06/06/2015	Pharmacy	PAQA	-	-	-	-	-
Mr. Suvanpuram Rajshekar	M Pharm	JNTUH	2016	Full time	Assistant Professor	17/07/2016	Pharmacy	PAQA	-	-	-	-	-
Mr. G Abhilash	M Pharm	JNTUH	2014	Full time	Assistant Professor	11/10/2014	Pharmacy	Pharmacology	-	-	-	-	-
Ms Sree Harini Mallireddy	M Pharm	JNTUH	2011	Full time	Assistant Professor	25/05/2014	Pharmacy	Pharmacognosy	-	-	-	-	-
Mr. Dubbasi Vishwanath	M Pharm	JNTUH	2013	Full Time	Assistant Professor	30/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Rudraksha Renuka	M Pharm	JNTUH	2016	Full time	Assistant Professor	23/06/2016	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Aitha Goni Kalpana	M Pharm	JNTUH	2013	Full time	Assistant Professor	06/01/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. P. Alivelu	M Pharm	JNTUH	2015	Full time	Assistant Professor	07/11/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

Ms. Nousu Chaitanya venkatamma	M Pharm	OU	2015	Full time	Assistant Professor	28/12/2015	Pharmacy	PAQA	-	-	-	-	-
VLD Spandana onduu	M Pharm	Kakatiya university	2014	Full time	Assistant Professor	03/07/2015	Pharmacy	Pharmaceutical analysis	-	-	-	-	-
Ms. Sriramoji Jyothi	M Pharm	JNTUH	2015	Full Time	Assistant Professor	22/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. R. Sharada	M Pharm	OU	2015	Full Time	Assistant Professor	16/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. T. Shivkumar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/12/2015	Pharmacy	PAQA	-	-	-	-	-

For CAY 2018-19
For M Pharmacy

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. M. Venkata Reddy	Ph.D.	Andhra University	2009	Full Time	Director	01/09/2008	Pharmacy	Pharmaceutical Chemistry	4	2	-	-	-
Dr. S. A. Sreenivas	Ph.D.	Kuvempu University	2010	Full Time	Principal & Professor	01/07/2015	Pharmacy	Pharmaceutics	4	1	-	-	-
Dr. M. T. Shreenivas	Ph.D.	Kuvempu University	2012	Full Time	Professor	25/04/2014	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-
Dr. V. Sivajothi	Ph.D.	Annamalai University	2008	Full Time	Professor	07/05/2014	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-
Dr. Y. Ganesh	Ph.D.	KU	2018	Full Time	Professor	19/01/2019	Pharmacy	Pharmacognosy	-	-	-	-	-

Dr. K. S. Nagesh	Ph.D.	NIMHANS Karnataka	2009	Full Time	Professor	02/11/2014	Pharmacy	Pharmacology	-	-	-	-	-
Ms. G. Gangamani	M Pharm	JNTUH	2016	Full Time	Assistant Professor	05/07/2016	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Kiran kumar Mudi	M Pharm	JNTUH	2015	Full time	Assistant Professor	25/05/2017	Pharmacy	Pharmaceutical Technology	-	-	-	-	-
Mrs. Sundru Naga Chandrika	M Pharm	OU	2014	Full Time	Assistant Professor	28/07/2018	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. V. Jhansi Laxmi	M Pharm	JNTUH	2015	Full Time	Assistant Professor	16/07/2018	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. Badavath Ravi	M Pharm	OU	2014	Full Time	Assistant Professor	30/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. Kasula Venkat Reddy	M Pharm	JNTUH	2018	Full Time	Assistant Professor	01/09/2018	Pharmacy	PMRA	-	-	-	-	-
Ms. N. Adilakshmi	M Pharm	JNTUH	2017	Full Time	Assistant Professor	16/08/2018	Pharmacy	PAQA	-	-	-	-	-
Mr. V. Raju	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/08/2018	Pharmacy	PMRA	-	-	-	-	-
Mr. U. Krishna	M Pharm	JNTUH	2015	Full Time	Assistant Professor	17/01/2019	Pharmacy	PAQA					
Mr. B. Rajkumar	M Pharm	JNTUH	2014	Full Time	Assistant Professor	19/01/2019	Pharmacy	PAQA					
Mr. P. Uday Kumar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	27/08/2018	Pharmacy	Pharmacology					
Ms. A. Vasavi	M Pharm	JNTUH	2018	Full Time	Assistant Professor	03/01/2019	Pharmacy	PAQA					
Ms. M. Jyothi	M Pharm	JNTUH	2017	Full Time	Assistant Professor	19/01/2019	Pharmacy	PAQA					

For CAY 2018-19
For Pharm D (PB)

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Shivkumar Shete	Pharm D(PB)	VMU	2013	Full Time	Assistant Professor	18/08/2015	Pharmacy	Pharm D (PB)	5	-	-	-	-
Dr. Humera Siddiq	Pharm D (PB)	JNTUH	2017	Full Time	Assistant Professor	14/04/2018	Pharmacy	Pharm D	-	-	-	-	-

For CAY 2018-19
For Pharm D

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Salma Tasneem	Pharm D	OU	2017	Full Time	Assistant Professor	20/06/2017	Pharmacy	Pharm D	-	-	-	-	-
Dr. Amatul Ali Sameera	Pharm D	OU	2017	Full Time	Assistant Professor	11/09/2017	Pharmacy	Pharm D	-	-	-	-	-
Ms. Chepui madhavi	M Pharm	KU	2012	Full Time	Assistant Professor	16/08/2018	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. S. Soujanya	M Pharm	JNTUH	2015	Full Time	Assistant Professor	05/09/2018	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Shaik muneerud din	M Pharm	Palamuru Univesity	2017	Full time	Assistant Professor	13/07/2017	Pharmacy	Industrial pharmacy	-	-	-	-	-
Mrs. Alampally Sreelatha	M Pharm	JNTUH	2017	Full time	Assistant Professor	30/07/2018	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Ravula Divya	M Pharm	OU	2015	Full time	Assistant Professor	05/09/2018	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-
Dr. M. Pavani	Pharm D	JNTUH	2017	Full Time	Assistant Professor	25/08/2018	Pharmacy	Pharm D					
Ms. P. Ramadevi	M Pharm	JNTUH	2014	Full Time	Assistant Professor	30/04/2015	Pharmacy	Pharmacology					
Ms. T. Shravani	M Pharm	JNTUH	2014	Full Time	Assistant Professor	27/08/2018	Pharmacy	Pharmacology					

Annexure-II
For CAYm1 2017-2018
For B Pharmacy

Name of Faculty Member	Qualification			Association with the Institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. S. A. Sreenivas	Ph.D.	Kuvempu University	2010	Full time	Principal & Professor	01/07/2015	Pharmacy	Pharmaceutics	4	1	-	-	1
Dr. V. Sivajothi	Ph.D.	Annamalai University	2008	Full time	Professor	07/05/2014	Pharmacy	Pharmaceutical Chemistry	2	-	-	-	-
Dr. K. S. Nagesh	Ph.D.	NIMHANS Karnataka	2009	Full time	Professor	02/11/2014	Pharmacy	Pharmacology	-	-	-	-	-
Dr. Pratap Kumar Patra	Ph.D.	Berhampur University	2016	Full time	Associate Professor	03/12/2012	Pharmacy	Pharmaceutical Chemistry	1	-	-	-	-
Dr Ravi Shankar	Ph.D.	JNTUA	2014	Full time	Associate Professor	12/04/2014	Pharmacy	Pharmaceutics					
Dr Sattanathan	Ph.D.	Annamali University	2012	Full time	Associate Professor	21/02/2014	Pharmacy	Pharmacy practice					
Mrs. Mary Ratna Anitha	M.Pharm	JNTUH	2009	Full time	Assistant Professor	01/07/2014	Pharmacy	Pharm. Biotechnology	-	-	-	-	-
Mr. V. Pradeep Kumar	M.Pharm	JNTUH	2015	Full time	Assistant Professor	09/06/2015	Pharmacy	PAQA	-	-	-	-	-
Mrs Pamukuntla Deepika	M.Pharm	JNTUH	2013	Full time	Assistant Professor	09/06/2015	Pharmacy	pharmacology	-	-	-	-	-
Mrs. Rupali Gawande	M.Pharm	Bharati Vidyapeeth University	2009	Full time	Assistant Professor	09/06/2014	Pharmacy	Pharmacognosy	1	-	-	-	-
Mr. Parag Kale	M Pharm	Nagpur University	2010	Full Time	Assistant Professor	28/07/2015	Pharmacy	Quality Assurance	-	-	-	-	-

Mr. B. Gnaneshwar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/12/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Bangaru Mamatha	M.Pharm	OU	2015	Full time	Assistant Professor	01/12/2015	Pharmacy	Pharmacology	-	-	-	-	-
Ms. Shital Dange	M.Pharm	SRTMU	2014	Full time	Assistant Professor	11/09/2015	Pharmacy	Quality Assurance	2	-	-	-	-
Ms. Gundeboina Swathi	M.Pharm	JNTUH	2011	Full time	Assistant Professor	11/09/2015	Pharmacy	PAQA	-	-	-	-	-
Ms. K Janaki	M.Pharm	JNTUH	2015	Full time	Assistant Professor	17/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Akula Niharika	M.Pharm	OU	2013	Full time	Assistant Professor	01/03/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. K Kiran	M.Pharm	JNTUH	2015	Full time	Assistant Professor	04/05/2015	Pharmacy	Industrial Pharmacy	-	-	-	-	-
Ms. Mangarai Kavitha	M.Pharm	OU	2015	Full time	Assistant Professor	17/07/2016	Pharmacy	Pharmaceutical chemistry	1	-	-	-	-
Mr. Mathangi Praveen Kumar	M.Pharm	OU	2015	Full time	Assistant Professor	06/06/2015	Pharmacy	PAQA	-	-	-	-	-
Mr. Suvanpuram Rajshekar	M.Pharm	JNTUH	2016	Full time	Assistant Professor	17/07/2016	Pharmacy	PAQA	-	-	-	-	-
Mr. G Abhilash	M.Pharm	JNTUH	2014	Full time	Assistant Professor	11/10/2014	Pharmacy	Pharmacology	-	-	-	-	-
Ms Sree Harini Mallireddy	M.Pharm	JNTUH	2011	Full time	Assistant Professor	25/05/2014	Pharmacy	Pharmacognosy	-	-	-	-	-
Mr. Dubbasi Vishwanath	M Pharm	JNTUH	2013	Full Time	Assistant Professor	30/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Rudraksha Renuka	M.Pharm	JNTUH	2016	Full time	Assistant Professor	23/06/2016	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Aitha Goni Kalpana	M.Pharm	JNTUH	2013	Full time	Assistant Professor	06/01/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. P. Alivelu	M.Pharm	JNTUH	2015	Full time	Assistant Professor	07/11/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

Ms. Nousu Chaitanya venkatamma	M.Pharm	OU	2015	Full time	Assistant Professor	28/12/2015	Pharmacy	PAQA	-	-	-	-	-
VLD Spandana onduu	M.Pharm	Kakatiya university	2014	Full time	Assistant Professor	03/07/2015	Pharmacy	Pharmaceutical analysis	-	-	-	-	-
Ms. Sriramoji Jyothi	M Pharm	JNTUH	2015	Full Time	Assistant Professor	22/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. R. Sharada	M Pharm	OU	2015	Full Time	Assistant Professor	16/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. T. Shivkumar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/12/2015	Pharmacy	PAQA	-	-	-	-	-

For CAYm1 2017-2018
For M Pharmacy

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. M. Venkata Reddy	Ph.D.	Andhra University	2009	Full Time	Director	01/09/2008	Pharmacy	Pharmaceutical Chemistry	4	2	-	-	-
Dr. S. A. Sreenivas	Ph.D.	Kuvempu University	2010	Full Time	Principal & Professor	01/07/2015	Pharmacy	Pharmaceutics	4	1	-	-	-
Dr. M. T. Shreenivas	Ph.D.	Kuvempu University	2012	Full Time	Professor	25/04/2014	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-
Dr. V. Sivajothi	Ph.D.	Annamalai University	2008	Full Time	Professor	07/05/2014	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-

Dr. M. N. Rao	Ph.D.	IIM	1987	Full Time	Professor	03/08/2014	Pharmacy	Pharmaceutical Management	-	-	-	-	-
Dr. K. S. Nagesh	Ph.D.	NIMHANS Karnataka	2009	Full Time	Professor	02/11/2014	Pharmacy	Pharmacology	-	-	-	-	-
Mr. K. Mohan Naik	M Pharm	JNTUH	2016	Full Time	Assistant Professor	06/07/2016	Pharmacy	PMRA	-	-	-	-	-
Ms. G. Gangamani	M Pharm	JNTUH	2016	Full Time	Assistant Professor	05/07/2016	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Kiran kumar Mudi	M.Pharm	JNTUH	2015	Full time	Assistant Professor	25/05/2017	Pharmacy	Pharmaceutical Technology	-	-	-	-	-
Mr. Aswin Reddy	M.Pharm	JNTUH	2012	Full time	Assistant Professor	16/10/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. B Srivathsava	M.Pharm	JNTUH	2012	Full time	Assistant Professor	28/08/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. M. Vishnu Vardhan Reddy	M.Pharm	Jaipur National University	2013	Full time	Assistant Professor	12/12/2012	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Dava Naveen Kumar	M Pharm	JNTUH	2014	Full Time	Assistant Professor	14/05/2015	Pharmacy	PMRA	-	-	-	-	-
Mr. P Satyanarayana	M Pharm	JNTUH	2014	Full Time	Assistant Professor	12/05/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. Badavath Ravi	M Pharm	OU	2014	Full Time	Assistant Professor	30/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Kommu Manasa	M.Pharm	JNTUH	2015	Full time	Assistant Professor	21/07/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Madisetti Gowthami	M.Pharm	JNTUH	2015	Full time	Assistant Professor	12/03/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

For CAYm1 2017-2018
For Pharm D (PB)

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Shivkumar Shete	Pharm D(PB)	VMU	2013	Full Time	Assistant Professor	18/08/2015	Pharmacy	Pharm D (PB)	5	-	-	-	-
Dr. Javvaji Yagnesh	Pharm D(PB)	JNTU H	2015	Full Time	Assistant Professor	16/06/2015	Pharmacy	Pharm D (PB)	-	-	-	-	-

For CAYm1 2017-2018
For Pharm D

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Salma Tasneem	Pharm D	OU	2017	Full Time	Assistant Professor	20/06/2017	Pharmacy	Pharm D	-	-	-	-	-
Dr. Amatul Ali Sameera	Pharm D	OU	2017	Full Time	Assistant Professor	11/09/2017	Pharmacy	Pharm D	-	-	-	-	-
Dr Kandula Kumari Sneha	Pharm D	OU	2015	Full Time	Assistant Professor	10/06/2015	Pharmacy	Pharm D	-	-	-	-	-
Dr. Rekha Palle	Pharm D	JNTUH	2015	Full Time	Assistant Professor	23/12/2015	Pharmacy	Pharm D (PB)	-	-	-	-	-
Ms. Keerthi Vennela	M Pharm	JNTUH	2016	Full Time	Assistant Professor	24/06/2016	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Rajesh Dabbeti	M Pharm	JNTUH	2014	Full Time	Assistant Professor	15/01/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

Ms. Gokala Haripriya	M Pharm	JNTUH	2015	Full Time	Assistant Professor	09/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. G Suresh Kumar	M.Pharm	NIPER	2014	Full time	Assistant Professor	02/11/2014	Pharmacy	Natural Products	1	-	-	-	-
Mr. Arvind Kumar	M Pharm	OU	2012	Full Time	Assistant Professor	12/06/2015	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Lingeshwara Rao	M.Pharm	Dr MGR Medical University	2008	Full time	Assistant Professor	01/12/2014	Pharmacy	Pharmaceutical Analysis	-	-	-	-	-
Mrs M. Alekhya	M.Pharm	Kakatiya University	2012	Full time	Assistant Professor	10/06/2014	Pharmacy	Pharmaceutical Analysis	-	-	-	-	-
Mr. Krishnamachary	M.Pharm	JNTUH	2015	Full time	Assistant Professor	09/06/2015	Pharmacy	PAQA	-	-	-	-	-

Annexure-II
For CAYm2 2016-17
For B Pharmacy

Name of Faculty Member	Qualification			Association with the Institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. S. A. Sreenivas	Ph.D.	Kuvempu University	2010	Full time	Principal & Professor	01/07/2015	Pharmacy	Pharmaceutics	4	1	-	-	1
Dr. V. Sivajothi	Ph.D.	Annamalai University	2008	Full time	Professor	07/05/2014	Pharmacy	Pharmaceutical Chemistry	2	-	-	-	-
Dr. K. S. Nagesh	Ph.D.	NIMHANS Karnataka	2009	Full time	Professor	02/11/2014	Pharmacy	Pharmacology	-	-	-	-	-
Dr. Pratap Kumar Patra	Ph.D.	Berhampur University	2016	Full time	Associate Professor	03/12/2012	Pharmacy	Pharmaceutical Chemistry	1	-	-	-	-
Dr Ravi Shankar	Ph.D.	JNTUA	2014	Full time	Associate Professor	12/04/2014	Pharmacy	Pharmaceutics					
Dr Sattanathan	Ph.D.	Annamali University	2012	Full time	Associate Professor	21/02/2014	Pharmacy	Pharmacy practice					
Mrs. Mary Ratna Anitha	M.Pharm	JNTUH	2009	Full time	Assistant Professor	01/07/2014	Pharmacy	Pharm. Biotechnology	-	-	-	-	-
Mr. V. Pradeep Kumar	M.Pharm	JNTUH	2015	Full time	Assistant Professor	09/06/2015	Pharmacy	PAQA	-	-	-	-	-
Mrs Pamukuntla Deepika	M.Pharm	JNTUH	2013	Full time	Assistant Professor	09/06/2015	Pharmacy	pharmacology	-	-	-	-	-
Mrs. Rupali Gawande	M.Pharm	Bharati Vidyapeeth University	2009	Full time	Assistant Professor	09/06/2014	Pharmacy	Pharmacognosy	1	-	-	-	-
Mr. Parag Kale	M Pharm	Nagpur University	2010	Full Time	Assistant Professor	28/07/2015	Pharmacy	Quality Assurance	-	-	-	-	-

Mr. B. Gnaneshwar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/12/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Bangaru Mamatha	M.Pharm	OU	2015	Full time	Assistant Professor	01/12/2015	Pharmacy	Pharmacology	-	-	-	-	-
Ms. Shital Dange	M.Pharm	SRTMU	2014	Full time	Assistant Professor	11/09/2015	Pharmacy	Quality Assurance	2	-	-	-	-
Ms. Gundeboina Swathi	M.Pharm	JNTUH	2011	Full time	Assistant Professor	11/09/2015	Pharmacy	PAQA	-	-	-	-	-
Ms. K Janaki	M.Pharm	JNTUH	2015	Full time	Assistant Professor	17/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Akula Niharika	M.Pharm	OU	2013	Full time	Assistant Professor	01/03/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. K Kiran	M.Pharm	JNTUH	2015	Full time	Assistant Professor	04/05/2015	Pharmacy	Industrial Pharmacy	-	-	-	-	-
Ms. Mangarai Kavitha	M.Pharm	OU	2015	Full time	Assistant Professor	17/07/2016	Pharmacy	Pharmaceutical chemistry	1	-	-	-	-
Mr. Mathangi Praveen Kumar	M.Pharm	OU	2015	Full time	Assistant Professor	06/06/2015	Pharmacy	PAQA	-	-	-	-	-
Mr. Suvanpuram Rajshekar	M.Pharm	JNTUH	2016	Full time	Assistant Professor	17/07/2016	Pharmacy	PAQA	-	-	-	-	-
Mr. G Abhilash	M.Pharm	JNTUH	2014	Full time	Assistant Professor	11/10/2014	Pharmacy	Pharmacology	-	-	-	-	-
Ms Sree Harini Mallireddy	M.Pharm	JNTUH	2011	Full time	Assistant Professor	25/05/2014	Pharmacy	Pharmacognosy	-	-	-	-	-
Mr. Dubbasi Vishwanath	M Pharm	JNTUH	2013	Full Time	Assistant Professor	30/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Rudraksha Renuka	M.Pharm	JNTUH	2016	Full time	Assistant Professor	23/06/2016	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Aitha Goni Kalpana	M.Pharm	JNTUH	2013	Full time	Assistant Professor	06/01/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. P. Alivelu	M.Pharm	JNTUH	2015	Full time	Assistant Professor	07/11/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

Ms. Nousu Chaitanya venkatamma	M.Pharm	OU	2015	Full time	Assistant Professor	28/12/2015	Pharmacy	PAQA	-	-	-	-	-
VLD Spandana onduu	M.Pharm	Kakatiya university	2014	Full time	Assistant Professor	03/07/2015	Pharmacy	Pharmaceutical analysis	-	-	-	-	-
Ms. Sriramoji Jyothi	M Pharm	JNTUH	2015	Full Time	Assistant Professor	22/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. R. Sharada	M Pharm	OU	2015	Full Time	Assistant Professor	16/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. T. Shivkumar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/12/2015	Pharmacy	PAQA	-	-	-	-	-

For CAYm2 2016-17
For M Pharmacy

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. M. Venkata Reddy	Ph.D.	Andhra University	2009	Full Time	Director	01/09/2008	Pharmacy	Pharmaceutical Chemistry	4	2	-	-	-
Dr. S. A. Sreenivas	Ph.D.	Kuvempu University	2010	Full Time	Principal & Professor	01/07/2015	Pharmacy	Pharmaceutics	4	1	-	-	-
Dr. M. T. Shreenivas	Ph.D.	Kuvempu University	2012	Full Time	Professor	25/04/2014	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-
Dr. V. Sivajothi	Ph.D.	Annamalai University	2008	Full Time	Professor	07/05/2014	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-

Dr. M. N. Rao	Ph.D.	IIM	1987	Full Time	Professor	03/08/2014	Pharmacy	Pharmaceutical Management	-	-	-	-	-
Dr. K. S. Nagesh	Ph.D.	NIMHANS Karnataka	2009	Full Time	Professor	02/11/2014	Pharmacy	Pharmacology	-	-	-	-	-
Mr. K. Mohan Naik	M Pharm	JNTUH	2016	Full Time	Assistant Professor	06/07/2016	Pharmacy	PMRA	-	-	-	-	-
Ms. G. Gangamani	M Pharm	JNTUH	2016	Full Time	Assistant Professor	05/07/2016	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Rajesh Patro	M Pharm	Utkal Univeristy	2007	Full Time	Assistant Professor	01/07/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. Aswin Reddy	M.Pharm	JNTUH	2012	Full time	Assistant Professor	16/10/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. B Srivathsava	M.Pharm	JNTUH	2012	Full time	Assistant Professor	28/08/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. M. Vishnu Vardhan Reddy	M.Pharm	Jaipur National University	2013	Full time	Assistant Professor	12/12/2012	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Dava Naveen Kumar	M Pharm	JNTUH	2014	Full Time	Assistant Professor	14/05/2015	Pharmacy	PMRA	-	-	-	-	-
Mr. P Satyanarayana	M Pharm	JNTUH	2014	Full Time	Assistant Professor	12/05/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. Badavath Ravi	M Pharm	OU	2014	Full Time	Assistant Professor	30/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Kommu Manasa	M.Pharm	JNTUH	2015	Full time	Assistant Professor	21/07/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Madisetti Gowthami	M.Pharm	JNTUH	2015	Full time	Assistant Professor	12/03/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

For CAYm2 2016-17
For Pharm D (PB)

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Shivkumar Shete	Pharm D(PB)	VMU	2013	Full Time	Assistant Professor	18/08/2015	Pharmacy	Pharm D (PB)	5	-	-	-	-
Dr. Javvaji Yagnesh	Pharm D(PB)	JNTU H	2015	Full Time	Assistant Professor	16/06/2015	Pharmacy	Pharm D (PB)	-	-	-	-	-

For CAYm2 2016-17
For Pharm D

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. P Sneha	Pharm D	Rajiv Gandhi University	2015	Full Time	Assistant Professor	18/08/2015	Pharmacy	Pharm D	2	-	-	-	-
Dr. M. Sai Sudha	Pharm D	Rajiv Gandhi University	2015	Full Time	Assistant Professor	29/02/2016	Pharmacy	Pharm D	2	-	-	-	-
Dr Kandula Kumari Sneha	Pharm D	OU	2015	Full Time	Assistant Professor	10/06/2015	Pharmacy	Pharm D	-	-	-	-	-
Dr. Rekha Palle	Pharm D	JNTUH	2015	Full Time	Assistant Professor	23/12/2015	Pharmacy	Pharm D (PB)	-	-	-	-	-
Ms. Keerthi Vennela	M Pharm	JNTUH	2016	Full Time	Assistant Professor	24/06/2016	Pharmacy	Pharmacology	-	-	-	-	-

Mr. Rajesh Dabbeti	M Pharm	JNTUH	2014	Full Time	Assistant Professor	15/01/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Gokala Haripriya	M Pharm	JNTUH	2015	Full Time	Assistant Professor	09/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. G Suresh Kumar	M.Pharm	NIPER	2014	Full time	Assistant Professor	02/11/2014	Pharmacy	Natural Products	1	-	-	-	-
Mr. Arvind Kumar	M Pharm	OU	2012	Full Time	Assistant Professor	12/06/2015	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Lingeshwara Rao	M.Pharm	Dr MGR Medical University	2008	Full time	Assistant Professor	01/12/2014	Pharmacy	Pharmaceutical Analysis	-	-	-	-	-
Mrs M. Alekhya	M.Pharm	Kakatiya University	2012	Full time	Assistant Professor	10/06/2014	Pharmacy	Pharmaceutical Analysis	-	-	-	-	-
Mr. Krishnamachary	M.Pharm	JNTUH	2015	Full time	Assistant Professor	09/06/2015	Pharmacy	PAQA	-	-	-	-	-

Annexure-II
For CAYm3 2015-16
For B Pharmacy

Name of Faculty Member	Qualification			Association with the Institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. S. A. Sreenivas	Ph.D.	Kuvempu University	2010	Full time	Principal & Professor	01/07/2015	Pharmacy	Pharmaceutics	4	1	-	-	1
Dr. V. Sivajothi	Ph.D.	Annamalai University	2008	Full time	Professor	07/05/2014	Pharmacy	Pharmaceutical Chemistry	2	-	-	-	-
Dr. K. S. Nagesh	Ph.D.	NIMHANS Karnataka	2009	Full time	Professor	02/11/2014	Pharmacy	Pharmacology	-	-	-	-	-
Dr. Pratap Kumar Patra	Ph.D.	Berhampur University	2016	Full time	Associate Professor	03/12/2012	Pharmacy	Pharmaceutical Chemistry	1	-	-	-	-
Dr Ravi Shankar	Ph.D.	JNTUA	2014	Full time	Associate Professor	12/04/2014	Pharmacy	Pharmaceutics					
Dr Sattanathan	Ph.D.	Annamali University	2012	Full time	Associate Professor	21/02/2014	Pharmacy	Pharmacy practice					
Mrs. Mary Ratna Anitha	M.Pharm	JNTUH	2009	Full time	Assistant Professor	01/07/2014	Pharmacy	Pharm. Biotechnology	-	-	-	-	-
Mr. V. Pradeep Kumar	M.Pharm	JNTUH	2015	Full time	Assistant Professor	09/06/2015	Pharmacy	PAQA	-	-	-	-	-
Mrs Pamukuntla Deepika	M.Pharm	JNTUH	2013	Full time	Assistant Professor	09/06/2015	Pharmacy	pharmacology	-	-	-	-	-
Mrs. Rupali Gawande	M.Pharm	Bharati Vidyapeeth University	2009	Full time	Assistant Professor	09/06/2014	Pharmacy	Pharmacognosy	1	-	-	-	-

Mr. Parag Kale	M Pharm	Nagpur University	2010	Full Time	Assistant Professor	28/07/2015	Pharmacy	Quality Assurance	-	-	-	-	-
Mr. B. Gnaneshwar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/12/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Bangaru Mamatha	M.Pharm	OU	2015	Full time	Assistant Professor	01/12/2015	Pharmacy	Pharmacology	-	-	-	-	-
Ms. Shital Dange	M.Pharm	SRTMU	2014	Full time	Assistant Professor	11/09/2015	Pharmacy	Quality Assurance	-	-	-	-	-
Ms. Gundeboina Swathi	M.Pharm	JNTUH	2011	Full time	Assistant Professor	11/09/2015	Pharmacy	PAQA	-	-	-	-	-
Ms. K Janaki	M.Pharm	JNTUH	2015	Full time	Assistant Professor	17/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Akula Niharika	M.Pharm	OU	2013	Full time	Assistant Professor	01/03/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. K Kiran	M.Pharm	JNTUH	2015	Full time	Assistant Professor	04/05/2015	Pharmacy	Industrial Pharmacy	-	-	-	-	-
Ms. Atiya Begum	M.Pharm	JNTUH	2015	Full time	Assistant Professor	15/12/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. Mathangi Praveen Kumar	M.Pharm	OU	2015	Full time	Assistant Professor	06/06/2015	Pharmacy	PAQA	-	-	-	-	-
Ms. Laxmi Durga	M.Pharm.	JNTUK	2011	Full time	Assistant Professor	27/02/2012	Pharmacy	Pharmacy Practice	-	-	-	-	-
Mr. G Abhilash	M.Pharm	JNTUH	2014	Full time	Assistant Professor	11/10/2014	Pharmacy	Pharmacology	-	-	-	-	-
Ms Sree Harini Mallireddy	M.Pharm	JNTUH	2011	Full time	Assistant Professor	25/05/2014	Pharmacy	Pharmacognosy	-	-	-	-	-
Mr. Dubbasi Vishwanath	M Pharm	JNTUH	2013	Full Time	Assistant Professor	30/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Preethi Devarpally	M.Pharm	KU	2013	Full time	Assistant Professor	11/05/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Aitha Goni Kalpana	M.Pharm	JNTUH	2013	Full time	Assistant Professor	06/01/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. P. Alivelu	M.Pharm	JNTUH	2015	Full time	Assistant Professor	07/11/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

Ms. Nousu Chaitanya venkatamma	M.Pharm	OU	2015	Full time	Assistant Professor	28/12/2015	Pharmacy	PAQA	-	-	-	-	-
VLD Spandana onduu	M.Pharm	Kakatiya university	2014	Full time	Assistant Professor	03/07/2015	Pharmacy	Pharmaceutical analysis	-	-	-	-	-
Ms. Sriramoji Jyothi	M Pharm	JNTUH	2015	Full Time	Assistant Professor	22/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. R. Sharada	M Pharm	OU	2015	Full Time	Assistant Professor	16/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. T. Shivkumar	M Pharm	JNTUH	2015	Full Time	Assistant Professor	28/12/2015	Pharmacy	PAQA	-	-	-	-	-

For CAYm3 2015-16
For M Pharmacy

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. M. Venkata Reddy	Ph.D.	Andhra University	2009	Full Time	Director	01/09/2008	Pharmacy	Pharmaceutical Chemistry	4	2	-	-	-
Dr. S. A. Sreenivas	Ph.D.	Kuvempu University	2010	Full Time	Principal & Professor	01/07/2015	Pharmacy	Pharmaceutics	4	1	-	-	-
Dr. M. T. Shreenivas	Ph.D.	Kuvempu University	2012	Full Time	Professor	25/04/2014	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-
Dr. V. Sivajothi	Ph.D.	Annamalai University	2008	Full Time	Professor	07/05/2014	Pharmacy	Pharmaceutical Chemistry	-	-	-	-	-

Dr. M. N. Rao	Ph.D.	IIM	1987	Full Time	Professor	03/08/2014	Pharmacy	Pharmaceutical Management	-	-	-	-	-
Dr. K. S. Nagesh	Ph.D.	NIMHANS Karnataka	2009	Full Time	Professor	02/11/2014	Pharmacy	Pharmacology	-	-	-	-	-
Ms. Arifa Begum	M Pharm	Padmavati Mahila Visvavidhyalaya	2005	Full Time	Assistant Professor	01/08/2011	Pharmacy	Pharmaceutical Chemistry	5	-	-	-	-
Ms. Kiranmai	M Pharm	JSS University	2007	Full Time	Assistant Professor	27/5/2013	Pharmacy	Pharmaceutical Chemistry	5	-	-	-	-
Mr. Ramana Reddy	M Pharm	Dr MGR Medical Univeristy	2005	Full Time	Assistant Professor	14/07/2015	Pharmacy	Pharmaceutics	2	-	-	-	-
Mr. Cijo George	M Pharm	Kerala Univesity	2005	Full Time	Assistant Professor	25/06/2014	Pharmacy	Pharmacy Practice	-	-	-	-	-
Mr. Rajesh Patro	M Pharm	Utkal Univeristy	2007	Full Time	Assistant Professor	01/07/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. K. Prithvi Yadav	M Pharm	JSS Univeristy	2013	Full Time	Assistant Professor	15/09/2015	Pharmacy	Pharmaceutical Analysis	-	-	-	-	-
Mr. Aswin Reddy	M.Pharm	JNTUH	2012	Full time	Assistant Professor	16/10/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. B Srivathsava	M.Pharm	JNTUH	2012	Full time	Assistant Professor	28/08/2014	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. M. Vishnu Vardhan Reddy	M.Pharm	Jaipur National University	2013	Full time	Assistant Professor	12/12/2012	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Dava Naveen Kumar	M Pharm	JNTUH	2014	Full Time	Assistant Professor	14/05/2015	Pharmacy	PMRA	-	-	-	-	-
Mr. P Satyanarayana	M Pharm	JNTUH	2014	Full Time	Assistant Professor	12/05/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. Badavath Ravi	M Pharm	OU	2014	Full Time	Assistant Professor	30/09/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Kommu Manasa	M.Pharm	JNTUH	2015	Full time	Assistant Professor	21/07/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

Ms. Madisetti Gowthami	M.Pharm	JNTUH	2015	Full time	Assistant Professor	12/03/2015	Pharmacy	Pharmaceutics	-	-	-	-	-

For CAYm3 2015-16
For Pharm D (PB)

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. Shivkumar Shete	Pharm D(PB)	VMU	2013	Full Time	Assistant Professor	18/08/2015	Pharmacy	Pharm D (PB)	5	-	-	-	-
Dr. Javvaji Yagnesh	Pharm D(PB)	JNTU H	2015	Full Time	Assistant Professor	16/06/2015	Pharmacy	Pharm D (PB)	-	-	-	-	-

For CAYm3 2015-16
For Pharm D

Name of Faculty Member	Qualification			Association with the institution	Designation	Date of joining the institution	Department	Specialization	Academic Research			Sponsored Research (Funded Research)	Consultancy and product Development
	Degree (highest degree)	University	Year of graduate						Research paper publication	Ph.D. Guidance	Faculty Receiving Ph.D. during the Assessment Years		
Dr. P Sneha	Pharm D	Rajiv Gandhi Universit y	2015	Full Time	Assistant Professor	18/08/2015	Pharmacy	Pharm D	2	-	-	-	-
Dr. Jyothirmai	Pharm D	KU	2014	Full Time	Assistant Professor	29/12/2014	Pharmacy	Pharm D	-	-	-	-	-
Dr Kandula Kumari Sneha	Pharm D	OU	2015	Full Time	Assistant Professor	10/06/2015	Pharmacy	Pharm D	-	-	-	-	-
Dr. Rekha Palle	Pharm D	JNTUH	2015	Full Time	Assistant Professor	23/12/2015	Pharmacy	Pharm D (PB)	-	-	-	-	-
Ms. Ramadevi	M Pharm	OU	2014	Full Time	Assistant Professor	30/04/2015	Pharmacy	Pharm acolog y	-	-	-	-	-

Mr. Rajesh Dabbeti	M Pharm	JNTUH	2014	Full Time	Assistant Professor	15/01/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Ms. Gokala Haripriya	M Pharm	JNTUH	2015	Full Time	Assistant Professor	09/06/2015	Pharmacy	Pharmaceutics	-	-	-	-	-
Mr. G Suresh Kumar	M.Pharm	NIPER	2014	Full time	Assistant Professor	02/11/2014	Pharmacy	Natural Products	1	-	-	-	-
Mr. Arvind Kumar	M Pharm	OU	2012	Full Time	Assistant Professor	12/06/2015	Pharmacy	Pharmacology	-	-	-	-	-
Mr. Lingeshwara Rao	M.Pharm	Dr MGR Medical University	2008	Full time	Assistant Professor	01/12/2014	Pharmacy	Pharmaceutical Analysis	-	-	-	-	-
Mrs M. Alekhya	M.Pharm	Kakatiya University	2012	Full time	Assistant Professor	10/06/2014	Pharmacy	Pharmaceutical Analysis	-	-	-	-	-
Mr. Krishnamachary	M.Pharm	JNTUH	2015	Full time	Assistant Professor	09/06/2015	Pharmacy	PAQA	-	-	-	-	-

Hyd. : 040-32403858
Fax : 040-30522458
MBNR : 08542 - 242611

VYJAYANTHI EDUCATIONAL SOCIETY

(Regd. No. 6387/2000), Mahabubnagar

City Office : # 101, Mount Nasir Apartments, Behind Ravindra Bharathi, Lakdi-ka-Pool, Hyderabad - 500 004.

Ref.No.

Date : .....

Society / Governing Body minutes of the meeting dated 15/06/2016

Item No: I (a)

I. Society general body meeting was held on 15/06/2016 at Flat No: 101/A, Mount Nasir Apartments, behind Ravindra Bharathi, Lakdikapool, Hyderabad. It was unanimously resolved to forward a letter to CPCSEA requesting reconstitution of Institutional Animal Ethical Committee of the establishment and renewal of establishment for the conduct of animal experiments on small animals.

II. Committee also decided to organize a workshop for B.Pharmacy students on "Handling of Laboratory Animals".

"TRUE – EXTRACT"

SECRETARY/CORRESPONDENT

For SREE DATTHA INSTITUTE OF PHARMACY

SECRETARY/CORRESPONDENT

Dr. S A SREENIVAS
M. Pharm, Ph. D
PRINCIPAL
Sree Dattha Institute of Pharmacy
Sheriguda. V, Ibrahimpatnam .M, R.R .Dist -501 510.

Hyd. : 040-32403858
Fax : 040-30522458
MBNR : 08542 - 242611

VYJAYANTHI EDUCATIONAL SOCIETY

(Regd. No. 6387/2000), Mahabubnagar

City Office : # 101, Mount Nasir Apartments, Behind Ravindra Bharathi, Lakdi-ka-Pool, Hyderabad - 500 004.

Ref.No.

Date : .....

SOCIETY MINUTES EXTRACT

I. That the Society vide its executive meeting held on 15/06/2016 at registered office at Lakdikapool vide item no. I (a), have resolved to forward a letter to CPCSEA requesting reconstitution of Institutional Animal Ethical Committee of the establishment and renewal of establishment for the conduct of animal experiments on small animals.

II. Committee also decided to organize a workshop for B.Pharmacy students on "Handling of Laboratory Animals".

"TRUE – EXTRACT"

SECRETARY/CORRESPONDENT

For SREE DATTHA INSTITUTE OF PHARMACY

SECRETARY/CORRESPONDENT

Dr. S A SREENIVAS
M. Pharm, Ph. D
PRINCIPAL
Sree Dattha Institute of Pharmacy
Sheriguda. V, Ibrahimpatnam M, R.R .Dist -501 510.

ESTD : 2005

EAMCET CODE : SDIP

SREE DATTHA INSTITUTE OF PHARMACY

(Approved by P.C.I., Approved by AICTE, New Delhi, Affiliated to JNTUH, College Code : U2, Hyderabad, Andhra Pradesh)
Sagar Road, Sheriguda (V), Ibrahimpatnam (M), R.R. Dist. - 501 510.
Ph. : 08414-320919, 9393808082, Fax : 040-30522458, www.sreedattha.ac.in, E-mail : sdipu2@gmail.com

Date : _____

Date: 18.06.2016

Registration number: **1636/PO/a/12/CPCSEA**

To
Director (AW) & Member Secretary,
CPCSEA,
Government of India,
Ministry of Environment & Forests,
New Delhi 110001.

Sub.: Proposed Members for Reconstitution of IAEC .....reg
F.No.25/50/2012-AWD

Dear Sir/Madam,

With respect to the subject and reference cited, we wish to hereby bring following points into your kind consideration for the reconstitution and approval of Institutional Animal Ethical Committee (IAEC):

- Here with submitting the required filled in formats for the reconstitution of IAEC and its approval
- Dr. S. A. Sreenivas, appointed as Principal of Sree Dattha Institute of Pharmacy shall be nominated as Chairman-IAEC, (CPCSEA Nominee application form, bio data and appointment order issued by Institute is enclosed herewith for your kind perusal)
- Mr. Vishnu Vardhan Reddy shall be replace Ms. Adepu Rajani as the later is no longer working with this Institute ((CPCSEA Nominee application form, bio data are enclosed)
- Remaining members will hold the same designation except Dr. M. Venkata Reddy who will now be nominated as Scientist from different discipline
- Approval sought for the reconstitution of IAEC as per following details:

Contd. Page 2...

18/06/16.

Proposed IAEC Members for reconstitution

Sl. No.	Name of the IAEC Member	Designation
1	Dr. S. A. Sreenivas	Chairman
2	Dr. M. Venkata Reddy	Scientist from different discipline
3	Dr. Syed S Y H Qadri	Scientist from different discipline
4	Dr. M. A. Muqeeth	Veterinarian
5	Mr. Vishnu Vardhan Reddy	Scientist In-charge
6	Dr. K. V. Jogi	Scientist from outside the Institute
7	Mr. S. Ramesh Gupta	Non-Scientific Socially Aware Member

- Anticipate your kind reply mentioning reconstitution of IAEC and necessary fees to be paid applicable if any.
- Dr. P. Suresh and Shri R. Nagendra Hegde were appointed by CPCSEA as Main Nominee and Link Nominee respectively.

In this regard we have communicated letters to CPCSEA dated 12.01.2013, 26.03.2013, 09.05.2013, 14.03.2015, 21.07.2015.

Kindly do the needful and oblige at the earliest.

Thanking you,

Yours faithfully,

18/06/16.

Dr. S A SREENIVAS
M. Pharm, Ph. D
PRINCIPAL
Sree Dattha Institute of Pharmacy
Sheriguda. V, Ibrahimpatnam .M, R.R .Dist -501 510.

Encl.:

1. Dr. S. A. Sreenivas – CPCSEA Nominee application form, Biodata format for of the IAEC and appointment order
2. Mr. Vishnu Vardhan Reddy - CPCSEA Nominee application form and Biodata format of the IAEC
3. Biodata format of the IAEC for other members of IAEC
4. Previous communication letters
5. CPCESA and IAEC first approval letters

E-mail

F. No. 25/50/2012 - AWD
Government of India
Ministry of Environment, Forests & Climate Change
Animal Welfare Division
O/o Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA)
******

5th Floor, Vayu Block, Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 110003
08/09/2016

To

The Principal
Sree Dattha Institute of Pharmacy,
Sheriguda (V), Ibrahimpatnam (M),
R.R. Dist – 501510, Telangana
Phone: 08414-320919
E-mail: info@sreedattha.ac.in

online

Subject: Renewal of Animal House Facility with CPCSEA and Reconstitution of IAEC - regarding.

Sir,

I am glad to inform you that online processes of Registration, Renewal of Registration, Reconstitution of IAECs, Revision of IAECs, submission of Minutes of IAEC meeting and submission of Annual Inspection Reports by the concerned nominee(s) of the establishment has been made effective on the website of the CPCSEA. Establishments need not send hard copies of documents for the above processes.

2. It is also informed that now the Registration and Constitution of IAEC are being done for a period of five years, and as per present procedure Renewal of Registration and Reconstitution of IAEC will be done concurrently.

3. The procedure for applying online:

The user is required to login through User Login Window at Home Page of Website of CPCSEA (http://cpcsea.nic.in) by selecting 'Establishment Login' in User type and put the User Name & Password. The login ID and Password details of your establishment are as: **login ID: 1636/CPCSEA and password: Admin@123**. Establishment can change the password.

4. List of requisite documents for applying online:

i. The establishment is required to upload the biodata and consent letters of Five (5) IAEC members (a Biological Scientist, 2-Scientist from different biological Discipline, a Veterinarian having at least BVSc degree and a Scientist In charge of animal facility) in a single PDF file for each member. At least half of the members are required to be replaced at the time of Reconstitution of IAEC.

ii. The minutes of IAEC meetings of the previous years (if any), bearing the signature (with date) of all the IAEC members.

...2

5. Fees as per the revised fee structure (copy enclosed) will be accepted only through online payment, and if already paid, the same will be exempted.

6. Accordingly, you are requested to take immediate necessary action to apply online on the Website of the CPCSEA.

Yours faithfully,

Encl: As above.

(Mahendra Yadav)
Under Secretary, CPCSEA
Phone: 011-24695424
E-mail: cpcsea-mef@gov.in

F. No. 25/197/2013 - CPCSEA (Vol-III)
Government of India
Ministry of Environment, Forest & Climate Change
Animal Welfare Division
Committee for the Purpose of Control and Supervision of Experiments on Animals
(CPCSEA)

***

New Delhi, 19/08/, 2016

Constitution / Re-constitution of Institutional Animal Ethics Committee (IAEC)

CPCSEA Constitutes / Re-constitutes the IAEC on the receipt of 5 (Five) names (all from science background including one Veterinarian) from the establishment.

2. IAEC must be reconstituted after every **five years** as per extant guidelines of CPCSEA.

3. The revised minimum qualification for the Internal IAEC Members is as below:
   i. B.V.Sc. or
   ii. M.Sc. (Zoology/ Animal Sciences/ Animal Biotechnology), or
   iii. M.Sc. (Life Sciences/Biological Sciences/ Biochemistry/ Biotechnology) with experience in animal handling and animal research or
   iv. M. Pharm. with experience in animal handling and animal research.
   v. M.D. (Microbiology and Pharmacology) with experience in animal handling and animal research.

4. The composition of IAEC should be as under:
   i. A Biological Scientist.
   ii. Two Scientists from different biological disciplines.
   iii. A Veterinarian involved in the care of Animals.
   iv. Scientist In-Charge of Animal House Facility.

5. The establishments are required to upload the biodata with consent of proposed IAEC members in a single PDF file in the format (Annexure - I).

6. The Chairman of the Committee (preferably Head of the Institution/ Department) and Member Secretary would be nominated by the establishment from the above five IAEC members.

7. Further, having a Veterinarian in IAEC is mandatory. However, if no Veterinarian (full-time/ part-time) is available, the establishment may engage the Veterinarian on outsource basis.

8. At least half of the members are required to be replaced at the time of Reconstitution of IAEC.

9. Other members of the IAEC viz. Main Nominee, Link Nominee, Scientist from outside the Institute and Socially Aware Nominee will be nominated by CPCSEA on receipt of the above composition of IAEC for the establishment.

***

Government of India
Ministry of Environment, Forest & Climate Change
(Animal Welfare Division)
O/o Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA)
*****

5th Floor, Vayu Wing, Indira Paryavaran Bhawan
Jorbagh Road, New Delhi-110 003
Date: 21/10/2016

Registration No:	
Name of the establishment	Sree Dattha Institute of Pharmacy
Address of Animal House Facility	Sree Dattha Institute of Pharmacy, Sheriguda (V), Ibrahimpatnam (M),R.R. Dist- 501510, Telangana
Tel No	8414320919
Email	sdipu2@gmail.com
Purpose of Registration	Small:- Research for Education purpose Large:-
Type of Facility	Small Animal
Purpose of fee	Renewal
TotalFee	Rs.2500 Only
Fee paid through DD	0
Fee Received through payment gateway	Rs.2500 Only

Committee for the Purpose of Control and Supervision of Experiments on Animals

Ministry of Environment, Forest and Climate Change, Government of India

Registration No:- 1636/PO/Re/S/12/CPCSEA
Date of Registration:-29/03/2012
Registration valid till:- 28/03/2015
Name of the Establishment:-Sree Dattha Institute of Pharmacy
Address of establishment:-Sree Dattha Institute of Pharmacy, Sheriguda (V), Ibrahimpatnam (M),R.R. Dist- 501510, Telangana
Purpose of Registration:-Small animal:- Research for Education purpose
Type of Animal House Facility:-Small Animal
Validity of registration has expired! Renewal of registration and re-constitution of IAEC is required!

WELCOME :-1636/CPCSEA

- Edit Profile
- Registration Status
- IAEC Members
- Revision of IAEC
- Upload Minutes
- View Minutes
- Change Nominee Request
- Renewal/Reconstitution Request
- Change Password
- Logout

EDIT USER PROFILE

Establishment Name	Sree Dattha Institute of Pharmacy
Address	Sree Dattha Institute of Pharmacy, Sheriguda (V),
Contact No	9393808082
State	Telangana
Pincode	501510
Email	principalsdip@sreedattha.ac.in

Update Cancel

Committee for the Purpose of Control and Supervision of Experiments on Animals

Ministry of Environment, Forest and Climate Change, Government of India

Registration No:- 1636/PO/Re/S/12/CPCSEA
Date of Registration:-29/03/2012
Registration valid till:- 28/03/2015
Name of the Establishment:-Sree Dattha Institute of Pharmacy
Address of establishment:-Sree Dattha Institute of Pharmacy, Sheriguda (V), Ibrahimpatnam (M),R.R. Dist- 501510, Telangana
Purpose of Registration:-Small animal:- Research for Education purpose
Type of Animal House Facility:-Small Animal
Validity of registration has expired! Renewal of registration and re-constitution of IAEC is required!

WELCOME :-1636/CPCSEA

- Edit Profile
- Registration Status
- IAEC Members
- Revision of IAEC
- Upload Minutes
- View Minutes
- Change Nominee Request
- Renewal/Reconstitution Request
- Change Password
- Logout

RENEWAL & RECONSTITUTION

View payment slip

Remarks Section

Clarification / Information sought by CPCSEA	Attachment

Payment Details

FEE RECEIVED THROUGH DD (RS.)	FEE RECEIVED THROUGH NETBANKING (RS.)	BALANCE (RS.)	TOTAL FEES (RS.)
0	2500	0	2500

Existing IAEC Members

S.NO.	MEMBER NAME	DATE OF BIRTH	DESIGNATION	QUALIFICATION	MOBILE	EMAIL	EXPERIENCE	ORGANIZATION	RESUME & CONSENT LETTER IN A SINGLE PDF FILE
1	Dr. venkata Reddy	24 Mar 1946	Chairperson	Ph.D., M.Pharma, B.Pharma	9849928114	venkat_manda60@yahoo.com	15 years	Sree Dattha Institute of Pharmacy,A.P..	View
2	Dr. S.Y.H. Syed Qadri	13 Jul 1962	Scientist from different discipline	M.V.Sc., B.V.Sc., A.H	9849518510	ssyhd@yahoo.com	12 years	NIN, Hyderabad	View
3	Mr. Mohanned Mohiuddin	05 Oct 1969	Scientist from different discipline	M.Pharma, B.Pharma	9985809481	mdmohiudd77@gmail.com	19 years	Sree Dattha Institute of Pharmacy, A.P.	View
4	Ms. Adepu Rajani	11 Jul 1985	Scientist from different discipline	M.Pharma, B.Pharma	9290871047	rajani_adepu85@yahoo.com	Professor from 2010 to till date	Sree Dattha Institute of Pharmacy, A.P.	View
5	Dr. M.A. Muqueeth	19 May 1962	Veterinarian	M.V.Sc., B.V.Sc.	7702774763		23 years	Veterinary Biological Research Institute, A.P.	View
6	Dr. K.V. Jogi	13 Jan 1945	Scientist from out side of the Institute	Ph.D., M.Pharma, B.Pharma	9848244375	kvjogi@gmail.com	13 years	Natco Research Centre, A.P.	View
7	Mr. S. Ramesh Gupta		Socially aware Nominee	LL.B., B.Sc.	9848045065	ramesh22760@gmail.com	Advocate from 1985 onwards		View

Proposed IAEC Members for reconstitution

SNO	NAME OF MEMBER	DATE OF BIRTH	DESIGNATION 1	DESIGNATION 2	QUALIFICATION	MOBILE	EMAIL	EXPERIENCE	ORGANIZATION TO WHICH THEY BELONG	RESUME & CONSENT LETTER IN A SINGLE PDF FILE

1	Dr Syed Shah Yousuf Hussain Qadry	13/07/1962	Scientist from different discipline	NA	M.V.Sc	9849518510	ssyhd @yahoo.com	16 years	NIN, ICMR, Hyderabad	QUADRI(1).PDF
2	Dr M A Muqeeth	19/05/1962	Veterinarian	NA	M.V.Sc	7702774763	mdmuqueeth @yahoo.com	26 years	Veterinary Biological Institute, Hyderabad	MUQUEETH(1).PDF
3	Dr K V Jogi	13/01/1945	Biological Scientist	NA	Ph.D.	9848244375	kvjogi @gmail.com	45 years	NATCO Research Centre, Hyderabad	KASI_SOMAYAJULA.
4	Dr M Venkata Reddy	24/02/1946	NA	Member Secretary	M.Pharm., Ph.D.	9849928114	sdip @sreedattha.ac.in	58 years	Sree Dattha Institute of Pharmacy, Sheriguda, Ibrahimpatnam, R R Dist 501510	VENKATA_REDDY.p
5	Mr Vishnu Vardhan Reddy	03/03/1989	Scientist Incharge of Animal House Facility	NA	M.Pharm.	8801099935	mvishnu.pharmacology @gmail.com	3 years	Sree Dattha Institute of Pharmacy, Sheriguda, Ibrahimpatnam, R R Dist 501510	VISHNU.PDF
6	Dr S A Sreenivas	06/12/1976	NA	Chairperson	M.Pharm., Ph.D.	9393808082	principalsdip @sreedattha.ac.in	15 years	Sree Dattha Institute of Pharmacy, Sheriguda, Ibrahimpatnam, R R Dist 501510	DR.S.A_SREENIVAS

S	R	O	1	-	3	3	2	5	2	5	8	0	2	5	1	7	.	4	0	1	0	0	2

MBNR : 08542 - 242611

VYJAYANTHI EDUCATIONAL SOCIETY

(Regd. No. 6387/2000), Mahabubnagar

City Office : # 101, Mount Nasir Apartments, Behind Ravindra Bharathi, Lakdi-ka-Pool, Hyderabad - 500 004.

Ref.No.

Date : .....

Society / Governing Body minutes of the meeting dated 3/12/2016

Item No: II (a)

I. Society general body meeting was held on 3/12/2016 at Flat No: 101/A, Mount Nasir Appartments, behind Ravindra Bharathi, Lakdikapool, Hyderabad. It was unanimously resolved to introduce supernumerary seats for PIO & NRIs.

II. Committee even emphasized on submitting the documents for approval of seats for sons/ daughters of PIO & NRIs.

"TRUE – EXTRACT"

SECRETARY/CORRESPONDENT

For SREE DATTHA INSTITUTE OF PHARMACY

SECRETARY/CORRESPONDENT

Dr. S A SREENIVAS
M. Pharm, Ph. D
PRINCIPAL
Sree Dattha Institute of Pharmacy
Sheriguda. V, Ibrahimpatnam .M, R.R .Dist -501 510.

SRO1-33252580251 7.401003
: 040-32403858
: 040-30522458
MBNR : 08542 - 242611

VYJAYANTHI EDUCATIONAL SOCIETY

(Regd. No. 6387/2000), Mahabubnagar

City Office : # 101, Mount Nasir Apartments, Behind Ravindra Bharathi, Lakdi-ka-Pool, Hyderabad - 500 004.

Ref.No.

Date : .....

SOCIETY MINUTES EXTRACT

I. That the Society vide its executive meeting held on 3/12/2016 at registered office at Lakdikapool vide item no. II (a), have resolved **to submit the documents to AICTE for approval of Introduction of supernumerary seats for PIO in Format[16]** as prescribed on the portal.

II. Committee even emphasized on the **Submission of Additional Documents to AICTE for the approval of seats for sons/ daughters of NRIs in the Format[17]** as prescribed on the portal.

"TRUE EXTRACT"

Dr. S A SREENIVAS
M. Pharm, Ph. D
PRINCIPAL
Sree Dattha Institute of Pharmacy
Sheriguda. V, Ibrahimpatnam .M, R.R .Dist -501 510.

SREE DATTHA INSTITUTE OF PHARMACY Sheriguda

Secretary/ Correspondent
For SREE DATTHA INSTITUTE OF PHARMACY

SECRETARY/CORRESPONDENT

S	R	0	1	-	3	3	2	5	2	5	8	0	2	5	1	7	.	4	0	1	0	0	1

Fax : 040-30522458
MBNR : 08542 - 242611

VYJAYANTHI EDUCATIONAL SOCIETY

(Regd. No. 6387/2000), Mahabubnagar

City Office : # 101, Mount Nasir Apartments, Behind Ravindra Bharathi, Lakdi-ka-Pool, Hyderabad - 500 004.

Ref.No.

Date : .....

FORMAT[16]

RESOLUTION FOR INTRODUCTION OF SUPERNUMERARY SEATS FOR OCI/ PIO/ FOREIGN NATIONALS/ CHILDREN OF INDIAN WORKERS IN GULF COUNTRIES

That the Trust/ Society vide its Executive meeting held on 3/12/2016 at Flat No: 101/A, Mount Nasir Appartments, behind Ravindra Bharathi, Lakdikapool, Hyderabad vide item no. II(a) have resolved that, shall apply to AICTE for introduction of PIO in Bachelor of Pharmacy Course and resolved to allocate required funds for creation of suitable hostel/ residential accommodation for the persons of Indian origin and shall also allocate required funds for procurement of furniture and other required entities for smooth functioning of the same.

(Signature and name of Chairman/ Secretary of parent organization),

(Designation), (Name of the organization)

For SREE DATTHA INSTITUTE OF PHARMACY

SECRETARY/CORRESPONDENT

SREE DATTHA INSTITUTE OF PHARMACY

Dr. S A SREENIVAS
M. Pharm, Ph. D
PRINCIPAL
Sree Dattha Institute of Pharmacy
Sheriguda. V, Ibrahimpatnam .M, R.R .Dist -501 510.

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MBNR : 08542 - 242611

VYJAYANTHI EDUCATIONAL SOCIETY

(Regd. No. 6387/2000), Mahabubnagar

City Office : # 101, Mount Nasir Apartments, Behind Ravindra Bharathi, Lakdi-ka-Pool, Hyderabad - 500 004.

Ref.No.

Date : .....

FORMAT[17]

RESOLUTION FOR INTRODUCTION OF SEATS FOR SONS/ DAUGHTERS OF NRI

That the Trust/ Society vide its Executive meeting held on 3/12/2016 at Flat No: 101/A, Mount Nasir Appartments, behind Ravindra Bharathi, Lakdikapool, Hyderabad vide item no. II(a) have resolved that, shall apply to AICTE for introduction of NRI in Bachelor of Pharmacy Course and resolved to allocate required funds for procurement of required entities for smooth functioning of the same.

(Signature and name of Chairman/ Secretary of parent organization),

(Designation), (Name of the organization)

For SREE DATTHA INSTITUTE OF PHARMACY

SECRETARY/CORRESPONDENT

SREE DATTHA INSTITUTE OF PHARMACY Sheriguda

Dr. S A SREENIVAS
M. Pharm, Ph. D
PRINCIPAL
Sree Dattha Institute of Pharmacy
Sheriguda. V, Ibrahimpatnam .M, R.R .Dist -501 510.

SRO1-332525802517.402001

SREE DATTHA INSTITUTE OF PHARMACY

(Approved by P.C.I., Approved by AICTE, New Delhi, Affiliated to JNTUH, College Code : U2, Hyderabad, Andhra Pradesh)
Sagar Road, Sheriguda (V), Ibrahimpatnam (M), R.R. Dist. - 501 510.
Ph. : 08414-320919, 9393808082, Fax : 040-30522458, www.sreedattha.ac.in, E-mail : sdipu2@gmail.com

Date : _____

TO WHOME SO EVER IT MAY BE CONCERNED

This is to certify that we have Hostel facility to accommodate NRI's and PIO with all facilities and also we have duly appointed Hostel Rector along with supporting staff for smooth administration of Hostel.

For SREE DATTHA INSTITUTE OF PHARMACY

SECRETARY/CORRESPONDENT

SREE DATTHA INSTITUTE OF PHARMACY Sheriguda

PRINCIPAL
Principal
Sree Dattha Institute of Pharmacy
Sheriguda (V), Ibrahimpatnam (M),
Ranga Reddy (Dist)-501 510

Janaki

LESSON PLAN

Subject:- Bppk Class:- B.Pharm/M.Pharm/Pharm-D Year: I/II/III/IV Sem: 1/2

S. No.	Date	UNIT NO.	Topic to be covered
1)	10/7/18	I	Introduction to Biopharmaceutics, pharmacokinetics & pharmacodynamics.
2)	11/7/18	I	Introduction to Drug Absorption
3)	12/7/18	I	Extrapoint:- Fate of drug after drug absorption
4)	12/7/18	I	Mechanisms of drug absorption Extrapoint:- drug cond in blood.
5)	13/7/18	I	physicochemical properties effecting GI absorption
6)	14/7/18	I	physicochemical properties effecting GI absorption.
7)	16/7/18	I	Dosage form factors effecting GI absorption
8)	17/7/18	I	Dosage form factors effecting GI absorption
9)	18/7/18	I	Dosage form factors effecting GI absorption.
10)	19/7/18	I	patient related factors/ biological factors effecting GI absorption.
11)	20/7/18	I	Age, Gastric Emptying time Intestinal transit time & Gastro intestinal pH.
12)	21/7/18	I	Disease states, Blood flow through the GIT
13)	23/7/18	I	Gastrointestinal contents like

S. No.	Date	UNIT NO.	Topic to be covered
13)	23/7/18	I	other drugs, food, fluids & Normal GI contents
14)	24/7/18	I	presystemic metabolism by luminal Enzymes & Gut wall Enzymes.
15)	25/7/18	I	presystemic metabolism by Bacterial & Hepatic Enzymes.
16)	26/7/18	I	methods for studying drug uptake
17)	27/7/18	I	clarifying doubts
18)	28/7/18	I	Slip test – I
19)	30/7/18	II	Introduction to Distribution
20)	31/7/18	II	steps involved in drug distribution
21)	1/8/18	II	factors effecting distribution of drugs.
22)	2/8/18	II	Tissue permeability of drugs.
23)	3/8/18	II	organ / tissue size & perfusion rate
24)	4/8/18	II	Bindings of drugs to tissue components
25)	7/8/18	II	Miscellaneous factors.
26)	8/8/18	II	volume of distribution.
27)	9/8/18	II	protein binding of drugs
28)	10/8/18	II	factors effecting protein binding of drugs.
29)	11/8/18	II	factors effecting protein binding of drugs.

S. No.	Date	UNIT NO.	Topic to be covered
30)	13/8/18	II	Significance of protein binding
31)	14/8/18	II	kinetics of protein binding
32)	16/8/18	II	kinetics of protein binding
33)	18/8/18	II	clarifyingdoubts
34)	20/8/18	II	Sliptest NO-(2)
35)	21/8/18	II(a)	Introduction to Bio-transformation of drugs.
36)	23/8/18	III	Introduction to xenobiotics
37)	24/8/18	III	Drug metabolising Enzymes
38)	25/8/18	III	Introduction to phase I, II & III reactions.
39)	27/8/18	III	oxidative reactions
40)	28/8/18	III	continuation to oxidativereactions
41)	29/8/18	III	Reductive reactions.
42)	30/8/18	III	Hydrolytic reactions.
43)	31/8/18	III	phase II reactions.
44)	1/9/18	III	continuation to phase II reactions.
45)	7/9/18	III(b)	Introduction to Excretion of drugs, glomerular filtration, tubular secretion.
46)	8/9/18	III	Tubular reabsorption & concept of clearence
47)	10/9/18	III	Excretion of drugs through lungs & skin
48)	11/9/18	III	Excretion of drugsthrough bile & feces
49)	12/9/18	III	Sliptest NO. (3)

Signature of the Faculty Incharge

S. No.	Date	UNIT NO.	Topic to be covered
50)	14/9/18	IV	Introduction to Bioavailability & Bioequivalence.
51)	16/9/18	IV	concept & types of Equivalence
52)	17/9/18	IV	Types of Bioavailability studies
53)	18/9/18	IV	Extrapoint:- Quality parameters of dosage forms, assay methods & its validation.
54)	18/9/18	IV	Measurement of Bioavailability
55)	19/9/18	IV	Extrapoint:- physicochemical properties of drugs, added substances its effects on preparations & biological availability of dosage forms
56)	19/9/18	IV	Bioequivalence study design
57)	20/9/18	IV	Extrapoint:- pharmaceutical properties of dosage forms, disintegration, dissolution rate
58)	22/9/18	IV	Bioavailability testing procedure & CDSCO Extrapoint:- Biological, pharmacological effects of dosage forms.
59)	24/9/18	IV	In vitro - In vivo correlation of data Extrapoint:- factors effecting Bioavailability, Significance & statistical analysis of bio-equivalence studies Multistage & therapeutic Equivalence. Extrapoint:- New Drug Application. &

Slip test No - 4

S. No.	Date	UNIT NO.	Topic to be covered
60)	25/9/18	V	Basic considerations of pharmacokinetics.
61)	26/9/18	V	compartment modelling
62)	27/9/18	V	Non compartmental models.
63)	28/9/18	V	continuation to Non compartmental models.
			Extrapoint :- pharmacokinetic variability diseases
64)	29/9/18	V	one compartment open model - i.v bolus.
65)	1/10/18	V	continuation to i.v bolus.
			Extrapoint:- pharmacokinetic variability, drug interactions.
66)	3/10/18	V	Extravascular administration.
67)	4/10/18	V	continuation to E.V administration
			Extrapoint :- individualization & optimization of drug dosing regimns.
68)	5/10/18	V	calculation of pharmacokinetic parameters.
69)	6/10/18	V	Extrapoint :- titration design for clinical rationales.
70)	10/10/18	V	Brief over view of non linear kinetics
71)	11/10/18	V	Extrapoint :- post marketing surveillance & process validation.

V. Jaswanth

Signature of the Faculty Incharge

S. No.	Date	UNIT NO.	Topic to be covered
75)	12/10/18	V	clarifying doubts
76)	13/10/18	V	Slip Test No. 5
77)	from 22/10/18		Revision of Each topic.

Date: 26/1/18.

TO WHOM SO EVER IT MAY CONCERN

(Blood Bank Training)

This is to certify that Mr./Ms. T. Bhavya Nagalakshmi S/D/o T. V. Satyanarayana bearing JNTUH H.T.No. 17U21R0006 student of **Sree Dattha Institute of Pharmacy**, Sheriguda, Ibrahimpatnam, R.R.Dist 501510, Telanganga, residing at Medical And Health Colony, Srehanai Nagar Vanasthalipuram, R.R.district. address has been trained in our Blood Bank bearing name and address HIMABINDU HOSPITAL BLOOD BANK SANTOSHNAGAR, RANGAREDDY DIST for a period of 18 hours from 24/1/18 to 26/1/18 dates (minimum 03 days). The student has learnt the process of blood sample collection and testing, blood collection into unit bags, whole blood preservation, separation of blood components, preservation, Licensing procedure, maintenance of hygienic conditions in blood bank, documentation, BB Register maintenance etc. as a part of "Blood Bank Training".

Date: 26/1/18
Place: Santosh Nagar.

Signature of Incharge Person
and Seal of Blood Bank

HIMABINDU BLOOD BANK HYDERABAD 26/1/18 SANTOSH NAGAR

Date: 22/12/17

TO WHOM SO EVER IT MAY CONCERN

(Community Pharmacy Training)

This is to certify that Mr./Ms. K. Gouthami Reddy S/D/o K. Srinivas Reddy bearing JNTUH H.T.No. 16U21R0002 student of **Sree Dattha Institute of Pharmacy**, Sheriguda, Ibrahimpatnam, R.R.Dist 501510, Telanganga, residing at H.no 1-112/8, Vinayak nagar, Achanpally, Bodhan, Nizamabad address has been trained in our Pharmacy shop bearing name and address _____ Amrutha medical & General Stores. D.NO 4-19, Mamidipally for a period of 90 hours from 1/12/17 to 16/12/17 dates (minimum 15 days). The student has learnt receiving and reading the Prescription, identifying and removing the medicines from the racks, handling the dosage forms, dispensing and billing, proper storage of medicines, stock checking and inventory control and other routine works related to Pharmacy shop as a part of "Community Pharmacy Training".

Name and Signature of Registered Pharmacist with Registration Number	Stamp of Pharmacy Shop	Name and Signature of Proprietor
94931/A1	AMRUTHA MEDICAL & GENERAL STORES- D.No. 4-19, Vill.: MAMIDIPALLY, Mdl. Armoor, Dist. Nizamabad.	