

MANDATORY DISCLOSURE BY INSTITUTIONS RUNNING AICTE APPROVED ENGINEERING/TECHNOLOGY/PHARMACY PROGRAMMES TO BE INCLUDED IN THEIR RESPECTIVE INFORMATION BROCHURE, DISPLAYED ON THEIR WEBSITE AND TO BE SUBMITTED TO AICTE EVERY YEAR LATEST BY 30TH APRIL TOGETHER WITH ITS URL

The following information is to be given in the Information Brochure besides being hosted on the Institution's official Website.

“The information has been provided by the concerned institution and the onus of authenticity lies with the institution and not on AICTE.”

I. NAME OF THE INSTITUTION

- **ARIHANT SCHOOL OF PHARMACY & BIO-RESEARCH INSTITUTE**
- **SARKHEJ-GANDHINAGAR HIGHWAY, POST : ADALAJ, DIST.GANDHINAGAR. (GUJARAT – 382 421)**
- **Phone No. 079-23970331 & 34**
- **info@arihantpharmay.com**

II. NAME & ADDRESS OF THE PRINCIPAL

- **Dr. K. N. Patel (Principal)**
- **C-103, Ashutosh Avenue, Opp. Vasupujya Tower**
- **Naranpura, Ahmedabad-380013.**
- **Tel. No. 079-27911639, (M) 98793-56664**

III. NAME OF THE AFFILIATING UNIVERSITY

Name	Gujarat University		
Address	Navrangpura, Ahmedabad - 380 015.		
Pin Code	380 015	Period of Affiliation	One Year
STD Code	079	Phone No.	2630141, 26300664 26300342-343
Fax No.	26302654	E-Mail/ Web site	<u>www.gujaratuniversity.org.in</u>

IV. GOVERNANCE

❖ Members of the Board and their brief background

(1) **Shri Rishbhkumar Gayaprasad Jain**

Chairman

11, Tulip Bungalow, Opp. Manekbag Hall,
Ambavadi, Odhav, Ahmedabad.

(2) **Rajeshbhai Haribhai Patel**

Secretary

A-1, Sunsine Apartment,
Nr. Jahanvi Apartment,
Ambavadi, Ahmedabad.

(3) **Dipak Sankarlal Patel**

Joint Secretary

23, Khavad Society,
B/h.Ghyanda High School,
Ghatlodia, Ahmedabad-61.

(4) **Manoj Harishchandra Jain,**

Laxminagar Society, Opp. C.M.C.
Odhav, Ahmedabad.

(5) **Ravi Hiralal Jain**

Krushan Vilash Society, Ramnagar,
At. Indore, Madhypradesh.

(6) **Rajesh Kundanlal Jain**

Gajraj Society,
Chandlodia, Ahmedabad.

(7) **Rajkumar Gayaprasasad Jain**

33, Madhurpark, Opp. Gauri Cinema,
Ahmedabad.

Brief Background of the Board Member

Shri Rishbhbbhai Jain

Mr. Rushabh Jain is a prominent industrialist in the area of petroleum. He is renowned builder. He comes from farmer family. He is a founder of the trust as he is having great interest in education line. He is a graduate with a great vision & welfare attitude for the society.

Shri Rajeshbhai Patel

Mr. Rajeshbhai Patel is a famous person in the area of admissions and guidance for professional courses amongst the students. He is also good business person in the area of petroleum and construction. He is founder trustee of Deep education trust. He is managing trustee for Umiya Education Trust. He is having great vision in the education line.

Shri Dipakbhai Patel

Mr. Dipakbhai Patel started his career from the industry then he switched over to school organization. He is a postgraduate in science. He fully involve in Umiya Education Trust & this trust. He is have 6 years teaching experience.

❖ Members of Academic Advisory Body

Sr. No.	Name	Designation	College Name
1	Rajesh Patel	Chairman	Secretary, Arihant Seva Samiti
2	Dr. K. N. Patel	Member Secretary	Principal, Arihant School of Pharmacy
3	D. S. Patel	Member	Campus Director of Arihant School of Pharmacy
4	M. V. Jali	Member	Principal, T.V.M. College of Pharmacy, Bellare.
5	Manish P. Patel	Member	Head, Dept. of Pharmaceutics, Arihant School of Pharmacy
6	D. P. Patel	Member	Ex. Deputy Registrar Gujarat University
7	P. I. Patel	Member	Librarian, Shri S.K. Patel Institute of Pharmaceutical Education & Research.
8	M. J. Patel	Member	Managing Director, Pragnya Chemical Industries, Ankleshwar.
9	Dr. K. A. Parmar	Member	Professor, Department of Chemistry Hemchandracharya North Gujarat University, Patan.

❖ Frequency of the Board Meetings and Academic Advisory Body

- The Board meeting held quarterly in the year
- The Advisory Body meeting held one time in a semester.
- The urgent meeting will be held in the emergency time.

❖ Organizational chart and processes

The following committees are working in the development of the Institute.

- Construction Committee

- Academic Committee
 - Purchase Committee
 - Sports & Entertainment Committee
 - Library Committee
 - Feedback Committee
 - Examination Committee
- ❖ Nature and Extent of involvement of faculty and students in academic affairs/ improvements
- Evaluation of faculty members is done by the students at least once in a year to improve the quality of education imparted to students. Based on this evaluation, the faculty members try to rectify their shortcomings and improve their teaching methodology.
 - Results of University Examinations are analysed and then discussed during the staff meeting. In case of poor result in any subject, the cause for the same is found out & strategy is made to improve the results of those subjects in subsequent examination.
 - After each sessional examination, the result of each student is analysed and the students who score less in a particular subject are given extra assignment in the respective subject to improve his/her result in the subsequent exams.
- ❖ Mechanism/Norms & Procedure for democratic/good Governance
- All the decisions pertaining to academic affairs are taken in the general staff meeting. The opinion of all staff members is considered while taking decisions.
 - All the decisions regarding purchase of equipments or renovation/refurnishing of laboratories are taken after discussion with faculty members of the concerned department.
- ❖ Student Feedback on Institutional Governance/faculty performance
- Student feedback on performance of faculty & non-teaching staff members is taken by the institute at least once in a year.

❖ Grievance redressal mechanism for faculty, staff and students

- A committee comprising of 4 faculty members has been constituted to address the complaints of students & to take necessary steps to redress those complaints.
- In case of a major dispute between teaching or non-teaching staff members, a committee is formed to look into the matter & give their report regarding the dispute. Based on the committee's report, decision is taken by the Principal & the committee members to solve the dispute & to compensate for grievance to any staff member.

V. PROGRAMMES

- ❖ Name of the Programmes approved by the AICTE **B.Pharm.**
- ❖ Name of the Programmes accredited by the AICTE **-**
- ❖ For each Programme the following details are to be given:
 - Name **B. Pharm.**
 - Number of seats **60**
 - Duration **4 Year**
 - **Cut off marks for admission during the last three years**

Year	Category	Cut of Marks
2005-06	Open	352/450
	SC	189/450
	ST	-
	SEBC	279/450
2006-07	Open	190.80/227
	SC	178.40/227
	ST	66.40/227
	SEBC	177.30/227
2007-08	Open	182.74/228
	SC	172.17/228
	ST	76.26/228
	SEBC	172.07/228

- Fee **Rs. 32,000/-**

- Placement Facilities : Available
- Campus placement in last three years with minimum salary, maximum salary and average salary - **Not Applicable**

❖ Name and duration of programme(s) having affiliation/collaboration with Foreign University(s)/Institution(s) and being run in the same Campus along with status of their AICTE approval. If there is foreign collaboration, give the following details :

Details of the Foreign Institution/University: **Not Applicable**

- Name of the University/Institution
- Address
- Website
- Is the Institution/University Accredited in its Home Country
- Ranking of the Institution/University in the Home Country
- Whether the degree offered is equivalent to an Indian Degree? If yes, the name of the agency which has approved equivalence. If no, implications for students in terms of pursuit of higher studies in India and abroad and job both within and outside the country.
- Nature of Collaboration
- Conditions of Collaboration
- Complete details of payment a student has to make to get the full benefit of collaboration.

❖ For each Collaborative/affiliated Programme give the following:

Not Applicable

- Programme Focus
- Number of seats
- Admission Procedure
- Fee
- Placement Facility
- Placement Records for last three years with minimum salary, maximum salary and average salary

- ❖ Whether the Collaborative Programme is approved by AICTE? If not whether the Domestic/Foreign Institution has applied to AICTE for approval as required under notification no. 37-3/Legal/2005 dated 16th May, 2005.

VI. FACULTY

- ❖ Branch wise list faculty members :

1. Permanent Faculty 18
2. Visiting Faculty
3. Adjunct Faculty
4. Guest Faculty
5. Permanent Faculty: Student Ratio 1 : 13

Name of the Course	S. N o.	Name (s) of the Teaching Faculty	Desig. (Lecturer/ Asst. Professor/ Professor)	Qualifications with field of specialization			Date of Birth	Experience a) Teaching b) Industry c) Research			Date of Joining the Institution	Gross total salary as on date with scale & Basic pay.
				UG	PG	Doct orate		a	b	c		
Pharmacy	1	Dr. K. N. Patel	Principal & Prof.	B.Pharm 1 st Class	M.Pharm 1 st Class Pharma Cognosy	Ph. D.	30-06-1954	30 Yr.	-	26	15-06-2006	51688 (G) 18400-500-22400 (S) 20900 (B)
	2	Niranjan Kanaki	Asst. Prof.	B.Pharm 1 st Class	M.Pharm 1 st Class Pharma P'Cognosy	Ph. D.	4-2-1978	1 Yr.	-	5.5	01-04-2007	31081 (G) 12000-420-18300 (S) 12420 (B)
	3	Payal Garg	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class Pharma Bio.Tech	-	14-6-1980	2.5 Yr.	-	-	23-01-2006	21946 (G) 8000-275-13500 (S) 8825 (B)
	4	Manish P. Patel	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class Pharma Ceutics	-	15-06-1980	3 Yr.	1	-	21-03-2006	21946 (G) 8000-275-13500 (S) 8825 (B)
	5	Hiren K. Kadikar	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class Quality Assuranc	-	30-7-1981	2 Yr.	1	-	01-07-2006	21946 (G) 8000-275-13500 (S) 8825 (B)
	6	Upendra L. Patel	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class Pharma Ceutics	-	21-7-1981	2 Yr.	-	-	24-07-2006	21946 (G) 8000-275-13500 (S) 8825 (B)
	7	Jigar D. Patel	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class Pharma Cology	-	15-08-1983	2 Yr.	-	-	01-07-2006	21277 (G) 8000-275-13500 (S) 8550 (B)
	8	Pragnesh V. Patani	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class Pharma Cology	-	27-04-1980	2 Yr.	-	-	27-07-2006	21277 (G) 8000-275-13500 (S) 8550 (B)
	9	Hiral D. Koradia	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class P'Ceutics	-	04-05-1983	1.8 Yr.	-	-	21-06-2007	21277 (G) 8000-275-13500 (S) 8550 (B)
	10	Christian Mona	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class Q.A.	-	9-8-1983	2 Yr.	-	-	11-08-2007	20609 (G) 8000-275-13500 (S) 8275 (B)

Name of the Course	S. N o.	Name (s) of the Teaching Faculty	Desig. (Lecturer/ Asst. Professor/ Professor)	Qualifications with field of specialization			Date of Birth	Experience a) Teaching b) Industry c) Research			Date of Joining the Institution	Gross total salary as on date with scale & Basic pay.
				UG	PG	Doct orate		a	b	c		
	11	Bhumika Patel	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class P'Chem.	-	22-4-1984	1 Yr.	-	-	21-8-2007	19940 (G) 8000-275-13500 (S) 8000 (B)
	12	Vishal Modi	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class P'Chem.	-	11-08-1984	1 Yr.	-	-	21-08-2007	19940 (G) 8000-275-13500 (S) 8000 (B)
	13	Resha Parmar	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class P'cognosy	-	14-8-1983	1 Yr.	-	-	21-08-2007	19940 (G) 8000-275-13500 (S) 8000 (B)
	14	Mehul M. Patel	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class P'Chem.	-	11-6-1984	1 Yr.	-	-	21-08-2007	19940 (G) 8000-275-13500 (S) 8000 (B)
	15	Nimisha Kakadia	Lecturer	B.Pharm 1 st Class	M.Pharm 1 st Class P'Cology	-	06-11-1983	1 Yr.	-	-	21-08-2007	19940 (G) 8000-275-13500 (S) 8000 (B)
	16	Mrs. Chamy Kothari	Lecturer	B.Pharm 1 st Class	M.Pharm 1st Class Q.A.	-	06-12-1981	3 Yr.	-	-	13-12-2007	21946 (G) 8000-275-13500 (S) 8825 (B)
	17	Mrs. Hiral J. Shah	Lecturer	B.Pharm 1 st Class	M.Pharm 1st Class P'Ceutics	-	03-07-1983	1 Yr.	-	-	01-06-2008	20609 (G) 8000-275-13500 (S) 8275 (B)
	18	Ms. Dhruvi Upadhyay	Compt. Lab. Assistant	B.Sc. (Maths.) 2nd Class	B.Ed 1st Class	-	31-5-1983	3 Yr.	-	-	11-08-2005	Rs. 8500 Fixed

❖ Number of faculty employed and left during the last three years :

Sr.No,	Name of Faculty Employed during the last three years	Name of Faculty Left during the last three years
1	Dr.K.N.Patel	Ms.Jignasha Savjani
2	Dr.N.S.Kanaki	Mr.Divyakant Patel
3	Mr.Manish Patel	Ms. Radhika Dangar
4	Mr.Divyakant Patel	Mr. Viren Javiya
5	Ms.Jignasha Savjani	
6	Ms. Radhika Dangar	
7	Ms. Payal Garg	
8	Mr. Hiren Kadikar	
9	Mr. Viren Javiya	
10	Mr. Jigar Patel	
11	Mr. Pragnesh Patani	
12	Mr. Upendra Patel	
13	Ms. Hiral Koradia	
14	Ms. Mona Christian	
15	Mr. Vishal Modi	
16	Ms. Resa Parmar	
17	Ms. Bhoomika Patel	
18	Mr. Mehul Patel	

19	Ms. Nimisha Kakadia	
20	Ms. Charmy Kothari	
21	Ms. Hiral Shah	
22	Ms. Dhruiti Upadhyay	

VII. PROFILE OF DIRECTOR/PRINCIPAL WITH QUALIFICATIONS, TOTAL EXPERIENCE, AGE AND DURATION OF EMPLOYMENT AT THE INSTITUTE CONCERNED

For each Faculty give a page covering

1. Name : **Dr. Krishnakumar Narsinhbhai Patel**
2. Date of Birth : **30-06-1954**
3. Educational Qualification :
M. Pharm. (Pharmacognosy)
Ph. D. (Pharmacognosy)
4. Work Experience
 - Teaching : **30 Year**
 - Research : **28 Year**
 - Industry : -
 - Others
5. Area of Specializations **Pharmacognosy**
6. Subjects teaching at Under Graduate Level **Pharmacognosy**
Post Graduate Level **Pharmacognosy**
7. Research guidance
 - No. of M.Pharm Students guided : 30
 - No. of Ph.D. student working : 7
 - No. of papers published in
 - National Journals - 13
 - International Journals - 2
 - Conferences - 50
8. Projects Carried out -
9. Patents -
10. Technology Transfer -
11. Research Publications
 1. Bhavsar G.C., Patel K.N. and Patel M.P. and Patel U.N.; Antiinflammatory activity of ***Nyctanthus arbor-tritis***; *Ind. J. Nat. Prod.*,1988,4(1), 9-11

2. Bhavsar G.C., Chauhan M.G., Shah B.K., Patel K.N. and Das N.; Hepatoprotective principles of ***Eclipta alba*** and its Spectrophotometric determination; *Ind. Drugs*, 1990, 28(8), 100-102.
3. Bhavsar G.C., Chauhan M.G., Shah B.K., Patel K.N. and Das N.; Antihepatotoxic principles in Tissue culture of ***Eclipta alba*** Linn., *Ind. Drugs*; 1990, 28(8), 356-358.
4. Chauhan M.G., Patel K.N. and Shah M.B.; Contribution to Indigenous drugs Part-I, ***Celosia argentea*** L.; *International J. of Pharmacog.*; 1993, 31(3), 223-234.
5. Chauhan M.G., Patel K.N. and Dengre R.G.; Comparative studies of ***Rubia cordifolia*** L. and ***Rubia tinctorum*** L.(Rubiaceae); *Ancient Sci. of Life*; 1993, 13(1-2), 165- 179.
6. Patel K. N.; "Solutions to problems associated with herbal drugs and their formulations", *Pharma plus*, 1996, 1, 9-10 & 18-19.
7. Shah B.K. ,Patel K.N. and Mathew H.S.; " Investigation on antifeedant and anthelmintic potential of ***Adathoda vasica*** Nees"; *Ind. J. Nat. Prod.*,1998,14(1),p.11-16
8. Majmudar F.I., Shah M.B., Patel K.N., & Shah B.K., "***Aerva lanata*** its diuretic and hepatoprotective activity " *Ind. J. Nat. Prod.* , 1999, 15(1), 9-12.
9. Chauhan M. G., Patel H. K. and Patel K. N.; "Phytochemical investigation of ***Cyperus pangorei*** and its comparison with ***Cyperus rotundus***", *Ayu International*, 2001, 1(1),1-7.
10. Patel K. N., Gavaskar V. N. and Chauhan M. G.; "Contribution to indigenous drugs, part-II- ***Cordia rothii***", Communicated to ***Ayu International***.
11. Patel K. N. Shah B. K. and Kalola Jyoti, "HPTLC method for the Quality Control of Authentic Root and Polyherbal Market Formulations of *Argyrea speciosa*, communicated to ***J. Nat. Remedies***.
12. Patel K. N., Shah and Shah V.D., "Pharmacognostical studies on *Solanum nigrum* Linn, communicated to ***Indian Drugs***.
13. Patel K.N. Shah B.K. and Dasani R.H., "Evaluation of commercial samples of saffron its formulations.", communicated to *Ind. J. Nat. Prod.* (Sept.2005)
14. Patel K.N., Shah B. K. and Patel P.D., ""Evaluation of market samples of Sandalwood", communicated to ***Ind. J. Nat. Rem.***; (Sept.2005)
15. Shah B. N., Nayak B.S., Seth A. K., Jalapure S.S., Patel K.N., Review Article "Search for medicinal plants as a source of anti- infiummatory and anti- arithmetic agents". ***Pharmacognosy Magazine***, 2006, 2(6), 77-86.

12. No. of Books published with details.

Contributed 30 articles in Gujarati Encyclopedia

VIII. FEE

❖ Details of fee, as approved by State fee Committee, for the Institution.

Rs. 32,000/-

❖ Time schedule for payment of fee for the entire programme.

At the Time of Admission within 7 day

❖ No. of Fee waivers granted with amount and name of students.

Sr. No.	Name	Class	Amount
1	Dave Dhwani	T.Y. B.Pharm	16,000/-
2	Dave Abhijit	T.Y. B.Pharm	16,000/-
3	Tongya Palak	S.Y. B.Pharm	5,000/-

❖ Number of scholarship offered by the institute, duration and amount

❖ Criteria for fee waivers/scholarship. **(SEBC, Girls, PH / Rankers)**

We will collect Half Tuition Fees for University Rankers.

❖ Estimated cost of Boarding and Lodging in Hostels.

Till not started.

IX. ADMISSION

❖ Number of seats sanctioned with the year of approval. : **60 (August, 2005)**

❖ Number of students admitted under various categories each year in the last three years.

Year	No. of students admitted			
	OPEN	SEBC	SC	ST
2005-06	30	11	4	0
2006-07	25	12	3	5
2007-08	25	11	3	6

❖ Number of applications received during last two years for admission under Management Quota and number admitted.

Year	Application Received	Admission Given
2005-06	37	15
2006-07	34	15
2007-08	40	15

X. ADMISSION PROCEDURE

- ❖ Mention the admission test being followed, name and address of the Test Agency and its URL (website).

Government of Gujarat, Gujarat Higher Secondary Board, Gandhinagar.

- ❖ Number of seats allotted to different Test Qualified candidates separately.

As per State Government Decision

[AIEEE/CET (State conducted test/University tests)/Association conducted test]

All students admitted through the test conducted by state.

- ❖ Calendar for admission against management/vacant seats:

- Last date for request for applications. _____
- Last date for submission of application. _____
- Dates for announcing final results. _____
- Release of admission list (main list and waiting list should be announced on the same day) _____
- Date for acceptance by the candidate (time given should in no case be less than 15 days) _____
- Last date for closing of admission. _____
- Starting of the Academic session. _____
- The waiting list should be activated only on the expiry of date of main list.
- The policy of refund of the fee, in case of withdrawal, should be clearly notified.

Institution Refund total Fees of the current year in the case of withdrawal before last date of closing of admission.

XI. CRITERIA AND WEIGHTAGES FOR ADMISSION

- ❖ Describe each criteria with its respective weightages i.e. Admission Test, marks in qualifying examination etc.

As per State Government Rules :

Marks in qualifying examination : 60% weightage
Common Entrance Test (GUJCET) : 40% weightage

- ❖ Mention the minimum level of acceptance, if any.
We mentioned the minimum level of acceptance is as per Declaration of State Government. The minimum level kept for last year for the students was 40% marks in Physics, Chemistry, Biology & Maths Theory.
- ❖ Mention the cut-off levels of percentage & percentile scores of the candidates in the admission test for the last three years.

- ❖ Display marks scored in Test etc. and in aggregate for all candidates who were admitted.

Item No I - XI must be given in information brochure and must be hosted as fixed content in the website of the Institution.

The Website must be dynamically updated with regard to XII–XV.

XII. APPLICATION FORM

- ❖ Downloadable application form, with online submission possibilities.

XIII. LIST OF APPLICANTS

- ❖ List of candidates whose applications have been received along with percentile/percentage score for each of the qualifying examination in separate categories for open seats. List of candidates who have applied along with percentage and percentile score for Management quota seats.

The Joint Admission Committee for Professional Courses is giving the admission for open seats on the base of merit and the J.A.C.P.C. is recruited by the State Government. List of candidates who have applied along with percentage with this report as per Annexure-A.

XIV. RESULTS OF ADMISSION UNDER MANAGEMENT SEATS/VACANT SEATS

- ❖ Composition of selection team for admission under Management Quota with the brief profiles of members (This information be made available in the public domain after the admission process is over)

Composition of selection team for admission under Management Quota

Sr. No.	Name	Designation	College Name
1	Rajesh Patel	Chairman Selection Committee	Secretary, Arihant Seva Samiti

2	Dr. K. N. Patel	Member Secretary	Principal, Arihant School of Pharmacy
3	Manish P. Patel	Member	Head, Dept. of Pharmaceutics, Arihant School of Pharmacy
4	Dipak S. Patel	Member	Campus Director of Arihant School of Pharmacy

- ❖ Score of the individual candidates admitted arranged in order of merit.
Merit List attached with this report as per Annexure-B.
- ❖ List of candidates who have been offered admission.
Admission List attached with this report as per Annexure-C which is approved by JACPC.
- ❖ Waiting list of the candidates in order of merit to be operative from the last date of joining of the first list candidates.

- ❖ List of the candidates who joined within the date, vacancy position in each category before operation of waiting list.

XV. INFORMATION ON INFRASTRUCTURE AND OTHER RESOURCES AVAILABLE

LIBRARY :

- Number of Library books/Titles/Journals available (programme-wise)

Sr. No	Course (s)	Number of titles of the books	Number of volumes	Journals	
				National	International
1	B.Pharm	600	4665 + 530 (Order)	25	7

- List of online National/International Journals subscribed. ----
Online International Journal
(1) The New England Journal of Medicine.
- E-Library facilities ----

LABORATORY :

- List of Major Equipments/Facilities in each department.

DEPARTMENT OF PHARMACEUTICS AND PHARMACEUTICAL TECHNOLOGY

Sr. No.	Instruments	Quantity
1.	Brookfield viscometer	01
2.	Tablet compression machine (single punch)	01
3.	Tablet compression machine (Rotary)- Ordered	01
4.	Tablet disintegrating machine	01
5.	Friability tester	01
6.	Disintegrator	01
7.	Dissolution apparatus (single basket)	01
8.	Dissolution apparatus (six basket)	01
9.	Homogeniser	05
10.	Tray dryer	01
11.	Ampoule filling and sealing machine	01
12.	Capsule filling machine	01
13.	Ampoule washing machine	01
14.	Clarity test apparatus	01
15.	Ointment filling machine	01
16.	Ointment filling machine	01
17.	Ointment crimping machine	01
18.	Tablet coating pan	01
19.	Bulk Density Appartus	03
20.	Infrared Moisture Balance	01
21.	Hot air Oven	02
22.	Magnetic Stirrer with hot plate 2 lt.	10
23.	centrifuge	03
24.	Hand Grinding Mill	03
25.	Andreason pippete	05
26.	Hardness tester- Monsanto type	01
27.	Hardness tester- Pfizer type	01
28.	Sieve Shaker	01
29.	Digital balance	05
30.	425 MIC Fine Sieve 20 cm Dia Brass	10
31.	75 MIC Fine Sieve 20 cm Dia Brass	09
32.	250 MIC Fine Sieve 20 cm Dia Brass	02
33.	2mm fine sieve	05
34.	710 mic fine sieve	05
35.	180 mic fine sieve	02
36.	125 mic fine sieve	03
37.	Conical Percolator cap-500 ml.	06
38.	Dispensing Balance	22
39.	Exhaust Fan	01
40.	Glass Thermometer 110 C	16
41.	Heating Mantle 1 Lt.	01
42.	Heating Mantle 500 ml.	03
43.	Manometer	08
44.	Occular Micrometer	13
45.	Orifice Meter	16
46.	Physical Balance P-1	02
47.	Analytical balance	02

Sr. No.	Instruments	Quantity
48.	Rota Meter	07
49.	Stop Watch (Digital)	18
50.	Triple Beam Balance	13
51.	Venturimeter	10
52.	Water Bath (copper)	03
53.	Water Bath 6 hole	02
54.	Water Bath 12 hole (16 x 20 x 4)	02
55.	Weight Box	03
56.	Fractional column	02
57.	Burette stand	10
58.	Bunsen burner	14
59.	Traveling microscope	01
60.	Stage micrometer	12
61.	Distillation unit	02
62.	Vernier callipers	02
63.	Screw gauge	02
64.	Drawing board	20
65.	T-Square	20
66.	Charts	01
67.	Tripod stand	20
68.	Aluminium bowl (1 l)	06
69.	Wire gauge	24
70.	steam generator	01
71.	Rubber cork, tube	05
72.	Mortar & pestle (porcelin: 6" dia)	32
73.	Ostwald Viscometer	19
74.	Stalagmometer	22
75.	Laminar air flow	01
76.	Hot air oven	01
77.	B.O.D. Incubator	01
78.	Auto clave	02
79.	pH meter	01
80.	Compound microscope	10
81.	Digital balance	02
82.	Hot plate	01
83.	Triple beam balance	02
84.	Water bath	01
85.	Magnetic stirrer	02

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

Sr. No.	Instruments	Quantity
1.	U.V Spectrophotometer (double beam)	01
2.	HPLC (Chemito) – Ordered	01
3.	Turbidimeter	01
4.	Flame photometer	01
5.	Polarimeter	01
6.	Digital balance	03
7.	Digital Colorimeter	01
8.	Digital Conductometer	02
9.	Digital P.H. meter	03
10.	ABBE` s Refractometer	01
11.	Analytical Balance	08
12.	Electronic Balance 10 kg/1 gm	01
13.	Lab. Oven (18x18x18)	01
14.	Energy regulator	01
15.	UV Chamber	01
16.	Vacuum Pump	01
17.	TLC kit	01
18.	Distillation unit(Glass)	02
19.	Distillation unit(steel)	01
20.	Platinum Electrode	10
21.	Magnetic stirrer	05
22.	Oil Bath	05
23.	Physical balance	04
24.	Triple beam balance	06
25.	Kipp` s Apparatus	02
26.	Heating mantle	09
27.	Hot Plate	03
28.	Atomic Model Set Senior	03
29.	Atomic Model Set Junior	01
30.	Electric Water bath (12 holes)	01
31.	Electric Water bath (1 holes)	03
32.	Vernier Calliper	01
33.	ICE BOX	01

DEPARTMENT OF PHARMACOLOGY

Sr. No.	Instruments	Quantity
1	Student's Physiograph	01
2	a) Strain Gauge Coupler	01
3	b) Pressure transducer	01
4	c) Muscle's activity force	01
5	Actophotometer	01
6	Analgesimeter	01
7	B.P. Instrument	10
8	Clinical Thermometer	10
9	Electro Convulsimeter	01

Sr. No.	Instruments	Quantity
10	Eddy's Hot Plate Analgesiometer	01
11	Rota Rod	01
12	Spirometer	01
13	Haemocytometer	32
14	Haemometer	35
15	Histamine Chamber	01
16	Medical Microscope RM-3	01
17	Student Microscope	21
18	Sherrington Recording Drum	22
19	Students Organ Bath	22
20	Student Stimulator	01
21	Rabbit Cage	01
22	Rabbit Holder	01
23	Small animal operating table	01
24	Animal water feeding bottle	17
25	Animal Cage Big	10
26	Animal Cage Small	10
27	Rack (45" x 18" x 12")	01
28	Bone Cutter 6" S.S.	10
29	Platform Balance 5 KG	01
30	Human Brain	02
31	Human Ear	02
32	Human Eye	01
33	Human Heart	02
34	Human Skin	02
35	Human Blood circulation	01
36	Human Urinary System	01
37	Human Respiratory system	01
38	Human Reproductive System-Male	01
39	human reproductive system-Female	01
40	Human Skeleton	02
41	Human Torso	01
42	Human Histology slide	16
43	Human Respiratory System(Char)	02
44	Human nervous System(Char)	02
45	Human Digestive System(Char)	02
46	Human Heart(Char)	02
47	The structure of the ear(Char)	02
48	Human Kidney, Skin, hair & Excretory organ(Char)	02
49	The Muscles(Char)	01
50	The Eye(Char)	02
51	Circulation of Blood (Chart)	02
52	The Endocrine System (Chart)	01
53	Gento - Urinary organs (Chart)	01
54	Female Reproductive system (Chart)	01
55	Digestive System (Chart)	01
56	Human Embrology (Chart)	01

Sr. No.	Instruments	Quantity
57	Muscular System (Chart)	01
58	Lymphatic System (Chart)	01
59	Human Arterial (Chart)	01
60	Human Blood Groups (Chart)	01
61	Human Menstrual Cycle (Chart)	01
62	Human Immunity System (Chart)	01
63	Human Venous System (Chart)	01
64	Tripple beam balance	01
65	Tourniquet belt	03
66	Aeriation Tube	34
67	Dissection Tray	10
68	Aeration Pump	23
69	Frontal Lever	10
70	Muscle Lever	05
71	Starling Heart Lever	10
72	Symme's Cannula	05
73	Venous Cannula	05
74	WBC Diluting Pipetts	10
75	RBC Diluting Pipetts	10
76	HB Micro Pipetts	10
77	HB% Measuring Tube	12
78	Reagent Bottle	27
79	Neubaurs' Chamber	20

DEPARTMENT OF PHARMACOGNOSY

Sr. No.	Instruments	Quantity
1	Dissecting Microscope	13
2	Student Microscope RM-2B	24
3	Electronic Microscope	01
4	Projection microscope	01
5	Camera Lucida Prism Type	19
6	Eye piece micrometer	10
7	Stage micrometer	06
8	TLC Kit	01
9	Digital balance	03
10	Colourimeter	01
11	Digital pH meter	01
12	Waterbath	03
13	Muffle furnace	01
14	Hot air oven	01
15	Autoclave	01
16	Charts (Pharmacognosy)	49

☞ List of Experimental Setup

B. PHARM. SEMESTER I

BASICS OF COMPUTER APPLICATIONS

PRACTICALS

(2 Hours/Week; 2 Credits/Year)

Practical exercises should be based on theoretical topics. Exercise to familiarize students with the use of various DOS commands and WINDOWS environment. Exercises on word processing to execute various commands in preparing and editing documents, preparation of pharmaceutical documents and practical tables of pharmacognosy, pharmaceutical chemistry, pharmaceuticals and pharmacology in MS Word. Preparing and editing worksheets in MS EXCEL, drawing graphs, inserting formulas, etc. Demonstration of softwares for viewing pdf documents (ADOBE reader, ACROBAT), drawing simple chemical structures (CHEMDRAW, etc.)

Demonstration of pharmaceutical web sites including educational, government, commercial & search engines working with E-mail & e-mail software, patent Web-site.

COMPUTING FACILITIES:

➤ Number and Configuration of Systems

System	Configuration	Qty.
Computer System HCL	P-4 Xing PC (CPU 2.8 Ghz, Mother GVSRL Original, 256 MB DDR Ram, 40 GB HDD, 1.44 MB FDD, 104 Key KBD, Mouse, Cabinet with SMPS)	10
Computer System LG	P-4 (2.4 GHz), 845 GV Gigabyte M.B., 40 G.B. Segate, 1.44 MB FDD, ATX P-IV Cabinet, LG 52X CD Rom, I-Ball Dark M.M. Keyboard, Logitech Optical Scroll Mouse, 17" LG Silver-Grey Monitor, 256 MB DDR Ram 333 FSB	20

- Total number of systems connected by LAN : **15**
- Total number of systems connected to WAN : **NIL**
- Internet bandwidth : **2 Mbps Wireless Internet Facility
(unlimited uses)**
- Major software packages available : **Windows XP Professional
Windows Office XP
Professional**
- Special purpose facilities available : **NIL**

PHARMACEUTICAL ENGINEERING

PRACTICALS:

Practicals related to topics in pharmaceutical engineering theory should be carried out.

Experiments to demonstrate stoichiometry and tie substances in chemical reactions, Study of various flowmeters and ejector pump, Experiment on Reynolds number, Determination of overall heat transfer coefficient, Demonstration of corrosion resistance of various materials.

Introduction to engineering drawing – demonstration of orthographic and isometric projections, demonstration of AUTOCAD, interpretation of pharmaceutical building drawings, pharmaceutical machinery drawings. Flowcharting- drawing of simple flowcharts for pharmaceutical processes.

PHARMACEUTICAL CHEMISTRY – I

(Pharmaceutical Inorganic Chemistry)

(3 Hours/Week; 3 Credits/Year 45 hours

PRACTICALS

- 1) The backgrounds and systematic qualitative analysis of inorganic mixture of up to 4 radicals. Six mixtures to be analyzed, preferably by semi-micro methods. (18)
- 2) All identification tests for pharmacopoeial inorganic pharmaceuticals and

- qualitative tests for cations and anions should be covered. (6)
- 3) Limit tests for Cl, SO₄, As, Heavy metals and Lead along with a few modifications. (9)
- 4) Volumetric Analysis of few important compounds covered in theory. (12)

PHARMACEUTICS I (UNIT OPERATIONS I)

(3 HRS /Week; 3 Credits)

PRACTICALS

Practicals related to topics in theory should be carried out.

Experiments on filtration, factors affecting rate of filtration, demonstration of centrifuge, experiments on evaporation, rectification, determination of HETP, comparison of efficiency of packed and plate columns, steam distillation, experiments to determine EMC of various pharmaceutical raw materials, preparation of drying curves and calculation of rates, demonstration of tray dryer, vacuum dryer, fluid bed dryer, Experiments on determination of humidity and related parameters using DBT/WBT and Dew point methods, demonstration of sling psychrometer, dial type and digital humidity measuring instruments.

HUMAN ANATOMY AND PHYSIOLOGY

(2 hrs /Week: 2 Credits)

PRACTICALS

1. Study of the human skeleton. (2)
2. Study with the help of charts and models of the Digestive and Muscular System and organs (2)
3. Histology of elementary tissues and organs of alimentary canal and associated organs (2).

Hematology experiments

Use & Care of Microscope

Study of Haemocytometry

Hemoglobin estimation

Total WBC count

Total RBC count

Differential WBC count

Determination of clotting time and bleeding time of blood,

Erythrocyte sedimentation rate (ESR) and Blood Groups

Effect of Osmosis on RBC (6).

4. Amphibian Experiments for Study of Properties of Skeletal Muscle using either demonstrations or computer simulated experiments. (3)

B. PHARM. SEMESTER II

UNIT OPERATIONS II

PRACTICALS:

Practicals related to topics in theory should be carried out.

Demonstration of size reduction equipments, calculation of energy requirements in size reduction, Experiments on size separation techniques, computation of particle size, Experiments on mixing equipments, solid solid mixing , solid-liquid mixing, plotting of Mier's super solubility curve, calculation of yields of crystals under various conditions, experiments to demonstrate the compactibility of different pharmaceutical powders with and without additives, experiments on solid liquid and liquid liquid extraction, estimation of extraction efficiency using simple and multiple extraction procedures, demonstration of automatic pressure, temperature controlling systems in the laboratory.

PHARMACEUTICAL CHEMISTRY – I

(Physical Chemistry)

PRACTICALS

1. Experiments on surface tension and viscosity, partition coefficient, adsorption, order of reaction (First and Second), refractive index and molar refraction. (45)

HUMAN ANATOMY AND PHYSIOLOGY

PRACTICALS (2 hrs /Week: 2Credits)

1. Biochemical Analysis of Urine
Physical Characteristics
Normal Constituents
Abnormal Constituents (2)
2. Study with the help of charts and models of the Anatomy of following Systems:
Heart
Arterial System
Venous System
Respiratory System
Urinary System
Male and Female Reproductive System
Eye and Ear
Nervous System (7)
3. Histology of Various organs of above mentioned Systems (2)
4. Determination of body temperature, pulse rate, blood pressure, listening to heart sounds, demonstration of ECG (1)
5. Determination of Lung Volumes and Vital Capacity (1)
6. Study of Reflexes, Vision and Hearing capacity (2)

PHARMACOGNOSY-I

PRACTICALS

(3 Hours/Week; 2 Credits/Year)

1. Morphology of plant parts indicated in theory.
2. Care, use and types of microscopes.
3. Morphological characteristics of plant families mentioned in theory.
4. Microscopic measurements of cell and cell contents: starch grains, calcium oxalate crystals and phloem fibers.
5. Identification of crude drugs belonging to carbohydrates and lipids.

6. Preparation of herbarium sheets.

PHYSICAL PHARMACEUTICS

PRACTICALS

Practicals demonstrating any theoretical aspects of above topics may be carried out. Experiments on application of phase rule, two component systems, estimation of buffer capacity, preparation of various buffer solutions and their use, experiments on tonicity adjustment, Solubility determination of solids. Determination of surface / interfacial tension, HLB value and CMC of surfactants. Estimation of partition coefficient, Determination of viscosity using different viscometers, Demonstration of Brookfield viscometer, Determination particle size and surface area, derived properties of powders like density porosity, compressibility angle of repose etc. Study on polymorphs, their identification & properties. Studies of different types of colloids and their properties, Determination of sedimentation parameters for suspensions and emulsions, work done in emulsification, etc.

For Second Year B. Pharm

PHARMACEUTICS – II (PHYSICAL PHARMACEUTICS)

1. Determination of latent heat, vapor pressure, critical point.
2. Studies on polymorphs, their identification and properties.
3. Determination of particle size, particle size distribution and surface areas using various methods of particle size analysis.
4. Determination of derived properties of powders like density, porosity, compressibility, angle of repose etc.
5. Determination of surface/interfacial tension, HLB value and critical micellar concentration of surfactants.
6. Study of rheological properties of various types of systems using different Viscometers.
7. Studies of different types of colloids and their properties.
8. Preparation of various types of suspensions and determination of their sedimentation parameters.
9. Preparation and stability studies of emulsions.
10. Studies on different types of complexes and determination of their stability constants.

11. Preparation of pharmaceutical buffers and determination of buffer capacity.
12. Preparation involving tonicity adjustments.
13. Determination of C.S.T and partial or mutual solubility.
14. Determination of C.M.C of surfactant.
15. Determination of isoelectric point, blooming rating of proteins and gelatin.
16. Study of measurement of molecular weight of polymers macromolecular substances.
17. Temp. Dependency and viscosity study of binary systems.

PHARMACEUTICS – III (PHARM. ENGG. UNIT OPERATIONS II)

1. Determination of rate of evaporation, steam distillation.
2. Experiment based on steam, extractive and azeotropic distillation.
3. Determination of rate of drying, free moisture content and bound moisture content.
4. Experiments to illustrate the influence of various parameters on the rate of drying.
5. Experiment to illustrate principles of size reduction, laws governing energy and power requirements of size reduction.
6. Experiment to illustrate solid-solid mixing, determination of mixing efficiency using different types of mixers.
7. Crystallization and smooth behavior.
8. Principles of extraction.
9. Study of Stoke's law and sedimentation.
10. Rectification.
11. Particle size determination by microscopic method.

PHARMACEUTICAL CHEMISTRY ORGANIC CHEMISTRY

1. The student should be introduced to the various laboratory techniques through demonstrations involving syntheses of selected organic compounds (e.g. aspirin, p-bromoacetanilide, anthraquinone from anthracene, reduction of nitrobenzene etc.)
2. Identification of organic compounds and their derivatives.
3. An exercise involving stereoselective synthesis of a compound, resolution of racemic DL-alanine or any other example.
4. Introduction to the use of stereo models.

PHARMACEUTICAL ANALYSIS - I

1. Standardization of analytical weights and calibration of, volumetric apparatus.
2. Acid base Titration: Preparation and standardization of acids and bases; some exercises related with determination of acids and bases separately or in mixture form, some official assay procedures e.g. boric acid should also be covered.
3. Oxidation-reduction Titrations: Preparation and standardization of some redox titrants e.g. potassium permanganate, potassium dichromate, iodine, sodium, thiosulphate etc., I some exercises related to determination of oxidizing and reducing agents in the sample shall be covered. Exercises involving potassium iodate, potassium bromate, iodine solution, titanous chloride, sodium 2,6-dichlorophenol indophenol and ceric ammonium sulphate.
4. Precipitation titrations: preparation and standardization of titrants like silver nitrate and ammonium thiocyanate, titrations according to mohr's, volhard's and fajan's methods.
5. Gravimetric analysis preparation of gooch crucible for filtration and use of sintered glass crucible, determination of water of hydration, some exercises related to gravimetric analysis should be covered.
6. Non aqueous titration: preparation and standardization of perchloric acid and sodium/potassium/lithium methoxides solution, estimation of some pharmacopoeial products.
7. Complexometric titrations: preparation and standardization of EDTA solution, some exercises related to pharmacopoeial assays by complexometric titrations.
8. Miscellaneous determination: exercises involving diazotization, kjeldahl, karl-fisher, and oxygen flask combustion and gaseometry methods. Determination of alcohol content in liquid galenicals, procedure (BPC) shall be covered.
9. Experiments involving separation of drugs from excipients.
10. Chromatographic analysis of some pharmaceutical products.
11. Exercises based on titration using potentiometric technique, determination of acid base dissociation constant and plotting of titration curves using pH meter.
12. Exercises involving polarimetry.
13. Exercises involving conductometric and polarographic technique.

PHARMACOLOGY- I (General and systemic pharmacology)

1. Experiments on intact preparations: study of different routes of administration of drugs in mice/rats. to study the effect of hepatic microsomal enzyme inhibitors and induction on the pentobarbitone sleeping time in mice. Experiments on urinary excretion of drugs/their metabolites.
2. Experiments on Central Nervous System Recording of spontaneous motor activity, stereotype, analgesia, anticonvulsant activity, anti-inflammatory activity, and muscle relaxant activity of drugs using simple experiments.
3. To study the effect of autonomic drugs and local anaesthetics on rabbits eye.
4. To study the effect of various agonists and antagonists and their characterization using isolated preparations like frog's rectus abdominus muscle and isolated ileum preparations of rat, guinea pig *and* rabbit, viz:
 - A. To record the concentration response curve (CRC) of acetylcholine using rectus abdominus muscle preparation of frog.
 - B. To study the effects of physostigmine and d-tubocurarine on the CRC of acetylcho line using frog rectus abdominus muscle preparation of frog.
 - C. To record the CRC of 5-HT on rat fundus preparation.
 - D. To record the CRC of histamine on guineapig ileum preparation..
 - E. To record the CRC of noradrenaline on rat anococcygeus muscle preparation.
 - F. To record the CRC of oxytocin using rat uterus preparation.
 - G. To study the effect of adrenaline on rabbit duodenum.

PHARMACOGNOSY - II

1. Identification of crude drugs mentioned in theory.
2. Study of fibers and pharmaceutical aids.
3. Microscopic studies of 7 selected drugs (Crude) and their powders mentioned under the category of volatile oils in theory and their chemical tests.
4. General chemical tests for alkaloids, glycosides containing crude drugs as mentioned in theory. Study of powdered drugs.

For Third Year B. Pharm

PHARMACEUTICAL MICROBIOLOGY & BIOTECHNOLOGY

- Preparation of various types of culture media.
- Subculturing of common aerobic & anaerobic bacteria, fungus & yeast.
Staining of microorganisms: various methods.
- Methods of isolation and identification of microbes.
- Study of sterilization techniques & their validation.
- Evaluation of antiseptics & disinfectants.
- Sterility testing of pharmaceuticals as per I.P.
- Microbiological assay of Antibiotics & vitamins etc.
- Preparation of vaccines.
- Demonstration of Mini-fermenter.

DISPENSING, COMMUNITY & HOSPITAL PHARMACY

- Dispensing of prescription falling under the categories: Mixtures, solutions, emulsion external preparations, powders, suppositories, oral unit dosage forms, inhalations.
- Dispensing procedures involving pharmaceutical calculations, pricing of prescriptions and dosage calculations for pediatric and geriatric patients.
- Dispensing of prescriptions involving adjustment of tonicity.
- Identification of various types of incompatibilities in prescription, correction and dispensing.
- Categorization and storage of pharmaceutical products based on legal requirements of labeling and storage.
- Experiments based on sterilization of various types of materials used in hospitals.
- Practicals designed on the use of computer and drug, information centre, prescription filling, documentation of information on drug interaction.

- Experiments to illustrate handling of radio pharmaceuticals, measurement of radioactivity.
- Project report on visit of the nearby community for counseling on the rational use drugs and aspects of health care.

MEDICINAL CHEMISTRY - I

- Synthesis of selected drugs from the course content. .
- Spectral analysis of the drugs synthesized.
- Workshop on stereo model use .of some selected drugs.
- Establishing the pharmacopoeial standards of the drugs synthesized.
- Organic spotting of, Binary mixtures with derivative preparation and tic.

PHARMACEUTICAL CHEMISTRY (BIOCHEMISTRY)

- Preparation of, standard buffers (citrate, phosphate and carbonate) and measurement of pH.
- Titration curve for amino acids.
- Separation of amino acids by two dimensional paper chromatography and gel electrophoresis.
- The separation of lipids by TLC.
- Separation of serum proteins by electrophoresis on cellulose acetate.
- Quantitative estimation of amino acids.
- Quantitative estimation of proteins.
- The identification of C-terminal amino acids of a protein.
- The determination of glucose by means of the enzyme glucose oxidase.
- Enzymatic hydrolysis of glycogen by alpha and beta-amylase.
- Effect of temperature on the activity of alpha-amylase.
- Estimation of SGOT, SGPT, BRN, Creatinine, Cholesterol, Urea etc. in the serum.

PHARMACOLOGY

1. Pharmacology of Cardiovascular System
 - a) To study the inotropic and chronotropic effects of drugs on isolated frog heart.
 - b) To study the effects of drug on normal and hypodynamic frog heart.
2. Blood Pressure of anaesthetized Dog/Cat/Rat: To demonstrate the effects of various drugs on the B.P. and respiration including the Vasomotor Reversal of Dale and nicotinic action of acetylcholine.
3. Experiments on Isolated Preparations:
 - a) To calculate the pA₂ value of atropine using acetylcholine as an agonist on rat ileum preparation.
 - b) To calculate the pA₂ value of mepyramine and chlorpheniramine using histamine as agonist on guineapig ileum.
 - c) To find out the strength of the given sample of agonist (e. g. Acetylcholine, Histamine, 5-HT, Oxytocin etc.) and antagonist (e.g. pancuronium, atropine, mepyramine etc.) using a suitable isolated muscle preparation by Graded response method, Matching Assay, Three point Assay, Four point Assay.
4. Pharmacology of the Gastrointestinal Tract :
To study the Anti-secretory and anti-ulcer activity using pylorus ligated rats.
5. Clinical Pharmacology: To determine the effects of certain clinically useful drugs on human volunteers like: a) Antihistaminics, b) Anti-anxiety and sedative drugs, c) Analgesics, d) Betablockers

PHARMACOGNOSY

- Identification of crude drugs listed above.
- Microscopic study of characters of 9 selected drugs of Alkaloids given in theory in entire & powdered form.
- Chemical evaluation of powder drugs.
- Chromatographic (T.L.C. paper) studies of some herbal constituents.
- Laboratory experiments on isolation, separation, purification of various groups of chemical constituents of pharmaceutical significance.

FOR FOURTH YEAR B. PHARM

PHARMACEUTICAL TECHNOLOGY (INDUSTRIAL PHARMACY)

- Experiments to illustrate Preparation, Physical & Chemical evaluation of pharmaceutical products like tablets, capsules, parenterals, microcapsules, etc.
- Preparation, evaluation and packing of solution, suspensions and emulsions, ointments, suppositories, aerosols, eye drops, eye ointment, etc.
- Formulation of various types of cosmetics for skin & hair, dentifrices and manicure preparations.
- Evaluation of materials used in pharmaceutical packaging.

DOSAGE FORM DESIGN, BIOPHARMACEUTICS & PHARMACOKINETICS

- Evaluation of different excipients and their effect on formulations of pharmaceuticals like: Suspending agents, Emulsifying agents, Diluents, Binders, Lubricants, Disintegrating agents.
- Preformulation studies including drug excipient compatibility studies.
- Stability evaluation of various dosage forms and their expiration dating.
- Dissolution testing and data evaluation for oral solid dosage forms.
- Evaluation of Bioequivalence of some marketed products. (Calculation of standard data obtained from text-books)
- In vivo bioavailability evaluation from plasma drug conc. & urinary excretion curves (data treatment)
- Experiments designed for estimation of various pharmacokinetic parameters with given data.
- Design, Development and evaluation of controlled released dosage form.
- Statistical treatment of pharmaceutical data.

- Absorption studies – in vitro and in situ.

PHARMACEUTICAL CHEMISTRY - II

- Selected drug synthesis from the course content.
- Special analysis of the drug synthesized.
- Organic spotting of binary mixtures with derivative preparation and TLC
- Establishing pharmacopoeial standards of the drugs synthesized.

PHARMACEUTICAL ANALYSIS - II

- Quantitative estimation and general tests of at least ten formulations containing single drug or more than one drug, using instrumental techniques.
- Complete Monograph of one or two raw materials as per I. P.
- Estimation of Na⁺, K⁺, Ca⁺⁺, ions using flame photometer.
- Electro analytical techniques like pH metry, potentiometry, conductometry.
- Other analytical techniques like Polarimetry, Karl Fischer titration, identification of drugs by I.R.

PHARMACOGNOSY - IV

- Isolation of some selected phytoconstituents studied in theory.
- Extraction of volatile oils and their chromatographic profiles.
- Some experiment in plant tissue culture.
- Chromatographic studies of some herbal constituents.
- Exercises on paper and thin layer chromatographic evaluation of herbal drug constituents.
- Identification of traditional drugs listed in theory.
- Standardization of some traditional drug formulations.

WORKSHOP :

➤ List of facilities available.

- Games and Sports Facilities : For outdoor games and sport play ground is Available for Cricket and Volleyball and badminton. For indoor games we have carom Boards, chess facilities.
- Extra Curriculum Activities : The Institute arrange study tour one time in a year and picnic, musical programme, quiz, debate competition and other events are arranged by Institute.
- Soft Skill Development Facilities : ----

Number of Classrooms and size of each :

Particulars	Number of rooms		Carpet area of each room	
	Requirement as per norms	Available in the institution	Requirement as per norms	Available in the Institution (Sq. M)
Class Rooms	3	3	66	66,66 & 90
Tutorial Hall	2	2	35	70
Drawing Hall (*)	-	-		-
Computer Centre	1	1	75	30
Library	1	1	150	150
Laboratories & workshops	12	13	75	100 to 150 sq.m
Total	17	19	401	

- Curricula and syllabi for each of the programmes as approved by the University.
- **Academic Calendar of the University:**
- Academic Calendar of the Gujarat Technical University for 1st Year B.Pharm:**
- Opening: 28-07-2008
 - Academic Term: 28-07-2008 to 25-10-2008
10-11-2008 to 22-11-2008
 - Diwali Vacation: 26-10-2008 to 9-11-2008
 - Mid Semester Exam. : 22-09-2008 to 29-09-2008
 - End Semester Exam: 15th December onwards.

Academic Calendar for Various events in the year 2008-09 :

	S.Y. B.Pharm	T.Y. B.Pharm	FOURTH B.Pharm
Opening	10-07-2008	16-06-2008	16-06-2008
I Internal	08-09-2008	08-09-2008	08-09-2008
II Internal	01-12-2008	01-12-2008	01-12-2008
III Internal	19-02-2009	19-02-2009	19-02-2009
Practical Exam.	04-03-2009	26-2-2009	26-02-2009

- Date for events in year 2008-09

1. Navratri : 3rd Oct,08
2. Sports week : 11th Dec'08 – 16th Dec'08
3. NSS Day : 17th Dec'08
4. Annual Day : 19th Dec'08
5. Days : 1st Jan'09 – 7th Jan'09

➤ Academic Time Table

YEAR 2008-09

Time	Monday				Tuesday			
	F.Y.	S.Y.	T. Y.	Final	F.Y.	S.Y.	T.Y.	Final
9:30 to 10:30	P'Engg.I (Mehul P.) A	O.C. (Bhumika P.)	P'Cognosy (Dr.Niranjan K.) A	P' tech. (Manish P.)	Inorg.Chem. (Hiren K.) A	O. C. (Mehul P.)	Biochemistry (Vishal M.) A	P'Cognosy (Dr.Niranjan K.)
10:30 to 11:30	Inorg. Chem (Charmy K.) B	P'colology (Pragnesh P.)	Dispensing (Upendra P.) B	Analysis (Hiren K.)	HAPHE (Nimisha K.) B	P'Engg. (Hiral S.)	P'Cognosy (Resa P.) B	Bio-Pharm. (Hiral K.)
11:30 to 12:30	HAPHE (Nimisha K.) C	P. P. (Hiral K.)	Biochemistry (Vishal M.) C	P'Tech. (Hiral S.)	P'Engg.I (Jigar P.) C	Analysis (Mona C.)	Dispensing (Manish P.) C	Med. Chem. (Bhumika P.)
12:30 to 1:00	R E C E S S							
1:00 to 2:00	HAPHE (Jigar P.)	P'Cology (Pragnesh P.) A	Biochemistry (Vishal M.)	Analysis (Mona C.)	Inorg.Chem. (Charmy K.)	O. C. (Mehul P.) A	Dispensing (Manish P.)	Clinical (Jigar P.)
2:00 to 3:00	Unit operation (Hiral S.)	P'Engg. (Payal A./Manish P.) B	Med. Chem. (Bhumika P.)	Analysis (Hiren K.) A	P'Engg.I (Hiral K.)	P'Cology (Pragnesh P.) B	P'Cognosy (Dr. K.N.Patel)	Bio-Pharm. (Hiral S.) A
3:00 to 4:00	P'Engg.I (Hiral K.)	O.C. (Mehul P.) C	P'Cognosy (Resa P.)	P'Cognosy (Dr.Niranjan K.) B	Inorg. Chem. (Hiren K.)	P'Engg. (Upendra P.) C	Med. Chem. (Bhumika P.)	Analysis (Mona C.) B
4:00 to 5:00	Elementary Maths (Dhruti U.)	P'cology (Nimisha K.)	Micro (Payal A./Manish P.)	Bio-Pharm. (Upendra P.) C	HAPHE (Nimisha K.)	P'Cognosy (Resa P.)	Micro (Payal A./Upendra P.)	P'Cognosy (Dr.Niranjan K.) C

Continue.....

YEAR 2008-09

Time	Wednesday				Thursday			
	F.Y.	S.Y.	T.Y.	Final	F.Y.	S.Y.	T.Y.	Final
9:30 to 10:30	HAPHE (Nimisha K.) A	P'Cology (Jigar P.)	Dispensing (Hiral K.) A	Analysis (Charmy K.)	Computer (Dhruti U.) A	Juri (Manish P.)	Micro (Upendra P.) A	P'tech (Hiral K.)
10:30 to 11:30	P'Engg.I (Vishal M.) B	O. C. (Mehul P.)	Med.chem. (Bhumika P.) B	Bio-Pharm. (Upendra P.)	Unit operation I (Mona C.) B	P'Cognosy (Dr. K. N. Patel)	Bio. Chem. (Vishal M.) B	Bio-Pharm. (Hiral S.)
11:30 to 12:30	Inorg.Chem. (Mona C.) C	Juri (Manish P.)	P'Cognosy (Resa P.) C	P'Cognosy (Dr.K.N. Patel)	Library C	Analysis (Charmy K.)	P'Cology (Jigar P.) C	Mangt (Hiren K.)
12:30 to 1:00	R E C E S S							
1:00 to 2:00	HAPHE (Pragnesh P.)	P'Engg. (Payal A./Manish P.) A	Micro (Payal A./Hiral S.)	Med. Chem. (Vishal M.)	Computer (Dhruti U.)	P. P. (Hiral K.) A	P'Cology (Pragnesh P.)	Clinical (Nimisha K.)
2:00 to 3:00	P'Engg.I (Upendra P.)	O. C. (Mehul P.) B	Dispensing (Hiral K.)	P'Cognosy (Resa P.) A	Unit operation I (Manish P.)	P'Cognosy (Dr.Niranjan K.) B	Dispensing (Upendra P.)	P'tech (Hiral S.) A
3:00 to 4:00	Inorg.Chem. (Mona C.)	P'Cology (Pragnesh P.) C	P'Cognosy (Dr.Niranjan K.)	Bio-Pharm. (Hiral S.) B	Elementary Maths (Dhruti U.)	Analysis (Hiren K.) C	Med. Chem. (Mehul P.)	Med. Chem. (Bhumika P.) B
4:00 to 5:00	Computer (Dhruti U.)	Analysis (Hiren K.)	P'Cology (Nimisha K.)	Analysis (Charmy K.) C	—————	P.P (Upendra P.)	P'Cology (Jigar P.)	Project C

Continue.....

YEAR 2008-09

Time	Friday			
	F.Y.	S.Y.	T.Y.	Final
9:30 to 10:30	Unit operation I (Nimisha K.) A	P'Cog (Pragnesh P.) A	P'Cology (Jigar P.) A	Med. Chem. (Mehul P.) A
10:30 to 11:30	Library B	Analysis (Mona C.) B	Micro (Payal A./Hiral S.) B	Project B
11:30 to 12:30	Computer (Dhruti U.) C	P. P. (Charmy K.) C	Med. Chem. (Bhumika P.) C	P'tech (Hiral K.) C
12:30 to 1:00	R E C E S S			
1:00 to 2:00	Unit operation I (Hiral S.)	Analysis (Charmy K.) A	Biochemistry (Mehul P.)	Clinical (Pragnesh P.)
2:00 to 3:00	Library A	P. P. (Mona C.) B	Med. Chem. (Bhumika P.) A	Project A
3:00 to 4:00	Computer (Dhruti U.) B	P'Cognosy (Resa P.) C	P'Cology (Jigar P.) B	P'tech (Manish P.) B
4:00 to 5:00	Unit oper. I (Pragnesh P.) C	P'Engg. (Payal A./Upendra P.)	Micro (Payal A./Hiral K.) C	Med. Chem. (Vishal M.) C

➤ Teaching Load of each Faculty

FACULTY -WISE WORKLOAD PER WEEK

Faculty Name	First year		Second year		Third year		Final year		Total (hrs)
	Theory	Practical	Theory	Practical	Theory	Practical	Theory	Practical	
Mr. Manish Patel	1	6	2		1	3	1	3	17
Mr. Upendra Patel	2		1	3	1	6	1	3	17
Mrs. Payal Garg			1	6	3	6			16
Mrs. Hiral Koradia	1	3	1	3	1	3	2	3	17
Mrs. Hiral Shah	2	3	1				2	9	17
Mr. Hiren Kadikar	1	3	1	6			1	3	15
Mrs. Charmy Kothari		3	1	6			1	3	14
Ms. Mona Christian	2	3	1	3			1	3	13
Ms. Bhumika Patel			1		2	9	1	3	16
Mr. Mehul Patel			2	9	1			3	15
Mr. Vishal Patel					2	9	1	3	15
Mr. Jigar Patel	1	3	1		1	9	1		16
Mr. Pragnesh Patani	1		1	9	1		2		14
Ms. Nimisha kakadia	1	12	1		1		1		16
Dr. K. N. Patel			1		1		1		3
Mr. Niranjan Kanaki				3	1	3	1	6	14
Ms. Resa Parmar			1	6	1	6		3	17
Ms. Dhruvi Upadhyay	4	9							13
									265

For each **Post Graduate programme** give the following: **Not Applicable**

- i. Title of the programme
- ii. Curricula and Syllabi
- iii. Faculty Profile

SR	NAME	DESIGNATION	SUBJECT TEACHING
1.			
2.			
3.			

➤ Brief profile of each faculty.

- Laboratory facilities exclusive to the PG programme

Special Purpose

- Software, all design tools in case
- Academic Calendar and frame work
- Research focus
List of typical research projects.
- Industry Linkage
- Publications (if any) out of research in last three years out of masters projects
- Placement status
- Admission procedure
- Fee Structure
- Hostel Facilities
- Contact address of co-ordinator of the PG programme

Name:

Address:

Telephone:

E-mail :

NOTE: Suppression and/or misrepresentation of information would attract appropriate penal action.