

Mandatory Disclosure of GTU – Graduate School of Pharmacy (GSP)

1. Name of the Institution:

GTU – Graduate School of Pharmacy

Gujarat Technological University Gandhinagar Campus Nr. Government Polytechnic K-6 Circle, E-4 Electronic Estate G.I.D.C, Sector - 26, Gandhinagar-382028- Gujarat

Telephone: 07923267806

Mobile: 9427614966

Email: director-gsp@gtu.edu.in

<https://www.gsp.gtu.ac.in/>

2. Name and address of the Trust/ Society/ Company and the Trustees:

Gujarat Technological University

Nr. Vishwakarma Government Engineering College Nr. Visat Three Roads, Visat - Gandhinagar Highway Chandkheda, Ahmedabad – 382424 – Gujarat

Telephone: 079-23267580

Email: registrar@gtu.ac.in

<https://www.gtu.ac.in/>

3. Name and Address of the Vice Chancellor/ Director:

a) Vice Chancellor: Prof. (Dr.) Navin Sheth

Gujarat Technological University

Nr. Vishwakarma Government Engineering College

Nr. Visat Three Roads, Visat - Gandhinagar

Highway Chandkheda, Ahmedabad – 382424 –

Gujarat

Telephone: 079-23267564

Email: vc@gtu.ac.in

b) Director: Prof. (Dr.) Sanjay Chauhan

Director, Graduate School of Pharmacy

Gujarat Technological University Gandhinagar

Campus Nr. Government Polytechnic K-6 Circle,

E-4 Electronic Estate G.I.D.C, Sector -

26, Gandhinagar-382028- Gujarat

Telephone: 07923267806

Mobile: 9427614966

Email: director-gsp@gtu.edu.in

4. Name of the affiliating University:

Graduate School of Pharmacy is a constitute institute of Gujarat Technological University.

<https://www.gtu.ac.in/>

5. Governance:

- Members of the Board and their brief background:
<https://www.gtu.ac.in/Memberofbog.aspx> Annexure 5.1
- Members of Academic Advisory Body:
https://www.gtu.ac.in/Member_of_AC.aspx Annexure 5.2
- Frequency of the Board Meeting and Academic Advisory Body: at least

Thrice in an academic year

- Organizational chart: Annexure 5.3
- Nature and Extent of involvement of Faculty and students in academic affairs/ improvements: Dr. D. M. Patel, Associate Professor is entrusted with additional duty as Academic Coordinator and Ms. Asmatbanu M. Pathan and Dr. Jigna Vadalia, Assistant Professor - Faculty and staff members finalise academic calendar, timetable, unit distribution, workload distribution through regular meetings and Ms. Bhumika Maheriya, Assistant Professor is entrusted with additional duty as an Examination Coordinator. Dr. Manju Misra is involved in Research and development work.
- Mechanism/ Norms and Procedure for democratic/ good Governance: Institute development is planned through discussion among staff and faculty members.
- Student Feedback on Institutional Governance/ Faculty performance: It is taken at regular interval.
- Grievance Redressal mechanism for Faculty, staff and students:
The grievance related to GTU – GSP are submitted to below
Email id:director-gsp@gtu.edu.in
- Establishment of Anti Ragging Committee: Annexure 5. 4
- Establishment of Online Grievance Redressal Mechanism
- Establishment of Grievance Redressal Committee in the Institution and Appointment of OMBUDSMAN by the University: Annexure 5. 5
- Establishment of Internal Complaint Committee (ICC): Annexure 5. 6
- Establishment of Committee for SC/ ST: Annexure 5.7
- Internal Quality Assurance Cell: Annexure 5. 8

6. Programmes:

Name of Programmes approved by AICTE:

1. M.Pharm in Drug Regulatory Affairs from Academic year 2017-18
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutical-regulatory-affairs/>
2. M.Pharm in Pharmaceutical Quality Assurance from Academic year 2019-20
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutical-quality-assurance/>
3. M.Pharm in Pharmaceutics from Academic year 2020-21
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutics/>
4. M.Pharm in Phyto Pharmcy and Phyto Medicine from Academic year 2021-22
(Not approved by AICTE approved by PCI)
<https://www.gsp.gtu.ac.in/m-pharm-phytopharmacy-and-phytomedicine/>

Status of Accreditation of the Courses:

NBA Accreditation Status		
1	Programmes/Course Accredited	Not Available
2	Applied for Accreditation	Not applied yet
	A. Applied but visit not happened	Not applicable
	B. Visit happened but result awaited	Not applicable
3	List of programmes/ courses Not Applied	3 Courses not applied

NAAC Accreditation Status		
1	Accredited	Not Available
2	Applied for Accreditation	Not applied yet
	A. Applied but visit not happened	Not applicable
	B. Visit happened but result awaited	Not applicable
3	Not Applied	3 Courses not applied

Total number of Courses	3
No. of Courses for which applied for Accreditation	Not applied yet
Status of Accreditation –	Not Applicable

For each Programme the following details are to be given:

Programme Name	Drug Regulatory Affairs	Pharmaceutical Quality Assurance	Pharmaceutics
Number of Seats	15	15	15
Duration	2 Years	2 Years	2 Years
Cut off marks/rank of admission during the last three years	Merit Rank: 3011331.0	Merit Rank: 3011213.0	Merit Rank: 3011213.0
Fee	25,000/Annum	25,000/Annum	25,000/Annum
Placement Facilities	Yes	Yes	Yes
Campus placement in last three years with minimum salary, maximum salary and average salary	Maximum: 3.25 Lac/Annum Minimum: 1.6 Lac/Annum Average: 2.5 Lac/Annum	Maximum: 3.25 Lac/Annum Minimum: 1.6 Lac/Annum Average: 2.5 Lac/Annum	NA

7. Faculty: <https://www.gsp.gtu.ac.in/institute-faculty-profile/>

M. Pharm in Drug Regulatory Affairs			
Sr. No.	Name	Designation	Nature of Appointment
1	Prof. (Dr.) Sanjay Chauhan	Director	Permanent
2	Dr. Kashyap Thummar	Assistant Professor	Permanent
3	Ms. Asmatbanu Pathan	Assistant Professor	Contractual
4	Ms. Bhumika Maheriya	Assistant Professor	Contractual
M. Pharm in Pharmaceutical Quality Assurance			
Sr. No.	Name	Designation	Nature of Appointment
1	Dr. Rajeshkumar Patel	Associate Professor	Permanent
2	Mr. Ravisinh Solanki	Assistant Professor	Permanent
3	Mr. Ravi Patel	Assistant Professor	Permanent
4	Ms. Hardi Joshi	Assistant Professor	Contractual
M. Pharm in Pharmaceutics			
Sr. No.	Name	Designation	Nature of Appointment
1	Dr. Dasharath M. Patel	Associate Professor	Permanent
2	Dr. Manju Misra	Associate Professor	Contractual
3	Dr. Jigna Vadaliala	Assistant Professor	Contractual
4	Dr. Dignesh Khunt	Assistant Professor	Contractual
5	Mr. Udaykumar Vegad	Assistant Professor	Permanent

Sr. No.	Name	Designation	Nature of Appointment
1	Dr. Soumitra Banerjee	Adjunct Professor	Contractual
2	Dr. J. B. Dave	Adjunct Professor	Contractual

Number of Faculty employed and left during the last three years:

Number of Faculty Available at present	15
Number of Faculty Left	3

8. Profile of Vice Chancellor/ Director / Faculty: Annexure 8.1 & 8.2**9. Fees:**

- Details of Fee, as approved by State Fee Committee, for the Institution: Annexure 9.1
- Time schedule for payment of Fee for the entire Programme: Within 15 days from the beginning of academic semester.
- No. of Fee waivers granted with amount and name of students: NA
- Number of scholarship facilitates by the Institution:
- AICTE PG Scholarship for GPAT qualified students.
- Digital Gujarat Scholarship for ST/SC/OBC students
- Merit cum means scholarship from National Scholarship portal for minority students
- Any other scheme as applicable
- Criteria for Fee waivers/scholarship:
For AICTE PG Scholarship application student should be GPAT Qualified and Have Valid GPAT Score card.

10. Admission:

Number of seats sanctioned with the year of approval:

Year	Drug Regulatory Affairs	Pharmaceutical Quality Assurance	Pharmaceutics
2017	30	-	-
2018	15	-	-
2019	15	15	-
2020	15	15	15
2021	15	15	15

Number of Students admitted under various categories each year in the last five years:

Year		Drug Regulatory Affair	Pharmaceutical Quality Assurance	Pharmaceutics
2017	Open	10	-	-
	ST	01	-	-
2018	Open	10	-	-
	SEBC	03	-	-
	SC	01	-	-
2019	Open	09	08	-
	SEBC	06	06	-
	SC	01	-	-
	ST	02	-	-
	EWS	02	-	-
2020	Open	15	14	14
	SEBC	03	04	04
	SC	01	-	-
	ST	-	-	01
	EWS	-	01	01
2021	Open	09	04	04
	SEBC	04	05	03
	SC	01	02	01
	ST	-	01	02
	EWS	01	05	06

11, 12, 13, 14: Admission Procedure:

Through Admission Committee for Professional Courses(ACPC): <http://www.jacpoldce.ac.in/me.asp>

15. Information of Infrastructure and Other Resources Available:**Overall Infrastructure:**

Sr. No.	Particulars	Level	Actual Room Area (Sqm)
1.	Classroom	PG	303
2.	Seminar Hall	UG/PG	284
3.	Machine Room	UG/PG	75
4.	Instrument Room	UG/PG	158
5.	Laboratory	PG	565
TOTAL			1385.00

Amenities Area

Sr. No.	Particulars	Actual Room Area (Sq. m.)
1.	Boys Common Room	112.5
2.	Cafeteria	200
3.	First aid cum Sick Room	18.85
4.	Girls Common Room	87.92
5.	Stationery Store	12.25
TOTAL		431.52

Computational Facilities

Sr. No.	Particulars	Available
1.	Printers	1
2.	A1 size Color Printers	1
3.	Number of PCs in Language lab	25
4.	Legal Application S/W	10
5.	Legal System S/W	2
6.	PCs to Student ratio	61

Library Facilities

Sr. No.	Particulars	Available
1.	Volumes	101743
2.	Titles	101554
3.	Journals	19949
4.	Library Management Software	1
5.	Reading Room Seating Capacity	100
6.	Multi Media PC	15

Instructional Area-Common Facilities

Sr. No.	Particulars	Available
1.	Computer Center inclusive of Language Laboratory	78
2.	Library & Reading Room	291
TOTAL		369.00

Other Facilities

Sr. No.	Particulars	Availability
1.	All Weather Approach(Motorized Road)	Yes
2.	Safety Provisions	Yes
3.	Sewage Disposal System	Yes
4.	Telephone	Yes
5.	Vehicle Parking	Yes
6.	First Aid	Yes
7.	Appointment: Student Counselor	Yes
8.	Establishment: Anti-Ragging Committee	Yes
9.	Establishment: Committee for SC/ST	Yes
10.	Establishment: Internal Complaint Committee(ICC)	Yes
11.	Estb: Grievance Redressal Committee/OMBUDSMAN	Yes
12.	Barrier free Environment	Yes
13.	AICTE Approval Letters- EoA/LoA	Yes
14.	Institution-Industry Cell	Yes
15.	Digital Payment-Financial Transactions	Yes
16.	Compliance of the NAD	Yes
17.	Food Safety and Standards	Yes
18.	Insurance for Students	Yes
19.	Online Grievance Redressal Mechanism	Yes
20.	Internal Quality Assurance Cell	Yes
21.	Fire and Safety Certificate	Yes
22.	Examinations Reforms	Yes
23.	At least 5 MoUs with industries	Yes
24.	Display of info submitted to AICTE on website	Yes
25.	General Insurance	Yes
26.	Backup Electric Supply	Yes
27.	Group accident policy for employees	Yes
28.	Implementation of student Induction Programme	Yes
29.	Waste Management and a sustainable Green Campus	Yes
30.	Display of Course(s) and Approved In entrance	Yes
31.	Institution Web Site	Yes
32.	Medical & Counseling	Yes
33.	Notice Boards	Yes
34.	Potable Water Supply	Yes

Barrier Free Built Environment for disabled and elderly persons: Yes

Occupancy Certificate: Annexure 15.1

Fire and Safety Certificate: 15.2

Hostel Facilities:

Hostel	Carpet Area (m ²)
Boys Hostel	3510
Girls Hostel	480

Library:

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

Name of Programme	Drug Regulatory Affairs	Pharmaceutical Quality Assurance	Pharmaceutics
Number of Library books/ Titles	242	146	100
Number of Journals	06	04	03

List of online National/ International Journals subscribed: K-nimbus, K-hub and Bentham Science 15.3
E- Library facilities: K-nimbus, K-hub and Bentham Science...
https://drive.google.com/file/d/1f46hHfPzZPniTR2EYJ7B2g_1m4UcV2XY/view?usp=sharing

<https://drive.google.com/file/d/1oqBbXIVznw2Js--ULXItV96ZCimMi1Tl/view?usp=sharing>

National Digital Library (NDL) subscription details

Laboratory and Workshop:

- List of Major Equipment/Facilities in each Laboratory/ Workshop:
<https://www.gsp.gtu.ac.in/gallery/> Annexure 15.4
- List of Experimental Setup in each Laboratory/ Workshop: Availability of modern analytical instruments and e-CTD software

Computing Facilities:

- Internet Bandwidth: 100 mbps
- Number and configuration of System: 116
- Total number of system connected by LAN: 106
- Total number of system connected by WAN: 10
- Major software packages available: M S Office, Windows 10, Anti-virus, Adobe Reader free version
- Special purpose facilities available (Conduct of online Meetings/Webinars/Workshops, etc.): Yes
- Facilities for conduct of classes/courses in online mode (Theory & Practical): Yes
- Innovation Cell: <https://gtuinnovationcouncil.ac.in/>
- Social Media Cell: Yes
- Compliance of the National Academic Depository (NAD), applicable to PGCM/ PGDM Institutions and University Department: Yes
- Games and Sports Facilities: Gym, Indoor Games, Out Door Games
- Extra-Curricular Activities: Yes
- Soft Skill Development Facilities: Yes

Teaching Learning Process:

- Curricula and syllabus for each of the Programmes as approved by the University:
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutical-regulatory-affairs/> ,
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutical-quality-assurance/> ,
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutics/> Annexure 15.5
- Academic Calendar of the University: <https://www.gtu.ac.in/AcademicCal.aspx>
Annexure 15.6
- Academic Time Table with the name of the Faculty members handling the Course:
Annexure 15.6
- Teaching Load of each Faculty: Annexure 15.6
- Internal Continuous Evaluation System and place: Examination Guideline: Annexure 15.7
- Student's assessment of Faculty, System in place

For each Post Graduate Courses give the following:

- Title of the Course: Annexure 15.5
- Curricula and Syllabi: Annexure 15.5
- Laboratory facilities exclusive to the Post Graduate Course:
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutical-regulatory-affairs/>
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutical-quality-assurance/>
<https://www.gsp.gtu.ac.in/m-pharm-pharmaceutics/>

16. Enrolment and placement details of students in the last 3 years: Annexure 16.1 & Annexure 16.2

17. List of Research Projects / Consultancy Works: Annexure 17.1 & 17.2
MoUs with Industries: Annexure 17.3.

18. LoA and subsequent EoA till the current Academic Year: Annexure 18.1
<https://www.gsp.gtu.ac.in/aicte-approval-letters/>

19. Accounted audited statement for the last three years: Annexure 19.1

20. Best Practices adopted, if any


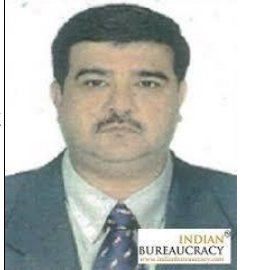


- Outcome based teaching-learning processes.
- Course exit survey is taken from each student at the end of semester in every subjects.
- Students' anonymous feedback about system, institute, learning processes and faculty members is taken at the end of semester.

List of Annexures


Sr. No.	Annexure name	Annexure number
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	Members of Academic Advisory Body	Annexure 5.2
	Organizational chart	Annexure 5.3
	Establishment of Anti Ragging Committee	Annexure 5.4
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	Establishment of Internal Complaint Committee (ICC)	Annexure 5.6
	Establishment of Committee for SC/ ST	Annexure 5.7
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	Profile of Director / Faculty	Annexure 8.2
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15	Occupancy Certificate	Annexure 15.1
	Fire and Safety Certificate	Annexure 15.2
	List of online National/ International Journals subscribed	Annexure 15.3
	List of Major Equipment/Facilities in each Laboratory/ Workshop	Annexure 15.4
	Curricula and syllabus for each of the Programmes as approved by the University	Annexure 15.5
	Academic Calendar of the University	Annexure 15.6
	Academic Time Table with the name of the Faculty members handling the Course	Annexure 15.6
	Teaching Load of each Faculty	Annexure 15.6
	Internal Continuous Evaluation System and place: Examination Guideline	Annexure 15.7
16	Enrolment details	Annexure 16.1
	Placement details of students in the last 3 years	Annexure 16.2
17	List of Research Projects	Annexure 17.1
	List of Consultancy Works	Annexure 17.2
	MoUs with Industries	Annexure 17.3
18	LoA and subsequent EoA till the current Academic Year	Annexure 18.1
19	Accounted audited statement for the last three years	Annexure 19.1

Gujarat Technological University
Graduate School of Pharmacy

Annexure 5.1: Members of the Board of Governors - GTU

Honourable Members of Board of Governors – Gujarat Technological University				
1	Prof. (Dr.) Navin Sheth Honourable Vice Chancellor, Gujarat Technological University	Chairman	As per GTU Act 15 – 2(i)	
2	Shri S. J. Haider, I.A.S Principal Secretary (Higher & Technical Education) Colleges & Universities, Government Of Gujarat, Gandhinagar	Ex-officio member	As per GTU Act 15 – 2(iv)	
3	Shri G. T. Pandya, I.A.S The Commissioner, Commissionerate of Technical Education, Government of Gujarat	Ex-officio member	As per GTU Act 15 – 2(ix)	
4	Shri Nagrajan M, I.A.S The Commissioner, Commissionerate of Higher Education, Government of Gujarat	Ex-officio member	As per GTU Act 15 – 2(vi)	
5	Smt. Manisha Chandra, IAS Secretary (Expenditure), Finance Department, Government of Gujarat	Ex-officio member	As per GTU Act 15 – 2(v)	
6	Prof. (Dr.) C. N. Patel, Principal, Shri Sarvajanik Pharmacy College Mehsana, Gujarat	Member	As per GTU Act 15 – 2(viii)	

7	Dr. Nehal Shukla Managing Trustee, Saraswati Social Education Trust Mahatma Gandhi Education Trust, Rajkot, Gujarat	Member	As per GTU Act 15 – 2(viii)	
8	Shri Ketan Marwadi Chairman and Managing Director Marwadi Shares and Finance Ltd., Rajkot, Gujarat	Member	As per GTU Act 15 – 2(x)	
9	Shri Amit Thaker Director, Lokmanya B.Ed. College, Ahmedabad, Gujarat	Member	As per GTU Act 15 – 2(x)	
10	Dr. Ketan R. Patel Chairman & Managing Director, Troikaa Pharmaceuticals Ltd. , Ahmedabad, Gujarat	Member	As per GTU Act 15 – 2(xi)	
11	Shri Rajubhai Shah Managing Director, Harsha Engineering, Ahmedabad, Gujarat	Member	As per GTU Act 15 – 2(xi)	
12	Shri Utkanth Bhandari Director, Streamline Controls Private Limited, Ahmedabad, Gujarat	Member	As per GTU Act 15 – 2(xi)	
13	Prof. (Dr.) Shailesh D. Panchal Director, GTU - Graduate School of Engineering & Technology	Member	As per GTU ACT 15 - 2(ii)	

14	Prof. (Dr.) Chetan B. Bhatt Dean - Gujarat Technological University, Ahmedabad, Gujarat	Member	As per GTU ACT 15 - 2(iii)	
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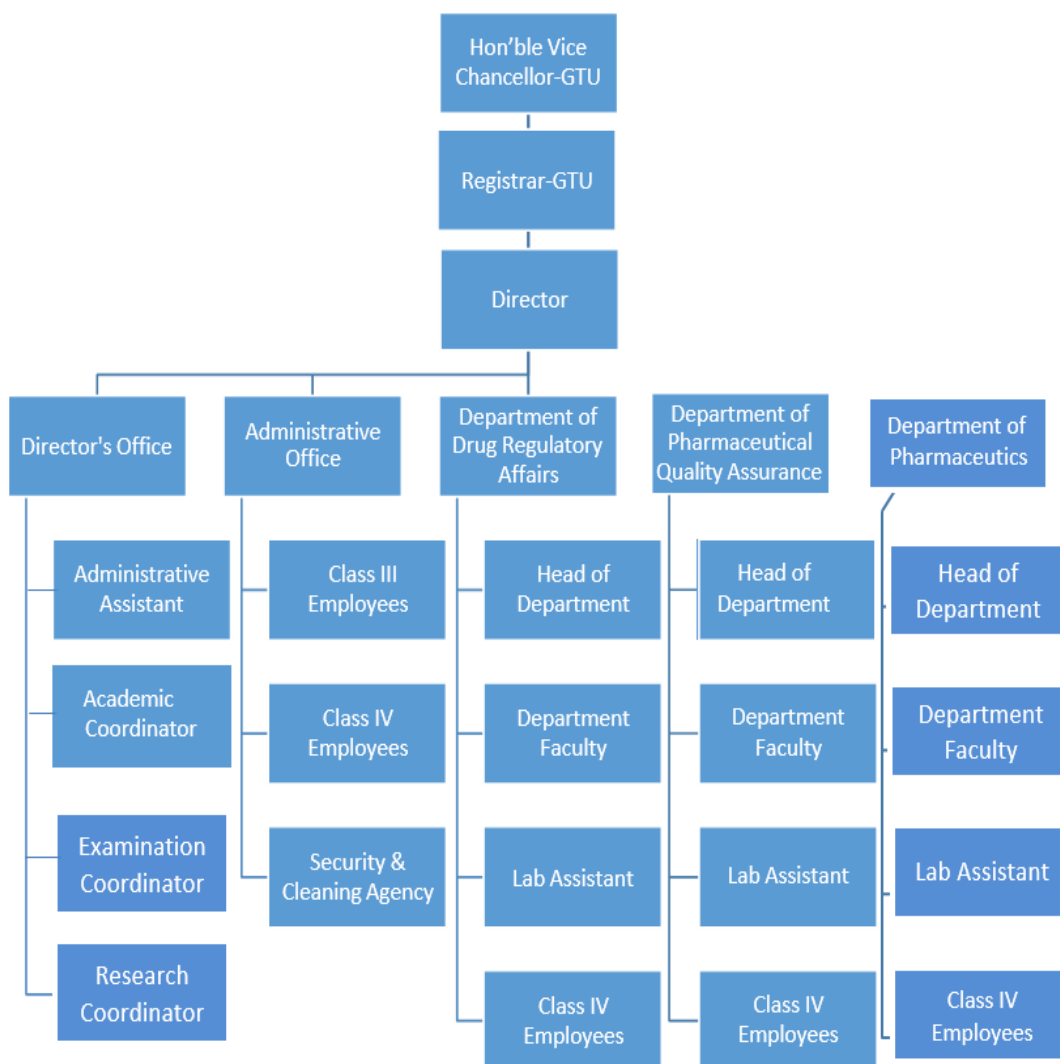
**Gujarat Technological University
Graduate School of Pharmacy**

Annexure: 5.2: MEMBERS OF ACADEMIC COUNCIL

Honorable Members of Academic Council – Gujarat Technological University		
Sr. No.	Name	Designation
1	Prof. (Dr.) Navin Sheth Honourable Vice Chancellor	Chairman
2	Dr Deepak Srivastava Professor, IIM Tiruchirappalli	Member
3	Dr V K Srivastava, Vice Chancellor, Indus University	Member
4	Dr Pramod M Padole Professor, Visvesvaraya National Institute of Technology, Nagpur	Member
5	Dr Gaurav Trivedi Associate Professor, IIT Guwahati	Member
6	Dr S D Panchal Professor and Director, GTU Graduate School of Engineering	Member
7	Dr Sanjay Chauhan Professor and Director, GTU Graduate School of Pharmacy	Member
8	Dr G P Vadodaria Principal, GEC, Bhavnagar	Member
9	Dr C N Patel Principal, Shri Sarvajanic Pharmacy College Mehsana	Member
10	Dr M T Chabaria Principal, L M College of Pharmacy	Member
11	Dr C H Vithalani, Professor, GEC Rajkot	Member
12	Dr D G Thakore Professor, BVM Engineering college	Member
13	Dr V S Purani Principal, GEC Valsad	Member
14	Dr Paresh Kotak Principal, GP Rajkot	Member
15	Dr Pravin Rathod Professor, Govt. Engineering College, Bhuj	Member
16	Dr S N Pandya Professor, Lukhdhirji Engineering College, Morbi	Member
17	Dr. Rupesh Vasani Principal, Sal Engineering college, Ahmedabad	Member
18	Dr. Trupti Almoula Director, Narmada College of Management, Bharuch	Member
19	Dr K N Kher Registrar, GTU	Member Secretary

Gujarat Technological University
Graduate School of Pharmacy

Annexure 5. 3: Hierarchical Chart





GUJARAT TECHNOLOGICAL UNIVERSITY

(Established Under Gujarat Act No.: 20 of 2007)

ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

Ref: GTU/Academic/Anti Ragging/2018/7371

Date: 03/10/2018

Circular

To

All Deans, Principals, Directors, Coordinators, Faculty, Non – Teaching Staff Members, Students & Parents.

Gujarat Technological University, Ahmedabad has constituted Anti Ragging Committee as per the guidelines of University Grants Commission, New Delhi and State Government. The details of members are as follows:

Sr No.	Name	Designation	Position held in Monitoring Cell	Contact Details
1	Dr.JayeshDeshkar	Principal, VPP College, Rajkot	Chirman	9137313861 Jvdeshkar9@yahoo.com
2	Dr. K. N. Mistry	Principal GIDC Degree Engg. College	Member-Faculty Representative	9737174329 dean_bezone5@gtu.edu.in
3	Mr. Ramesh Merja	Addl. Collector, Kheda	Member-Civil Admin	9909501501 rameshmerja@gmail.com
4	Shri M. N. Parmar	Account Officer class1 - GTU	Member-Non-Teaching Staff	9909944893 ao@gtu.edu.in
5	Prof U. V.Shah	-----	Member-Parents Representative	02774-242634 9426286895 er_utpalshah@rediffmail.com
6	Prof. UshaNeelkanthan	Prof. and Head of Electronics and Communication department L. D. College of Engineering	Member	079-23253536 9426329897 u.neel06@gmail.com
7	Dr. Rajesh Parikh	Director - GTU	Member	9426512675 rajesh.parikh@gtu.edu.in
8	Class Representative year on year		Member-Student Representative (First Year)	-----

Winners of: ICT Enabled University Award E-India – 2009 ♦ Manthan Award – 2009 ♦ GESIA Award-2011 ♦ Digital Learning WES-2011 Award ♦ AIMS International University Award-2013

Chandkheda: Nr. Campus Of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda, Ahmedabad – 382424- Gujarat - India. Phone: + 91 - 79 – 23267500

Ahmedabad: 2nd Floor, ACPC Building, L. D. College Of Engineering Campus, Navrangpura Ahmedabad (Gujarat) India – 380 015. Phone: + 91 - 79 – 26300499/599, Fax: 079-26 23 1500

Gandhinagar: K-6 Circle, E-4 Electronic Estate, GIDC, Nr. Government Polytechnic, Sector 26, Gandhinagar- 382028, Gujarat E-mail: info@gtu.ac.in URL: www.gtu.ac.in



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અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

9	Class Representative year on year	Member-Student Representative (Senior/Final Year)	-----
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Students should not hesitate of reporting any incident of ragging either as a victim or as a witness. All institution will have to place Anti-Ragging Complaint Boxes in selected areas in institutions and in the hostels for students who may drop in their complains of any incidence of ragging which has not otherwise been reported for necessary action by the Anti – Ragging Committee / Squads.

Sd/-
I/c Registrar

Winners of: ICT Enabled University Award E-India – 2009 ♦ Manthan Award – 2009 ♦ GESIA Award-2011 ♦ Digital Learning WES-2011 Award ♦ AIMS International University Award-2013

Chandkheda: Nr. Campus Of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda, Ahmedabad – 382424- Gujarat - India. Phone: + 91 - 79 – 23267500

Ahmedabad: 2nd Floor, ACPC Building, L. D. College Of Engineering Campus, Navrangpura Ahmedabad (Gujarat) India – 380 015. Phone: + 91 - 79 – 26300499/599, Fax: 079-26 23 1500

Gandhinagar: K-6 Circle, E-4 Electronic Estate, GIDC, Nr. Government Polytechnic, Sector 26, Gandhinagar- 382028, Gujarat E-mail: info@gtu.ac.in URL: www.gtu.ac.in



GUJARAT TECHNOLOGICAL UNIVERSITY

(Established Under Gujarat Act No.: 20 of 2007)

ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

Ref: GTU/Anti Ragging Cell/2020/5213

Date: 20/07/2020

Circular

22

To ,

All Deans, Principals, Directors, Coordinators, Faculty, Non – Teaching Staff Members, Students & Parents.

Gujarat Technological University, Ahmedabad has constituted Anti Ragging Monitoring Cell as per the guidelines of University Grants Commission, New Delhi and State Government. The details of members of Monitoring Cell-Ragging are as follows:

Sr No.	Name	Designation	Position held in Monitoring Cell	Contact Details
1	Dr Jayesh Deshkar	Principal, VPP College, Rajkot	Chairman	9428200514 Jvdeshkar9@yahoo.com
2	Dr. K. N. Mistry	Retired Principal	Member-Faculty Representative	9737174329 dean_bezone5@gtu.edu.in
3	Mr. Ramesh Merja	Addl. Collector, Kheda	Member-Civil Admin	9909501501 rameshmerja@gmail.com
4	Shri M. N. Parmar	Account Officer class1 - GTU	Member-Non-Teaching Staff	9909944893 ao@gtu.edu.in
5	Prof U. V. Shah	-----	Member-Parents Representative	02774-242634 9426286895 er_utpalshah@rediffmail.com
6	Prof. Usha Neelkanthan	Prof. and Head of Electronics and Communication department L. D. College of Engineering	Member	079-23253536 9426329897 u_neel06@gmail.com
7	Dr. Rajesh Parikh	Director - GTU	Member	9426512675 rajesh.parikh@gtu.edu.in
8.	Hemlata Varma	Legal Officer/Consultant	Member Secretary	079-23267591 osd_hemlata@gtu.edu.in

Winners of: ICT Enabled University Award E-India – 2009 ❖ Manthan Award – 2009 ❖ GESIA Award-2011 ❖ Digital Learning WES-2011 Award ❖ AIMS International University Award-2013

Chandkheda: Nr. Campus Of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda, Ahmedabad – 382 424- Gujarat - India. Phone: + 91 - 79 – 23 26 7500

Ahmedabad: 2nd Floor, ACPC Building, L. D. College Of Engineering Campus, Navrangpura Ahmedabad (Gujarat) India – 380 015. Phone: + 91 - 79 – 26 300 499/599, Fax: 079-26 23 1500

Gandhinagar: K-6 Circle, E-4 Electronic Estate, GIDC, Nr. Government Polytechnic, Sector 26, Gandhinagar-382028, Gujarat E-mail: info@gtu.ac.in URL: www.gtu.ac.in



GUJARAT TECHNOLOGICAL UNIVERSITY

(Established Under Gujarat Act No.: 20 of 2007)

ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

9.	Class Representative year on year	Member-Student Representative (First Year)	-----
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Students should not hesitate of reporting any incident of ragging either as a victim or as a witness. All institution will have to place Anti-Ragging Complaint Boxes in selected areas in institutions and in the hostels for students who may drop in their complains of any incidence of ragging which has not otherwise been reported for necessary action by the Anti – Ragging Monitoring Cell.

Registrar

Winners of: ICT Enabled University Award E-India – 2009 ❖ Manthan Award – 2009 ❖ GESIA Award-2011 ❖ Digital Learning WES-2011 Award ❖ AIMS International University Award-2013

Chandkheda: Nr. Campus Of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda, Ahmedabad – 382 424- Gujarat - India. Phone: + 91 - 79 – 23 26 7500

Ahmedabad: 2nd Floor, ACPC Building, L. D. College Of Engineering Campus, Navrangpura Ahmedabad (Gujarat) India – 380 015. Phone: + 91 - 79 – 26 300 499/599, Fax: 079-26 23 1500

Gandhinagar: K-6 Circle, E-4 Electronic Estate, GIDC, Nr. Government Polytechnic, Sector 26, Gandhinagar-382028, Gujarat E-mail: info@gtu.ac.in URL: www.gtu.ac.in



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ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત સરકારના ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

Ref: GTU/Grievance/Circular/2020/2143

Date: 24/02/2020

Circular

Read:

- (1) University Grants Commission, New Delhi UGC (Redress of Grievance of students) Regulations 2019 F.No.14-4/2012(CPP-II), dated-06/05/2019.
- (2) Education Department Resolution No.: Parcha / 2019/ Ombudsperson / Kh-1 Secretariat, Gandhinagar, Dt-06/09/2019.
- (3) GTU Office Note approved by Hon. Vice Chancellor on Dt.24/01/2020 & Dt.10/02/2020.

University has constituted two committees to address student's grievances. All the Directors/Principals /Students are here by informed to take note for the same.

The details of these are as follows.

(1) Institutional Student Grievance Redressal Committee (ISGRC) :

Sr No.	Name	Designation	Position held in Monitoring Cell	Contact Details
1	Dr.S.P.Chauhan	Professor (GSOP)	Chair Person	9427614966, ID-Prof_sanjay_chauhan@gtu.edu.in
2	Dr. G.P.Vadodariya	Principal GEC, Bhavanagar	Member-Dean	9909980005 ID-gpv11@rediffmail.com
3	Dr. N.M.Bhatt	Professor L.D.Ahmedabad	Member – Senior Academic	9904406000 ID-nmbhatt19@gmail.com
4	Dr.Usma Anerao	I/c Principal Government Polytechnic For Girls, Ahmedabad	Member – Senior Academic	9824667877 ID-usma_shah1@rediffmail.com
5	Ms.Ami Patel	Student – Sal Institute of Engineering	Special Invitee	9438739120

**Winners of : ICT Enabled University Award E-India - 2009 ❖ Manthan Award - 2009 ❖ GESIA Award -2011
❖ Digital Learning WES - 2011 Award ❖ AIMS International Innovative University Award - 2013**

Chandkheda : Nr. Campus of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda, Ahmedabad - 382 424. Gujarat, India Ph. : 079 - 232 67 500 Fax : +91 - 79 232 67 580
Ahmedabad : 2nd Floor, ACPC Building, L. D. College of Engineering Campus, Navrangpura, Ahmedabad, (Gujarat) India - 380 015.
 Ph. : 079 - 232 67 500 Fax : +91 - 79 - 232 67 500



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ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત સરકારના ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

(2) University student Grievance Redressal Committee (USGRC) :

Sr No.	Name	Designation	Position held in Monitoring Cell	Contact Details
1	Dr. Pankaj Rai Patel	Professor (GSMS)	Chair Person	9426770873 ID-director@gtu.edu.in
2	Dr. Kotak Parekh	Gov. Poly. Rajkot	Member-Dean	9825469617 ID-kotakp2003@yahoo.com
3	Dr. C.B. Bhatt	Principal A.K. Shastri (MCA)	Member	9427624727 ID-chetan_bhatt@yahoo.com
4	Shri P.M. Patel	Principal Gov. Polytechnic Ambawadi	Member	9825022025 ID-cte.gpa@gmail.com
5	Prof. S.D. Panchal	Ass. Prof VGEC Chandkheda	Member- University Professors	9428062077 ID-sdpanchal2007@gmail.com
6	Ms. Zankhana Joshi	Student – VGEC Chandkheda	Special Invitee	9426141493

-Sd-
Registrar

To,
The Directors, Principals of Affiliated Institute.

**Winners of : ICT Enabled University Award E-India - 2009 ❖ Manthan Award - 2009 ❖ GESIA Award -2011
❖ Digital Learning WES - 2011 Award ❖ AIMS International Innovative University Award - 2013**

Chandkheda : Nr. Campus of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda, Ahmedabad - 382 424. Gujarat, India Ph. : 079 - 232 67 500 Fax : +91 - 79 232 67 580
Ahmedabad : 2nd Floor, ACPC Building, L. D. College of Engineering Campus, Navrangpura, Ahmedabad, (Gujarat) India - 380 015. Phone : + 91 - 79 - 26 300 499 / 500 Fax : + 91 - 79 - 26 30 1500



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(ગુજરાત સરકારના ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

Ref: GTU/Stu_Sec/Grievance/2020/3636

Date: 20-03-2020

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Circular

Read:

1. University Grants Commissions (Redress of Grievances of Students) Regulations, 2019 dated 06-05-2019.
2. GTU Office note approved by Hon. Vice Chancellor on 24-01-2020 & 04-03-2020.

University has constituted committee for student's grievances. All the Directors/Principals/Students are here by informed to take note for the same.

The details are as follows:

Departmental Student Grievance Redressal Committee (DSGRC) for Student Section:

Sr. No	Name	Designation	Position held in Monitoring cell	Contact details
1	Mrs. S. T. Sengunthar	Statistical Officer (Student Section)	Chair Person	079-23267636 statistics@gtu.edu.in
2	Dr. D.M.Patel	Associate Professor (GSOP)	Member	079-23267645 asso_dmpatel@gtu.edu.in
3	Dr. Komal Borisagar	Associate Professor (GSET)	Member	asso_komal_borisagar@gtu.edu.in
4	Dr. K.N.Thumar	Assistant Professor (GSOP)	Member	079-23267804 ap_kashyap@gtu.edu.in
5	Joshi Vedant R	Student, GSET, GTU	Special Invitee	joshivedant49@gmail.com

Registrar

To:

- 1) All members for information and necessary action.
- 2) All Directors/Principals of affiliated institutes.

Winners of : ICT Enabled University Award E-India - 2009 ❖ Manthan Award - 2009 ❖ GESIA Award -2011
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ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

Ref: GTU/SC-ST Cell/2019/

Date: 16/10/2019

Circular

To

All Deans, Principals, Directors, Coordinators, Faculty, Non – Teaching Staff Members, Students & Parents.

Gujarat Technological University, Ahmedabad has reconstituted SC-ST Cell as per the guidelines of University Grants Commission, New Delhi, and Ref: F1-5/2006(S.T.C.) dated 25-08-2006. The details of members are as follows:

Sr No.	Name	Designation	Position held in Monitoring Cell	Contact Details
1	Dr. A.M. Prabhakar	Principal, GEC Modasa	Chairman	M- 7567750007 Mail- aswin.prabhakar@gmail.com
2	Mr. M.N. Parmar	Accounts Officer (Grade I)	Liaison Officer (GTU Representative)	M- 9909944893 Mail- ao@gtu.edu.in
3	Dr. K.N.Kher	Registrar, GTU	Member-Secretary	M-7069029955 Mail- registrar@gtu.ac.in
4	Dr. Pankaj Rai Patel	Director GTU	Member	M- 9099061044 Mail-director@gtu.edu.in
5	Prof. M.B. Chaudhary	Professor GEC Gandhinagar	Member (ST)	M- 9427020407 Mail- hod.ce@gecg28.ac.in
6	Prof. M.N.Charel	GP Dahod	Member	M-9427057855 Mail-manishcharel@yahoo.com
7	Prof. Umesh Pattani	HOD Civil GP Ahmedabad	Member	M-9428911569 Mail-unpat_1969@yahoo.co.in
8	Prof. M.K. Shah	Asso. Prof., VGEC Chandkheda	Member (Open)	M-7874563242 Mail-milindshah@vgecg.ac.in
9.	-	DTE Officer	Member	-
10.	-	DTE Officer	Member	-

Winners of: ICT Enabled University Award E-India – 2009 ❖ Manthan Award – 2009 ❖ GESIA Award-2011 ❖ Digital Learning WES-2011 Award ❖ AIMS International University Award-2013

Chandkheda: Nr. Campus Of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda. Ahmedabad – 382 424- Gujarat - India. Phone: + 91 - 79 – 23 26 7500



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Copy to:

1. All Members.
2. Office File.

Sd/-
I/c Registrar

Winners of: ICT Enabled University Award E-India – 2009 ❖ Manthan Award – 2009 ❖ GESIA Award-2011 ❖ Digital Learning WES-2011 Award ❖ AIMS International University Award-2013

Chandkheda: Nr. Campus Of Vishwakarma Government Engineering College, Sabarmati - Koba Highway, Nr. Visat Three Roads, Chandkheda, Ahmedabad – 382 424- Gujarat - India. Phone: + 91 - 79 – 23 26 7500



GRADUATE SCHOOL OF PHARMACY

GUJARAT TECHNOLOGICAL UNIVERSITY

(Established by Government of Gujarat Under Gujarat Act No. 20 of 2007)

Ref: GTU/GSP/2021/11/I.C./022

Date: 22/11/2021

Circular/ Notice

Internal Quality Assurance Cell is conceived as a mechanism to build and ensure a quality culture at the institutional level. The IQAC shall have the following function:

- Development and application of quality benchmarks/parameters for the various academic and administrative activities of the Colleges;
- Facilitating the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process;
- Arrangement for feedback responses from students, parents and other stakeholders on quality related institutional processes;
- Dissemination of information on the various quality parameters of higher education;
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles;
- Documentation of the various programmes/activities of the College, leading to quality improvement;
- Acting as a nodal agency of the college for coordinating quality-related activities, including adoption and dissemination of good practices;
- Development of the Annual Quality Assurance Report (AQAR) of the College based on the quality parameters/assessment criteria developed by the relevant quality assurance body (like NAAC, NBA) in the prescribed format;

Constitution of the IQAC at GTU-Graduate School of Pharmacy

Sr. No.	Name of Person	Designation	Designation in Cell
1.	Dr. Sanjay Chauhan	Director & Professor	Chairperson
2.	Dr. D. M. Patel	Associate Professor	Coordinator
3.	Dr. Manju Misra	Associate Professor	Member (P'ceutics)
4.	Dr. Kashyap Thummar	Assistant Professor	Member (PQA)
5.	Ms. Bhumika Maheriya	Assistant Professor	Member (PRA)

Director

Graduate School of Pharmacy

Copy To:

- 1) All concern faculty member
- 2) IQAC Coordinator
- 3) Institute Office File



Gujarat Technological University
Graduate School of Pharmacy

Annexure 8.1: Profile of VC

Profile of Prof. (Dr.) Navin Sheth, Hon'ble Vice Chancellor- GTU

Prof. (Dr.) Navin Sheth is the Vice-Chancellor of the Gujarat Technological University from December 31, 2016. A renowned educationist and administrator, Prof. Sheth started his academic career way back in 1979 and during the course of time, emerged as a tireless academician and herbal scientist.

Prof. Sheth had his early education in his hometown. He obtained his B. Pharm and M. Pharm degrees from L. M. College of Pharmacy, Gujarat University, Ahmedabad, the oldest pharmacy college of India. He was awarded the National Merit Scholarship for his graduation studies. He obtained Ph.D. degree from the Saurashtra University, Rajkot.

A distinguished academician, staunch disciplinarian and an efficient administrator. He has also served as the Member and Chairman of the various Committees of UGC/ AICTE /DST/ GUJCOST and several Universities in India. He had been the Advisor and later on, Member of the GPSC.

Prof. Sheth has attended many national and international conferences in India and abroad. His research interests include Traditional Drugs, Herbal Drugs and Standardization. His exuberant involvement in R&D has been recognized by his 100+ publications including 65 technical papers in renowned research journals, 42 papers in National Conferences 21 papers in the International Conferences.


Till date 28 research scholars had successfully completed their doctoral research under his guidance. At present, 4 research scholars are pursuing their Ph.D. under his supervision.


Prof. Sheth is awarded by Life Time Achievement Award at KLE University, Karnataka during 20th National Conference of ISP at Belgaum, Karnataka, Life Time Achievement Award at World Education Convention 2017 at New Delhi, "Swami Vivekananda Excellence Award" by Indian Institute of Oriental Heritage on 9th March, 2019, received Academic Excellence Award by The Textile Association (India) Ahmedabad Unit on 9th April, 2019, received Honorary ISCB Fellow Award at 26th ISCB (Indian Society of Chemists and Biologists) International Conference, Ahmedabad on 22nd January, 2020 and awarded by Vice Chancellor of the Year 2020 by Integrated Chamber of Commerce Industry (ICCI), New Delhi on 24th February, 2020 and received IASTAM Dr. K.M. Parikh Award for Contribution to Development of Ayurvedic/Herbal Pharmaceuticals for the Year 2020 organized by Indian Association for the Study of Traditional Asian Medicine (IASTAM - India) on 13th December, 2020. He has visited, Poland, Germany, US, China, Switzerland, South Africa, Tanzania, Kenya, Australia, Nepal and Bhutan for paper presentation and as resource person.


Gujarat Technological University


Graduate School of Pharmacy


Annexure 8.2 Profile of Director / Faculty


1	Name	Prof. Dr. Sanjay Chauhan 
	Date of Birth	22/06/1982
	Education Qualifications	PhD, M. pharm
	Work Experience in years Teaching	17
	Work Experience in years Research	5
	Work Experience in years Industry	0
	Work Experience in years others	0
	Area of Specialization	Pharmaceutical Chemistry
	Courses taught Post Graduate	Regulation and Legislation, Regulatory aspects of Food & Nutraceuticals, Research Methodology
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	3
	Research guidance(Number of Students) Master (Completed/Ongoing)	22
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	2
	Research guidance(Number of Students) Projects Carried out	2
	Patents (Filed & Granted)	1
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	23
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	1


2	Name	Dr. D. M. Patel 
	Date of Birth	01-06-1971
	Education Qualifications	M Pharm., PhD
	Work Experience in years Teaching	21.5
	Work Experience in years Research	14
	Work Experience in years Industry	0.4
	Work Experience in years others	0.8
	Area of Specialization	Pharmaceutics
	Courses taught Post Graduate	Research Methodology, Drug Delivery systems, Advanced Biopharmaceutics and Pharmacokinetics
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	60
	Research guidance(Number of Students) Master (Completed/Ongoing)	43
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	11
	Research guidance(Number of Students) Projects Carried out	43
	Patents (Filed & Granted)	1
	Technology Transfer	0
	Research Publications (No.of papers published in National/International Journals/Conferences)	60
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	5


3	Name	Dr. Rajesh Patel 
	Date of Birth	07-01-1981
	Education Qualifications	M Pharm., PhD
	Work Experience in years Teaching	14.5
	Work Experience in years Research	0
	Work Experience in years Industry	0.9
	Work Experience in years others	0
	Area of Specialization	Pharmaceutical Quality Assurance
	Courses taught Post Graduate	Documentation and regulatory Writing, Regulation of herbal and Biologicals
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	7
	Research guidance(Number of Students) Master (Completed/Ongoing)	34
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance(Number of Students) Projects Carried out	5
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No.of papers published in National/International Journals/Conferences)	7
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	3


4	Name	Dr. Manju Misra 
	Date of Birth	2-12-1979
	Education Qualifications	PhD, M. Pharm
	Work Experience in years Teaching	12.5
	Work Experience in years Research	12.5
	Work Experience in years Industry	2
	Work Experience in years others	0
	Area of Specialization	Pharmaceutics
	Courses taught Post Graduate	Drug delivery, modern pharmaceutics, computer assisted drug delivery , IPR etc.
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	57
	Research guidance(Number of Students) Master (Completed/Ongoing)	88
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	3
	Research guidance(Number of Students) Projects Carried out	88
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	57
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	0


5	Name	Dr. Kashyap Thummar 
	Date of Birth	14/10/1987
	Education Qualifications	M. Pharm, Ph.D.
	Work Experience in years Teaching	12
	Work Experience in years Research	0
	Work Experience in years Industry	0
	Work Experience in years others	0
	Area of Specialization	Pharmaceutical Quality Assurance
	Courses taught Post Graduate	Modern Pharmaceutical Analytical Techniques, Pharmaceutical Validation
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	10
	Research guidance(Number of Students) Master (Completed/Ongoing)	40
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	1
	Research guidance(Number of Students) Projects Carried out	4
	Patents (Filed & Granted)	2
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	17
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	1


6	Name	Dr. Jigna Vadalia 
	Date of Birth	15/01/1983
	Education Qualifications	M Pharm., PhD
	Work Experience in years Teaching	8.5
	Work Experience in years Research	0
	Work Experience in years Industry	0
	Work Experience in years others	2
	Area of Specialization	Pharmacognosy
	Courses taught Post Graduate	Natural product chemistry, Phytochemical Investigation, Traditional Medicine, Standardization of Herbal Drugs, Biotechnology and Regulatory aspects of Phytomedicines
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	4
	Research guidance(Number of Students) Master (Completed/Ongoing)	10
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance(Number of Students) Projects Carried out	
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	4
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	0


7	Name	Dr. Dignesh Khunt 
	Date of Birth	26/06/1989
	Education Qualifications	M Pharm., PhD
	Work Experience in years Teaching	1.5
	Work Experience in years Research	6.1
	Work Experience in years Industry	0.7
	Work Experience in years others	0.7
	Area of Specialization	Pharmaceutics
	Courses taught Post Graduate	Drug delivery, Regulatory affairs, Cosmetics and Cosmeceutics, computer assisted drug delivery
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	18
	Research guidance(Number of Students) Master (Completed/Ongoing)	3
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance(Number of Students) Projects Carried out	0
	Patents (Filed & Granted)	1
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	18
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	0


8	Name	Mr. Udaykumar Vegad
		
	Date of Birth	10-05-1986
	Education Qualifications	M.S. Pharm
	Work Experience in years Teaching	12.5
	Work Experience in years Research	3
	Work Experience in years Industry	9.5
	Work Experience in years others	0
	Area of Specialization	Natural Products
	Courses taught Post Graduate	
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	1
	Research guidance(Number of Students) Master (Completed/Ongoing)	7
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance(Number of Students) Projects Carried out	0
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	0
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	0

9	Name	Mr. Ravisinh Solanki 
	Date of Birth	12-07-1989
	Education Qualifications	M. Pharm
	Work Experience in years Teaching	2.2
	Work Experience in years Research	0
	Work Experience in years Industry	6.7
	Work Experience in years others	0
	Area of Specialization	Pharmaceutical Analysis
	Courses taught Post Graduate	Quality management systems, Hazards and safety management, Pharmaceutical manufacturing technology
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	0
	Research guidance(Number of Students) Master (Completed/Ongoing)	8
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance(Number of Students) Projects Carried out	1
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	1
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	0

10	Name	Mr. Ravi Patel 
	Date of Birth	05/02/1991
	Education Qualifications	M. Pharm
	Work Experience in years Teaching	2
	Work Experience in years Research	
	Work Experience in years Industry	6
	Work Experience in years others	
	Area of Specialization	Quality Assurance
	Courses taught Post Graduate	Audit & Regulatory compliance, Product development & Technology transfer, Pharmaceutical Quality Assurance Practical II
	Research guidance (Number of Students) No. of papers published in National/ International Journals/ Conferences	-
	Research guidance (Number of Students) Master (Completed/Ongoing)	7
	Research guidance (Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance (Number of Students) Projects Carried out	0
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	2
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	1

11	Name	Ms. Bhumika Maheriya 
	Date of Birth	10-04-1988
	Education Qualifications	M. Pharm, PGDIPR
	Work Experience in years Teaching	4.8
	Work Experience in years Research	4
	Work Experience in years Industry	0
	Work Experience in years others	0
	Area of Specialization	CLINICAL PHARMACY
	Courses taught Post Graduate	Clinical Research Regulation, Regulation of herbal and Biologicals, Regulation of Medical Devices, Research Methodology
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	7
	Research guidance(Number of Students) Master (Completed/Ongoing)	7
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance(Number of Students) Projects Carried out	0
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	4
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	0

12	Name	Ms. Hardi Joshi 
	Date of Birth	31/07/1992
	Education Qualifications	M. Pharm
	Work Experience in years Teaching	3
	Work Experience in years Research	3
	Work Experience in years Industry	2
	Work Experience in years others	0
	Area of Specialization	Quality Assurance
	Courses taught Post Graduate	Quality Control and Quality Assurance, Quality Assurance Practical I, Pharmaceutical Validation, Regulatory aspects of Food & Nutraceuticals, Regulation and Legislation
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	2
	Research guidance(Number of Students) Master (Completed/Ongoing)	5
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance(Number of Students) Projects Carried out	3
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	1
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	0

13	Name	Ms. Asmatbanu M. Pathan 
	Date of Birth	23/06/1992
	Education Qualifications	M. Pharm
	Work Experience in years Teaching	4.5
	Work Experience in years Research	3
	Work Experience in years Industry	0
	Work Experience in years others	0
	Area of Specialization	Quality Assurance & Pharmaceutical Regulatory Affairs
	Courses taught Post Graduate	Good Regulatory Practice, Documentation and regulatory Writing, Clinical Research Regulation, Regulation and Legislation, Regulatory Affairs Practical I & II, Regulatory Aspects of Drug & Cosmetics, Regulatory aspects of Food & Nutraceuticals
	Research guidance(Number of Students) No. of papers published in National/ International Journals/ Conferences	7
	Research guidance (Number of Students) Master (Completed/Ongoing)	5
	Research guidance(Number of Students) Ph.D. (Completed/Ongoing)	0
	Research guidance(Number of Students) Projects Carried out	0
	Patents (Filed & Granted)	0
	Technology Transfer	0
	Research Publications (No. of papers published in National/International Journals/Conferences)	1
	No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	0

Gujarat Technological University
Graduate School of Pharmacy

Annexure 9.1: Detail of Fees - GSP

GTU has started AICTE & PCI approved M. Pharm in Drug regulatory Affairs (DRA) from A.Y. 2017-18, Pharmaceutical Quality Assurance (PQA) from A.Y. 2019-20 and Pharmaceutics from A. Y. 2020-21

Institute Name	Courses	Intake
GTU – Graduate School of Pharmacy	M.Pharm (DRA) *+	15
	M.Pharm (PQA)*+	15
	M.Pharm (Pharmaceutics)*+	15

*Annual fees of Rs. 25000/- (Approved by FRC)

+ Approved by AICTE & PCI

Salient Features:

- Course run by the State Government University
- Admission through ACPC
- Courses guided by acknowledged senior academicians and industry experts in capacity of advisors
- Excellent digital and physical library facility
- Easy access to conferences and workshops organized by GTU in campus itself
- PG Research projects proposed to be located at regulatory departments of industries
- Guest lectures by various industry experts
- Hostel facility available
- Internship and Placement at reputed government and private firms

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તાત્કાલિક

ક્રમાંક: બીઆઇએસ - ૧૦૨૦૦૪ મુધા ૩ ૪

ઉદ્યોગ અને ખાણ વિભાગ

પ.સરદાર પટેલ ભવન, ૪થો માળ

સચિવાલય, ગાંધીનગર

તારીખ: ૧૩-૭-૨૦૧૨

પ્રતિ,

ઉદ્યોગ કમિશનરશ્રી,

ઉદ્યોગ કમિશનરશ્રીની કચેરી,

ઉદ્યોગ ભવન, ગાંધીનગર

વિષય - ગુજરાત નેશનલ લો યુનિવર્સિટીને ફાળવેલ મકાનનો કબજો ગુજરાત ટેકનોલોજી યુનિવર્સિટી, અમદાવાદને ફાળવવા બાબત

શ્રીમાન,

ઉપર્યુક્ત વિષય અંગેના અગત્યવિષય શિક્ષણ વિભાગના તા. ૨૨-૫-૨૦૧૨ ના પ્રત્યક્ષમાં જીટીયુ-૧૦-૨૦૧૨૨૬૯-સ અન્વયે સેક્ટર -૨૬, ગાંધીનગર ખાતે આવેલ બિલ્ડીંગ આ વિભાગનું છે જે બિલ્ડીંગનો કબજો જિલ્લેટ સંસ્થા પાસેથી લઈ સરખા ક્રમાંકના તા. ૧૧-૬-૨૦૦૪ ના પ્રત્યક્ષ ગુજરાત નેશનલ લો યુનિવર્સિટીને ફાળવવામાં આવેલ છે. ગુજરાત નેશનલ લો યુનિવર્સિટી નોત્તરના પિલ્ડીંગમાં શિફ્ટ થતાં ખાલી પડેલ સદરહુ બિલ્ડીંગ ગુજરાત ટેકનોલોજી યુનિવર્સિટી ને હંગામી ધોરણે સોંપવાં સરકારશ્રીને નિર્ણય કરેલ છે જેથી આ અંગે સદરહુ બિલ્ડીંગ ના કબજો શિક્ષણ વિભાગને ગુજરાત ટેકનોલોજી યુનિવર્સિટી માટે ભાડેથી સોંપવા અંગે જરૂરી કાર્યવાહી કરવા વિનંતી છે.

આ અંગેની થરતો અને બોલીઓ નક્કી કરવા તથા સંબંધિત સંસ્કારો, વિભાગ (Agreement Document duly signed by parties concerned) કરીને અત્રે જાણ કરવા વિનંતી છે.

આપનો વિશ્વાસ

(સચિવ પદવર્ધન)

ઉપસચિવ

ઉદ્યોગ અને ખાણ વિભાગ

નકલ જાણ/જરૂરી કાર્યવાહી અર્થે સ્વાગત

પ્રતિ,

નાયબ સચિવશ્રી, શિક્ષણ વિભાગ, સચિવાલય, ગાંધીનગર

રજિસ્ટ્રારશ્રી ગુજરાત ટેકનોલોજી યુનિવર્સિટી અમદાવાદ

ગાંધી મંદિરની ફાઇલ



TRUE COPY
SHAMBHALBHAI M. DESAI
NOTARY
GOVT. OF GUJARAT (INDIA)

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Gujarat Technological University
Chandkheda, Ahmedabad-382 424



KILLOL PANDYA
UNDER SECRETARY



NO: NOC/102017/813/S
Government of Gujarat
ગુજરાત સરકાર
Education Department
શિક્ષણ વિભાગ,
Block No: 5, 7th floor,
બ્લોક નં. ૫, ૭મો માળ,
Sardar Bhavan, Sachivalaya,
સરદાર ભવન, સચિવાલય,
Gandhinagar-382010
ગાંધીનગર

**No Objection Certificate for Establishment
of School of Engineering & Technology & School of Pharmacy**

Government of Gujarat has set up a Gujarat Technological University (GTU) vide its University Act 20/2007 Date:16/05/2007. Gujarat Technological University (GTU) will be establishing GTU School of Engineering & Technology for courses in post graduate Engineering and GTU- School of Pharmacy for post graduate courses in pharmacy, vide its Board of Governors meeting resolution no:03 dated:10/02/2017.

Gujarat Technological University is a Government State University under Government of Gujarat. GTU has applied to AICTE, New Delhi for starting the courses of ME (Cyber Security) and M. Pharm.(Drug Regulatory affairs) at these two schools for a temporary period of about two years at Gujarat Technological University Gandhinagar campus, K-6, E-4-Electronic Estate GIDC, Nr. Government Polytechnic, Sector-26, Gandhinagar and later on shift them to GTU Chandkheda Campus. GTU is in the Process of infrastructure development at GTU Gandhinagar Campus in accordance with guidelines laid down in Process handbook for the academic year 2017-18 published by AICTE, New Delhi. This is to confirm that the Government of Gujarat has no objection for establishment of Gujarat Technological University- School of Engineering & Technology and Gujarat Technological University-School of Pharmacy at the said campus for a temporary period of about two years from the academic year 2017-18.

Liabilities, if any, on this count shall be the sole responsibility of Gujarat Technological University and shall be settled as per the rules and regulations as applicable.

K. Pandya
(KILLOL PANDYA)
Under Secretary
Education Department

Place: Gandhinagar

Date: 22 MAY 2017

VS
Director
Amd

[Signature]
I/C Registrar
Gujarat Technological University
Chandkheda, Ahmedabad-382 424



GUJARAT TECHNOLOGICAL UNIVERSITY

(Established by Government of Gujarat under Gujarat Act No. : 20 of 2007)

ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત સરકારના ગુજરાત અધિનિયમ ક્રમાંક : ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

જીટીયુ/એસ્ટેટ/સી-૧૦૧/૪૩૫૩/૨૦૨૦

તા.૨૫/૧૧/૨૦૨૦

પ્રતિ,

રીજીયોનલ ફાયર ઓફિસર,

ગાંધીનગર ફાયર એન્ડ ઇમર્જન્સી સર્વિસ

ગાંધીનગર મહાનગરપાલિકા,

૧૪/૩ ધ ટાઇપ, સેક્ટર-૨૨,

ગાંધીનગર-૩૮૨૦૨૨.

વિષય: અગ્નિ નિવારણ અને જીવન સુરક્ષા વિષયક ઉપાયોને લગતી જોગવાઈ કરી ફાયર સેફ્ટી સર્ટીફિકેટ બાબત.

સંદર્ભ: (૧) ઉદ્યોગ અને ખાણ વિભાગના પત્ર ક્રમાંક બીઆઇએસ-૧૦૨૦૦૪-યુઓ-૭-ય તા.૧૩/૦૭/૨૦૧૨.

(૨) આપશ્રીના પત્ર ક્રમાંક ફાયર સેફ્ટી પત્ર/૯૪૧/૨૦૨૦ તા.૨૩/૧૧/૨૦૨૦.

શ્રીમાન,

ઉપરોક્ત વિષય અન્વયે જણાવવાનું કે ઉદ્યોગ અને ખાણ વિભાગ, ગાંધીનગર દ્વારા સંદર્ભ-૧ થી પ્લોટ નં-૪-૪, ઇલેક્ટ્રોનિક એસ્ટેટ, જુઆઇડીસી, સેક્ટર-૨૬, ગાંધીનગર ખાતે આવેલ સદર મકાન શૈક્ષણિક હેતુસર ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટીને ભાડેથી ફાળવેલ છે. સદર મકાનનું બાંધકામ સને ૧૯૯૧ માં G + 2 કક્ષાનું તેમજ બિલ્ડીંગની ઊંચાઈ ૧૨.૧૫ મી. છે જેના નક્શા આ સાથે સાદર કરેલ છે. ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી દ્વારા સદર મકાનમાં જરૂરીયાત મુજબના ફાયર એક્ષટીન્ગ્યુશર લગાવેલ છે જેના ફોટોગ્રાફ આ સાથે બિડાણ કરેલ છે. આપશ્રી દ્વારા સંદર્ભ-૨ થી સદર મકાન માટે ફાયર સેફ્ટી સર્ટીફિકેટ મેળવવા જણાવેલ હોય ફાયર એનઓસી ઇસ્યુ કરવા તેમજ આ અંગે કોઈ રકમ ભરવાની થતી હોય તો તે જણાવવા વિનંતી.

આપનો વિશ્વાસુ

રજીસ્ટ્રાર

બિડાણ: ઉપર મુજબ.

નકલ રવાના પ્રતિ, ઇન-ચાર્જ, જીટીયુ ગાંધીનગર કેમ્પસ, સેક્ટર-૨૬, ગાંધીનગર તરફ જાણ સારું.

Winners of : ICT Enabled University Award E-India - 2009 ❖ Manthan Award - 2009 ❖ GESIA Award -2011
❖ Digital Learning WES - 2011 Award ❖ AIMS International Innovative University Award - 2013

Chandkheda : GTU Campus, Nr. Visat Three Road, Chandkheda, Ahmedabad - 382 424. Gujarat, India Ph. : 079 - 23267521/570
e-mail : info@gtu.ac.in URL : www.gtu.ac.in

Sl.No	Journal Name	Publisher Name	E-ISSN	P-ISSN	Indexed / Fulltext
1	Pharmacological Reviews	American Society for Pharmacology and Experimental Therapeutics	1521-0081	0031-6997	Indexed
2	Anesthesiology	Lippincott Williams and Wilkins	1528-1175	0003-3022	Indexed
3	Biochemical Pharmacology	Elsevier Science		0006-2952	Indexed
4	Bioorganic and Medicinal Chemistry	Elsevier Science	1464-3391	0968-0896	Indexed
5	Annual Review of Pharmacology and Toxicology	Annual Reviews Inc	1545-4304	0362-1642	Indexed
6	Clinical Science	Portland Press Limited	1470-8736	0009-9287	Indexed
7	Clinical Pharmacology and Therapeutics	John Wiley and Sons, Ltd	1532-6519	0009-9236	Indexed
8	Journal of Pharmacology and Experimental Therapeutics	American Society for Pharmacology and Experimental Therapeutics	1521-0103	0022-3565	Indexed
9	Anesthesia and Analgesia	International Anesthesia Research Society	1526-7598	0003-2999	Indexed
10	Trends in Pharmacological Sciences	Elsevier Science		0165-6147	Indexed
11	Indian Journal of Pharmacology	Medknow Publications Pvt Ltd	1998-3751	0253-7613	Full text
12	British Journal of Pharmacology	John Wiley and Sons, Ltd	1476-5381	0007-1188	Indexed
13	Journal of Medicinal Chemistry	American Chemical Society	1520-4804	0022-2623	Indexed
14	International Journal of Antimicrobial Agents	International Society of Chemotherapy		0924-8579	Indexed
15	Journal of Maternal-Fetal and Neonatal Medicine	Taylor and Francis Ltd	1476-4954	1476-7058	Indexed
16	Cellular and Molecular Life Sciences	Springer Nature	1420-9071	1420-682X	Indexed
17	Chemical Biology and Drug Design	John Wiley and Sons, Ltd	1747-0285	1747-0277	Indexed
18	British Journal of Clinical Pharmacology	John Wiley and Sons, Ltd	1365-2125	0306-5251	Indexed
19	Clinical Pharmacokinetics	Springer Nature	1179-1926	0312-5963	Indexed
20	Drugs	Springer Nature	1179-1950	0012-6667	Indexed
21	European Journal of Clinical Pharmacology	Springer Nature	1432-1041	0031-6970	Indexed
22	European Journal of Pharmaceutical Sciences	European Federation for Pharmaceutical Sciences		0928-0987	Indexed
23	Journal of Ethnopharmacology	International Society of Ethnopharmacology		0378-8741	Indexed
24	Indian Journal of Experimental Biology	National Institute of Science Communication and Information Resources	0975-1009	0019-5189	Full text
25	Indian Journal of Pharmaceutical Sciences	Medknow Publications Pvt Ltd	1998-3743	0250-474X	Full text

26	European Journal of Pharmacology	Elsevier Science		0014-2999	Indexed
27	Pharmacological Research	Elsevier Science	1096-1186	1043-6618	Indexed
28	Journal of Pharmacological Sciences	Elsevier Science	1347-8648	1347-8613	Full text
29	Journal of Pharmaceutical Sciences	Elsevier Science	1520-6017	0022-3549	Indexed
30	Drug Development and Industrial Pharmacy	Taylor and Francis Ltd	1520-5762	0363-9045	Indexed
31	Psychopharmacology	Springer Nature	1432-2072	0033-3158	Indexed
32	Journal of Pharmacokinetics and Pharmacodynamics	Springer Nature	1573-8744	1567-567X	Indexed
33	Pharmacotherapy	American College of Clinical Pharmacy		0277-0008	Indexed
34	Molecular Pharmacology	American Society for Pharmacology and Experimental Therapeutics	1521-0111	0026-895X	Indexed
35	Therapeutic Drug Monitoring	Lippincott Williams and Wilkins	1536-3694	0163-4356	Indexed
36	Cardiovascular Drugs and Therapy	Springer Nature	1573-7241	0920-3206	Indexed
37	Nuclear Medicine and Biology	Elsevier Science		0969-8051	Indexed
38	Advanced Drug Delivery Reviews	Elsevier Science		0169-409X	Indexed
39	Journal of Clinical Pharmacy and Therapeutics	John Wiley and Sons, Ltd	1365-2710	0269-4727	Indexed
40	Biomedicine and Pharmacotherapy	Elsevier Science		0753-3322	Full text
41	Pharmacology	Karger Publisher	1423-0313	0031-7012	Indexed
42	Clinical Chemistry and Laboratory Medicine	Walter de Gruyter GmbH & Co. KG	1437-4331	1434-6621	Indexed
43	Contemporary Clinical Trials	Elsevier Science		1551-7144	Indexed
44	Journal of Clinical Pharmacology	John Wiley and Sons, Ltd	1552-4604	0091-2700	Indexed
45	Fundamental and Clinical Pharmacology	John Wiley and Sons, Ltd	1472-8206	0767-3981	Indexed
46	Skin Pharmacology and Physiology	Karger Publisher	1660-5535	1660-5527	Indexed
47	Journal of Pharmacological and Toxicological Methods	Elsevier Science		1056-8719	Indexed
48	Clinical and Experimental Pharmacology and Physiology	John Wiley and Sons, Ltd	1440-1681	0305-1870	Indexed
49	International Journal of Drug Policy	International Harm Reduction Association		0955-3959	Indexed
50	BioDrugs	Springer Nature	1179-190X	1173-8804	Indexed
51	Vascular Pharmacology	Elsevier Science		1537-1891	Indexed

52	Annals of Pharmacotherapy	Harvey Whitney Books Company	1542-6270	1060-0280	Indexed
53	Drug and Chemical Toxicology	Taylor and Francis Ltd	1525-6014	0148-0545	Indexed
54	Pharmaceutical Development and Technology	Taylor and Francis Ltd	1097-9867	1083-7450	Indexed
55	Clinical Research and Regulatory Affairs	Taylor and Francis Ltd	1532-2521	1060-1333	Indexed
56	Toxicological Reviews	Springer Nature		1176-2551	Indexed
57	Anti-Cancer Drug Design	Cognizant Communication Corporation	1460-2148	0266-9536	Indexed
58	American Journal on Addictions	John Wiley and Sons, Ltd	1521-0391	1055-0496	Indexed
59	Pharmacopsychiatry	Thieme Medical Publishers Inc	1439-0795	0176-3679	Indexed
60	Microbial Drug Resistance	Mary Ann Liebert, Inc		1076-6294	Indexed
61	Clinical Drug Investigation	Springer Nature	1179-1918	1173-2563	Indexed
62	Vojnosanitetski pregled	Health Department, Sector for Material Resources, Ministry of Defence		0042-8450	Full text
63	Drug Discovery Today	Elsevier Science		1359-6446	Indexed
64	Pharmacology and Therapeutics	Elsevier Science		0163-7258	Indexed
65	Naunyn-Schmiedeberg's Archives of Pharmacology	Springer Nature	1432-1912	0028-1298	Indexed
66	Journal of Drug Targeting	Taylor and Francis Ltd	1029-2330	1061-186X	Indexed
67	Pharmaceutical Biology	Taylor and Francis Ltd	1744-5116	1388-0209	Full text
68	Progress in Neuro-Psychopharmacology and Biological Psychiatry	Elsevier Science		0278-5846	Indexed
69	Cancer Chemotherapy and Pharmacology	Springer Nature	1432-0843	0344-5704	Indexed
70	Internet Journal of Pharmacology	Internet Scientific Publication		1531-2976	Full text
71	Drug Delivery	Taylor and Francis Ltd	1521-0464	1071-7544	Full text
72	Journal of Oncology Pharmacy Practice	SAGE Publications	1477-092X	1078-1552	Indexed
73	Drug Metabolism and Disposition	American Society for Pharmacology and Experimental Therapeutics	1521-009X	0090-9556	Indexed
74	Journal of Pharmacy and Pharmaceutical Sciences	Canadian Society for Pharmaceutical Sciences		1482-1826	Full text
75	International Journal of Neuropsychopharmacology	Oxford University Press	1469-5111	1461-1457	Full text
76	International Journal of Clinical Pharmacy	Springer Nature	2210-7711	2210-7703	Indexed

77	Modern Drug Discovery	American Chemical Society		1099-8209	Indexed
78	Journal of Biopharmaceutical Statistics	Taylor and Francis Ltd	1520-5711	1054-3406	Indexed
79	CNS Drugs	Springer Nature	1179-1934	1172-7047	Indexed
80	Drugs and Aging	Springer Nature	1179-1969	1170-229X	Indexed
81	Drug Safety	Springer Nature	1179-1942	0114-5916	Indexed
82	Pediatric Drugs	Springer Nature	1179-2019	1174-5878	Indexed
83	PharmacoEconomics	Springer Nature	1179-2027	1170-7690	Indexed
84	Biopharmaceutics and Drug Disposition	John Wiley and Sons, Ltd	1099-081X	0142-2782	Indexed
85	Immunopharmacology and Immunotoxicology	Taylor and Francis Ltd	1532-2513	0892-3973	Indexed
86	Neuropsychopharmacology	American College of Neuropsychopharmacology	1740-634X	0893-133X	Indexed
87	Pharmacology Biochemistry and Behavior	Elsevier Science		0091-3057	Indexed
88	AAPS Pharmscitech	Springer Nature	1522-1059	1530-9932	Indexed
89	Drug Design and Discovery	Taylor and Francis Ltd	1029-2322	1055-9612	Indexed
90	Pulmonary Pharmacology and Therapeutics	Elsevier Science	1522-9629	1094-5539	Indexed
91	Journal of Headache and Pain	Springer Nature	1129-2377	1129-2369	Full text
92	Pharmacogenomics Journal	Nature Publishing Group	1473-1150	1470-269X	Indexed
93	Inflammopharmacology	Springer Nature	1568-5608	0925-4692	Indexed
94	American Journal of PharmacoGenomics	Springer Nature		1175-2203	Indexed
95	Journal of Psychopharmacology	British Association for Psychopharmacology		0269-8811	Indexed
96	Investigational New Drugs	Springer Nature	1573-0646	0167-6997	Indexed
97	International Journal of Peptide Research and Therapeutics	Springer Nature	1573-3904	1573-3149	Indexed
98	American Journal of Health-System Pharmacy	Oxford University Press	1535-2900	1079-2082	Indexed
99	Journal of Managed Care and Specialty Pharmacy	Academy of Managed Care Pharmacy	2376-1032	2376-0540	Full text
100	Environmental Toxicology and Pharmacology	Elsevier Science		1382-6689	Indexed
101	European Journal of Pharmaceutics and Biopharmaceutics	International Association for Pharmaceutical Technology		0939-6411	Indexed
102	European Neuropsychopharmacology	European College of Neuropsychopharmacology		0924-977X	Indexed

103	International Immunopharmacology	Elsevier Science		1567-5769	Indexed
104	Journal of Pharmacy Practice	SAGE Publications	1531-1937	0897-1900	Indexed
105	International Journal of Laboratory Hematology	International Society for Laboratory Hematology	0141-9854	1751-5521	Indexed
106	Cephalalgia	SAGE Publications	1468-2982	0333-1024	Indexed
107	Journal of Labelled Compounds and Radiopharmaceuticals	John Wiley and Sons, Ltd	1099-1344	0362-4803	Indexed
108	Dyslexia	John Wiley and Sons, Ltd	1099-0909	1076-9242	Indexed
109	Molecular Interventions	American Society for Pharmacology and Experimental Therapeutics	1543-2548	1534-0384	Indexed
110	Child and Adolescent Psychopharmacology News	Guilford Press		1085-0295	Indexed
111	Pharmaceutical Journal	Royal Pharmaceutical Society		0031-6873	Indexed
112	Pharmacoepidemiology and Drug Safety	John Wiley and Sons, Ltd	1099-1557	1053-8569	Indexed
113	International Journal of Pharmacy Practice	John Wiley and Sons, Ltd	2042-7174	0961-7671	Indexed
114	Journal of Clinical Psychopharmacology	Lippincott Williams and Wilkins	1533-712X	0271-0749	Indexed
115	Drugs in R and D	Springer Nature	1179-6901	1174-5886	Indexed
116	Drug News and Perspectives	Prous Science		0214-0934	Indexed
117	Drugs of the Future	Prous Science		0377-8282	Indexed
118	Drugs of Today	Prous Science	1699-4019	1699-3993	Indexed
119	Methods and Findings in Experimental and Clinical Pharmacology	Prous Science		0379-0355	Indexed
120	Addictive Behaviors	Elsevier Science		0306-4603	Indexed
121	Pharmaceuticals Policy and Law	IOS Press	2210-495X	1389-2827	Indexed
122	Behavioural Pharmacology	Lippincott Williams and Wilkins	1473-5849	0955-8810	Indexed
123	International Clinical Psychopharmacology	Lippincott Williams and Wilkins		0268-1315	Indexed
124	Pharmaceutical Medicine	Springer Nature	1179-1993	1178-2595	Indexed
125	Indian Journal of Physiology and Pharmacology	Indian Journal of Physiology and Pharmacology		0019-5499	Full text
126	Pharmacogenetics and Genomics	Lippincott Williams and Wilkins	1744-6880	1744-6872	Indexed
127	Inpharma Weekly	Springer Nature		1173-8324	Indexed
128	European Journal of Medicinal Chemistry	Elsevier Science		0223-5234	Indexed

129	Journal of Pharmacy and Pharmacology	John Wiley and Sons, Ltd	2042-7158	0022-3573	Indexed
130	WHO Drug Information	World Health Organization		1010-9609	Full text
131	Drug Research	Thieme Medical Publishers Inc	2194-9387	0004-4172	Indexed
132	Journal of Antibiotics	Nature Publishing Group	1881-1469	0021-8820	Indexed
133	Biological and Pharmaceutical Bulletin	Pharmaceutical Society of Japan	1347-5215	0918-6158	Full text
134	PharmaGenomics	Nature Publishing Group		1541-4035	Indexed
135	Drugs and Therapy Perspectives	Springer Nature	1179-1977	1172-0360	Indexed
136	BMC Pharmacology	BioMed Central Ltd		1471-2210	Full text
137	BMC Clinical Pharmacology	BioMed Central Ltd	1472-6904	1472-6904	Full text
138	Experimental and Clinical Psychopharmacology	American Psychological Association		1064-1297	Indexed
139	Managed Care	MediMedia USA, Inc.		1062-3388	Full text
140	Prescriber Update	Medsafe		1172-5648	Indexed
141	Current Drug Metabolism	Bentham Science Publishers Ltd		1389-2002	Indexed
142	Endocrine, Metabolic and Immune Disorders: Drug Targets	Bentham Science Publishers Ltd	2212-3873	1871-5303	Indexed
143	Current Drug Targets	Bentham Science Publishers Ltd		1389-4501	Indexed
144	Current Medicinal Chemistry	Bentham Science Publishers Ltd		0929-8673	Indexed
145	Current Pharmaceutical Biotechnology	Bentham Science Publishers Ltd		1389-2010	Indexed
146	Current Topics in Medicinal Chemistry	Bentham Science Publishers Ltd		1568-0266	Indexed
147	Anti-Infective Agents	Bentham Science Publishers Ltd	2211-3533	2211-3525	Indexed
148	Journal of Population Therapeutics and Clinical Pharmacology	Codon Publications	1710-6222	1198-581X	Full text
149	Pharmacological Reports	Springer Nature	2299-5684	1734-1140	Indexed
150	Pharmaceutical Innovation	Springer Nature		1537-1328	Indexed
151	Pharmacogenomics	Future Medicine Ltd		1462-2416	Indexed
152	Expert Opinion on Drug Safety	Taylor and Francis Ltd	1744-764X	1474-0338	Indexed
153	Expert Opinion on Emerging Drugs	Taylor and Francis Ltd	1744-7623	1472-8214	Indexed
154	Expert Opinion on Investigational Drugs	Taylor and Francis Ltd	1744-7658	1354-3784	Indexed

155	Expert Opinion on Pharmacotherapy	Taylor and Francis Ltd	1744-7666	1465-6566	Indexed
156	Expert Opinion on Therapeutic Patents	Taylor and Francis Ltd	1744-7674	1354-3776	Indexed
157	Expert Review of Pharmacoeconomics and Outcomes Research	Taylor and Francis Ltd	1744-8379	1473-7167	Indexed
158	Expert Review of Vaccines	Taylor and Francis Ltd		1476-0584	Indexed
159	International Journal of Pharmaceutical Compounding	International Journal of Pharmaceutical Compounding		1092-4221	Indexed
160	Current Opinion in Pharmacology	Elsevier Science		1471-4892	Indexed
161	Pharmacology Reviews and Communications	Taylor and Francis Ltd		1028-8945	Indexed
162	Pharmacy Education	University of Namibia	1477-2701	1560-2214	Indexed
163	Acta Pharmacologica Sinica	Nature Publishing Group	1745-7254	1671-4083	Indexed
164	Archives of Pharmacal Research	Springer Nature	1976-3786	0253-6269	Indexed
165	Journal of the Australasian College of Nutritional and Environmental Medicine	Australasian College of Nutritional and Environmental Medicine Inc		1328-8040	Indexed
166	Techniques in Regional Anesthesia and Pain Management	Elsevier Science		1084-208X	Indexed
167	Journal of Trauma and Dissociation	Routledge	1529-9740	1529-9732	Indexed
168	Journal of Aging and Pharmacotherapy	Taylor and Francis Ltd	1540-4706	1540-5303	Indexed
169	Journal of Chemical Dependency Treatment	Taylor and Francis Ltd		0885-4734	Indexed
170	Journal of Herbal Pharmacotherapy	Taylor and Francis Ltd	1522-9106	1522-8940	Indexed
171	Journal of Pharmacy Teaching	Taylor and Francis Ltd	1540-7365	1044-0054	Indexed
172	Acta Pharmaceutica Sinica B	Elsevier Science	2211-3843	0513-4870	Full text
173	Folia Pharmacologica Japonica	Japanese Pharmacological Society	1347-8397	0015-5691	Indexed
174	Current Pharmacogenomics and Personalized Medicine	Bentham Science Publishers Ltd	1875-6913	1875-6921	Indexed
175	Current Neuropharmacology	Bentham Science Publishers Ltd		1570-159X	Indexed
176	Pharmacy Practice News	McMahon Publishing Group		0886-988X	Indexed
177	Pharmaceutical Statistics	John Wiley and Sons, Ltd	1539-1612	1539-1604	Indexed
178	International Journal of Life Sciences Biotechnology and Pharma Research	Meghana Publications	2250-3137		Full text
179	American Journal of Drug Delivery	Springer Nature		1175-9038	Indexed

180	Pharmaceutical Development and Regulation	Springer Nature		1175-9046	Indexed
181	Assay and Drug Development Technologies	Mary Ann Liebert, Inc		1540-658X	Indexed
182	Daru: Journal of Pharmaceutical Sciences	Springer Nature	2008-2231	1560-8115	Indexed
183	Journal of Generic Medicines	SAGE Publications	1741-7090	1741-1343	Indexed
184	South African Pharmaceutical Journal	Medpharm Publications (Pty) Ltd		0016-643X	Full text
185	South African Pharmacist's Assistant	Medpharm Publications (Pty) Ltd		1608-9634	Full text
186	Tropical Journal of Pharmaceutical Research	Pharmacotherapy Group		1596-5996	Full text
187	Journal of the American Pharmacists Association	American Pharmacists Association	1544-3450	1544-3191	Indexed
188	Current Drug Discovery Technologies	Bentham Science Publishers Ltd		1570-1638	Indexed
189	Drug Design Reviews - Online	Bentham Science Publishers Ltd	1567-2697		Indexed
190	Journal of Cardiovascular Pharmacology and Therapeutics	SAGE Publications	1940-4034	1074-2484	Indexed
191	Hospital Pharmacy	SAGE Publications	1945-1253	0018-5787	Indexed
192	Pharmazie	GOVI-Verlag		0031-7144	Indexed
193	Marine Drugs	Multidisciplinary Digital Publishing Institute	1660-3397	1660-3397	Full text
194	Pharmaceuticals	Multidisciplinary Digital Publishing Institute		1424-8247	Full text
195	Iranian Journal of Pharmaceutical Research	Shaheed Beheshti University of Medical Sciences and Health Services	1726-6890	1735-0328	Full text
196	Gazzetta Medica Italiana Archivio per le Scienze Mediche	Edizioni Minerva Medica	1827-1812	0393-3660	Indexed
197	Journal of Advancement in Medicine	Springer Nature	1573-9767	0894-5888	Indexed
198	Drug Discovery Today: Biosilico	Elsevier Science		1741-8364	Indexed
199	EMC: Médecine	Elsevier Science		1762-4193	Indexed
200	Perspectives in Drug Discovery and Design	Springer Nature	1573-9023	0928-2866	Indexed
201	Letters in Drug Design and Discovery	Bentham Science Publishers Ltd		1570-1808	Indexed
202	Current Drug Delivery	Bentham Science Publishers Ltd		1567-2018	Indexed
203	Contract Pharma	Rodman Publishing			Full text
204	Drug Metabolism and Pharmacokinetics	Elsevier Science	1880-0920	1347-4367	Indexed
205	Journal of Drug Evaluation	Parthenon Publishing Group		1479-1137	Indexed
206	Pharmacy and Therapeutics	MediMedia USA, Inc.		1052-1372	Indexed

207	Journal of Dual Diagnosis	Routledge	1550-4271	1550-4263	Indexed
208	Current Pharmaceutical Analysis	Bentham Science Publishers Ltd		1573-4129	Indexed
209	Current Computer-Aided Drug Design	Bentham Science Publishers Ltd		1573-4099	Indexed
210	Indian Journal of Pharmaceutical Education and Research	Association of Pharmaceutical Teachers of India		0019-5464	Full text
211	American Pharmaceutical Review	Russell Publishing		1099-8012	Indexed
212	Adverse Drug Reaction Bulletin	Lippincott Williams and Wilkins	2159-7774	0044-6394	Indexed
213	Canadian Adverse Reaction Newsletter	Health Canada	1499-9447	1492-8167	Full text
214	Journal of Pharmacy Practice and Research	Society of Hospital Pharmacists of Australia		1445-937X	Indexed
215	Biochemical Medicine and Metabolic Biology	Elsevier Science		0885-4505	Indexed
216	Drugs and Alcohol Today	Emerald Group Publishing Limited	2042-8359	1745-9265	Indexed
217	Drug Discovery Today: Technologies	Elsevier Science		1740-6749	Indexed
218	Drug Discovery Today: Disease Models	Elsevier Science		1740-6757	Indexed
219	Drug Discovery Today: Disease Mechanisms	Elsevier Science		1740-6765	Indexed
220	Drug Discovery Today: Therapeutic Strategies	Elsevier Science		1740-6773	Indexed
221	Pharmaceutica Acta Helvetiae	Elsevier Science		0031-6865	Indexed
222	Proceedings of the Society for Experimental Biology and Medicine	John Wiley and Sons, Ltd	1525-1373	0037-9727	Indexed
223	Journal of pharmacological methods	Elsevier Science		0160-5402	Indexed
224	Pharmaceutical Science and Technology Today	Elsevier Science		1461-5347	Indexed
225	Stamford Journal of Pharmaceutical Sciences	Stamford University Bangladesh		1999-7108	Full text
226	Indian Journal of Pharmacy Practice	Association of Pharmaceutical Teachers of India			Full text
227	ClinicoEconomics and Outcomes Research	Dove Medical Press Ltd	1178-6981	1178-6981	Full text
228	Journal of Bioequivalence and Bioavailability	Longdom Publishing SL		0975-0851	Full text
229	Pharmacogenomics and Personalized Medicine	Dove Medical Press Ltd	1178-7066	1178-7066	Full text
230	Drug, Healthcare and Patient Safety	Dove Medical Press Ltd	1179-1365	1179-1365	Full text
231	Molecular and Cellular Toxicology	Springer Nature	2092-8467	1738-642X	Indexed
232	Open Pharmacoeconomics and Health Economics Journal	Bentham Science Publishers Ltd	1876-8245		Full text

233	Journal of Pharmaceutical Sciences and Research	PharmaInfo Publications	0975-1459		Full text
234	Current Medical Science	Springer Nature	2523-899X	2096-5230	Indexed
235	Biomarkers in Medicine	Future Medicine Ltd	1752-0371	1752-0363	Indexed
236	Medicinal Chemistry Research	Springer Nature	1554-8120	1054-2523	Indexed
237	International Journal of Computational Biology and Drug Design	Inderscience Enterprises Limited	1756-0764	1756-0756	Indexed
238	Open Bioactive Compounds Journal	Bentham Science Publishers Ltd	1874-8473		Full text
239	Pharmaceutical Programming	Taylor and Francis Ltd	1757-093X	1757-0921	Indexed
240	Infection and Drug Resistance	Dove Medical Press Ltd	1178-6973	1178-6973	Full text
241	Pharmaceutical and Diagnostic Innovation	Springer Nature		1176-3469	Indexed
242	Recent Patents on Inflammation and Allergy Drug Discovery	Bentham Science Publishers Ltd		1872-213X	Indexed
243	Annales Pharmaceutiques Françaises	Elsevier Science		0003-4509	Indexed
244	Revista Cubana de Farmacia	Editorial Ciencias Médicas	1561-2988	0034-7515	Full text
245	Dhaka University Journal of Pharmaceutical Sciences	Dhaka University	1816-1839	1816-1820	Full text
246	Prescriber	John Wiley and Sons, Ltd	1931-2253	0959-6682	Full text
247	Bulletin of Clinical Psychopharmacology	Taylor and Francis Ltd	1302-9657	1017-7833	Full text
248	Acta Pharmaceutica	Walter de Gruyter GmbH & Co. KG	1846-9558	1330-0075	Full text
249	PharmaTimes	PharmaTimes			Full text
250	Research in Social and Administrative Pharmacy	Elsevier Science		1551-7411	Indexed
251	Alimentary Pharmacology and Therapeutics Symposium Series	John Wiley and Sons, Ltd	1746-6342	1746-6334	Indexed
252	Ars Pharmaceutica	Faculty of Pharmacy, University of Granada	2340-9894	0004-2927	Full text
253	International Journal of Chronic Obstructive Pulmonary Disease	Dove Medical Press Ltd	1178-2005	1176-9106	Full text
254	Nigerian Journal of Pharmaceutical Research	Nigerian Association of Pharmacists in Academia		0189-8434	Indexed
255	Journal of Pharmaceutical and Allied Sciences	University of Nigeria		1596-8499	Indexed
256	Pharmacy Times	Pharmacy Times		0003-0627	Full text
257	Current Clinical Pharmacology	Bentham Science Publishers Ltd		1574-8847	Indexed
258	Current Drug Safety	Bentham Science Publishers Ltd		1574-8863	Indexed

259	Reviews on Recent Clinical Trials	Bentham Science Publishers Ltd		1574-8871	Indexed
260	Recent Patents on CNS Drug Discovery	Bentham Science Publishers Ltd		1574-8898	Indexed
261	Recent Patents on Anti-Cancer Drug Discovery	Bentham Science Publishers Ltd		1574-8928	Indexed
262	Recent Patents on Cardiovascular Drug Discovery	Bentham Science Publishers Ltd	2212-3962	1574-8901	Indexed
263	Recent Patents on Anti-Infective Drug Discovery	Bentham Science Publishers Ltd		1574-891X	Indexed
264	Pharmacy Practice	Centro de Investigaciones y Publicaciones Farmaceuticas	1886-3655	1885-642X	Full text
265	Canadian Bulletin of Medical History	Lakehead University	2371-0179	0823-2105	Indexed
266	Brazilian Journal of Pharmaceutical Sciences	Universidade de São Paulo	2175-9790	1984-8250	Full text
267	PPAR Research	Hindawi Publishing Corporation	1687-4765	1687-4757	Full text
268	Journal of Pharmacology and Toxicology	Academic Journals	2152-100X	1816-496X	Full text
269	Advances in Pharmacology and Toxicology	Connect Journals		0973-2381	Indexed
270	Journal of Pharmacy and Bioresources	University of Jos		0189-8442	Indexed
271	Drug Delivery System	Japan Society of Drug Delivery System	1881-2732	0913-5006	Full text
272	Nanomedicine	Future Medicine Ltd	1748-6963	1743-5889	Indexed
273	Brown University Psychopharmacology Update	John Wiley and Sons, Ltd	1556-7532	1608-5308	Indexed
274	Musculoskeletal Care	John Wiley and Sons, Ltd	1557-0681	1478-2189	Indexed
275	Pharmacognosy Magazine	Medknow Publications Pvt Ltd	0976-4062	0973-1296	Full text
276	Research Journal of Pharmacology	Medwell Online	1993-6109	1815-9362	Full text
277	American Journal of Pharmacology and Toxicology	Science Publications	1557-4970	1557-4962	Full text
278	Bangladesh Journal of Pharmacology	Bangladesh Pharmacological Society	1991-0088	1991-007X	Full text
279	Progress in Neurotherapeutics and Neuropsychopharmacology	Cambridge University Press	1748-233X	1748-2321	Indexed
280	International Journal of Pharmaceutical and Healthcare Marketing	Emerald Group Publishing Limited		1750-6123	Indexed
281	Drug Metabolism Letters	Bentham Science Publishers Ltd		1872-3128	Indexed
282	Archives of Drug Information	John Wiley and Sons, Ltd		1753-5174	Indexed
283	Advances in Pharmacological and Pharmaceutical Sciences	Hindawi Publishing Corporation	2633-4690	2633-4682	Full text
284	PDA Journal of Pharmaceutical Science and Technology	Parenteral Drug Association Inc.		1079-7440	Indexed

285	Open Vaccine Journal	Bentham Science Publishers Ltd	1875-0354		Full text
286	Open Pharmacology Journal	Bentham Science Publishers Ltd	1874-1436		Full text
287	Open Medicinal Chemistry Journal	Bentham Science Publishers Ltd	1874-1045		Full text
288	Open Drug Delivery Journal	Bentham Science Publishers Ltd	1874-1266		Full text
289	Japanese Journal of Pharmaceutical Health Care and Sciences	Japan Science and Technology Corporation	1882-1499	1346-342X	Indexed
290	Biomolecules and Therapeutics	Korean Society of Applied Pharmacology	2005-4483	1976-9148	Full text
291	Open Drug Metabolism Journal	Bentham Science Publishers Ltd	1874-0731		Full text
292	Current Molecular Pharmacology	Bentham Science Publishers Ltd	1874-4702	1874-4672	Indexed
293	Expert Review of Clinical Pharmacology	Taylor and Francis Ltd	1751-2441	1751-2433	Indexed
294	African Journal of Pharmacy and Pharmacology	Academic Journals		1996-0816	Full text
295	Saudi Pharmaceutical Journal	Elsevier Science		1319-0164	Full text
296	Asian Journal of Pharmaceutics	Mandsaur Universty	1998-409X	0973-8398	Full text
297	International Journal of Green Pharmacy	Mandsaur Universty	1998-4103	0973-8258	Full text
298	Recent Patents on Endocrine, Metabolic and Immune Drug Discovery	Bentham Science Publishers Ltd		1872-2148	Indexed
299	Biologics: Targets and Therapy	Dove Medical Press Ltd	1177-5491	1177-5475	Full text
300	Dose-Response	SAGE Publications	1559-3258		Full text
301	Scientia Pharmaceutica	Multidisciplinary Digital Publishing Institute	2218-0532	0036-8709	Full text
302	Open Neuropsychopharmacology Journal	Bentham Science Publishers Ltd	1876-5238		Full text
303	Journal of Addiction Medicine	Lippincott Williams and Wilkins	1935-3227	1932-0620	Indexed
304	Journal of Young Pharmacists	Medknow Publications Pvt Ltd	0975-1505	0975-1483	Full text
305	Revista Facultad de Medicina de la Universidad Nacional de Colombia	Universidad Nacional de Colombia		0120-0011	Full text
306	Drug Testing and Analysis	John Wiley and Sons, Ltd	1942-7611	1942-7603	Indexed
307	International Journal of PharmTech Research	Sphinx Knowledge House	2455-9563	0974-4304	Full text
308	Genome Medicine	BioMed Central Ltd	1756-994X		Full text
309	Pharmacognosy Reviews	Medknow Publications Pvt Ltd	0976-2787	0973-7847	Full text
310	Thai Journal of Pharmaceutical Sciences	Thai Journal of Pharmaceutical Sciences	1905-4637	0125-4685	Full text

311	Brazilian Journal of Pharmacognosy	Springer Nature	1981-528X	0102-695X	Full text
312	Pakistan Journal of Pharmaceutical Sciences	University of Karachi		1011-601X	Full text
313	Asian Journal of Pharmaceutical and Clinical Research	Innovare Academic Sciences	2455-3891	0974-2441	Full text
314	International Journal of Pharmacy and Pharmaceutical Sciences	Innovare Academic Sciences	0975-1491	2656-0097	Full text
315	Current Trends in Biotechnology and Pharmacy	Association of Biotechnology and Pharmacy	2230-7303	0973-8916	Full text
316	Australian Journal of Pharmacy	Australian Pharmaceutical Publishing Company Ltd		0311-8002	Indexed
317	Open Clinical Trials Journal	Bentham Science Publishers Ltd	1876-8210		Full text
318	Galle Medical Journal	Galle Medical Association	1391-7072		Full text
319	Journal of Pharmacy Research	Journal of Pharmacy Research		2321-4988	Full text
320	Currents in Pharmacy Teaching and Learning	Elsevier Science		1877-1297	Indexed
321	Australian Journal of Medical Herbalism	National Herbalists Association of Australia		1033-8330	Indexed
322	Pharmacognosy Research	Medknow Publications Pvt Ltd	0974-8490	0976-4836	Full text
323	Pharmacognosy Journal	Pharmacognosy Network Worldwide		0975-3575	Full text
324	Psychopharmacology and Biological Narcology	Military Medical Academy	2070-5670	1606-8181	Full text
325	Journal of Pharmacy Technology	Harvey Whitney Books Company	1549-4810	8755-1225	Indexed
326	Heroin Addiction and Related Clinical Problems	Europad		1592-1638	Full text
327	Journal of Pharmacy and BioAllied Sciences	Medknow Publications Pvt Ltd	0975-7406	0976-4879	Full text
328	International Journal of Drug Delivery	Advanced Research Journals	0975-0215		Full text
329	International Journal of Phytomedicine	Advanced Research Journals		0975-0185	Full text
330	Open Drug Discovery Journal	Bentham Science Publishers Ltd	1877-3818		Full text
331	Open Access Journal of Clinical Trials	Dove Medical Press Ltd	1179-1519	1179-1519	Full text
332	Asian Journal of Pharmaceutical Research and Health Care	Journal of Pharmaceutical Research and Health Care	2250-1460	2250-1444	Full text
333	International Journal of Applied Pharmaceutics	Innovare Academic Sciences		0975-7058	Full text
334	Future Medicinal Chemistry	Future Science	1756-8927	1756-8919	Indexed
335	Drug Development and Therapeutics	Medknow Publications Pvt Ltd	2394-2002	2394-6555	Full text
336	Clinical Pharmacology: Advances and Applications	Dove Medical Press Ltd	1179-1438	1179-1438	Full text

337	Journal of Experimental Pharmacology	Dove Medical Press Ltd	1179-1454		Full text
338	International Journal of Pharmaceutical Research and Development	International Journal of Pharmaceutical Research and Development		0974-9446	Full text
339	Journal of Cardiology	Japanese College of Cardiology		0914-5087	Indexed
340	International Journal of Research in Pharmaceutical Sciences	JK Welfare & Pharmascope Foundation		0975-7538	Full text
341	International Journal of Drug Development and Research	Insight Medical Publishing		0975-9344	Full text
342	SRX Pharmacology	Hindawi Publishing Corporation	2090-1151		Full text
343	Research Journal of Pharmaceutical, Biological and Chemical Sciences	Research Journal of Pharmaceutical, Biological and Chemical Sciences	0975-8585		Full text
344	Systematic Reviews in Pharmacy	Medknow Publications Pvt Ltd		0975-8453	Indexed
345	ACS Medicinal Chemistry Letters	American Chemical Society		1948-5875	Indexed
346	Journal of Basic and Clinical Pharmacy	Medknow Publications Pvt Ltd	0976-0113	0976-0105	Full text
347	SA Pharmaceutical Journal	Pharmaceutical Society of South Africa		1015-1362	Full text
348	Statistics in Biopharmaceutical Research	Taylor and Francis Ltd	1946-6315		Indexed
349	Global Journal of Pharmacology	International Digital Organization for Scientific Information Publications		1992-0075	Full text
350	International Journal of Pharma Sciences and Research	KEJA Publications	0975-9492		Full text
351	International Journal of Advances in Pharmaceutical Sciences	Advanced Research Journals		0976-1055	Indexed
352	International Journal of Pharmaceutical Sciences Review and Research	Global Research Online	0976-044X		Full text
353	Journal of Advanced Pharmaceutical Technology and Research	Medknow Publications Pvt Ltd	0976-2094	0110-5558	Full text
354	Malaysian Journal of Pharmaceutical Sciences	Universiti Sains Malaysia	2180-429X	1675-7319	Full text
355	Journal of Chemical and Pharmaceutical Research	Journal of Chemical and Pharmaceutical Research	0975-7384		Full text
356	Journal of Pharmaceutical Health Services Research	John Wiley and Sons, Ltd	1759-8893	1759-8885	Indexed
357	International Journal of Pharmaceutical Sciences and Drug Research	International Journal of Pharmaceutical Sciences and Drug Research	0975-248X		Full text
358	Journal of Global Pharma Technology	Journal of Global Pharma Technology		0975-8542	Full text
359	International Journal of Pharmacy and Technology	International Journal of Pharmacy and Technology	0975-766X		Full text
360	Journal of Drug Issues	SAGE Publications		0022-0426	Indexed

361	Pharmaceutics	Multidisciplinary Digital Publishing Institute		1999-4923	Full text
362	Journal of Applied Pharmacy	Consortium Publishers	1920-4159		Full text
363	International Journal of Applied Biology and Pharmaceutical Technology	Fortune Journals	0976-4550		Full text
364	Journal of Pharmacology and Pharmacotherapeutics	Medknow Publications Pvt Ltd	0976-5018	0976-500X	Full text
365	International Journal of Pharmaceutical and Biological Research	KEJA Publications	0976-285X		Full text
366	Russian Journal of Biopharmaceuticals	Folium Publishing Company		2073-8099	Indexed
367	Bangladesh Journal of Physiology and Pharmacology	Bangladesh Physiological and Pharmacological Society		1561-1566	Full text
368	Pharma Science Monitor-An International Journal of Pharmaceutical Sciences	Pharma Science Monitor	0976-7908	0976-9242	Full text
369	International Journal of Pharmaceutical Applications	Bio International Journals	2278-6023	0976-2639	Full text
370	International Journal of Pharmaceutical and Biological Archive	Mandsaur Universty		0976-3333	Full text
371	International Journal of Research in Ayurveda and Pharmacy	Moksha Publishing House	2229-3566	2277-4343	Full text
372	International Journal of Current Pharmaceutical Research	Innovare Academic Sciences		0975-7066	Full text
373	American Health and Drug Benefits	Engage Healthcare Communications	1942-2970	1942-2962	Full text
374	Pharmacia	Institute of Professional Studies-College of Pharmacy Gwalior	2229-4309	0867-0609	Full text
375	Archives of Pharmacy Practice	Medknow Publications Pvt Ltd	2045-080X	2320-5210	Full text
376	Journal of Cachexia, Sarcopenia and Muscle	Springer Nature	2190-6009	2190-5991	Full text
377	International Journal of Medicinal Chemistry	Hindawi Publishing Corporation	2090-2077	2090-2069	Full text
378	Perspectives in Clinical Research	Medknow Publications Pvt Ltd	2229-5488	2229-3485	Full text
379	Therapeutic Advances in Drug Safety	SAGE Publications	2042-0994	2042-0986	Full text
380	Journal of Drug Delivery	Hindawi Publishing Corporation	2090-3022	2090-3014	Full text
381	Acta Medica Marisiensis	Sciendo	2247-6113	2068-3324	Full text
382	Drug Invention Today	Elsevier Science		0975-7619	Indexed
383	Turkish Journal of Pharmaceutical Sciences	Galenos Yayınevi		1304-530X	Full text
384	Pragmatic and Observational Research	Dove Medical Press Ltd		1179-7266	Full text

385	Frontiers in Pharmacology	Frontiers Media S.A	1663-9812		Full text
386	Indian Journal of Novel Drug Delivery	Karnataka Education and Scientific Society		0975-5500	Full text
387	Journal of Current Pharma Research	e-Current Science	2230-7842	2230-7834	Full text
388	International Research Journal of Pharmacy	Moksha Publishing House	2230-8407		Full text
389	Therapeutic Delivery	Future Science	2041-6008	2041-5990	Indexed
390	Pharmacology and Pharmacy	Scientific Research Publishing, Inc	2157-9431	2157-9423	Full text
391	Journal of Pharmacology Research	Bioinfo Publications	0976-7142	0976-7134	Full text
392	Pharmacophore	PharmacophoreJournal.com	2229-5402		Full text
393	Pharmacologyonline	University of Salerno	1827-8620		Full text
394	Drug Delivery and Translational Research	Springer Nature	2190-3948	2190-393X	Indexed
395	World Journal of Gastrointestinal Pharmacology and Therapeutics	Baishideng Publishing	2150-5349		Full text
396	Open Journal of Pharmacology	Ross Science Publishers		2075-910X	Full text
397	Journal of Vaccines and Vaccination	Longdom Publishing SL		2157-7560	Full text
398	Pharmaceutica Analytica Acta	Longdom Publishing SL		2153-2435	Full text
399	International Journal of Medical and Pharmaceutical Sciences	International Journal of Medical and Pharmaceutical Sciences	2231-685X	2231-2188	Indexed
400	Asian Journal of Pharmaceutical and Biological Research	Young Pharmaceutical and Biological Scientist Group	2231-2218		Full text
401	British Journal of Pharmaceutical Research	Sciencedomain International	2231-2919		Full text
402	International Journal of Pharmaceutical Investigation	Medknow Publications Pvt Ltd	2230-9713	2230-973X	Full text
403	International Journal of Nutrition Pharmacology Neurological Diseases	Medknow Publications Pvt Ltd	2231-2722	2231-0738	Full text
404	Drug and Therapeutics Bulletin	BMJ Publishing Group	1755-5248	0012-6543	Indexed
405	Drug Metabolism and Personalized Therapy	Walter de Gruyter GmbH & Co. KG	2191-0162	2363-8907	Indexed
406	Journal of Medical and Allied Sciences	Deccan College of Medical Sciences	2231-170X	2231-1696	Full text
407	Drugs and Therapy Studies	PAGEPress	2038-9507	2038-9493	Full text
408	Der Pharma Chemica	Scholars Research Library		0975-413X	Full text
409	ISRN Pharmacology	Hindawi Publishing Corporation	2090-5173	2090-5165	Full text
410	Therapeutics Pharmacology and Clinical Toxicology	Society of Pharmacology, Therapeutics and Clinical Toxicology		1583-0012	Indexed

411	Journal of Paramedic Practice	MA Healthcare Ltd		2041-9457	Indexed
412	Journal of Pharmacognosy and Phytotherapy	Academic Journals		2141-2502	Full text
413	Results in Pharma Sciences	Elsevier Science	2211-2863	2211-2863	Full text
414	International Journal of Pharmacy	Pharma Scholars Library		2249-1848	Full text
415	World Journal of Vaccines	Scientific Research Publishing, Inc	2160-5823	2160-5815	Full text
416	BIOINFO Pharmaceutical Biotechnology	Bioinfo Publications	2249-1821	2249-1813	Full text
417	FABAD Journal of Pharmaceutical Sciences	Mehmet Akif Ocak		1300-4182	Full text
418	Asian Journal of Pharmaceutical and Health Sciences	Pharmaceutical and Biological Society	2231-234X	2231-2331	Full text
419	RIPER PDIC Bulletin	Raghavendra Institute of Pharmaceutical Education and Research		2230-8741	Full text
420	Journal of Applied Pharmaceutical Science	MediPOEIA Publication		2231-3354	Full text
421	ISRN Pharmaceutics	Hindawi Publishing Corporation	2090-6153	2090-6145	Full text
422	Iranian Journal of Pharmaceutical Sciences	University of Medical Sciences		1735-2444	Full text
423	Research in Pharmaceutical Sciences	Isfahan School of Pharmacy & Pharmaceutical Sciences	1735-9414	1735-5362	Full text
424	International Journal of Pharmaceutical and Phytopharmacological Research	Anjali Harshal Pawar	2249-6084	2250-1029	Full text
425	Beneficial Microbes	Wageningen Academic Publishers	1876-2891	1876-2883	Indexed
426	Biopharm International	UBM Advanstar		1542-166X	Full text
427	Asian Journal of Pharmacy and Life Science	Asian journal of pharmacy and life science		2231-4423	Full text
428	Journal of Pharmaceutical Research	Krupanidhi College of Pharmacy		0973-7200	Full text
429	Oriental Pharmacy and Experimental Medicine	Springer Nature	2211-1069	1598-2386	Indexed
430	International Journal of Pharmacy and Biological Sciences	JP Research Publications	2230-7605		Full text
431	International Journal of Phytopharmacy	Scholar Science Journals	2277-2928		Full text
432	British Journal of Pharmacology and Toxicology	Maxwell Science Publication	2044-2467	2044-2459	Full text
433	Pharmacognosy Communications	Pharmacognosy Network Worldwide	2249-0167	2249-0159	Full text
434	Journal of Research in Pharmaceutical Science	Quest Journals Inc		2347-2995	Full text
435	South African Pharmaceutical and Cosmetic Review	Aerosol Manufacturers Association		0257-2028	Indexed

436	Physiology and Pharmacology	Neuroscience Research Center	2476-5244	2476-5236	Full text
437	Archives of Razi Institute	Razi Vaccine and Serum Research Institute	2008-9872	0365-3439	Full text
438	Advanced Pharmaceutical Bulletin	Tabriz University of Medical Sciences	2251-7308	2228-5881	Full text
439	Canadian Journal of Hospital Pharmacy	Canadian Society of Hospital Pharmacists	1920-2903	0008-4123	Indexed
440	World Journal of Pharmacology	Baishideng Publishing	2220-3192		Full text
441	Journal of Medical and Pharmaceutical Sciences	ScopeMed	2249-5002	2231-2765	Full text
442	American Journal of PharmTech Research	American Journal of PharmTech Research	2249-3387		Full text
443	Pharmaceutical Crops	Bentham Science Publishers Ltd		2210-2906	Full text
444	International Journal of Pharmaceutical Research and Allied Sciences	International Journal of Pharmaceutical Research and Allied Sciences		2277-3657	Full text
445	Biosimilars	Dove Medical Press Ltd	2230-245X		Full text
446	Integrated Pharmacy Research and Practice	Dove Medical Press Ltd	2230-5254		Full text
447	Orphan Drugs: Research and Reviews	Dove Medical Press Ltd	2230-6161		Full text
448	International Journal of Research in Pharmacy and Science	International Journal of Research in Pharmacy and Science	2249-3522		Full text
449	Research and Reports in Transdermal Drug Delivery	Dove Medical Press Ltd	2253-1580		Full text
450	Journal of Drug Delivery and Therapeutics	Journal of Drug Delivery and Therapeutics	2250-1177		Full text
451	Journal of Pharmaceutical and Scientific Innovation	Moksha Publishing House	2277-4572		Full text
452	International Journal for Pharmaceutical Research Scholars	International Journal for Pharmaceutical Research Scholars	2277-7873		Full text
453	Current Topics in Pharmacology	Research Trends		0972-4559	Indexed
454	Current Trends in Medicinal Chemistry	Research Trends		0973-0532	Indexed
455	International Journal of Pharmaceutical Research and Bio-Science	International Journal of Pharmaceutical Research and Bio-Science	2277-8713		Full text
456	Research and Reviews: Journal of Pharmaceutical Science	STM Journals		2229-7006	Indexed
457	Research and Reviews: Journal of Pharmacology	STM Journals	2230-9861		Indexed
458	Annals of Pharmacy and Pharmaceutical Sciences	Hind Agri-Horticultural Society	2230-9438	0976-125X	Indexed
459	Pharmaceutical Patent Analyst	Future Science	2046-8962	2046-8954	Indexed
460	International Journal of Pharmacology and Biological Sciences	Dr. Ram Prakash		0973-6808	Indexed

461	International Journal of Research and Development in Pharmacy and Life Sciences	OMICS Publishing Group	2278-0238		Full text
462	London Journal of Primary Care	Taylor and Francis Ltd	1757-1480	1757-1472	Full text
463	Innovations in Pharmacy	University of Minnesota College of Pharmacy	2155-0417		Full text
464	European Medical, Health and Pharmaceutical Journal	Central Bohemia University	1804-9702	1804-5804	Full text
465	Clinical Pharmacology in Drug Development	John Wiley and Sons, Ltd	2160-7648	2160-763X	Indexed
466	Current Psychopharmacology	Bentham Science Publishers Ltd	2211-5579	2211-5560	Indexed
467	IOSR Journal of Pharmacy and Biological Sciences	International Organization of Scientific Research	2278-3008		Full text
468	Asian Journal of Biomedical and Pharmaceutical Sciences	Association of Pharm innovators	2249-622X		Full text
469	Critical Review in Pharmaceutical Sciences	Earth Journals	2319-1082		Full text
470	International Journal of Basic and Clinical Pharmacology	Medip Academy	2279-0780	2319-2003	Full text
471	European Pharmaceutical Journal	Sciendo	2453-6725		Full text
472	Revista Farmacia Hospitalaria	Sociedad Española de Farmacia Hospitalaria		1130-6343	Full text
473	International Research Journal of Pharmacy and Pharmacology	International Research Journals	2251-0176		Full text
474	Journal of Pharmaceutical and Biomedical Sciences	TextRoad Publication	2090-4231	2090-4290	Full text
475	Drug Discovery	Discovery Publication	2278-540X	2278-5396	Full text
476	Discovery Pharmacy	Discovery Publication	2278-5426	2278-5418	Full text
477	Research in Pharmacy	TathQeef Scientific Publishing	2231-539X		Full text
478	Journal of Addiction	Hindawi Publishing Corporation	2090-7850	2090-7834	Full text
479	Journal of Basic and Clinical Physiology and Pharmacology	Walter de Gruyter GmbH & Co. KG	2191-0286	0792-6855	Indexed
480	Insight Ethnopharmacology	Insight Knowledge		2078-2069	Full text
481	Insight Pharmaceutical Sciences	Insight Knowledge	2040-705X		Full text
482	Journal of Pharmacy and Nutrition Sciences	Lifescience Global	1927-5951	2223-3806	Full text
483	Pharmaceutical Technology and Drug Research	Herbert Publications	2050-120X		Full text
484	Asian Journal of Pharmaceutical Education and Research	Asian Journal of Pharmaceutical Education and Research	2278-7496		Full text
485	International Journal of Pharma Medicine and Biological Sciences	Meghana Publications	2278-5221		Full text
486	International Journal of Biopharmaceutics	Pharma Intelligence	0976-1047	2229-7499	Full text

487	International Journal of Pharmacy and Therapeutics	Pharma Intelligence	0976-0342	2229-7456	Full text
488	International Journal of Preclinical and Pharmaceutical Research	Pharma Intelligence	2229-7552	2249-7502	Full text
489	International Journal of Phytopharmacy Research	Pharma Intelligence	2249-7544	2229-7464	Full text
490	International Journal of Pharmaceutical Development and Technology	Pharma Intelligence	2248-910X	2248-9096	Full text
491	International Journal of Experimental Pharmacology	Pharma Intelligence	2248-9169	2248-9150	Full text
492	Journal of Pharmaceutical Biology	Pharma Intelligence	2249-7560	2249-7579	Full text
493	International Journal of Pharmacy Review and Research	Pharma Intelligence	2248-9207	2248-9193	Full text
494	International Journal of Current Pharmaceutical and Clinical Research	Pharma Intelligence	2248-9142	2248-9134	Full text
495	Asian Journal of Pharmaceutical Science and Technology	Pharma Intelligence	2248-9185	2248-9177	Full text
496	International Journal of Pharmacology and Toxicology	Pharma Intelligence	2249-7668	2249-7676	Full text
497	International Journal of Medicinal Chemistry and Analysis	Pharma Intelligence	2249-7587	2249-7595	Full text
498	International Journal of Pharmacology Research	Pharma Intelligence	2249-7641	2249-765X	Full text
499	International Journal of Innovative Drug Discovery	Pharma Intelligence	2249-7609	2249-7617	Full text
500	International Journal of Pharmacy	Pharma Intelligence	2249-7684	2249-7692	Full text
501	International Journal of Pharmacy Practice and Drug Research	Pharma Intelligence	2249-7625	2249-7633	Full text
502	International Journal of Advanced Pharmaceutics	Pharma Intelligence	2249-7706	2249-7714	Full text
503	International Journal of Pharmacological Screening Methods	Pharma Intelligence	2249-7749	2249-7757	Full text
504	International Bulletin of Drug Research	International Bulletin of Drug Research	2250-3692		Full text
505	Herald Journal of Pharmacy and Pharmacological Research	Herald International Research Journals			Full text
506	International Journal of Pharmacy and Integrated Life Sciences	International Journal of Pharmacy and Integrated Life Sciences	2320-0782		Full text
507	Wudpecker Journal of Pharmacy and Pharmacology	Wudpecker Journals			Full text
508	International Journal of Advanced Ayurveda, Yoga, Unani, Siddha and Homeopathy	Cloud Publications	2320-0251		Full text
509	International Journal of Advances in Pharmaceutical Analysis	Scholar Science Journals	2277-9353		Full text
510	Global Advanced Research Journal of Pharmacy and Pharmacology	Global Advanced Research Journals			Full text
511	Australian Journal of Hospital Pharmacy	Society of Hospital Pharmacists of Australia		0310-6810	Indexed

512	Double Helix research's International Journal of Pharmaceutical Sciences	Double Helix Research	2278-8328		Full text
513	Bangladesh Pharmaceutical Journal	Bangladesh Pharmaceutical Society	0301-4606		Full text
514	International Journal of Pharmaceutical and Life Sciences	Mohammed Raihan Chowdhury	2305-0330		Full text
515	International Journal of Pharmaceutical Research and Innovation	Whites Science Innovation Limited	2046-5114		Full text
516	Journal of Pharmaceutical Science and Bioscientific Research	JPSBR Publications	2277-3681		Full text
517	Dataset Papers in Pharmacology	Hindawi Publishing Corporation	2090-9365		Full text
518	Journal of Pharmacogenomics and Pharmacoproteomics	Longdom Publishing SL	2153-0645		Full text
519	PharmacoEconomics and Outcomes News	Springer Nature	1179-2043	1173-5503	Indexed
520	Reactions Weekly	Springer Nature	1179-2051	0114-9954	Indexed
521	Expert Opinion on Orphan Drugs	Taylor and Francis Ltd	2167-8707	2167-8707	Indexed
522	International Journal of Pharma Sciences	Aizeon Publishers	2249-8214		Full text
523	International Research Journal of Medicine and Medical Sciences	Net Journals			Full text
524	Journal of Clinical and Experimental Pharmacology	OMICS Publishing Group	2161-1459		Full text
525	In Silico Pharmacology	Springer Nature	2193-9616		Indexed
526	International Journal of Lifescience and Pharma Research	International Journal of Lifescience and Pharma Research	2250-0480		Full text
527	Research and Reviews: Journal of Medical Science and Technology	STM Journals	2319-3417		Indexed
528	Journal of Nepal Pharmaceutical Association	Nepal Pharmaceutical Association	0253-8261		Full text
529	Indian Journal of Pharmaceutics	International Science Press		2229-7405	Indexed
530	CPT: Pharmacometrics and Systems Pharmacology	John Wiley and Sons, Ltd	2163-8306		Full text
531	International Journal of Clinical Pharmacology and Toxicology	SciDoc Publishers	2167-910X		Full text
532	International Journal of Pharmaceutical Formulation and Analysis	International Science Press		0976-5573	Indexed
533	International Journal of Pharmacology and Technology	International Science Press		0975-8143	Indexed
534	PharmaNutrition	Elsevier Science		2213-4344	Indexed
535	International Journal of Pharmaceutical Sciences and Practice	Research India Publications			Indexed

536	International Journal of Pharmacy and Drug Research	Research India Publications			Indexed
537	International Journal of Advances Drug Delivery	Research Science Press			Indexed
538	Journal of Pharmaceutical Care	Tehran University of Medical Sciences	2322-4509	2322-4630	Full text
539	VSRD International Journal of Biotechnology and Pharmaceutical Sciences	VSRD International Journals Division	2278-9197		Full text
540	American Journal of Pharmacological Sciences	Science and Education Publishing			Full text
541	Research Journal of Pharmacutical Sciences	International Science Community Association	2319-555X		Full text
542	Journal of Medical Pharmaceutical and Allied Sciences	Journal of Medical Pharmaceutical and Allied Sciences	2320-7418		Full text
543	International Journal of Advanced Pharmaceutical Science and Technology	Cloud Publications			Full text
544	Research and Reviews: Journal of Hospital and Clinical Pharmacy	Research and Reviews			Full text
545	Research and Reviews: Journal of Medical and Health Sciences	Research and Reviews		2319-9865	Full text
546	Research and Reviews: Journal of Pharmacy and Pharmaceutical Sciences	Research and Reviews	2322-0112	2320-1215	Full text
547	Research and Reviews: Journal of Pharmaceutical Analysis	Research and Reviews	2320-0812	2347-2340	Full text
548	Research and Reviews: Journal of Pharmaceutical Quality Assurance	Research and Reviews			Full text
549	Research and Reviews: Journal of Pharmaceutics and Nanotechnology	Research and Reviews	2347-7857	2347-7849	Full text
550	Research and Reviews: Journal of Pharmacology and Toxicological Studies	Research and Reviews	2322-0139	2322-0120	Full text
551	BMC Pharmacology and Toxicology	BioMed Central Ltd		2050-6511	Full text
552	Mintage Journal of Pharmaceutical and Medical Sciences	Mintage Journals	2320-3315		Full text
553	Drug Intoxication and Detoxification: Novel Approaches	SciTechnol	2327-4557		Indexed
554	Journal of Reports in Pharmaceutical Sciences	Kermanshah University of Medical Sciences	2322-5106	2322-1232	Full text
555	Journal of Pharmaceutics and Drug Delivery Research	SciTechnol	2325-9604		Indexed
556	Revista Española de Quimioterapia	Sociedad Española de Quimioterapia		0214-3429	Full text
557	International Journal of Advances in Pharmaceutics	Scholar Science Journals	2320-4923	2320-4931	Full text
558	Journal of Drug and Alcohol Research	Ashdin Publishing	2090-8342	2090-8334	Full text
559	Journal of PharmaSciTech	Gupta College of Technological Sciences	2321-4376	2231-3788	Full text

560	World Journal of Pharmaceutical Sciences	Atom and Cell Publishers	2321-3086	2321-3310	Full text
561	International Journal of Pharma Bioscience and Technology	International Journal of Pharma Bioscience and Technology	2321-2969		Full text
562	Asian Journal of Phytomedicine and Clinical Research	Asian Journal of Phytomedicine and Clinical Research	2321-0915		Full text
563	Asian Journal of Pharmaceutical Analysis and Medicinal Chemistry	Asian Journal of Pharmaceutical Analysis and Medicinal Chemistry	2321-0923		Full text
564	Journal of Research in Pharmacy Practice	Medknow Publications Pvt Ltd	2279-042X	2319-9644	Full text
565	Drugs in Context	Just Medical Media Limited	1740-4398	1745-1981	Full text
566	American Journal of Pharmacy and Health Research	American Journal of Pharmacy and Health Research		2321-3647	Full text
567	Journal of Pharmaceutical Research and Opinion	Innovative Journal		2249-1953	Full text
568	Vaccines	Multidisciplinary Digital Publishing Institute		2076-393X	Full text
569	Pharmacy and Pharmacology Research	Net Journals			Full text
570	Asian Journal of Medical and Pharmaceutical Researches	Science-Line Publication		2322-4789	Full text
571	Antibiotics	Multidisciplinary Digital Publishing Institute	2079-6382	2079-6382	Full text
572	International Journal of Pharmacology and Toxicology	Science Publishing Corporation	2310-2985		Full text
573	International Journal of Medicine and Biomedical Research	Michael Joanna Publications	2315-5019	2277-0941	Full text
574	International Journal of Pharmaceutical Science and Health Care	RS Publication		2249-5738	Full text
575	Advances in Pharmaceutical and Ethnomedicines	Nexus Academic Publishers			Full text
576	Journal of Pharmacognosy and Phytochemistry	AkiNik Publications		2278-4136	Full text
577	Pharma Innovation	AkiNik Publications	2277-7695	2349-8242	Full text
578	Systems Pharmacology	Walter de Gruyter GmbH & Co. KG		2084-8854	Full text
579	VRI Phytomedicine	Vedic Research International	2330-0280		Full text
580	Asian Journal of Pharmacy, Nursing and Medical Sciences	Asian Online Journals		2321-3639	Full text
581	International Journal of Pharmacy and Pharmacology	International Scholars Journals Publishing Corporation		2326-7267	Full text
582	Journal of Pharmacovigilance	Longdom Publishing SL		2329-6887	Full text
583	European Journal of Hospital Pharmacy : Science and Practice	BMJ Publishing Group	2047-9964	2047-9956	Indexed
584	OA Drug Design and Delivery	Open Access Publishing London			Full text
585	Advances in Pharmacology and Pharmacy	Horizon Research Publishing			Full text

586	Universal Journal of Medical Science	Horizon Research Publishing			Full text
587	Universal Journal of Public Health	Horizon Research Publishing			Full text
588	Pharmaceutical Bioprocessing	Open Access Journals Ltd	2048-9153	2048-9145	Indexed
589	Bulletin of Pharmaceutical and Medical Sciences	KY Publications		2321-4503	Full text
590	International Journal of Current Trends in Pharmaceutical Research	Pharma Research Library		2321-3760	Full text
591	International Journal of Medicine and Pharmaceutical Research	Pharma Research Library		2321-2624	Full text
592	International Journal of Research in Pharmacy and Life Sciences	Pharma Research Library		2321-5038	Full text
593	Bulletin of Pharmaceutical Research	Association of Pharmaceutical Innovators	2249-9245	2249-6041	Full text
594	International Journal of Ayurveda and Pharma Research	Mahadev Publications			Full text
595	International Journal of Antibiotics	Hindawi Publishing Corporation	2314-5773		Full text
596	Journal of Pharmaceutics and Drug Development	Annex Publishers			Full text
597	PharmacoEconomics Italian Research Articles	Springer Nature	2035-6137	1590-9158	Indexed
598	Journal of Pharmaceutical Sciences and Emerging Drugs	SciTechnol			Indexed
599	Greener Journal of Pharmacy and Pharmacology	Greener Journals			Full text
600	Journal of Pharmaceutics and Pharmacology	Avens Publishing Group		2327-204X	Full text
601	Open Research Journal of Phytotherapy and Pharmacognosy	Science and Technology Publishing			Full text
602	Annals of Pharma Research	Ebioscholar	2347-1956		Full text
603	Pharmacy	Multidisciplinary Digital Publishing Institute	2226-4787		Full text
604	Journal of Pharmacy Research	Elsevier Science	0974-6943	0974-6943	Indexed
605	International Journal of Research in Pharmacology and Pharmacotherapeutics	Smt.Sarojini Ramulamma College of Pharmacy	2278-2656	2278-2648	Full text
606	Scholars Academic Journal of Pharmacy	Scholars Academic and Scientific Publishers	2320-4206	2347-9531	Full text
607	International Journal of Drug Regulatory Affairs	International Journal of Drug Regulatory Affairs Publishing Group	2321-6794	2321-7162	Full text
608	Science International	Science International		2305-1884	Full text
609	Asian Journal of Pharmaceutical Technology and Innovation	Literati Scientific and Publishers Pvt.Ltd			Full text
610	Asian Journal of Pharmaceutical Sciences	Elsevier Science		1818-0876	Full text
611	Journal of Medical and Pharmaceutical Innovation	Literati Scientific and Publishers Pvt.Ltd			Full text

612	Journal of Global Antimicrobial Resistance	Elsevier Science		2213-7165	Indexed
613	Biomedicines	Multidisciplinary Digital Publishing Institute		2227-9059	Full text
614	Acta Bioclínica	Universidad de Los Andes		2244-8136	Full text
615	Research Journal of Pharmaceutical Dosage Forms and Technology	A & V Publications	0975-4377	0975-234X	Indexed
616	Research Journal of Pharmacology and Pharmacodynamics	A & V Publications	2321-5836	0975-4407	Indexed
617	Research Journal of Pharmacy and Technology	A & V Publications	0974-360X	0974-3618	Indexed
618	Asian Journal of Pharmaceutical Analysis	A & V Publications	2231-5675	2231-5667	Indexed
619	Asian Journal of Pharmaceutical Research	A & V Publications	2231-5691	2231-5683	Indexed
620	Asian Journal of Pharmacy and Technology	A & V Publications	2231-5713	2231-5705	Indexed
621	Asian Journal of Research in Pharmaceutical Sciences	A & V Publications	2231-5659	2231-5640	Indexed
622	Journal of Applied Biopharmaceutics and Pharmacokinetics	JPM Press	2309-4435		Full text
623	American Journal of Bio-Pharmacology Biochemistry and Life Sciences	American Journal of Biopharmacology Biochemistry and Life Sciences	2166-126X		Full text
624	American Journal of Advanced Drug Delivery	Insight Medical Publishing		2321-547X	Full text
625	Journal of Chemical Health Risks	Islamic Azad University, Damghan Branch	2251-6727	2251-6719	Full text
626	Innovations in Pharmaceuticals and Pharmacotherapy	Innovations in Pharmaceuticals and Pharmacotherapy	2321-323X		Full text
627	Journal of Pharmacopuncture	Korean Pharmacopuncture Institute	2234-6856	2093-6966	Full text
628	Open Science Journal of Pharmacy and Pharmacology	Open Science Publishers			Full text
629	Asia Pacific Journal of Medical Toxicology	Mashhad University of Medical Sciences	2322-4320	2322-2611	Full text
630	Indian Journal of Pharmaceutical and Biological Research	Shri Manmohan Sharma Educational Society		2320-9267	Full text
631	Journal of Harmonized Research in Pharmacy	Journal of Harmonized Research Publications	2321-0958		Full text
632	International Journal of Pharmaceutical Sciences and Business Management	International Journal of Pharmaceutical Sciences and Business Management		2310-6913	Full text
633	Journal of Biomedical and Pharmaceutical Research	Innovative Research Center		2279-0594	Full text
634	Nigerian Journal of Experimental and Clinical Biosciences	Medknow Publications Pvt Ltd	2348-0149	2348-053X	Full text
635	Saudi Journal of Medicine and Medical Sciences	Medknow Publications Pvt Ltd	2321-4856	1658-631X	Full text
636	Journal of Pharmacy and Pharmacology	David Publishing		2328-2150	Full text

637	Drug Science, Policy and Law	SAGE Publications	2050-3245		Indexed
638	International Journal of Pharmacognosy	Society of Pharmaceutical Sciences and Research		0925-1618	Full text
639	International Journal of Celiac Disease	Science and Education Publishing	2334-3486	2334-3427	Full text
640	International Journal of Pharma Research and Health Sciences	Harekrishna Roy	2348-6465		Full text
641	Egyptian Pharmaceutical Journal	Medknow Publications Pvt Ltd	2090-9853	1687-4315	Full text
642	International Journal of Medicine and Pharmacy	American Research Institute for Policy Development			Full text
643	Global Journal of Pharmacy and Pharmacology	Global Science Research Journals		2111-3067	Full text
644	Journal of HerbMed Pharmacology	Nickan Research Institute	2345-5004		Full text
645	Journal of Advanced Drug Delivery	Journal of Advanced Drug Delivery	2348-3792		Full text
646	World Journal of Pharmacy	World Journal of Publisher	2319-8737		Full text
647	Ocular Surface	Elsevier Science		1542-0124	Indexed
648	Pharmacy Information	Hans Publishers Inc	2160-4452	2160-441X	Full text
649	Austin Journal of Drug Abuse and Addiction	Austin Publishing Group			Full text
650	US Open Pharmaceutical, Biological and Chemical Sciences Journal	American Research Publications			Full text
651	Timing and Time Perception	Brill Academic Publishers	2213-4468	2213-445X	Indexed
652	Journal of Advanced Pharmaceutical Science and Technology	Open Access Pub	2328-0182		Full text
653	Journal of Pharmacology and Drug Metabolism	JScholar			Full text
654	International Journal of Medical Science Research and Practice	Axis Journals	2349-3186	2349-3178	Full text
655	International Journal of Pharmaceutical Science Invention	Invention Journals	2319-6718	2319-670X	Full text
656	Advances in Pharmaceutics	Hindawi Publishing Corporation	2314-775X	2356-6841	Full text
657	Journal of Advanced Clinical Pharmacology	JPM Press	2312-3710		Full text
658	World Journal of Pharmaceutical Research	World Journal of Pharmaceutical Research		2277-7105	Full text
659	Pharmacologia	Pharmacologia	2044-4656	2044-4648	Full text
660	Biochemistry and Pharmacology	Longdom Publishing SL		2167-0501	Full text
661	Journal of Pharmaceutical, Chemical and Biological Sciences	Star Carrier Academy		2348-7658	Full text

662	Indian Research Journal of Pharmacy and Science	Mr. Saumendu Deb Roy	2349-5332		Full text
663	International Journal of Medical and Pharmaceutical Case Reports	Sciencedomain International			Full text
664	Journal of Advances in Medical and Pharmaceutical Sciences	Sciencedomain International			Full text
665	Thai Journal of Hospital Pharmacy	Health Science Journals In Thailand		1513-4067	Full text
666	Bulletin of Faculty of Pharmacy, Cairo University	Elsevier Science		1110-0931	Full text
667	Performance Enhancement and Health	Elsevier Science		2211-2669	Indexed
668	Journal of Drug Discovery, Development and Delivery	Austin Publishing Group			Full text
669	Ciencia e Natura	Marcelo Barcellos da Rosa	2179-460X	0100-8307	Full text
670	Journal of Pediatric Pharmacology and Therapeutics	Pediatric Pharmacology Advocacy Group		1551-6776	Indexed
671	Journal of Advanced Clinical and Research Insights	Incessant Nature Science Publishers Pvt Ltd			Full text
672	Journal of Pharmaceutical Policy and Practice	BioMed Central Ltd		2052-3211	Full text
673	International Journal of Pharmacy and Bio-Sciences	BioMed Research Publication			Full text
674	BMR Phytomedicine	BioMed Research Publication			Full text
675	International Journal of Ethnobiology and Ethnomedicine	BioMed Research Publication			Full text
676	Pharmacology and Toxicology Research	BioMed Research Publication			Full text
677	Pediatric Pharmacology	Union of Pediatricians of Russia		1727-5776	Full text
678	Enliven: Pharmacovigilance and Drug Safety	Enliven Archive		2378-5411	Full text
679	Research and Reviews: A Journal of Drug Formulation, Development and Production	STM Journals			Indexed
680	Research and Reviews: A Journal of Pharmacognosy	STM Journals			Indexed
681	Research and Reviews: A Journal of Drug Design and Discovery	STM Journals		2349-9036	Indexed
682	International Journal of BioAnalytical Methods and BioEquivalence Studies	SciDoc Publishers			Full text
683	Journal of Pharmacy and Pharmaceutics	Omega Publishers	2377-1313		Full text
684	American Journal of Ethnomedicine	Insight Medical Publishing		2348-9502	Full text
685	Indian Journal of Pharmacy and Pharmacology	Innovative Publication	2393-9087	2393-9079	Full text
686	International Journal of Ethnopharmacology	Premier Publishers			Full text
687	SOJ Pharmacy and Pharmaceutical Sciences	Symbiosis Group	2374-6866		Full text

688	Indonesian Journal of Clinical Pharmacy	Universitas Padjadjaran	2337-5701	2252-6218	Full text
689	American Journal of Pharmacy and Pharmacology	American Association for Science and Technology		2375-3900	Full text
690	International Journal of Medical Reviews	Baqiyatallah University of Medical Sciences		2345-525X	Full text
691	Enliven: Toxicology and Allied Clinical Pharmacology	Enliven Archive			Full text
692	Global Advances in Pharmaceutical Research	New Century Science Press LLC	2372-8299		Full text
693	Panacea Journal of Pharmacy and Pharmaceutical Sciences	Panacea Research Library		2349-7025	Full text
694	International Journal of Pharmaceutical and Chemical Sciences	International Journal of Pharmaceutical and Chemical Sciences		2277-5005	Full text
695	Research Journal of Drug Abuse	Herbert Publications		2057-3111	Full text
696	Journal of Pharmaceutical Sciences and Pharmacology	American Scientific Publishers	2333-3723	2333-3715	Indexed
697	Journal of Pharmacoeconomics and Pharmaceutical Management	Tehran University of Medical Sciences			Full text
698	International Journal of Pharmacology and Pharmaceutical Sciences	International Journal of Pharmacology and Pharmaceutical Sciences			Full text
699	Alcoholism and Drug Addiction	Termedia Publishing House Ltd	1689-3530	0867-4361	Full text
700	International Journal of Pharmaceutical Research and Biomedical Analysis	International Journal of Pharmaceutical Research and Biomedical Analysis		2278-2664	Full text
701	Drug Safety - Case Reports	Springer Nature	2198-977X	2199-1162	Full text
702	Drugs - Real World Outcomes	Springer Nature	2198-9788	2199-1154	Full text
703	Acta Biomedica Scientia	McMed International	2348-2168	2348-215X	Full text
704	American Journal of Biological and Pharmaceutical Research	McMed International	2348-2184	2348-2176	Full text
705	American Journal of Pharmaceutical Sciences	McMed International			Full text
706	Australian Journal of Pharmaceutical Research	McMed International			Full text
707	Der Pharmacologia Sinica	McMed International			Full text
708	European Journal of Pharmaceutical Science and Research	McMed International			Full text
709	European Journal of Pharmacology and Toxicology	McMed International			Full text
710	Scandinavian Journal of Pharmaceutical Science and Research	McMed International			Full text
711	Singapore Journal of Pharmaceutical Research	McMed International			Full text
712	International Journal of Ethnomedicine and Pharmacognosy	Michael Joanna Publications			Indexed

713	World Research Journal of Pharmaceutical Research	Bioinfo Publications	2322-0570	2322-0562	Indexed
714	Journal of Biological, Pharmaceutical and Chemical Research	Journal of Biological, Pharmaceutical and Chemical Research		2394-3076	Full text
715	Current Pharmacology Reports	Springer Nature	2198-641X		Indexed
716	Global Journal of Pharmaceutical Sciences and Education	Research India Publications			Indexed
717	Journal of Pharmaceutical and Biomedical Analysis Letters	Pharma Research Library		2347-4742	Full text
718	Asian Journal of Chemical and Pharmaceutical Research	Pharma Research Library		2347-8322	Full text
719	Asian Journal of Medical and Pharmaceutical Sciences	Pharma Research Library		2348-0165	Full text
720	World Journal of Pharmacy and Biotechnology	Pharma Research Library		2349-9087	Full text
721	Pharmacy and Pharmacology International Journal	MedCrave Group			Full text
722	Creative Journal of Pharmaceutical Research	Creative Educational Society College of Pharmacy			Full text
723	Gratis Journal of Pharmaceutics and Therapeutics	Gratis Open Access Publishers			Full text
724	Integrative Pharmacology, Toxicology and Genotoxicology	Open Access Text Pvt. Ltd	2058-8496		Full text
725	American Research Journal of Pharmacy	American Research Journals Inc			Full text
726	EC Pharmaceutical Science	E-Cronicon			Full text
727	International Journal of Pharmaceutical Sciences and Developmental Research	Peertechz Publications Pvt Ltd			Full text
728	Media Farmasi	Universitas Ahmad Dahlan		1412-7946	Full text
729	Journal of Pharma and Pharmaceutical Sciences	Verizona Publisher Limited			Full text
730	BAOJ Pharmaceutical Sciences	Bio Accent Group LLC			Full text
731	Jacobs Journal of Medicinal Chemistry	Jacobs Publishers			Full text
732	Clinical Research	Sci Forschen		0009-9279	Full text
733	Journal of Diseases and Medicinal Plants	Science Publishing Group			Full text
734	Asian Journal of Research in Biological and Pharmaceutical Sciences	Uptodate Research Publication		2349-4492	Full text
735	Asian Journal of Research in Chemistry and Pharmaceutical Sciences	Uptodate Research Publication	2349-7106		Full text
736	Asian Journal of Research in Pharmaceutical Sciences and Biotechnology	Uptodate Research Publication	2349-7114		Full text
737	Annals of Phytomedicine	Ukaaz Publications	2393-9885	2278-9839	Full text

738	European Journal of Pharmaceutical and Medical Research	Dr. K. M. Girhepunje		2394-3211	Full text
739	European Journal of Biomedical and Pharmaceutical Sciences	Dr. K. M. Girhepunje	2349-8870		Full text
740	International Journal of Clinical Pharmacology and Pharmacotherapy	Graphy Publications			Full text
741	Journal of Asian Association of Schools of Pharmacy	Asian Association of Schools of Pharmacy			Full text
742	International Journal of Pharmaceutical Sciences Research	Graphy Publications		2394-1502	Full text
743	International Journal of Chemical and Pharmaceutical Review and Research	Saathvik Publications	2395-3306		Full text
744	Pakistan Journal of Pharmaceutical Research	Bahauddin Zakariya University		2410-6275	Full text
745	MIT International Journal of Pharmaceutical Sciences	MIT Publications	2394-5346	2394-5338	Full text
746	Pharmaceutical and Biological Evaluations	iMedPharm	2394-0859		Full text
747	International Journal of Pharmacy and Chemistry	Science Publishing Group			Full text
748	Journal of Chronotherapy and Drug Delivery	SciTechInnova Foundation		2249-6785	Full text
749	Pyrex Journal of Pharmacy and Pharmacology	Pyrex Journals		2035-7877	Full text
750	Future Journal of Pharmaceutical Sciences	SpringerOpen	2314-7253	2314-7245	Full text
751	Le Pharmacien Hospitalier et Clinicien	Elsevier Science		2211-1042	Indexed
752	Trends in Pharmaceutical Sciences	Shiraz University of Medical Sciences	2423-5652	2423-3722	Full text
753	Journal of Natural Products Research Updates	Synchro Publisher			Full text
754	International Journal of Public Health, Pharmacy and Pharmacology	European Centre for Research Training and Development	2516-0419	2516-0400	Full text
755	HSA Journal of Alcoholism, Drug Abuse and Substance Dependence	Herald Scholarly Open Access			Full text
756	Journal of in Silico and in Vitro Pharmacology	Insight Medical Publishing			Full text
757	Journal of Natural Products and Resources	JACS Directory	2455-0299		Full text
758	Journal of Pharmaceutical and Medicinal Research	JACS Directory	2455-0280		Full text
759	Journal of Pharmaceutical and Medicinal Chemistry	Red Flower Publication Pvt. Ltd		2395-6615	Indexed
760	Journal of Drug Design and Medicinal Chemistry	Science Publishing Group			Full text
761	Macedonian Pharmaceutical Bulletin	Ss Cyril and Methodius University in Skopje	1857-8969	1409-8695	Full text
762	Asian Journal of Pharmacy and Pharmacology	Pharmaceutical Research Information Group		2455-2674	Full text

763	Journal of Pharmacognosy and Natural Products	Hilaris SRL			Full text
764	Pharmacoeconomics	Hilaris SRL			Full text
765	Herbal Medicine	Insight Medical Publishing			Full text
766	International Archives of Clinical Pharmacology	ClinMed International Library			Full text
767	ARC Journal of Pharmaceutical Sciences	Academicians Research Center	2455-1538		Full text
768	Journal of Pharmacology and Clinical Research	Juniper Publishers			Full text
769	Journal of Antibiotics Research	Annex Publishers			Full text
770	Indian E-Journal of Pharmaceutical Sciences	ASD Publisher	2454-5244		Full text
771	Research Journal of Phytomedicine	ASD Publisher			Full text
772	Research Journal of Pharmacology and Toxicology	ASD Publisher			Full text
773	Sustainable Chemistry and Pharmacy	Elsevier Science	2352-5541	2352-5541	Indexed
774	Journal of Pharmaceutical Analytics and Insights	Sci Forschen			Full text
775	Folia Medica Copernicana	Via Medica	2353-6489	2300-5432	Full text
776	ASIO Journal of Pharmaceutical and Herbal Medicines Research	Albert Science International Organization		2455-281X	Full text
777	Journal of Bioequivalence Studies	Annex Publishers			Full text
778	Journal of Pharmaceutical Microbiology	Insight Medical Publishing			Full text
779	Journal of Applied Pharmaceutical Sciences	Open Science Publishers LLP	2358-3495		Full text
780	Ibero Latin American Journal of Health System Pharmacy	Organización Farmacéutica Ibero Latinoamericana	1699-714X	1131-9429	Full text
781	International Journal of Quantitative Structure-Property Relationships	IGI Publishing	2379-7479	2379-7487	Indexed
782	EC Pharmacology and Toxicology	E-Cronicon			Full text
783	Pharmacovigilance and Pharmacoepidemiology	Edelweiss Publications Inc			Full text
784	ASIO Journal of Experimental Pharmacology and Clinical Research	Albert Science International Organization			Full text
785	Mathews Journal of Pharmaceutical Science	Mathews International Publishers LLC			Full text
786	Global Journal of Pharmacy and Pharmaceutical Sciences	Juniper Publishers			Full text
787	European Journal of Parenteral and Pharmaceutical Sciences	Euromed Communications		1740-6277	Indexed
788	Journal of Chinese Pharmaceutical Sciences	Journal of Chinese Pharmaceutical Sciences		1003-1057	Full text
789	International Journal of Pharmaceutical and Clinical Research	International Journal of Pharmaceutical and Clinical Research		0975-1556	Full text
790	Journal of Chemical and Pharmaceutical Sciences	Journal of Chemical and Pharmaceutical Sciences		0974-2115	Full text

791	Pharmaceutical Outsourcing	CompareNetworks, Inc	1945-3345	1945-3337	Full text
792	Revista Mexicana de Ciencias Farmacéuticas	Asociación Farmaceutica Mexicana		1027-3956	Full text
793	International Journal of Current Pharmaceutical Review and Research	Publishing House		0976-822X	Full text
794	Pharmakeftiki	Hellenic Society of Medicinal Chemistry		1105-4999	Full text
795	International Journal of Pharmacognosy and Phytochemical Research	Prof. L. N. Choudhary		0975-4873	Full text
796	European Review for Medical and Pharmacological Sciences	Verduci Editore Srl	2284-0729	1128-3602	Full text
797	International Journal of Pharmacology, Phytochemistry and Ethnomedicine	SciPress Ltd		2297-6922	Full text
798	Innovations in Pharmacy and Pharmaceutical Technology	Innovational Publishers			Full text
799	Aperito Journal of Pharmacology and Drug Designing	Aperito Online Publishing		2378-8968	Full text
800	Journal of Drug	Verizona Publisher Limited			Full text
801	Pharmacy in History	American Institute of the History of Pharmacy		0031-7047	Indexed
802	Pharmaceutical Technology in Hospital Pharmacy	Walter de Gruyter GmbH & Co. KG	2365-242X	2365-2411	Full text
803	Canadian Open Pharmacy Journal	Canadian Research Publication			Full text
804	Canadian Open Pharmacology and Pharmacy Journal	Canadian Research Publication			Full text
805	Journal of the American Pharmaceutical Association (1912)	Elsevier Science		0898-140X	Indexed
806	European Journal of Pharmacology: Environmental Toxicology and Pharmacology	Elsevier Science		0926-6917	Indexed
807	Pharmacology and Therapeutics. Part B: General and Systematic Pharmacology	Elsevier Science		0306-039X	Indexed
808	Current Protocols in Pharmacology	John Wiley and Sons, Ltd	1934-8290	1934-8282	Indexed
809	Journal of the American Pharmaceutical Association (1996)	Elsevier Science		1086-5802	Indexed
810	Journal of Pharmaceutical Care and Health Systems	Longdom Publishing SL		2376-0419	Full text
811	Chain Drug Review	Racher Press, Inc			Indexed
812	Clinical Pharmacology and Biopharmaceutics	OMICS Publishing Group		2167-065X	Full text
813	Infarma: Pharmaceutical Sciences	Federal Council of Pharmacy	2318-9312	0104-0219	Full text
814	Letters in Health and Biological Sciences	Ommega Publishers		2475-6245	Full text
815	Journal of Medicinal Chemistry and Toxicology	Ommega Publishers			Full text

816	Anveshana's International Journal of Research in Pharmacy and Life Sciences	Anveshana Educational and Research Foundation			Indexed
817	Journal of Innovations in Applied Pharmaceutical Sciences	Innovative Scientific Publishers	2455-5177		Full text
818	International Journal of Medical Pharmacology	International Association of Research and Science			Full text
819	Journal of Clinical Pharmacology and Toxicology	NobleResearch Publishers Limited			Full text
820	International Journal of Applied Pharmaceutical and Biological Research	Journal of Applied Pharmaceutical and Biological research	2456-0189		Full text
821	Saudi Journal of Medical and Pharmaceutical Sciences	Scholars Middle East Publishers	2413-4910	2413-4929	Full text
822	Pharmaceutical Sciences and Technology	Science Publishing Group			Full text
823	EIJO Journal of Ayurveda, Herbal Medicine and Innovative Research	Einstein International Journal Organization			Full text
824	PTB Reports	EManuscript Services		2395-4736	Full text
825	Journal of Al-Nahrain University - Science	Al-Nahrain University		1814-5922	Full text
826	International Journal of Pharmacovigilance	Symbiosis Group			Full text
827	Journal of Applied Pharmaceutical Research	Creative Pharma Assent	2348-0335		Full text
828	ARC Journal of Addiction	Academicians Research Center			Full text
829	International Journal of Chemical and Pharmaceutical Analysis	Aarya Publishing House	2348-0726	2395-2466	Full text
830	Journal of Advanced Research in Pharmaceutical Sciences and Pharmacology Interventions	Advanced Research Publications			Full text
831	NeuroPharmac Journal	Sahara Public Library		2456-3927	Indexed
832	Rapports de Pharmacie	Pharm Trend Publisher		2455-0507	Full text
833	Pharmabiz.com	Saffron Media Private Limited			Full text
834	Asia Pacific Journal of Clinical Trials: Nervous System Diseases	Medknow Publications Pvt Ltd	2542-3940	2542-3932	Full text
835	Pharmacology And Toxicology	John Wiley and Sons, Ltd	1600-0773		Indexed
836	Texila International Journal of Clinical Research	Texila International Journal		2520-3096	Full text
837	Journal of Antibiotics, Series B	Japan Science and Technology Agency			Full text
838	Pakistan Journal of Pharmacy	University of Punjab		1019-956X	Full text
839	Recent Patents on Nanomedicine	Bentham Science Publishers Ltd	1877-9131	1877-9123	Indexed
840	Journal of Opioid Management	Journal of Opioid Management		1551-7489	Indexed
841	Japanese Journal of Antibiotics	Japan Science and Technology Agency	2186-5477	0368-2781	Full text

842	International Journal of Medical, Pharmacy and Drug Research	AI Publications		2456-8015	Full text
843	Journal of Scientific Discovery	E-Discovery Publication Inc.	2573-6310		Full text
844	PS Post Script	Australian Pharmaceutical Publishing Company Ltd		0156-0433	Indexed
845	PharmaTutor	PharmaTutor	2347-7881	2394-6679	Full text
846	International Journal of Pharmaceutical Science and Research	Gupta Publications		2455-4685	Full text
847	Innovat International Journal of Medical and Pharmaceutical Sciences	Innovat Publisher	2456-8694		Full text
848	Journal of Pharmaceutical and Pharmacological Sciences	Gavin International Conferences and Publishers Inc.	2574-7711		Full text
849	Current Research Journal of Pharmaceutical and Allied Sciences	Girijananda Chowdhury Institute of Pharmaceutical Science		2456-9674	Full text
850	CNS Drug Reviews	John Wiley and Sons, Ltd	1527-3458	1080-563X	Indexed
851	Journal of Ayurveda and Integrated Medical Sciences	Charaka Publishing House	2456-3110		Full text
852	Novel Approaches in Drug Designing and Development	Juniper Publishers		2575-8942	Full text
853	Open Access Journal of Gerontology and Geriatric Medicine	Juniper Publishers		2575-8543	Full text
854	International Journal of Pharmaceutics and Pharmacology	Edwiser International		2581-3080	Full text
855	Matrix Science Pharma	Zibeline International Publishing	2521-0432	2521-0815	Full text
856	Chiang Mai Journal of Science	Chiang Mai University	2465-3845	0125-2526	Full text
857	International Journal of Innovative Pharmaceutical Sciences and Research	Dr. M. Srujan Reddy	2347-2154		Full text
858	European Pharmaceutical Review	Russell Publishing		1360-8606	Full text
859	Natural Product Sciences	Korean Society of Pharmacognosy	2288-9027	1226-3907	Full text
860	GSC Biological and Pharmaceutical Sciences	GSC Online Press		2581-3250	Full text
861	Ankara Universitesi Eczacilik Fakultesi Dergisi	Ankara University		2564-6524	Full text
862	European Journal of Clinical Pharmacy	Rasgo Editorial S.L.			Indexed
863	Journal of Innovation in Pharmaceutical Sciences	Guru Nanak Publications			Full text
864	International Journal of Recent Advances in Medical and Pharma Research	Eureka Journals			Full text
865	International Journal on Current Trends in Drug Development and Industrial Pharmacy	Eureka Journals			Full text

866	Global Journal of Transformation in Pharmaceutical Formulation and Consumer Health	Eureka Journals			Full text
867	Current Medical and Drug Research	Global SciTech Ocean GLOSTO) Publishing Co.		2581-5008	Full text
868	Journal of Pharmaceutical Research and Education	Suresh Gyan Vihar University	2456-4508		Full text
869	Open Access Journal of Translational Medicine and Research	MedCrave Group		2576-4578	Full text
870	Journal of Pharmaceutical Research International	Sciencedomain International	2456-9119		Full text
871	PharmacoEconomics - Open	Springer Nature	2509-4254	2509-4262	Full text
872	Journal of Community Medicine	MedDocs Publishers LLC		2637-4900	Full text
873	Journal of Patient-Reported Outcomes	SpringerOpen	2509-8020		Full text
874	Journal of Applied Pharmaceutical Sciences and Research	Journal of Applied Pharmaceutical Sciences and Research		2581-5520	Full text
875	Quarterly Journal of Crude Drug Research	Taylor and Francis Ltd			Indexed
876	Journal of Drugs and Pharmaceutical Science	Integrity Research Journals			Full text
877	Journal of the American College of Clinical Pharmacy	John Wiley and Sons, Ltd	2574-9870		Indexed
878	Research Results in Pharmacology	Pensoft Publishers	2658-381X	2500-235X	Full text
879	Current Drug Research Reviews	Bentham Science Publishers Ltd	2589-9783	2589-9775	Indexed
880	J: Multidisciplinary Scientific Journal	Multidisciplinary Digital Publishing Institute	2571-8800		Full text
881	PAIN Reports	Wolters Kluwer Health, Inc			Full text
882	Medicine and Pharmacy Reports	Iuliu Hațieganu University of Medicine and Pharmac			Full text
883	HSOA Journal of Pharmacology, Pharmaceutics and Pharmacovigilance	Herald Scholarly Open Access	2639-5649		Full text
884	Journal of Pharmaceutical and Biological Sciences	Innovative Publication	2320-1924		Full text
885	Scientific World Journal	Hindawi Publishing Corporation	1537-744X	2356-6140	Full text
886	Journal of Pharmaceutical Advanced Research	Journal of Pharmaceutical Advanced Research	2581-6160		Full text
887	Journal of Theoretical and Computational Science	Longdom Publishing SL	2376-130X		Full text
888	International Journal of Research in Pharmaceutical Sciences and Technology	Rubatosi Publications		2581-9143	Full text
889	International Journal of Research in Hospital and Clinical Pharmacy	Rubatosi Publications		2582-0672	Full text

890	International Journal of Research In Pharmaceutical Chemistry And Analysis	Rubatos Publications			Full text
891	International Journal of Research In Phytochemical And Pharmacological Sciences	Rubatos Publications			Full text
892	Korean Journal of Pharmacognosy	Korean Journal Publishing Service			Full text
893	Journal of Perioperative Nursing	Journal of Perioperative Nursing	2209-1092	2209-1084	Full text
894	Clinical Neuropsychopharmacology and Therapeutics	The Japanese Society of Clinical Neuropsychopharmacology	1884-8826		Full text
895	Journal of Drug Development and Delivery	Innovation Info			Full text
896	Trends in Phytochemical Research	Islamic Azad University, Shahrood Branch Press	2588-3631	2588-3623	Full text
897	International Journal of Academic Medicine and Pharmacy	International Journal of Academic Medicine and Pharmacy	2687-5365		Full text
898	Journal of the Malta College of Pharmacy Practice	University of Malta		1811-9522	Full text
899	Global Health Journal	Elsevier Science		2414-6447	Full text
900	Medicine in Drug Discovery	Elsevier Science		2590-0986	Full text
901	African Journal of Pharmaceutical Research and Development	University of Nigeria		0794-800X	Full text
902	Iraqi Journal of Pharmaceutical Sciences	University of Baghdad	2521-3517	1683-3597	Full text
903	Pharmaceutical Resonance	Dr. D. Y. Patil Institute of Pharmaceutical Sciences and Research	2581-6136		Full text
904	Journal of Biomedical and Pharmaceutical Sciences	Hilaris SRL			Full text
905	Advances in Pharmacology and Clinical Trials	Medwin Publishers		2474-9214	Full text
906	Bioequivalence and Bioavailability International Journal	Medwin Publishers		2578-4803	Full text
907	Journal of Natural and Applied Sciences Pakistan	Kinnaird College for Women		2663-6328	Full text
908	Drug Combination Therapy	TMR Publishing Group		2624-3075	Full text
909	Current Nutraceuticals	Bentham Science Publishers Ltd	2665-9794	2665-9786	Indexed
910	Australian Journal of Herbal and Naturopathic Medicine	Cambridge Media		2209-119X	Indexed
911	African Journal of Pharmacology and Therapeutics	University of Nairobi		2303-9841	Full text
912	Trends in Natural Products Research	Natural Products Research Group		2734-391X	Full text
913	Journal of Molecular Pharmaceuticals and Regulatory Affairs	MAT Journals			Full text

914	International Journal of Allied Medical Sciences and Clinical Research	International Journal of Allied Medical Sciences and Clinical Research		2347-6567	Full text
915	International Pharmacy Acta	Shahid Beheshti University of Medical Sciences	2645-3266	2645-3258	Full text
916	Journal on Medical Emphasis Research	AO Syniuta Publisher			Full text
917	British Journal of Addiction to Alcohol and Other Drugs	John Wiley and Sons, Ltd			Full text
918	Current Trends in Pharmacy and Pharmaceutical Chemistry	e-Current Science	2582-5062		Full text
919	Innovative Journal of Medical Sciences	Mandsaur Universty		2581-4346	Full text
920	Philippine Journal of Allied Health Sciences	Philippine Journal of Allied Health Sciences		1908-5044	Full text
921	Pharmaceutical Fronts	Thieme Medical Publishers Inc		2628-5096	Full text
922	Journal of Medical Research and Health Sciences	Medical Editor And Educational Research Publishers Ltd	2589-9031	2589-9023	Full text
923	Current Reviews in Clinical and Experimental Pharmacology	Bentham Science Publishers Ltd	2772-4336	2772-4328	Indexed
924	Recent Advances in Anti-Infective Drug Discovery	Bentham Science Publishers Ltd	2772-4352	2772-4344	Indexed
925	Applied Drug Research, Clinical Trials and Regulatory Affairs	Bentham Science Publishers Ltd	2667-338X	2667-3371	Indexed
926	Japanese Journal of Clinical Research on Death and Dying	The Japanese Association For Clinical Research on Death and Dying	2434-9089	0912-4292	Indexed
927	Journal of Tropical Medicine and Hygiene	Open Access Pub			Full text
928	Nirma University Journal of Pharmaceutical Sciences	Nirma University Institute of Pharmacy		2348-4012	Full text
929	International Journal of Pharma Sciences and Scientific Research	BioCore Online Publishing			Full text
930	Recent Advances in Drug Delivery and Formulation	Bentham Science Publishers Ltd	2667-3886	2667-3878	Indexed
931	American Journal of Medical Sciences and Pharmaceutical Research	USA Journals		2689-1026	Full text
932	Journal of Virus Adaptation and Treatment	Open Access Pub			Full text
933	Journal of the American Pharmaceutical Association (Scientific ed.)	Elsevier Science		0095-9553	Indexed
934	Journal of Experimental and Clinical Toxicology	Open Access Pub			Full text
935	International Journal of Antibiotic Research	Open Access Pub			Full text

Annexure 15.4 List of Major Equipment/Facilities in each Laboratory/Workshop				
Sr. No.	Instrument Facility	Make and Model	Name of attached software with instrument	Quantity/ Numbers available
1	Shimadzu Electronic Top Loading Balance BL 220H (HIGH Precision Lab Balance With Cover 1mg 220gm)	Shimadzu BL 220H	-	1
2	Ultrasonic Bath sonicator	Labman LMOC-6	-	1
3	LG 308 L 3 Star Frost Free Double door Refrigerator	LG 308 L 3 sar	-	1
4	HOT AIR OVEN (Oven Universal Memmert type outer MS & Inner SS Digital Alu Ambient 250 C size 605×605×605mm 215 ltr)	Neumann & Miller M-NM-ALU-E	-	1
5	Vaccum Oven (SS Inner MS Outer TempRT to 150 Deg C Dig. Temp Control With Vaccum Pump 12×12 inch)	Neumann & Miller NM-254B	-	1
6	Industrial Refrigerator, Chiller and Deep Freezer Model-Elanpro EFSV 340	Elanpro EFSV 340	-	1
7	Unibloc Analytical Balance AUX220 (HIGH Precision Lab Balance With Cover 1mg 220gm)	Uniblock AUX220	-	1
8	Shimadzu Electronic Top Loading Balance BL 220H	Shimadzu BL 220H	-	1
9	Refrigerated Centrifuge with Rotor(12×15ml And 24×1.5ml)	Remi	-	1
10	Water System Purificaion	Milipore	-	1
11	Tablet Dissolution test Apparatus (DS 8000)-Basic unit (TMCU-BC) (DT 19090738)	Lab India DS8000	-	1
12	Fourier Transform Infra-Red Spectrophotometer, Irsprit-T with Consisting below Accessories	Shimadzu IR Spirit	IRsolution program	1
13	Shimadzu UV-VIS Spectrophotometer Model : UV-1900	Shimadzu UV-1900	UV probe Software	1
14	PH Meter Digital	Eutech PH510	-	1
15	Conductivity Meter	Labman LMCM20	-	1
16	Hot Plate S.S Top	Janki Impex	-	1
17	High Pressure Liquid Chromatography (HPLC)	Agilent 1260	Open Lab solution	1
18	Tablet Hardness Tester (Monsato type)	Patel Scientific Instruments	-	1
19	Tablet Hardness Tester (Pfizer type)	Patel Scientific Instruments	-	1
20	REMI & RQ - 5 PLUS MINI Stirrer	REMI & RQ - 5	-	1
21	LABORATORY STIRRER REMI	Remi	-	1
22	Analytical Balance	Shimadzu BL-220	-	1
23	LABORATORY STIRRER with PMDC MOTOR SHAFT	Remi	-	1
24	MAGNETIC STRRIER WITH HOT PLATE	Remi MLH-5	-	1
25	METTLER TOLEDO HE-53 Moisture Analyzer	Mettler Toledo HE-53	-	1
26	Magnetic Stirrer	Remi MS-800 Plus	-	1
27	Liquid Chromatography Tandem Mass Spectrometry	Agilent	Mass Hunter	1
28	High Performance Thin Layer Chromatography with Mass Interface	CAMAG	Vision CATS	1
29	Particle Size Analyzer	Microtrac	Microtrac Flex	1
30	Benchtop NMR	Nananalysis	Nova Mestrelab Research	1

**Gujarat Technological University
Graduate School of Pharmacy**

Curricula and syllabus for each of the Programmes as approved by the University

Annexure 15.5: Teaching Scheme and Syllabus

Course Structure: Drug Regulatory Affairs

Sr No.	Course Code	Course Name	Th. Hrs	Pr. Hrs	Total Credit
Semester I					
1	MRA101T	Good Regulatory Practices	4	0	4
2	MRA102T	Documentation and Regulatory Writing	4	0	4
3	MRA103T	Clinical Research Regulations	4	0	4
4	MRA104T	Regulations and Legislation for Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals In India and Intellectual Property Rights	4	0	4
5	MRA105P	Regulatory Affairs Practical I	0	12	6
6	MSA106P	Seminar/Assignment	0	8	4
Semester II					
1	MRA201T	Regulatory Aspects of Drugs & Cosmetics	4	0	4
2	MRA202T	Regulatory Aspects of Herbal & Biologicals	4	0	4
3	MRA203T	Regulatory Aspects of Medical Devices	4	0	4
4	MRA204T	Regulatory Aspects of Food & Nutraceuticals	4	0	4
5	MRA205P	Regulatory Affairs Practical II	0	12	6

6	MSA206P	Seminar/Assignment	0	8	4
Semester III					
1	MRM301T	Research Methodology and Biostatistics	4	0	4
2	MJC302P	Journal Club I	1	0	1
3	MDP303P	Discussion/Presentation(Proposal Presentation)	2	0	2
4	MRW304P	Research Work - Dissertation Phase I	0	28	14
Semester IV					
1	MJC401P	Journal Club II	1	0	1
2	MDP402P	Discussion/ Presentation	3	0	3
3	MRW403P	Research Work - Dissertation Phase II	0	32	16

Course Structure: Pharmaceutical Quality Assurance

Sr No.	Course Code	Course Name	Th. Hrs	Pr. Hrs	Total Credit
Semester I					
1	MAT101T	Modern Pharmaceutical Analytical Techniques	4	0	4
2	MQA102T	Quality Management System	4	0	4
3	MQA103T	Quality Control and Quality Assurance	4	0	4
4	MQA104T	Product Development and Technology Transfer	4	0	4
5	MQA105P	Pharmaceutical Quality Assurance Practical I	0	12	6

6	MSA106P	Seminar/Assignment	0	8	4
Semester II					
1	MQA201T	Hazards and Safety Management	4	0	4
2	MQA202T	Pharmaceutical Validation	4	0	4
3	MQA203T	Audits and Regulatory Compliance	4	0	4
4	MQA204T	Pharmaceutical Manufacturing Technology	4	0	4
5	MQA205P	Pharmaceutical Quality Assurance Practical II	0	12	6
6	MSA206P	Seminar/Assignment	0	8	4
Semester III					
1	MRM301T	Research Methodology and Biostatistics	4	0	4
2	MJC302P	Journal Club I	1	0	1
3	MDP303P	Discussion/Presentation(Proposal Presentation)	2	0	2
4	MRW304P	Research Work - Dissertation Phase I	0	28	14
Semester IV					
1	MJC401P	Journal Club II	1	0	1
2	MDP402P	Discussion/ Presentation	3	0	3
3	MRW403P	Research Work - Dissertation Phase II	0	32	16

Course Structure: Pharmaceutics

Sr No.	Course Code	Course Name	Th. Hrs	Pr. Hrs	Total Credit
Semester I					
1	MAT101T	Modern Pharmaceutical Analytical Techniques	4	0	4
2	MPH102T	Drug Delivery System	4	0	4
3	MPH103T	Modern Pharmaceutics	4	0	4
4	MPH104T	Regulatory Affairs	4	0	4
5	MPH105P	Pharmaceutics Practical I	0	12	6
6	MSA106P	Seminar/Assignment	0	8	4
Semester II					
1	MAT201T	Hazards and Safety Management	4	0	4
2	MPH202T	Pharmaceutical Validation	4	0	4
3	MPH203T	Audits and Regulatory Compliance	4	0	4
4	MPH204T	Pharmaceutical Manufacturing Technology	4	0	4
5	MPH205P	Pharmaceutical Quality Assurance Practical II	0	12	6
6	MSA206P	Seminar/Assignment	0	8	4
Semester III					
1	MRM301T	Research Methodology and Biostatistics	4	0	4
2	MJC302P	Journal Club I	1	0	1
3	MDP303P	Discussion/Presentation(Proposal Presentation)	2	0	2
4	MRW304P	Research Work - Dissertation Phase I	0	28	14

Semester IV					
1	MJC401P	Journal Club II	1	0	1
2	MDP402P	Discussion/ Presentation	3	0	3
3	MRW403P	Research Work - Dissertation Phase II	0	32	16

Semester III								
Subject code	Subject name	No. of Hours	Credits	Internal Assessment		End Semester Exams		Total Marks
				Sessional Exams		Marks	Duration	
				Marks	Duration			
MRA301T	Research Methodology and Biostatistics*	4	4	20	1 hr	80	3 hrs	100
MJC302P	Journal Club I	1	1	25		0		25
MDP303P	Discussion/ Presentation (Proposal Presentation)	2	2	50				50
MRW304P	Research Work - Dissertation Phase I	28	14	50		300		350
	Total							525
Semester IV								
Subject code	Subject name	No. of Hours	Credits	Internal Assessment		End Semester Exams		Total Marks
				Sessional Exams		Marks	Duration	
				Marks	Duration			
MJC401P	Journal Club II	1	1	25				25
MDP402P	Discussion/ Presentation (Proposal Presentation)	3	3	75				75
MRW404P	Research Work - Dissertation Phase I	32	16	0		400		400
	Total							500
	* Non University Examination							

Journal Club I : Review submission or Minor Research Project report submission (topic for the same should be other than major research Topic (Dissertation)).								
Students have to submit report of 25 Pages in Soft Copy to GTU and Hard Copy to College								
Journal Club II: Patent Submission/ Manuscript Submission / Conference/								
Bifurcation of Marks of Research Work - Dissertation Phase I								
Sr No.	Description	Marks	Internal/External					
1	Patent Search and Analysis Report	50	Internal					
2	DP-1 Submission	100	External					
3	DP-1 Presentation and Viva	200	External					
Bifurcation of Marks of Research Work - Dissertation Phase II								
1	Mid Sem Review	100	External					
2	DP-II Submission	100	External					
3	DP-II Presentation and Viva	200	External					

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL REGULATORY AFFAIRS

SEMESTER: I

Subject Name: GOOD REGULATORY PRACTICES

Subject Code: MRA101T

Scope: This course is designed to impart fundamental knowledge on various Good Regulatory Practices viz., cGMP, GLP, GALP and GDP for Pharmaceuticals, Cosmetics, Food & Nutraceuticals, Medical devices, In-vitro Diagnostic Medical Devices (IVDs) and biological products and understand the rationale behind these requirements and will propose ways and means of complying with them.

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

1. The key regulatory and compliance elements with respect to Good Manufacturing Practices, Good Laboratory Practices, Good Automated Laboratory Practices and Good Documentation Practices
2. Prepare and implement the check lists and SOPs for various Good Regulatory Practices
3. Implement Good Regulatory Practices in the Healthcare and related Industries
4. Prepare for the readiness and conduct of audits and inspections

Sr No	Course Contents	Total Hrs
1	Current Good Manufacturing Practices: Introduction, US Cgmp Part 210 and Part 211.EC Principles of GMP (Directive 91/356/EEC) Article 6 to Article 14 and WHO cGMP guidelines GAMP-5; Medical device and IVDs Global Harmonization Task Force(GHTF) Guidance docs	12
2	Good Laboratory Practices: Introduction, USFDA GLP Regulations (Subpart A to Subpart K), Controlling the GLP inspection process, Documentation, Audit, goals of Laboratory Quality Audit, Audit tools, Future of GLP regulations, relevant ISO and Quality Council of India(QCI) Standards	12
3	Good Automated Laboratory Practices: Introduction to GALP, Principles of GALP, GALP Requirements, SOPs of GALP, Training Documentation, 21 CFR Part 11, General check list of 21CFR Part 11, Software Evaluation checklist, relevant ISO and QCI Standards.	12
4	Good Distribution Practices: Introduction to GDP, Legal GDP requirements put worldwide, Principles, Personnel, Documentation, Premises and Equipment, Deliveries to Customers, Returns, Self-Inspection, Provision of information, Stability testing principles, WHO GDP, USP GDP (Supply chain integrity), relevant CDSCO guidance and ISO standards	12
5	Quality management systems: Concept of Quality, Total Quality Management, Quality by design, Six Sigma concept, Out of Specifications (OOS), Change control. Validation: Types of Validation, Types of Qualification, Validation master plan (VMP), Analytical Method Validation. Validation of utilities, [Compressed air, steam, water systems, Heat Ventilation and Air conditioning (HVAC)]and Cleaning Validation. The International Conference on Harmonization (ICH) process, ICH guidelines to establish quality, safety and efficacy of drug substances and products, ISO 13485, Sch MIII and other relevant CDSCO regulatory guidance documents.	12

REFERENCES:

1. Good Laboratory Practice Regulations, by Sandy Weinberg, Fourth Edition Drugs and the Pharmaceutical Sciences, Vol.168
2. Good Pharmaceutical Manufacturing practice, Rational and compliance by John Sharp, CRC Press
3. Establishing a cGMP Laboratory Audit System, A practical Guide by David M.Bleisner, Wiley Publication.
4. How to practice GLP by PP Sharma, Vandana Publications.
5. Laboratory Auditing for Quality and Regulatory compliance bu Donald C.Singer, Drugs and the Pharmaceutical Sciences, Vol.150.
6. Drugs & Cosmetics Act, Rules & Amendments

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL REGULATORY AFFAIRS

SEMESTER: I

Subject Name: DOCUMENTATION AND REGULATORY WRITING

Subject Code: MRA102T

Scope: This course is designed to impart fundamental knowledge on documentation and general principles involved in regulatory writing and submission to agencies.

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

1. Know the various documents pertaining to drugs in pharmaceutical industry
2. Understand the basics of regulatory compilation
3. Create and assemble the regulation submission as per the requirements of agencies
4. Follow up the submissions and post approval document requirements

Sr No	Course Contents	Total Hrs
1	Documentation in pharmaceutical industry: Exploratory Product Development Brief (EPDB) for Drug substance and Drug product, Product Development Plan (PDP), Product Development Report (PDR), Master Formula Record, Batch Manufacturing Record and its calculations, Batch Reconciliation, Batch Packaging Records, Print pack specifications, Distribution records, Certificate of Analysis (CoA), Site Master File and Drug Master Files (DMF).	12
2	Dossier preparation and submission: Introduction and overview of dossiers, contents and organization of dossier, binders and sections, compilation and review of dossier. Paper submissions, overview and modules of CTD, electronic CTD submissions; Electronic submission: Planning electronic submission, requirements for submission, regulatory bindings and requirements, Tool and Technologies, electronic dossier submission process and validating the submission, Electronic Submission Gateway (ESG). Non eCTD electronic submissions (NeeS), Asian CTD formats (ACTD) submission. Organizing, process and validation of submission. Submission in Sugam system of CDSCO.	12
3	Audits: Introduction, Definition, Summary, Types of audits, GMP compliance audit, Audit policy, Internal and External Audits, Second Party Audits, External third party audits, Auditing strategies, Preparation and conducting audit, Auditing strategies, audit analysis, audit report, audit follow up. Auditing/inspection of manufacturing facilities by regulatory agencies. Timelines for audits/inspection. GHTF study group 4 guidance document. ISO 13485.	12
4	Inspections: Pre-approval inspections, Inspection of pharmaceutical manufacturers, Inspection of drug distribution channels, Quality systems requirements for national good manufacturing practice inspectorates, inspection report, model certificate of good manufacturing practices, Root cause analysis, Corrective and Preventive action (CAPA).	12

5	Product life cycle management: Prior Approval Supplement (PAS), Post Approval Changes [SUPAC], Changes Being Effectuated in 30 Days (CBE-30), Annual Report, Post marketing Reporting Requirements, Post approval Labeling Changes, Lifecycle Management, FDA Inspection and Enforcement, Establishment Inspection Report (EIR), Warning Letters, Recalls, Seizure and Injunctions. ISO Risk Management Standard	12
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REFERENCES:

1. Compliance auditing for Pharmaceutical Manufacturers. Karen Ginsbury and Gil Bismuth, Interpharm/CRC, Boca Raton, London New York, Washington D.C.
2. Pharmaceutical Manufacturing Handbook, Regulations and Quality by Shayne Cox Gad. Wiley-Interscience, A John Wiley and sons, Inc., Publications.
3. Handbook of microbiological Quality control. Rosamund M. Baird, Norman A. Hodges, Stephen P. Denyar. CRC Press. 2000.
4. Laboratory auditing for quality and regulatory compliance. Donald C. Singer, Raluca-loana Stefan, Jacobus F. Van Staden. Taylor and Francis (2005).
5. Implementing Juran's Road Map for Quality Leadership: Benchmarks and Results, By Al Endres, Wiley, 2000
6. Understanding, Managing and Implementing Quality: Frameworks, Techniques and Cases, By Jiju Antony; David Preece, Routledge, 2002
7. Organizing for High Performance: Employee Involvement, TQM, Reengineering, and Knowledge Management in the Fortune 1000: The CEO Report By Edward E. Lawler; Susan Albers Mohrman; George Benson, Jossey-Bass, 2001
8. Corporate Culture and the Quality Organization By James W. Fairfield- Sonn, Quorum Books, 2001
9. The Quality Management Sourcebook: An International Guide to Materials and Resources By Christine Avery; Diane Zabel, Routledge, 1997
10. The Quality Toolbox, Second Edition, Nancy R. Tague, ASQ Publications
11. Juran's Quality Handbook, Sixth Edition, Joseph M. Juran and Joseph A. De Feo, ASQ Publications
12. Root Cause Analysis, The Core of Problem Solving and Corrective Action, Duke Okes, 2009, ASQ Publications
13. International Medical Device Regulators Forum (IMDRF) Medical Device Single Audit Program (MDSAP)

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

CLINICAL RESEARCH REGULATIONS

SEMESTER: I

Subject Name: CLINICAL RESEARCH REGULATIONS

Subject Code: MRA103T

Scope: This course is designed to impart the fundamental knowledge on the clinical development process of drugs, pharmaceuticals and Medical Devices, phases and conduct of clinical trials and research, regulations and guidance governing the conduct of clinical research in India, USA and EU. It prepares the students to learn in detail on various laws, legislations and guidance related to safety, efficacy, ethical conduct and regulatory approval of clinical research

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

1. History, origin and ethics of clinical and biomedical research and evaluation
2. Clinical drug, medical device development process and different types and phases of clinical trials
3. Regulatory requirements and guidance for conduct of clinical trials and research

Sr No	Course Contents	Total Hrs
1	<p>Clinical Drug Development Process</p> <ul style="list-style-type: none">• Different types of Clinical Studies• Phases of clinical trials, Clinical Trial protocol• Phase 0 studies• Phase I and subtype studies (single ascending, multiple ascending, dose escalation, methods, food effect studies drug – drug interaction, PK end points• Phase II studies (proof of concept or principle studies to establish efficacy)• Phase III studies (Multi ethnicity, global clinical trial, registration studies)• Phase IV studies (Post Marketing Studies; PSUR) <p>Clinical Investigation and Evaluation of Medical Devices & IVDs Different Types of Studies Key Concepts of Medical Device Clinical Evaluation Key concepts of Clinical Investigation</p>	12
2	<p>Ethics in Clinical Research</p> <ul style="list-style-type: none">• Historical Perspectives: Nuremberg Code, Thalidomide study , Nazis Trials, Tuskegee Syphilis Study, The Belmont Report, The declaration of Helsinki• Origin of International Conference on Harmonization – Good Clinical Practice (ICH-GCP) guidelines• The ethics of randomized clinical trials• The role of placebo in clinical trials• Ethics of clinical research in special population• Institutional Review Board/Independent Ethics Committee/Ethics Committee – composition, roles, responsibilities, review and approval process and ongoing monitoring of safety data	12

	<ul style="list-style-type: none"> • Data safety monitoring boards • Responsibilities of sponsor, CRO, and investigator in ethical conduct of clinical research • Ethical principles governing informed consent process • Patient Information Sheet and Informed Consent Form • The informed consent process and documentation 	
3	<p>Regulations governing Clinical Trials</p> <p>India: Clinical Research regulations in India – Schedule Y & Medical Device Guidance</p> <p>USA: Regulations to conduct drug studies in USA (FDA)</p> <ul style="list-style-type: none"> • NDA 505(b)(1) of the FD&C Act (Application for approval of a new drug) • NDA 505(b)(2) of the FD&C Act (Application for approval of a new drug that relies, at least in part, on data not developed by the applicant) • ANDA 505(j) of the FD&C Act (Application for approval of a generic drug product) • FDA Guidance for Industry - Acceptance of Foreign Clinical Studies • FDA Clinical Trials Guidance Document: Good Clinical Practice <p>EU: Clinical Research regulations in European Union (EMA)</p>	12
4	<p>Clinical Research Related Guidelines</p> <ul style="list-style-type: none"> • Good Clinical Practice Guidelines (ICH GCP E6) • Indian GCP Guidelines • ICMR Ethical Guidelines for Biomedical Research • CDSCO guidelines <p>GHTF study group 5 guidance documents</p> <p>Regulatory Guidance on Efficacy and Safety ICH Guidance's</p> <ul style="list-style-type: none"> • E4 – Dose Response Information to support Drug Registration • E7 – Studies in support of General Population: Geriatrics • E8 – General Considerations of Clinical Trials • E10 – Choice of Control Groups and Related Issues in Clinical Trials • E 11 – Clinical Investigation of Medicinal Products in the Pediatric Population • General biostatistics principle applied in clinical research 	12
5	<p>USA & EU Guidance</p> <p>USA: FDA Guidance</p> <ul style="list-style-type: none"> • CFR 21Part 50: Protection of Human Subjects • CFR 21Part 54: Financial Disclosure by Clinical Investigators • CFR 21Part 312: IND Application • CFR 21Part 314: Application for FDA Approval to Market a New Drug • CFR 21Part 320: Bioavailability and bioequivalence requirements • CFR 21Part 812: Investigational Device Exemptions • CFR 21Part 822: Post-market surveillance • FDA Safety Reporting Requirements for INDs and BA/BE studies • FDA Med Watch 	12

	<ul style="list-style-type: none"> • Guidance for Industry: Good Pharmacovigilance Practices and Pharmacoepidemiologic Assessment European Union: EMA Guidance • EU Directives 2001 • EudraLex (EMA) Volume 3 – Scientific guidelines for medicinal products for human use • EU Annual Safety Report (ASR) • Volume 9A – Pharmacovigilance for Medicinal Products for Human Use • EU MDD with respect to clinical research • ISO 14155 	
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REFERENCES

1. Clinical Trials and Human Research: A Practical Guide to Regulatory Compliance By Fay A. Rozovsky and Rodney K. Adams
2. HIPAA and Human Subjects Research: A Question and Answer Reference Guide By Mark Barnes, JD, LL.M. and Jennifer Kulynych, JD, PhD
3. Principles and Practices of Clinical Research, Second Edition Edited by John I. Gallin and Frederick P. Ognibene
4. Reviewing Clinical Trials: A Guide for the Ethics Committee; Johan PE Karlberg and Marjorie A Speers; Karlberg, Johan Petter Einar, Hong Kong.
5. International Pharmaceutical Product Registration: Aspects of Quality, Safety and Efficacy; Anthony C. Cartwright; Taylor & Francis Inc., USA.
6. New Drug Approval Process: The Global Challenge; Guarino, Richard A; Marcel Dekker Inc., NY.
7. FDA regulatory affairs: a guide for prescription drugs, medical devices, and biologics; Douglas J. Pisano, David Mantus; CRC Press, USA
8. Country Specific Guidelines from official websites.
9. Drugs & Cosmetics Act & Rules and Amendments

RECOMMENDED WEBSITES:

1. EU Clinical Research Directive 2001: <http://www.eortc.be/services/doc/clinical-eudirective-04-april-01.pdf>
2. Code of Federal Regulations, FDA: <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm>
3. Guidelines of International Conference on Harmonization: <http://www.ich.org/products/guidelines.html>
4. Eudralex Guidelines: <http://www.gmpcompliance.info/euguide.htm>
5. FDA New Drug Application:
6. <http://www.fda.gov/regulatoryinformation/legislation/FederalFoodDrugAct/FDCAAct/FDCAActChapterVDrugsandDevices/ucm108125.htm> and Cosmetic
7. Medicines and Healthcare products Regulatory Agency: <http://www.mhra.gov.uk>
8. Central Drugs Standard Control Organization Guidance for Industry: <http://cdsco.nic.in/CDSCO-GuidanceForIndustry.pdf>
9. ICMR Ethical Guidelines for Biomedical Research: http://icmr.nic.in/ethical_guidelines.pdf

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

CLINICAL RESEARCH REGULATIONS

SEMESTER: I

Subject Name: REGULATIONS AND LEGISLATION FOR DRUGS & COSMETICS, MEDICAL DEVICES, BIOLOGICALS & HERBALS, AND FOOD & NUTRACEUTICALS IN INDIA AND INTELLECTUAL PROPERTY RIGHTS

Subject Code: MRA104T

Scope: This course is designed to impart fundamental knowledge on regulations and legislation in India w.r.t. Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals. It prepares the students for basic regulatory requirements in India of Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals. for manufacture, import & registration, export, sale, marketing authorization, clinical trials and intellectual property rights.

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

- Know different Acts and guidelines that regulate Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals industry in India
- Understand the approval process and regulatory requirements for Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals

Sr No	Course Contents	Total Hrs
1	Biologicals & Herbals, and Food & Nutraceuticals Acts and Rules (with latest amendments): <ul style="list-style-type: none">• Drugs and Cosmetics Act 1940 and Rules 1945: DPCO and NPPA• Other relevant provisions (rules schedules and guidelines for approval of Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals in India Other relevant Acts: Narcotics Drugs and Psychotropic Substances Act; Medicinal and Toilet Preparations (Excise Duties) Act, 1955; Pharmacy Act, 1948; Drugs and Magic Remedies (Objectionable Advertisements) Act, 1955; Prevention of Cruelty to Animals Act.	12
2	Regulatory requirements and approval procedures for Drugs & Cosmetics Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals CDSCO (Central Drug Standard Control Organization) and State Licensing Authority: Organization, Responsibilities <ul style="list-style-type: none">• Rules, regulations, guidelines and standards for regulatory filing of Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals• Format and contents of Regulatory dossier filing Clinical trial/ investigations	12
3	Indian Pharmacopoeial Standards, BIS standards and ISO and other relevant standards	12
4	Bioavailability and Bioequivalence data (BA & BE), BCS Classification of Drugs, Regulatory Requirements for Bioequivalence study Stability requirements: ICH and WHO Guidelines for Drug testing in animals/Preclinical Studies	12

	Animal testing: Rationale for conducting studies, CPCSEA Guidelines Ethical guidelines for human participants ICMR-DBT Guidelines for Stem Cell Research	
5	Intellectual Property Rights: Patent, Trademark, Copyright, Industrial Designs and Geographical Indications, Indian Patent Scenario. IPR vs Regulatory Affairs	12

REFERENCES

1. Manual of Patent Practice & Procedure, 3rd Edition, by The Patent Office of India
2. Patent Failure How Judges, Bureaucrats, and Lawyers put innovators at risk by James Bessen and Michael J. Meurer
3. Principles and Practice of Clinical Trial Medicine by Richard Chin and Bruce Y. Lee
4. Ethical Guidelines for Biomedical Research on Human Participants by Indian Council of Medical Research New delhi 2006.
5. CPCSEA Guidelines for Laboratory Animal Facility by Committee for the purpose of control and supervision on experiments on animals (CPCSEA)
6. ICH E6 Guideline — Good Clinical Practice by ICH Harmonised Tripartite
7. Guidance for Industry on Submission of Clinical Trial Application for Evaluating Safety and Efficacy by CDSCO (Central Drug Standard Control Organisation)
8. Guidance for Industry on Requirement of Chemical & Pharmaceutical Information including Stability Study Data before approval of clinical trials / BE studies by CDSCO
9. Guidelines for Import and Manufacture of Medical Devices by CDSCO
10. Guidelines from official website of CDSCO

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL CHEMISTRY

SEMESTER: I

Subject Name: REGULATORY AFFAIRS PRACTICAL - I

Subject Code: MRA105P

List of Practicals:

1. Case studies (4 Nos.) of each of Good Pharmaceutical Practices.
2. Documentation for in process and finished products Quality control tests for Solid, liquid, Semisolid and Sterile preparations.
3. Preparation of SOPs, Analytical reports (Stability and validation)
4. Protocol preparation for documentation of various types of records (BMR, MFR, DR)
5. Labeling comparison between brand & generics.
6. Preparation of clinical trial protocol for registering trial in India
7. Registration for conducting BA/ BE studies in India
8. Import of drugs for research and developmental activities
9. Preparation of regulatory dossier as per Indian CTD format and submission in SUGAM
10. Registering for different Intellectual Property Rights in India
11. GMP Audit Requirements as per CDSCO
12. Preparation and documentation for Indian Patent application.
13. Preparation of checklist for registration of IND as per ICH CTD format.
14. Preparation of checklist for registration of NDA as per ICH CTD format.
15. Preparation of checklist for registration of ANDA as per ICH CTD format.
16. Case studies on response with scientific rationale to USFDA Warning Letter
17. Preparation of submission checklist of IMPD for EU submission.
18. Comparison study of marketing authorization procedures in EU.
19. Comparative study of DMF system in US, EU and Japan
20. Preparation of regulatory submission using eCTD software
21. Preparation of Clinical Trial Application (CTA) for US submission
22. Preparation of Clinical Trial Application (CTA) for EU submission
23. Comparison of Clinical Trial Application requirements of US, EU and Japan of a dosage form.
24. Regulatory requirements checklist for conducting clinical trials in India.
25. Regulatory requirements checklist for conducting clinical trials in Europe.
26. Regulatory requirements checklist for conducting clinical trials in USA

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL REGULATORY AFFAIRS

SEMESTER: II

Subject Name: REGULATORY ASPECTS OF DRUGS & COSMETICS

Subject Code: MRA201T

Scope: This course is designed to impart the fundamental knowledge on the drug development process, regulatory requirements for approval of new drugs, drug products and cosmetics in regulated and semi-regulated countries. It prepares the students to learn in detail on the regulatory requirements, documentation requirements, and registration procedures for marketing the drug products and cosmetics in regulated and semi-regulated countries.

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

1. process of drug discovery and development and generic product development
2. Regulatory approval process and registration procedures for API and drug products in US, EU
3. Cosmetics regulations in regulated and semi-regulated countries
4. A comparative study of India with other global regulated markets

Sr No	Course Contents	Total Hrs
1	USA & CANADA: Organization structure and functions of FDA. Federal register and Code of Federal Regulations (CFR), History and evolution of United States Federal, Food, Drug and Cosmetic Act (FFDCA), Hatch Waxman act and Orange book, Purple book, Drug Master Files (DMF) system in US, Regulatory Approval Process for Investigational New Drug (IND), New Drug Application (NDA), Abbreviated New Drug Application (ANDA), Supplemental New Drug Application (SNDA); Regulatory requirements for Orphan drugs and Combination Products, Changes to an approved NDA/ANDA. Regulatory considerations for manufacturing, packaging and labeling of pharmaceuticals in USA. Legislation and regulations for import, manufacture, distribution and sale of cosmetics in USA and Canada	12
2	European Union & Australia: Organization and structure of EMA & EDQM, General guidelines, Active Substance Master Files (ASMF) system in EU, Content and approval process of IMPD, Marketing Authorization procedures in EU (Centralized procedure Decentralized procedure, Mutual recognition procedure and National Procedure). Regulatory considerations for manufacturing, packaging and labeling of pharmaceuticals in EU, Eudralex directives for human medicines, Variations & extensions, Compliance of European Pharmacopoeia (CEP)/ Certificate of Suitability (CoS), Marketing Authorization (MA) transfers, Qualified Person (QP) in EU. Legislation and regulations for import, manufacture, distribution and sale of cosmetics in European Union & Australia	12
3	Japan: Organization of the PMDA, Pharmaceutical Laws and regulations, types of registration applications, DMF system in Japan, drug regulatory approval process, Regulatory considerations for manufacturing, packaging and labeling of pharmaceuticals in Japan, Post marketing surveillance in	12

	Japan. Legislation and regulations for import, manufacture, distribution and sale of cosmetics in Japan	
4	Emerging Market: Introduction, Countries covered, Study of the world map, study of various committees across the globe (ASEAN, APEC, EAC, GCC, PANDRH, SADC) WHO: WHO, GMP, Regulatory Requirements for registration of drugs and post approval requirements in WHO through prequalification programme, Certificate of Pharmaceutical Product (CoPP) - General and Country Specific (South Africa, Egypt, Algeria and Morocco, Nigeria, Kenya and Botswana)	12
5	Brazil, ASEAN, CIS and GCC Countries: ASIAN Countries: Introduction to ACTD, Regulatory Requirements for registration of drugs and post approval requirements in China and South Korea & Association of Southeast Asian Nations (ASEAN) Region i.e. Vietnam, Malaysia, Philippines, Singapore and Thailand. CIS (Commonwealth Independent States): Regulatory prerequisites related to Marketing authorization requirements for drugs and post approval requirements in CIS countries i.e. Russia, Kazakhstan and Ukraine GCC (Gulf Cooperation Council) for Arab states: Regulatory prerequisites related to Marketing authorization requirements for drugs and post approval requirements in Saudi Arabia and UAE Legislation and regulations for import, manufacture, distribution and sale of cosmetics in Brazil, ASEAN, CIS and GCC Countries	12

REFERENCES:

1. Generic Drug Product Development, Solid Oral Dosage forms, Leon Shargel and Isader Kaufer, Marcel Dekker series, Vol. 143
2. The Pharmaceutical Regulatory Process, Edited by Ira R. Berry Marcel Dekker Series, Vol. 144
3. The Pharmaceutical Regulatory Process, Second Edition Edited by Ira R. Berry and Robert P. Martin, Drugs and the Pharmaceutical Sciences, Vol. 185 Informa Healthcare Publishers
4. New Drug Approval Process: Accelerating Global Registrations By Richard A Guarino, MD, 5th edition, Drugs and the Pharmaceutical Sciences, Vol. 190
5. Guidebook for drug regulatory submissions / Sandy Weinberg. By John Wiley & Sons, Inc.
6. Drugs: From Discovery to Approval, Second Edition By Rick Ng
7. New Drug Development: A Regulatory Overview, Eighth Edition By Mark Mathieu
8. Pharmaceutical Risk Management By Jeffrey E. Fetterman, Wayne L. Pines and Gary H. Slatko
9. Preparation and Maintenance of the IND Application in eCTD Format By William K. Sietsema
10. Country Specific Guidelines from official websites
11. http://www.who.int/medicines/areas/quality_safety/regulation_legislation/ListMRAWebsites.pdf
12. Roadmap to an ASEAN economic community Edited by Denis Hew. ISEAS Publications, Singapore 2005, ISBN 981-230-347-2
13. ASEAN, Rodolfo C. Severino, ISEAS Publications, Singapore 2005, ISBN 978-981-230-750-7
14. Building a Future with BRICS: The Next Decade for Offshoring, Mark Kobayashi-Hillary, Springer
15. Outsourcing to India: The Offshore Advantage, Mark Kobayashi-Hillary, Springer Trade performance and Regional Integration of the CIS Countries, Lev Freinkman
16. The World Bank, Washington, DC, ISBN: 0-8212-5896-0
17. Global Pharmaceutical Policy: Ensuring Medicines for Tomorrow's World By Frederick M. Abbott, Graham Dukes, Maurice Nelson Graham Dukes
18. The Gulf Cooperation Council: A Rising Power and Lessons for ASEAN by Linda Low and Lorraine Carlos Salazar (Nov 22, 2010)
19. Doing Business in the ASEAN Countries, Balbir Bhasin, Business Expert Press ISBN: 13: 978-1-60649-108-9

20. Realizing the ASEAN Economic Community: A Comprehensive Assessment, Michael G Plummer (Editor), Chia Siow Yue (Editor), Institute of South East Asian Studies, Singapore

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL REGULATORY AFFAIRS

SEMESTER: II

Subject Name: REGULATORY ASPECTS OF HERBAL AND BIOLOGICALS

Subject Code: MRA202T

Scope: This course is designed to impart fundamental knowledge on Regulatory Requirements, Licensing and Registration, Regulation on Labelling of Biologics in India, USA and Europe. It prepares the students to learn in detail on Regulatory Requirements for biologics, Vaccines and Blood Products.

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

1. Know the regulatory Requirements for Biologics and Vaccines
2. Understand the regulation for newly developed biologics and biosimilars
3. Know the pre-clinical and clinical development considerations of biologics
4. Understand the Regulatory Requirements of Blood and/or Its Components Including Blood Products and label requirements

Sr No	Course Contents	Total Hrs
1	India : Introduction, Applicable Regulations and Guidelines , Principles for Development of Similar Biologics, Data Requirements for Preclinical Studies, Data Requirements for Clinical Trial Application, Data Requirements for Market Authorization Application, Post-Market Data for Similar Biologics, Pharmacovigilance. GMP and GDP	12
2	USA: Introduction to Biologics; biologics, biological and biosimilars, different biological products, difference between generic drug and biosimilars, laws, regulations and guidance on biologics/ biosimilars, development and approval of biologics and biosimilars (IND,PMA, BLA, NDA,510(k), pre-clinical and clinical development considerations, advertising, labelling and packing of biologics	12
3	European Union: Introduction to Biologics; directives, scientific guidelines and guidance related to biologics in EU, comparability/ biosimilarity assessment, Plasma master file, TSE/ BSE evaluation, development and regulatory approval of biologics (Investigational medicinal products and biosimilars), pre-clinical and clinical development considerations; stability, safety, advertising, labelling and packing of biologics in EU	12
4	Vaccine regulations in India, US and European Union: Clinical evaluation, Marketing authorisation, Registration or licensing, Quality assessment, Pharmacovigilance, Additional requirements Blood and Blood Products Regulations in India, US and European Union: Regulatory Requirements of Blood and/or Its Components Including Blood Products, Label Requirements, ISBT (International Society of Blood Transfusion)and IHN(International Haemovigilance Network)	12
5	Herbal Products: Quality, safety and legislation for herbal products in India, USA and European Union	12

REFERENCES:

1. FDA Regulatory Affairs: A Guide for Prescription Drugs, Medical Devices, and Biologics, Douglas J. Pisano, David S. Mantus; Informa, 2008
2. Biological Drug Products: Development and Strategies; Wei Wang, Manmohan Singh; Wiley, 2013
3. Development of Vaccines: From Discovery to Clinical Testing; Manmohan Singh, Indresh K. Srivastava; Wiley, 2011
4. www.who.int/biologicals/en
5. www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/
6. www.ihn-org.com
7. www.isbtweb.org
8. Guidelines on Similar Biologics: Regulatory Requirements for Marketing Authorization in India
9. www.cdsc.nic.in
10. www.ema.europa.eu > scientific guidelines > Biologicals
11. [www.fda.gov/biologicsbloodVaccines/GuidanceCompliance Regulatory Information](http://www.fda.gov/biologicsbloodvaccines/guidancecompliance/regulatoryinformation) (Biologics)

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMCEUTICAL REGULATORY AFFAIRS

SEMESTER: II

Subject Name: REGULATORY ASPECTS OF MEDICAL DEVICES

Subject Code: MRA203T

Scope: This course is designed to impart the fundamental knowledge on the medical devices and in vitro diagnostics, basis of classification and product life cycle of medical devices, regulatory requirements for approval of medical devices in regulated countries like US, EU and Asian countries along with WHO regulations. It prepares the students to learn in detail on the harmonization initiatives, quality and ethical considerations, regulatory and documentation requirements for marketing medical devices and IVDs in regulated countries

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

1. basics of medical devices and IVDs, process of development, ethical and quality considerations
2. harmonization initiatives for approval and marketing of medical devices and IVDs
3. regulatory approval process for medical devices and IVDs in India, US, Canada, EU, Japan and ASEAN
4. Clinical evaluation and investigation of medical devices and IVDs

Sr No	Course Contents	Total Hrs
1	Medical Devices: Introduction, Definition, Risk based classification and Essential Principles of Medical Devices and IVDs. Differentiating medical devices IVDs and Combination Products from that of pharmaceuticals, History of Medical Device Regulation, Product Lifecycle of Medical Devices and Classification of Medical Devices. IMDRF/GHTF: Introduction, Organizational Structure, Purpose and Functions, Regulatory Guidelines, Working Groups, Summary Technical Document (STED), Global Medical Device Nomenclature(GMDN).	12
2	Ethics: Clinical Investigation of Medical Devices, Clinical Investigation Plan for Medical Devices, Good Clinical Practice for Clinical Investigation of medical devices(ISO 14155:2011) Quality: Quality System Regulations of Medical Devices: ISO 13485, Quality Risk Management of Medical Devices: ISO 14971, Validation and Verification of Medical device, Adverse Event Reporting of Medical device	12
3	USA: Introduction, Classification, Regulatory approval process for Medical Devices (510k) Premarket Notification, Pre-Market Approval (PMA), Investigational Device Exemption (IDE) and In vitro Diagnostics, Quality System Requirements 21 CFR Part 820, Labeling requirements 21 CFR Part 801, Post marketing surveillance of MD and Unique Device Identification (UDI). Basics of In vitro diagnostics, classification and approval process	12
4	European Union: Introduction, Classification, Regulatory approval process for Medical Devices (Medical Device Directive, Active Implantable Medical Device Directive) and In vitro Diagnostics (In Vitro Diagnostics Directive), CE certification process. Basics of In vitro diagnostics, classification and approval process	12

5	ASEAN, China & Japan: Medical Devices and IVDs, Regulatory registration procedures, Quality System requirements and clinical evaluation and investigation. IMDRF study groups and guidance documents	12
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REFERENCES

1. FDA regulatory affairs :a guide for prescription drugs, medical devices, and biologics by Douglas J. Pisano ,David Mantus
2. Medical Device Development: A Regulatory Overview by Jonathan S. Kahan
3. Medical Product Regulatory Affairs: Pharmaceuticals, Diagnostics, Medical Devices by John J. Tobin and Gary Walsh
4. Compliance Handbook for Pharmaceuticals, Medical Devices and Biologics by Carmen Medina
5. Country Specific Guidelines from official websites

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMCEUTICAL REGULATORY AFFAIRS

SEMESTER: II

Subject Name: REGULATORY ASPECTS OF FOOD & NUTRACEUTICALS

Subject Code: MRA204T

Scope: This course is designed to impart the fundamental knowledge on Regulatory Requirements, Registration and Labeling Regulations of Nutraceuticals in India, USA and Europe. It prepares the students to learn in detail on Regulatory Aspects for nutraceuticals and food supplements.

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

1. Know the regulatory Requirements for nutraceuticals
2. Understand the regulation for registration and labeling of nutraceuticals and food supplements in India, USA and Europe

Sr No	Course Contents	Total Hrs
1	Nutraceuticals: Introduction, History of Food and Nutraceutical Regulations, Meaning of Nutraceuticals, Dietary Supplements, Functional Foods, Medical Foods, Scope and Opportunities in Nutraceutical Market	12
2	Global Aspects: WHO guidelines on nutrition. NSF International: Its Role in the Dietary Supplements and Nutraceuticals Industries, NSF Certification, NSF Standards for Food And Dietary Supplements. Good Manufacturing Practices for Nutraceuticals	12
3	India : Food Safety and Standards Act, Food Safety and Standards Authority of India: Organization and Functions, Regulations for import, manufacture and sale of nutraceutical products in India, Recommended Dietary Allowances (RDA) in India	12
4	USA: US FDA Food Safety Modernization Act, Dietary Supplement Health and Education Act. U.S. regulations for manufacture and sale of nutraceuticals and dietary supplements, Labelling Requirements and Label Claims for Dietary Supplements, Recommended Dietary Allowances (RDA) in the U.S	12
5	European Union: European Food Safety Authority (EFSA): Organization and Functions. EU Directives and regulations for manufacture and sale of nutraceuticals and dietary supplements. Nutrition labelling. European Regulation on Novel Foods and Novel Food Ingredients. Recommended Dietary Allowances (RDA) in Europe	12

REFERENCES:

1. Regulation of Functional Foods and Nutraceuticals: A Global Perspective by ClareM.Hasler (WileyOnlineLibrary)
2. Nutraceutical and Functional Food Regulations in the United States and Around the World by Debasis Bagchi (AcademicPress,Elsevier)
3. <http://www.who.int/publications/guidelines/nutrition/en/>
4. [http://www.europarl.europa.eu/RegData/etudes/STUD/2015/536324/IPOL_STU\(2015\)536324_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2015/536324/IPOL_STU(2015)536324_EN.pdf)

5. Handbook of Nutraceuticals by Yashwant Pathak (CRC Press)
6. Food Regulation: Law, Science, Policy and Practice by Neal D. Fortin (Wiley)
7. Country Specific Guidelines from official websites

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMCEUTICAL REGULATORY AFFAIRS

SEMESTER: II

Subject Name: REGULATORY AFFAIRS PRACTICAL - II

Subject Code: MRA205P

List of Practicals:

1. Case studies on
2. Change Management/Change control. Deviations
3. Corrective & Preventive Actions(CAPA)
4. Documentation of raw materials analysis as per official monographs
5. Preparation of audit checklist for various agencies
6. Preparation of submission to FDA using Ectd software
7. Preparation of submission to EMA using eCTD software
8. Preparation of submission to MHRA using eCTD software
9. Preparation of Biologics License Applications(BLA)
10. Preparation of documents required for Vaccine Product Approval
11. Comparison of clinical trial application requirements of US, EU and India of Biologics
12. Preparation of Checklist for Registration of Blood and Blood Products
13. Registration requirement comparison study in 5 emerging markets (WHO) and preparing check list for market authorization
14. Registration requirement comparison study in emerging markets (BRICS) and preparing check list for market authorization
15. Registration requirement comparison study in emerging markets (China and South Korea) and preparing check list for market authorization
16. Registration requirement comparison study in emerging markets (ASEAN) and preparing check list for market authorization
17. Registration requirement comparison study in emerging markets(GCC) and preparing check list for market authorization
18. Checklists for 510k and PMA for US market
19. Checklist for CE marking for various classes of devices for EU
20. STED Application for Class III Devices
21. Audit Checklist for Medical Device Facility
22. Clinical Investigation Plan for Medical Devices

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

SEMESTER: III

Subject Name: RESEARCH METHODOLOGY, BIOSTATISTICS AND IPR

Subject Code: MRM301T

Sr No	Course Contents	Total Hrs
1	General Research Methodology General Research Methodology: Research, objective, requirements, practical difficulties, Review of literature: Use of Library, books and journals-Medlines-Internet, and reprints of articles as a source for Literature survey. Selecting a problem and preparing Research proposals. The Research Report, Paper writing/ thesis writing, Different parts of the Research paper/Thesis Presentation oral/poster presentation) Importance, types, different skills, content, format of model, Poster, Gestures, eye contact, facial expressions, stage fright, volume- pitch, speed, pause & language, Visual aids & seating, Questionnaire. Sources for procurement research grants –National/ international agencies, Government and private bodies	12
2	Experimental Design (15 hours) Terminology and definitions related to experimental design Study design, types of studies, strategies to eliminate errors/bias, controls, randomization, crossover design, placebo, blinding techniques Sampling Designs: Introduction, types of sample designs, steps, criteria of selection, characteristics, random sampling, drop outs. Advantage and disadvantage of conventional design over experimental design. Basic steps in experimental design. Screening Designs: Screening of factors, General properties for independent factor selected for experimental design, Fractional factorial design(FFD): Purpose advantage and disadvantage of fractional factorial design, Concept of Aliased Effects and Design Aliasing Structure and constructing FFD Analysis of fractional factorial design: Concept of Design Resolution for FFD Case study of factorial design Plackett–Burman designs: Purpose advantage and disadvantage and construction of matrix , Comparison between placket-Burman and FFD design, Case study Full factorial design Optimization techniques and various method of optimization Introduction to contour plots Introduction of repose surface design: Classification Characteristic of design Matrix and analysis of design with case study	15

	<p>Evolution of full and reduced mathematical models in experimental designs</p> <p>Central composite designs</p> <p>Taguchi and mixture design</p> <p>Application of experimental design in pharmacology for reduction of animal</p>	
3	<p>Biostatistics</p> <p>Definition, application, statistical tests of significance, type of significance tests, parametric tests (students “t” test, ANOVA, Correlation coefficient, regression), non-parametric tests (wilcoxon rank tests, analysis of variance, correlation, chi square test, Kruskal Wallis test, Mann Whitney U test), null hypothesis, P values, degree of freedom, interpretation of P values, post hoc tests for parametric and non-parametric data (Dunnett’s test, Tukey’s test, Dunn’s test)</p>	8
4	<p>Regulatory perspectives of Medical research</p> <p>History of medical research (Nuremberg code, The declaration of Helsinki), initiation of ICH-GCP guidelines, advantages of ICH-GCP, core principles of ICH -GCP guidelines, Ethical Committee: Institutional Review Board, Ethical Guidelines by ICMR for Biomedical Research and Human Participants (ethical issues- informed consent process, confidentiality, payments, conflict of interest, vulnerable participants), Schedule Y, Preparation of clinical protocol, Investigator Brochure, Case Report Forms</p>	10
5	<p>CPCSEA guidelines for laboratory animal facility</p> <p>Objective and functions of IAEC, background and process of evolution of guidelines, statutory provisions regarding scientific experiments of animals, CPCSEA guidelines for animal experimentation and laboratory animal facility 2015, care and handling of animals, concept of 4 R, protocol preparation for Preclinical studies (Form B)</p>	5
6	<p>IPR and Patents</p> <p>Patents: Definition, Need for patenting, scope and importance of patents, Types of Patents, Condition to be satisfied by an invention to be patentable, Introduction to patent search and important websites, The essential elements of patents, Guidelines for preparations of laboratory notebook, non-obviousness in patents, Drafting of patent claims, important patent related websites. Copyrights and Trademark: Brief introduction to trademark protection and WTO patents, Introduction to “The Patents Act 1970” and “The Patents Rule 2003”, with special emphasis on the forms to be submitted along with a patent application</p>	10

REFERENCES:

1. Research Methodology by C.R. Kothari
2. Compendium of CPCSEA 2018
3. Presentation skills - Michael Hallon- Indian Society for Institute education
4. Pharmaceutics Statistics by Sanford Bolton, Charles Bon
5. Patent laws, By P. Narayan. Eastern law house publications
6. Pharmaceutical Experimental Design By Gareth Lewis and Didier Mathieu
7. www.ipindia.nic.in, www.uspto.gov
8. www.cpcsea.nic.in
9. www.icmr.nic.in

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm SEMESTER: I

Subject Name: MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES

Subject Code: MAT101T

Scope: This subject deals with various advanced analytical instrumental techniques for identification, characterization and quantification of drugs. Instruments dealt are NMR, Mass spectrometer, IR, HPLC, GC etc. .

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

1. Chemicals and Excipients
2. The analysis of various drugs in single and combination dosage forms
3. Theoretical and practical skills of the instruments

Sr No	Course Contents	Total Hrs
1	UV-Visible spectroscopy: Introduction, Theory, Laws, Instrumentation associated with UV-Visible spectroscopy, Choice of solvents and solvent effect and Applications of UVVisible Spectroscopy IR spectroscopy: Theory, Modes of Molecular vibrations, Sample handling, Instrumentation of Dispersive and Fourier - Transform IR Spectrometer, Factors affecting vibrational frequencies and Applications of IR spectroscopy Spectrofluorimetry: Theory of Fluorescence, Factors affecting fluorescence, Quenchers, Instrumentation and Applications of fluorescence spectrophotometer Flame emission spectroscopy and Atomic absorption spectroscopy: Principle, Instrumentation, Interferences and Applications	11
2	NMR spectroscopy: Quantum numbers and their role in NMR, Principle, Instrumentation, Solvent requirement in NMR, Relaxation process, NMR signals in various compounds, Chemical shift, Factors influencing chemical shift, Spin-Spin coupling, Coupling constant, Nuclear magnetic double resonance, Brief outline of principles of FT-NMR and ¹³ C NMR. Applications of NMR spectroscopy	10
3	Mass Spectroscopy: Principle, Theory, Instrumentation of Mass Spectroscopy, Different types of ionization like electron impact, chemical, field, FAB and MALDI, APCI, ESI, APPI Analyzers of Quadrupole and Time of Flight, Mass fragmentation and its rules, Meta stable ions, Isotopic peaks and Applications of Mass Spectroscopy	10
4	Chromatography: Principle, apparatus, instrumentation, chromatographic parameters, factors affecting resolution and applications of the following: a) Paper chromatography b) Thin Layer chromatography c) Ion exchange chromatography d) Column chromatography e) Gas chromatography f) High Performance Liquid chromatography g) Affinity chromatography	11
5	a. Electrophoresis: Principle, Instrumentation, Working conditions, factors affecting separation and applications of the following: a) Paper electrophoresis b) Gel electrophoresis c) Capillary electrophoresis d) Zone electrophoresis e) Moving boundary electrophoresis f) Iso electric focusing b. X ray Crystallography: Production of X rays, Different X ray diffraction methods, Bragg's law, Rotating crystal technique, X ray powder technique, Types of crystals and applications of Xray diffraction.	9

6	Potentiometry: Principle, thermal transitions and instrumentation (heat flux and power compensation and designs) working, Ion selective Electrodes and Application of potentiometry. Thermal Analysis: Polymer behavior, factors affecting and instrumentation, and working, application of TGA	9
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REFERENCES:

1. Spectrometric Identification of Organic compounds - Robert M Silverstein, Sixth edition, John Wiley & Sons, 2004.
2. Principles of Instrumental Analysis - Douglas A Skoog, F. James Holler, Timothy A. Nieman, 5th edition, Eastern press, Bangalore, 1998.
3. Instrumental methods of analysis – Willards, 7th edition, CBS publishers.
4. Practical Pharmaceutical Chemistry – Beckett and Stenlake, Vol II, 4th edition, CBS Publishers, New Delhi, 1997.
5. Organic Spectroscopy - William Kemp, 3rd edition, ELBS, 1991.
6. Quantitative Analysis of Drugs in Pharmaceutical formulation - P D Sethi, 3rd Edition, CBS Publishers, New Delhi, 1997.
7. Pharmaceutical Analysis- Modern methods – Part B - J W Munson, Volume 11, Marcel Dekker Series

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: I

Subject Name: QUALITY MANAGEMENT SYSTEMS

Subject Code: MQA102T

Scope: This course deals with the various aspects of quality control and quality assurance aspects of pharmaceutical industries. It covers the important aspects like cGMP, QC tests, documentation, quality certifications, GLP and regulatory affairs.

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

1. Understand the cGMP aspects in a pharmaceutical industry
2. To appreciate the importance of documentation
3. To understand the scope of quality certifications applicable to Pharmaceutical industries
4. To understand the responsibilities of QA & QC departments.

Sr No	Course Contents	Total Hrs
1	Introduction to Quality: Evolution of Quality, Definition of Quality, Dimensions of Quality Quality as a Strategic Decision: Meaning of strategy and strategic quality management, mission and vision statements, quality policy, Quality objectives, strategic planning and implementation, McKinsey 7s model, Competitive analysis, Management commitment to quality Customer Focus: Meaning of customer and customer focus, Classification of customers, Customer focus, Customer perception of quality, Factors affecting customer perception, Customer requirements, Meeting customer needs and expectations, Customer satisfaction and Customer delight, Handling customer complaints, Understanding customer behavior, concept of internal and external customers. Case studies. Cost of Quality: Cost of quality, Categories of cost of Quality, Models of cost of quality, Optimising costs, Preventing cost of quality.	12
2	Pharmaceutical quality Management: Basics of Quality Management, Total Quality Management (TQM), Principles of Six sigma, ISO 9001:2008, 9001:2015, ISO 14001:2004, Pharmaceutical Quality Management – ICH Q10, Knowledge management, Quality Metrics, Operational Excellence and Quality Management Review. OSHAS guidelines, NABL certification and accreditation, CFR-21 part 11, WHO-GMP requirements.	12
3	Six System Inspection model: Quality Management system, Production system, Facility and Equipment system, Laboratory control system, Materials system, Packaging and labeling system. Concept of self inspection. Quality systems: Change Management/ Change control. Deviations, Out of Specifications (OOS), Out of Trend (OOT), Complaints - evaluation and handling, Investigation and determination of root cause, Corrective & Preventive Actions (CAPA), Returns and Recalls, Vendor Qualification, Annual Product Reviews, Batch Review and Batch Release. Concept of IPQC, area clearance/ Line clearance.	12

4	Drug Stability: ICH guidelines for stability testing of drug substances and drug products. Study of ICH Q8, Quality by Design and Process development report Quality risk management: Introduction, risk assessment, risk control, risk review, risk management tools, HACCP, risk ranking and filtering according to ICH Q9 guidelines.	12
5	Statistical Process control (SPC): Definition and Importance of SPC, Quality measurement in manufacturing, Statistical control charts - concepts and general aspects, Advantages of statistical control, Process capability, Estimating Inherent or potential capability from a control chart analysis, Measuring process control and quality improvement, Pursuit of decreased process variability.	8
6	Regulatory Compliance through Quality Management and development of Quality Culture Benchmarking: Definition of benchmarking, Reasons for benchmarking, Types of Benchmarking, Benchmarking process, Advantages of benchmarking, Limitations of benchmarking.	4

REFERENCES:

1. Implementing Juran's Road Map for Quality Leadership: Benchmarks and Results, By Al Endres, Wiley, 2000
2. Understanding, Managing and Implementing Quality: Frameworks, Techniques and Cases, By Jiju Antony; David Preece, Routledge, 2002
3. Organizing for High Performance: Employee Involvement, TQM, Reengineering, and Knowledge Management in the Fortune 1000: The CEO Report By Edward E. Lawler; Susan Albers Mohrman; George Benson, Jossey-Bass, 2001
4. Corporate Culture and the Quality Organization By James W. Fairfield- Sonn, Quorum Books, 2001
5. The Quality Management Sourcebook: An International Guide to Materials and Resources By Christine Avery; Diane Zabel, Routledge, 1997
6. The Quality Toolbox, Second Edition, Nancy R. Tague, ASQ Publications
7. Juran's Quality Handbook, Sixth Edition, Joseph M. Juran and Joseph A. De Feo, ASQ Publications
8. Root Cause Analysis, The Core of Problem Solving and Corrective Action, Duke Okes, 2009, ASQ Publications.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: I

Subject Name: QUALITY CONTROL AND QUALITY ASSURANCE

Subject Code: MQA103T

Scope: This course is designed to impart fundamental knowledge and concepts about various quality management principles and systems utilized in the manufacturing industry. It also aids in understanding the quality evaluation in the pharmaceutical industries.

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

1. The importance of quality
2. ISO management systems
3. Tools for quality improvement
4. Analysis of issues in quality
5. Quality evaluation of pharmaceuticals
6. Stability testing of drug and drug substances
7. Statistical approaches for quality

Sr No	Course Contents	Total Hrs
1	Introduction: Concept and evolution and scopes of Quality Control and Quality Assurance, Good Laboratory Practice, GMP, Overview of ICH Guidelines - QSEM, with special emphasis on Qseries guidelines. Good Laboratory Practices: Scope of GLP, Definitions, Quality assurance unit, protocol for conduct of non clinical testing, control on animal house, report preparation and documentation. CPCSEA guidelines.	12
2	cGMP guidelines according to schedule M, USFDA (inclusive of CDER and CBER) Pharmaceutical Inspection Convention(PIC), WHO and EMEA covering: Organization and personnel responsibilities, training, hygiene and personal records, drug industry location, design, construction and plant lay out, maintenance, sanitation, environmental control, utilities and maintenance of sterile areas, control of contamination and Good Warehousing Practice.	12
3	Analysis of raw materials, finished products, packaging materials, in process quality control (IPQC), Developing specification (ICH Q6 and Q3), purchase specifications and maintenance of stores for raw materials. In process quality control and finished products quality control for following dosage forms in Pharma industry according to Indian, US and British pharmacopoeias: tablets, capsules, ointments, suppositories, creams, parenterals, ophthalmic and surgical products (How to refer pharmacopoeias).	12
4	Documentation in pharmaceutical industry: Three tier documentation, Policy, Procedures and Work instructions, and records (Formats), Basic principles- How to maintain, retention and retrieval etc. Standard operating procedures (How to write), Master Batch Record, Batch Manufacturing	12

	Record, Quality audit plan and reports. Specification and test procedures, Protocols and reports. Distribution records. Electronic data handling. Concepts of controlled and uncontrolled documents. Submission documents for regulators DMFs, as Common Technical Document and Electronic Common Technical Documentation (CTD, eCTD). Concept of regulated and non regulated markets.	
5	Manufacturing operations and controls: Sanitation of manufacturing premises, mix-ups and cross contamination, processing of intermediates and bulk products, packaging operations, IPQC, release of finished product, process deviations, charge-in of components, time limitations on production, drug product inspection, expiry date calculation, calculation of yields, production record review, change control, sterile products, aseptic process control, packaging, reprocessing, salvaging, handling of waste and scrap disposal. Introduction, scope and importance of intellectual property rights. Concept of trade mark, copyright and patents.	12

REFERENCES:

1. Quality Assurance Guide by organization of Pharmaceutical Procedures of India, 3rd revised edition, Volume I & II, Mumbai, 1996.
2. Good Laboratory Practice Regulations, 2nd Edition, Sandy Weinberg Vol. 69, Marcel Dekker Series, 1995.
3. Quality Assurance of Pharmaceuticals- A compedium of Guide lines and Related materials Vol I & II, 2nd edition, WHO Publications, 1999.
4. How to Practice GMP's – P P Sharma, Vandana Publications, Agra, 1991.
5. The International Pharmacopoeia – vol I, II, III, IV & V - General Methods of Analysis and Quality specification for Pharmaceutical Substances, Excipients and Dosage forms, 3rd edition, WHO, Geneva, 2005.
6. Good laboratory Practice Regulations – Allen F. Hirsch, Volume 38, Marcel Dekker Series, 1989.
7. ICH guidelines
8. ISO 9000 and total quality management
9. The drugs and cosmetics act 1940 – Deshpande, Nilesh Gandhi, 4th edition, Susmit Publishers, 2006.
10. QA Manual – D.H. Shah, 1st edition, Business Horizons, 2000.
11. Good Manufacturing Practices for Pharmaceuticals a plan for total quality control – Sidney H. Willig, Vol. 52, 3rd edition, Marcel Dekker Series.
12. Steinborn L. GMP/ISO Quality Audit Manual for Healthcare Manufacturers and Their Suppliers, Sixth Edition, (Volume 1 - With Checklists and Software Package). Taylor & Francis; 2003.
13. Sarker DK. Quality Systems and Controls for Pharmaceuticals. John Wiley & Sons; 2008.
14. Packaging of Pharmaceuticals.
15. Schedule M and Schedule N.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: I

Subject Name: PRODUCT DEVELOPMENT AND TECHNOLOGY TRANSFER

Subject Code: MQA104T

Scope: This deal with technology transfer covers the activities associated with Drug Substance, Drug Product and analytical tests and methods, required following candidate drug selection to completion of technology transfer from R&D to the first receiving site and technology transfer related to post-marketing changes in manufacturing places.

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

1. To understand the new product development process
2. To understand the necessary information to transfer technology from R&D to actual manufacturing by sorting out various information obtained during R&D
3. To elucidate necessary information to transfer technology of existing products between various manufacturing places

Sr No	Course Contents	Total Hrs
1	Principles of Drug discovery and development: Introduction, Clinical research process. Development and informational content for Investigational New Drugs Application (IND), New Drug Application (NDA), Abbreviated New Drug Application (ANDA), Supplemental New Drug Application (SNDAs), Scale Up Post Approval Changes (SUPAC) and Bulk active chemical Post approval changes (BACPAC), Post marketing surveillance, Product registration guidelines – CDSCO, USFDA	12
2	Pre-formulation studies: Introduction/concept, organoleptic properties, purity, impurity profiles, particle size, shape and surface area. Solubility, Methods to improve solubility of Drugs: Surfactants & its importance, co-solvency. Techniques for the study of Crystal properties and polymorphism. Pre-formulation protocol, Stability testing during product development	12
3	Pilot plant scale up: Concept, Significance, design, layout of pilot plant scale up study, operations, large scale manufacturing techniques (formula, equipment, process, stability and quality control) of solids, liquids, semisolid and parenteral dosage forms. New era of drug products: opportunities and challenges.	12
4	Pharmaceutical packaging: Pharmaceutical dosage form and their packaging requirements, Pharmaceutical packaging materials, Medical device packaging, Enteral Packaging, Aseptic packaging systems, Container closure systems, Issues facing modern drug packaging, Selection and evaluation of Pharmaceutical packaging materials. Quality control test: Containers, closures and secondary packing materials.	12
5	Technology transfer: Development of technology by R & D, Technology transfer from R & D to production, Optimization and Production, Qualitative and quantitative technology models. Documentation in technology transfer: Development report, technology transfer plan and Exhibit.	12

REFERENCES:

1. The process of new drug discovery and development. I and II Edition (2006) by Charles G. Smith, James T and O. Donnell. CRC Press, Group of Taylor and Francis.
2. Leon Lac Lachman, Herbert A. Liberman, Theory and Practice of Industrial Pharmacy. Marcel Dekker Inc. New York.
3. Sidney H Willing, Murray M, Tuckerman. Williams Hitchings IV, Good manufacturing of pharmaceuticals (A Plan for total quality control) 3rd Edition. Bhalani publishing house Mumbai.
4. Tablets Vol. I, II, III by Leon Lachman, Herbert A. Liberman, Joseph B. Schwartz, 2nd Edn. (1989) Marcel Dekker Inc. New York.
5. Text book of Bio- Pharmaceutics and clinical Pharmacokinetics by Milo Gibaldi, 3rd Edn, Lea & Febriger, Philadelphia.
6. Pharmaceutical product development. Vandana V. Patrevalle. John I. Disouza. Maharukh T.Rustomji. CRC Press, Group of Taylor and Francis.
7. Dissolution, Bioavailability and Bio-Equivalence by Abdou H.M, Mack Publishing company, Eastern Pennsylvania.
8. Remingtons Pharmaceutical Sciences, by Alfonso & Gennaro, 19th Edn.(1995)OO2C Lippincott; Williams and Wilkins A Wolters Kluwer Company, Philadelphia.
9. The Pharmaceutical Sciences; the Pharma Path way 'Pure and applied Pharmacy' by D. A Sawant, Pragathi Books Pvt. Ltd.
10. Pharmaceutical Packaging technology by D.A. Dean. E.R. Evans, I.H. Hall. 1st Edition(Reprint 2006). Taylor and Francis. London and New York.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: I

Subject Name: PHARMACEUTICAL QUALITY ASSURANCE

Subject Code: MQA105P

List of Practicals:

PART A:

1. Analysis of pharmacopoeial compounds and their formulations by UV Vis spectrophotometer
2. Simultaneous estimation of multi component containing formulations by UV spectrophotometry
3. Experiments based on HPLC
4. Experiments based on Gas Chromatography
5. Estimation of riboflavin/quinine sulphate by fluorimetry
6. Estimation of sodium/potassium by flame photometry

PART B:

1. Case studies on
 - a. Total Quality Management
 - b. Six Sigma
 - c. Change Management/ Change control. Deviations,
 - d. Out of Specifications (OOS)
 - e. Out of Trend (OOT)
 - f. Corrective & Preventive Actions (CAPA)
 - g. Deviations
2. Development of Stability study protocol
3. Estimation of process capability
4. In process and finished product quality control tests for tablets, capsules, parenterals and semisolid dosage forms.
6. Assay of raw materials as per official monographs
7. Testing of related and foreign substances in drugs and raw materials
8. To carry out pre formulation study for tablets, parenterals (2 experiment).
9. To study the effect of pH on the solubility of drugs, (1 experiment)
10. Quality control tests for Primary and secondary packaging materials
11. Accelerated stability studies (1 experiment)
12. Improved solubility of drugs using surfactant systems (1 experiment)
13. Improved solubility of drugs using co-solvency method (1 experiment)
14. Determination of Pka and Log p of drugs.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: II

Subject Name: HAZARDS AND SAFETY MANAGEMENT

Subject Code: MQA201T

Scope: This course is designed to convey the knowledge necessary to understand issues related to different kinds of hazard and their management. Basic theoretical and practical discussions integrate the proficiency to handle the emergency situation in the pharmaceutical product development process and provides the principle based approach to solve the complex tribulations.

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

1. Understand about environmental problems among learners.
2. Impart basic knowledge about the environment and its allied problems.
3. Develop an attitude of concern for the industry environment.
4. Ensure safety standards in pharmaceutical industry
5. Provide comprehensive knowledge on the safety management
6. Empower an ideas to clear mechanism and management in different kinds of hazard managements system
7. Teach the method of Hazard assessment, procedure, methodology for provide safe industrial atmosphere.

Sr No	Course Contents	Total Hrs
1	Multidisciplinary nature of environmental studies: Natural Resources, Renewable and non-renewable resources, Natural resources and associated problems, a) Forest resources; b) Water resources; c) Mineral resources; d) Energy resources e) Land resources Ecosystems: Concept of an ecosystem and Structure and function of an ecosystem. Environmental hazards: Hazards based on Air, Water, Soil and Radioisotopes	12
2	Air based hazards: Sources, Types of Hazards, Air circulation maintenance industry for sterile area and non sterile area, Preliminary Hazard Analysis (PHA) Fire protection system: Fire prevention, types of fire extinguishers and critical Hazard management system	12
3	Chemical based hazards: Sources of chemical hazards, Hazards of Organic synthesis, sulphonating hazard, Organic solvent hazard, Control measures for chemical hazards Management of combustible gases, Toxic gases and Oxygen displacing gases management, Regulations for chemical hazard, Management of over-Exposure to chemicals and TLV concept	12
4	Fire and Explosion: Introduction, Industrial processes and hazards potential, mechanical electrical, thermal and process hazards. Safety and hazards regulations, Fire protection system: Fire prevention, types of fire extinguishers and critical Hazard management system mechanical and chemical explosion, multiphase reactions, transport effects and global rates. Preventive and protective management from fires and explosion electricity	12

	passivation, ventilation, and sprinkling, proofing, relief systems-relief valves, flares, scrubbers	
5	Hazard and risk management: Self-protective measures against workplace hazards. Critical training for risk management, Process of hazard management, ICH guidelines on risk assessment and Risk management methods and Tools Factory act and rules, fundamentals of accident prevention, elements of safety programme and safety management, Physicochemical measurements of effluents, BOD, COD, Determination of some contaminants, Effluent treatment procedure, Role of emergency services	12

REFERENCES:

1. Y.K. Sing, Environmental Science, New Age International Pvt, Publishers, Bangalore
2. "Quantitative Risk Assessment in Chemical Process Industries" American Institute of Chemical Industries, Centre for Chemical Process safety.
3. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad- 380 013, India,
4. Hazardous Chemicals: Safety Management and Global Regulations, T.S.S. Dikshith, CRC press

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: II

Subject Name: PHARMACEUTICAL VALIDATION

Subject Code: MQA202T

Scope: The main purpose of the subject is to understand about validation and how it can be applied to industry and thus improve the quality of the products. The subject covers the complete information about validation, types, methodology and application.

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

1. The concepts of calibration, qualification and validation
2. The qualification of various equipments and instruments
3. Process validation of different dosage forms
4. Validation of analytical method for estimation of drugs
5. Cleaning validation of equipments employed in the manufacture of pharmaceuticals.

Sr No	Course Contents	Total Hrs
1	Introduction to validation: Definition of Calibration, Qualification and Validation, Scope, frequency and importance. Difference between calibration and validation. Calibration of weights and measures. Advantages of Validation, scope of Validation, Organization for Validation, Validation Master plan, Types of Validation, Streamlining of qualification & Validation process and Validation Master Plan. Qualification: User requirement specification, Design qualification, Factory Acceptance Test (FAT)/Site Acceptance Test (SAT), Installation qualification, Operational qualification, Performance qualification, Re-Qualification (Maintaining status Calibration Preventive Maintenance, Change management).	10
2	Qualification of manufacturing equipment: Dry Powder Mixers, Fluid Bed and Tray dryers, Tablet Compression (Machine), Dry heat sterilization/Tunnels, Autoclaves, Membrane filtration, Capsule filling machine. Qualification of analytical instruments: UV-Visible spectrophotometer, FTIR, DSC, GC, HPLC, HPTLC, LC-MS	10
3	Qualification of laboratory equipments: Hardness tester, Friability test apparatus, tap density tester, Disintegration tester, Dissolution test apparatus Validation of Utility systems: Pharmaceutical water system & pure steam, HVAC system, Compressed air and nitrogen	10
4	Process Validation: Concept, Process and documentation of Process Validation. Prospective, Concurrent & Retrospective Validation, Re validation criteria, Process Validation of various formulations (Coated tablets, Capsules, Ointment/Creams, Liquid Orals and aerosols.), Aseptic filling: Media fill validation, USFDA guidelines on Process Validation-A life cycle approach. Analytical method validation: General principles, Validation of analytical method as per ICH guidelines and USP	10

5	Cleaning Validation: Cleaning Method development, Validation of analytical method used in cleaning, Cleaning of Equipment, Cleaning of Facilities. Cleaning in place(CIP). Validation of facilities in sterile and non-sterile plant. Computerized system validation: Electronic records and digital signature-21CFR Part 11 and GAMP	10
6	General Principles of Intellectual Property: Concepts of Intellectual Property (IP), Intellectual Property Protection (IPP), Intellectual Property Rights (IPR); Economic importance, mechanism for protection of Intellectual Property –patents, Copyright, Trademark; Factors affecting choice of IP protection; Penalties for violation; Role of IP in pharmaceutical industry; Global ramification and financial implications. Filing a patent applications; patent application forms and guidelines. Types patent applications-provisional and non provisional, PCT and convention patent applications; International patenting requirement procedures and costs; Rights and responsibilities of a patentee; Practical aspects regarding maintaining of a Patent file; Patent infringement meaning and scope. Significance of transfer technology (TOT), IP and ethics-positive and negative aspects of IPP; Societal responsibility, avoiding unethical practices	10

REFERENCES:

1. B. T. Loftus & R. A. Nash, "Pharmaceutical Process Validation", Drugs and Pharm Sci. Series, Vol. 129, 3rd Ed., Marcel Dekker Inc., N.Y.
2. The Theory & Practice of Industrial Pharmacy, 3rd edition, Leon Lachman, Herbert A. Lieberman, Joseph L. Karig, Varghese Publishing House, Bombay
3. Validation Master plan by Terveeks or Deeks, Davis Harwood International publishing
4. Validation of Aseptic Pharmaceutical Processes, 2nd Edition, by Carleton & Agalloco
5. Michael Levin, "Pharmaceutical Process Scale-Up", Drugs and Pharm. Sci. Series, Vol. 157, 2nd Ed., Marcel Dekker Inc., N.Y.
6. Validation Standard Operating Procedures: A Step by Step Guide for Achieving Compliance in the Pharmaceutical, Medical Device, and Biotech Industries, Syed Imtiaz Haider
7. Pharmaceutical Equipment Validation: The Ultimate Qualification Handbook, Phillip A. Cloud, Interpharm Press
8. Validation of Pharmaceutical Processes: Sterile Products, Frederick J. Carlton (Ed.) and James Agalloco (Ed.), Marcel Dekker
9. Analytical Method validation and Instrument Performance Verification by Churg Chan, Heiman Lam, Y.C. Lee, Yue Zhang, Wiley Interscience
10. Huber L. Validation and Qualification in Analytical Laboratories. Informa Healthcare
11. Wingate G. Validating Corporate Computer Systems: Good IT Practice for Pharmaceutical Manufacturers. Interpharm Press
12. LeBlanc DA. Validated Cleaning Technologies for Pharmaceutical Manufacturing. Interpharm Press

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: I

Subject Name: AUDITS AND REGULATORY COMPLIANCE

Subject Code: MQA203T

Scope: This course deals with the understanding and process for auditing in pharmaceutical industries. This subject covers the methodology involved in the auditing process of different in pharmaceutical industries.

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

1. To understand the importance of auditing
2. To understand the methodology of auditing
3. To carry out the audit process
4. To prepare the auditing report
5. To prepare the check list for auditing

Sr No	Course Contents	Total Hrs
1	Introduction: Objectives, Management of audit, Responsibilities, Planning process, information gathering, administration, Classifications of deficiencies	12
2	Role of quality systems and audits in pharmaceutical manufacturing environment: cGMP Regulations, Quality assurance functions, Quality systems approach, Management responsibilities, Resource, Manufacturing operations, Evaluation activities, Transitioning to quality system approach, Audit checklist for drug industries	12
3	Auditing of vendors and production department: Bulk Pharmaceutical Chemicals and packaging material Vendor audit, Warehouse and weighing, Dry Production: Granulation, tableting, coating, capsules, sterile production and packaging	12
4	Auditing of Microbiological laboratory: Auditing the manufacturing process, Product and process information, General areas of interest in the building raw materials, Water, Packaging materials	12
5	Auditing of Quality Assurance and engineering department: Quality Assurance Maintenance, Critical systems: HVAC, Water, Water for Injection systems, ETP	12

REFERENCES:

1. Compliance auditing for Pharmaceutical Manufacturers. Karen Ginsbury and Gil Bismuth, Interpharm/CRC, Boca Raton, London New York, Washington D.C
2. Pharmaceutical Manufacturing Handbook, Regulations and Quality by Shayne Cox Gad. Wiley-Interscience, A John Wiley and sons, Inc., Publications
3. Handbook of microbiological Quality control. Rosamund M.Baird, Norman A.Hodges, Stephen P. Denyar. CRC Press. 2000
4. Laboratory auditing for quality and regulatory compliance. Donald C. Singer, Raluca-loana Stefan, Jacobus F. Van Staden. Taylor and Francis (2005).

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: II

Subject Name: PHARMACEUTICAL MANUFACTURING TECHNOLOGY

Subject Code: MQA204T

Scope: This course is designed to impart knowledge and skills necessary to train the students with the industrial activities during Pharmaceutical Manufacturing.

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

1. The common practice in the pharmaceutical industry developments, plant layout and production planning
2. Will be familiar with the principles and practices of aseptic process technology, non sterile manufacturing technology and packaging technology
3. Have a better understanding of principles and implementation of Quality by design (QbD) and process analytical technology (PAT) in pharmaceutical manufacturing
- 4.

Sr No	Course Contents	Total Hrs
1	Pharmaceutical industry developments: Legal requirements and Licenses for API and formulation industry, Plant location Factors influencing. Plant layout: Factors influencing, Special provisions, Storage spacerequirements,sterile and asepticarea layout. Production planning: General principles, production systems, calculation of standard cost, process planning, routing, loading, scheduling, dispatching of records, production control	12
2	Aseptic process technology: Manufacturing, manufacturing flowcharts, in process-quality control tests for following sterile dosage forms: Ointment, Suspension and Emulsion, Dry powder, Solution (Small Volume & large Volume). Advanced sterile product manufacturing technology : Area planning & environmental control, wall and floor treatment, fixtures and machineries, change rooms, personnel flow, utilities & utilities equipment location, engineering and maintenance. Process Automation in Pharmaceutical Industry: With specific reference to manufacturing of sterile semisolids, Small Volume Parenterals & Large Volume Parenterals (SVP &LVP), Monitoring of Parenteral manufacturing facility, Cleaning in Place (CIP), Sterilization in Place (SIP), Prefilled Syringe, Powdered Jet, Needle Free Injections, and Form Fill Seal Technology (FFS). Lyophilization technology:Principles, process, equipment	12
3	Non sterile manufacturing process technology: Manufacturing, manufacturing flowcharts, in process-quality control tests for following Non-Sterile solid dosage forms: Tablets (compressed & coated),Capsules(Hard &Soft). Advance non-sterile solid product manufacturing technology: Process Automation in Pharmaceutical Industry with specific reference to manufacturing of tablets and coated products, Improved Tablet Production: Tablet production process, granulation and pelletization equipments, continuous and batch mixing, rapid mixing granulators, rota granulators, spheronizers and marumerisers, and other specialized granulation and drying	12

	equipments. Problems encountered. Coating technology: Process, equipments, particle coating, fluidized bed coating, application techniques. Problems encountered	
4	Containers and closures for pharmaceuticals: Types, performance, assuring quality of glass; types of plastics used, Drug plastic interactions, biological tests, modification of plastics by drugs; different types of closures and closure liners; film wrapper; blister packs; bubble packs; shrink packaging; foil / plastic pouches, bottle seals, tape seals, breakable seals and sealed tubes; quality control of packaging material and filling equipment, flexible packaging, product package compatibility, transit worthiness of package, Stability aspects of packaging. Evaluation of stability of packaging material	12
5	Quality by design (QbD) and process analytical technology (PAT): Current approach and its limitations. Why QbD is required, Advantages, Elements of QbD, Terminology: QTPP, CMA, CQA, CPP, RLD, Design space, Design of Experiments, Risk Assessment and mitigation/minimization. Quality by Design, Formulations by Design, QbD for drug products, QbD for Drug Substances, QbD for Excipients, Analytical QbD. FDA initiative on process analytical technology. PAT as a driver for improving quality and reducing costs: quality by design (QbD), QA, QC and GAMP. PAT guidance, standards and regulatory requirements	12

REFERENCES:

1. Lachman L, Lieberman HA, Kanig JL. The theory and practice of industrial rd pharmacy, 3 ed., Varghese Publishers, Mumbai 1991
2. Sinko PJ. Martin's physical pharmacy and pharmaceutical sciences, 5 ed., B.I. Publications Pvt. Ltd, Noida, 2006
3. Lieberman HA, Lachman L, Schwartz JB. Pharmaceutical dosageforms: nd tablets Vol. I-III, 2 ed., CBS Publishers & distributors, New Delhi, 2005
4. Banker GS, Rhodes CT. Modern Pharmaceutics, 4 Inc, New York, 2005
5. Sidney H Willing, Murray M, Tuckerman. Williams Hitchings IV, Good manufacturing of pharmaceuticals (A Plan for total quality control) 3rd Edition. Bhalani publishing house Mumbai
6. Indian Pharmacopoeia. Controller of Publication. Delhi, 1996
7. British Pharmacopoeia. British Pharmacopoeia Commission Office, London, 2008
8. United States Pharmacopoeia. United States Pharmacopeial Convention, Inc, USA, 2003.
9. Dean D A, Evans E R and Hall I H. Pharmaceutical Packaging Technology. London, Taylor & Francis, 1st Edition. UK
10. Edward J Bauer. Pharmaceutical Packaging Handbook. 2009. Informa Healthcare USA Inc. New York
11. Shaybe Cox Gad. Pharmaceutical Manufacturing Handbook. John Wiley and Sons, New Jersey, 2008

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

PHARMACEUTICAL QUALITY ASSURANCE

SEMESTER: II

Subject Name: PHARMACEUTICAL QUALITY ASSURANCE

Subject Code: MQA205P

List of Practicals:

1. Organic contaminants residue analysis by HPLC
2. Estimation of Metallic contaminants by Flame photometer
3. identification of antibiotic residue by TLC
4. Estimation of Hydrogen Sulphide in Air
5. Estimation of Chlorine in Work Environment
6. Sampling and analysis of SO₂ using Colorimetric method
7. Qualification of following Pharma equipment
 - A) Autoclave
 - B) Hot air oven
 - C) Powder Mixer (Dry)
 - D) Tablet Compression Machine
8. Validation of an analytical method for a drug
9. Validation of a processing area
10. Qualification of at least two analytical instruments
11. Cleaning validation of one equipment
12. Qualification of Pharmaceutical Testing Equipment (Dissolution testing apparatus, Friability Apparatus, Disintegration Tester)
13. Check list for Bulk Pharmaceutical Chemicals vendors
14. Check list for tableting production
15. Check list for sterile production area
16. Check list for Water for injection
17. Design of plant layout: Sterile and non-sterile
18. Case study on application of QbD
19. Case study on application of PAT

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

SEMESTER: III

Subject Name: RESEARCH METHODOLOGY, BIOSTATISTICS AND IPR

Subject Code: MRM301T

Sr No	Course Contents	Total Hrs
1	General Research Methodology General Research Methodology: Research, objective, requirements, practical difficulties, Review of literature: Use of Library, books and journals-Medlines-Internet, and reprints of articles as a source for Literature survey. Selecting a problem and preparing Research proposals. The Research Report, Paper writing/ thesis writing, Different parts of the Research paper/Thesis Presentation oral/poster presentation) Importance, types, different skills, content, format of model, Poster, Gestures, eye contact, facial expressions, stage fright, volume- pitch, speed, pause & language, Visual aids & seating, Questionnaire. Sources for procurement research grants –National/ international agencies, Government and private bodies	12
2	Experimental Design (15 hours) Terminology and definitions related to experimental design Study design, types of studies, strategies to eliminate errors/bias, controls, randomization, crossover design, placebo, blinding techniques Sampling Designs: Introduction, types of sample designs, steps, criteria of selection, characteristics, random sampling, drop outs. Advantage and disadvantage of conventional design over experimental design. Basic steps in experimental design. Screening Designs: Screening of factors, General properties for independent factor selected for experimental design, Fractional factorial design(FFD): Purpose advantage and disadvantage of fractional factorial design, Concept of Aliased Effects and Design Aliasing Structure and constructing FFD Analysis of fractional factorial design: Concept of Design Resolution for FFD Case study of factorial design Plackett–Burman designs: Purpose advantage and disadvantage and construction of matrix , Comparison between placket-Burman and FFD design, Case study Full factorial design Optimization techniques and various method of optimization Introduction to contour plots Introduction of repose surface design: Classification Characteristic of design Matrix and analysis of design with case study	15

	<p>Evolution of full and reduced mathematical models in experimental designs</p> <p>Central composite designs</p> <p>Taguchi and mixture design</p> <p>Application of experimental design in pharmacology for reduction of animal</p>	
3	<p>Biostatistics</p> <p>Definition, application, statistical tests of significance, type of significance tests, parametric tests (students “t” test, ANOVA, Correlation coefficient, regression), non-parametric tests (wilcoxon rank tests, analysis of variance, correlation, chi square test, Kruskal Wallis test, Mann Whitney U test), null hypothesis, P values, degree of freedom, interpretation of P values, post hoc tests for parametric and non-parametric data (Dunnett’s test, Tukey’s test, Dunn’s test)</p>	8
4	<p>Regulatory perspectives of Medical research</p> <p>History of medical research (Nuremberg code, The declaration of Helsinki), initiation of ICH-GCP guidelines, advantages of ICH-GCP, core principles of ICH -GCP guidelines, Ethical Committee: Institutional Review Board, Ethical Guidelines by ICMR for Biomedical Research and Human Participants (ethical issues- informed consent process, confidentiality, payments, conflict of interest, vulnerable participants), Schedule Y, Preparation of clinical protocol, Investigator Brochure, Case Report Forms</p>	10
5	<p>CPCSEA guidelines for laboratory animal facility</p> <p>Objective and functions of IAEC, background and process of evolution of guidelines, statutory provisions regarding scientific experiments of animals, CPCSEA guidelines for animal experimentation and laboratory animal facility 2015, care and handling of animals, concept of 4 R, protocol preparation for Preclinical studies (Form B)</p>	5
6	<p>IPR and Patents</p> <p>Patents: Definition, Need for patenting, scope and importance of patents, Types of Patents, Condition to be satisfied by an invention to be patentable, Introduction to patent search and important websites, The essential elements of patents, Guidelines for preparations of laboratory notebook, non-obviousness in patents, Drafting of patent claims, important patent related websites. Copyrights and Trademark: Brief introduction to trademark protection and WTO patents, Introduction to “The Patents Act 1970” and “The Patents Rule 2003”, with special emphasis on the forms to be submitted along with a patent application</p>	10

REFERENCES:

1. Research Methodology by C.R. Kothari
2. Compendium of CPCSEA 2018
3. Presentation skills - Michael Hallon- Indian Society for Institute education
4. Pharmaceutics Statistics by Sanford Bolton, Charles Bon
5. Patent laws, By P. Narayan. Eastern law house publications
6. Pharmaceutical Experimental Design By Gareth Lewis and Didier Mathieu
7. www.ipindia.nic.in, www.uspto.gov
8. www.cpcsea.nic.in
9. www.icmr.nic.in

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm SEMESTER: I

Subject Name: MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES

Subject Code: MAT101T

Scope: This subject deals with various advanced analytical instrumental techniques for identification, characterization and quantification of drugs. Instruments dealt are NMR, Mass spectrometer, IR, HPLC, GC etc. .

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

1. Chemicals and Excipients
2. The analysis of various drugs in single and combination dosage forms
3. Theoretical and practical skills of the instruments

Sr No	Course Contents	Total Hrs
1	UV-Visible spectroscopy: Introduction, Theory, Laws, Instrumentation associated with UV-Visible spectroscopy, Choice of solvents and solvent effect and Applications of UVVisible Spectroscopy IR spectroscopy: Theory, Modes of Molecular vibrations, Sample handling, Instrumentation of Dispersive and Fourier - Transform IR Spectrometer, Factors affecting vibrational frequencies and Applications of IR spectroscopy Spectrofluorimetry: Theory of Fluorescence, Factors affecting fluorescence, Quenchers, Instrumentation and Applications of fluorescence spectrophotometer Flame emission spectroscopy and Atomic absorption spectroscopy: Principle, Instrumentation, Interferences and Applications	11
2	NMR spectroscopy: Quantum numbers and their role in NMR, Principle, Instrumentation, Solvent requirement in NMR, Relaxation process, NMR signals in various compounds, Chemical shift, Factors influencing chemical shift, Spin-Spin coupling, Coupling constant, Nuclear magnetic double resonance, Brief outline of principles of FT-NMR and ¹³ C NMR. Applications of NMR spectroscopy	10
3	Mass Spectroscopy: Principle, Theory, Instrumentation of Mass Spectroscopy, Different types of ionization like electron impact, chemical, field, FAB and MALDI, APCI, ESI, APPI Analyzers of Quadrupole and Time of Flight, Mass fragmentation and its rules, Meta stable ions, Isotopic peaks and Applications of Mass Spectroscopy	10
4	Chromatography: Principle, apparatus, instrumentation, chromatographic parameters, factors affecting resolution and applications of the following: a) Paper chromatography b) Thin Layer chromatography c) Ion exchange chromatography d) Column chromatography e) Gas chromatography f) High Performance Liquid chromatography g) Affinity chromatography	11
5	a. Electrophoresis: Principle, Instrumentation, Working conditions, factors affecting separation and applications of the following: a) Paper electrophoresis b) Gel electrophoresis c) Capillary electrophoresis d) Zone electrophoresis e) Moving boundary electrophoresis f) Iso electric focusing b. X ray Crystallography: Production of X rays, Different X ray diffraction methods, Bragg's law, Rotating crystal technique, X ray powder technique, Types of crystals and applications of Xray diffraction.	9

6	Potentiometry: Principle, thermal transitions and instrumentation (heat flux and power compensation and designs) working, Ion selective Electrodes and Application of potentiometry. Thermal Analysis: Polymer behavior, factors affecting and instrumentation, and working, application of TGA	9
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REFERENCES:

1. Spectrometric Identification of Organic compounds - Robert M Silverstein, Sixth edition, John Wiley & Sons, 2004.
2. Principles of Instrumental Analysis - Douglas A Skoog, F. James Holler, Timothy A. Nieman, 5th edition, Eastern press, Bangalore, 1998.
3. Instrumental methods of analysis – Willards, 7th edition, CBS publishers.
4. Practical Pharmaceutical Chemistry – Beckett and Stenlake, Vol II, 4th edition, CBS Publishers, New Delhi, 1997.
5. Organic Spectroscopy - William Kemp, 3rd edition, ELBS, 1991.
6. Quantitative Analysis of Drugs in Pharmaceutical formulation - P D Sethi, 3rd Edition, CBS Publishers, New Delhi, 1997.
7. Pharmaceutical Analysis- Modern methods – Part B - J W Munson, Volume 11, Marcel Dekker Series

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm PHARMACEUTICS SEMESTER: I

Subject Name: DRUG DELIVERY SYSTEMS

Subject Code: MPH102T

SCOPE: This course is designed to impart knowledge on the area of advances in novel drug delivery systems

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

1. The various approaches for development of novel drug delivery systems.
2. The criteria for selection of drugs and polymers for the development of delivering system
3. The formulation and evaluation of Novel drug delivery systems.

Sr.No	Course content	Total Hrs
1.	Sustained Release(SR) and Controlled Release (CR) formulations: Introduction & basic concepts, advantages/ disadvantages, factors influencing, Physicochemical & biological approaches for SR/CR formulation, Mechanism of Drug Delivery from SR/CR formulation. Polymers: introduction, definition, classification, properties and application Dosage Forms for Personalized Medicine: Introduction, Definition, Pharmacogenetics, Categories of Patients for Personalized Medicines: Customized drug delivery systems, Bioelectronic Medicines, 3D printing of pharmaceuticals, Telepharmacy.	10
2.	Rate Controlled Drug Delivery Systems: Principles & Fundamentals, Types, Activation; Modulated Drug Delivery Systems; Mechanically activated, pH activated, Enzyme activated, and Osmotic activated Drug Delivery Systems Feedback regulated Drug Delivery Systems; Principles & Fundamentals	10
3.	Gastro-Retentive Drug Delivery Systems: Principle, concepts advantages and disadvantages, Modulation of GI transit time approaches to extend GI transit. Buccal Drug Delivery Systems: Principle of muco adhesion, advantages and disadvantages, Mechanism of drug permeation, Methods of formulation and its evaluations.	10
4.	Ocular Drug Delivery Systems: Barriers of drug permeation, Methods to overcome barriers.	6
5.	Transdermal Drug Delivery Systems: Structure of skin and barriers, Penetration enhancers, Transdermal Drug Delivery Systems, Formulation and evaluation	10
6	Protein and Peptide Delivery: Barriers for protein delivery. Formulation and Evaluation of delivery systems of proteins and other macromolecules.	8
7	Vaccine delivery systems: Vaccines, uptake of antigens, single shot vaccines, mucosal and transdermal delivery of vaccines.	6

REFERENCES:

1. Y W. Chien, Novel Drug Delivery Systems, 2nd edition, revised and expanded, Marcel Dekker, Inc., New York, 1992.

2. Robinson, J. R., Lee V. H. L, Controlled Drug Delivery Systems, Marcel Dekker, Inc., New York, 1992.
3. Encyclopedia of controlled delivery, Editor- Edith Mathiowitz, Published by WileyInterscience Publication, John Wiley and Sons, Inc, New York! Chichester/Weinheim
4. N.K. Jain, Controlled and Novel Drug Delivery, CBS Publishers & Distributors, New Delhi, First edition 1997 (reprint in 2001).
5. S.P.Vyas and R.K.Khar, Controlled Drug Delivery - concepts and advances, Vallabh Prakashan, New Delhi, First edition 2002

JOURNALS:

1. Indian Journal of Pharmaceutical Sciences (IPA)
2. Indian drugs (IDMA)
3. Journal of controlled release (Elsevier Sciences) desirable
4. Drug Development and Industrial Pharmacy (Marcel & Decker) desirable

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm PHARMACEUTICS SEMESTER: I

Subject Name: MODERN PHARMACEUTICS

Subject Code: MPH103T

SCOPE: Course designed to impart advanced knowledge and skills required to learn various aspects and concepts at pharmaceutical industries

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

1. The elements of preformulation studies.
2. The Active Pharmaceutical Ingredients and Generic drug Product development
3. Industrial Management and GMP Considerations
4. Optimization Techniques & Pilot Plant Scale Up Techniques
5. Stability Testing, sterilization process & packaging of dosage forms.

Sr.No	Course content	Total Hrs
1.	a. Preformation Concepts – Drug Excipient interactions – different methods, kinetics of stability, Stability testing. Theories of dispersion and pharmaceutical Dispersion (Emulsion and Suspension, SMEDDS) preparation and stability Large and small volume parental – physiological and formulation consideration, Manufacturing and evaluation. b. Optimization techniques in Pharmaceutical Formulation: Concept and parameters of optimization, Optimization techniques in pharmaceutical formulation and processing. Statistical design, Response surface method, Contour designs, Factorial designs and application in formulation	10 10
2.	Validation : Introduction to Pharmaceutical Validation, Scope & merits of Validation, Validation and calibration of Master plan, ICH & WHO guidelines for calibration and validation of equipments, Validation of specific dosage form, Types of validation. Government regulation, Manufacturing Process Model, URS, DQ, IQ, OQ & P.Q. of facilities.	10
3.	cGMP & Industrial Management: Objectives and policies of current good manufacturing practices, layout of buildings, services, equipments and their maintenance Production management: Production organization, , materials management, handling and transportation, inventory management and control, production and planning control, Sales forecasting, budget and cost control, industrial and personal relationship. Concept of Total Quality Management.	10
4.	Compression and compaction: Physics of tablet compression, compression, consolidation, effect of friction, distribution of forces, compaction profiles. Solubility	10
5.	Study of consolidation parameters; Diffusion parameters, Dissolution parameters and Pharmacokinetic parameters, Heckel plots, Similarity factors – f ₂ and f ₁ , Higuchi and Peppas plot, Linearity Concept of significance, Standard deviation , Chi square test, students T-test , ANOVA test	10

REFERENCES:

1. Theory and Practice of Industrial Pharmacy By Lachmann and Libermann
2. Pharmaceutical dosage forms: Tablets Vol. 1-3 by Leon Lachmann.
3. Pharmaceutical Dosage forms: Disperse systems, Vol, 1-2; By Leon Lachmann.
4. Pharmaceutical Dosage forms: Parenteral medications Vol. 1-2; By Leon Lachmann.
5. Modern Pharmaceutics; By Gillbert and S. Banker.
6. Remington's Pharmaceutical Sciences.
7. Advances in Pharmaceutical Sciences Vol. 1-5; By H.S. Bean & A.H.Beckett.
8. Physical Pharmacy; By Alfred martin
9. Bentley's Textbook of Pharmaceutics – by Rawlins.
10. Good manufacturing practices for Pharmaceuticals: A plan for total quality control, Second edition; By Sidney H. Willig.
11. Quality Assurance Guide; By Organization of Pharmaceutical producers of India.
12. Drug formulation manual; By D.P.S. Kohli and D.H.Shah. Eastern publishers, New Delhi.
13. How to practice GMPs; By P.P.Sharma. Vandhana Publications, Agra.
14. Pharmaceutical Process Validation; By Fra. R. Berry and Robert A. Nash.
15. Pharmaceutical Preformulations; By J.J. Wells.
16. Applied production and operations management; By Evans, Anderson, Sweeney and Williams.
17. Encyclopaedia of Pharmaceutical technology, Vol I – III.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm PHARMACEUTICS SEMESTER: I

Subject Name: REGULATORY AFFAIRS

Subject Code: MPH104T

SCOPE: Course designed to impart advanced knowledge and skills required to learn the concept of generic drug and their development, various regulatory filings in different countries, different phases of clinical trials and submitting regulatory documents : filing process of IND, NDA and ANDA

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

1. The Concepts of innovator and generic drugs, drug development process.
2. The Regulatory guidance's and guidelines for filing and approval Process
3. Preparation of Dossiers and their submission to regulatory agencies in different countries
4. Post approval regulatory requirements for actives and drug products
5. Submission of global documents in CTD/ eCTD formats
6. Clinical trials requirements for approvals for conducting clinical trials
7. Pharmacovigilance and process of monitoring in clinical trials.

Sr.No	Course content	Total Hrs
1.	a. Documentation in Pharmaceutical industry: Master formula record, DMF (Drug Master File), distribution records. Generic drugs product development Introduction , Hatch- Waxman act and amendments, CFR (CODE OF FEDERAL REGULATION) ,drug product performance, in-vitro, ANDA regulatory approval process, NDA approval process, BE and drug product assessment, in –vivo, scale up process approval changes, post marketing surveillance, outsourcing BA and BE to CRO. b. Regulatory requirement for product approval: API, biologics, novel, therapies obtaining NDA, ANDA for generic drugs ways and means of US registration for foreign drugs	15
2.	CMC, post approval regulatory affairs. Regulation for combination Products and medical devices.CTD and ECTD format, industry and FDA liaison. ICH - Guidelines of ICH-Q, S E, M. Regulatory requirements of EU, MHRA, TGA and ROW countries.	15
3.	Non clinical drug development: Global submission of IND, NDA, ANDA. Investigation of medicinal products dossier, dossier (IMPD) and investigator brochure (IB).	15
4.	Clinical trials: Developing clinical trial protocols. Institutional review board/ independent ethics committee Formulation and working procedures informed Consent process and procedures. HIPAA- new, requirement to clinical study process, pharmacovigilance safety monitoring in clinical trials.	15

REFERENCES:

1. Generic Drug Product Development, Solid Oral Dosage forms, Leon Shargel and IsaderKaufer,Marcel Dekker series, Vol.143
2. The Pharmaceutical Regulatory Process, Second Edition Edited by Ira R. Berry and Robert P.Martin, Drugs and the Pharmaceutical Sciences,Vol.185, Informa Health care Publishers.

3. New Drug Approval Process: Accelerating Global Registrations By Richard A Guarino, MD, 5th edition, Drugs and the Pharmaceutical Sciences, Vol. 190.
4. Guidebook for drug regulatory submissions / Sandy Weinberg. By John Wiley & Sons, Inc.
5. FDA regulatory affairs: a guide for prescription drugs, medical devices, and biologics/edited By Douglas J. Pisano, David Mantus.
6. Clinical Trials and Human Research: A Practical Guide to Regulatory Compliance By Fay A. Rozovsky and Rodney K. Adams
7. www.ich.org/
8. www.fda.gov/
9. europa.eu/index_en.htm
10. <https://www.tga.gov.au/tga-basics>

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm PHARMACEUTICS SEMESTER: I

Subject Name: PHARMACEUTICS PRACTICALS - I

Subject Code: MPH105T

List of Practicals:

PART A:

1. Analysis of pharmacopoeial compounds and their formulations by UV Vis spectrophotometer
2. Simultaneous estimation of multi component containing formulations by UV spectrophotometry
3. Experiments based on HPLC
4. Experiments based on Gas Chromatography
5. Estimation of riboflavin/quinine sulphate by fluorimetry
6. Estimation of sodium/potassium by flame photometry

PART B:

1. To perform In-vitro dissolution profile of CR/ SR marketed formulation
2. Formulation and evaluation of sustained release matrix tablets
3. Formulation and evaluation osmotically controlled DDS
4. Preparation and evaluation of Floating DDS- hydro dynamically balanced DDS
5. Formulation and evaluation of Muco adhesive tablets.
6. Formulation and evaluation of trans dermal patches.
7. To carry out preformulation studies of tablets.
8. To study the effect of compressional force on tablets disintegration time.
9. To study Micromeritic properties of powders and granulation.
10. To study the effect of particle size on dissolution of a tablet.
11. To study the effect of binders on dissolution of a tablet.
12. To plot Heckal plot, Higuchi and peppas plot and determine similarity factors.
13. To perform stability testing of drug in liquid formulation.
14. To prepare and evaluate self-micro emulsifying drug delivery system (SMEDDS).
15. To perform calibration study of dissolution test apparatus.
16. To calculate standard deviation; perform Chi square test, students T-test and ANOVA test for given data.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

Pharmaceutics (20)

SEMESTER: II

Subject Name: Molecular Pharmaceutics(Nano Tech and Targeted DDS)

Subject Code: MPH201T

Scope: This course is designed to impart knowledge on the area of advances in novel drug delivery systems

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

1. The various approaches for development of novel drug delivery systems.
2. The criteria for selection of drugs and polymers for the development of NTDS
3. The formulation and evaluation of novel drug delivery system

Sr.	Topic	Hr
1.	Targeted Drug Delivery Systems: Concepts, Events and biological process involved in drug targeting. Tumor targeting and Brain specific delivery.	12
2.	Targeting Methods: introduction preparation and evaluation. Nano Particles & Liposomes: Types, preparation and evaluation.	12
3.	Micro Capsules / Micro Spheres: Types, preparation and evaluation, Monoclonal Antibodies; preparation and application, Preparation and application of Niosomes, Aquasomes, Phytosomes, Electrosomes	12
4.	Pulmonary Drug Delivery Systems : Aerosols, propellents, ContainersTypes, preparation andevaluation, Intra Nasal Route Deliverysystems;Types,preparationandevaluation	12
5.	Nucleic acid based therapeutic delivery system : Gene therapy, introduction (ex-vivo & in-vivo gene therapy). Potential target diseases for genetherapy (inherited disorder andcancer). Gene expression systems (viral andnonviral genetransfer). Liposomal gene deliverysystems. Biodistribution and Pharmacokinetics. knowledge of therapeutic antisensemoleculesandaptamersasdrugs offuture	12

REFERENCES:

1. Y W. Chien, Novel Drug Delivery Systems, 2nd edition, revised and expanded,Marcel Dekker,Inc.,NewYork,1992
2. S.P.Vyas and R.K.Khar, Controlled Drug Delivery - concepts and advances,VallabhPrakashan,New Delhi,Firstedition 2002
3. N.K. Jain, Controlled and Novel Drug Delivery, CBS Publishers & Distributors,NewDelhi,Firstedition 1997 (reprint in2001).

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

Pharmaceutics (20)

SEMESTER: II

Subject Name: Advanced Biopharmaceutics & Pharmacokinetics

Subject Code: MPH202T

Scope: This course is designed to impart knowledge and skills necessary for dose calculations, dose adjustments and to apply biopharmaceutics theories in practical problem solving. Basic theoretical discussions of the principles of biopharmaceutics and pharmacokinetics are provided to help the students' to clarify the concepts.

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

1. The basic concepts in biopharmaceutics and pharmacokinetics.
2. The use raw data and derive the pharmacokinetic models and parameters the best describe the process of drug absorption, distribution, metabolism and elimination.
3. The critical evaluation of biopharmaceutic studies involving drug product equivalency.
4. The design and evaluation of dosage regimens of the drugs using pharmacokinetic and biopharmaceutic parameters.
5. The potential clinical pharmacokinetic problems and application of basics of pharmacokinetic

Sr.	Topic	Hr
1.	Drug Absorption from the Gastrointestinal Tract: Gastrointestinal tract, Mechanism of drug absorption, Factors affecting drug absorption, pH-partition theory of drug absorption. Formulation and physicochemical factors: Dissolution rate, Dissolution process, Noyes-Whitney equation and drug dissolution, Factors affecting the dissolution rate. Gastrointestinal absorption: role of the dosage form: Solution (elixir, syrup and solution) as a dosage form, Suspension as a dosage form, Capsule as a dosage form, Tablet as a dosage form, Dissolution methods, Formulation and processing factors, Correlation of in vivo data with in vitro dissolution data. Transport model: Permeability-Solubility-Charge State and the pH Partition Hypothesis, Properties of the Gastrointestinal Tract (GIT), pH Microclimate Intracellular pH Environment, Tight-Junction Complex.	12
2.	Biopharmaceutic considerations in drug product design and In Vitro Drug Product Performance: Introduction, biopharmaceutic factors affecting drug bioavailability, rate-limiting steps in drug absorption, physicochemical nature of the drug formulation factors affecting drug product performance, in vitro: dissolution and drug release testing, compendial methods of dissolution, alternative methods of dissolution testing, meeting dissolution requirements, problems of variable control in dissolution testing performance of drug products. In vitro-in vivo correlation, dissolution profile comparisons, drug product stability, considerations in the design of a drug product.	12
3.	Pharmacokinetics: Basic considerations, pharmacokinetic models, compartment modeling: one compartment model- IV bolus, IV infusion, extra-vascular. Multi compartment model: two compartment - model in brief, non-linear pharmacokinetics: cause of non-linearity, Michaelis - Menten equation, estimation of k_{max} and v_{max} . Drug interactions: introduction, the effect of protein binding interactions, the effect of tissue-binding interactions, cytochrome p450-based drug interactions, drug interactions linked to transporters	12

4.	Drug Product Performance, In Vivo: Bioavailability and Bioequivalence: drug product performance, purpose of bioavailability studies, relative and absolute availability. methods for assessing bioavailability, bioequivalence studies, design and evaluation of bioequivalence studies, study designs, crossover study designs, evaluation of the data, bioequivalence example, study submission and drug review process. biopharmaceutics classification system, methods. Permeability: In-vitro, in-situ and In-vivo methods. generic biologics (biosimilar drug products), clinical significance of bioequivalence studies, special concerns in bioavailability and bioequivalence studies, generic substitution	12
5.	Application of Pharmacokinetics: Modified-Release Drug Products, Targeted Drug Delivery Systems and Biotechnological Products. Introduction to Pharmacokinetics and pharmacodynamic, drug interactions. Pharmacokinetics and pharmacodynamics of biotechnology drugs. Introduction, Proteins and peptides, Monoclonal antibodies, Oligonucleotides, Vaccines (immunotherapy), Gene therapies	12

REFERENCES:

1. Biopharmaceutics and Clinical Pharmacokinetics by Milo Gibaldi, 4th edition, Philadelphia, Lea and Febiger, 1991
2. Biopharmaceutics and Pharmacokinetics, A. Treatise, D. M. Brahmkar and Sunil B. Jaiswal., Vallab Prakashan, Pitampura, Delhi
3. Applied Biopharmaceutics and Pharmacokinetics by Shargel. Land Yu ABC, 2nd edition, Connecticut Appleton Century Crofts, 1985
4. Textbook of Biopharmaceutics and Pharmacokinetics, Dr. Shobha Rani R. Hiremath, Prism Book
5. Pharmacokinetics by Milo Gibaldi and D. Perrier, 2nd edition, Marcel Dekker Inc., New York, 1982
6. Current Concepts in Pharmaceutical Sciences: Biopharmaceutics, Swarbrick, J., Lea and Febiger, Philadelphia, 1970
7. Clinical Pharmacokinetics, Concepts and Applications 3rd edition by Malcolm Rowland and Thom~N. Tozer, Lea and Febiger, Philadelphia, 1995
8. Dissolution, Bioavailability and Bioequivalence, Abdou. H.M, Mack Publishing Company, Pennsylvania 1989
9. Biopharmaceutics and Clinical Pharmacokinetics, An Introduction, 4th edition, revised and expanded by Robert. E. Notari, Marcel Dekker Inc, New York and Basel, 1987
10. Biopharmaceutics and Relevant Pharmacokinetics by John. G Wagner and M. Pamarowski, 1st edition, Drug Intelligence Publications, Hamilton, Illinois, 1971
11. Encyclopedia of Pharmaceutical Technology, Vol 13, James Swarbrick, James. G. Boylan, Marcel Dekker Inc, New York, 1996
12. Basic Pharmacokinetics, 1st edition, Sunil S Jambhekar and Philip J Breen, pharmaceutical press, RPS Publishing, 2009
13. Absorption and Drug Development- Solubility, Permeability, and Charge State, Alex Avdeef, John Wiley & Sons, Inc, 2003

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

Pharmaceutics (20)

SEMESTER: II

Subject Name: COMPUTER AIDED DRUG DEVELOPMENT

Subject Code: MPH203T

Scope: This course is designed to impart knowledge and skills necessary for computer Applications in pharmaceutical research and development who want to understand the application of computers across the entire drug research and development process. Basic theoretical discussions of the principles of more integrated and coherent use of computerized information (informatics) in the drug development process are provided to help the students to clarify the concepts.

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

1. History of Computers in Pharmaceutical Research and Development
2. Computational Modeling of Drug Disposition
3. Computers in Preclinical Development
4. Optimization Techniques in Pharmaceutical Formulation
5. Computers in Market Analysis
6. Computers in Clinical Development
7. Artificial Intelligence(AI) and Robotics
8. Computational fluid dynamics (CFD)

Sr.	Topic	Hr
1.	a. Computers in Pharmaceutical Research and Development: A General Overview: History of Computers in Pharmaceutical Research and Development. Statistical modeling in Pharmaceutical research and development: Descriptive versus Mechanistic Modeling, Statistical Parameters, Estimation, Confidence Regions, Nonlinearity at the Optimum, Sensitivity Analysis, Optimal Design, Population Modeling b. Quality-by-Design In Pharmaceutical Development: Introduction, ICH Q8 guideline, Regulatory and industry views on QbD, Scientifically based QbD-examples of application	12
2.	Computational Modeling Of Drug Disposition: Introduction ,Modeling Techniques: Drug Absorption, Solubility, Intestinal Permeation, Drug Distribution ,Drug Excretion, Active Transport; P-gp, BCRP, Nucleoside Transporters, hPEPT1, ASBT, OCT, OATP,BBB-CholineTransporter	12
3.	Computer-aided formulation development:: Concept of optimization, Optimization parameters, Factorial design, Optimization technology & Screening design. Computers in Pharmaceutical Formulation: Development of pharmaceutical emulsions, micro emulsion drug carriers Legal Protection of Innovative Uses of Computers in R&D, The Ethics of Computing in Pharmaceutical Research, Computers in Market analysis	12
4.	a. Computer-aided biopharmaceutical characterization: Gastrointestinal absorption simulation. Introduction, Theoretical background, Model construction, Parameter sensitivity analysis, Virtual trial, Fed vs. fasted state, In vitro dissolution and in vitro in vivo correlation, Biowaiver considerations b. Computer Simulations in Pharmacokinetics and Pharmacodynamics: Introduction, Computer Simulation: Whole Organism, Isolated Tissues, Organs, Cell, Proteins and Genes. c. Computers in Clinical Development: Clinical Data Collection and Management, Regulation of Computer Systems	12

5.	Artificial Intelligence (AI), Robotics and Computational fluid dynamics: General overview, Pharmaceutical Automation, Pharmaceutical applications, Advantages and Disadvantages. Current Challenges and Future Directions	12
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REFERENCES:

1. Computer Applications in Pharmaceutical Research and Development, Sean Ekins, 2006, John Wiley & Sons.
2. Computer-Aided Applications in Pharmaceutical Technology, 1st Edition, Jelena Djuris, Woodhead Publishing
3. Encyclopedia of Pharmaceutical Technology, Vol 1
James Swarbrick, James G. Boylan, Marcel Dekker Inc, New York, 1996.

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

Pharmaceutics (20)

SEMESTER: II

Subject Name: COSMETICS AND COSMECEUTICALS

Subject Code: MPH204T

Scope: This course is designed to impart knowledge and skills necessary for the fundamental need for cosmetic and cosmeceutical products

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

1. Key ingredients used in cosmetics and cosmeceuticals.
2. Key building blocks for various formulations.
3. Current technologies in the market
4. Various key ingredients and basic science to develop cosmetics and cosmeceuticals
5. Scientific knowledge to develop cosmetics and cosmeceuticals with desired Safety, stability, and efficacy

Sr.	Topic	Hr
1.	Cosmetics – Regulatory : Definition of cosmetic products as per Indian regulation. Indian regulatory requirements for labeling of cosmetics Regulatory provisions relating to import of cosmetics., Misbranded and spurious cosmetics. Regulatory provisions relating to manufacture of cosmetics – Conditions for obtaining license, prohibition of manufacture and sale of certain cosmetics, loan license, offences and penalties	12
2.	Cosmetics - Biological aspects : Structure of skin relating to problems like dry skin, acne, pigmentation, prickly heat, wrinkles and body odor. Structure of hair and hair growth cycle. Common problems associated with oral cavity. Cleansing and care needs for face, eye lids, lips, hands, feet, nail, scalp, neck, body and under-arm	12
3.	Formulation Building blocks: Building blocks for different product formulations of cosmetics/cosmeceuticals. Surfactants – Classification and application. Emollients, rheological additives: classification and application. Antimicrobial used as preservatives, their merits and demerits. Factors affecting microbial preservative efficacy. Building blocks for formulation of a moisturizing cream, vanishing cream, cold cream, shampoo and toothpaste. Soaps and syndetbars. Perfumes; Classification of perfumes. Perfume ingredients listed as allergens in EU regulation Controversial ingredients: Parabens, formaldehyde liberators, dioxane	12
4.	Design of cosmeceutical products: Sun protection, sunscreens classification and regulatory aspects. Addressing dry skin, acne, sun-protection, pigmentation, prickly heat, wrinkles, bodyodor., dandruff, dental cavities, bleeding gums, mouth odor and sensitive teeth through cosmeceutical formulations	12
5.	Herbal Cosmetics : Herbal ingredients used in Hair care, skin care and oral care. Review of guidelines for herbal cosmetics by private bodies like cosmos with respect to preservatives, emollients, foaming agents, emulsifiers and rheology modifiers. Challenges in formulating herbal cosmetics	12

REFERENCES:

1. Harry's Cosmeticology. 8th edition.
2. Poucher's perfume cosmetics and Soaps, 10th edition.
3. Cosmetics - Formulation, Manufacture and quality control, PP. Sharma, 4th edition

4. Handbook of cosmetic science and Technology A.O.Barel, M.Paye and H.I.Maibach.3rdedition
5. Cosmetic and Toiletries recent suppliers catalogue.
6. CTFA directory

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

Pharmaceutics (20)

SEMESTER: II

Subject Name: PHARMACEUTICS PRACTICALS - II

Subject Code: MPH205P

1. To study the effect of temperature change , non solvent addition, incompatible polymer addition in microcapsules preparation
2. Preparation and evaluation of Alginate beads
3. Formulation and evaluation of gelatin /albumin microspheres
4. Formulation and evaluation of liposomes/niosomes
5. Formulation and evaluation of spherules
6. Improvement of dissolution characteristics of slightly soluble drug by Solid dispersion technique.
7. Comparison of dissolution of two different marketed products /brands
8. Protein binding studies of a highly protein bound drug & poorly protein bound drug
9. Bioavailability studies of Paracetamol in animals.
10. Pharmacokinetic and IVIVC data analysis by Winnoline R software
11. In vitro cells studies for permeability and metabolism
12. DoE Using Design Expert® Software
13. Formulation data analysis Using Design Expert® Software
14. Quality-by-Design in Pharmaceutical Development
15. Computer Simulation in Pharmacokinetics and Pharmacodynamics
16. Computational Modeling Of Drug Disposition
17. To develop Clinical Data Collection manual
18. To carry out Sensitivity Analysis, and Population Modeling.
19. Development and evaluation of Creams
20. Development and evaluation of Shampoo and Toothpaste base
21. To incorporate herbal and chemical actives to develop products
22. To address Dry skin, acne, blemish, Wrinkles, bleeding gums and dandruff

GUJARAT TECHNOLOGICAL UNIVERSITY

M.Pharm

SEMESTER: III

Subject Name: RESEARCH METHODOLOGY, BIOSTATISTICS AND IPR

Subject Code: MRM301T

Sr No	Course Contents	Total Hrs
1	General Research Methodology General Research Methodology: Research, objective, requirements, practical difficulties, Review of literature: Use of Library, books and journals-Medlines-Internet, and reprints of articles as a source for Literature survey. Selecting a problem and preparing Research proposals. The Research Report, Paper writing/ thesis writing, Different parts of the Research paper/Thesis Presentation oral/poster presentation) Importance, types, different skills, content, format of model, Poster, Gestures, eye contact, facial expressions, stage fright, volume- pitch, speed, pause & language, Visual aids & seating, Questionnaire. Sources for procurement research grants –National/ international agencies, Government and private bodies	12
2	Experimental Design (15 hours) Terminology and definitions related to experimental design Study design, types of studies, strategies to eliminate errors/bias, controls, randomization, crossover design, placebo, blinding techniques Sampling Designs: Introduction, types of sample designs, steps, criteria of selection, characteristics, random sampling, drop outs. Advantage and disadvantage of conventional design over experimental design. Basic steps in experimental design. Screening Designs: Screening of factors, General properties for independent factor selected for experimental design, Fractional factorial design(FFD): Purpose advantage and disadvantage of fractional factorial design, Concept of Aliased Effects and Design Aliasing Structure and constructing FFD Analysis of fractional factorial design: Concept of Design Resolution for FFD Case study of factorial design Plackett–Burman designs: Purpose advantage and disadvantage and construction of matrix , Comparison between placket-Burman and FFD design, Case study Full factorial design Optimization techniques and various method of optimization Introduction to contour plots Introduction of repose surface design: Classification Characteristic of design Matrix and analysis of design with case study	15

	<p>Evolution of full and reduced mathematical models in experimental designs</p> <p>Central composite designs</p> <p>Taguchi and mixture design</p> <p>Application of experimental design in pharmacology for reduction of animal</p>	
3	<p>Biostatistics</p> <p>Definition, application, statistical tests of significance, type of significance tests, parametric tests (students “t” test, ANOVA, Correlation coefficient, regression), non-parametric tests (wilcoxon rank tests, analysis of variance, correlation, chi square test, Kruskal Wallis test, Mann Whitney U test), null hypothesis, P values, degree of freedom, interpretation of P values, post hoc tests for parametric and non-parametric data (Dunnett’s test, Tukey’s test, Dunn’s test)</p>	8
4	<p>Regulatory perspectives of Medical research</p> <p>History of medical research (Nuremberg code, The declaration of Helsinki), initiation of ICH-GCP guidelines, advantages of ICH-GCP, core principles of ICH -GCP guidelines, Ethical Committee: Institutional Review Board, Ethical Guidelines by ICMR for Biomedical Research and Human Participants (ethical issues- informed consent process, confidentiality, payments, conflict of interest, vulnerable participants), Schedule Y, Preparation of clinical protocol, Investigator Brochure, Case Report Forms</p>	10
5	<p>CPCSEA guidelines for laboratory animal facility</p> <p>Objective and functions of IAEC, background and process of evolution of guidelines, statutory provisions regarding scientific experiments of animals, CPCSEA guidelines for animal experimentation and laboratory animal facility 2015, care and handling of animals, concept of 4 R, protocol preparation for Preclinical studies (Form B)</p>	5
6	<p>IPR and Patents</p> <p>Patents: Definition, Need for patenting, scope and importance of patents, Types of Patents, Condition to be satisfied by an invention to be patentable, Introduction to patent search and important websites, The essential elements of patents, Guidelines for preparations of laboratory notebook, non-obviousness in patents, Drafting of patent claims, important patent related websites. Copyrights and Trademark: Brief introduction to trademark protection and WTO patents, Introduction to “The Patents Act 1970” and “The Patents Rule 2003”, with special emphasis on the forms to be submitted along with a patent application</p>	10

REFERENCES:

1. Research Methodology by C.R. Kothari
2. Compendium of CPCSEA 2018
3. Presentation skills - Michael Hallon- Indian Society for Institute education
4. Pharmaceutics Statistics by Sanford Bolton, Charles Bon
5. Patent laws, By P. Narayan. Eastern law house publications
6. Pharmaceutical Experimental Design By Gareth Lewis and Didier Mathieu
7. www.ipindia.nic.in, www.uspto.gov
8. www.cpcsea.nic.in
9. www.icmr.nic.in

Gujarat Technological University
Graduate School of Pharmacy
M.Pharm in
Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)
Phytopharmacy and Phytomedicine (31)
Semester – II
Academic Year 2021-22

Date: 17/01/2022

Tentative Academic Schedule

*Term Start Date: 14/02/2022

*Term End Date: 10/06/2022

+End-Semester Examination (Theory): As declared by GTU Exam Schedule Glance

+End-Semester Examination (Practical): As declared by GTU Exam Schedule Glance

Teaching Learning – Curricular Activities and Co-Curricular activities to be performed apart from these mentioned examination dates within term duration declared by the GTU.

INTERNAL EXAMINATION

1st Theory Test Commencement Date: 18-22/04/2022

2nd Theory Test Commencement Date: 23-27/05/2022

Practical Journal Submission Date: 01-04/06/2022

Internal Practical Exam Date: 08-10/06/2022

SEMINAR PRESENTATION

1st Seminar Presentation to Start from: 21-25/03/2022

2nd Seminar Presentation to Start from: 09-13/05/2022

* Academic Calendar – 2021-22 (Odd Term) as per GTU Circular Reference No. GTU/AC/even-term/2021/5859 dated 14/10/2021.

+ GTU Exam Schedule Glance-2021-22 (Odd Term) as per GTU Circular to be declared by GTU

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Director, GTU-GSP



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Gujarat Technological University
Graduate School of Pharmacy

Academic Year: 2021-22

M Pharm Semester 2 (MRA, MQA, MPH and MPM)

Time Table

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10:30 am to 11:30 am	MRA201T AMP MQA201T RVS MPH201T MM MPM201T UGV	MRA202T AMP MQA202T RVS MPH202T MM MPM202T UGV	MRA203T RP MQA203T KNT MPH203T DNP MPM203T JMV	MRA204T BKM MQA204T RBP MPH204T DK MPM204T KNT	SPC HDJ RVS DK RVS	AMP MQA203T RBP MM UGV MPM203T
11:30 am to 12:30 pm	MRA202T RP MQA202T KNT MPH202T DNP MPM202T JMV	MRA204T AMP MQA204T HDJ MPH204T DK MPM204T RVS	MRA201T AMP MQA201T RVS MPH201T MM MPM201T UGV	MRA202T RP MQA202T KNT MPH202T DNP MPM202T JMV	MRA202T RP MQA202T KNT MPH202T DNP MPM202T JMV	MRA202T RP MQA202T KNT MPH202T DNP MPM202T JMV
12:30 pm to 01:30 pm	SEMINAR					
01:30 pm to 02:30 pm	SEMINAR					
02:30 pm to 03:30 pm	MRA201T AMP MQA201T RVS MPH201T MM MPM201T UGV	MRA202T AMP MQA202T RVS MPH202T MM MPM202T UGV	MRA203T RP MQA203T KNT MPH203T DNP MPM203T JMV	MRA205P BKM MQA205P RVS MPH205P DK MPM205P JMV	MRA203T BKM MQA203T RBP MPH203T DK MPM203T KNT	LIBRARY/EXPERT LECTURE/EXTRA CURRICULAR ACTIVITIES
03:30 pm to 04:00 pm	MRA203T BKM MQA203T RBP MPH203T DK MPM203T SPC	MRA205P KNT MQA205P RBP MPH205P DNP MPM205P JMV	MRA205P KNT MQA205P RBP MPH205P DNP MPM205P JMV	MRA205P RVS MQA205P RVS MPH205P DK MPM205P JMV	MRA203T BKM MQA203T RBP MPH203T DK MPM203T KNT	LIBRARY/EXPERT LECTURE/EXTRA CURRICULAR ACTIVITIES
04:00 pm to 05:00 pm	SEMINAR					
05:00 pm to 06:00 pm	MRA204T BKM MQA204T HDJ MPH204T DK MPM204T RBP	MRA205P JMV MQA205P JMV MPH205P HDJ MPM205P JMV	MRA205P DNP MQA205P DNP MPH205P DNP MPM205P JMV	MRA205P DK MQA205P DK MPH205P DK MPM205P JMV	MRA204T BKM MQA204T HDJ MPH204T DK MPM204T JMV	AMP MQA201T RVS MM UGV MPM201T
Pharma. Regulatory Affairs (PRA)						
Subject Code	Subject Name	Subject Code	Subject Name	Subject Code	Subject Name	Subject Name
MRA201T	Regulatory Aspects of Drugs & Cosmetics	MQA201T	Hazards and Safety Management	MPH201T	Molecular Pharmaceutics (Nano Tech and Targeted DDS)	Phytopharmaceutical Product Development
MRA202T	Regulatory Aspects of Herbal and Biologics	MQA202T	Pharmaceutical Validation	MPH202T	Advanced Biopharmaceutics & Pharmacokinetics	Standardization and Validation of Phytopharmaceuticals
MRA203T	Regulatory Aspects of Medical Devices	MQA203T	Audits and Regulatory Compliance	MPH203T	Computer Aided Drug Delivery System	Biological Evaluation of phytopharmaceuticals
MRA204T	Regulatory Aspects of Food & Nutraceuticals	MQA204T	Pharmaceutical Manufacturing Technology	MPH204T	Cosmetic and Cosmeceuticals	Biotechnology and Regulatory aspects of Phytopharmaceuticals
MRA205P	Regulatory Affairs Practical II	MQA205P	Pharmaceutical Quality Assurance Practical II	MPH205P	Pharmaceutics Practical II	Phytopharmaceutical Practical II
Seminar/Assignment						
MRA206P	Regulatory Affairs Practical II	MSA206P	Seminar/Assignment	MSA206P	Seminar/Assignment	Seminar/Assignment

Note: * Students are FACULTY

SSPC: Dr. S. P. Chauhan
DMP: Dr. D. M. Patel

KNT: Dr. K. N. Thummar
JMV: Dr. Jigna Vadalia

DK: Dr. Dignesh Khunt
UGV: Mr. U. G. Vegad

RVS: Mr. R. V. Solanki
RBP: Mr. R. B. Patel

BKM: Ms. B. K. Mahaniya
HDJ: Ms. H. D. Joshi

AMP: Ms. A. M. Pathan

Jonathan

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GRADUATE SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY

Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (2nd Semester) (Academic Year 2021-22)
Program: Pharmaceutical Regulatory Affairs (27)

10/02/2022

Circular

Allocation of Units in various Course

Course Code	Course Name	Allocation				
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
MRA201T	Regulatory Aspects Of Drugs & Cosmetics	AMP	AMP	AMP	AMP	AMP
MRA202T	Regulatory Aspects Of Herbal And Biologicals	RP	RP	RP	RP	RP
MRA203T	Regulatory Aspects Of Medical Devices	BKM	BKM	BKM	BKM	BKM
MRA204T	Regulatory Aspects Of Food & Nutraceuticals	BKM	BKM	AMP	AMP	SPC
MRA205P	Regulatory Affairs Practical II	AMP+BKM+RP				
MSA206P	Seminar/Assignment	SPC + RP +BKM+AMP				

SPC: Dr. Sanjay P. Chauhan

RP: Dr. Rajesh Patel

AMP: Ms. Asmatbanu M. Pathan

BKM: Ms. Bhumika K. Maheriya

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (2nd Semester) (Academic Year 2021-22)
Program: Pharmaceutical Quality Assurance (24)

10/02/2022

Circular

Allocation of Units in various Course

Course Code	Course Name	Allocation					
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
MAT201T	Hazards And Safety Management	RVS	RVS	RVS	RVS	RVS	RVS
MQA202T	Pharmaceutical Validation	KNT	KNT	KNT	KNT	KNT	KNT
MQA203T	Audits And Regulatory Compliance	RBP	RBP	RBP	RBP	RBP	-
MQA204T	Pharmaceutical Manufacturing Technology	HDJ	HDJ	HDJ	HDJ	HDJ	-
MQA205P	Pharmaceutical Quality Assurance Practical II	KNT +RVS+RBP					
MSA206P	Seminar/Assignment	KNT +RVS+RBP+HDJ					

KNT: Dr. Kashyap Thummar

RVS: Mr. Ravisinh Solanki

RBP: Mr. Ravi B. Patel

HDJ: Ms. Hardi Joshi

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (2nd Semester) (Academic Year 2021-22)
Program: Pharmaceutics (20)

10/02/2022

Circular
Allocation of Units in various Course

Course Code	Course Name	Allocation						
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
MAT201T	Molecular Pharmaceutics(Nano Tech And Targeted DDS)	MM	MM	MM	MM	MM	MM	-
MPH202T	Advanced Biopharmaceutics & Pharmacokinetics	DMP	DMP	DMP	DMP	DMP	DMP	DMP
MPH203T	Computer Aided Drug Development	MM	DK	DK	EXPT	EXPT	-	-
MPH204T	Cosmetics and Cosmeceuticals	DK	DK	DK	DK	-	-	-
MPH205P	Pharmaceutics Practical II (A + B)	DMP +MM +DK						
MSA206P	Seminar/Assignment	DMP +MM +DK						

DMP: Dr. D. M. Patel

MM: Dr. Manju Misra

DK: Dr. Dignesh Khunt

Prepared by:

Coordinator-Academic, GTU-GSP

Director, GTU-GSP

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (2nd Semester) (Academic Year 2021-22)
Program: Phytopharmacy and Phytomedicine (31)

10/02/2022

Circular

Allocation of Units in various Course

Course Code	Course Name	Allocation				
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
MPM201T	Phytopharmaceutical Product Development	UGV	UGV	UGV	UGV	UGV
MPM202T	Standardization and Validation of Phytomedicine	JMV	JMV	JMV	JMV	JMV
MPM203T	Biological Evaluation of phytomedicines	SPC	UGV	UGV	KNT	KNT
MPM204T	Biotechnology and Regulatory aspects of Phytomedicines	JMV	JMV	RVS	RVS	RBP
MPM205P	Phytopharmacy and Phytomedicine Practical II	UGV+JMV+HDJ				
MSA206P	Seminar/Assignment	SPC +UGV+ JMV+ RVS+ RBP+KNT				

SPC: Dr. Sanjay P. Chuahan

UGV: Mr. Uday G. Vegad

JMV: Dr. Jigna Vadalia

KNT: Dr. Kashyap Thummar

RBP: Mr. Ravi B. Patel

RVS: Mr. Ravisinh Solanki

HDJ: Ms. Hardi Joshi

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (2nd Semester) (Academic Year 2021-22)
Program: Pharmaceutical Regulatory Affairs (27)

10/02/2022

Course Coordinator Circular

Teachers as per following details are entrusted with additional responsibilities as Course Coordinator.

Course Code	Course Name	Teacher/s teaching the Course	Course Coordinator
MRA201T	Regulatory Aspects Of Drugs & Cosmetics	AMP	AMP
MRA202T	Regulatory Aspects Of Herbal And Biologicals	RP	RP
MRA203T	Regulatory Aspects Of Medical Devices	BKM	BKM
MRA204T	Regulatory Aspects Of Food & Nutraceuticals	SPC+BKM+AMP	AMP
MRA205P	Regulatory Affairs Practical II	RP+ BKM+ AMP	RP
MSA206P	Seminar/Assignment	SPC+RP+ BKM+ AMP	BKM

SPC: Dr. Sanjay P. Chauhan

RP: Dr. Rajesh Patel

BKM: Ms. Bhumika K. Maheriya

AMP: Ms. Asmatbanu M. Pathan

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Graduate School of Pharmacy
M.Pharm (2nd Semester) (Academic Year 2021-22)
Program: Pharmaceutical Quality Assurance (24)

10/02/2022

Course Coordinator Circular

Teachers as per following details are entrusted with additional responsibilities as Course Coordinator.

Course Code	Course Name	Teacher/s teaching the Course	Course coordinator
MAT201T	Hazards And Safety Management	RVS	RVS
MQA202T	Pharmaceutical Validation	KNT	KNT
MQA203T	Audits And Regulatory Compliance	RBP	RBP
MQA204T	Pharmaceutical Manufacturing Technology	HDJ	HDJ
MQA205P	Pharmaceutical Quality Assurance Practical II	KNT+RVS+RBP	KNT
MSA206P	Seminar/Assignment	KNT+RVS+RBP+HDJ	RBP

KNT: Dr. Kashyap Thummar

RVS: Mr. Ravisinh Solanki

RBP: Mr. Ravi B. Patel

HDJ: Ms. Hardi Joshi

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (2nd Semester) (Academic Year 2021-22)
Program: Pharmaceutics (20)

10/02/2022

Course Coordinator Circular

Teachers as per following details are entrusted with additional responsibilities as Course Coordinator.

Course Code	Course Name	Teacher/s teaching the Course	Course Coordinator
MPH201T	Molecular Pharmaceutics(Nano Tech And Targeted DDS)	MM	MM
MPH202T	Advanced Biopharmaceutics & Pharmacokinetics	DMP	DMP
MPH203T	Computer Aided Drug Development	MM+DK	MM
MPH204T	Cosmetics And Cosmeceuticals	DK	DK
MPH205P	Pharmaceutics Practical II (A + B)	DMP+MM+DK	DK
MSA206P	Seminar/Assignment	DMP+MM+DK	DK

DMP: Dr. D. M. Patel

MM: Dr. Manju Misra

DK: Dr. Dignesh Khunt


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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (2nd Semester) (Academic Year 2021-22)
Program: Phytopharmacy and Phytomedicine (31)

10/02/2022

Course Coordinator Circular

Teachers as per following details are entrusted with additional responsibilities as Course Coordinator.

Course Code	Course Name	Teacher/s teaching the Course	Course Coordinator
MPM201T	Phytopharmaceutical Product Development	UGV	UGV
MPM202T	Standardization and Validation of Phytomedicine	JMV	JMV
MPM203T	Biological Evaluation of phytomedicines	SPC+UGV+KNT	UGV
MPM204T	Biotechnology and Regulatory aspects of Phytomedicines	JMV+RVS+RBP	JMV
MPM205P	Phytopharmacy and Phytomedicine Practical II	UGV+JMV+HDJ	UGV
MSA206P	Seminar/Assignment	UGV+JMV+HDJ+KNT+RBP+RVS	HDJ

SPC: Dr. Sanjay P. Chuahan

KNT: Dr. Kashyap Thummar

JMV: Dr. Jigna Vadalia

UGV: Mr. Uday G. Vegad

RVS: Mr. Ravisinh Solanki

RBP: Mr. Ravi B. Patel

HDJ: Ms. Hardi Joshi

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GUJARAT TECHNOLOGICAL UNIVERSITY

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm in
Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)
Semester – IV
Academic Year 2021-22

Date: 17/01/2022

Tentative Academic Schedule

*Term Start Date: 17/01/2022

*Term End Date: 10/05/2022

Teaching Learning – Curricular Activities and Co-Curricular activities to be performed apart from these mentioned examination dates within term duration declared by the GTU.

Internal Assessment

Journal Club II (MJC401P)	Manuscript Submission to the Institute	23-25/02/2022
	Manuscript Submission to the Journal	02-05/03/2022
	Reporting the Status of Manuscript from Journal	05/05/2022
Discussion/Presentation (MDP402P)	DP II Submission & Presentation	28-31/03/2022
Research Work - Dissertation Phase II (MRW403P & MRW404P)	Mid Sem Review and VIVA	18-21/04/2022

End Semester University Examination

Research Work Dissertation Phase II (MRW404P)	DP II Submission	+
	DP II Presentation and Viva	+

* Provisional Academic Calendar – 2021-22 (Even Term) as per GTU Circular Reference No GTU/AC/even-term/2021/5859 dated 14/10/2021.

+ GTU Exam Schedule Glance-2021-22 (Even Term) as per GTU Circular to be declared by GTU

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GUJARAT TECHNOLOGICAL UNIVERSITY






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With Effect From: 17/01/2022

Gujarat Technological University
Graduate School of Pharmacy
M. Pharm Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)
4th Sem (A. Y. 2021-22)

Time Table

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10:30 am to 11:30 am	JC	RW	RW	RW	RW	RW
11:30 am to 12:30 pm	D/P	RW	RW	RW	RW	RW
12:30 am to 01:30 pm	D/P	RW	RW	RW	RW	RW
01:30 pm to 02:00 pm	LUNCH BREAK					
02:00 pm to 03:00 pm	D/P	RW	RW	RW	RW	RW
03:00 pm to 04:00 pm	RW	RW	RW	RW	RW	RW
04:00 pm to 05:00 pm	RW	RW	RW	RW	RW	RW
05:00 pm to 06:00 pm	RW	RW	RW	RW	RW	RW
1. Journal club (JC) II (MJC401P) 2. Discussion / Presentation (D/P) (MDP402P) 3. Research Work-Dissertation Phase-II (RW) (MRW403)		Note: 1. For Journal Club II Students are assigned guide. They need to work as per guidance. 2. For D/P, students need to carry out work as per guides allotted to them for RW. 3. For RW, Students are assigned Supervisor/s as per Enclosure-I. They need to carry out RW as per their guidance.				
SPC: Dr. S. P. Chauhan DMP: Dr. D. M. Patel MM: Dr. Manju Misra RP: Dr. Rajesh Patel	KNT: Dr. K. N. Thummar JV: Dr. Jigna Vadalia DK: Dr. Dignesh Khunt	UGV: Mr. U. G. Vegad RVS: Mr. R. V. Solanki RBP: Mr. R. B. Patel	BKM: Ms. B. K. Maheriya HDJ: Ms. H. D. Joshi AMP: Ms. A. M. Pathan			
Prepared by 		Coordinator-Academic, GTU-GSP 		Director, GTU-GSP 		

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- (1) 11.1-Academic File, (2) 11.2-Subject File, (3) 6.2- Admin File, (4) Notice Board.



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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (4th Semester) (Academic Year 2021-22)
Program: Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)

17/01/2022

Circular

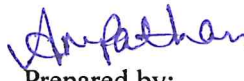

Allocation of Course

Course Code	Course Name	Allocation
MJC401P	Journal Club II (JC II)	SPC+DMP+MM+RKP+KNT+JMV+DK+UGV+RVS+RBP+BKM+AMP+HDJ
MDP402P	Discussion/ Presentation (Proposal Presentation) (DP II)	
MRW403P	Research Work - Dissert. Phase II (RWDP II)	

Faculties


SPC: Dr. Sanjay P. Chuahan
DMP: Dr. D. M. Patel
RKP: Dr. Rajesh Patel
MM: Dr. Manju Misra
KNT: Dr. Kashyap Thummar
JMV: Dr. Jigna Vadalia
UGV: Mr. Uday G. Vegad

DK: Dr. Dignesh Khunt
RVS: Mr. Ravish Solanki
RBP: Mr. Ravi B. Patel
BKM: Ms. Bhumika Maheriya
AMP: Ms. Asmatbanu M. Pathan
HDJ: Ms. Hardi Joshi


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GUJARAT TECHNOLOGICAL UNIVERSITY

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (4th Semester) (Academic Year 2021-22)
Program: Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)

17/01/2022

Course Coordinator Circular

Teachers as per following details are entrusted with additional responsibilities as Course Coordinator.

Course Code	Course Name	Teacher/s teaching the Course PRA	Teacher/s teaching the Course PQA	Teacher/s teaching the Course Pharm.	Course Coordin ator PRA	Course Coordin ator PQA	CourseCoor dinator Pharm.
MJC401P	Journal Club II (JC II)	SPC+JBD+U GV+RVS+R BP+BKM+ AMP	SPC+KNT+ RBP+RVS+ UGV+ JMV+HDJ	DMP+MM +KNT+UG V+JMV+D K	AMP	RVS	MM
MDP402P	Discussion/ Presentation (Proposal Presentation) (DP II)	SPC+JBD+U GV+RVS+R BP+BKM+A MP+RP	SPC+KNT+ RBP+RVS+ UGV+JMV+ HDJ+RP	DMP+MM +KNT+UG V+JMV+D K	BKM	KNT	DMP
MRW403P	Research Work - Dissert. Phase II (RWDP II)	SPC+JBD+U GV+RVS+R BP+BKM+A MP	SPC+KNT+ RBP+RVS+ UGV+JMV+ HDJ	DMP+MM +KNT+UG V+JMV+D K	BKM	KNT	DMP
SPC: Dr. Sanjay P. Chauhan		DMP: Dr. D. M. Patel		MM: Dr. Manju Misra		RP: Dr. Rajesh Patel	
UGV: Mr. Uday G. Vegad		KNT: Dr. Kashyap Thummar		RVS: Mr. Ravisinh Solanki		Ms. Hardi Joshi	
RBP: Mr. Ravi B. Patel		JMV: Ms. Jigna Vadalala		BKM: Ms. Bhumika K.Maheriya		AMP: Ms. Pathan Asmatbanu M	
DK: Dr. Dignesh Khunt							

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Coordinator-Academic, GTU-GSP

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm in
Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)
Phytopharmacy and Phytomedicine (31)
Semester – I
Academic Year 2021-22



Date: 21/09/2021

Tentative Academic Schedule

Term Start Date: 20/09/2021*

Term End Date: 25/01/2022*

End-Semester Examination (Theory): As declared by GTU Exam Schedule Glance+

End-Semester Examination (Practical): As declared by GTU Exam Schedule Glance+

INTERNAL EXAMINATION

1st Theory Test Commencement Date: 22-26/11/2021

2nd Theory Test Commencement Date: 10-13/01/2022

Practical Journal Submission Date: 18-19/01/2022

Internal Practical Exam Date: 20-21/01/2022

SEMINAR PRESENTATION

1st Seminar Presentation to Start from: 25-29/10/2021

2nd Seminar Presentation to Start from: 03-07/01/2022

* Academic Calendar – 2021-22 (Odd Term) as per GTU Circular Reference No. **GTU/AC/odd-term/2021/5326** dated 18/09/2020.

+ GTU Exam Schedule Glance-2021-22 (Odd Term) as per GTU Circular to be declared by GTU

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Revised Time Table for M. Pharm Semester I (MRA, MQA, MPH and MPM)

Revised Time Table for M. Pharm Semester 1 (MRA, MQA, MPH and MPM)														
Time	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday			
	MRA101T	AMP	MRA102T	KNT	MRA103T	RP	MRA104T	BKM	MAT101T	DK	MRA101T	AMP		
10:30 am to 11:30 am	MAT101T	KNT	MAT101T	KNT	MAT101T	KNT	MAT101T	KNT	MAT101T	KNT	MAT101T	KNT		
11:30 am to 12:30 pm	MRA102T	RP	MRA103T	BKM	MRA104T	HDJ	MRA105T	RP	MRA106T	BKM	MRA107T	RP		
	MQA102T	RVS	MQA103T	HDJ	MQA104T	RBP	MQA105T	RVS	MQA106T	RBP	MQA107T	RVS		
	MPH102T	DMP	MPH103T	NM	MPH104T	DK	MPH105T	DMP	MPH106T	NM	MPH107T	DMP		
	MPM102T	JMV	MPM103T	UGV	MPM104T	JMV	MPM105T	JMV	MPM106T	UGV	MPM107T	JMV		
12:30 pm to 01:30 pm	SEMINAR													
01:30 pm to 02:00 pm	SEMINAR													
LUNCH BREAK														
02:00 pm to 03:00 pm	MRA103T	BKM			#MRA105P AMP		#MRA105P HDJ/DK/RP		MRA104T		AMP	LIBRARY/EXPERT LECTURE/EXTRA CURRICULAR ACTIVITIES		
	MQA103T	KNT							MQA103T		HDJ			
	MPH103T	UGV							MPH104T		DK			
	MPM103T	SPC							MPM104T		JMV			
03:00 pm to 04:00 pm	MQA104T	RBP			#MQA105P KNT Part A		#MQA105P RBP Part B		SEMINAR			SEMINAR		
	MPH104T	DK												
	MPM104T	JMV												
04:00 pm to 05:00 pm	SEMINAR				#MPH105P MM Part B		#MPH105P DMP Part B		MRA101T		AMP	MRA103T		
	MRA101T	AMP							MQA104T		RBP		MOA103T	
	MQA102T	RVS							MPH102T		DMP			MPH103T
	MPH103T	NM							MPM102T		SPC			
05:00 pm to 06:00 pm					#MPM105P JMV Part B		#MPM105P RP Part A		MRA102T		DK	MRA104T		
									MQA103T		HDJ		MQA103T	
									MPH103T		NM			MPH104T
									MPM103T		UGV			
Pharma. Regulatory Affairs (MRA)														
Subject Code	Subject Name		Pharma. Quality Assurance (MQA)		Pharmaceutics (MPH)		Pharmaceutics & Phyto medicine (MPM)		Subject Name					
	MRA101T	Good Regulatory Practices	MAT101T	Mod Pharma. Anal. Techn.	MAT101T	Mod Pharma. Anal. Techn.	MAT101T	Mod Pharma. Anal. Techn.	Mod Pharma. Anal. Techn.					
MRA102T	Document. & Regul. Writing	MQA102T	Quality Manag. System	MPH102T	Drug Delivery System	MPH102T	Drug Delivery System	Natural Products Chemistry						
MRA103T	Clin. Res. Regulations	MQA103T	Qua. Contil. & Qua. Assura.	MPH103T	Modern Pharmaceutics	Phytochemical Investigation Techniques								
MRA104T	Reg. and Legi of DC, MDs, Bio. H. in India and IPKS	MQA104T	Prod.Dev & Tech. Transfer	MPH104T	Regulatory Affair	Traditional Medicines								
MRA105P	Regul. Affairs Practical I	MQA105P	Pharma. QA Practical I	MPH105P	Pharmaceutics Practical I	Phytopharmacy and Phytochemistry Practical I								
MSA106P	Seminar/Assignment	MSA106P	Seminar/Assignment	MSA106P	Seminar/Assignment	Seminar/Assignment								
Note: * Students are informed to complete library related work during these hours. Expert lecture may be scheduled by the faculties and extracurricular activities may be scheduled by the students or faculties.														
FACULTY														

SPC: Dr. S. P. Chaulhan RP: Dr. Rajesh Patel
DMP: Dr. D. N. Patel NM: Dr. Manju Misra
KNT: Dr. K. N. Thummar RVS: Mr. R. V. Solanki
UGV: Mr. U. G. Vagad RBP: Mr. R. B. Patel
HDJ: Ms. H. D. Joshi BKM: Ms. B. K. Maheriya
AMP: Ms. A. M. Pathan JV: Ms. Jigna Vadalia
DK: Dr. Dignesh Khunt

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Director, GTU-GSP

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KANSAS STATE UNIVERSITY

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With effect from: 09/09/2021

Gujarat Technological University
Graduate School of Pharmacy
Academic Year: 2021-22

Time Table for M. Pharm Semester I (MIRA, MQA, MPH and MPM)

Time	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
	MRA101T	AMP	MRA102T	RVS	MRA103T	BKM	MRA104T	HDJ	MRA101T	AMP	MRA101T	AMP
10:30 am to 11:30 am	MAT101T	KNT	MAT101T	KNT	MAT101T	KNT	MAT101T	KNT	MPH104T	ABC	MAT101T	KNT
	MRA102T	SPC	MRA103T	BKM	MRA104T	HDJ	MRA102T	AMP	MRA103T	BKM	MRA102T	AMP
11:30 am to 12:30 pm	MQA102T	RVS	MQA103T	HDJ	MQA104T	RBP	MQA102T	RVS	MQA104T	RBP	MQA102T	RVS
	MPH102T	DMP	MPH103T	MM	MPH104T	ABC	MPH102T	DMP	MPH103T	MM	MPH102T	DMP
12:30 pm to 01:30 pm 01:30 pm to 02:00 pm	MPM102T	JMV	MPM103T	UGV	MPM104T	JMV	MPM102T	JMV	MPM103T	UGV	MPM102T	JMV
	SEMINAR											
LUNCH BREAK												
02:00 pm to 03:00 pm	MRA103T	BKM	*MRA105P BKM	*MRA105P AMP	*MRA105P HDJ/KNT/RVS	MRA105P	MRA104T	KNT	LIBRARY/EXPERT LECTURE/EXTRA CURRICULAR ACTIVITIES	KNT HDJ ABC JMV	*	
	MQA103T	HDJ										
	MPH102T	DMP										
	MPM103T	UGV										
03:00 pm to 04:00 pm	MRA104T	SPC	*MQA105P KNT Part A	*MQA105P RBP Part B	*MQA105P RVS Part B	*MQA105P RVS Part B	SEMINAR	SEMINAR	*			
	MQA104T	RBP										
	MPH104T	ABC										
	MPM104T	JMV										
04:00 pm to 05:00 pm	SEMINAR		*MPH105P MM Part B	*MPH105P DMP Part B	*MPH105P HDJ Part A	*MPH105P HDJ Part A	MRA101T	AMP	MRA103T	BKM		
	MRA101T	AMP					MQA104T	RBP	MQA103T	HDJ	MM	HDJ
05:00 pm to 06:00 pm	MQA102T	RVS	*MPM105P KNT/RVS Part A	*MPM105P KNT/RVS Part A	*MPM105P UGV Part B	*MPM105P UGV Part B	MPM102T	SPC	MPM103T	UGV	UGV	
	MPH103T	MM					MRA102T	RVS	MQA104T	HDJ	MM	ABC
	MPM102T	UGV					MPM103T	UGV	MPM104T	JMV	JMV	
	Pharmacy & Phyto medicine (MPM)											
Pharma. Regulatory Affairs (MIRA)												
Subject Code	Subject Name		Subject Code	Subject Name		Subject Code		Subject Name		Subject Name		
MRA101T	Good Regulatory Practices		MAT101T	Mod Pharma.Anal. Techn.		MAT101T	Mod Pharma.Anal. Techn.		MAT101T	Mod Pharma.Anal. Techn.		
MRA102T	Document. & Regul. Writing		MQA102T	Quality Manag. System		MPH102T	Drug Delivery System		MPM102T	Natural Products Chemistry		
MRA103T	Clin. Res. Regulations		MQA103T	Qua. Cont. & Qua.Assura.		MPH103T	Modern Pharmaceutics		MPM103T	Phytochemical Investigation Techniques		
MRA104T	Reg. and Legi. of DC, MDs, Bio, H, in		MQA104T	Prod.Dev.&Tech.Transfer		MPH104T	Regulatory Affairs		MPM104T	Traditional Medicines		
MRA105P	Regul. Affairs Practical I		MQA105P	Pharma. QA Practical I		MPH105P	Pharmaceutics Practical I		MPM105P	Phyto pharmacy and Phyto medicine Practical I		
MSA106P	Seminar/Assignment		MSA106P	Seminar/Assignment		MSA106P	Seminar/Assignment		MSA106P	Seminar/Assignment		
Note: * Students are informed to complete library related work during these hours. Expert lecture may be scheduled by the faculties and extracurricular activities may be scheduled by the students or faculties.												

FACULTY

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DMP: Dr. D. M. Patel
MM: Dr. Manju Misra
UGV: Mr. U. G. Vegad
KNT: Dr. K. N. Thummar
RVS: Mr. R. V. Solanki
RBP: Mr. R. B. Patel
AMP: Ms. A. M. Pathan
BKM: Ms. B. K. Maheriya
HDJ: Ms. H. D. Joshi
JV: Ms. Jigna Vaddiya

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GRADUATE SCHOOL OF PHARMACY
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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutical Regulatory Affairs (27)

08/09/2021

Circular
Revised

Teachers as per following details are entrusted with additional responsibilities as Subject Coordinator.

Subject Code	Subject Name	Teacher/s teaching the subject	Subject coordinator
MRA101T	Good Regulatory Practices	AMP	AMP
MRA102T	Document. & Regulatory Writing	RP	RP
MRA103T	Clinical Research Regulations	BKM	BKM
MRA104T	Reg. and Legi. of DC, MDs, Bio, Herbal, in India and IPRs	AMP+DK+HDJ+RVS+SPC	RVS
MRA105P	Regulatory Affairs Practical I	AMP+BKM+ DK+RP+HDJ	AMP
MSA106P	Seminar/Assignment	AMP + BKM+ RP+HDJ+KNT+SPC	BKM

SPC: Dr. Sanjay P. Chauhan

RP: Dr. Rajesh Patel

DK: Dr. Dignesh Khunt

RVS: Mr. Ravisinh Solanki

AMP: Ms. Asmatbanu M. Pathan

HDJ: Ms. Hardi Joshi

BKM: Ms. Bhumika K. Maheriya



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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutical Quality Assurance (24)



08/09/2021

Circular

Teachers as per following details are entrusted with additional responsibilities as Subject Coordinator.

Subject Code	Subject Name	Teacher/s teaching the subject	Subject coordinator
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT
MQA102T	Quality Management System	RVS	RVS
MQA103T	Quality Control and Quality Assurance	HDJ	HDJ
MQA104T	Product Develop. and Technology Transfer	RBP	RBP
MQA105P	Pharmaceutical Quality Assurance Practical I	KNT+RVS+RBP	KNT
MSA106P	Seminar/Assignment	SPC+KNT+RVS+HDJ+RBP	RBP

KNT: Dr. Kashyap Thummar

RVS: Mr. Ravisinh Solanki

RBP: Mr. Ravi B. Patel

HDJ: Ms. Hardi Joshi

Coordinator-Academic, GTU-GSP

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutics (20)

08/09/2021

Circular

Teachers as per following details are entrusted with additional responsibilities as Subject Coordinator.

Subject Code	Subject Name	Teacher/s teaching the subject	Subject Coordinator
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT
MPH102T	Drug Delivery System	DMP	DMP
MPH103T	Modern Pharmaceutics	MM	MM
MPH104T	Regulatory Affair	DK	DK
MPH105P	Pharmaceutics Practical I (A + B)	DMP+MM+ HDJ	DMP
MSA106P	Seminar/Assignment	KNT+DMP+MM+ DK	MM

DMP: Dr. D. M. Patel

KNT: Dr. Kashyap Thummar

MM: Dr. Manju Misra

DK: Dr. Dignesh Khunt



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Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Phytopharmacy and Phytomedicine (31)

29/09/2021

Circular
Revised

Teachers as per following details are entrusted with additional responsibilities as Subject Coordinator.

Subject Code	Subject Name	Teacher/s teaching the subject	Subject Coordinator
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT
MPM102T	Natural Products Chemistry	SPC+JMV+UGV	JMV
MPM103T	Phytochemical Investigation Techniques	UGV	UGV
MPM104T	Traditional Medicines	JMV	JMV
MPM105P	Phytopharmacy and Phytomedicine Practical I	JMV+UGV+RP	JMV
MSA106P	Seminar/Assignment	KNT+SPC+JMV+UGV	UGV

SPC: Dr. Sanjay P. Chuahan

KNT: Dr. Kashyap Thummar

UGV: Mr. Uday G. Vegad

JMV: Ms. Jigna Vadalila


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Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Phytopharmacy and Phytomedicine (31)



08/09/2021

Circular

Teachers as per following details are entrusted with additional responsibilities as Subject Coordinator.

Subject Code	Subject Name	Teacher/s teaching the subject	Subject Coordinator
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT
MPM102T	Natural Products Chemistry	SPC+JMV+UGV	JMV
MPM103T	Phytochemical Investigation Techniques	UGV	UGV
MPM104T	Traditional Medicines	JMV	JMV
MPM105P	Phytopharmacy and Phytomedicine Practical I	KNT+JMV+UGV	JMV
MSA106P	Seminar/Assignment	KNT+SPC+JMV+UGV	UGV

SPC: Dr. Sanjay P. Chuahan

KNT: Dr. Kashyap Thummar

UGV: Mr. Uday G. Vegad

JMV: Ms. Jigna Vadalia

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutical Regulatory Affairs (27)

29/09/2021

Circular

Revised Allocation of Units in various Subjects (Theory)

Subject Code	Subject Name	Allocation				
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
MRA101T	Good Regulatory Practices	AMP	AMP	AMP	AMP	AMP
MRA102T	Documentation & Regulatory Writing	DK	RP	RP	RP	RP
MRA103T	Clinical Research Regulations	BKM	BKM	BKM	BKM	BKM
MRA104T	Reg. and Legi. of DC, MDs, Bio & Herbals, in India and IPRs	AMP	DK	HDJ	RVS	SPC
MRA105P	Regulatory Affairs Practical I	AMP+BKM+RP+DK+HDJ				
MSA106P	Seminar/Assignment	AMP+BKM+RP+DK+HDJ+RVS+SPC				

SPC: Dr. Sanjay P. Chauhan

RP: Dr. Rajesh Patel

DK: Dr. Dignesh Khunt

RVS: Mr. Ravisinh Solanki

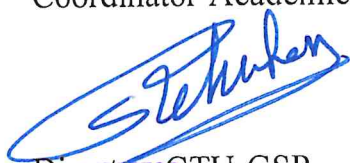
AMP: Ms. Asmatbanu M. Pathan

HDJ: Ms. Hardi Joshi

BKM: Ms. Bhumika K. Maheriya



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Director, GTU-GSP

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Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutical Regulatory Affairs (27)



08/09/2021

Circular

Allocation of Units in various Subjects (Theory)

Subject Code	Subject Name	Allocation				
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
MRA101T	Good Regulatory Practices	AMP	AMP	AMP	AMP	AMP
MRA102T	Documentation & Regulatory Writing	AMP	AMP	RVS	RVS	SPC
MRA103T	Clinical Research Regulations	BKM	BKM	BKM	BKM	BKM
MRA104T	Reg. and Legi. of DC, MDs, Bio & Herbals, in India and IPRs	HDJ	KNT	HDJ	KNT	SPC
MRA105P	Regulatory Affairs Practical I	AMP+BKM+RVS+KNT+HDJ				
MSA106P	Seminar/Assignment	AMP+BKM+RVS+KNT+HDJ				

SPC: Dr. Sanjay P. Chauhan

KNT: Dr. Kashyap N. Thummar

RVS: Mr. Ravisinh Solanki

AMP: Ms. Asmatbanu M. Pathan

HDJ: Ms. Hardi Joshi

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Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutical Quality Assurance (24)

08/09/2021

Circular

Revised Allocation of Units in various Subjects (Theory)

Subject Code	Subject Name	Allocation					
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT	KNT	KNT	KNT	KNT
MQA102T	Quality Management System	RVS	RVS	RVS	RVS	RVS	RVS
MQA103T	Quality Control and Quality Assurance	KNT	HDJ	HDJ	HDJ	HDJ	-
MQA104T	Product Development and Technology Transfer	RBP	RBP	RBP	RBP	RBP	-
MQA105P	Pharmaceutical Quality Assurance Practical I	KNT+RVS+HDJ+RBP					
MSA106P	Seminar/Assignment	KNT+RVS+HDJ+RBP					

KNT: Dr. Kashyap Thummar


RVS: Mr. Ravisinh Solanki

RBP: Mr. Ravi B. Patel

HDJ: Ms. Hardi Joshi



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Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutical Quality Assurance (24)



08/09/2021

Circular

Allocation of Units in various Subjects (Theory)

Subject Code	Subject Name	Allocation					
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT	KNT	KNT	KNT	KNT
MQA102T	Quality Management System	RVS	RVS	RVS	RVS	RVS	RVS
MQA103T	Quality Control and Quality Assurance	HDJ	HDJ	HDJ	HDJ	HDJ	-
MQA104T	Product Development and Technology Transfer	RBP	RBP	RBP	RBP	RBP	-
MQA105P	Pharmaceutical Quality Assurance Practical I	KNT+RVS+HDJ+RBP					
MSA106P	Seminar/Assignment	KNT+RVS+HDJ+RBP					

KNT: Dr. Kashyap Thummar

RVS: Mr. Ravisinh Solanki

RBP: Mr. Ravi B. Patel

HDJ: Ms. Hardi Joshi

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutics (20)

29/09/2021

Circular

Revised Allocation of Units in various Subjects (Theory)

Subject Code	Subject Name	Allocation						
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT	KNT	KNT	KNT	KNT	-
MPH102T	Drug Delivery System	DMP	DMP	DMP	DMP	DMP	DMP	DMP
MPH103T	Modern Pharmaceutics	MM	MM	MM	MM	MM	-	-
MPH104T	Regulatory Affair	DK	DK	DK	DK	-	-	-
MPH105P	Pharmaceutics Practical I	KNT+DMP+MM+ DK						
MSA106P	Seminar/Assignment	KNT+DMP+MM+ DK						

DMP: Dr. D. M. Patel

KNT: Dr. Kashyap Thummar

MM: Dr. Manju Misra

DK: Dr. Dignesh Khunt



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Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Pharmaceutics (20)



08/09/2021

Circular

Allocation of Units in various Subjects (Theory)

Subject Code	Subject Name	Allocation						
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT	KNT	KNT	KNT	KNT	-
MPH102T	Drug Delivery System	DMP	DMP	DMP	DMP	DMP	DMP	DMP
MPH103T	Modern Pharmaceutics	MM	MM	MM	MM	MM	-	-
MPH104T	Regulatory Affair	ABC	ABC	ABC	ABC	-	-	-
MPH105P	Pharmaceutics Practical I	KNT+DMP+MM+ ABC						
MSA106P	Seminar/Assignment	KNT+DMP+MM+ ABC						

DMP: Dr. D. M. Patel

KNT: Dr. Kashyap Thummar

MM: Dr. Manju Misra

ABC:

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Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Phytopharmacy and Phytomedicine (31)

29/09/2021

Circular

Revised Allocation of Units in various Subjects (Theory)

Subject Code	Subject Name	Allocation					
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT	KNT	KNT	KNT	KNT
MPM102T	Natural Products Chemistry	SPC	UGV	JMV	JMV	UGV	-
MPM103T	Phytochemical Investigation Techniques	UGV	UGV	UGV	UGV	UGV	-
MPM104T	Traditional Medicines	JMV	JMV	JMV	JMV	JMV	-
MPM105P	Phytopharmacy and Phytomedicine Practical I	RP+JMV+UGV					
MSA106P	Seminar/Assignment	KNT+SPC+JMV+UGV					

SPC: Dr. Sanjay P. Chuahan

RP: Dr. Rajesh Patel

UGV: Mr. Uday G. Vegad

JMV: Ms. Jigna Vadalia



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GUJARAT TECHNOLOGICAL UNIVERSITY

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (1st Semester) (Academic Year 2021-22)
Course: Phytopharmacy and Phytomedicine (31)



08/09/2021

Circular

Allocation of Units in various Subjects (Theory)

Subject Code	Subject Name	Allocation					
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
MAT101T	Modern Pharmaceutical Analytical Techniques	KNT	KNT	KNT	KNT	KNT	KNT
MPM102T	Natural Products Chemistry	SPC	UGV	JMV	JMV	UGV	-
MPM103T	Phytochemical Investigation Techniques	UGV	UGV	UGV	UGV	UGV	-
MPM104T	Traditional Medicines	JMV	JMV	JMV	JMV	JMV	-
MPM105P	Phytopharmacy and Phytomedicine Practical I	KNT+JMV+UGV					
MSA106P	Seminar/Assignment	KNT+SPC+JMV+UGV					

SPC: Dr. Sanjay P. Chuahan
KNT: Dr. Kashyap Thummar
UGV: Mr. Uday G. Vegad
JMV: Ms. Jigna Vadalía

Coordinator-Academic, GTU-GSP

Director, GTU-GSP

GRADUATE SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm in
Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)
Semester – III
Academic Year 2021-22

Date: 12/10/2021

Revised Tentative Academic Schedule

*Term Start Date: 23/08/2021

*Term End Date: 31/12/2021

Research Methodology and Biostatistics (MRM 301T)	Date
1 st Test to start from	20-22/10/2021
2 nd test to start from	27-29/12/2021
Final Non-University Exam	03-05/01/2022

Journal club I (MJC302P) (Non-University Exam)	Date
Report submission	15-17/12/2021
Poster Presentation	30-31/12/2021

Internal Semester Examination

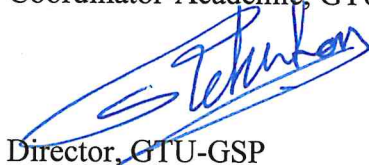
Research Work (MRW304P)	Date
Dissertation Proposal Discussion / Presentation (MDP303P)	22-26/11/2021
Introduction to Dissertation	20-24/12/2021

* Tentative Academic Calendar – 2021-22 (Odd Term) as per GTU Circular Reference No. **GTU/AC/odd-term/2021/3128 dated 11/06/2021.**

+ GTU Exam Schedule Glance-2021-22 (Odd Term) as per GTU Circular to be declared by GTU



Coordinator-Academic, GTU-GSP



Director, GTU-GSP

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3. Student notice board

Gujarat Technological University
Graduate School of Pharmacy
M.Pharm in
Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)
Semester – III
Academic Year 2021-22



Date: 02/08/2021

Tentative Academic Schedule

*Term Start Date: 23/08/2021

*Term End Date: 31/12/2021

Research Methodology and Biostatistics (MRM 301T)	Date
1 st Test to start from	20-22/10/2021
2 nd test to start from	27-29/12/2021
Final Non-University Exam	03-05/01/2022

Journal club I (MJC302P) (Non-University Exam)	Date
Report submission	25-27/10/2021
Poster Presentation	30-31/12/2021

Internal Semester Examination

Research Work (MRW304P)	Date
Dissertation Proposal Discussion / Presentation (MDP303P)	22-26/11/2021
Introduction to Dissertation	20-24/12/2021

* Tentative Academic Calendar – 2021-22 (Odd Term) as per GTU Circular Reference No. **GTU/AC/odd-term/2021/3128** dated 11/06/2021.

+ GTU Exam Schedule Glance-2021-22 (Odd Term) as per GTU Circular to be declared by GTU

Coordinator-Academic, GTU-GSP

Director, GTU-GSP

GRADUATE SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY

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With effect from: 23/08/2021



**Gujarat Technological University
Graduate School of Pharmacy
Academic Year: 2021-22**

Time Table for M. Pharm. Semester-3 (MRA, MQA and MPH)

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10:30 am to 11:30 am	RWDP I	RWDP I	RWDP I	RWDP I	RWDP I	RWDP I
11:30 am to 12:30 pm	RWDP I	RWDP I	RWDP I	RWDP I	D/P	RWDP I
12:30 pm to 01:30 pm	JC I	RWDP I	D/P	RWDP I	RWDP I	RWDP I
LUNCH BREAK						
01:30 pm to 02:00 pm						
02:00 pm to 03:00 pm	RMB (MM)	RMB (DMP)	RMB (BKM)	RMB (SPC)	RMB (RBP)	RWDP I
03:00 pm to 04:00 pm	RWDP I	RWDP I	RWDP I	RWDP I	RWDP I	RWDP I
04:00 pm to 05:00 pm	RWDP I	RWDP I	RWDP I	RWDP I	RWDP I	RWDP I
05:00 pm to 06:00 pm	RWDP I	RWDP I	RWDP I	RWDP I	RWDP I	RWDP I
Pharma. Regulatory Affairs (MRA) and Pharma. Quality Assurance (MQA) and Pharmaceutics (MPH)						
FACULTY						
SPC: Dr. S. P. Chauhan						
Subject Code	Subject Name	Abbreviation		DMP: Dr. D. M. Patel		
MRM301T	Research Methodology & Biostatistics	RMB		RVS: Mr. R. V. Solanki		
MJC302P	Journal Club I	JC I		Dr. Manju Misra		
MDP303P	Discussion/ Presentation (Proposal Presentation)	D/P		KNT: Dr. K. N. Thummar		
MRW304P	Research Work - Dissertation Phase I	RWDP I		UGV: Mr. U. G. Vegad		
				JMV: Ms. Jigna Vadaliya		
				BKM: Ms. B. K. Maheriya		

Note: For Research Work Dissertation Phase I (RWDP I), Journal Club I (JC I) and Discussion / Presentation (Proposal Presentation) (D/P) students shall follow the instructions issued by Supervisor and/or Institution from time to time.


Director, GTU-GSP


Coordinator-Academic, GTU-GSP

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GRADUATE SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY

Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (3rd Semester) (Academic Year 2021-22)
Course: Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)



08/09/2021

Circular

Teachers as per following details are entrusted with additional responsibilities as Subject Coordinator.

Subject Code	Subject Name	Teacher/s teaching the subject PRA	Teacher/s teaching the subject PQA	Teacher/s teaching the subject Pharmaceutics	Subject Coordinator PRA	Subject Coordinator PQA	Subject Coordinator Pharmaceutics
MRM301T	RM and Biostatistics*	SPC+DMP+MM+RBP+BKM			RBP		
MJC302P	Journal Club I (JC 1)	SPC+JBD+UGV+RVS+RBP+BKM+AMP	SPC+KNT+RBP+RV S+UGV+JMV+HDJ	DMP+MM+KNT+UGV+JMV+DK	AMP	RVS	MM
MDP303P	Discussion/ Presentation (Proposal Presentation)	SPC+JBD+UGV+RVS+RBP+BKM+AMP	SPC+KNT+RBP+RV S+UGV+JMV+HDJ	DMP+MM+KNT+UGV+JMV+DK	BKM	KNT	DMP
MRW304P	Research Work - Dissert. Phase I (RWDP 1)	SPC+JBD+UGV+RVS+RBP+BKM+AMP	SPC+KNT+RBP+RV S+UGV+JMV+HDJ	DMP+MM+KNT+UGV+JMV+DK	BKM	KNT	DMP
SPC: Dr. Sanjay P. Chauhan		DMP: Dr. D. M. Patel		MM: Dr. Manju M:sra		Ms. Hardi Joshi	
UGV: Mr. Uday G. Vegad		KNT: Dr. Kashyap Thummar		RVS: Mr. Ravishinh Solanki		AMP: Ms. Pathan Asmatbanu M	
RBP: Mr. Ravi B. Patel		JMV: Ms. Jigna Vadalala		BKM: Ms. Bhumika K.Maheriya			


 Coordinator-Academic, GTU-GSP


 Director, GTU-GSP

DIRECTOR

GRADUATE SCHOOL OF PHARMACY
 GUJARAT TECHNOLOGICAL UNIVERSITY

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (3rd Semester) (Academic Year 2021-22)
Course: Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)

08/09/2021

Circular

Teachers as per following details are entrusted with additional responsibilities as Subject Coordinator.

Subject Code	Subject Name	Teacher/s teaching the subject PRA	Teacher/s teaching the subject PQA	Teacher/s teaching the subject Pharmaceutics	Subject Coordinator PRA	Subject Coordinator PQA	Subject Coordinator Pharmaceutics
MRM301T	RM and Biostatistics*	SPC+DMP+MM+RBP+BKM			RBP		
MJC302P	Journal Club I (JC 1)	SPC+JBD+UGV+RVS+RBP+BKM+AMP	SPC+KNT+RBP+RV S+UGV+JMV+HDJ	DMP+MM+KNT+UGV+JMV+DK	AMP	RVS	MM
MDP303P	Discussion/ Presentation (Proposal Presentation)	SPC+JBD+UGV+RVS+RBP+BKM+AMP+R P	SPC+KNT+RBP+RV S+UGV+J MV+HDJ +RP	DMP+MM+KNT+UGV+JMV+DK	BKM	KNT	DMP
MRW304P	Research Work - Dissert. Phase I (RWDP 1)	SPC+JBD+UGV+RVS+RBP+BKM+AMP	SPC+KNT+RBP+RV S+UGV+J MV+HDJ	DMP+MM+KNT+UGV+JMV+DK	BKM	KNT	DMP
SPC: Dr. Sanjay P. Chauhan		DMP: Dr. D. M. Patel		MM: Dr. Manju Misra		RP: Dr. Rajesh Patel	
UGV: Mr. Uday G. Vegad		KNT: Dr. Kashyap Thummar		RVS: Mr. Ravisinh Solanki		Ms. Hardi Joshi	
RBP: Mr. Ravi B. Patel		JMV: Ms. Jigna Vadalila		BKM: Ms. Bhumika K. Maheriya		AMP: Ms. Pathan Asmatbanu M	
DK: Dr. Dignesh Khunt							


Coordinator-Academic, GTU-GSP


Director, GTU-GSP

DIRECTOR

GRADUATE SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY

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Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (3rd Semester) (Academic Year 2021-22)
Course: Pharmaceutical Regulatory Affairs (27)
Pharmaceutical Quality Assurance (24)
Pharmaceutics (20)



08/09/2021

Circular

Allocation of Subject Units

Subject Code	Subject Name	Allocation					
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
MRM301T	Research Methodology and Biostatistics*	SPC	DMP	MM	BKM	BKM	RBP
MJC302P	Journal Club I	SPC+DMP+MM+UGV+JMV+KNT+RVS+ RBP+BKM+AMP+HDJ					
MDP303P	Discussion/ Presentation (Proposal Presentation)						
MRW304P	Research Work - Dissertation Phase I						

Faculties

SPC: Dr. Sanjay P. Chuahan
DMP: Dr. D. M. Patel
MM: Dr. Manju Misra
KNT: Dr. Kashyap Thummar
UGV: Mr. Uday G. Vegad
JMV: Ms. Jigna Vadalia

RVS: Mr. Ravish Solanki
RBP: Mr. Ravi B. Patel
BKM: Ms. Bhumika Maheriya
AMP: Ms. Asmatbanu M. Pathan
HDJ: Ms. Hardi Joshi

Coordinator-Academic, GTU-GSP

Director, GTU-GSP

DIRECTOR
GRADUATE SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY

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29/09/2021

Gujarat Technological University

Graduate School of Pharmacy

Academic Year: 2021-22

Academic Work load for M. Pharm Semester 1 and 3 (MRA, MQA, MPH and MPM)

Semester	Subject Code	Subject Name	Hours	SPC	DMP	RP	MM	KNT	UGV	RVS	RBP	AMP	BKM	HDJ	JV	DK	JBD										
1	MAT101T	Modern Pharma. Analytical Techniques	5					5																			
	MPH102T	Drug Delivery System	5		5																						
	MPH103T	Modern Pharmaceutics	5				5																				
	MPH104T	Regulatory Affair	5													5											
	MPH105P	Pharmaceutics Practical I (A + B)	12		4		4							4													
	MSA106P	Seminar/Assignment (S/A)	8		2.5		2.5	1									2.5										
	MQA102T	Quality Management System	5							5																	
	MQA103T	Quality Control and Quality Assurance	5					1							4												
	MQA104T	Product Develop. and Technol. Transfer	5								5																
	MQA105P	Pharmaceutical QA Practical I (A + B)	12					4		4	4																
	MSA106P	Seminar/Assignment (S/A)	8					1		2.5	2.5			2.5													
	MPM102T	Natural Products Chemistry	5	1					2							2											
	MPM103T	Phytochemical Investigation Techniques	5						5																		
	MPM104T	Traditional Medicines	5													5											
	MPM105P	Phytopharmacy and Phytomedicine Practical I	12			4			4							4											
	MSA106P	Seminar/Assignment	8					0.5	2.5							2.5											
	MRA101T	Good Regulatory Practices	5									5															
	MRA102T	Documentation and Regulatory Writing	5			4											1										
	MRA103T	Clinical Research Regulations	5										5														
	MRA104T	Regulations and Legislation for D & C, MDs, Biologicals & Herbals, and Food & Nutraceuticals In India and IPRs	5	1							1		1		1		1										
	MRA105P	Regulatory Affairs Practical I	12			1.5						4	4	1.5			1.5										
	MSA106P	Seminar/Assignment	8	1		2.5						2.5	2.5														
3	MRM301T	RM and Biostatistics*	5	1	1		1				1		1														
	MJC302P	Journal Club I (JC I)	1	2.5	2.5	2.5	2.5	2	2	2	2	1.5	2	1.5	2	1.5	1										
	MDP303P	Discussn/ Presentn (Proposal Presentn)	2																								
	MRW304P	Research Work - Dissert. Phase I (RWDP I)	28	5	5	5	5	4	4	4	4	3	4	3	4	3	2										
Total contact Hr				11.5	20	19.5	20	18.5	19.5	18.5	18.5	17	18.5	17.5	19.5	15.5	3										
As per Norms				6	14	14	14	16	16	16	16	16	16	16	16	16	14										
Faculties				SPC	DMP	RP	MM	KNT	UGV	RVS	RBP	AMP	BKM	HDJ	JV	DK	JBD										
FACULTY																											
SPC: Dr. S. P. Chauhan				RP: Dr. Rajesh Patel				KNT: Dr. K. N. Thummar				RVS: Mr. R. V. Solanki				BKM: Ms. B. K. Maheriya				AMP: Ms. A. M. Patil				DK: Dr. Dignesh Khunt			
DMP: Dr. D. M. Patel				MM: Dr. Manju Misra				UGV: Mr. U. G. Vegad				RBP: Mr. R. B. Patel				JV: Ms. Jigna Vadalia				HDJ: Ms. H. D. Joshi							
<div><div> Coordinator-Academic, GTU-GSP</div><div> SCHOOL OF PHARMACY</div><div> Director, GTU-GSP</div></div>																											


 GRADUATE SCHOOL OF PHARMACY
 GUJARAT TECHNOLOGICAL UNIVERSITY

Gujarat Technological University
Graduate School of Pharmacy
M.Pharm (Pharmaceutical Regulatory Affairs)

NOTICE/CIRCULAR

Date: 03.10.2017

Guidelines for Internal Examination & Computing Internal Marks

Reference:

- a) Teaching & Examination Scheme issued by Gujarat Technological University(Annexure 1)
- b) Norms of Pharmacy Council of India (Annexure 2)

Theory

1. GTU-Graduate School of Pharmacy shall conduct two internal test in each semester.
2. 1st internal test may be scheduled during 4th/5th weeks of the semester. 2nd internal test may be scheduled during 8th to 10th week of the semester
- 2A. Syllabus for each internal test may include approximately 2 units. Each unit is generally having 12 hrs.
3. Each internal test shall be of 45 marks for each theory subject.
4. Duration of examination for each theory internal test: weightage in the syllabus shall be for each subject 1 hour & 30 minutes.
5. Question Paper is to be set by teachers teaching the course. Answer books are to be evaluated by teachers who have set the question paper.
6. Pattern of question paper shall be as indicated in Annexure – 3
7. Internal marks for each theory subject shall be computed as per the details provided in the

Annexure 4:

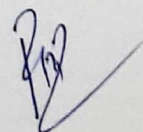
Weightage of internal Theory test: 15 Marks

Weightage of Attendance' & Weightage of Student Teacher interaction: 05 Marks

Total Weightage: 20 Marks

Computation Table:

Attendance %	Marks out of 8	Student /Teacher Interaction	Write % Out of 5
		Mark Out of 2	btc/2



Practical:

8. Graduate School of Pharmacy Shall Conduct One Internal Practical Test preferably during 11th to 12th week of the semester.
9. Duration of Practical Examination Shall be : 4 hours.
10. Practical Examination shall be Conducted by the teachers teaching the Practical Subjects
11. Internal Marks in practical shall be Computer as per the following scheme

Weightage of Practical Exercises: 30 Marks

Weightage of Viva - : 05 marks

Weightage of Practical Record (Journal) :05 Marks

Weightage of Attendance* & Weightage of Student Teacher interaction: 10 Marks

Total Weightage: 50 Mark

***Computation of marks**

% OF ATTENDANCE	Marks
90 - 100	8
85 - 89	7
80-84	6
75-79	5
70-74	4
65-69	3
60-64	2
55 - 59	1
<55	0





GUJARAT TECHNOLOGICAL UNIVERSITY

Report Logo : File-1 2.1 List of All student Enrolled (Branch-Wise)

Date :10/10/2017

College Code : 288

College Name : SCHOOL OF PHARMACY (GUJARAT TECHNOLOGICAL UNIVERSITY)

Branch Name : Pharmaceutical Regulatory Affairs

Branch Code : 27

Total : 11 (11 + 0)

Sr	Enrollment	Name	Gender	Category	Status	Fee+Penalty
1	172880827001	ANSARI DARAKSHA MUHAMMAD	F	OPEN	SQ	150
2	172880827002	BATADA NORIN BARKATBHAI	F	OPEN	SQ	150
3	172880827003	DEVADHA MEHULBHAI RAJNIKANT	M	ST	SQ	150
4	172880827004	GANDHI HANSAL VIJAY	M	OPEN	SQ	150
5	172880827005	GOHEL SAGAR KISHORBHAI	M	SEBC	SQ	150
6	172880827006	JADAV RAHUL KIRITKUMAR	M	OPEN	SQ	150
7	172880827007	JAGANI DHARMESHKUMAR UKABHAI	M	OPEN	SQ	150
8	172880827008	PATEL PANKTIBEN KIRTIKUMAR	F	OPEN	SQ	150
9	172880827009	PATEL YAGNESHKUMAR VINODBHAI	M	OPEN	SQ	150
10	172880827010	SHIPRA VIJAYESH PANDEY	F	OPEN	SQ	150
11	172880827011	THAKKAR RAGHAV ATMARAMBHAI	M	OPEN	SQ	150

Total Students : 11

Total Fees : 1,650.00

Total Penalty : 0.00

Grand Total : 1,650.00

DIRECTOR
GRADUATE SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY



GUJARAT TECHNOLOGICAL UNIVERSITY

Report Logo : File-1 2.6 List of Students Enrolled, admitted under SQ/MHRD

Date :03/10/2018

College Code : 288

College Name : SCHOOL OF PHARMACY (GUJARAT TECHNOLOGICAL UNIVERSITY)

Branch Name : Pharmaceutical Regulatory Affairs

Branch Code : 27

Total : 14 (14 + 0)

Sr	Enrollment	Name	Gender	Category	Status	Fee+Penalty
1	182880827001	ACHARYA SHARAD HARILAL	M	OPEN	SQ	150
2	182880827002	BARAIYA KOMALBEN BHASKARRAY	F	OPEN	SQ	150
3	182880827003	DAVE KEYUR PIYUSHKUMAR	M	OPEN	SQ	150
4	182880827004	KHAMAR VIDHI VINAYBHAI	F	OPEN	SQ	150
5	182880827005	KU SADHVI DHARAMNARAYAN TIWARI	F	OPEN	SQ	150
6	182880827006	MAURYA PRITIKUMARI RADHESHYAM	F	OPEN	SQ	150
7	182880827007	MEHTA HETAL MANISHKUMAR	F	OPEN	SQ	150
8	182880827008	MOURYA MAMTASHANTI SHAMBHUNATH	F	OPEN	SQ	150
9	182880827009	PANCHAL KINJAL PANKAJBHAI	F	SEBC	SQ	150
10	182880827010	PAREKH ISHANI HITESHKUMAR	F	SEBC	SQ	150
11	182880827011	PATEL NIDHI HASMUKHBHAI	F	SEBC	SQ	150
12	182880827012	REVATI KABARIYA	F	OPEN	SQ	150
13	182880827013	ROHIT KUMAR	M	OPEN	SQ	150
14	182880827014	ZALA TWINKLE DHANJIBHAI	F	SC	SQ	150

Total Students : 14

Total Fees : 2,100.00

Total Penalty : 0.00

Grand Total : 2,100.00

Signature of Principal :

GRADUATE SCHOOL OF PHARMACY
K-6 CIRCLE, ELECTRONIC ESTATE GIDC,
NR. GOVT. POLYTECHNIC, SECTOR-26,
GANDHINAGAR-382028

Seal of College :



GUJARAT TECHNOLOGICAL UNIVERSITY

Report Logo : File-1 2.1 List of All student Enrolled (Branch-Wise)

Date :30/11/2019

College Code : 288

College Name : SCHOOL OF PHARMACY (GUJARAT TECHNOLOGICAL UNIVERSITY)

Branch Name : Pharmaceutical Quality Assurance

Branch Code : 24 Total : 14 (14 + 0)

Sr	Enrollment	Name	Gender	Category	Status	Fee+Penalty
1	192880824001	BHAGYASHREE BALU	F	OPEN	ACPC	150
2	192880824003	DHIMAR MUGDHA JAGDISHBHAI	F	SEBC	ACPC	150
3	192880824004	GOSWAMI JANKI RAJENDRAPURI	F	SEBC	ACPC	150
4	192880824005	LIMBANI BRINDA BHASKARBHAI	F	SEBC	ACPC	150
5	192880824006	NAYAK KRISH JIGNESHKUMAR	M	SEBC	ACPC	150
6	192880824007	PANDYA MALAY PATHIK	M	GEN	ACPC	150
7	192880824008	PATEL DHARUVI HIRENKUMAR	F	GEN	ACPC	150
8	192880824009	PATEL DHARUVILKUMAR RAJANIBHAI	M	GEN	ACPC	150
9	192880824010	PATEL NISARG PRAVINBHAI	M	SEBC	ACPC	150
10	192880824011	RAVAT FORAMBAHEN KISHORKUMAR	F	SEBC	ACPC	150
11	192880824012	SHAIKH ZEESHAN MAZHAR IMAM	M	GEN	ACPC	150
12	192880824013	TIWARI RISHIKESH ANAND	M	GEN	ACPC	150
13	192880824014	UDHANI RAVEENA OMPRAKASH	F	GEN	ACPC	150
14	192880824015	BHATT SAGAR HARESHKUMAR	M	OPEN	VQ	150

Signature of Principal :



GRADUATE SCHOOL OF PHARMACY
K-6 CIRCLE, ELECTRONIC ESTABLISHMENT,
HIP. GOVT. POLYTECHNIC, SECTOR-20,
GANDHINAGAR-382028

Seal of College :

Branch Name : Pharmaceutical Regulatory Affairs

Branch Code : 27 Total : 20 (20 + 0)

Sr	Enrollment	Name	Gender	Category	Status	Fee+Penalty
1	192880827002	ASHWIN PATHAK	M	GEN	ACPC	150
2	192880827003	BUCH RAGHAV RAJESHBHAI	M	GEN	ACPC	150
3	192880827004	DERVALIYA MANSIBEN BAKULBHAI	F	SEBC	ACPC	150
4	192880827005	GOHEL ANKITA DINESHBHAI	F	SC	ACPC	150
5	192880827006	HARSOLIYA MOHAMMADHASSAN ZAKIRHUSEN	M	EWS	ACPC	150
6	192880827007	OLAKIYA ROHAN BHANUBHAI	M	SEBC	ACPC	150
7	192880827008	PALAS ALPESH GAURSINHBHAI	M	ST	ACPC	150
8	192880827009	PATEL PRATIMA NIHALAPRASAD	F	GEN	ACPC	150
9	192880827010	PATEL RIYA HARESHKUMAR	F	GEN	ACPC	150
10	192880827012	TANK RENUKABEN PARSOTTAMBHAI	F	SEBC	ACPC	150
11	192880827013	TARAPARA KOMAL BHARATKUMAR	F	EWS	ACPC	150
12	192880827014	THAKKAR JANKIBEN KISHORBHAI	F	GEN	ACPC	150
13	192880827015	TRIVEDI KOSHA CHIRAGKUMAR	F	GEN	ACPC	150
14	192880827016	UNNATI DILIPKUMAR CHANPURA	F	SEBC	ACPC	150
15	192880827017	VASAVA JAGRUTIBEN RAYJIBHAI	F	ST	ACPC	150
16	192880827018	VEER JASHVANTBHAI PATEL	M	SEBC	ACPC	150
17	192880827019	LEON ISHENGOMA	M	GEN	ICCR	150
18	192880827020	GABU MEETKUMAR JIVANBHAI	M	SEBC	VQ	150
19	192880827021	TANVI THAKAR	F	GEN	VQ	150
20	192880827022	YASH ARVINDKUMAR PATEL	M	OPEN	VQ	150

Total Students : 34

Total Fees : 5,100.00

Total Penalty : 0.00

Grand Total : 5,100.00

Signature of Principal :



Seal of College :

Gujarat Technological University
Graduate School of Pharmacy
M. Pharm (Pharmaceutical Regulatory Affairs)
Academic Year 2017-18

Sr. No.	Enrollment No	Student Name	Gender	Admission Category
1	172880827001	Ansari Daraksha Muhammad	F	OPEN
2	172880827002	Batada Norin Barkatbhai	F	OPEN
3	172880827003	Devdha Mehul Rajnikant	M	ST
4	172880827004	Gandhi Hansal Vijay	M	OPEN
5	172880827005	Gohel Sagar Kishorbhai	M	SEBC
6	172880827006	Jadav Rahul Kiritkumar	M	OPEN
7	172880827007	Jagani Dharmesh Ukabhai	M	OPEN
8	172880827008	Patel Pankti Kirtikumar	F	OPEN
9	172880827009	Patel Yagnesh Vinodbhai	M	OPEN
10	172880827010	Pandey Shipra Vijayesh	F	OPEN
11	172880827011	Thakkar Raghav Atmarambhai	M	OPEN



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Gujarat Technological University
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Academic Year 2018-19

Sr. No.	Enrollment No	Student Name	Gender	Admission Category
1	182880827001	Acharya Sharad Harilal	M	OPEN
2	182880827002	Baraiya Komalben Bhaskarray	F	OPEN
3	182880827003	Dave Keyur Piyushkumar	M	OPEN
4	182880827004	Khamar Vidhi Vinaybhai	F	OPEN
5	182880827005	Ku Sadhvi Dharamnarayan Tiwari	F	OPEN
6	182880827006	Maurya Pritikumari Radheshyam	F	OPEN
7	182880827007	Mehta Hetal Manishkumar	F	OPEN
8	182880827008	Mourya Mamtashanti Shambhunath	F	OPEN
9	182880827009	Panchal Kinjal Pankajbhai	F	SEBC
10	182880827010	Parekh Ishani Hiteshkumar	F	SEBC
11	182880827011	Patel Nidhi Hasmukhbhai	F	SEBC
12	182880827012	Revati Kabariya	F	OPEN
13	182880827013	Rohit Kumar	M	OPEN
14	182880827014	Zala Twinkle Dhanjibhai	F	SC



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Gujarat Technological University
Graduate School of Pharmacy
M. Pharm (Pharmaceutical Regulatory Affairs)
Academic Year 2019-20

Sr. No.	Enrollment No	Student Name	Gender	Admission Category
1	192880827002	Ashwin Pathak	M	OPEN
2	192880827003	Buch Raghav Rajeshbhai	M	Open
3	192880827004	Dervaliya Mansiben Bakulbhai	F	SEBC
4	192880827005	Gohel Ankita Dineshbhai	F	SC
5	192880827006	Harsoliya Mohammadhassan Zakirhusen	M	EWS
6	192880827007	Olakiya Rohan Bhanubhai	M	SEBC
7	192880827008	Palas Alpesh Gaursinhbhai	M	ST
8	192880827009	Patel Pratima Nihalaprasad	M	Open
9	192880827010	Patel Riya Hareshkumar	F	Open
10	192880827012	Tank Renukaben Parsottambhai	F	SEBC
11	192880827013	Tarapara Komal Bharatkumar	F	EWS
12	192880827014	Thakkar Jankiben Kishorbhai	F	open
13	192880827015	Trivedi Kosha Chiragkumar	F	open
14	192880827016	Unnati Dilipkumar Chanpura	F	SEBC
15	192880827017	Vasava Jagrutiben Rayjibhai	F	ST
16	192880827018	Veer Jashvantbhai Patel	M	SEBC
17	192880827019	Leon Ishengoma	M	Open
18	192880827020	Gabu Meetkumar Jivanbhai	M	SEBC
19	192880827021	Tanvi Thakar	F	open
20	192880827022	Yash Arvindkumar Patel	M	Open



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Gujarat Technological University
Graduate School of Pharmacy
M. Pharm (Pharmaceutical Quality Assurance)
Academic Year 2019-20

Sr. No.	Enrollment No	Student Name	Gender	Admission Category
1	192880824001	Bhagyashree Balu	F	OPEN
2	192880824003	Dhimar Mugdha Jagdishbhai	F	SEBC
3	192880824004	Goswami Janki Rajendrapuri	F	SEBC
4	192880824005	Lim bani Brinda Bhaskarbhai	F	SEBC
5	192880824006	Nayak Krish Jigneshkumar	M	SEBC
6	192880824007	Pandya Malay Pathik	M	OPEN
7	192880824008	Patel Dhruvi Hirenkumar	F	OPEN
8	192880824009	Patel Dhruvilkumar Rajanibhai	M	OPEN
9	192880824010	Patel Nisarg Pravinbhai	M	SEBC
10	192880824011	Ravat Forambahen Kishorkumar	F	SEBC
11	192880824012	Shaikh Zeeshan Mazhar Imam	M	OPEN
12	192880824013	Tiwari Rishikesh Anand	M	OPEN
13	192880824014	Udhani Raveena Omprakash	F	OPEN
14	192880824015	Sagar Bhatt	M	OPEN




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GUJARAT TECHNOLOGICAL UNIVERSITY



Gujarat Technological University
Graduate School of Pharmacy
M. Pharm (Pharmaceutical Regulatory Affairs)
Academic Year 2020-21

Sr. No.	Enrollment No	Student Name	Gender	Admission Category
1	202880827001	JEEL ARVINDKUMAR PATEL	MALE	OPEN
2	202880827002	Bhatt Drashtiben	FEMALE	OPEN
3	202880827003	Gond kanchankumari Subhashchandra	FEMALE	OPEN
4	202880827004	DONGA PALAK KAMLESHBHAI	FEMALE	OPEN
5	202880827005	Mann PANKAJKUMAR Mehta	MALE	OPEN
6	202880827006	Salevala Rozina A	FEMALE	OPEN
7	202880827007	Prakruti Pandya	FEMALE	OPEN
8	202880827008	VARASADA MISHRI HITESHBHAI	FEMALE	OPEN
9	202880827009	Gori Jeetkumar Jentilal	MALE	OPEN
10	202880827010	Riddhi Chetanbhai Tandel	FEMALE	SE
11	202880827011	MEHTA HIMANSHU MAHESHBHAI	MALE	SC
12	202880827012	PATEL PARTHKUMAR VISHNUBHAI	MALE	OPEN
13	202880827013	khodia yash jitendrakumar	MALE	OPEN
14	202880827014	Mittalpanchal	FEMALE	SE
15	202880827015	Patel Swatiben Mukeshbhai	FEMALE	OPEN
16	202880827016	RANA AVANI HEMANTKUMAR	FEMALE	SE
17	202880827017	AJUDIYA AYUSHI GOVINDBHAI	FEMALE	OPEN
18	202880827018	Trivedi Priyal Himanshubhai	FEMALE	OPEN
19	202880827019	GUPTA ANJALI KAILASHCHANDRA	FEMALE	OPEN


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GUJARAT TECHNOLOGICAL UNIVERSITY



Gujarat Technological University
Graduate School of Pharmacy
M. Pharm (Pharmaceutical Quality Assurance)
Academic Year 2020-21

Sr. No.	Enrollment No	Student Name	Gender	Admission Category
1	202880824001	Dhorajiya Shivani Rajeshbhai	FEMALE	OPEN
2	202880824002	MARADIYA ANUJKUMAR PRAKASHBHAI	MALE	EWS
3	202880824003	Sojitra Shreyanshi Nikulbhai	FEMALE	OPEN
4	202880824004	GADHIYA CHANDNI HASMUKHBHAI	FEMALE	SE
5	202880824005	HARKHANI HINALBEN KISHORBHAI	FEMALE	OPEN
6	202880824006	RENITA BABUBHAI NAGANI	FEMALE	OPEN
7	202880824007	PATEL SWATI ARVINDKUMAR	FEMALE	OPEN
8	202880824008	PATEL NISHABEN JITENDRAKUMAR	FEMALE	OPEN
9	202880824009	PATEL PRANALI KAMLESHKUMAR	FEMALE	OPEN
10	202880824010	SHETH RIYA ALPESHKUMAR	FEMALE	OPEN
11	202880824011	PATEL BINALBEN MANOJKUMAR	FEMALE	OPEN
12	202880824012	Sorathiya Monika Bharatbhai	FEMALE	OPEN
13	202880824013	SANJAY KUMAR PUROHIT	MALE	OPEN
14	202880824014	VISHWAKARMA SONAL JOGENDRA	FEMALE	SE
15	202880824015	dhairyashri jayeshbhai kher	FEMALE	SE
16	202880824016	Poojaben Ravindrabhai Soni	FEMALE	OPEN
17	202880824017	Dube Abhishekkumar Indrakumar	MALE	OPEN
18	202880824018	PAWAR MANALI MAHENDRASINGH	FEMALE	SE
19	202880824019	PUROHIT DIVA CHETANBHAI	FEMALE	OPEN



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GRADUATE SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY



Gujarat Technological University
Graduate School of Pharmacy
M. Pharm (Pharmaceutics)
Academic Year 2020-21

Sr.No.	Enrollment No	Student Name	Gender	Admission Category
1	202880820001	Raval Jayvin Rameshbhai	MALE	SE
2	202880820002	Prajapati Devang kumar Amaratbhai	MALE	SE
3	202880820003	RAJAN LALJIBHAI PRAJAPATI	MALE	OPEN
4	202880820004	JANI HARSHILKUMAR SHARADCHANDRA	MALE	OPEN
5	202880820005	BHAVSAR RISHI MANOJ	MALE	OPEN
6	202880820006	CHAUDHARI MEGHABEN RITESHBHAI	FEMALE	ST
7	202880820007	AUDICHY PRACHEEBEN PRABHUBHAI	FEMALE	OPEN
8	202880820008	VADIYA DEVASHRI ASHOKBHAI	FEMALE	OPEN
9	202880820009	Patel Arati Rohitbhai	FEMALE	OPEN
10	202880820010	BODAR AARTIBEN HARSURBHAI	FEMALE	SE
11	202880820011	TIWARI VIKASH UMESHKUMAR	MALE	OPEN
12	202880820012	Prajapati Mehulkumar Rameshbhai	MALE	OPEN
13	202880820013	Bheda Mayur J.	MALE	SE
14	202880820014	KOTAK FRENIL MAHESHBHAI	MALE	EWS
15	202880820015	Patel Fenil lalitkumar	MALE	OPEN
16	202880820016	PATEL MEGHA PRAKASHKUMAR	FEMALE	OPEN
17	202880820017	Happy Bharatbhai Patel	FEMALE	OPEN
18	202880820018	Lariya Jahnvi Viren	FEMALE	OPEN
19	202880820019	Sushama Sinha	FEMALE	ICCR
20	202880820020	PATEL RITU PRAVINBHAI	FEMALE	OPEN



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GRADUATE SCHOOL OF PHARMACY
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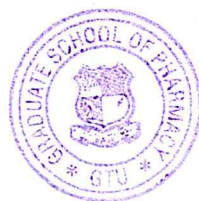



Gujarat Technological University				
Graduate School of Pharmacy				
Enrollment of Students (A.Y.2021-22)				
M.Pharm (Pharmaceutical Regulatory Affairs)				
SrNo	Enrollment No	Student Name	Gender	Admission Category
1	212880827001	Patel Hardi Nikesh	FEMALE	OPEN
2	212880827002	Pathak Kankshi Naimeshkumar	FEMALE	OPEN
3	212880827003	Prajapati Poojakumari Manharbhai	FEMALE	OPEN
4	212880827004	Banth Mandeep Kaur	FEMALE	OPEN
5	212880827005	Patel Shivani Sanjaybhai	FEMALE	OPEN
6	212880827006	Rangani Krupali Hareshbhai	FEMALE	OPEN
7	212880827007	Aghera Nidhi Alpeshbhai	FEMALE	OPEN
8	212880827008	Shah Paras Dipakbhai	MALE	OPEN
9	212880827009	Rajput Shitalsingh Sujeetsingh	FEMALE	OPEN
10	212880827010	Sharma Divya Krishnakant	FEMALE	OPEN
11	212880827011	Modi Priti Nareshbhai	FEMALE	SEBC
12	212880827012	Nayi Nidhi Hitesh	FEMALE	OPEN
13	212880827013	Makwana Reenaben Dahyabhai	FEMALE	SC
14	212880827014	Parmar Pooja Manishbhai	FEMALE	SEBC
15	212880827015	Tandel Rutviben Rajanbhai	FEMALE	SEBC



[Signature]
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 GRADUATE SCHOOL OF PHARMACY
 GUJARAT TECHNOLOGICAL UNIVERSITY

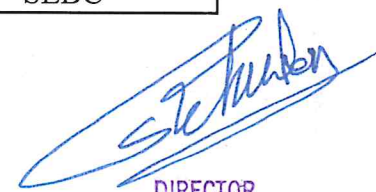
Gujarat Technological University				
Graduate School of Pharmacy				
Enrollment of Students (A.Y.2021-22)				
M.Pharm (Pharmaceutical Quality Assurance)				
SrNo	Enrollment No	Student Name	Gender	Admission Category
1	212880824001	Sharma Ritu Dipak	FEMALE	EWS
2	212880824002	Vadher Priyankaben Rameshbhai	FEMALE	SEBC
3	212880824003	Jesur Mihir Jitendrabhai	MALE	OPEN
4	212880824004	Wadhwa Poojaben Ashokbhai	FEMALE	OPEN
5	212880824005	Solanki Jahanviben Kishorbhai	FEMALE	OPEN
6	212880824006	Patel Manil Pankajbhai	MALE	OPEN
7	212880824007	Patil Shraddha Sunilbhai	FEMALE	OPEN
8	212880824008	Patel Kinnari Bharatbhai	FEMALE	OPEN
9	212880824009	Patel Mansi Natvarbhai	FEMALE	EWS
10	212880824010	Bhusara Daneshwari Suresh	FEMALE	ST
11	212880824011	Makwana Riya Sureshbhai	FEMALE	SC
12	212880824012	Solanki Kartiksinh Arjunsinh	MALE	SEBC
13	212880824013	Patel Shraddhaben Hasmukhbhai	FEMALE	OPEN
14	212880824014	Kapadia Nrupa Jaypal	FEMALE	OPEN
15	212880824015	Patel Anjali Kanubhai	FEMALE	OPEN
16	212880824016	Kathad Archanaben Narsinhbhai	FEMALE	OPEN
17	212880824017	Sharma Shikha Kuldip	FEMALE	OPEN




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 GRADUATE SCHOOL OF PHARMACY
 GUJARAT TECHNOLOGICAL UNIVERSITY

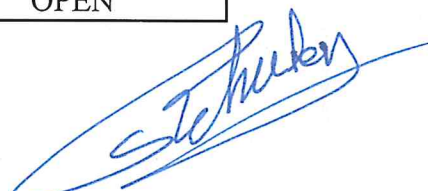
Gujarat Technological University				
Graduate School of Pharmacy				
Enrollment of Students (A.Y.2021-22)				
M.Pharm (Pharmaceutics)				
SrNo	Enrollment No	Student Name	Gender	Admission Category
1	212880820001	Joshi Vivek Deepak	MALE	OPEN
2	212880820002	Nishant Milanbhai Tejura	MALE	OPEN
3	212880820003	Shah Dhruvilkumar Nikunj Kumar	MALE	OPEN
4	212880820004	Gadhvi Chelsi Kanubhai	FEMALE	OPEN
5	212880820005	Shah Meetkumar Hareshbhai	MALE	EWS
6	212880820006	Kakkad Janki Kiritkumar	FEMALE	OPEN
7	212880820007	Shah Rutvi Pintubhai	FEMALE	EWS
8	212880820008	Patel Reeyaben Subhashbhai	FEMALE	OPEN
9	212880820009	Nayi Smit Ashokkumar	MALE	SEBC
10	212880820010	Sudhirkumar Amarprakash Shukla	MALE	OPEN
11	212880820011	Lakhatariya Mansi Yogeshkumar	FEMALE	OPEN
12	212880820012	Bhavsar Vishva Dharmendrabhai	FEMALE	OPEN
13	212880820013	Patel Riti Nileshbhai	FEMALE	ST
14	212880820014	Bhoye Pankajbhai Bharatbhai	MALE	ST
15	212880820015	Parmar Dishita Girishbhai	FEMALE	OPEN
16	212880820016	Malam Ravin Jagdishbhai	MALE	SEBC




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Gujarat Technological University				
Graduate School of Pharmacy				
Enrollment of Students (A.Y.2021-22)				
M.Pharm (Phytopharmacy and Phytomedicine)				
SrNo	Enrollment No	Student Name	Gender	Admission Category
1	212880831001	Vihol Disha Rajendrasinh	FEMALE	OPEN
2	212880831002	Bahliwala Payal Dipakkumar	FEMALE	OPEN
3	212880831003	Rohit Rutvi Dinubhai	FEMALE	OPEN
4	212880831004	Badiyavadara Nikhitaben Punjabhai	FEMALE	SEBC
5	212880831005	Patel Harshkumar Bipinbhai	MALE	OPEN
6	212880831006	Mandal Nitish Kumar Nandlal	MALE	OPEN
7	212880831007	Narigara Parth Bharatbhai	MALE	SEBC
8	212880831008	Zalavadiya Urvikkumar Himmatbhai	MALE	OPEN
9	212880831009	Patel Pinal Rajendrabhai	FEMALE	OPEN




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Annexure 16.2 Placement details of students

Sr. No.	Name of Programme (Drug Regulatory Affairs/Pharmaceutical Quality Assurance)	Name of Student	Name of Company	Salary Package	Institute Pass out year
1	Pharmaceutical Quality Assurance	Bhagyashree Balu	Meril Diagnostics	144000	2020-21
2	Pharmaceutical Quality Assurance	Limbani Brinda Bhaskarbhai	Acculife Pvt Ltd	198000	2020-21
3	Pharmaceutical Quality Assurance	Nayak Krish Jigneshkumar	Intas Pharma	240000	2020-21
4	Pharmaceutical Quality Assurance	Patel Dhruvi Hirenkumar	Cadilla Health care Ltd	144000	2020-21
5	Pharmaceutical Quality Assurance	Patel Dhruvilkumar Rajanibhai	Emcure Pharmaceuticals	144000	2020-21
6	Pharmaceutical Quality Assurance	Ravat Forambahen Kishorkumar	Sankul Pharmacy College, Amreli	300000	2020-21
7	Pharmaceutical Quality Assurance	Sagar Bhatt	BDR Pharma	180000	2020-21
8	Drug Regulatory Affairs	Ashwin Pathak	Alpa Laboratories Ltd	168000	2020-21
9	Drug Regulatory Affairs	Buch Raghav Rajeshbhai	Molkem Pvt Ltd	302748	2020-21
10	Drug Regulatory Affairs	Dervaliya Mansiben Bakulbhai	BDR Pharma	156000	2020-21
11	Drug Regulatory Affairs	Olakiya Rohan Bhanubhai	Torrent Pharmaceuticals	144000	2020-21
12	Drug Regulatory Affairs	Patel Pratima Nihalaprasad	Anand Pharmacy College	228000	2020-21
13	Drug Regulatory Affairs	Patel Riya Hareshkumar	Torrent Pharmaceuticals	144000	2020-21
14	Drug Regulatory Affairs	Tank Renukaben Parsottambhai	Accuprec Research Center	279996	2020-21
15	Drug Regulatory Affairs	Tarapara Komal Bharatkumar	Vivanza bio Science	156000	2020-21
16	Drug Regulatory Affairs	Trivedi Kosha Chiragkumar	GIC, GTU	216000	2020-21
17	Drug Regulatory Affairs	Gabu Meetkumar Jivanbhai	Torrent Pharmaceuticals	144000	2020-21
18	Drug Regulatory Affairs	Tanvi Thakar	Eburon Organics	144000	2020-21
19	Drug Regulatory Affairs	Yash Arvindkumar Patel	Lambda CRO	204000	2020-21
20	Drug Regulatory Affairs	Veer Jashvantbhai Patel	Meril Diagnostics	144000	2020-21

Annexure 17.1 List of Research Projects/ Consultancy Works

Sr. No.	Name	Number of Projects carried out, funding agency, Grant received	Publications (if any) out of research in last three years out of masters projects								Indus- try Linkag e	MoUs with Industri es
1	In-situ gelling mucoadhesive system for brain delivery of p-Glycoprotein (P-gp) substrates via nasal route: Effect of a novel lipidic agent on drug release and P-gp inhibition.	DST-INSPIRE (35 lakhs)	Authors	Title	Publication	Volum e	Number	Pages	Year	Publisher	–	–
2	Design of Oral delivery system for macromolecules using gastrointestinal patch system: Role of fatty acid as penetration enhancer	DBT RGYI (25.54 lakhs)	Shah, Brijesh; Khunt, Dignesh; Misra, Manju; Padh, Harish;	Formulation and in-vivo pharmacokinetic consideration of intranasal microemulsion and mucoadhesive microemulsion of rivastigmine for brain targeting	Pharmaceutical research	35	1	01-Oct	2018	Springer US	–	–
3	Exploring the molecular mechanism of butter oil enriched nanoformulation in enhancing nasal to brain delivery and its potential role in promoting neurogenesis	SERB EMR (17.44)	Katdare, Aakash; Thakkar, Shreya; Dhepale, Shivshankar; Khunt, Dignesh; Misra, Manju;	Fatty acids as essential adjuvants to treat various ailments and their role in drug delivery: A review	Nutrition	65		138-157	2019	Elsevier	–	–
4	Colloidal lipid nanocarrier based antifungal formulation for nasal delivery in management of Mucormycosis	Seed Money Scheme-IQAC GTU (1 lakh)	Katrajkar, Kiran; Darji, Lalit; Kethavath, Devial; Thakkar, Shreya; Kshirsagar, Bhavesh; Misra, Manju;	Shedding light on interaction of so called inactive ingredients (excipients) with permeability-glycoprotein	Journal of Drug Delivery Science and Technology	52		531-552	2019	Elsevier	–	–
			Shrivastava, Meera; Khunt, Dignesh; Shrivastava, Meenakshree; Choudhary, Manisha; Rathod, Rajeshwar; Misra, Manju;	Advances in in vivo predictive dissolution testing of solid oral formulations: how closer to in vivo performance?	Journal of Pharmaceutical Innovation	15	3	296-317	2020	Springer US	–	–
			Gupta, Aashu; Nayak, Kritika; Misra, Manju;	Cow ghee fortified ocular topical microemulsion; in vitro, ex vivo, and in vivo evaluation	Journal of Microencapsulation	36	7	603-621	2019	Taylor & Francis	–	–
			Thakkar, Shreya; More, Namdev; Sharma, Dilip; Kapusetti, Govinda; Kalia, Kiran; Misra, Manju;	Fast dissolving electrospun polymeric films of anti-diabetic drug repaglinide: formulation and evaluation	Drug development and industrial pharmacy	45	12	1921-1930	2019	Taylor & Francis	–	–
			Kochhar, Pratiksha; Nayak, Kritika; Thakkar, Shreya; Polaka, Suryanarayana; Khunt, Dignesh; Misra, Manju;	Exploring the potential of minoxidil tretinoin liposomal based hydrogel for topical delivery in the treatment of androgenic alopecia	Cutaneous and Ocular Toxicology	39	1	43-53	2020	Taylor & Francis	–	–
			Khunt, Dignesh; Shrivastava, Meenakshree; Polaka, Suryanarayana; Gondaliya, Piyush; Misra, Manju;	Role of omega-3 fatty acids and butter oil in targeting delivery of donepezil hydrochloride microemulsion to brain via the intranasal route: a comparative study	AAPS PharmSciTech	21	2	01-Nov	2020	Springer International Publishing	–	–
			Nayak, Kritika; Misra, Manju;	PEGylated microemulsion for dexamethasone delivery to posterior segment of eye	Journal of Biomaterials Science, Polymer Edition	31	8	1071-1090	2020	Taylor & Francis	–	–
			Khunt, Dignesh; Polaka, Suryanarayana; Shrivastava, Meenakshree; Misra, Manju;	Biodistribution and amyloid beta induced cell line toxicity study of intranasal Rivastigmine microemulsion enriched with Fish Oil and Butter oil	Journal of Drug Delivery Science and Technology	57		101661	2020	Elsevier	–	–
			Katdare, Aakash; Khunt, Dignesh; Thakkar, Shreya; Polaka, Surya Narayana; Misra, Manju;	Comparative evaluation of fish oil and butter oil in modulating delivery of galantamine hydrobromide to brain via intranasal route: pharmacokinetic and oxidative stress studies	Drug delivery and translational research	10	4	1136-1146	2020	Springer US	–	–
			Nayak, Kritika; Misra, Manju;	Triamcinolone Acetonide-Loaded PEGylated Microemulsion for the Posterior Segment of Eye	ACS omega	5	14	7928-7939	2020	American Chemical Society	–	–
			Katrajkar, Kiran; Thakkar, Shreya; Kshirsagar, Bhavesh; Sirsakar, Bhushan; Polaka, Suryanarayana; Misra, Manju;	Development and evaluation of crystalline inclusion complex of finasteride using electrospraying as a novel approach	Journal of Drug Delivery Science and Technology	59		101887	2020	Elsevier	–	–
			Thakkar, Shreya; Misra, Manju;	Electrospray drying of docetaxel nanosuspension: A study on particle formation and evaluation of nanocrystals thereof	Journal of Drug Delivery Science and Technology	60		102009	2020	Elsevier	–	–
			Choudhary, Devendra; Goykar, Hamman; Kananwad, Tukaram; Kannauja, Suraj; Gadekar, Vedant; Misra, Manju;	An understanding of mitochondria and its role in targeting nanocarriers for diagnosis and treatment of cancer	Asian Journal of Pharmaceutical Sciences	16	4	397-418	2021	Elsevier	–	–
			Nayak, Kritika; Choudhary, Manisha Vinayak; Bagul, Swati; Chavan, Tejas Avinash; Misra, Manju;	Ocular drug delivery systems	Drug Delivery Devices and Therapeutic Systems			515-566	2021	Academic Press	–	–
			Ahire, Ekhnath; Thakkar, Shreya; Borade, Yogeshwari; Misra, Manju;	Nanocrystal based orally disintegrating tablets as a tool to improve dissolution rate of Vortioxetine	Bulletin of Faculty of Pharmacy, Cairo University	58	1&2	Nov-20	2020	Cairo University; Faculty of Pharmacy	–	–
			Shah, Brijesh; Khunt, Dignesh; Misra, Manju;	Comparative evaluation of intranasally delivered quetiapine loaded mucoadhesive microemulsion and polymeric nanoparticles for brain targeting: pharmacokinetic and gamma scintigraphy studies	Future Journal of Pharmaceutical Sciences	7	1	01-Dec	2021	SpringerOpen	–	–
			Thakkar, Shreya; Misra, Manju;	Electrospray particles as drug delivery systems: concepts, strategies, and applications	Biomedical Applications of Electrospraying and Electrospraying			245-275	2021	Woodhead Publishing	–	–
			Khunt, Dignesh; Misra, Manju;	An overview of anatomical and physiological aspects of the nose and the brain	Direct Nose-to-Brain Drug Delivery			Mar-14	2021	Academic Press	–	–
			Padh, Harish; Shenoy, Snehal; Thakkar, Shreya; Misra, Manju;	Organelle targeting: Focus on the mitochondria	Mitochondrial Dysfunction and Nanotherapeutics			263-289	2021	Academic Press	–	–
			Shah, Viral; Hathi, Garvit; Misra, Manju; Nivsarkar, Manish;	Design, development and QbD based optimization of double coated spheronized aceclofenac pellets for effective palliative care in rheumatoid arthritis	Journal of Drug Delivery Science and Technology			102920	2021	Elsevier	–	–
5	Exploration of Antiinflammatory and Hepatoprotective potential of Onosma bracteata Wall – A controversial botanical source of Ayurvedic medicine Gajivha	Seed money Scheme - IQAC GTU (0.30 Lakhs)	–	–	–	–	–	–	–	–	–	–
6	Risk assessment of Genotoxic Impurities (Nitrosamines) in Marketed Anti-hypertensive Formulations Administered over a Long-Term Duration	Seed Money Scheme-IQAC GTU (1 lakh)	–	–	–	–	–	–	–	–	–	–
7	Exploration of Antiinflammatory and Hepatoprotective potential of Onosma bracteata Wall – A controversial botanical source of Ayurvedic medicine Gajivha	Seed money Scheme - IQAC GTU (0.30 Lakhs)	–	–	–	–	–	–	–	–	–	–
8	Herbal Potential compound affected to the oral cancer	1.5 lakhs	–	–	–	–	–	–	2022	–	–	–

17.2 List of Consultancy Works			
Sr. No.	Name of instrument	Details	Year
1	Functional group identification of API by FT-IR spectrophotometer	Mr. Maharshi Bharatkuar Vyas, M.pharm Student KBIPER Gandhinagar, maharshivvyas342@gmail.com 7990880429	2021
2		Ms. Priya Patel M.pharm Student KBIPER Gandhinagar priyapatel.23121997@gmail.com 9712651220	2021
3		Mr. Anup Kumar Junior Scientist R&D Axio Biosolutions Ahmedabad anup.kumar@axiobio.com 8670989539	2021
4		Ms. Rami Dharati Ph.d. Scholar GTU Ph.d. Scholar Ahmedabad ramidharati@gmail.com 9033486489	2021
5		Ms.Monika Sonawane PhD Student M.V.P.S College of Pharmacy Nashik monika.sonawane763@gmail.com 9890468136	2021
6		pharmace research laboratory Student PharmAce Research Laboratory Adalaj, Gandhinagar info@pharmaceresearch.com 9924509678	2021
7		Dr. Punit Parejia Associate Professor K. B. Institute of Pharmaceutical Education and Research Gandhinagar punit.parejia@kbiper.ac.in 9898561832	2021
8		Mr. Arjun Joshi Research Scholar Aanand Pharmacy College, Aanand Aanand arjunjoshi176@gmail.com 7041940502	2021
9		Ms. Urmi prajapati Research Scholar Aanand Pharmacy College, Aanand Aanand prajapatiurmi6@gmail.com 9512753767	2021
10		Ms. Nidhi Shah M.Pharm-Gold Medal nidhishah514@gmail.com 94293 05640 FTIR	2022
11		Ms.Jagruti B. Vani Ph.d. Scholar vanijagu1901@gmail.com 7265031321	2022
12		Dr. Punit Parejia Associate Professor K. B. Institute of Pharmaceutical Education and Research Gandhinagar punit.parejia@kbiper.ac.in 9898561832	2022
13	High pressure Liquid Chromatography(HPLC)	Ms. Rami Dharati Ph.d. Scholar GTU Ph.d. Scholar Ahmedabad ramidharati@gmail.com 9033486489	2021
14		Mr. Himanshu Makwana Assistant R & D Manager Phytolifescience Pvt.Ltd ahmedabad phytoqac@gmail.com 9662432549	2021
15		Ms. Khyati Shah Assitant Professor B. K. Modi Government Pharmacy College Gandhinagar khyati_ns@yahoo.co.in 8511115937	2021
16		Ms.Monika Sonawane PhD Student M.V.P.S College of Pharmacy Nashik monika.sonawane763@gmail.com 9890468136	2021
17		Ms.Manisha Bihani Ph.d. Scholar MVP College of Pharmacy Nashik mmbihani@gmail.com 9890468136	2021
18		Mr. Himanshu Makwana Assistant R & D Manager Phytolifescience Pvt.Ltd ahmedabad phytoqac@gmail.com 9662432549	2021
19		Ms. Khyati Shah Assitant Professor B. K. Modi Government Pharmacy College Gandhinagar khyati_ns@yahoo.co.in 8511115937	2021
20		Ms. Mili Tataria Quality Control Executive Windson Organics Private Limited Gandhinagar quality@windsonindia.com 7405257793	2021
21		Ms. Pooja Kansagra Ph.d. Scholar School of Pharmacy, R. K. University Rajkot phsmile12@gmail.com 9712974191	2021
22		Mr.Azhar Danish Khan Ph.d. Scholar Ram-Eesh Institute of Vocational and Technical Education Noida, Delhi azhardk@gmail.com 8802235141	2021
23		Ms.Priyanka Rathod Ph.D student MGMIHS OMICS Research Center, MGM Institute of Health Navi Mumbai pmk.rathod@gmail.com 8767139626	2021
24		Mr. Himanshu Makwana Assistant R & D Manager Phytolifescience Pvt.Ltd ahmedabad phytoqac@gmail.com 9662432549	2021
25		Ms. Priyanka Rathod, Ph.D Student MGMIHS OMICS Research Centre,mumbai.pmk.rathod@gmail.com 7021106902	2021
26		Dr. Rishad Jivani Owner U Liva Nutrition LLP Rajkot RISHAD@ULIVANUTRITION.COM 9898770900	2021
27		Devang Pandya devang.pandya@rku.ac.in 9898168034	2021
28		HIMANSHU MAKWANA R & D Manager Phytolifescience.Pvt Ltd Ahmedabad himanshu23makwana@gmail.com 9662432549	2021
29		Ashwini Dhruv M.pharm Student B. K. Mody Govt. Pharmacy College Rajkot a.dhruv9.ad@gmail.com 7567433993	2021
30		Mr. Himanshu Makwana R & D Manager Phytolifescience.Pvt Ltd Ahmedabad himanshu23makwana@gmail.com 9662432549	2021
31		PRIYANKA RATHOD , 7021106902	2021
32		SAUTIK GHOSHAL botany@pharmanza.com 8866333503	2021
33		Aruna Rajpara PhD Student L M College Pharmacy Ahmedabad amrajpara12@mail.com 9726913500	2021

34	High performance Thin Layer Chromatography/LC-MS/MS	Monika Sonawane PhD Student MVPS College of Pharmacy Nasik monika.sonawane763@gmail.com 91-253-2577250	2021
35		HIMANSHU MAKWANA R & D MANAGER PHYTOLIFESCENCE PVT LTD AHMEDABAD phytoqac@gmail.com 9662432549	2021
36		Monika Sonawane PhD Student MVPS College of Pharmacy Nasik monika.sonawane763@gmail.com 91-253-2577250	2021
37		PRIYANKA RATHOD PhD Student MGMIHS OMICS RESEARCH CENTER MUMBAI pmk.rathod@gmail.com 8767139626	2021
38		Dr. Amit Gangwal Ex Principal MP gangwal.amit@gmail.com 8080479814	2021
39		Nilesh Gaikar PhD Student R P COLLEGE OF PHARMACY CHANGA gaikarnilesh126@gmail.com 9819767409	2021
40			
41		Aruna Rajpara PhD Student L M College Pharmacy Ahmedabad amrajpara12@mail.com 9726913500	2021
42		Aum Research labs Research Scholar Aum Research Labs Pvt Ltd. Gandhinagar account@aumresearchlabs.com 8160837521	2021
43		KAVITA CHAUDHARI PHD STUDENT DEPARTMENT OF BOTANY UNIVARSITY RAJSTHAN kavita24387@gmail.com 9928832426	2021
44		Aum Research labs Research Scholar Aum Research Labs Pvt Ltd. Gandhinagar account@aumresearchlabs.com 8160837521	2021
45		Dr.kamlesh gurjar chemistry faculty LEC morbi gurjar.kamlesh@gmail.com 9426330340	2021
46		Mr.Nishit patel Research scholar RPCP changa 1993nishitpatel@gmail.com 9408077078	2021
47		Aum Research labs Research Scholar Aum Research Labs Pvt Ltd. Gandhinagar account@aumresearchlabs.com 8160837521	2021
48		Dr. kamlesh gurjar chemistry faculty LEC morbi gurjar.kamlesh@gmail.com 9426330340	2021
49		Ms.Monika Sonawane PhD Student M.V.P.S College of Pharmacy Nashik monika.sonawane763@gmail.com 9890468136	2021
50		Ms.Manisha Bihani Ph.d. Scholar MVP College of Pharmacy Nashik mmbihani@gmail.com 9890468136	2021
51		Dr.kamlesh gurjar chemistry faculty LEC morbi gurjar.kamlesh@gmail.com 9426330340	2021
52		Dr. Sindhav Gaurang M. Assistant Professor Department of Zoology Ahmedabad drgaurang.sindhav@gmail.com 9879785558	2022
53		Ms.Charulata Tushar Nemade Research Scholar Department of Pharmacognosy, MVP's College of Pharmacy Nashik charutnemade@gmail.com 9850200925	2022
54		Vikas D Jadhav Ph.D. Scholar DEPARTMENT OF CHEMISTRY, KTHM COLLEGE,NASHIK-2, Maharashtra vikasjadhav968@gmail.com 9975377273	2022
55		Aum Research labs Research Scholar Aum Research Labs Pvt Ltd. Gandhinagar account@aumresearchlabs.com 8160837521	2022
56		Ms. Pooja Kansagra Ph.d. Scholar School of Pharmacy,R. K. University, Rajkot phsmile12@gmail.com 9712974191	2022
57		Aum Research labs Research Scholar Aum Research Labs Pvt Ltd. Gandhinagar account@aumresearchlabs.com 8160837521	2022
58		Masuma Hakim Ph.D. Scholar Department of Life Sciences Hemchandracharya North Gujarat University Patan hakim.masuma1@gmail.com 8200868072	2022
59		Ms. Khyati Bhupta Ph.d. Student(medical chemistry) Dr. Subhash Educational campus Junagadh khyatiiibhupta@gmail.com 7600023301	2022
60		Mr. Himanshu Makwana Assistant R & D Manager Phytolifescience Pvt.Ltd ahmedabad phytoqac@gmail.com 9662432549	2022
61		Ms. Nisha Patel , e mail:pnisha473@gmail.com 9898440947	2022
62		Skantr Lifescience LLP ,9825436444	2022
63		Mr. Samir Shah Lecturer Shri B.M shah college of pharmacy modasa 123.samir.shah.ss@gmail.com 9824996427	2021
64	Particle Size and Zeta potential measurement	Mr.Rikhav shah B.Pharm student ayushsachdev740@gmail.com 7405358599 PSA	2021
65		Mr.Devang Tandel Ph.d. Scholar Pharmacy College Anand devangapc205@gmail.com 9662532812	2021
66		Phytolifescience Pvt.Ltd	2021
67		Aum Research labs Research	2022
		Vasu industry	2021

MEMORANDUM OF UNDERSTANDING
BETWEEN
GUJARAT TECHNOLOGICAL UNIVERSITY, GRADUATE SCHOOL OF PHARMACY
AND

Phyto Life Sciences Pvt. Ltd.

Phyto Life Sciences Pvt. Ltd., Ahmedabad, 380054, Gujarat, India (hereinafter called “Phyto Lifesciences” which expression shall wherever the context so claims include its successors and permitted assignees) represented by Mr. Himanshu Makwana (R&D Manager).

AND

Graduate School of Pharmacy, Gujarat Technological University located at, K-6 Circle, Sector 26, E-4 Electronic Estate, GIDC, Nr. Govt. Polytechnic, Gandhinagar – 382028. (Hereinafter called GTU – GSP which expression shall wherever the context so claims include its successors and permitted assignees) represented by Dr. Sanjay Chauhan, Director, recognize the benefits to their respective universities/institutes/research centres from the establishment of collaborations and proceed to have a memorandum of understanding (MOU)

Both the independent institutions are committed to mutual and common goals of generating new knowledge towards improvement of science to betterment of the society we serve.

PREAMBLE:

GTU is a premier academic and research institution which has driven new ways of thinking since its 2007 founding, established by the Government of Gujarat vide Gujarat Act No. 20 of 2007. GTU is a State University with more than 400+ affiliated colleges in its fold operating across the state of Gujarat through its FIVE zones at Ahmedabad, Gandhinagar, Vallabh Vidyanagar, Rajkot and Surat. The University caters to the fields of Engineering, Architecture, Management, Pharmacy and Computer Science. The University has more than 4,00,000 students enrolled in a large number of Diploma, Under Graduate, Post Graduate programs along with the robust Doctorial program. Graduate School of Pharmacy is exclusive PG department & constituent institute of GTU and established in 2017. Currently, GTU-GSP have runs three Post Graduate Course and two certificate courses. GTU has developed state of art laboratory facilities to cater the need of Industry, Academia and Research needs.

WHEREAS “Phyto Life sciences” is Phyto Life Sciences P ltd is a creative factory of botanical minds. We are born with crystal clear motive to combine PHYTO SCIENCE and LIFE SCIENCE (Ayurveda). In the early 21st century, the world once again turned back to traditional medicines and created the necessity to build a bridge to deliver flavours of forests into the health pack.

The respective Universities/institutes jointly recognize this MOU to mutually cooperate in the areas of Pharmacy Education, Research and Development.

PURPOSE/OBJECTIVE

The primary purpose of this MOU is to build academic research capacity and to promote mutual understanding between the Universities/Research establishments. The MOU shall formally set out the terms of co-operative relationship between the parties, establish their respective roles, and facilitate the function of each party in relation to collaborative research.



Both parties agree to develop collaborative activities in academic areas of mutual interest and as equal partners with reciprocity. All educational events are expected to reflect the faculty member's area of research and expertise.

The development and implementation of specific activities based on this MOU shall be negotiated and agreed between individual faculty members through the Director of GSP. This MOU is agreed on the basis of cooperation between the GSP & Phyto Lifescience and includes but is not limited to the following options.

- a) Exchange of academic/research information and related materials to facilitate joint publications by collaborating faculty members.
- b) Jointly apply for research funds to conduct collaborative research projects.
- c) Conducting colloquiums.
- d) Standards/Herbal markers or extract/API/ will be shared by each other's for research purpose.
- e) Industry visit/training for faculty and students for getting of Industrial exposure and research needs.
- f) Testing of facilities will be available on discounted rates by GTU GSP which is same available to other academic institutes (Attached as Annexure 1)

TERMS OF AGREEMENT

Both parties agree to carry out the above mentioned activities in accordance with laws and regulations of respective organization after full consultation and approvals.

The team of this agreement shall be valid for a period of **24 month** commencing from the date of signature hereof. This agreement can be extended for further terms on agreement. This agreement may be terminated by giving 6 months prior notice from either party.

In witness whereof, the parties have executed this documented on the day of 10-02-2021.

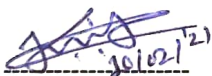


Dr. Sanjay Chauhan
Director,
Graduate School of Pharmacy
Gujarat Technological University
Ahmedabad, Gujarat

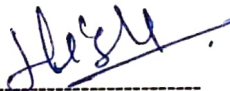


Authorized Signatory
Dr. Shaktisinh Makwana
Technical Head
Phyto Lifesciences Pvt. Ltd
Ahmedabad, Gujarat.

Witness Details :



Dr. Kashyap Thummar
Assistant Professor
Graduate School of Pharmacy
Gujarat Technological University
Gandhinagar, Gujarat



Mr. Himanshu Makwana
R & D Manager
Phyto Lifesciences Pvt. Ltd
Ahmedabad, Gujarat



MEMORANDUM OF UNDERSTANDING
BETWEEN
GRADUATE SCHOOL OF PHARMACY, GUJARAT TECHNOLOGICAL UNIVERSITY
AND
VASU RESEARCH CENTRE (A DIVISION OF VASU HEALTHCARE PVT. LTD.)

Vasu Research Centre (A Division of Vasu Healthcare Pvt. Ltd.), A2/624-625/2, G.I.D.C., Makarpura, Vadodara – 390010, Gujarat. (herein after called “VRC” which expression shall wherever the context so claims include its successors and permitted assignees) represented by Mr. Vikram Trivedi, Sr. General Manager – R&D.

AND

Graduate School of Pharmacy, Gujarat Technological University located at, K-6 Circle, Sector 26, E-4.Electronic Estate, GIDC, Nr. Govt. Polytechnic, Gandhinagar – 382028, Gujarat. (Hereinafter called GTU – GSP which expression shall wherever the context so claims include its successors and permitted assignees) represented by Dr. Sanjay Chauhan, Director, recognize the benefits to their respective universities/institutes/research centres from the establishment of collaborations and proceed to have a memorandum of understanding (MOU)

Both the independent institutions are committed to mutual and common goals of generating new knowledge towards improvement of science to betterment of the society we serve.

PREAMBLE

GTU is a premier academic and research institution which has driven new ways of thinking since its 2007 founding, established by the Government of Gujarat vide Gujarat Act No. 20 of 2007. GTU is a State University with more than 400+ affiliated colleges in its fold operating across the state of Gujarat through its FIVE zones at Ahmedabad, Gandhinagar, Vallabh Vidyanagar, Rajkot and Surat. The University caters to the fields of Engineering, Architecture, Management, Pharmacy and Computer Science. Graduate School of Pharmacy is exclusive PG department & constituent institute of GTU and established in 2017. Currently, GTU-GSP have runs four Post Graduate Course and five certificate courses. GTU has developed state of art laboratory facilities to cater the need of Industry, Academia and Research needs.

WHEREAS “VRC” is the brain and backbone of Vasu Healthcare Pvt. Ltd. VRC is involved in multifarious activities pertaining to research and innovation in the field of Ayurvedic / Herbal Pharmaceuticals, Phytochemicals and Nutraceuticals, using modern science and technology, without diluting the principles of Ayurveda. VRC was first established on the 26th Feb. 2008 as a research wing of Vasu Healthcare Pvt. Ltd. With a view to expand its research horizon, which is spread across 10,000 sq. ft. area and equipped with the most modern research facilities & backed by highly qualified, skilled & experienced team of scientists from diverse fields like Ayurveda, Pharmacognosy & Phytochemistry, Pharmaceutics, Analytical Chemistry, Pharmacology and Microbiology. Above all, VRC is awarded with the renowned and prestigious DSIR accreditation for its continuous innovations in products, process, quality and new technologies.



Page 1 of 3



The respective University/Private R&D Centre jointly recognize this MOU to mutually cooperate in the areas of Pharmacy Education, Research and Development.

PURPOSE/OBJECTIVE

The primary purpose of this MOU is to build academic research capacity and to promote mutual understanding between the University/ Private R&D Centre. The MOU shall formally set out the terms of co-operative relationship between the parties, establish their respective roles, and facilitate the function of each party in relation to collaborative research.

Both parties agree to develop collaborative activities in academic areas of mutual interest and as equal partners with reciprocity. All educational events are expected to reflect the faculty member's area of research and expertise.

The development and implementation of specific activities based on this MOU shall be negotiated and agreed between individual faculty members through the Director of GSP. This MOU is agreed on the basis of cooperation between the GSP & VRC and includes but is not limited to the following options.

- a) Exchange of academic/research information and related materials to facilitate joint publications by collaborating faculty members.
- b) Jointly apply for research funds to conduct collaborative research projects.
- c) Conducting colloquiums.
- d) Standards/Herbal markers or extract/API/ will be shared by each other's for research purpose.
- e) Industry visit/training for faculty and students for getting of Industrial exposure and research needs.
- f) Testing of facilities will be available at discount rates if the testing expenses (as per industrial rate) are higher than Rs. 25000/- per month, in which case GTU GSP would give the same concessional costing as other academic institutes. (Attached as Annexure 1)

COMMUNICATION

All communication required to be served the purpose of collaboration will be carried out at one end point through the following representative of both the parties.

Behalf of Vasu Research Centre:

Dr. Hardik Soni

Senior Manager-R&D

Vasu Research Centre (A Division of Vasu Healthcare Pvt. Ltd.)

A2/624-625/2, GIDC, Makarpura, Vadodara-390010, Gujarat, INDIA

Tel.: +91-265-2635553/57 Mo.: +91-9409032725

E-mail: hsoni@vasuresearch.com

Behalf of Graduate School of Pharmacy:

Prof. (Dr.) Sanjay Chauhan

Director,

Graduate School of Pharmacy,

Sector-26, Gandhinagar-382028

Email: director-gsp@gtu.edu.in



COMPETENT COURT

This agreement shall be governed by and construed in accordance with the laws of India, without regard to the conflict of law principles thereof. The parties agree to submit to the jurisdiction of the principles thereof.

The parties agree to submit to the jurisdiction of the competent court located in Vadodara, Gujarat.

TERMS OF AGREEMENT

Both parties agree to carry out the above-mentioned activities in accordance with laws and regulations of respective organization after full consultation and approvals.

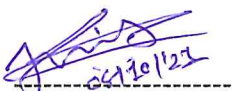
The term of this agreement shall be valid for a period of **24 month** commencing from the date of signature hereof. This agreement can be extended for further terms on agreement. This agreement may be terminated by giving 6 months prior notice from either party.

In witness whereof, the parties have executed this document on the day of 26-07-2021.



Dr. Sanjay Chauhan
Director,
Graduate School of Pharmacy
Gujarat Technological University
Ahmedabad, Gujarat

Witness Details :



Dr. Kashyap Thummar
Assistant Professor
Graduate School of Pharmacy
Gujarat Technological University
Gandhinagar, Gujarat



Mr. Vikram Trivedi
Sr. General Manager - R&D
Vasu Research Centre
(A Div. of Vasu Healthcare)
Vadodara, Gujarat



Dr. Hardik Soni
Sr. Manager – R&D
Vasu Research Centre
(A Div. of Vasu Healthcare)
Vadodara, Gujarat

