

JSS Academy of Higher Education & Research, Mysuru (Accredited 'A+' Grade by NAAC)

# JSS College of Pharmacy, Ooty (An ISO 9001:2015 Certified Institution)



# Student's HAND BOOK (2019 - 20)















### **Welcome Note**

It is a pleasure and privilege to welcome you all to the academic year 2019-20. We hope the inimitable ambience and learning experience at JSS College of Pharmacy, Ooty will explore your potentials and help to realize your dreams.

We wish you the very best.

### **Editorial Policy**

JSS College of Pharmacy, Ooty reserves the rights to revise, amend, or change items set forth in this Student's Handbook from time to time. Accordingly, readers of this Student's Handbook shall inquire as to whether any such revisions, amendments, or changes have been made since the date of publication. The Office of the Principal and Internal Quality Assurance Cell oversees any such amendments to the Student's Handbook as per the requirements.

### **BIO DATA**

(Student's Copy – To be retained in the book)

1. NAME :

2. REGISTER NUMBER :

3. PROGRAM : D.Pharm. /B.Pharm. / Pharm.D.

4. Year : I / II / III / IV / V / VI

5. PARENT/GURDIAN NAME :

6. PARENT/GURDIAN ADDRESS :

7. MOBILE NUMBER : STUDENT:

PARENT/GURDIAN:

8. E-MAIL ADDRESS : STUDENT:

PARENT/GURDIAN:

9. ACCOMOMATION STATUS : HOSTELLER / DAY SCHOLAR

10. PRESENT ADDRESS (IF DAY SCHOLAR):

11. NATIONALITY :

12. DATE OF BIRTH :

13. BLOOD GROUP :

12. IDENTIFICATION MARKS : 1.

**BIO DATA** (Office Copy – To be submitted in the Office)

1. NAME	:	
2. REGISTER NUMBER	:	
3. PROGRAM	: D.Pharm. /B.Pharm. /M.Phar	m. / Pharm.D.
4. Year	: I / II / III / IV / V / VI	
5. PARENT/GURDIAN NAME	:	
6. PARENT/GURDIAN ADDRESS	:	
7. MOBILE NUMBER	: STUDENT:	
	PARENT/GURDIAN:	
8. E-MAIL ADDRESS	: STUDENT: PARENT/GURDIAN:	
9. ACCOMOMATION STATUS	: HOSTELLER / DAY SCHOLAR	
10. PRESENT ADDRESS (IF DAY SCHOLAR	<b>x</b> ):	
11. NATIONALITY	:	
12. DATE OF BIRTH	:	
13. BLOOD GROUP	:	
12. IDENTIFICATION MARKS	: 1.	
	2.	



Dear Student,

Welcome to the academic year 2019-20. I hope that this academic year will provide us exciting opportunities for learning, personal growth, and new experiences. As pharmacy students, you are encouraged to appreciate our diverse community and to become global citizens by acquiring knowledge, developing useful skills, understanding, critical/higher order thinking, and problem-solving abilities. While it is a great honor being a pharmacy student, it also brings great responsibility to play a significant role in the changing health care environment. The safety and wellbeing of the ultimate customers of this industry, the patients, should be your top priority. To accomplish such professional mind-set, you are supposed to have self-discipline, professional ethics and life-long learning. As the transition from the college student to a professional is a difficult one, I encourage you to be professional while you are a student.

This hand book provides you a glimpse of the various curricular, co-curricular and extracurricular activities, and orients you to the institution and the programme chosen by you. This handbook can serve as a guide to your academic requirements, expected competencies, general rules and policies, ethical aspects, professional responsibilities, residential facilities and other activities of the college. Importantly, it describes the values we cherish at the institution and the expectations we have from you with regard to your conduct and discipline in the college campus.

If at any time I or my office can be of assistance to you, please do not hesitate to contact us.

I wish a successful academic year ahead!

Dr. Dhanabal S Palaniswamy, M. Pharm, Ph.D, FIC., Principal

Contents	Page No
About JSS Mahavidyapeetha	1
About JSS Academy of Higher Education & Research, Mysuru	. 1
About JSS College of Pharmacy, Ooty	2
Organization Chart of the College	4
Faculty	. 5
Organization Chart of Student Services	7
Duties and Responsibilities of Individuals in Student Services	8
Programs Offered	. 19
Curriculum	22
Expected Competencies – B.Pharm	. 33
Expected General Outcomes – B.Pharm	. 33
Expected Competencies – Pharm.D	35
Expected General Outcomes – Pharm.D	. 35
Cross Walk of Subjects to the Professional Competencies to be achieved	
by Pharm.D. Graduates	. 37
Specialization and Subjects of PG Diploma	38
Examination	39
Student Representation in College Committees	. 47
10 Commandments to be a Successful College Student	. 48
Academic and Professional Conduct	. 49
Code of Ethics	. 53
Pharmacist Oath	. 56
Complaints and Grievances	. 56
Dress Code, Health Services, Cell Phone Policy	. 58
Library and Information Centre	. 59
College Events	. 63
Calendar of Events	63
Anti Ragging Committee	. 77

### **ABOUT US**

### **JSS Mahavidyapeetha**

JSS Mahavidyapeetha (JSSMVP), one of the largest educational trusts in the southern part of the country manages more than 350 institutions spread across inland and offshore. The founder of the trust, His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji, the 23<sup>rd</sup> Pontiff of 1000 years old Suttur Mutt had the vision and foresight of establishing educational institutions in several branches of learning including ancient knowledge, tradition and culture. The services rendered by the MVP are paid rich tributes by many national leaders. Presently His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, the 24<sup>th</sup> pontiff, is steering the success of this giant organization.

### JSS Academy of Higher Education & Research, Mysuru

In the year 2008, the University Grants Commission (UGC), New Delhi declared JSS Academy of Higher Education & Research as Deemed-to-be-University under section (3) of UGC Act, 1956. It is a culmination of a half-century of perseverance in the field of education steered by the philosophy of noble minds. The medical institutions under the aegis of JSS University include Medical College, Dental College and Colleges of Pharmacy at Mysore and Ooty. These institutions are islands of excellence in their respective fields in medical sciences. The binding philosophy of these institutions is training physicians, dentists, pharmacists and other healthcare professionals to provide the highest standards of patient care, whilst pursuing cutting edge research. The University departments also offer allied medical/health sciences programs. *In the year 2018, JSS University has been accredited 'A+' Grade by the National Assessment and Accreditation Council (NAAC) of UGC.* THE RANKING (101-200) (The Times Higher Education University Impact Rankings)

### **Vision**

To provide education that helps transformation of individuals and society.

### **Mission**

The mission of JSSU is to expand the boundaries of education and to make the most amazing learning possible by

- o Providing superior undergraduate, graduate and professional education to its students
- o Developing and advancing the talents of students to create applicable knowledge
- o Nurturing translational and transformational research that benefit the society
- o Inspiring to excel in health sciences delivery and care

### **About JSS College of Pharmacy, Ooty**

JSS College of Pharmacy, Ooty (Est. 1980) is a constituent college of JSS Academy of Higher Education & Research, Mysuru. The institution offers D. Pharm., B. Pharm., Pharm. D., M. Pharm. (in 10 specializations), Ph.D., PG Diploma and Certificate courses. The undergraduate and post graduate programs are approved by Pharmacy Council of India (PCI), New Delhi and/or All India Council for Technical Education (AICTE), New Delhi. The research program, PG Diploma and Certificate courses are approved by JSS Academy of Higher Education & Research, Mysuru. The college is committed to become a center for excellence in pharmaceutical education and research. The college has also got the *ISO 9001:2015 certification*.

### **Vision**

To be a leader in pharmaceutical sciences & pharmacy practice education, training, research and continuous professional development for pharmacists and Pharmaceutical Scientists providing competent patient care and nurturing drug discovery and development.

### **Mission**

- To impart knowledge, develop skills and competencies in students in pharmaceutical sciences and pharmacy practice.
- ❖ To develop and advance the knowledge, attitude and skills of pharmacists and faculty members who can provide comprehensive pharmaceutical care to patients, improve patient outcomes, and meet societal needs for safe and effective drug therapy.
- ❖ To develop, promote and nurture research activities in pharmaceutical sciences and pharmacy practice and translating research into healthcare.

### **Core Values**

- Leadership
- Excellence
- Integrity
- Respect
- Professionalism
- Innovation

**Quality Policy** 

JSS College of Pharmacy, Ooty meet its MISSION, VISION and CORE VALUES by

Completing the Course Curriculum at Scheduled Time

Adopting Latest Technologies for Research

Improving the Systems & Process

**College Strategic Plan** 

College has a well defined strategic plan. Strategic planning allows the college to make

fundamental decisions or choices by taking mission and vision in to account, and to view

what college hopes to accomplish and how it will do so. A strategic plan is built on a

thorough analysis of the college's mission and vision, existing structure, governance,

staff, collaborations, and resources (financial, human, technical, and material).

JSS College of Pharmacy, Ooty will position itself as the SMART College of

Pharmacy in the country by 2020 By developing and advancing

**S** Student Quality

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**M** Motivation

A Academic Excellence

**R** Research and Innovation

**T** Technology

and produce SMART Pharmacists who excel through -

**S** Skills that help achieve excellence

**M** Motivation to do their best and emerge as leaders

**A** Academic excellence that is exemplified

**R** Research that is relevant, reproducible and realistic

**T** Technology that integrates with their practice

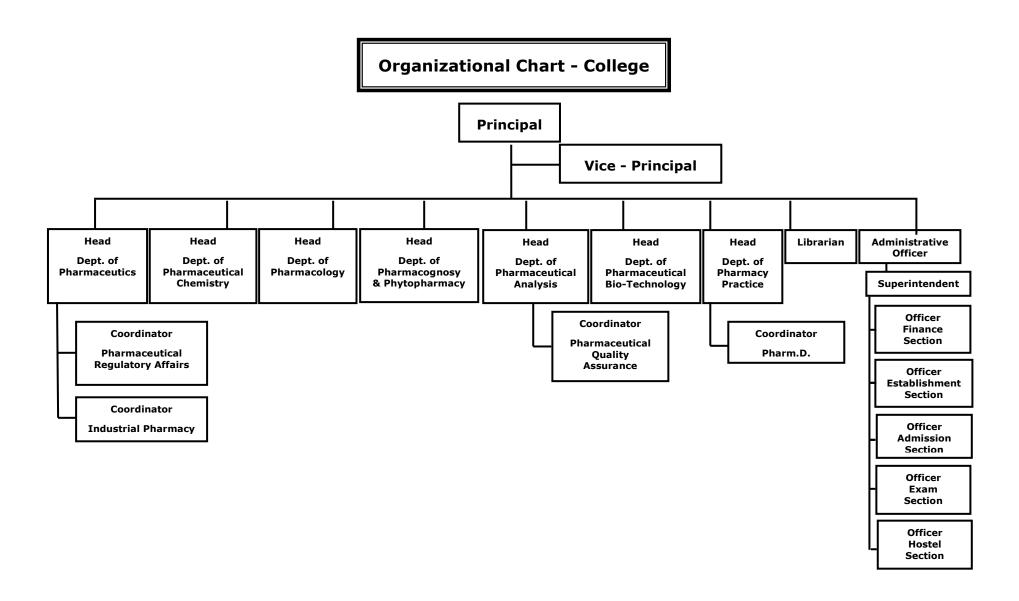
**Contact us** 

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3



# **FACULTY**

# Department of Pharmaceutics

S. No.	Name	Qualification	Designation
1	Dr. Gowthamarajan Kuppusamy	M. Pharm., Ph.D.,	Professor & Head
2	2 Dr. Senthil Venkatachalam M. Pharm., Ph.D.,		Professor
3	Dr. Suresh K Raman	M. Pharm., Ph.D.,	Asst. Professor
4	Dr. Nagasamy V Dhandapani	M. Pharm., Ph.D.,	Asst. Professor
5	Dr. Ganesh GN Krishnan	M. Pharm., Ph.D.,	Asst. Professor
6	Dr. Jawahar Natarajan	M. Pharm., Ph.D.,	Asst. Professor
7	Dr. Karri V.V.S. Narayana Reddy	M. Pharm., Ph.D.,	Lecturer
8	Mr. Arun R	M. Pharm.,	Lecturer

# Department of Pharmaceutical Chemistry

S. No.	Name	Qualification	Designation
1	Dr. Afzal A Mohammed	M. Pharm., Ph.D.,	Professor & Head & Vice – Principal
2	Dr. Chandrasekar MJ Nanjan	M. Sc., Ph.D.,	Professor
3	Dr. Kalirajan Rajagopal	M. Pharm., Ph.D.,	Asst. Professor
4	Dr. Jubie Selvaraj	M. Pharm., Ph.D.,	Asst. Professor
5	Dr. Gowramma Byran	M. Pharm., Ph.D.,	Asst. Professor
6 Dr. Gomathy Subramanian		M.Pharm., Ph.D.,	Asst. Professor
7 Dr. Srikanth J		M.Pharm., Ph.D.,	Lecturer
8 Dr. Gomathy S		M.Pharm., Ph.D.,	Lecturer

# Department of Pharmacology

S. No.	Name	Qualification	Designation
1	Dr. Vadivelan Ramachandran	M. Pharm., Ph.D.,	Professor
2	Dr. Praveen T Krishnamurthy	M. Pharm., Ph.D.,	Professor
3 Dr. Anand vijayakumar		M. Pharm., Ph.D.,	Professor
4 Mr. Shiva Rama Krishnan B.		M. Pharm.,	Lecturer
5 Dr. Justin Antony M. P		M. Pharm., Ph.D.,	Asst. Professor
6	Mr.J.Saravanan	M. Pharm.,	Lecturer
7	Dr.Diwakar	M. Pharm., Ph.D.,	Lecturer

# Department of Pharmacognosy and Phytopharmacy

S. No.	Name	Qualification	Designation
1	Dr. Dhanabal S Palaniswamy	M. Pharm., Ph.D.,	Professor & Principal
2	Dr. Duraiswamy Basavan	M. Pharm., Ph.D.,	Professor & Head
3	Mr. Ramu .G	M. Pharm.,	Lecturer
4	Dr.Ragendran	M. Pharm., Ph.D.,	Lecturer
5	Ms. Priyadharshini	M. Pharm.,	Lecturer

# Department of Pharmaceutical Biotechnology

S. No.	Name	Qualification	Designation
1	Dr. Ashish D Wadhwani	M. Pharm., Ph.D.,	Asst. Professor & Head
2	Dr. Rajesh K Raman	M. Pharm., Ph.D.,	Lecturer

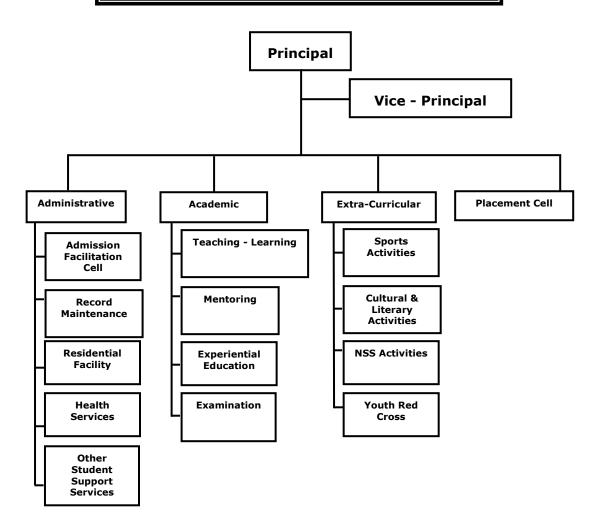
# Department of Pharmaceutical Analysis

S. No.	Name	Qualification	Designation
1	Dr. Krishnaveni Nagappan	M. Pharm., Ph.D.,	Professor & Head
2 Dr. Meyyanathan S Nainar		M. Pharm., Ph.D.,	Professor
3	Mr. Nagarajan JS Krishnan	M. Pharm.,	Asst. Professor
4	Dr. Jeyaprakash M Raju	M. Pharm., Ph.D.	Asst. Professor
5	Mr. Babu Basavan	M. Pharm.,	Lecturer

# Department of Pharmacy Practice

S. No	Name	Qualification	Designation
1 Dr. Ponnusankar Sivasankaran M		M. Pharm., Ph.D.	Professor & Head
2 Dr. Arun K Parthasarathy N		M. Pharm., Ph.D.	Asst. Professor
3	Mr. Jayakumar C	MCA, M.Phil, B.Ed, PGDCA.,	Asst. Professor
4	Ms. Deepalakshmi Mani	M. Pharm.,	Lecturer
5	Ms. Roopa B Satyanarayan	M. Pharm.,	Lecturer
6	Dr. Sadagoban G Krishnamoorthy	Pharm.D.,	Lecturer
7	Dr. Swathi Swaroopa Bora	Pharm.D.	Lecturer
8	Dr. Aneena Suresh	Pharm.D.	Lecturer
9	Dr. Keerthana Chandrashekar	Pharm.D.	Resident
10	Dr. Khayati Moudgil	Pharm.D.	Resident
11	Mr.Vishwas.H.N	M. Pharm.,	Lecturer
12 Dr.R.Santhosh kumar		Pharm.D.	Lecturer

# **Organizational Chart - Student Services**



# **Duties and Responsibilities of Individuals in Student Services**

<b>Student Services</b>	Person/s Responsible	Responsibilities	
Principal	Dr. Dhanabal S Palaniswamy	<ul> <li>Making decisions on behalf of the faculty, staff, students and alumni to achieve the stated mission and vision of the college.</li> <li>Effectively organizing and allocating the human and financial resources of the college to achieve the stated mission and vision of the college.</li> <li>Implementing and enforcing the policies of the College and the university.</li> <li>Representing and advocating on behalf of the faculty, staff, students and alumni to the university.</li> </ul>	
Vice	Dr. Afzal A	<ul> <li>Supervision, coordination and delivery of teaching programs</li> </ul>	
Principal	Mohammed	<ul> <li>Management of programs to improve the knowledge, skill and attitude of staff</li> <li>Responsibility for general discipline matters of students</li> <li>Centre for continuous learning for professional excellence (CCLPE)</li> <li>Contribute to the overall management of the college</li> </ul>	
Administrative	Mr. Basavalinga-	❖ Coordinating a range of functions, such as finance, human resources and other support	
Officer	deveru H K	<ul> <li>areas that contributes significantly to the management function within the college.</li> <li>Managing the delivery of a particular service or function (e.g. finance, library, human resources, facilities)</li> <li>Performing routine administrative activities</li> <li>Providing basic physical and emotional care for students</li> <li>Assisting with coordination and planning of student routines</li> <li>Providing routine customer service tasks such as reception and providing straightforward advice about the college</li> <li>Providing routine support tasks with respect to college maintenance</li> <li>Coordinating the day to day routine operational requirements of a college office</li> <li>Assuming responsibilities for the general cleanliness and maintenance of the college</li> </ul>	

Admission Facilitation Cell	The cell is responsible to create awareness about the pharmacy education and profession in and around the district.	
	❖ The team will be actively participating in two way communication between aspiring students, who would wish to take up pharmacy curriculum after 10+2.	
	❖ Admission facilitation cell can provide complete information package about the various courses offered by the institution, fee structure and admission process.	
	This cell facilitates and assists the university officials for the smooth and fair conduct of entrance tests for getting the admission into various UG and PG programs and in the selection process.	
Record Maintenance	<ul> <li>Fee collection and documents.</li> <li>Maintaining all the records of students, which include the completed application, academic information, transcripts, and others.</li> <li>Maintaining confidentiality of student educational records.</li> </ul>	
Residential facility	❖ To frame policy for the smooth functioning of the hostels, messes and other facilities within the hostel.	
	To ensure that no ragging takes place in the hostels and maintain a ragging free hostels.	
	❖ To plan for upgradation of facilities in the hostels.	
	❖ To ensure maintenance of discipline in and around the hostel.	
	❖ Any other responsibility assigned by the principal/higher authority.	

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Health Services	<ul> <li>To ensure the access to the health care facilities as per the requirements.</li> <li>To facilitate the access to the District Head Quarters Public Hospital, Ooty for free health care checkup and free medications.</li> </ul>
Institutional Hostel Review Committee	<ul> <li>They shall collectively carry out hostel rounds during the working hours of the institution and if necessary even after the working hours to ensure that the student's amenities, dining, and mess needs and discipline are maintained.</li> <li>They shall review hostel income and expenditure every month and give report to the principal and also the warden.</li> <li>They shall carry out random stock verification, and also annual verification of all records, stocks, etc.,</li> <li>They shall periodically assess the quality of food.</li> <li>Purchase made for the various provisions and vegetables for the hostel shall be checked by them with regard to the quantity and quality of the material delivered to the hostel.</li> <li>They shall receive the grievances, complaints, if any, regard to the ragging, theft, etc., if any, from the students and redress them to the extent possible.</li> </ul>
Teaching & Learning	<ul> <li>Students made aware of curriculum, syllabi, method of evaluation through orientation programme in the beginning of the year. Academic calendar of events (course-wise and subject wise for UG and PG courses), feedback and academic planning is given to the students.</li> <li>Unitized teaching plan to ensure proper teaching-learning transaction and continuous evaluation in the form of internal assessment examinations.</li> <li>Teaching-learning (TL) strategies include practical, field work, project work, student seminars, group discussions, case studies, industrial/field visits, in-plant training, along with didactic teaching.</li> <li>ICT enabled TL process (Computers, Internet, LCD, Models, etc.).</li> <li>The learner centric approach ensured through student seminars, assignments, project work, visits, in-house training etc.</li> <li>Faculty function as academic counselors and mentors.</li> </ul>

	<ul> <li>Continuous internal assessment that is shared with students to ensure proper understanding of the subject and clarification of doubts.</li> <li>Students are encouraged to use extensively the library resources, computers and e-material in the TL process.</li> </ul>
Mentoring	<ul> <li>Monitor, evaluate and report student progress in key learning areas.</li> <li>Implement strategies to achieve targets related to student learning outcomes.</li> <li>Maintain records of class attendance and recording student progress.</li> <li>Supervising a range of student activities including support and welfare programs and contributing to a range of co-curricular activities.</li> <li>To send sessional marks statement and attendance to the parents after completion of each sessional.</li> <li>Maintain the student profile form which consists of bio - data of students, their residential and permanent addresses, their academic grades.</li> <li>Any problem related to the particular student is attended by the respective Batch teacher which includes counseling the students.</li> </ul>

Examination section	<ul> <li>Each of the college's examinations falls under the responsibility of an examination coordinator.</li> <li>Adhere to all rules and regulations pertaining to the conduct of examinations.</li> <li>Adhere to timelines for the development, conduct and review of examinations.</li> <li>To announce the date of sessional examination well in advance to the students and staff.</li> <li>To collect the question paper from the individual subject teachers and maintain the confidentiality of the same.</li> <li>To assign the invigilation duty to the staff and ensure the smooth conducting of the exam.</li> <li>To check the seating arrangement of the students in the examination hall</li> </ul>
Extracurricular activities	<ul> <li>Represent the views and interests of students on sporting matters to the University, locally and nationally.</li> <li>Encourage students to participate in recreational, intramural, and performance sport along with fitness and wellbeing programmes.</li> <li>Organize and support meetings of representatives of all classes.</li> <li>To develop and promote all areas of sport provided by the college.</li> <li>Represent students of the university to local and national bodies and organizing campaigns in support of student to promote health and social awareness programmes.</li> <li>To identify the student coordinators for individual sport events well in advance for the smooth conduction of events.</li> <li>To carry out Annual athletic meet for two days in an academic year.</li> <li>The schedule of events is prepared and communicated to all staff and students by displaying on the notice board.</li> </ul>

- ❖ A team consisting of principal, national pharmacy week celebrations (NPWC) committee members and staff coordinators will decide the schedule, events, rules and regulations of the NPWC.
- ❖ To ensure the commencement of schedule of NPWC well in advance.
- ❖ To prepare the list of participants and event schedules in association with student representatives.
- Identify the judges for each event in advance.
- Encourage students to participate in inter-collegiate cultural events and coordinate such programs.
- Ensuring the discipline of the students during cultural program.
- ❖ To provide NSS orientation to the students for social service scheme.
- ❖ To encourage the students for participation in various social service schemes.
- ❖ To conduct NSS regular activities as per the NSS and university guidelines.
- ❖ To organize NSS annual special camp in a selected village.
- $\ \ \, \ \ \,$  To conduct rallies for promotion of public health awareness.

❖ To look after the training and placement activities of students.	
❖ To have close liaison with industry for placement of students.	
To work in consultation with Coordinator, Industry Institution Interaction Cell (IIIC) fo organizing lectures by the professionals from industry.	
❖ To collect feedback from the companies coming for placement.	
Arrange Training programmes for soft skills and for interview facing skills for the students using institutional and external expertise.	
❖ To organize the entrepreneurship workshops.	
Preparing the 'Placement Brochure' with the curriculum-vitae of outgoing students of all the programs.	
❖ Liaising with pharmaceutical industries for the training of B. Pharm Students in III year	
<ul> <li>Communicating and arranging industrial visits for the students</li> </ul>	
❖ Maintaining all the track records of industrial training and visits	
Providing counseling for the needy students on both professional and personal related aspects.	
Discuss with the mentors of individual students prior to counseling to get the background information about the student.	
Providing counseling to the parents on various issues related to their wards whenever necessary.	
<ul> <li>Arranging professional counselors based on the need to counsel students and or parents.</li> </ul>	

Higher Education, Competitive Exams / Personality Development Program / English Coaching	<ul> <li>Coordinating the personality development programs.</li> <li>Coordinating the coaching classes for competitive exams for higher studies with the assistance of internal and external subject experts.</li> <li>Coordinating English language coaching for the students especially who are from Non-English speaking countries.</li> </ul>
International Students Services Cell	<ul> <li>Facilitating the legal procedures and immigration issues of international students.</li> <li>Liaising with the district police and administration for the verification process and VISA proceedings.</li> <li>Providing orientation towards the socio-cultural aspects of the country and college to avoid conflicts during the period of their stay.</li> </ul>
Anti Sexual Harassment Committee	<ul> <li>Addressing the issues related to sexual harassment.</li> <li>Recommending for necessary legal/ administrative actions against the persons if proven guilty.</li> </ul>
Social Discrimination Prevention Committee	<ul> <li>Addressing the issues related to social discrimination.</li> <li>Recommending for necessary legal/ administrative actions against the persons if proven guilty.</li> </ul>
Spektrum: Wall Magazine Committee	<ul> <li>Coordinating with the student committees to explore the talents of students.</li> <li>Updating the wall magazine periodically and monitoring the performances of the students.</li> </ul>

SI.No.	Committee	Name of the Staff
		Principal (Chairman)
1		Dr. S N Meyyanathan, Member
	College Council	Secretary
		All HOD's
		Dr. Arun K P, IQAC Coordinator
		Dr. Suresh Mohan Kumar, Research
		Director
		Dr. N. Krishnaveni (Coordinator)
M Dha	Dua aurama Camamitha a	All HOD's
M.Pnar	m Program Committee	Student Members
		Student representative of I & II
		M.Pharm
		Dr.N.Jawahar (Coordinator)
B.Phar	m Program Committee	I - IV B.Pharm Class Teachers
		Student members
		Student representative of I - IV
		B.Pharm
		Dr. K P Arun (Coordinator)
Pharm	D Program Committee	I - VI Pharm D Class Teachers
		Student members
		Student representatives of I - VI
		Pharm.D
D Bhar	m Program Committee	Dr. Anand Vijaykumar, Coordinator
D.Pilai	m Program Committee	Student members
		Student representatives of I & II
		D.Pharm
		Principal (Chief Superintendent)
	Examination Section	Vice-Principal (Dy. Chief
2		Superintendent)
		Dr. R Kalirajan (Coordinator)
		Dr.B. Babu
		Dr.B. Swathi Swaroopa
		Dr.R.Sureshkumar
		Dr.S.Diwakar
		Dr.Srikanth Jupudi
		Ms.S.Priyadharshini
		Mr. R. Arun
		Mrs.S.Gomathi
		Dr. S Ponnusankar (Coordinator)
3	Library	Mr. C Jayakumar
		All HODs
4	Sports	Mr.Sivaprasad, PT Teacher
i e		(Coordinator)

	1	Mr. D. Chivaramalurishasa
		Mr. B Shivaramakrishnan
		Dr. M R Jeyaprakash
		Dr.R.Vadivelan
		Dr.R.Santhoshkumar
		Dr. Gomathy Subramaniam
		Dr.Aneena Suresh
5	Purchase	Principal (Chairman)
		Dr. Afzal Azam, Vice-Principal
		All HoDs
		Mr. Basavalingadevaru H K, A O I/c
		Mr. P Rajashekarappa
6	Research	Dr. Suresh M.Kumar, Director-
		Research
		Research Guides
7	Higher Education, Competitive	Dr. A Justin (Coordinator)
	Examinations/ Personality	Dr. Rajesh Kumar R
	<b>Development Cell, English Coaching</b>	Mr.R Arun
8	National Pharmacy Week	IPA EC Members
	Celebrations	
9	Industry Institution Interaction Cell	Dr. K Gowthamarajan (IIIS)
	Industrial Training & Practice School	Dr. T K Praveen (Industrial training)
		Dr.N.Jawaher (Practice school)
10	Placement	Mr. J S K Nagarajan (Coordinator)
		Dr.Nagasamy Venkatesh
11	Magazine (Pharmasaga / AAA	All Staff of Pharm. Analysis &
	function)	Pharmacognosy
12	Website Maintenance	Mr C Jayakumar
13	National Service Scheme (NSS)	Mr. B Babu, (Coordinator- NSS)
		Dr. V Senthil
14	Hostel Review	Principal & Chief Warden (Chairman)
		Vice-Principal & Deputy Chief
		Warden
		Mr. Basavalingadevaru H K, A O I/c,
		Resident Warden – Boys Hostel
		Dr. K P Arun, Warden, Boy's Hostel
		Dr. N Krishnaveni, Warden, Girl's
		Hostel
15	Grievance Redressal	Dr. S Ponnusankar, Chairperson
		Dr. Md Afzal Azam-Co-Chair
		Dr.MJN.Chandrasekar, Member
		Dr. N Krishnaveni, Member
		Dr. K PArun, Member Secretary
		Dr. A Justin, Member
		Mr. S Saravanan, Member
		Dr. K.Rajendran (Coordinator)
16	International Students Cell	Mr.Umesh (Office Admission section)
		,

	T	Du C D Dhanahal (Chairmann)
		Dr. S P Dhanabal (Chairman)
4-7	Auti Danina / Dissiplinam	Dy. Superintent of Police, Ooty
17	Anti-Ragging / Disciplinary	Town (0423-2223811)
		Inspector of Police, B1 Police Station
		(0423-2223808)
		Dr. Afzal Azam, Vice-Principal
		Mr. Basavalingadevaru H K
		Dr. N Krishnaveni
		Dr. G N K Ganesh
		Dr.B.Duraiswamy
		Dr. S Gomathy Subramanian
		Dr. K P Arun
		Student Members
		Mr. Sai Jayadeep, IV B.Pharm
		(7871032334)
		Ms. Kavyashree, IV B.Pharm
		(7339338615)
		Mr. K.Sudhakar, II M.Pharm
		(7200374870)
		Mr. R.Dinesh, VI Pharm D
		(9442665996)
		Dr. KP. Arun, Chairperson
		Dr. V. Senthil, Member
18	Anti-Ragging Squad	Dr. N. Krishnaveni, Member
		Dr.D.Ashish Wadhwani, Member
		Dr. GNK. Ganesh, Member
		Dr. B.Gowramma, Member
19	Internal Compliance Committee	Dr. B. Gowramma, Chairperson
		Dr. T. K. Praveen, Co-Chair
		Dr. N. Krishnaveni, Member
		Secretary
		Ms. B.S.Roopa, Member
		Inspector – B1 Police Station, Ooty,
		Member
		Dr. Khayati Moudgil, Member
		Mr.Narayanan, NGO Member
		Student Members
		Mr. T.Sagar, II.M.Pharm
		Ms. S.Samantha Sanjeev, IV Pharm
		D
		Ms. Anu Manual, III Pharm.D
		Mr.Thirumurthy, IV B.Pharm
20	ISO Certification	Mr.JSK Nagarajan, Management
		Representative
21	Rotaract Club	Mr. Suresh M Kumar (Coordinator)
		Ms.S.Priyadharshini
22	Smart Campus	Dr. Khayati Moudgil
		Mr.B.Sivaramkrishnan

23	Spektrum Wall Magazine	Mr. B Shivarama Krishnan
		(Coordinator)
		Mr. Karri VVS Narayana Reddy
24	Internal Quality Assurance Cell	Dr. K.P.Arun (Coorrinator)
		Dr. Ashish Wadhwani (Joint
		Coordinator)
25	Statutory Approvals	Dr. P R Anand Vijayakumar
	, , ,	Dr. S Jubie
26	Red Cross Society & Blood Donation	Dr. G.Ramu (Program Officer)
	,	Dr. Keerthana
		Dr. Deepalakshmi
27	PG Diploma (Coordinator)	Dr. R.Suresh Kumar
28	Certificate Course (Coordinator)	Dr. N Jawahar
29	Course Coordinators	Dr. Anand Vijaykumar
	D.Pharm	
	B.Pharm	Dr. S Jubie
	Pharm D	Dr. K P Arun
	M.Pharm	
	Class Teachers D.Pharm	
		I D.Pharm:Dr Gomathy Subramaniam
		II D.Pharm : Dr Anand Vijayakumar
		I B.Pharm : Dr Justin Antony
30	B.Pharm	II B.Pharm : Dr Karri VVS
		Narayana Reddy
		III B.Pharm: Dr V Senthil
		IV B.Pharm : Dr N Jawahar
		I Pharm D : Mr J.Saravanan
	Pharm D	II Pharm D : Ms M Deepalakshmi III Pharm D : Dr G K Sadagoban
	Pharm D	IV Pharm D : Dr B Swathi Swaroopa
		V Pharm D: Dr Roopa B S
		VI Pharm D : Dr S Ponnusankar
		VI FIIdilli D . Di 3 Foliliusalikal
31	Student Services	Dr.M.R.Jayaprakash
		Dr.Deepalakshmi
		Dr.S.Jubie
		Dr.Khayati Moudgil
32	Student Counselling	Dr.Gowthamrajan
		Dr.Ashish Wadhwani
		Dr.K.P.Arun
		Dr.N.Krishnaveni
33	External guests/students visit	Dr.R.Sureshkumar
	Coordination	Dr.R.Vadivelan
		Dr.Rajeshkumar
		Dr.K.Rajendran
		Ms.S.Priyadharshini
L		

34	Student Class representatives	I D.Pharm : Mr. Susigar M
		II D.Pharm : Ms. Ayesha Siddique
		I B.Pharm : Mr. Saravana Kumar
		II B.Pharm : Mr. Prarasan/Ms.
		Shreya R
		III B.Pharm : Mr. RudreshD
		IV B.Pharm : Mr. Trimoorthy A/
		Ms. Shamin P
		I Pharm.D : Ms. Smrithi P
		II Pharm.D : Ms. Ayesha
		Siddique
		III Pharm.D : Ms. Anu Varghese
		IV Pharm.D : Ms. Niva Rose
		V Pharm.D : Mr.Bakthraj Singh
		VI Pharm.D : Ms. Jitha
		Thankachan
		I M.Pharm : Mr.Sujith Kannan
		II M.Pharm : Mr.Sudeep
		Ph.D : Mr.Gowtham & Ms.Manisha

### **PROGRAMS OFFERED**

### The college offers the following Programs

- 1. Diploma in Pharmacy (D. Pharm.)
- 2. Bachelor of Pharmacy (B. Pharm.)
- 3. Bachelor of Pharmacy (B. Pharm. Practice)
- 4. Doctor of Pharmacy (Pharm. D.)
- 5. Master of Pharmacy (M. Pharm.)
- 6. Doctor of Philosophy (Ph.D.)
- 7. Post Graduate Diploma (P.G. Dip.)
- 8. Certificate Programs

S. No.	Course	Duration
1.	D. Pharm.	2 Years
2.	B. Pharm.	4 Years
	* Lateral Entry	3 Years
3.	Pharm. D.	6 Years
	*Post-Baccalaureate	3 Years
4.	M. Pharm.	2 Years
5.	Ph.D. (Full Time)	3 Years
	* Part Time	4 Years
6.	P.G. Diploma	1 Year
7.	Certificate Programs	6 Months

### Diploma in Pharmacy (D. Pharm.)

Diploma in Pharmacy is a two years program with the basic objective of educating and training the students to serve as community pharmacists/hospital pharmacists. This is the minimum qualification to get registered as Pharmacist in India.

### **Bachelor of Pharmacy (B. Pharm.)**

Bachelor of Pharmacy is a four years program that prepares students for career in pharmaceutical industry and research. The candidates having Diploma in Pharmacy (D. Pharm.) qualification may join in the second year of B. Pharm. as a lateral entry. The students are exposed and trained in synthetic and natural chemistry and drugs, formulation development, quality control of drugs and formulations, screening of substances for pharmacological activities, and to a little extent in the pharmaceutical care process. The students also undergo focused training in the 'Practice School' being held at the college and 'Industrial Training' at an identified pharmaceutical industry for a specified period of time.

### **Doctor of Pharmacy (Pharm. D.)**

Doctor of Pharmacy program offers patient/clinical oriented pharmacy education and training. This six year program comprises of five years of didactic teaching in the first phase and one year of internship in the second phase. The candidates having Bachelor of Pharmacy (B. Pharm.) qualification may join in the fourth year of Pharm.D. as a Post Baccalaureate student. The students are trained in patient care, interprofessional relationships with clinicians and other members of health care team. The students are also given training in answering drug queries to become authoritative source for drug information to the health care professionals and general public.

### Master of Pharmacy (M. Pharm.)

M. Pharm. is a two years Masters Program and college offers M.Pharm in the following specializations.

- 1. Pharmaceutics
- 2. Pharmaceutical Chemistry
- 3. Pharmacology
- 4. Pharmacognosy
- 5. Pharmaceutical Analysis
- 6. Pharmaceutical Biotechnology
- 7. Pharmacy Practice
- 8. Industrial Pharmacy
- 9. Pharmaceutical Regulatory Affairs
- 10. Pharmaceutical Quality Assurance

### Doctor of Philosophy (Ph.D.)

Doctor of Philosophy is a research degree and the college offers Ph.D. in the areas of pharmaceutical sciences and pharmacy practice.

### **Add-on Programs**

The college offers an advantage of registering for a post-graduate diploma or certificate program in ANY ONE of the specializations given below during their final year of doctorate/post-graduate or undergraduate program respectively. These add-on programs will certainly be a value addition to the students along with their regular

degrees. These programs are offered with no additional tuition fee for the students pursuing any regular program in the college, however, university registration fee and examination fee need to be paid by the students to opt any add-on program.

### Post Graduate Diploma (PG Diploma)

Post Graduate Diploma program is offered in the following specializations

- 1. Pharmaceutical Quality Assurance
- 2. Pharmaceutical Regulatory Affairs
- 3. Clinical Research
- 4. Medicine and Poison Information
- 5. Pharmacovigilance
- 6. Bioinformatics
- 7. Herbal Products and their Standardization
- 8. Nanotechnology

### **Certificate Program**

Certificate program is offered in the following specialization

- 1. Herbal Drug Standardization
- 2. Pharmaceutical Quality Assurance
- 3. Clinical Research
- 4. Medicine Information

# Following Certificate Programs are offered in collaboration with National Institute of Health (NIH), USA.

- 5. Principles of Clinical Pharmacology
- 6. Introduction to the Principles and Practice of Clinical Research

### **Working days**

The required number of working days for each course consists of not less than the days as listed below

S. No.	Course	No. of working days
1.	D. Pharm.	180
2.	B. Pharm.	200
3.	Pharm. D.	200
4.	M. Pharm.	220
5.	P.G. Diploma	200
6.	Certificate Programs*	-

<sup>\*</sup> Total of 100 Hours spread across 6 months duration

### **Attendance and Progress**

A candidate is required to put in at least 80% attendance in theory and practical subjects separately. The candidate shall complete the prescribed course satisfactorily to be eligible to appear for the respective examinations.

### **CURRICULUM**

The course of study shall include the subjects as mentioned in the tables below. The number of hours in a week, devoted to each subject for its teaching in theory, practical and tutorial shall not be less than that noted against it in columns.

D. PHARM. PART-I – First Year

Subject	Number of Hours of Theory	Number of Hours of Practicals
Pharmaceutics - I	75	100
Pharmaceutical Chemistry - I	75	75
Pharmacognosy	75	75
Biochemistry and Clinical Pathology	50	75
Human Anatomy & Physiology	75	75
Health Education & Community Pharmacy	50	-
Total	400	375 = 775

### **PART-II – Second Year**

Subject	Number of Hours of Theory	Number of Hours of Practicals
Pharmaceutics – II	75	100
Pharmaceutical Chemistry - II	100	75
Pharmacology & Toxicology	75	50
Pharmaceutical Jurisprudence	50	-
Drug Store & Business Management	75	-
Hospital & Clinical Pharmacy	75	50
Total	450	275 = 725

### **B. PHARM.**

### **B. Pharm. - First Semester (PCI Regulations and Syllabus)**

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP101T	Human Anatomy and Physiology I– Theory	3	1	4
BP102T	Pharmaceutical Analysis I – Theory	3	1	4
BP103T	Pharmaceutics I – Theory	3	1	4
BP104T	Pharmaceutical Inorganic Chemistry – Theory	3	1	4
BP105T	Communication skills – Theory *	2	-	2
BP106RBT	Remedial Biology/	2	-	2
BP106RMT	Remedial Mathematics – Theory*			
BP107P	Human Anatomy and Physiology  – Practical	4	-	2
BP108P	Pharmaceutical Analysis I – Practical	4	-	2
BP109P	Pharmaceutics I – Practical	4	-	2
BP110P	Pharmaceutical Inorganic Chemistry – Practical	4	-	2
BP111P	Communication skills – Practical*	2	-	1
BP112RBP	Remedial Biology – Practical*	2	-	1
	Total	32/34*/36#	4	27/29 <sup>\$</sup> /30 <sup>#</sup>

<sup>\*</sup>Applicable ONLY for the students who have studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology (RB) course.

<sup>\$</sup>Applicable ONLY for the students who have studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM) course.

<sup>\*</sup> Non University Examination (NUE)

# B. Pharm. - Second Semester (PCI Regulations and Syllabus)

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

<sup>\*</sup>Non University Examination (NUE)

### **B. Pharm. - Third Semester**

Course	Name of the course	No. of	Tutorial	Credit
code		hours		points
BP301T	Pharmaceutical Organic Chemistry II - Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305T	Pharmaceutical Jurisprudence – Theory	3	1	4
BP306P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP307P	Physical Pharmaceutics I – Practical	4	-	2
BP308P	Microbiology – Practical	4	-	2
	Total	27	5	26

### **B. Pharm. - Forth Semester**

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

### **B. Pharm. - Fifth Semester**

Course	Name of the course		No. of	Tutorial	Credit
code			hours		points
BP501T	Medicinal Chemistry II – Theory		3	1	4
BP502T	Formulative Pharmacy- Theory		3	1	4
BP503T	Pharmacology II – Theory		3	1	4
BP504T	Pharmacognosy II – Theory		3	1	4
BP505T	Pharmaceutical Biotechnology – Theory		3	1	4
BP506P	Formulative Pharmacy – Practical		4	-	2
BP507P	Pharmacology II – Practical		4	-	2
BP508P	Pharmacognosy II – Practical		4	-	2
		Total	27	5	26

### **B. Pharm. - Sixth Semester**

Course	Name of the course	No. of	Tutorial	Credit
code		hours		points
BP601T	Medicinal Chemistry III – Theory	3	1	4
BP602T	Pharmacology III – Theory	3	1	4
BP603T	Herbal Drug Technology – Theory	3	1	4
BP604T	Biopharmaceutics and Pharmacokinetics –	3	1	4
	Theory			
BP605T	Quality assurance – Theory	3	1	4
BP606P	Medicinal chemistry III – Practical	4	-	2
BP607P	Pharmacology III – Practical	4	-	2
BP608P	Herbal Drug Technology - Practical	4	-	2
	Total	27	5	26

# B. Pharm. - Fourth Year

S. No.	Name of the Subjects	Theory	Practical
		Hours/Week	Hours /Week
4.1.	Medicinal Chemistry – II	3	3
4.2.	Pharmacology – II	3	3
4.3.	Formulative and Industrial Pharmacy	3	3
4.4.	Industrial Methods of Analysis	3	3
4.5.	Pharmacy Practice	3	-
4.6.	Pharmaceutical Marketing and	3	-
	Management		
	Total Number of Working Hours	18	12
	Grand Total 30 Hours / Week		s / Week

PHARM. D. Pharm. D. - First Year

S. No.	Name of the Subjects	No. of Hours of Theory	No. of Hours of Practical	No. of Hours of Tutorial
1.1.	Human Anatomy and Physiology	3	3	1
1.2.	Pharmaceutics	2	3	1
1.3.	Medicinal Biochemistry	3	3	1
1.4.	Pharmaceutical Organic Chemistry	3	3	1
1.5.	Pharmaceutical Inorganic Chemistry	2	3	1
1.6.	Remedial Mathematics / Biology	3	3*	1
	Total Hours	13/16+	15/18*	5/6 <sup>+</sup> * = 33/37 <sup>+</sup> /40*

<sup>+</sup> For Mathematics (PCB students) \* For Biology (PCM students)

Pharm. D. - Second Year

S. No.	Name of the Subjects	No. of Hours of Theory	No. of Hours of Practical	No. of Hours of Tutorial
2.1.	Pathophysiology	3	-	1
2.2.	Pharmaceutical Microbiology	3	3	1
2.3.	Pharmacognosy &	3	3	1
	Phytopharmaceuticals			
2.4.	Pharmacology – I	3	-	1
2.5.	Community Pharmacy	2	-	1
2.6.	Pharmacotherapeutics – I	3	3	1
	Total Hours	17	9	6
				= 32
				Hours/Week

### Pharm. D. - Third Year

S. No.	Name of the Subjects	No. of Hours of Theory	No. of Hours of Practical	No. of Hours of Tutorial
3.1.	Pharmacology – II	3	3	1
3.2.	Pharmaceutical Analysis	3	3	1
3.3.	Pharmacotherapeutics – II	3	3	1
3.4.	Pharmaceutical Jurisprudence	2	-	-
3.5.	Medicinal Chemistry	3	3	1
3.6.	Pharmaceutical Formulations	2	3	1
	Total Hours	16	15	5
				= 36
				Hours/Week

Pharm. D. - Fourth Year

S. No.	Name of the Subjects	No. of Hours of Theory	No. of Hours of Practical	No. of Hours of Tutorial
4.1.	Pharmacotherapeutics - III	3	3	1
4.2.	Hospital Pharmacy	3	3	1
4.3.	Clinical Pharmacy	3	3	1
4.4.	Biostatistics & Research Methodology	2	-	1
4.5.	Biopharmaceutics & Pharmacokinetics	3	3	1
4.6.	Clinical Toxicology	2	-	1
4.7.	Pharmacotherapeutics I & II*	3	3	1
	Total Hours	15/18	12/15	6/7 = 33/40 Hours/Week

<sup>\*</sup> Additional subject for Post Baccalaureate students

Pharm. D. - Fifth Year

S. No.	Name of the Subjects	No. of Hours of Theory	No. of Hours of Practical	No. of Hours of Tutorial
5.1.	Clinical Research	3	ı	1
5.2.	Pharmacoepidemiology and Pharmacoeconomics	3	ı	1
5.3.	Clinical Pharmacokinetics & Pharmacotherapeutic Drug Monitoring	2	-	1
5.4.	Clerkship*	ı	1	1
5.5.	Project Work (Six Months)	- 1	20	-
	Total Hours	7	20	4 = 31 Hours/Week

### Pharm. D. - Sixth Year (Internship)

The internship training in the final year (VI Pharm.D.) of the Pharm.D. program provides working experience in a variety of clinical settings and an opportunity to deliver pharmaceutical care services independently. Internship training includes mandatory postings of six months in internal medicine department and two months posting each in any three other specialty departments such as pediatrics, surgery, & obstetrics, psychiatry, dermatology, and orthopedics.

# M. Pharm. (Industrial Pharmacy)

Course	Course	Credit	Credit		Marks	
Code		Hours	Points	Hrs./wk		
Semester I						
MIP101T	Modern Pharmaceutical Analytical	4	4	4	100	
	Techniques					
MIP102T	Pharmaceutical Formulation	4	4	4	100	
	Development					
MIP103T	Novel drug Delivery System	4	4	4	100	
MIP104T	Intellectual Property Rights	4	4	4	100	
MIP105P	Industrial Pharmacy Practical I	12	6	12	150	
-	Seminar/Assignment	7	4	7	100	
	Total	35	26	35	650	
	Semester	II				
MIP201T	Advanced Biopharmaceutics and	4	4	4	100	
	Pharmacokinetics					
MIP202T	Scale up and Technology Transfer	4	4	4	100	
MIP203T	Pharmaceutical Production	4	4	4	100	
	Technology					
MIP204T	Entrepreneurship Management	4	4	4	100	
MIP205P	Industrial Pharmacy Practical II	12	6	12	150	
_	Seminar/Assignment	7	4	7	100	
	Total	35	26	35	650	

# M. Pharm. (Pharmaceutical Analysis)

Course	Course	Credit	Credit	Hra /wh	Marks		
Code	Code   Hours   Points   Hrs./wk   Semester I						
Modern Pharmaceutical Analytical							
MPA101T	Techniques	4	4	4	100		
MPA102T	Advanced Pharmaceutical Analysis	4	4	4	100		
MPA103T	Pharmaceutical Validation	4	4	4	100		
MPA104T	Food Analysis	4	4	4	100		
MPA105P	Pharmaceutical Analysis Practical I	12	6	12	150		
-	Seminar/Assignment	7	4	7	100		
	Total	35	26	35	650		
	Semester II						
MPA201T	Advanced Instrumental Analysis	4	4	4	100		
MPA202T	Modern Bio-Analytical Techniques	4	4	4	100		
	Quality Control and Quality						
MPA203T	Assurance	4	4	4	100		
MPA204T	Herbal and Cosmetic Analysis	4	4	4	100		
	Pharmaceutical Analysis Practical						
MPA205P	II	12	6	12	150		
-	Seminar/Assignment	7	4	7	100		
	Total	35	26	35	650		

# M. Pharm. (Pharmaceutical Biotechnology)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
	Semester			11101, 1111	
MPB101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100
MPB102T	Microbial And Cellular Biology	4	4	4	100
MPB103T	Bioprocess Engineering and Technology	4	4	4	100
MPB104T	Advanced Pharmaceutical Biotechnology	4	4	4	100
MPB105P					150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Semester	II			
MPB201T	Proteins and protein Formulation	4	4	4	100
MPB202T	Immunotechnology	4	4	4	100
MPB203T	Bioinformatics and Computer Technology	4	4	4	100
MPB204T	Biological Evaluation of Drug Therapy	4	4	4	100
MPB205P	Pharmaceutical Biotechnology Practical II	12	6	12	150
-	Seminar/Assignment	7	4	7	100
_	Total	35	26	35	650

# M. Pharm. (Pharmaceutical Chemistry)

		Credit	Credit		
Course Code	Course	Hours	Points	Hrs./wk	Marks
	Semester 1	Ī			
MPC101T	Modern Pharmaceutical Analytical	4	4	4	100
	Techniques				
MPC102T	Advanced Organic Chemistry -I	4	4	4	100
MPC103T	Advanced Medicinal chemistry	4	4	4	100
MPC104T	Chemistry of Natural Products	4	4	4	100
MPC105P	Pharmaceutical Chemistry Practical	12	6	12	150
	I				
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Semester I	Ι			
MPC201T	Advanced Spectral Analysis	4	4	4	100
MPC202T	Advanced Organic Chemistry -II	4	4	4	100
MPC203T	Computer Aided Drug Design	4	4	4	100
MPC204T	Pharmaceutical Process Chemistry	4	4	4	100
MPC205P	PC205P Pharmaceutical Chemistry Practical		6	12	150
	II				
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650

# M. Pharm. (Pharmaceutics)

Course Code	Course	Credit Hours	Credit Points	Hrs./ wk	Marks
	Semester I				
MPH101T	Modern Pharmaceutical Analytical	4	4	4	100
	Techniques				
MPH102T	Drug Delivery System	4	4	4	100
MPH103T	Modern Pharmaceutics	4	4	4	100
MPH104T	Regulatory Affairs	4	4	4	100
MPH105P	Pharmaceutics Practical I	12	6	12 7	150 100
-	Seminar/Assignment	7	4		
	Total	35	26	35	650
MPH201T	Molecular Pharmaceutics(Nano	4	4	4	100
	Tech and Targeted DDS)				
MPH202T	Advanced Biopharmaceutics &	4	4	4	100
	Pharmacokinetics				
MPH203T	Computer Aided Drug Delivery	4	4	4	100
	System				
MPH204T	Cosmetic and Cosmeceuticals	4	4	4	100
MPH205P	Pharmaceutics Practical II	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650

# M. Pharm. (Pharmacognosy)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
	Semester I	•			
MPG101T	Modern Pharmaceutical Analytical	4	4	4	100
	Techniques				
MPG102T	Advanced Pharmacognosy-I	4	4	4	100
MPG103T	Phytochemistry	4	4	4	100
MPG104T	Industrial Pharmacognostical	4	4	4	100
	technology				
MPG105P	Pharmacognosy Practical I	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Semester I	I			
MPG201T	Medicinal Plant biotechnology	4	4	4	100
MPG202T	Advanced Pharmacognosy-II	4	4	4	100
MPG203T	Indian system of medicine	4	4	4	100
MPG204T	Herbal cosmetics	4	4 4		100
MPG205P	Pharmacognosy Practical II	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650

# M. Pharm. (Pharmacology)

Course	Course	Credit	Credit	Hrs./	Marks	
Code		Hours	Points	wk		
	Semester I					
MPL101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100	
MPL102T	Advanced Pharmacology-I	4	4	4	100	
MPL103T	Pharmacological and Toxicological Screening Methods- I	4	4	4	100	
MPL104T	Cellular and Molecular Pharmacology	4	4	4	4	100
MPL105P	Pharmacology Practical I	12	6	12	150	
-	Seminar/Assignment	7	4	7	100	
	Total	35	26	35	650	
	Semester I	[				
MPL201T	Advanced Pharmacology II	4	4	4	100	
MPL202T	Pharmacological and Toxicological Screening Methods-II	4	4	4	100	
MPL203T	Principles of Drug Discovery	4	4	4	100	
MPL204T	Clinical Research and Pharmacovigilance	4	4	4	100	
MPL205P	Pharmacology Practical- II	12	12 6 12		150	
_	Seminar/Assignment	7	4	7	100	
	Total	35	26	35	650	

# M. Pharm. (Pharmacy Practice)

Course		Credit	Credit	Hrs./	
Code	Course	Hours	Points	wk	Marks
	Semester 1				
MPP101T	Clinical Pharmacy Practice	4	ours         Points         wk         Ma           4         4         4         1           4         4         4         1           4         4         4         1           4         4         4         1           12         6         12         1           7         4         7         1           35         26         35         6		100
MPP102T	Pharmacotherapeutics-I	4	4	4	100
MPP103T	Hospital & Community Pharmacy	4	4	4	100
MPP104T	Clinical Research	4	4	4	100
MPP105P	Pharmacy Practice Practical I	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Semester I	I			
	Principles of Quality Use of				
MPP201T	Medicines	4	4	4	100
MPP202T	Pharmacotherapeutics II	4	4	4	100
	Clinical Pharmacokinetics and				
MPP203T	Therapeutic Drug Monitoring	4	4	4	100
	Pharmacoepidemiology &				
MPP204T	Pharmacoeconomics	4	4	4	100
MPP205P	Pharmacy Practice Practical II	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650

M. Pharm. (Pharmaceutical Quality Assurance)

Course		Credit	Credit	Hrs./		
Code	Course	Hours	Points	wk	Marks	
	Semester 1	Ī				
	Modern Pharmaceutical Analytical					
MQA101T	Techniques	4	4	4	100	
MQA102T	Quality Management System	4	4	4	100	
	Quality Control and Quality					
MQA103T	Assurance	4	4	4	100	
	Product Development and					
MQA104T	Technology Transfer	4	4	4	100	
	Pharmaceutical Quality Assurance					
MQA105P	Practical I	12	6	12	150	
-	Seminar/Assignment	7	4	7	100	
	Total	35	26	35	650	
	Semester I	I	•	•		
MQA201T	Hazards and Safety Management	4	4	4	100	
MQA202T	Pharmaceutical Validation	4	4	4	100	
MQA203T	Audits and Regulatory Compliance	4	4	4	100	
	Pharmaceutical Manufacturing					
MQA204T	Technology	4	4	4	100	
	Pharmaceutical Quality Assurance					
MQA205P	Practical II	12	6	12	150	
-	Seminar/Assignment	7	4	7	100	
	Total	35	26	35	650	

# M. Pharm. (Pharmaceutical Regulatory Affairs)

Course Code	Course	Credit Hours	Credit Points	Hrs./ wk	Marks
	Semester I				
MRA101T	Good Pharmaceutical Practices	4	4	4	100
MRA102T	Documentation and Regulatory	4	4	4	100
	Writing				
MRA103T	Clinical Research Regulations	4	4	4	100
MRA104T	Regulations and Legislation for	4	4	4	100
	Drugs & Cosmetics, Medical				
	Devices, Biologicals & Herbals and				
	Food & Nutraceuticals in India and				
	Intellectual Property Rights				
MRA105T	Pharmaceutical Regulatory Affairs	12	6	12	150
	Practical I				
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
	Semester I	I			
MRA201T	Regulatory Aspects of Drugs and	4	4	4	100
	Cosmetics				
MRA202T	Regulatory Aspects of Herbal and	4	4	4	100
	Biologicals				
MRA203T	Regulatory Aspects of Medical	4	4	4	100
	Devices				

MRA204T	Regulatory Aspects of Food and	4	4	4	100
	Nutraceuticals				
MRA205P	RA205P Pharmaceutical Regulatory Affairs		6	12	150
	Practical II				
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650

# M. Pharm. III Semester (Common for All Specializations)

Course Code	Course	Credit Hours	Credit Points
MRM301T	Research Methodology and Biostatistics*	4	4
-	Journal club	1	1
-	Discussion / Presentation (Proposal Presentation)	2	2
-	Research Work	28	14
	Total	35	21

<sup>\*</sup> Non University Exam

# M. Pharm. IV Semester (Common for All Specializations)

Course Code	Course	Credit Hours	
-	Journal Club	1	1
-	Research Work	31	16
-	Discussion/Final Presentation	3	3
	Total	35	20

#### **EXPECTED COMPETENCIES FOR GRADUATES OF B. PHARM.**

- 1. Development of industrial pharmacy knowledge and skills
- 2. Design and evaluation of dosage forms
- 3. Development of knowledge on various in-process tests for the dosage forms
- 4. Development of knowledge on Technology transfer process
- 5. Development of knowledge on packaging materials based on dosage form design
- 6. Market understanding
- 7. Dosage form manufacture process end point determination & decision making
- 8. Technical knowhow on cosmetic preparation
- 9. Natural products and pathways of discovery of new drugs
- 10. Communication skills
- 11. Computer literacy MS Office
- 12. Team work, assertiveness, integrity, sense of urgency, presentation skills

#### **EXPECTED GENERAL OUTCOMES:**

# 1. Development of industrial pharmacy knowledge and skills:

The student shall understand and possess required knowledge to demonstrate the ability and utilize scientific knowledge in Industrial Pharmacy career.

### 2. Design and evaluation of a dosage forms:

The student shall be able to understand the dosage form designs like Oral Solid and Liquid Dosage Forms, Sterile Dosage Forms, External Applications, Semisolid Preparations and shall demonstrate the preparations during the practical sessions extensively.

# 3. Development of knowledge on various in-process tests for the dosage forms:

The student shall be able to understand the importance of the in process tests for the dosage forms like Tablets, Powders, Capsules, Liquid Orals, Semisolid External Preparations, etc. Students shall learn and demonstrate the preparation during the practice sessions (Practical's)

#### 4. Development of knowledge on technology transfer process:

Technology Transfer Knowledge base is being taught to the student during the curriculum and student shall demonstrate the same during their assignments as part of the career at Industry.

# 5. Development of knowledge on packaging materials based on dosage form design:

Knowledge on various Packaging materials and its importance shall be imparted to the students during the curriculum and student shall learn and demonstrate the requirement of stability for the dosage form through the packaging design.

#### 6. Market understanding:

Detailed understanding of the market shall be imparted to the student about Pharmaceuticals, medical devices, Biopharmaceuticals and radioactive substances during the curriculum and student shall learn and demonstrate the same during the internal and final evaluations.

# 7. Dosage form manufacture process end point determination & decision making:

Detailed technological advancement in the manufacturing process, end point determination shall be imparted during the curriculum and student shall learn and exhibit this knowledge during the practical sessions.

#### 8. Technical know-how on cosmetic preparation:

Cosmetics technology know-how shall be imparted to the students and they shall demonstrate the application aspects during the practical assignment by making certain cosmetic dosage form like emulsions, creams and powders.

#### 9. Natural products and pathway of discovery of new drugs:

Knowledge on the natural products and Phytochemistry shall be imparted to the students during the curriculum and students shall learn the technique and exhibit the same during

the practical learning and student shall be evaluated during the internal and final examination.

#### 10. Communication skills:

Communication Skills shall be imparted to the students during the curriculum and students shall demonstrate the ability communicate well through group discussion and during Viva-voce.

## 11. Computer literacy:

Good computer literacy shall be given during the curriculum and student shall demonstrate the learning during the internal and final examination on computer literacy.

# 12. Team work, assertiveness, integrity, sense of urgency, presentation skills:

These aspects shall be explored by group project work, assignments, quizzes, etc. Further, soft Skill training shall be imparted to the students and they shall be assessed during the campus placement and other platforms like debate competitions, group event, and Pharmacy week celebrations in the institutions.

#### **EXPECTED COMPETENCIES FOR GRADUATES OF PHARM. D.**

- 1. Development of knowledge and skills
- 2. Assessment of patient medical condition
- 3. Development of pharmaceutical care plan
- 4. Management of patient medication therapy
- 5. Pharmacotherapeutic decision-making skills
- 6. Hospital pharmacy management
- 7. Promote public health care program
- 8. Ethics and professionalism
- 9. Analytical thinking and interpretational skills
- 10. Communication skills
- 11. Management skills
- 12. Design and conduct of need based research projects
- 13. Life-long learning

# **EXPECTED GENERAL OUTCOMES (PHARM. D.)**

#### 1. Development of knowledge and skills:

The student shall understand and possess the required knowledge to demonstrate the ability and utilize scientific knowledge in practice.

# 2. Assessment of patient medical condition:

The student shall be able to gather, document and interpret patient case history including laboratory data and patient specific medication information from various patient data sources and/or by conducting patient medication history interview. Shall also be able to identify and prioritize the drug related problems.

#### 3. Development of pharmaceutical care plan:

The student shall be able to formulate a pharmaceutical care plan by working in close relation with healthcare professionals, and patient/care taker in order to ensure the enhanced therapeutic outcome in the patient. Also, the pharmaceutical care plan includes optimization of therapeutic benefit by detecting, preventing and resolving drug related problems. The student shall be able to recommend pharmaceutical care plan based on evidence, and follow-up and document the outcome of the pharmaceutical care service provision.

### 4. Management of patient medication therapy:

The student shall be able to review and evaluate the patient medication therapy for the appropriateness. Monitor the clinical progress/outcome of the patient, and modify the plan of therapy as appropriate in order to achieve the set therapeutic goals.

## 5. Pharmacotherapeutic decision-making skills:

The student shall be able to make pharmacotherapy decisions and individualize the patient's drug therapy by considering patient-related and drug-related factors supported by evidence-based and best practice literature. Pharmacotherapeutic decision-making includes recommendation of appropriate use of prescription and non-prescription medications, alternative and complementary therapies and non-drug therapies.

#### 6. Hospital pharmacy management:

The student shall be able to accurately interpret prescriptions, dispense medications and manage drug distribution system adhering to patient needs and in compliance with hospital policy and the recommendations of regulatory agencies. Also able to prepare inventory, procure, and use appropriate methods for drug storage and adopt appropriate techniques of drug distribution to ensure correct dispensing of medicines.

#### 7. Promote public health care program:

The student shall be able to participate in various public health care programs of the nation including disease prevention initiatives to improve public health. Contribute to the development and promotion of national health policies including rational drug use program and essential drug policy.

#### 8. Ethics and professionalism:

The student shall deliver the duties in accordance with legal, ethical, social, economic, and professional guidelines. Able to provide patient care services by making rational and ethical decisions that represent the best interest of the patient and the society, and respect the patient, healthcare professionals, and the privacy and confidentiality of health information.

#### 9. Analytical thinking and interpretational skills:

The student shall be able to retrieve, understand, interpret, apply, analyze, synthesize, and evaluate information. Able to apply critical thinking and interpretational skills to identify, manage, and prevent problems and make appropriate decisions.

#### 10 - Communication skills:

The student shall be able to communicate effectively with patients/caretakers, healthcare professionals. Able to effectively counsel, provide medicines information, and educate patients, caretakers & healthcare professionals about medication therapy and

other health related issues. Effective communication includes use of both oral and written communications skills and various communication techniques.

## 11. Management skills:

The student shall be able to set personal and professional goals and priorities, effectively plan and manage time, organize work, and work in a team. Work collaboratively with patients /caretakers, health care professionals, hospital administrators and supportive personnel to manage and use the various resources of the health care system to optimize the drug therapy.

#### 12. Design and conduct of need based research projects:

The student shall be able to understand the research needs of the region/nation, and design and conduct the research that would add value to the health care requirements of the patients and community/ society.

#### 13. Life-long learning:

The student shall be able to recognize knowledge and skill deficits that exist in the effective delivery of health care needs of the patient / society. As a life-long learner, student shall be able to identify and analyze issues emerging in the advancing healthcare delivery, and set learning goals, locate, interpret appropriate resources, and assess progress toward meeting learning goals.

# Cross Walk of Subjects to the Professional Competencies to be achieved by Pharm.D. Graduates

Course		Subjects				Pr	ofes	ssio	nal	Con	pet	encie	s*		
		•	1	2	3	4	5	6	7	8	9	10	11	12	13
	1.1	Human Anatomy and Physiology	Χ							Χ	Χ	Χ			Χ
	1.2	Pharmaceutics	Χ											Χ	
	1.3	Medicinal Biochemistry	Χ	Х							Χ				
I	1.4	Pharmaceutical Organic	Χ												
Pharm.D		Chemistry													
	1.5	Pharmaceutical Inorganic	Χ												
		Chemistry													
	1.6	Remedial Mathematics / Biology	Χ												
	2.1	Pathophysiology	Χ	Χ	Χ	Χ	Χ				Χ				
	2.2	Pharmaceutical Microbiology	Χ												
11	2.3	Pharmacognosy and	Х						Х						
Pharm.D.		Phytopharmaceuticals													
Pilailii.D.	2.4	Pharmacology - I	Χ							Χ	Χ	Χ	Χ		Χ
	2.5	Community Pharmacy	Χ		Χ				Χ	Χ		Χ	Χ		Χ
	2.6	Pharmacotherapeutics - I	Χ	Χ	Χ	Χ	Χ				Χ				Χ
	3.1	Pharmacology – II	Χ		Х	Χ								Χ	
	3.2	Pharmaceutical Analysis	Χ												
III	3.3	Pharmacotherapeutics - II	Χ	Χ	Χ	Χ	Χ				Χ				Χ
Pharm.D.	3.4	Pharmaceutical Jurisprudence	Χ						Χ	Χ			Χ		Χ
	3.5	Medicinal Chemistry	Χ				Χ				Χ				
	3.6	Pharmaceutical Formulations	Χ				Χ				Χ				Χ
	4.1	Pharmacotherapeutics - III	Χ	Χ	Χ	Χ	Χ				Χ				Χ
	4.2	Hospital Pharmacy	Χ					Χ		Χ	Χ		Χ		Χ
	4.3	Clinical Pharmacy	Χ	Χ	Χ	Χ	Χ				Χ	Χ			
īV	4.4	Biostatistics & Research	Χ								Χ		Χ	Х	Χ
Pharm.D.		Methodology													
Pilailii.D.	4.5	Biopharmaceutics &	Χ				Χ				Χ			Χ	Χ
		Pharmacokinetics													
	4.6	Clinical Toxicology	Χ	Χ		Χ			Χ		Χ				
	4.7	Pharmacotherapeutics – I & II*	Χ			Χ	Χ				Χ			Χ	Χ
	5.1	Clinical Research	Х							Х	Χ			Χ	Χ
	5.2	Pharmacoepidemiology &	Χ			Χ	Χ				Х			Χ	Χ
		Pharmacoeconomics													
V	5.3	Clinical Pharmacokinetics &	Χ			Х	Х				Χ			Χ	Χ
Pharm.D.		Pharmacotherapeutic Drug													
		Monitoring													
	5.4	Clerkship	Χ	Χ	Χ	Χ	Χ			Χ	Χ	Χ	Χ		Х
	5.5	Project Work	Χ								Χ		Χ	Χ	Χ
* Additional	Subje	ct of Pharm.D. (PB) Students													

# SPECIALIZATIONS AND SUBJECTS OF P.G. DIPLOMA PROGRAM

S. No.	Specialization	Paper	Name of the Subjects						
1.	Pharmaceutical	I	Quality Control and Quality Assurance						
1.	Quality Assurance	II	Pharmaceutical Validation						
2.	Pharmaceutical	I	Pharmaceutical cGMP and Validation						
۷.	Regulatory Affairs	II	International Regulatory Requirements						
3.	Clinical Research	I	Clinical Development and Regulations						
٥.	Cillical Research	II	Clinical Research						
4.	Medicine and	I	Medicine Information						
4.	Poison Information	II	Poison Information						
5.	Dharmacovigilance	I	Principles of Pharmacovigilance						
٥.	Pharmacovigilance	II	Regulatory Perspectives of Pharmacovigilance						
6.	Bioinformatics	I	Basic Cellular and Molecular Biology						
0.	Didilioillatics	II	Bioinformatics and in silico Biology						
	Herbal Products	I	Herbal Drug Research						
7.	and their	II	Industrial Herbal Drug Technology						
	Standardization								
		I	Nanocarriers for Drug Delivery						
8.	Nanotechnology	II	Characterization and Applications of						
			Nanocarriers						

# **EXAMINATION**

# **Scheme of Examination**

# D. Pharm.

Part - I - First Year

Name of the Subject	Internal A	ssessment	Universi	ty Exams	Total	
	(Session	al Exams)	Marks	Duration	Marks	
	Marks	Duration				
Pharmaceutics – I (Theory)	20	1 Hr	80	3 Hrs	100	
Pharmaceutical Chemistry – I (Theory)	20	1 Hr	80	3 Hrs	100	
Pharmacognosy (Theory)	20	1 Hr	80	3 Hrs	100	
Biochemistry and Clinical Pathology (Theory)	20	1 Hr	80	3 Hrs	100	
Human Anatomy & Physiology (Theory)	20	1 Hr	80	3 Hrs	100	
Health Education & Community Pharmacy	20	1 Hr	80	3 Hrs	100	
(Theory)						
Pharmaceutics – I (Practical)	20	3 Hrs	80	3 Hrs	100	
Pharmaceutical Chemistry – I (Practical)	20	3 Hrs	80	3 Hrs	100	
Pharmacognosy (Practical)	20	3 Hrs	80	3 Hrs	100	
Biochemistry and Clinical Pathology (Practical)	20	3 Hrs	80	3 Hrs	100	
Human Anatomy & Physiology (Practical)	20	3 Hrs	80	3 Hrs	100	
				Total	1100	

Part - I - Second Year

Name of the Subject	Internal A	ssessment	Universi	ity Exams	Total Marks	
	(Sessiona	al Exams)	Marks	Duration		
	Marks	Duration				
Pharmaceutics – II (Theory)	20	1 Hr	80	3 Hrs	100	
Pharmaceutical Chemistry – II (Theory)	20	1 Hr	80	3 Hrs	100	
Pharmacology & Toxicology (Theory)	20	1 Hr	80	3 Hrs	100	
Pharmaceutical Jurisprudence (Theory)	20	1 Hr	80	3 Hrs	100	
Drug Store & Business Management (Theory)	20	1 Hr	80	3 Hrs	100	
Hospital & Clinical Pharmacy (Theory)	20	1 Hr	80	3 Hrs	100	
Pharmaceutics – II (Practical)	20	3 Hrs	80	3 Hrs	100	
Pharmaceutical Chemistry – II (Practical)	20	3 Hrs	80	3 Hrs	100	
Pharmacology & Toxicology (Practical)	20	3 Hrs	80	3 Hrs	100	
Hospital & Clinical Pharmacy (Practical)	20	3 Hrs	80	3 Hrs	100	
				Total	1000	

IV Yr B. Pharm., and Pharm.D.

		(Fo	Sessional rmative As	Final Exam (Summative Assessment)				
	Theory			Practical			Theory	Practical
Program	Written Exam (Average of Best 2)	Seminar	Total	Practical Exam (Average of Best 2)	Lab Work / Record	Total		
B. Pharm.	30	-	30	20	10	30	70	70
Pharm.D.	30	-	30	20	10	30	70	70

P.G. Diploma

Program	Session	nal Exam	Final Exam			
	(Formative	e Assessment)	(Summat	ive Assessment)		
DC D: 1	Theory	Practical	Theory	Practical		
PG Diploma	50	50	50	50		

# Schemes for internal assessments and end semester examinations semester wise

### **B. Pharm: Semester I**

Course	Name of the course		Internal Ass	sessment		End Semes	ster Exams	Total
code		Continuous	Session	nal Exams	Total	Marks	Duration	Marks
		Mode	Marks	Duration				
BP101T	Human Anatomy and Physiology I– Theory	10	15	1 Hr	25	75	3 Hrs	100
BP102T	Pharmaceutical Analysis I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP103T	Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP104T	Pharmaceutical Inorganic Chemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP105T	Communication skills – Theory *	5	10	1 Hr	15	35	1.5 Hrs	50
BP106T	Remedial Biology/Mathematics – Theory*	5	10	1 Hr	15	35	1.5 Hrs	50
BP107P	Human Anatomy and Physiology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP108P	Pharmaceutical Analysis I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP109P	Pharmaceutics I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP110P	Pharmaceutical Inorganic Chemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP111P	Communication skills – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
BP112P	Remedial Biology - Practical*	5	5	2 Hrs	10	15	2 Hrs	25
	Total	70/75\$/80#	115/125 <sup>\$</sup> / 130 <sup>#</sup>	23/24 <sup>\$</sup> /26 <sup>#</sup> Hrs	185/2 00 <sup>\$</sup> /21 0 <sup>#</sup>	490/525 <sup>\$</sup> / 540#	31.5/33 <sup>\$</sup> / 35# Hrs	675/72 5 <sup>\$</sup> / 750#

<sup>\*</sup>Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course.

<sup>\$</sup>Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.

<sup>\*</sup> Non University Examination (NUE)

# **B. Pharm: Semester II**

Course code	Name of the course	Inter	End S	Total Marks				
		Continuous Mode	Session Marks	nal Exams Duration	Total	Marks	Duration	
BP201T	Human Anatomy and Physiology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP202T	Pharmaceutical Organic Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP203T	Biochemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP204T	Pathophysiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP205T	Computer Applications in Pharmacy – Theory*	10	15	1 Hr	25	50	2 Hrs	75
BP206T	Environmental sciences – Theory*	10	15	1 Hr	25	50	2 Hrs	75
BP207P	Human Anatomy and Physiology II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP208P	Pharmaceutical Organic Chemistry I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP209P	Biochemistry - Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP210P	Computer Applications in Pharmacy – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
	Total	80	125	20 Hrs	205	520	30 Hrs	725

<sup>\*</sup> The subject experts at college level shall conduct examinations

# **B. Pharm: Semester III**

Course code	Name of the course	Int	ternal As	sessment			emester ams	Total Marks
		Continuous	Sessio	nal Exams	Total	Marks	Duration	
		Mode	Marks	Duration				
BP301T	Pharmaceutical Organic Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP302T	Physical Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP303T	Microbiology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP304T	Pharmaceutical Engineering – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP305T	Pharmaceutical Jurisprudence – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP306P	Pharmaceutical Organic Chemistry II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP307P	Physical Pharmaceutics I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP308P	Microbiology - Practical	5	10	4 Hrs	15	35	4 Hrs	50
	Total	65	105	17 Hrs	170	480	27 Hrs	650

# **B. Pharm: Semester IV**

Course code	Name of the course	Internal Assessment End Semester Exams				Total Marks		
		Continuous			Total	Marks	Duration	
		Mode	Marks	Duration				
BP401T	Pharmaceutical Organic Chemistry III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP402T	Medicinal Chemistry I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP403T	Physical Pharmaceutics II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP404T	Pharmacology I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP405T	Pharmacognosy I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP406P	Medicinal Chemistry I – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP407P	Physical Pharmaceutics II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP408P	Pharmacology I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP409P	Pharmacognosy I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
	Total	70	115	21 Hrs	185	515	31 Hrs	700

# B. Pharm: Semester V

Course code	Name of the course	Internal Assessment					emester ams	Total Marks
		Continuous	Sessio	nal Exams	Total	Marks	Duration	
		Mode	Marks	Duration				
BP501T	Medicinal Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP502T	Formulative Pharmacy - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP503T	Pharmacology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP504T	Pharmacognosy II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP505T	Pharmaceutical Biotechnology - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP506P	Formulative Pharmacy - Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP507P	Pharmacology II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP508P	Pharmacognosy II – Practical	5	10	4 Hrs	15	35	4 Hrs	50
	Total	65	105	17 Hrs	170	480	27 Hrs	650

# **B. Pharm: Semester VI**

Course code	Name of the course	In	ternal As	ssessment		End Semester Exams		Total Marks
		Continuous	Sessio	nal Exams	Total	Marks	Duration	
		Mode	Marks	Duration				
BP601T	Medicinal Chemistry III - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP602T	Pharmacology III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP603T	Herbal Drug Technology - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP604T	Biopharmaceutics and Pharmacokinetics-Theory	10	15	1 Hr	25	75	3 Hrs	100
BP605T	Quality assurance – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP606P	Medicinal chemistry III - Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP607P	Pharmacology III - Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP608P	Herbal Drug Technology - Practical	5	10	4 Hrs	15	35	4 Hrs	50
	Total	65	105	17 Hrs	170	480	27 Hrs	650

# M. Pharm: I & II Semester (Common for All Specializations)

_	Int	ernal Asse	ssment		End Semester Exams		Total
Course	Continuous		nal Exams	Total	Marks	Duration	Total Marks
	Mode	Marks	Duration			24.44.61.	
		SEMESTI	ER I				
Theory Papers	10	15	1 Hr	25	75	3 Hrs	100
Practical I	20	30	6 Hrs	50	100	6 Hrs	150
Seminar /Assignment	-	-	-	-	-	-	100
	<u> </u>					Total	650
		SEMESTE	RII				
Theory Papers	10	15	1 Hr	25	75	3 Hrs	100
Practical II	20	30	6 Hrs	50	100	6 Hrs	150
Seminar /Assignment	-	-	-	-	-	-	100
			•	•	•	Total	650

# M. Pharm: III & IV Semester (Common for All Specializations)

Course Code	Course	Internal Assessment				End Semester Exams		Total
		Continuous Mode	Sessional Exams		Total	1 '		Marks
			Marks	Duration		Marks	Duration	
		SEMEST	ER III					
MRM101T	Research Methodology and Biostatistics*	10	15	1 Hr	25	75	3 Hrs	100
-	Journal club	-	-	-	25	-	-	25
-	Discussion / Presentation	-	-	-	50	-	-	50
	(Proposal Presentation)							
-	Research work*	-	-	-	-	350	1 Hr	350
							Total	525
		SEMEST	ER IV					
-	Journal club	-	-	-	25	-	-	25
-	Discussion / Presentation	-	-	-	75	-	-	75
-	Research work and Colloquium	-	-	-	-	400	1 Hr	400
							Total	500

<sup>\*</sup>Non University Examination

Students are advised to refer the 'Regulations & Syllabus' of respective programs of JSS Academy of Higher Education & Research, Mysuru to know the following aspects and further information if needed.

- Award of Internal Assessment Marks
- Conditions permitting to appear for university examination
- University Examinations
- > Academic Progression
- Criteria for Pass
- > Conditions under which candidates are permitted to proceed to next higher class

#### Remediation

Students (D. Pharm./ B.Pharm./ Pharm. D.) who failed to score 50% marks in the internal assessment shall be identified by the respective class teacher and counseled during the ACB (Academic Counsel Board) meeting. The committee consists of Principal, class teacher and subject teachers. The progress reports are sent to the parents to help them to know the performance of their wards. During the tutorial hours, a special attention is given towards such students. If necessary, extra classes are conducted for such students.

#### **Declaration of class**

Class shall be awarded at the end of each academic examination for B.Pharm., Pharm. D. (except VI Pharm. D.), M. Pharm. and PG Diploma examinations as shown below:

Distinction 75% and above

First Class 60% and above and less than 75% Second class 50% and above and less than 60%

The result of the successful candidate shall be classified at the end of the final year examination on the basis of the aggregate of all subjects, theory and practicals, secured by the candidates who have completed the course within the specified duration, as indicated below.

I Class: 60% and above II Class: 50%-59%.

Candidate securing aggregate of 75% or above marks and have passed in all the subjects in a year in first attempt shall be declared to have obtained Distinction.

**Award of Ranks:** Ranks and Medals are awarded on the basis of aggregate of all the university examinations. However, candidates who fail in one or more subjects during the course are not eligible for award of ranks. Moreover, the candidates should have completed the course in minimum prescribed number of years prescribed in the regulations of the each course for the award of Ranks.

**Award of degree:** Candidates who fulfill the requirements mentioned above are eligible for award of degree during the JSS University convocation. All graduating students should apply for graduation towards the end of the graduation year to The Registrar, JSS University, Mysore.

**Duration for completion of the course of study:** The duration for the completion of the course is fixed as double the actual duration of the course and the students have to pass within the said period, otherwise they have to get fresh registration.

**Revaluation/ Retotalling of answer papers:** There is no provision for revaluation of the answer papers of failed candidates in any examination. However, the failed candidates can apply for retotalling.

**Withdrawal from the Program:** Students who wish to withdraw from the admitted program after registration must write a request for withdrawal to the Office of the Principal and later it will be forwarded to The Registrar, JSS University, Mysore for the approval of the same.

**Dismissal:** The students who have violated the institutional code of conduct will be dismissed permanently from their admitted program after conducting meeting in presence of The Principal, concerned staff members, parents and student. The decision made by the committee will be forwarded to The Registrar, JSS University, Mysore for the approval of the same.

**Readmission after break of study:** Candidate who seeks readmission to the course after break of study has to get the approval from the JSS University, Mysore, by paying a required condonation fee and no condonation is allowed for the candidate who has more than 2 years of break up period and he/she has to rejoin the course by paying the required fees.

Note: For more details/updates about syllabus and regulations please visit www.jssuni.edu.in

#### STUDENT REPRESENTATION IN COLLEGE COMMITTEES

Student representatives act as bridge between the college administration and student community and communicate the needs of the students. Each class is represented by a Class representative and each course is represented by a Lady Representative.

Inclusion of students in various committees of the institution that structure the policies and procedures enables the student to participate in various aspects of functioning of the institution.

The students will represent the following committees

- 1. Institutional Library Committee
- 2. Cultural Committee
- 3. Sports Committee
- 4. Hostel Review Committee
- 5. Magazine Committee
- 6. NSS Advisory Committee
- 7. Research Advisory Committee
- 8. National Pharmacy Week Celebration Committee

#### 10 COMMANDMENTS TO BE A SUCCESSFUL COLLEGE STUDENT

### 1. Make your college education your #1 job.

It takes time to do the job of learning properly at the college level. If you make college your highest priority, it will be easier to do the work necessary to succeed and graduate.

### 2. Learn how to organize and manage your time.

The toughest challenge for many college students is organizing and managing the time needed for college success. Very helpful tools are a weekly calendar book and a large semester planner used to plan each week's activities: class attendance, studying, appointments, meetings, jobs, free time, etc. Record all due dates for exams, quizzes, assignments, and projects.

#### 3. One of the worst places to study may be where you live.

One's residence can be a poor place to study because of distractions or potential distractions such as roommates, TVs, computers, music, beds, personal items, visitors, etc. Many students find that the campus library or a quiet study area is much more conducive to concentration and study.

# 4. Treat college like an 8-hour/day and a 40-hour/week job

Investing 8 hours per day and 40 hours per week into attending class and studying can bring large returns such as graduation and full-time employment in your major.

### 5. Set up a team for your college success.

Write a list of people you include on your team for your college success. Include the names of your academic advisor, professors, tutors, career counselor, student affairs staff members, resident assistants, housing staff member, etc. These people's jobs and expertise exist solely to help you to succeed in college.

#### 6. Adhere to important College/university dates and deadlines.

As many students have discovered, success in college is mostly a matter of following directions and meeting deadlines. Read your college calendar carefully and record important dates and deadlines on your academic planner.

#### 7. Attend classes regularly and do not arrive late.

In class, most professors cover at least half of the possible exam material. It can be difficult to learn from another's notes, so attend class to listen and take your own notes. Frequent absences or repeatedly arriving late communicates to the teacher that you are not that concerned about the class. Remember: that professor assigns your grade.

#### 8. Dare to be different.

Nearly 60% of freshmen in your class will not be at graduation with you. You increase your chances of not graduating by 60% if you party, go out too often, socialize too much, or play before getting the job of learning done first. Be different. Be successful.

#### 9. Choose your friends carefully.

A friend is someone who supports, encourages, and helps you achieve your academic and personal growth goals in college. Beware of those whose social life is out of proportion to academic efforts. We tend to become like the people with whom we surround ourselves.

#### 10. Balance college to include academic growth and personal growth activities.

Students who neglect personal growth activities find college life boring. Consider attending social events, participating in various administrative committees of hostel and college, attending academic and research meetings held in the campus, participating intramural/ extramural sports and cultural events etc. Doing the job of going to class and studying before engaging in personal growth activities is a successful way to balance college life.

#### **ACADEMIC AND PROFESSIONAL CONDUCT**

#### **CODE OF CONDUCT**

Code of conduct has been developed and adopted to express the guidelines for the conduct of all employees and students of the colleges. The present code of conduct is an attempt to provide direction and guidance to the teachers, employees and students in enhancing the dignity of their professional work and institution.

# 1. Obligations towards Students

- Treats all students with respect and affection.
- Respects the value of being just and impartial to all students irrespective of their caste, creed, religion, sex, economic status, disability, language and place of birth.
- ❖ Facilitates students' professional, social, intellectual, emotional, and moral development.
- Makes planned and systematic efforts to facilitate the student to actualize his/her potential and talent.
- ❖ Transacts the curriculum in conformity with the rules as prescribed by the university.
- Adapts his/her teaching to the individual needs of students.
- ❖ Maintains the confidentiality of the information concerning students and dispenses such information only to those who are legitimately entitled to it.
- \* Refrains from subjecting any student to fear, trauma, anxiety, physical punishment, sexual abuse, and mental and emotional harassment.
- ❖ Keeps a dignified demeanor commensurate with the expectations from a teacher as a role model.

# 2. Obligations towards Parents, Community and Society

- Establishes a relationship of trust with parents/guardians in the interest of all round development of students.
- Desists from doing anything which is derogatory to the respect of the student or his/her parents/guardians.
- Strives to develop respect for the composite culture of India among students.
- ❖ Keeps the country uppermost in mind, refrains from taking part in such activities as may spread feelings of hatred or enmity among different communities, religious or linguistic groups.

#### 3. Obligations towards the Profession and Colleagues

- Strives for his/her continuous professional development.
- Creates a culture that encourages purposeful collaboration and dialogue among colleagues and stakeholders.

- ❖ Takes pride in the teaching profession and treats other members of the profession with respect and dignity.
- Refrains from engaging himself/herself in private tuition or private teaching activity.
- ❖ Refrains from accepting any gift, or favour that might impair or appear to influence professional decisions or actions.
- Refrains from making unsubstantiated allegations against colleagues or higher authorities.

#### **General Rules**

Students, as adult learners, are expected to follow the rules and the code of conduct as laid down by the institution. The rules and the code of conduct is framed so as to facilitate and support the living and learning for all stakeholders on the campus. Remember that someone else defying the code or violating the rules might inconvenience you. It thus, becomes necessary that all of us follow rules to make life easy for everyone including us.

Institution believes in self-discipline and would actively work towards a threat free environment. This cannot be achieved without the active support and participation of the faculty, staff and students.

However, any act of indiscipline inside or outside the college may attract strict action in accordance with the rules applicable.

- Students should always keep their tagged identity card with them.
- Students should abide by all the rules and regulations of the college.
- Students should participate actively in the extra-curricular/co-curricular activities organized by college.
- ❖ Students are expected to attend all classes. Minimum physical attendance required is 80%,
- Students are required to adhere to the formal dress while engaging in academic activities in the campus such as attending lectures or working in laboratories.
- ❖ Students shall not use mobile/cell phones in the college premises. Any student using their phone will have their mobile phone confiscated.
- Ragging is an offence, do not indulge in ragging.

#### **Guidelines for Academic Excellence**

- ❖ Be in the class room 10 minutes before the scheduled time.
- Avoid using mobile phone in the academic blocks of the campus.
- ❖ Do not absent for theory classes and obtain the prior permission from the class-in-charge before availing any leave.
- ❖ In every class, look for positive people to associate with. Have a group discussion with your class mates and explain what you have learned.
- In every lecture, look for one more interesting idea.
- ❖ In every chapter, find one more concept important to you.
- With every teacher, ask a question and don't hesitate to get clarification for your doubts.
- ❖ Give respect and good co-operation to all the teaching and non-teaching staff and make use of them for your development.
- Maintain a positive and friendly atmosphere in the campus.
- With yourself, keep a list of your goals, positive thoughts and action.

#### **Lab Discipline**

- Be equipped with all the lab materials.
- Be in the lab 10 minutes before the scheduled time in your appropriate place.
- Come fully prepared for the day's work.
- Ladies should tie up the hair during practical classes.
- ❖ Do not absent for practical since it is difficult to repeat the same practical again.
- Keep your working table neat and clean.
- Work systematically and try to understand all aspects of the practical work scheduled for the day.
- ❖ Maintain silence in the lab, discuss only when required.
- Handle the reagents, apparatus and equipments with extra care.
- Turn off the gas burners after use, avoid wastage.
- ❖ Do not keep the reagent bottles in your working table, place them in appropriate shelves after use.
- Check the following before leaving the lab:
  - Return the equipments and class wares after proper cleaning and washing to the lab assistant and sign in the lab register.
  - Discard the waste in to the dustbin and do not through any waste in to the floor.
  - Obtain the signature of the teacher in the record and practical hand book.

## Requirements for Laboratory Work (In General)

- ❖ Laboratory hand book/Observation book and Practical record book
- Writing materials (pen, pencil, eraser, scale, sharpener)
- A clean apron
- Name plate and I.D Card
- A clean napkin
- Match box or lighter
- Fractional weight box
- Reference books and graph sheets

# **Code of Conduct specific to Pharmacy Practice Students**

As a student of pharmacy practice, you must demonstrate you are able to exercise those privileges and bear those responsibilities as listed below. This means you must conduct yourself professionally at all times. This Code of Conduct is based on the following principles.

# 1. Make patients your first concern

The health, wellbeing and safety of patients must be your main concern. To support this, you will learn about the design and development of medicines and their safe and effective use. Even when you are not in direct contact with patients, you will be developing values, attitudes, knowledge and skills that you will use as a pharmacist.

# As a student you must:

- ❖ Always bear in mind your future role as a pharmacist when studying.
- ❖ Apply your learning to ensure you know how to develop and use medicines for the maximum benefit of patients.
- Promote the health of patients.
- Use your professional judgment in the interests of patients and the public.

- Use Professional judgment at all times: your course is designed to help you understand, what this means is,
  - ⇒ consider and act in the best interests of patients and the public
  - ⇒ensure your beliefs do not compromise patient care
  - ⇒ make sure your judgment is not influenced by personal interests
  - $\Rightarrow$  be prepared to challenge the judgment of others if you have reason to believe that their decisions could compromise safety or care

## 2. Show respect for others

Demonstrating respect for the dignity, views and rights of others is fundamental in forming and maintaining appropriate professional relationships with patients, careers, colleagues and other individuals with whom you come into contact.

#### As a student you must:

- recognize diversity and respect the cultural differences, values and beliefs of others, including students and staff
- treat others politely, with consideration and with respect
- listen to, and respect, others' opinions and be non-judgmental in your attitudes toward them
- maintain proper professional boundaries in the relationships you have with others, especially with vulnerable adults and children
- recognize and respect the rights of patients
- respect patient confidentiality and consent, but disclose relevant information as required

# **3.** Encourage patients and the public to participate in decisions about their care Patients and the public have the right to be involved in decisions about their treatment

and care. Pharmacists must respect this right and help patients to take part in decisions which affect their health and well being.

# As a student you must:

- learn how to listen to patients and their care takers and communicate effectively with them in a way they can understand
- learn how to give patients information and advice so they can take part in decisions about their care, including recognizing their right to refuse care
- learn how to work in partnership with patients, their care takers and others to manage a patient's treatment and care

# 4. Develop your professional knowledge and competence

At all stages of your pharmacy career you must take responsibility for ensuring your knowledge and skills are up-to-date and that you maintain your competence.

# As a student you must:

- reflect on and develop your professional knowledge and competence throughout your course
- recognize and stay within the limits of your competence
- make rational and informed decisions
- engage constructively with assessments
- ensure you are aware of the continuing professional development

### 5. Be honest and trustworthy

The public trust healthcare professionals, and at all times pharmacists must justify that trust.

#### As a student you must:

- act with honesty and integrity
- honour your commitments and take responsibility for your work
- not plagiarize the work of others
- use research and laboratory data honestly and ethically, seeking permission to use data as required
- supply accurate information in response to lawful requests and update that information as necessary
- respond honestly, openly and courteously to complaints and criticisms concerning yourself or others
- cooperate with formal investigations about you or others
- abide by the rules and regulations of the university and other organizations linked to your studies

# 6. Pharmacists, like all healthcare professionals, must take responsibility for their work.

#### As a student you must:

- comply with this Code of Conduct
- take responsibility for your learning and your actions and work constructively with others
- ❖ ask for help when you need it and respond appropriately
- plan and use your time effectively
- follow dress codes
- attend classes and conduct yourself appropriately
- be punctual
- ❖ be contactable
- ensure you have adequate English language skills
- abide by health and safety requirements of the institution

#### **CODE OF ETHICS**

The faculty of Pharmacy, JSS University has adopted the code of ethics laid down by the Pharmacy Council of India and is imbibed in the practice, teaching and training processes.

Code of Pharmaceutical Ethics as formulated by Pharmacy Council of India which are meant to guide the pharmacist as to how he (or she) should conduct himself (or herself), in relation to himself (or herself), his/her patrons (owner of the pharmacy), general public, co-professionals etc. and patients, which may be categorized under the following headings:

- 1. Pharmacist in relation to job.
- 2. Pharmacist in relation to trade.
- 3. Pharmacist in relation to medical profession.
- 4. Pharmacist in relation to profession.

### 1. Pharmacist in relation to his job

- When premises are registered under statutory requirements and opened as a pharmacy, extensive pharmaceutical services should be provided.
- These involve the supply of commonly required medicines without undue delay and furnish emergency supplies, at all times.
- ❖ The appearance of the place should reflect the professional character of pharmacy and indicate to the public that the practice of pharmacy is carried out in the establishment.
- They should be qualified pharmacist having personal control over pharmacy.

#### Pharmaceutical services

Pharmacy premises (medicine shops) should be registered. Emergency medicines and common medicines should be supplied to the patients without any delay.

### **Conduct of the Pharmacy**

Error of accidental contamination in the preparation, dispensing and supply of medicines should be checked in a pharmacy.

# Handling of prescription

- When a prescription is presented for dispensing, it should be received by a pharmacist without any comment or discussion over it, regarding the merits demerits of its therapeutic efficiency.
- ❖ It is not within a capacity of a pharmacist to add, omit or substitute any ingredient or alter the composition of a prescription without the consent of a prescriber.
- ❖ In case of any obvious error in it, due to any omissions it should be referred back to the prescriber for correction.
- ❖ When such an act is necessary, it should neither offend the customer nor affect the reputation of the prescriber.

# Handling of drugs

- Prescription should be correctly dispensed with the drugs of standard quality.
- All the ingredients must be weighed correctly and must be in exact proportions.

#### 2. Pharmacist in relation to his trade

- Price structure: Prices charged from customers should be fair and must be in accordance with the quality and quantity of drugs including his compounding charges.
- Fair trade practice: No attempts should be made to get business by unethical and cut throat competitions, labels, trade market and science and symbols of others should not be imitated.
- Purchase of drugs: Always standard drugs must be purchased from reputable and genuine sources.
- ❖ Hawking of drugs: Hawking of drugs and medicines should not be encouraged nor should any attempt be made to get orders for such substances from door to door. Pharmacies and drug stores should not practice the method of self servicing or counter sales without the qualified person. They should discourage self medication, which is dangerous and highly undesirable.

- Advertising and display: The pharmacist should not advertise or display in his the premises, in the press, elsewhere, regarding the sale of medicines, which claim to cure and any other advertisements or display containing
  - ⇒ Symptoms of ill health
  - ⇒ A guarantee of therapeutic efficiency
  - $\Rightarrow$  An appeal to fear
  - ⇒ An offer to refund money paid
  - $\Rightarrow$  An incentive schemes
  - ⇒ Any reference to a medical practitioner or a hospital
  - ⇒ A reference to sexual weakness, premature aging or loss of virility
  - ⇒ Any reference to condemn the products of similar nature of others

# 3. Pharmacist in relation to medical profession

The pharmacist must be law obeying citizen and must fulfill the provisions of the pharmaceutical and other laws and regulations. He should have relationship with his own professional organizations. He should maintain dignity, decorum, decency and propriety of his profession. Following are the code of ethics of a pharmacist in relation to medical profession:

- ❖ The professional activity of the medical practitioner as well as the pharmacists should be confined to their own field only. Medical practitioners should not possess drugs stores and pharmacists should not diagnose diseases and prescribe remedies. A pharmacist may, however, can deliver first aid to the victim in-case of accident or emergency.
- ❖ No pharmacist should recommend a medical practitioner in particular. Pharmacist should be never entering into secret arrangements with practitioner to offer them commission by recommending his dispensary or drug store. He should maintain strictly the professional secrecy, unless required to do so by law.
- ❖ A pharmacist should always maintain proper link between physicians and people. He should advise the physicians on pharmaceutical matters and should educate the people regarding health and hygiene. The pharmacist should keep himself/herself up-to-date with pharmaceutical knowledge from various journals or publications.

Any information acquired by a pharmacist during his professional activities should not be disclosed to any third party until and unless required to do so by law.

# 4. Pharmacist in relation to his profession

Regarding to the profession the following code of ethics should be fulfilled.

#### \* Professional vigilance

A pharmacist must abide by the pharmaceutical laws and he/she should see that other pharmacists are abiding it.

#### \* Law-abiding citizens

The pharmacists should have a fair knowledge of the laws of the country pertaining to food, drug, pharmacy, health, sanitation etc.

# \* Relationship with Professional Organizations

A pharmacist should be actively involved in professional organization, should advance the cause of such organizations.

### \* Decorum and Propriety

A pharmacist should not indulge in doing anything that goes against the decorum and propriety of Pharmacy Profession.

#### Pharmacists Oath

A young prospective pharmacist should feel no hesitation in assuming the pharmacist's oath.

#### PHARMACIST'S OATH

- I Swear by the code of Ethics of Pharmacy Council of India in relation to the community and shall act as an integral part of health care team.
- I shall uphold the laws and standards governing my profession.
- I shall strive to perfect and enlarge my knowledge to contribute to the advancement of pharmacy and public health.
- I shall follow the system, which I consider best for pharmaceutical care and counseling of patients.
- I shall endeavour to discover and manufacture drugs of quality to alleviate sufferings of humanity.
- I shall hold in confidence the knowledge gained about the patients in connection with professional practice and never divulge unless compelled to do so by the law.
- I shall associate with organizations having their objectives for betterment of the profession of Pharmacy and make contribution to carry out the work of those organizations.
- While I continue to keep this Oath inviolated, may it be granted to me to enjoy life and the practice of pharmacy respected by all, at all times!
- Should I trespass and violate this oath, may the reverse be my lot!

#### **COMPLAINTS AND GRIEVANCES**

A grievance is any discontent or dissatisfaction, whether expressed or not, whether valid or not, arising out of anything connected with the College that a student thinks, believes, or even feels, is unfair, unjust or inequitable.

Any aggrieved student who has any complaint in the matters concerned with grievances may contact the Member Secretary and make a complaint in writing of his/her grievances for necessary clarifications and/or redressal of their grievances.

#### **Objectives:**

- a.To ensure that necessary actions should be prompted for better redressal of grievance.
- b. To make the redressal process fair, impartial, consistent, with prior warnings and corresponding with gravity of misconduct.
- c.To take necessary steps to prevent any arise of such complaints.

#### **Grievance redressal procedure:**

An aggrieved student (or his/ her parent or with a special permission from the Grievance Redressal Committee, by any other person) may make an application seeking redressal of grievance. The application should be in writing, duly signed by the applicant, giving full details of the applicant and of the grievance. Appropriate documentary proof in support of the grievance must also be submitted along with the application.

The application along with the other documents shall be submitted to the Member Secretary for Grievance Redressal, whose contact details are given below:

Dr. Arun K Parthasarathy
Member Secretary
Grievance Redressal Committee
JSS College of Pharmacy
Ooty - 643001

Ph: 0423 - 2443393 Extn. 228

Mobile: 09994934663 e-mail: kparun@jssuni.edu.in

- ⇒ On receipt of an application by the Member Secretary, the Member Secretary shall inform the Grievance Redressal Committee and shall immediately provide a copy to the head of the institution.
- ⇒ The Grievance Redressal Committee shall fix a date for hearing the complaint which shall be communicated to the Head of the Institution and the aggrieved person either in writing or electronically, as may be feasible.
- ⇒ An aggrieved person may appear either in person or represented by such person as may be authorized to present his case.
- ⇒ The Grievance Redressal Committee shall be guided by principles of natural justice while hearing the grievance.
- $\Rightarrow$  The Grievance Redressal Committee shall ensure speedy redress of grievance.
- ⇒ On the conclusion of proceedings, the Grievance Redressal Committee shall pass such order, with reasons for such order, as may be deemed fit to redress the grievance and provide such relief as may be desirable to the affected party at issue.
- ⇒ Every order shall be provided to the aggrieved person and the institution and shall be placed on the website of the college.
- ⇒ In case of any false / frivolous complaint, the Grievance Redressal Committee may order appropriate action against the complainant.
- ⇒ The students who are not satisfied with the decision of Grievance Redressal Committee communicated to them, may approach the Ombudsman for redressal of grievances of students at JSS University

## **Grievance Redressal Committee**

	Dr. S Ponnusankar, Chairperson	
	Dr. Md Afzal Azam-Co-Chair	
	Dr.MJN.Chandrasekar, Member	
<b>Grievance Redressal</b>	Dr. N Krishnaveni, Member	
	Dr. K PArun, Member Secretary	
	Dr. A Justin, Member	
	Mr. J Saravanan, Member	

#### **Dress Code**

# **Dress Code and Attire - Boys**

Allowed	Not Allowed				
Business Casuals: Collared Shirts	Jeans, T-shirts, Round collared shirts,				
(preferably full sleeved), Sweaters,	Cargo pants				
Blazers, Full Trousers					
Formal Foot wares: Leather / Canvas shoes	Sneakers, Chappals, Slippers, Sandals				
Clean shave / Trimmed beard	Long beard/ Designer beards				
Decent Haircut	Streaking, spikes, etc.				
Properly cut nails	Long / Designed nails				

#### **Dress Code and Attire - Girls**

Allowed	Not Allowed		
Salwar Kameez, Long Kurtas with	Jeans, T-shirts, Round collared shirts,		
Leggings, Business Casuals, Sweaters,	Cargo pants		
Blazers, Full Trousers			
Formal Foot wares: Leather / Canvas	Sneakers, Chappals, Slippers, high/pointed		
shoes, Sandals	heels		
Combed and tied hair	Loose hair		
Properly cut nails	Long / Designed nails		

#### Note:

- > It is compulsory to wear blazers on every Monday for theory classes and for all college meetings / functions.
- > All the students must wear aprons during laboratory / hospital hours.
- > All the students must wear the ID card within the campus.

## **HEALTH SERVICES**

The students have access to both public and private health care facilities having long association and understanding with the college. 'Doctor on call', transportation to health centres are also available 24x7 in case of any emergency. The hostel wardens, supervisors residing within the campus facilitate the health care services to the students.

#### **TRAVEL**

Indian Railways (Govt. of India Undertaking) provides concession on travel by train for students going to hometown and educational tours. The support is extended to research scholars for journey in connection with research work. The college authorizes the concession forms to avail the benefit from Indian Railways.

# POLICY ON COMMUNICATION DEVICES/CELL PHONES

- Students mobile should be put-off when in class room, laboratory, practice site, library and exam hall
- No phones, PDAs, calculators, notebook computers or other such electronic items may be used in the class-room/lab unless specifically required for a part of that activity and approved by the respective faculty member/instructor
- ❖ Failure to comply with these policies will raise a complaint to the Principal for appropriate disciplinary action(s)

### **Library and Information Centre**

The first law of library science "Books are for use" constitutes the basis for any library and is one of our library objectives. The first step towards achieving this is the location of the library. The main library is housed within the college building and departmental libraries at various departments. The library is open from 08:00 am to 08:00 pm throughout the week days and from10:00 am to1:00 pm on Sundays. This facilitates the users to use the library at their convenient and preferable time.

### Study space

The library located in the first floor with a built-in area of 275.00 sq.mts, has a seating capacity of 100 and provides a conducive atmosphere for extensive reading. There is a provision for a separate private study area to refer to the personal books.

#### Collection

The library has a well-developed and systematic policy for the collection development. It is a collective work of the Librarian, the staff and the students of the college. The comprehensive collection comprises of both traditional resources - books and journals in print and the electronic resources - the CD ROMs, videos, slides etc. They include books on pharmaceutical sciences and allied sciences like chemistry, anatomy, pathology, microbiology and biochemistry. The Library has access to more than 170 journals and 4 databases under which are included core journals. Access to the secondary sources of information is provided through databases like Scopus, International Pharmaceutical Abstracts, Iowa Drug Information Service and Clinical Key. The computer technology is an integral part of a library and its educational resources. The campus is Wi-Fi enabled.

#### **Information retrieval tools**

An online public access catalogue (OPAC) of the library's collection is provided in the main library. OPAC access points in their respective departments, is also available. An index for the contents pages of the journals subscribed by the library is maintained for the benefit of the users.

#### **Services**

The libraries provide a range of services through a team of dedicated library staff. The services aim to put information within easy reach. The conventional services - reference and lending, provide the staff and students the option of either using the information resources within the library or borrowing (textbooks) them for a stipulated period of time. Internet access is provided through the library LAN comprising of desktops and Wi-Fi access points throughout the college campuses. The digital collection comprising of ebooks, online journals, databases, the institutional repository collection of the abstracts of the theses and examination question bank can be accessed through the library network. Library orientation and 'hands on' training are given to the new users on the use of online sources and is supported by periodical training from the service providers like the Elsevier, Wolters kluwer etc. Collaborative services provide library members the access to the rich collection of about 30 thousand titles and 500 journals available in the constituent libraries of JSS University. A union catalogue of all the libraries is maintained in the library. Special assistance is given on request for literature search, scientific writing of articles and citing references. The students and staff can avail the reprographic and scanning facilities in the library.

#### **Facilities**

JSS Pharmacy College, Ooty has total campus area of 6.2 acres (30548 Sq.mts) with a total built carpet area measuring 16874.89 Sq.mts. Academics and administration built carpet area measures 5680.46 Sq.mts, the building has 4 floors.

#### **General Facilities**

- Wi-Fi enabled campus
- Six lecture halls (class rooms)
- Seminar rooms
- Undergraduate laboratories and postgraduate laboratories
- Computer work stations
- Library and Information center
- Training and Placement cell
- Digital Class room
- Students relaxation room
- In campus men's hostel
- In campus women's hostel
- Canteen
- Industry Institution Partnership Cell
- Auditorium
- Computer Lab
- Auditorium
- Multi-station Gym

#### **Academic Facilities**

**Laboratories:** JSS College of Pharmacy, Ooty has well equipped laboratories in basic sciences and pharmacy so that students can understand effectively, what they have learnt in the classrooms. Experiments are designed so that the basic concepts are well understood by the students. Advanced experiments in the laboratories, help the students to get an insight into the new frontiers of pharmacy and allied sciences.

**Computer Laboratory:** The computer laboratory of the college is well equipped with the latest computers. It has ten computers with CD ROM drives and inkjet printers. The laboratory is exclusively used by the I B.Pharm and I Pharm. D. students for their computer learning. The staff and PG students also use the facilities for their academic work. Some in-house programmes are also being developed for the benefit of students and staff.

**Equipments and Instruments:** The college machine room has various machines used in the pharmaceutical industries at different stages of production, quality control and packing. Tableting machines, coating pans, polishing pans, bottle filling machines, and Q.C. instruments like friability tester, DT and Dissolution test apparatus, deep freezer (up to minus 70°C), are the important ones, apart from other modern and sophisticated machines and instruments to update the facilities. Important equipments and instruments added include colorimeters, single pan balance, pH meters, refractometer, conductivity meter, BOD incubator, tray drier, laminar flow unit, fluorimeter, digital flame photometer, nephelometer, digital potentiometer, colony counter, convulsiometer, analgesiometer, histometer, Karl Fischer titration assembly U.V-Visible spectrophotometer, HPLC (Shimadzu) with U.V.-Florescence detector. Recently added instruments are HPLC Instrument and Gas chromatograph. General equipments purchased for the office use include paper

copiers, network electronic typewriter, gestener electronic stencil cutter, photocopiers, water coolers and refrigerators. A computer room with PCs is setup since May 1993, for office purpose.

**Research Laboratory:** The institution has well equipped research lab with equipments and Instruments like LC-MS-MS, HPLC machines, Gas chromatography, FTIR, AAS, RT-PCR, UVP iBox Scientia Small Animal Imaging System, UV-Visible Spectrophotometer machines, USP standard Dissolution apparatus, Viscometer, Research centrifuge, Tap Density Tester, High sensitivity digital balance, Gel electrophoresis, Rotary tablet press, Colloid mill, Planetary Mixer, computers etc.

**Visiting Faculty:** National and international experts in the field of pharmacy from industries, drugs control department, teaching profession and hospitals given the position of visiting faculty periodically visit to address the students and staff on advancements in the profession. Guest lectures arranged by scholarly and experienced persons also help the students and staff to update their knowledge.

**Experiential Education and Training:** Through the department of pharmacy practice for PG teaching and training (M.Pharm. - Pharmacy Practice) a tie-up was made with Government District Headquarters Hospital, Ooty since 1997 and presently both Pharm.D. students and PG students get their experiential education and training at this site. Various clinical pharmacy services are being offered at this practice site those include ward round participation, treatment chart review, ADR Monitoring, and patient counselling. Establishment of drug information centre with smart phone application, drug information hand book, protocol for poison management, patient information leaflet for the conditions like, Anemia, CVD, Cancer, COPD, Diabetes Mellitus, Hypertension, pregnancy related anemia, Peptic Ulcer, etc., E-drug cards, e-lingua guide, pictograms, drug interaction guide for TNMSC Essential drugs are the significant contributions of the department to date.

**Research and Publications:** Need based projects of professional importance are being carried out by M.Pharm. and Ph.D. students. Some of the areas include advanced drug delivery systems, synthetic drug development, scientific validation of traditional medicines, bioanalytical and food analysis, clinical pharmacokinetics, virology, etc. Staff and students are encouraged to present their research findings in seminars/conferences and publish the same in national and international journals. Several publications of the college have received the best article awards.

**Industrial tour & Industrial training:** Industrial tour is being organized for Undergraduate and Postgraduate students to visit various pharmaceutical industries across the country to get an orientation and exposure about the pharmaceutical industries. Industrial training is also arranged for the students in about 20 pharmaceutical industries within and outside the state are offering the training to our students.

**Training and Placement Cell:** The College has a training and placement cell to coordinate the student placements in pharmaceutical industries and health service organizations. The training and placement cell functions round the year to facilitate the process of placements for the graduates. Faculty coordinators are available to

respond to student's questions and concerns of all kinds regarding placement. This may include advice on placement procedures, help with preparation of applications and resumes and practice for interviews. Training and placement cell helps the students to have the information and skills necessary for an effective job search. Those considering pursuing higher education, research and academic career are also offered guidance.

The training and placement cell functions more effectively through the placement portal (<a href="http://jssuni.edu.in/placements/">http://jssuni.edu.in/placements/</a>) in which final year graduate and post graduate students register and upload their resume which will be made accessible to all the employers through web. This enables the potential employers to short list and contact the suitable candidates directly.

**Residential facilities:** The institution recognizes that a major concern of all students is the availability and quality of accommodation. Hostel facility is available in the campus to all students who need it. Both single and shared accommodation is available, separately for men and women. Hostels are built with all modern amenities providing distinct areas for learning and relaxation.

Particulars	Boy's Hostel	Women's Hostel	
Built area	3839.2 Sq. mts.	4041.63 Sq. mts.	
Capacity	294	290	
Dining Hall Capacity	100	100	
Hygienic Kitchen	$\sqrt{}$	$\checkmark$	
Round the Clock Security	$\sqrt{}$	$\checkmark$	
Hot Water Supply	$\sqrt{}$	√	
Multi Gymnasium	$\sqrt{}$	√	
Indoor Sports	√	√	
Periodicals	√	$\sqrt{}$	

# **Scholarship and Financial Aid**

- **1. GPAT Scholarships:** All India Council for Technical Education (AICTE), New Delhi provides scholarship for those students qualified GPAT examination and the college provides all administrative support to avail such scholarships.
- **2.** *JSS Academy of Higher Education & Research Scholarship:* The University has established research fund to encourage fulltime research scholars and provides scholarship of Rs. 5,000/- PM for qualified research scholars/students. Also the PG students are eligible to get the research grant from JSS Academy of Higher Education & Research, Mysuru.

#### **COLLEGE EVENTS**

College organizes the following events for the benefit of students

- 1. Orientation to Freshers, Mental Health Awareness Lectures
- 2. Anti-ragging awareness campaign (Freshers Day)
- 3. Pharmacist's Day
- 4. National Pharmacy Week Celebrations
- 5. Annual Sports Meet
- 6. College Annual Day
- 7. Literary activities
- 8. Personality development programs
- 9. Language (English) coaching
- 10. Career guidance
- 11. Placement drive
- 12. Competitive exam coaching
- 13. Pharmasaga (College Annual Magazine)
- 14. Outreach / Social Service programs by NSS and Indian Pharmaceutical Association, Nilgiris Local Branch

The college also encourages the students for the formation and functioning of various 'Clubs/Societies' to bring out the unique talents of the students.