

Mandatory Disclosure

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

The onus of the authenticity of the information lies with the Institution ONLY and not on AICTE.

1 Name of the Institution

- Rama and Krishana College of Pharmacy, Maksuspurnaul Haryana 123001
- Mob- 7597124243, 9416704677
- Email- atul.saini7@gmail.com

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

- Rama and Krishana Rural Educational and Research Society
- Telephone- 01282-206060
- Mob- 9416704677,9416065786
- Email- drrajumarsharma@gmail.com
- Opy281@gmail.com

3 Name and Address of the Principal/ Director

- Dr.Atul Kumar
- Address- Ward No- 12 New colony gothrakhetrinagar
- Mob- 7597124243, 8769492369

4 Name of the affiliating Board

1. HSBTE PANCHKULA
2. PCI

5 Governance

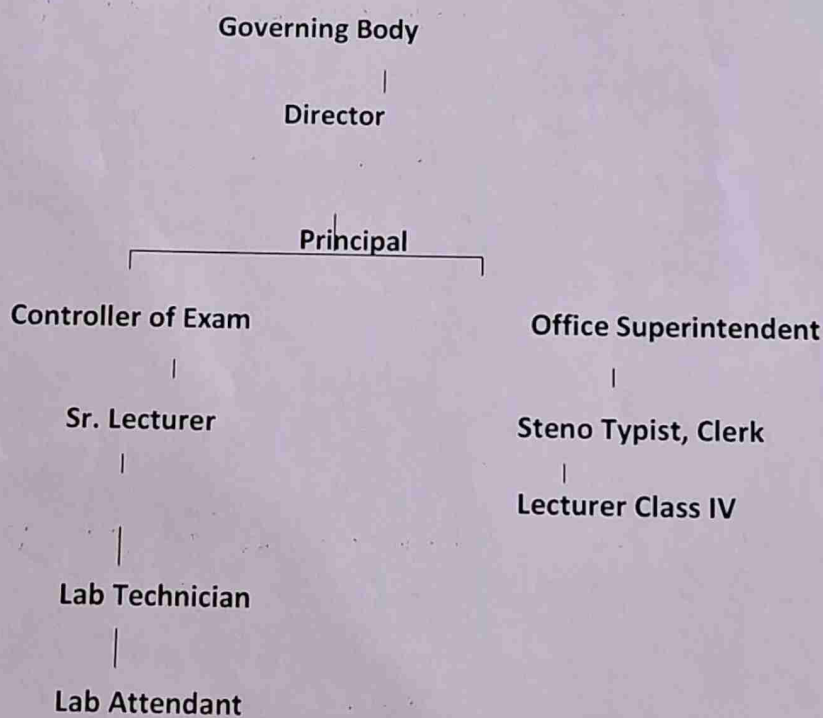
NAME AND ADDRESS OF THE MEMBERS OF THE GOVERNING BODY AS PER THE COMPOSITION PRESCRIBED BY AICTE							
S. No	Name	Position	Qualification	Present Professional position / Occupation	Telephone Numbers	E-mail	Address
01.	Dr.Rohita swYadav	Secretary	M.B.B.S,M.D Chest and T.B	Private Dr	9416382223	drrohitaswyadav@redifmail.com	Near ModawalaMandir, Narnaul
02.	Dr.Raj Kumar Sharma	President	M.B.B.S,M.S Surgeon	Private Dr.	9416704677	drrajumarsharma@gmail.com	Ram Nuesing Home Sinhana Road Narnaul
03.	Dr.O.P.yadav	Treasurer & Vice Chairman	M.B.B.S,M.D Anaesthesia	Private Dr	9416065786	opy281@gmail.com	Shanti Nursing Home ,Narnaul
04.	Dr.Narend erYadav	Member	M.B.B.S, M.D	Private Dr	9466276577	densyadav@outlook.com	General Hospital Circular road , Rewari
05.	Dr. Anita Sharma	Member	M.B.B.S	Private Dr	8397986055	Dranitasharma1961@gmail.com	Ram Nuesing Home Sinhana Road Narnaul
06.	Dr.RamGopalGarg	Secretary	M.B.B.S, M.D Pediatrics	Private Dr	9466274494	aryanmusk@Yahoo.co.in	Children Hospital M Garh Road ,Shiv Colony Narnaul
07.	Dr.Dinesh Sharma	Member	M.B.B.S,M.S Orthopaedic	Private Dr	9416478343	Sharma_pooja@Redifmail.com	Pooja Hospital Mohindergarh Road, Narnaul
08.	Dr.AtulVerm a	Member	M.B.B.S	Private Dr	999622288	Dratulvema03@gmail.com	2135,sec .7 Kurukshetra
09.	Sh. Suresh Chaudhary	Member	B.A.,LLB	Business	9416248841	Suresh 100980@gmail.com	101/3,ward no-16, Narnaul
10.	Sh.Manik Kapoor	Member	LLb	Business	9837070702 84	Yamuna Colony Dehradun

• **Member of academic advisory body**

SR. NO.	Position	Qualification	Designation	Telephone No.	Email
1	Dr. Anita Sharma	M.B.B.S	Member	8397986055	Dranitasharma1961@gmail.com
2	Dr. Atulkumar	PhD	member	8769492369	atul.saini7@gmail.com
3	Dr. Shalluyadav	PharmD	Member	8279191622	yadavshallu16@gmail.com
4	Riya	M.Pharm	Member		riyachauhan@gmail.com

- Frequency of the Governing Body Meetings :- Half Yearly
- Frequency of Academic Advisory Body :- Annually

• **Organizational chart and processes**



- **Nature and Extent of involvement of faculty and students in academic Affairs/improvements:** Regular meeting of faculty are taken for reviewing & considering the various points of improvements in academic activities. Students are involved in various activities like Celebration of Pharmacy Week , Seminars & Quiz etc
- **Mechanism/Norms& Procedure for democratic/good Governance:** Every matter is discussed at proper platform & action is taken according to the consensus.
- **Student Feedback on Institutional Governance/Faculty performance:** Office bearer of the Governing Body interacts with student about the performance of faculty & difficulty if any is sorted out.

- **Grievance Redressal Mechanism for Faculty, staff and students:**
Grievance if any, are redressed by the various concerned committees. Further, link for Online Grievance Redressal system is installed on institutional web-site

Establishment of Anti Ragging Committee

Whether Anti – Ragging Committee (As per All India Council for Technical Education notified regulation for prevention and prohibition of ragging in AICTE approved technical Institutions vide No. 37 – 3/Legal/AICTE/2009 dated 01.07.2009) constituted, Displayed in the campus of the institute and hoisted on the website of institute?

NAME AND ADDRESS OF THE MEMBERS OF THE MEMBERS OF THE ANTI-RAGGING COMMITTEE							
S. No	Name	Position	Qualification	Present Professional position / Occupation	Telephone Numbers	E-mail	Address
01.	Dr.RohitawYadav	Secretary	M.B.B.S,M.D Chest and T.B	Private Dr	9416382223	drrohitaswyadav@redifmail.com	Near ModawalaMandir, Narnaul
02.	Dr.Dinesh Sharma	Member	M.B.B.S,M.S Orthopaedic	Private Dr	9416478343	Sharma_pooja@Redifmail.com	Pooja Hospital Mohindergarh Road, Narnaul
03.	Dr.Atul Kumar	Principal	PhD	Principal	8769492369	Atul.saini7@gmail.com	Ward No- 12 Khetri road chirawa
04.	Dr.Shalluyadav	HOD	PharmD	HOD	8279191622	Yadavshallu16@gmail.com	Moh- Bawdipur, Narnaul, Haryana 123001
05.	Mr. Harish Kumar	Parents	B.A	Parents	8053243172	Vill. Nawaznagar, podharsoon, Dist. Mahendragarh
06	Mr. Amit kumar	Students	12	Student	9996097858	Amit.kumar.94@gmail.com	Vill. Nandlana k, narnaul

Establishment of Online Grievance Redressal Mechanism

NAME AND ADDRESS OF THE MEMBERS OF THE GRIEVANCE REDRESSAL COMMITTEE							
S. No	Name	Position	Qualification	Present Professional position / Occupation	Telephone Numbers	E-mail	Address
01.	Dr.RohitawYadav	Secretary	M.B.B.S,M.D Chest and T.B	Private Dr	9416382223	drrohitaswyada v@redifmail.com	Near ModawalaMandir, Narnaul
02.	Dr.Raj Kumar Sharma	President	M.B.B.S,M.S Surgeon	Private Dr.	9416704677	drraj कुमारsharma@gmail.com	Ram Nuesing Home Sinhana Road Narnaul
03.	Dr.O.P.yadav	Treasurer & Vice Chairman	M.B.B.S,M.D Anaesthesia	Private Dr	9416065786	opy281@gmail.com	Shanti Nursing Home ,Narnaul
04.	Dr.Narend erYadav	Member	M.B.B.S, M.D	Private Dr	9466276577	densyadav@outlook.com	Gerenal Hospital Circular road , Rewari
05.	Dr. Anita Sharma	Member	M.B.B.S	Private Dr	8397986055	Dranitasharma1961@gmail.com	Ram Nuesing Home Sinhana Road Narnaul
06.	Dr.RamGopalGarg	Secretary	M.B.B.S, M.D Pediatrics	Private Dr	9466274494	aryanmusk@Yahoo.co.in	Children Hospital M Garh Road ,Shiv Colony Narnaul
07.	Dr.Dinesh Sharma	Member	M.B.B.S,M.S Orthopaedic	Private Dr	9416478343	Sharma_pooja@Redifmail.com	Pooja Hospital Mohindergarh Road, Narnaul
08.	Dr.AtulVerma	Member	M.B.B.S	Private Dr	999622288	Dratulvema03@gmail.com	2135,sec .7 Kurukshetera
09.	Sh. Suresh Chaudhary	Member	B.A.,LLB	Business	9416248841	Suresh 100980@gmail.com	101/3,ward no-16, Narnaul
10.	Sh.Manik Kapoor	Member	LLb	Business	983707070284	Yamuna Colony Dehradun

• Establishment of Internal Complaint Committee (ICC)

SR. NO.	Position	Qualification	Designation	Telephone No.	Email
1	Dr. Anita Sharma	M.B.B.S	Member	8397986055	Dranitasharma1961@gmail.com
2	Dr.Atulkumar	PhD	member	8769492369	atul.saini7@gmail.com
3	Dr. Shalluyadav	PharmD	Member	8279191622	yadavshallu16@gmail.com
4	Riya	M.Pharm	Member		riyachauhan@gmail.com

NAME AND ADDRESS OF THE MEMBERS OF THE MEMBERS OF COMMITTEE SC/ST							
S. No	Name	Position	Qualification	Present Professional position / Occupation	Telephone Numbers	E-mail	Address
01.	Dr.RohitawYadav	Secretary	M.B.B.S,M.D Chest and T.B	Private Dr	9416382223	drrohitaswyada v@redifmail.com	Near ModawalaMandir, Narnaul
02.	Dr.Raj Kumar Sharma	President	M.B.B.S,M.S Surgeon	Private Dr.	9416704677	drraj कुमारsharma@gmail.com	Ram Nuesing Home Sinhana Road Narnaul
03.	Dr.O.P.yadav	Treasurer & Vice Chairman	M.B.B.S,M.D Anaesthesia	Private Dr	9416065786	opy281@gmail.com	Shanti Nursing Home ,Narnaul
04.	Dr.Dinesh Sharma	Member	M.B.B.S,M.S Orthopaedic	Private Dr	9416478343	Sharma_pooja@Redifmail.com	Pooja Hospital Mohindergarh Road, Narnaul
05.	Dr.Atulkumar	Principal	PhD	Principal	8769492369	Atul.saini7@gmail.com	Ward no-12 new colony gothrakhetrinagar
06.	Dr.Shalluyadav	HOD	PharmD	HOD	8279191622	Yadavshallu16@gmail.com	Moh- Bawdipur, Narnaul

6 PROGRAMMES:

Name of the Programmes Approved by the PCI:

Name of Program	D. Pharmacy
Number of Seats in 1 st Year	60

Name of the Programmes Accredited by the AICTE:

-None Status of Accreditation of Courses:-Not Applicable

Name of the Program	Duration
D. Pharmacy	02 Years

Cut of marks for admission during the last 3years:For

D. Pharmacy	
In2020-21	Passin10+2(Science)with70.00%MarksatInstituteLevel
In2021-22	Passin10+2(Science)with72.15%MarksatInstituteLevel
In2022-23	Passin10+2(Science)with70.5%MarksatInstituteLevel

Fee:-As per approval of fee committee from time to time.

Admission and Fee Regulatory Committee, Haryana

SCO-38-39, Sector-17 A, Chandigarh

Phone No. 0172-2703839

E-mail ID haryanasfc@gmail.com

From

The Director General-cum-Member Secretary,
Admission & Fee Regulatory Committee,
Department of Technical Education,
SCO 38-39, Sector 17-A, Chandigarh.

To

All Private Technical Educational Institutes

Memo No. 205 /A&FRC

Dated: 21.03.2023

Subject: Provisional Tuition Fee, development Fund, Student Fund, Caution Money for newly established Private Technical Institutions for the session 2023-24.

The provisional fee for the session.2023-24 has been revised as follows:-

Sr. No.	Name of the Programme	Tuition Fee	Development Fund	Total
Diploma Course				
1	Engineering and Technology	₹30000/-	₹4500/-	₹34500/-
2	Applied Art and Craft/Design/ Fashion & Apparel Designing	₹35000/-	₹5250/-	₹40250/-
3	Hotel Management & Catering Technology	₹30000/-	₹4500/-	₹34500/- Training, Food & other Lab Expenses +₹9000/- Operational Fee per annum
4	Pharmacy	₹35000/-	₹5250/-	₹40250/-
5	Architecture	₹30000/-	₹4500/-	₹34500/-
Under-Graduate Courses				
1	Engineering and Technology/Planning	₹60000/-	₹9000/-	₹69000/-
2	Applied Art and Craft/Design/ Fashion & Apparel designing	₹65000/-	₹9750/-	₹74750/-
3	Hotel Management & Catering Technology	₹40000/-	₹6000/-	₹46000/+₹10000/- Training, Food & other Lab Expenses +₹10000/-

				Operational Fee per annum.
4	Pharmacy	₹ 50000/-	₹ 8250/-	₹63250/-
5	B.Arch	₹65000/-	₹9750/-	₹74750/-
Post-Graduate Courses				
1	Engineering and Technology/Planning	₹62000/-	₹9300/-	₹71300/-
2	Applied Art and Craft/Design	₹68000/-	₹ 10200/-	₹78200/-
3	Hotel Management & Catering Technology	₹45000/-	₹ 6750/-	₹51750/-+₹12000/- Training, Food & other Lab Expenses+₹12000/- Operational Fee per annum.
4	Pharmacy	₹60000/-	₹9000/-	₹69000/-
5	MBA/PGDM	₹55000/-	₹8250/-	₹63250/-
6	MCA	₹55000/-	₹8250/-	₹63250/-
7	M.Arch	₹65000/-	₹9750/-	₹74750/-

Other Charges:-

Sr. No.	Name of the Programme	Student Fund	Caution Money- College (one time refundable)	Caution Money- Hostel/ Mess(one time from boarders/ Hostellers only, refundable)
1	Under-Graduate and Post- Graduate Courses	₹4000/-	₹4000/-	₹4000/-
2	Diploma Courses	₹3000/-	₹3000/-	₹3000/-

The Technical Institutes, other than newly established institutes charging fee less than the provisional fee for the Technical Courses, if so desire, may opt for charging above mentioned provisional fee, fixed by the Committee for the technical courses for the session 2023-24 onward, with prior permission of the Committee.

R. P. K...

**Joint Director (A&FRC),
Admission and Fee Regulatory Committee,
Haryana, Chandigarh.**

Placement Facilities:-

7

Placement Cell exists. The Cell helps the passed out students for getting job as per their qualification. Almost all the passed out students of Diploma in Pharmacy are either self employed as chemists & druggists or are serving in Hospitals.

Campus placements of last three years with minimum salary, maximum

Salary and average Salary:-

Placement cell of the College have been able to get appointed some passed out students of D. Pharmacy with minimum salary on 10,000 to 20,000/- per month in various organizations.

Name and duration of programme(s) having Twinning and Collaboration with Foreign Universities(s) and being run in the same campus along with status of their AICTE approval

College is not running any programme(s) having affiliation/collaboration with any Foreign students

7. Faculty

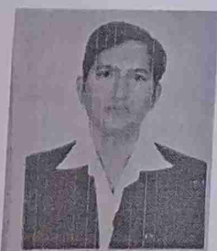
- Branch wise list Faculty members:

Sr.n	Name	Designation	QUALIFICATION	Branch
1	Dr. Atul Kumar	Principal	Ph.D, M.Pharma	Pharmaceutics
2	Miss Priyanka	Assistant Professor	M.Pharma	Pharmacology
3	Miss Riya	Assistant Professor	M.Pharma	Pharmacology
4	Dr. Shallu	H.O.D	Pharm.D	Pharmacy practice
5	Mr. Robel	Assistant Professor	M.Pharma	Pharmacology
6	Mr. Talim	Lecturer	B.Pharma	Pharmacognosy
7	Mr. Jagbirsingh	Lecturer	B.Pharma	Biochemistry

- Permanent Faculty - Same as above list
- Permanent Faculty: Student Ratio - 1:20
- Number of Faculty left during the last three years - 3
- Number of faculty employed during the last three years - 04

8. Profile of Director/ Principal/ Faculty

8



For each Faculty give a page covering with Passport size photograph

- i. Name – Dr. ATUL KUMAR
- ii. Date of Birth – 01/05/1982
- iii. Education Qualifications - M – Pharmacy, Ph.D
- iv. Work Experience
Teaching – 15 year
- v. Area of Specialization - Pharmaceutics
- vi. Courses taught at Diploma

Admission and Fee Regulatory Committee, Haryana

SCO-38-39, Sector-17 A, Chandigarh

Phone No. 0172-2703839

E-mail ID haryanasfc@gmail.com

From

The Director General-cum-Member Secretary,
Admission & Fee Regulatory Committee,
Department of Technical Education,
SCO 38-39, Sector 17-A, Chandigarh.

To

All Private Technical Educational Institutes

Memo No. 205 /A&FRC

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Other Charges:-

Sr. No.	Name of the Programme	Student Fund	Caution Money- College (one time refundable)	Caution Money- Hostel/ Mess(one time from boarders/ Hostellers only, refundable)
1	Under-Graduate and Post-Graduate Courses	₹4000/-	₹4000/-	₹4000/-
2	Diploma Courses	₹3000/-	₹3000/-	₹3000/-

The Technical Institutes, other than newly established institutes charging fee less than the provisional fee for the Technical Courses, if so desire, may opt for charging above mentioned provisional fee, fixed by the Committee for the technical courses for the session 2023-24 onward, with prior permission of the Committee.

Rohit K...
20/1/2023

**Joint Director (A&FRC),
Admission and Fee Regulatory Committee,
Haryana, Chandigarh.**

- Time schedule for payment of fee for the entire Programme : - 1/2 yearly
- No. of fee waiver granted with amount and name of students: - Concession of fee is granted to poor/fatherless/orphan students on compassionate grounds
- No. of scholarship offered by the institution, duration and amount: NA
- Criteria for fee waiver/scholarship : - Compassionate ground
 - Estimated cost of boarding and lodging in hostels : - Not applicable as we have no Hostel Facility

10. Admission Procedure

Number of seats sanctioned by AICTE/PCI/HSBTE for 2023-24.

For D.Pharmacy 60

Category wise admission made during the last

three years:-For D.Pharmacy

Years	All India	HOGC	Management
2020 -21	13	32	15
2021-22	13	32	15
2022-23	10	35	15

11. ADMISSION PROCEDURE

For D.Pharmacy:

Admissions for 75% seats are made by HSTES as per merit obtained in 10+2 (Science stream) by conducting online counseling, and rest 25% management seats and vacant/ left over seats are filled at Institute level as per guidelines of Govt./HSTES.

Calendar for admissions against Management/Vacant Seats:

Last Date of Receipt of Application	:-	28.10.2023
Last Date of Submission of Application	:-	30.10.2023
Application Date of announcing Final Result	:-	02.11.2023
Results Release of Admission List	:-	08.11.2023
Date of Acceptance of candidates	:-	10.11.2023
Last Date of Closing of Admission	:-	12.11.2023
Starting of Academic Session	:-	As per HSBTE Academic Calendar
Policy of refund of fee	:-	As per Guidelines of DTE, Haryana

ADMISSION CRITERIA

For D. Pharmacy:

Admissions are made on the basis of merit of 10+2 (Science Stream) and as per guidelines of the HSTES.

Cut of Level for Percentages For D. Pharmacy

In 2020- 21	Pass in 10+2 (Science) with 60% Mark sat
Institute Level In 2021-22	Pass in 10+2 (Science) with 61.15% Mark
Institute Level In 2022-23	Pass in 10+2 (Science) with 64.5% Mark sat
Institute Level	

MARKS SCORED: As per admission records

12. **LIST OF APPLICANTS:** - List of received applications is displayed on College Notice Board during the scheduled admission process.

RESULTS OF ADMISSION UNDER MANAGEMENT SEATS/VACANT

SEATS: - Composition of Selection Team: - Dr. Atulkumar, Dr. Shallu yadav, Riya

Score of Individual Candidate: - Percentage marks in 10+2 (Sci) for D. PHARMACY.

List of admitted Candidates: - Only 25% seats in D. Pharmacy & vacant seats are filed at Institute level as per guidelines of HSTES & is uploaded on the HSTES web portal.

Waiting List of Candidates: - Waiting List of Candidates is displayed on the College Notice Board during the admission schedule.

Joining of Candidates: During scheduled admission process, joining date is displayed on the College Notice Board

By Post

HARYANA STATE BOARD OF TECHNICAL EDUCATION
BAYS NO: 7-12, SECTOR-4, PANCHKULA
Fax No:- 0172-2560224
E-Mail ID-dsaffiliation@hsbte.org.in, Website: www.hsbte.com

Letter No: 146
Dated: 28-11-2023

To

The Principal
Rama and Krishana College of Pharmacy,
Maksuspur, Narnaul, Mohendergarh - 123001

Subject: Extension of Provisional Affiliation for the Academic year 2023-24.

Sir/Madam,

Kindly refer to your proposal regarding Extension of Affiliation for the Academic year 2023-24 for conducting diploma courses in your Institute.

In this regard, in terms of the provisions under the Haryana State Board of Technical Education Act No. 19 of 2008 at clause 27 (u), norms, standards, procedures, conditions, other notifications issued from time to time, I am directed to convey the provisional extension of affiliation to Rama and Krishana College of Pharmacy, Maksuspur, Narnaul, Mohendergarh to conduct following diploma courses with PCI approved intake for the academic year 2023-24 with the condition to strengthen the teaching faculty:

Sr. No.	Duration	Course	Intake
1.	2 Years	Diploma in Pharmacy	60
		Total	60

The above mentioned affiliation is subject to the condition that the institute shall follow and adhere to Regulations, guidelines, norms, standards & directions issued by HSBTE/ PCI / State Govt. from time to time. The same can be verified by conducting inspection any time by the HSBTE.

Institution shall fulfil the following conditions:

1. The management shall provide adequate funds for development of land and for providing related infrastructural, instructional and other facilities as per norms and standards laid down by the PCI as well as norms and standards prescribed by HSBTE in affiliation Bye-laws and act of HSBTE from time to time and for meeting recurring expenditure.
2. The institution by virtue of approval by PCI shall not be automatically entitled for affiliation. Before granting affiliation to a new polytechnic/institute Board shall conduct Physical inspection regarding whether institution has complied the condition of approval letter issued by PCI as well as other conditions mentioned in Act of HSBTE & Affiliation Bye-laws and in case of pharmacy course it shall also be the duty of the institute/polytechnic concerned to fulfil all the requirements of Education Regulations 1991, laid down by PCI and as



PHARMACY COUNCIL OF INDIA

A Statutory body under Ministry of Health and Family Welfare
Government of India

E-MAIL : registrarg@pci.nic.in
WEBSITE : www.pci.nic.in
Telephone : 011-61299803
011-61299801, 011-61299802
011-61299803

NBCC Centre, 3rd Floor
Plot No.2, Community Centre
Maa Anandamal Marg
Okhla Phase I
NEW DELHI - 110020

DECISION LETTER

Institute Name / Inst ID Rama And Krishna College Of Pharmacy Villmaksapur Ro
Hamidpur Teh Narnaul Distt Mahendragarh / PCI-1719
State HARYANA
District MAHENDRAGARH
Sub-District Narnaul
Village/Town/City Maksapur
Pin Code 123001



Sir / Madam

With reference to the subject cited above I am directed to convey the approval of PCI as per Following Details.

Course	Name of Affiliation body/University	Decision	Approval Status	Approval Upto	Approval Intake
D.Pharm	The Secretary State Board of Technical Education Bays Panchkula	116 CC(29.7.2022) decision decided as under:- D.Pharm - D.Pharm course is already approved upto 2022-2023 academic session for D.Pharm course. It was decided to reduce intake from 60 to 40 from 2022-2023 academic session for D.Pharm course. - It was noted that - a) salary of teaching faculty is not as per regulation (vii) of Minimum Qualification for Teachers in Pharmacy Institutions Regulations, 2014. b) It was further decided to instruct the institution to submit compliance of deficiencies pointed out in inspection report particularly in respect of appointment of Principal as prescribed under Education Regulations, 1991, Education Regulations 2020 and Minimum Qualification for Teachers in Pharmacy Institutions Regulations, 2014 with documentary evidence. c) faculty to be appointed as per the norms of PCI. In view of above it was decided to ask the institute to submit compliance. - The matter regarding reduce intake was placed and considered in 379th Executive held on 15.10.2022 which decided wherever admission intake was reduced in 2022-2023 academic session in pharmacy course(s), the previous approved intake during 2021-2022 academic session be restored for 2022-2023 academic session also. In this regard, the Council has uploaded circular dt. 22.10.2022 on Council's website and further clarification circular dt. 3.11.2022 was also uploaded on Council's website.	Approved	2022-2023	60

Date 09th Jan 2023

For
(IC) Registrar-cum-Secretary
PCI

Copy to

- i) Registrar of the University
- ii) Principal of the college
- iii) Secretary/Chairman of the Trust/Society
- iv) Guard File (PCI)

Note: Validity of the course details may be verified at www.pci.nic.in

भारतीय भेषजी परिषद्

(स्वास्थ्य एवं परिवार कल्याण मंत्रालय की अंतर्गत राष्ट्रीयिक निकाय)
भारत सरकार

एन बी सी सी सेक्टर, तृतीय तल, प्लॉट नम्बर 2,
कॉम्युनिटी सेंटर, मा आनन्दमयी मार्ग,
ओखला फेज-1, नई दिल्ली-110020
दूरभाष 011-61299900-03



भारतीय भेषजी परिषद्

PHARMACY COUNCIL OF INDIA
(Statutory body under Ministry of Health & Family Welfare)

Government of India
NBCC Centre, 3rd Floor, Plot No. 2,
Community Centre, Maa Anandmai Marg,
Okhla, Phase-I, New Delhi-110020
Telephone No. 011-61299900-03

DECISION LETTER

Institute Name/Inst ID Rama And Krishna College Of Pharmacy Villmaksuspur Ro Hamidpur Teh Narnaul
Distt Mahendragarh / PCI-1719
State HARYANA
District
Village/Town/City Maksuspur
Pin Code 123001



Sir/Madam

With reference to the subject cited above i am directed to convey the approval of PCI as per Following Details

Course	Name of Affiliation body/University	Decision	Approval Status	Approval Upto	Intake
B.Pharm	The Registrar Pt B D Sharma University of Health Sciences Rohtak	GRANT APPROVAL FOR 60 SEATS B.PHARMA SESSION 2023-24	Approved	2023-2024	60

Communication Date: 30 Nov, 2023

Copy to

- Registrar of the University
- Principal of the college
- Secretary/Chairman of the Trust/Society
- Guard File (PCI)

Note: Validity of the course details may be verified at pcionline.co.in

For
Registrar-cum-Secretary
PCI

Tentative Key Dates/Schedule for Diploma Pharmacy in the Session 2023-24
 Duration of Course: 02 Years

Registration Start Date	Registration End Date	Fee Start Date	Fee End Date	Verification Start Date	Verification End Date	Inter-se-Merit Result Date	
12.06.2023 11:00AM	08.10.2023 11:59PM	12.06.2023 11:00AM	08.10.2023 11:59PM	12.06.2023 1:00PM	09.10.2023 11:59PM	10.10.2023 5:00PM	
Counselling No	Choice Filling Start Date	Choice Filling End Date	Choice Locking Start Date	Choice Locking End Date	Seat Allotment Result	Reporting Start Date	Reporting End Date
1	11.10.2023 10:00AM	13.10.2023 11:59PM	11.10.2023 10:00AM	13.10.2023 11:59PM	16.10.2023 5:00PM	17.10.2023 10:00AM	19.10.2023 5:00PM
2	21.10.2023 10:00AM	23.10.2023 11:59PM	21.10.2023 10:00AM	23.10.2023 11:59PM	25.10.2023 5:00PM	26.10.2023 10:00AM	27.10.2023 5:00PM

PART F: INFRASTRUCTURE REQUIREMENT FOR DIPLOMA COURSES IN PHARMACY
Norms for Land requirement and built-up area for Diploma Level Technical Institution (for Diploma Courses as per PCI)

1. Rooms:

Particulars	Number of rooms required	Minimum Carpet Area required	Carpet Area available	Shortfall w.r.t. Number of Rooms & Carpet Area
Computer Centre inclusive of Language Laboratory	01	75sqm	160 sqm	
Library	01	150sqm	220 sqm	
Seminar Hall	01	132 sqm	300 sqm	
Smart class room	01	66 sqm	90 sqm	
Class room for D. Pharmacy (To accommodate 60 students)	02	90 Sq. mts of each room	190 sqm	

2. Laboratory requirement :

Sl. No.	Name of Infrastructure	Requirement as per Norms	Available		Remarks/ Deficiency
			No.	Area in Sq. mts	
1	Laboratory Area for D. Pharm Course	50 Sq mts x n (n=05)	05	420 sqm	
2	Pharmaceutics Pharmaceutical Chemistry Physiology and Pharmacology Pharmacy Practice Pharmacognosy Total no. of Labs for D. Pharm Course *Animal House	01 Laboratory	01	84 sqm	
		01 Laboratory	01	84 sqm	
		01 Laboratory	01	84 sqm	
		01 Laboratory	01	84 sqm	
		01 Laboratory	01	84 sqm	
		05 Laboratories	05	420sqm	
	01 (10 sq.mts)	01	20sqm		
3	Preparation Room for each lab (One room can be shared by two labs, if it is in between two labs)	10 Sq.mts (minimum)	05	50sqm	
4	Area of the Machine Room	100 Sq mts	01	110sqm	
5	Aseptic Room	25 Sq mts	01	41sqm	
6	Store Room – I	1 (Area 20 Sq mts)	01	45 sqm	
7	Store Room – II (For Inflammable chemicals)	1 (Area 20 Sq mts)	01	25 sqm	

* Not required if computer simulated software are available

Signature of the Principal/ Head of the Institution

Basic amenities to be provided in all the laboratories

Sr. No.	Amenities required	Available/Not Available	Remarks
1.	All the Laboratories should be well lit & ventilated	Available	
2.	All Laboratories should be provided with basic amenities and services like exhaust fans and fume chamber to reduce the pollution wherever necessary.	Available	
3.	The workbenches should be smooth and easily cleanable preferably made of non-absorbent material.	Available	
4.	The water taps should be non-leaking and directly installed on sinks. Drainage should be efficient.	Available	
5.	Balance room should be attached to the concerned laboratories.	Available	
6.	Fire extinguishers shall be provided inside and outside the laboratory.	Available	
7.	Flooring of the lab shall be non-skid and non-static.	Available	
8.	Standard Operating Procedure (S.O.P.) for all the equipment and system must be prepared and properly displayed near the respective machine.	Available	
9.	All the electrically operated machinery should be properly earthed and bonded.	Available	

3. Administration Area:

Sl. No.	Name of infrastructure	Requirement as per Norms in number	Requirement as per Norms in area	Available		Remarks/ Deficiency
				No.	Area in Sq. mts	
1	Principal's Chamber	01	20 Sq mts	01	32 sqm	
2	Office - I Including Confidential Room	01	40 Sq mts	01	50 sqm	
3	Staff / Faculty Rooms for D. Pharm course	01	30 Sq mts	01	50 sqm	
4	Library with computer and reprographic facilities	01	100 Sq mts	01	220 sqm	
5	Museum	01	30 Sq mts (May be attached to the Pharmacognosy Lab)	01	32 sqm	
6	Auditorium / Multi Purpose Hall (Desirable)	01	250 - 300 seating capacity	01	300 sqm	
7	Herbal Garden (Desirable)	01	Adequate Number of Medicinal Plants	01	150	

Signature of the Principal/ Head of the Institution

4. Student Facilities:

Sl. No.	Name of infrastructure	Requirement in number	Requirement In area	Available		Remarks/ Deficiency
				No.	Area inSq. mts	
1	Girl's Common Room (Essential)	01	40 Sq mts	01	93.36 sqm	
2	Boy's Common Room (Essential)	01	40 Sq mts	01	93.36sqm	
3	Toilet Blocks for Boys	01	25 Sq mts	03	81.36sqm	
4	Toilet Blocks for Girls	01	25 Sq mts	03	81.36sqm	
5	Canteen (Desirable)	01	100 Sq mts	01	170 sqm	
6	Drinking Water facility Water Cooler (Essential)	01		✓		
7	Boy's Hostel (Desirable)	01	9 Sq mts/ Room Single occupancy	-----		
8	Girl's Hostel (Desirable)	01	9 Sq mts / Room (single occupancy) 20 Sq mts/ room (triple occupancy)	-----		
9	Power Backup Provision (Desirable)	01		✓		

5. Computer and other Facilities:

Name	Required	Available	Available		Remarks of the Inspectors
			No.	Area inSq. mts	
Computer (latest Configuration)	1 system for every 10 students	25	25		
Printers	1 printer for every 10 computers	02	02		
Xerox Machine	01	01	01		
Multi Media Projector	02	02	02		

Equipment for laboratories and workshops Lab wise and shop wise

6. Amenities (Desirable):

Name	Requirement as per Norms in area	Available		Not Available	Remarks/ Deficiency
		No.	Area in Sq. mts		
Principal quarters	80 Sq. mts	-----			
Staff quarters	6 x 80 Sq. mts	----			

Signature of the Principal/ Head of the Institution

Parking Area for staff and students		500sq m		Available	
Bank Extension Counter		----			
Co operative Stores		----			
Guest House	80 Sq. mts	01	110sqm	Available	
Transport Facilities for students		02		Available	
Medical Facility (First Aid)		01	20sqm	Available	

7. A. Library books and periodicals

The minimum norms for the initial stock of books, yearly addition of the books and the number of journals to be subscribed are as given below:

Sl. Item No.	Titles (No)	Minimum Volumes (No)	Available		Remarks	
			Titles	Numbers		
1	Number of books	75	750 adequate coverage of a large number of standard text books and titles in all disciplines of pharmacy	272	1700	
2	Annual addition of books		75 books per year	51	355	
3	Periodicals Hard copies / online		06 National Journals Indian Journal of Pharmaceutical Sciences Indian Journal of Pharmaceutical Education and Research Journal of Hospital Pharmacy Indian Journal of Pharmacology CIMS, MIMS Indian Journal of Experimental Biology.	10	10	
4	Library Timings		9.00AM-4.30PM			

The bills for the purchase of books and subscription journals alongwith list of books to be attached.

B. Subject wise Classification:

Sl. No	Subject	Available		Remarks
		Titles	Numbers	
1	Pharmaceutics - I	32	283	
2	Pharmaceutical Chemistry - I	31	213	
3	Pharmacognosy	16	162	
4	Biochemistry and Clinical Pathology	24	176	
5	Human Anatomy and Physiology	39	197	
6	Health Education and Community Pharmacy	22	90	
7	Pharmaceutics - II	30	161	
8	Pharmaceutical Chemistry - II	14	95	

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9	Pharmacology and Toxicology	23	57	
10	Pharmaceutical Jurisprudence	12	115	
11	Drug Store and Business Management	08	64	
12	Hospital and Clinical Pharmacy	21	97	

S. No.	Type	No. of Titles	Volume	Remarks
1	Reference Books	20	110	
2	Text Books	272	1000	
3	General Books	30	590	

Books: Annual addition of books 50 Title and volume 150.

C. Library Staff:

	Staff:	Qualification	Required	Available	Remarks
1	Librarian	D. Lib	1	1	
2	Library Attenders	10+ 2 /PUC	1	1	

Note: The information provided will be assessed in giving the period of approval.

PART G – EQUIPMENT AND APPARATUS

(Department wise List of Minimum equipments required for D. Pharma)

PHARMACEUTICS

Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
1.	Continuous Hot Extraction Equipment	05	05	Yes	
2.	Conical Percolator	05	05	Yes	
3.	Tincture Press	01	01	Yes	
4.	Hand Grinding Mill	01	03	Yes	
5.	Disintegrator	01	01	Yes	
6.	Ball mill	01	01	Yes	
7.	Hand operated Tablet machine	01	01	Yes	
8.	Tablet Coating Pan unit with hot air blower laboratory size	01	01	Yes	
9.	Polishing pan laboratory size	01	01	Yes	
10.	Monsanto's hardness tester	01	01	Yes	
11.	Pfizer type hardness tester	01	01	Yes	
12.	Tablet disintegration test apparatus IP	01	03	Yes	
13.	Tablet dissolution test apparatus IP	01	01	Yes	
14.	Granulating sieve set	10	10	Yes	
15.	Tablet counter – small size	05	05	Yes	
16.	Friability tester	01	01	Yes	
17.	Collapsible tube – Filling and sealing equipment	01	01	Yes	
18.	Capsule filling machine – Lab size	01	01	Yes	

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19.	Digital balance	01	04	Yes	
20.	Distillation unit for distilled water	02	02	Yes	
21.	Deionization unit	01	01	Yes	
22.	Glass distillation unit for water for injection	01	01	Yes	
23.	Ampoule washing machine	01	01	Yes	
24.	Ampoule filling and sealing machine	01	01	Yes	
25.	Sintered glass filters for bacterial proof filtration(four different grades)	Adequate	10	Yes	
26.	Millipore filter (3 grades)	Adequate	02	Yes	
27.	Autoclave	01	01	Yes	
28.	Hot air sterilizer	01	01	Yes	
29.	Incubator	01	01	Yes	
30.	Aseptic cabinet	01	01	Yes	
31.	Ampoule clarity test equipment	01	01	Yes	
32.	Blender	01	01	Yes	
33.	Sieves set (Pharmacopoeia standard)	02	02	Yes	
34.	Lab Centrifuge	01	01	Yes	
35.	Ointment slab	Adequate	10	Yes	
36.	Ointment spatula	Adequate	20	Yes	
37.	Pestle and mortar porcelain	Adequate	20	Yes	
38.	Pestle and mortar glass	Adequate	12	Yes	
39.	Suppository moulds of three sizes	Adequate	10	Yes	
40.	Refrigerator	01	01	Yes	

NOTE: Adequate numbers of glassware commonly used in the laboratory should be provided in each laboratory and the department.

PHARMACEUTICAL CHEMISTRY

Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
1.	Refractometer	01	01	Yes	
2.	Polarimeter	01	01	Yes	
3.	Photoelectric colorimeter	01	01	Yes	
4.	pH meter	01	01	Yes	
5.	Atomic model set	02	02	Yes	
6.	Electronic balance	01	01	Yes	
7.	Periodic table chart	Adequate	02	Yes	

NOTE: Adequate numbers of glassware commonly used in the laboratory should be provided in each laboratory and the department.

PHYSIOLOGY AND PHARMACOLOGY LABORATORY

Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
1.	Haemoglobinometer	20	20	Yes	
2.	Haemocytometer	10	10	Yes	
3.	Student's organ bath	1	2	Yes	
4.	Sherington's rotating drum	1	1	Yes	
5.	Frog board	Adequate	05	Yes	
6.	Tray (dissecting)	Adequate	04	Yes	
7.	Frontal writing lever	Adequate	04	Yes	

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8.	Aeration tube	Adequate	04	Yes	
9.	Telethermometer	1	04	Yes	
10.	Pole climbing apparatus	1	1	Yes	
11.	Histamine chamber	1	1	Yes	
12.	Simple lever	Adequate	5	Yes	
13.	Staring heart lever	Adequate	5	Yes	
14.	Aerator	Adequate	5	Yes	
15.	Histological Slides	Adequate	5	Yes	
16.	Sphygmomanometer (B.P. apparatus)	5	5	Yes	
17.	Stethoscope	5	5	Yes	
18.	First aid equipment	Adequate	1	Yes	
19.	Contraceptive device	Adequate	15	Yes	
20.	Dissecting (surgical) instruments	Adequate	5	Yes	
21.	Balance for weighing small Animals	1	1	Yes	
22.	Kymograph paper	Adequate	200	Yes	
23.	Actophotometer	1	1	Yes	
24.	Analgesiometer	1	1	Yes	
25.	Thermometer	Adequate	20	Yes	
26.	Plastic animal cage	Adequate	5	Yes	
27.	Double unit organ bath with thermostat	1	1	Yes	
28.	Refrigerator	1	1	Yes	
29.	Single pan balance	1	1	Yes	
30.	Charts	Adequate	10	Yes	
31.	Human skeleton	1	1	Yes	
32.	Anatomical specimen (Heart, brain, eye, ear, reproductive system etc.,)	1 set	1	Yes	
33.	Electro-convulsimeter	1	1	Yes	
34.	Stop watch	Adequate	5	Yes	
35.	Clamp, boss heads, screw clips	Adequate	20	Yes	
36.	Syme's Cannula	Adequate	10	Yes	

NOTE: Adequate numbers of glassware commonly used in the laboratory should be provided in each laboratory and the department.

PHARMCOGNOSY LABORATORY

Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
1.	Projection Microscope	01	1	Yes	
2.	Charts (different types)	Adequate	10	Yes	
3.	Models (different types)	Adequate	10	Yes	
4.	Permanent Slides	Adequate	25	Yes	
5.	Slides and Cover Slips	Adequate	20	Yes	

NOTE: Adequate numbers of glassware commonly used in the laboratory should be provided in each laboratory and the department.

PHARMACY PRACTICE LABORATORY

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Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
1.	Colorimeter	2	2	Yes	
2.	Microscope	Adequate	4	Yes	
3.	Permanent slides (skin, kidney, pancreas, smooth muscle, liver etc.,)	Adequate	25	Yes	
4.	Watch glass	Adequate	36	Yes	
5.	Centrifuge	1	1	Yes	
6.	Biochemical reagents for analysis of normal and pathological constituents in urine and blood facilities	Adequate	1+1	Yes	
7.	Filtration equipment	2	2	Yes	
8.	Filling Machine	1	1	Yes	
9.	Sealing Machine	1	1	Yes	
10.	Autoclave sterilizer	1	1	Yes	
11.	Membrane filter	1 Unit	1unit	Yes	
12.	Sintered glass funnel with complete filtering assemble	Adequate	5	Yes	
13.	Small disposable membrane filter for IV admixture filtration	Adequate	5	Yes	
14.	Laminar air flow bench	1	1	Yes	
15.	Vacuum pump	1	2	Yes	
16.	Oven	Adequate	50	Yes	
17.	Surgical dressing	1	1	Yes	
18.	Incubator	1	2	Yes	
19.	PH meter	1	1	Yes	
20.	Disintegration test apparatus	1	1	Yes	
21.	Hardness tester	1	1	Yes	
22.	Centrifuge	1	2	Yes	
23.	Magnetic stirrer	1	1	Yes	
24.	Thermostatic bath	1	1	Yes	

NOTE: Adequate numbers of glassware commonly used in the laboratory should be provided in each laboratory and the department.

MUSEUM: Every Institution shall maintain a museum of crude drugs, herbarium sheets, botanical specimens of the drugs, and plants, mentioned in the course in addition the following are recommended.

Sr. No.	Requirement Prescribed by PCI	Available/Not Available	Remarks
1.	Colored slides of medicine plants.	Available	
2.	Display of popular patent medicines, and	Available	
3.	Containers of common usage in medicines.	Available	

MACHINE ROOM

Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
1.	Capsule filling machine	1	1	Yes	
2.	Automated Single Station Tablet punching	1	1	Yes	

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	machine			Yes	
3.	Tablet disintegration test apparatus IP (Digital Single/Double unit)	1	1	Yes	
4.	Monsanto's hardness tester	2	2	Yes	
5.	Pfizer type hardness tester	2	2	Yes	
6.	Friability test apparatus (Digital Single/Double unit)	1	1	Yes	
7.	Sieve shaker with sieve set	1	1	Yes	
8.	Ointment filling machine	1	1	Yes	
9.	All-purpose equipment with all accessories	1	1	Yes	
10.	Bottle washing Machine	1	1	Yes	
11.	Bottle Sealing Machine	1	1	Yes	
12.	Liquid Filling Machine	1	1	Yes	
13.	Ampoule washing machine	1	1	Yes	
14.	Ampoule filling and sealing machine (Jet Burner)	1	1	Yes	
15.	Clarity test apparatus	1	1	Yes	
16.	Collapsible tube – Filling and Sealing	1	1	Yes	
17.	Liquid Mixer	1	1	Yes	

NOTE: Adequate numbers of glassware commonly used in the laboratory should be provided in each laboratory and the department.

Signature of the Principal/ Head of the Institution

HOSPITAL AND CLINICAL PHARMACY LAB

Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
25.	Orthopaedical & Surgical Aids such as knee cap, LS belts, abdominal belt, walker, walking sticks, etc	Adequate Number	20	Yes	
26.	Different Types of bandages such as sterile gauze, cotton, crepe bandages, roll bandage etc	Adequate Number	20	Yes	
27.	Mannequins for CPR-1 (with indication Signals)	2	2	Yes	
28.	Mannequins for injection IV Arm	2	2	Yes	
29.	Variety of Needles	20	20	Yes	
30.	Variety of Syringes	20	20	Yes	
31.	Variety of catheters	5	5	Yes	
32.	IV set	20	20	Yes	
33.	Urine Bag	2	2	Yes	
34.	RYLE's tube	2	2	Yes	
35.	Urine pots	2	2	Yes	
36.	Colostomy bags	2	2	Yes	
37.	Oxygen masks	10	10	Yes	
38.	Inventory Software for Retail Pharmacy	1	1	Yes	

NOTE: Adequate numbers of glassware commonly used in the laboratory should be provided in each laboratory and the department.

MODEL PHARMACY

Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
1.	<ul style="list-style-type: none"> • Empty cartons of variety medicines (across variety dosage forms) • Various name plates indicating different parts of Pharmacy, • Proper arrangement of medicines, shelves, racks, drawers • Box/area for expiry medicines, • Display windows, shelves • Computer • Refrigerator • Designated patient counselling area, • Patient Information .Leaflets/Cards • Patient waiting area, • Drug Information books • Health information display, • Various devices for screening services (B.P. monitor, glucometer etc) • Height and body weight chart • Dummy devices (eg. Inhalers) • Display of pharmacist registration, license and other licenses • Display of name of owner • Inspection book, 	Adequate	50	YES	
			50	YES	
			3	YES	
			5	YES	
			25	YES	
			02	YES	
			01	YES	
			03	YES	
			05	YES	
			02	YES	
			05	YES	
			02	YES	
			02	YES	
			02	YES	

Signature of the Principal/ Head of the Institution

	<ul style="list-style-type: none"> Lock and key arrangement for Schedule X and NDPS medicines, Bill book (dummy), Computer stationary for bill printing 		02		
			05		
2.	Computers: hospital and community pharmacy management software	1	1	Yes	

PART: H ESSENTIAL AND DESIRABLE REQUIREMENTS

ESSENTIAL AND DESIRABLE REQUIREMENTS			
Sr. No	Description	Availability [YES / NO]	Details to be provided. [Number, if so required]
Essential Requirements			
1.	Display of information submitted to PCI (including the accreditation status and Board of Governors) along with mandatory disclosures in the Web site of the Institution. (Annexure-B)	YES	
2.	Establishment of Online Grievance Redressal Mechanism	YES	
3.	Establishment of Anti Ragging Committee	YES	
4.	Establishment of Grievance Redressal Committee in the Institution	YES	
5.	Establishment of Internal Complaint Committee (ICC)	YES	
6.	Establishment of Committee for SC/ ST (As per the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989, No. 33 of 1989, dated 11.09.1989)*	YES	
7.	Internal Quality Assurance Cell*	YES	
8.	Barrier Free Built Environment for disabled and elderly persons	YES	
9.	Fire and Safety Certificate	YES	
10.	Implementation of mandatory Internship policy for students**	YES	
11.	Facilitate teachers for undergoing Pedagogical training	YES	
12.	Implementation of student Induction Programme***	YES	
13.	At least 5 MoUs with Industries	YES	
14.	Implementation of examination reforms	YES	
15.	Compliance of the National Academic Depository (NAD) as per MoE directives, (Applicable for Standalone Institutions and Universities)	YES	
16.	Safety and Security measures in the Campus	YES	
17.	Implementation of Food Safety and Standards Act, 2006 at the Institution	YES	
18.	Digital payment for all financial transactions as per MoE directives	YES	

Signature of the Principal/ Head of the Institution

19.	Display of information submitted to PCI (including the accreditation status and Board of Governors) along with mandatory disclosures in the prime location of the Web site(as a quick link) of the Institution	YES	
20.	Language Laboratory (for institutions having Diploma and Degree Programs)	YES	
21.	Potable Water supply and outlets for drinking water at strategic locations	YES	
22.	Electrical Grid Power Supply Connection	YES	
23.	Backup Electric Supply	YES	
24.	Sports facilities	YES	
25.	Waste Management and environment improvement measures to ensure a sustainable Green Campus	YES	
26.	Sewage Disposal System	YES	
27.	Display board within the premises as well as on the Web site of the of Institution indicating the feedback facility of students and Faculty	YES	
28.	First aid, Medical and Counseling Facilities	YES	
29.	Students Safety Insurance	YES	
30.	Group Accident Policy to be provided for the employees	YES	
31.	Facility to watch MOOCs through SWAYAM & SWAYAM PRABHA	YES	
32.	Road suitable for use by Motor vehicle- Motorized Road	YES	
33.	Institution-Industry Cell	YES	
34.	Applied for membership of National Digital Library	YES	
35.	Copies of AICTE/PCI approvals (LoA and EoA of subsequent years) obtained since inception of the Institution till date shall be placed on the Web site of the Institution and Information about available Courses at the Entrance of the Institution	YES	
36.	Appointment of Student Counselor	YES	
37.	Vehicle Parking	YES	
38.	General Notice Board and Departmental Notice Boards	YES	
39.	Provision / Facilities to conduct online meetings, Webinars, classes and examinations	YES	
40.	Display of Course(s) and "Approved Intake" in the Institution at the entrance of the Institution.	YES	
<p>* Appointment of Committees/ IQAC/ Grievance Mechanism should be made before commencement of the session, however, an to that effect need to be submitted by the new Technical Institution at the time of inspection by Expert Visit Committee</p> <p>** An Affidavit to be uploaded on the Portal for the compliance of Implementation of Internship Policy of PCI.</p> <p>*** An Undertaking to be uploaded on the Portal that the Institution shall possess an UHV Induction Programme trained Faculty for every 20 newly joined students before AY 2024-25.</p> <p>**** An Undertaking to be uploaded on the Portal that the Internal Assessment & Laboratory Work shall be carried out following PCI Exam Reforms and all the existing Faculty shall be trained for the same.</p> <p>Note: The above mentioned documents need to be uploaded before downloading the EoA. The Council shall verify their implementation at any point of time.</p>			
Desirable Requirements			
1.	Implementation of the schemes announced by Government of India	Yes	

Signature of the Principal/ Head of the Institution

2.	Offering of Skill development Courses approved by the Council	Yes	
3.	Fabrication facility Laboratory (FABLAB)/ AICTE-IDEA LAB/Tinkering Laboratory/ Innovation Laboratory	Yes	
4.	Availability of at least ONE Smart Class Room per Department	Yes	
5.	Installation of grid connected solar rooftops/ Power Systems	Yes	
6.	Public announcement system at strategic locations for general announcements/ paging and announcements in emergency.	Yes	
7.	Enterprise Resource Planning (ERP) Software for Student-Institution-Parent interaction	Yes	
8.	Efforts to encourage Final Year students to appear in various competitive Examinations.	Yes	
9.	Efforts to encourage students to participate in National/International competition.	Yes	
10.	Efforts to encourage students to take-up internship and project work in Indian Knowledge System related Areas/Topics/Disaster Management	Yes	
11.	Transport	Yes	
12.	Banking Facility/ Automated Teller Machine	Yes	
13.	LCD (or similar) projectors in Class Rooms	Yes	
14.	Auditorium	Yes	
15.	Staff Quarters	Yes	
16.	Course(s) taken through duly recognized MOOCs shall be used as Supplementary Course(s)	Yes	
17.	General Insurance provided for assets against fire, burglary and other calamities	Yes	
18.	Intellectual Property Right Cell	Yes	
19.	Implementation of Unnat Bharat Abhiyan/ Saansad Adarsh Gram Yojana (SAGY)	Yes	
20.	Implementation of Startup Policy	Yes	
21.	Innovation Cell/Club	Yes	
22.	Social Media Cell	Yes	
23.	Participation in the National Institutional Ranking Framework (NIRF)	Yes	
24.	Participation in the National Innovation Ranking(ARIIA)	Yes	
25.	Plastic Free Campus	Yes	
26.	Measures for Cyber security	Yes	
27.	Availability of quality sanitary napkins through sanitary napkin vending machines and ensuring safe and environmental friendly disposal of used sanitary napkin through sanitary napkin incinerator	Yes	
28.	Rainwater Harvesting	Yes	

Signature of the Principal/ Head of the Institution

- **List of facilities available:**

Games and sports facilities : Indoor & outdoor games

Extracurricular activities : Periodically Conducted

Softskill development facilities : Provided

- **Teaching Learning Process**

Curricula and syllabi for each of the programme as approved by the HSBTE:

For D. Pharmacy :- Syllabus of PCI as per Education Regulations 1991 is being followed.

From Assistant Divisional Fire Officer/Fire Station Officer
MC NARNAUL

To M/s MS RAJKUMAR SHARMA
EDUCATIONAL BUILDING AT MAKSUSPUR MOHINDERGARH OF RAMA KRISHANA RURAL
EDUCATIONAL AND RESEARCH SOCIETY MAKSUSPUR

Memo No. FS/2023/45 dated : 04/07/2023

Subject: Renewal of Fire Safety Certificate Under 15 mtrs. height from the fire Safety Point of View of the Group B-Educational Building at EDUCATIONAL BUILDING AT MAKSUSPUR MOHINDERGARH OF RAMA KRISHANA RURAL EDUCATIONAL AND RESEARCH SOCIETY MAKSUSPUR of Ram and Krishna Rural Education and Research Society Maksuspur :

Reference to you online No 120742323000038 dated 08/06/2023 on the subject cited above.

Tower Name	Floor Detail	Height	Ground Coverage
Ram and Krishna Rural Education and Research Society	Semi Basement+Ground+Fist Floor	10.95	3359.647

Basement Level	Basement Area	Remarks
-	-	-

Your site for the Renewal of the Fire Safety Certificate has been inspected by the Team of Fire Station Officers, **MC NARNAUL** from fire safety Point of View. The means of escape and Fire Protection system were checked and found as per the National Building Code of India, Part- IV guidelines.

In view of the satisfactory fire protection system / arrangement mentioned as above, this office has no objection for occupation from the Fire Safety point of view, with the following conditions:-

- 1) The owner/occupier shall keep duly trained Fire Staff in all three shifts.
 - 2) The Fire Protection System tested during inspection shall be maintained properly & always should be in good working condition.
 - 3) If any lapse is found in the fire protection system at the time of inspection or detected during outbreak of fire, action will be taken as per rules against you.
 - 4) You are directed to apply for Renewal of Fire Safety Certificate in future before 2 month of expiry of your Fire Safety Certificate.
- The open set back area is not checked at our end as it shall be checked by concerned building department.
- 6) The owner/occupier shall strictly follow the other applicable rules/ regulations/ byelaws laid down regarding fire safety system. If you fail to comply with any of the above terms & conditions you will be liable to be punished as per Section 30,31 & 47 of fire & Emergency Services Act 2022.
 - 7) You have to perform quarterly Fire Drill in your building as per NBC with intimation to Fire Department and video graphy evidence to be kept as a record which shall be produced at the time of next Renewal; Officials/Residents/R.W.A. should be mentioned in the drill.
 - 8) If the Infringements of Byelaws remains un- noticed the Authority reserves the right to amend the Fire Safety Certificate as and when any such Infringements comes to notice after giving an opportunity of being heard and the Authority shall stand Indemnified against any claim on this account.
 - 9) The owner or occupier of the building shall give a self-declaration certificate annually to the effect that the fire fighting system installed in his building is working in good condition and there is no addition/alteration in the building. The Fire Officer may randomly check such building. In case there is any addition/alteration beyond permissible limits under the Haryana Building Code, 2017, the fire safety certificate shall cease to exist and the owner shall apply for approval of revised Fire Fighting Scheme as per the provisions of section 18.

The above Renewal of Fire Safety Certificate is valid for **Three** year from the date of issue of this letter Applying renewal of the same well in time shall be the responsibility of owner/occupier.

Remarks:- Approved



Digitally signed by RAJBIR SINGH
Date: 2023.07.03 18:21:40 -07:00
Reason: Digital Verification

MC NARNAUL

Exercising the power of Director, Fire Services, Haryana



PHARMACY COUNCIL OF INDIA

(Constituted under the Pharmacy Act, 1948)

E-MAIL : registrar@pci.nic.in
WEBSITE : www.pci.nic.in
Telephone : 011-61299901
011-61299902
011-61299903

NBCC Centre, 3rd Floor,
Plot No.2, Community Centre
Maa Anandamai Marg
Okhla Phase I
NEW DELHI - 110 020

Ref. No.14-55/2021-PCI(A) | 3642-45

23 SEP 2021

✓ To

- All institutions approved for D.Pharm Course.
- All State Governments (Technical Education and Health Departments) and admission making authorities.
- All Examining Authorities.

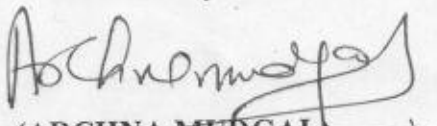
Sub: "Syllabus framed under Regulation 7, List of prescribed equipments and apparatus under Appendix-A of The Education Regulations, 2020 for Diploma Course in Pharmacy."

Sir/Madam

With reference to the subject cited above, it is informed that -

- With due approval of the Ministry of Health and Family Welfare, Government of India, PCI has notified the Education Regulations, 2020 for Diploma course in Pharmacy in the Gazette of India, Extraordinary No. 435, Part-III, Section-4, dt.16.10.2020.
- As empowered under regulation 7 and Appendix-A of ER-20, the PCI has framed the syllabus. A copy of the same titled as under is enclosed as **Annexure-I**.
"Syllabus framed under Regulation 7, List of prescribed equipments and apparatus under Appendix-A of The Education Regulations, 2020 for Diploma Course in Pharmacy."
- It is for implementation and strict compliance from 2021-2022 academic session.

Yours faithfully


(ARCHANA MUDGAL)
Registrar-cum-Secretary



Pharmacy Council of India New Delhi

**“Syllabus framed under Regulation 7,
List of prescribed equipments and
apparatus under Appendix-A of
The Education Regulations, 2020
For Diploma Course in Pharmacy”**

COMMITTEE MEMBERS

S. No.	Name	Affiliation	Role
1.	Dr. B. Suresh	President, Pharmacy Council of India, New Delhi	Ex-Officio
2.	Dr. Shailendra Saraf	Vice President, Pharmacy Council of India, New Delhi	Ex-Officio
3.	Dr. V. Gopal	Member, Pharmacy Council of India, (Puducherry)	Convener
4.	Dr. B. Jayakar	Member, Pharmacy Council of India, (Tamil Nadu)	Member
5.	Sri Kumar Ajay	Member, Pharmacy Council of India, (Bihar)	Member
6.	Dr. H. Lalhlenmawia	Member, Pharmacy Council of India, (Mizoram)	Member
7.	Dr. R. Debnath	Member, Pharmacy Council of India, (West Bengal)	Member
8.	Shri Annada Sankar Das	Member, Pharmacy Council of India, (Orissa)	Member
9.	Dr. Priyashree Sunita	Member, Pharmacy Council of India, (Jharkhand)	Member
10.	Dr. Mannava Radhakrishna Murthy	Member, Pharmacy Council of India, (Andhra Pradesh)	Member
11.	Shri Prakash Jeevandas Wanjari	Member, Pharmacy Council of India, (Maharashtra)	Member
12.	Shri K.R. Dinesh Kumar	Member, Pharmacy Council of India, (Kerala)	Member
13.	Mrs. Manjiri Sandeep Gharat	Principal I/c., Prin. K.M. Kundnani Pharmacy Polytechnic, Ulhasnagar, Maharashtra	Member
14.	Shri Raj Vaidya	Community Pharmacist, Hindu Pharmacy, Goa	Member
15.	Dr. R.N. Gupta	Professor, Birla Institute of Technology, Ranchi, Jharkhand.	Member
16.	Dr. K.P. Arun	Associate Professor, JSS College of Pharmacy, Ooty, Tamil Nadu	Member
17.	Dr. Neeraj Upmanyu	Professor & Dean, School of Pharmacy & Research, People's University Bhopal, Madhya Pradesh	Special Invitee

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1. Preamble

“Revamping the curriculum, pedagogy, assessment, and student support” is one of the vision statements and recommendations of the National Education Policy (NEP) of Govt. of India for attaining enhanced learning experiences by the students. In light of this, Pharmacy Council of India, the apex body regulating the pharmacy education in the country, committed to revise the education regulations of Diploma in Pharmacy (D.Pharm) program and thus, the ‘Education Regulations 2020’ (ER-2020) has been notified in the Gazette of India in October 2020. This new regulation has given due consideration for the fact that, universally the role of pharmacist has undergone continuous evolution from ‘dispenser of medicines’ to ‘medicine expert’ in the multidisciplinary health care team.

Accordingly, the courses (course means the subject) of the existing education regulations (ER-91) have been revisited, compared with the present and future needs of the society, expectations of the healthcare team and other stakeholders from the pharmacists were assessed, feedback from the experts in the pharmacy and other healthcare professions were sought. Thus, the course of study prescribed in ER-2020 is an amalgamation of all such exercises to arrive at a curriculum structure for D.Pharm that is more relevant to the current practice standards, dynamic to accommodate and address the upcoming changes.

Though the total number of courses across the program remain 21 as that of ER-91, the number of theory courses is reduced from 12 to 11 in the new regulation, while the number of practical courses is increased from 9 to 10. Further, the theory teaching hours across the program have been reduced from 850 to 825, while the practical hours have been increased from 750 to 800 in the new regulation. Three practical courses have been introduced for the first time in ER-2020. Further, about 275 hours have been assigned for the first time in D.Pharm curriculum for ‘Tutorial’ activities. All such changes explicitly reveal that the ER-2020 is intended to provide a little edge to the experiential learning through the practical courses and encourages the small group teaching-learning, self-directed learning, etc. in the tutorial hours.

Introduction of ‘Pharmacotherapeutics’ courses (theory and practical) is one of the revolutionary changes in the new curriculum, that will help the students to hone their knowledge and skills in the area of pharmaceutical care services which will certainly redefine the roles of the D.Pharm qualified pharmacists in both community and hospital settings. Also, the introduction of ‘Social Pharmacy’ courses (theory and practical) will provide insights about the primary and preventive healthcare concepts in the country and the potential roles of pharmacists in such healthcare segments.

In this backdrop, the Council has formulated a Committee which comprised of 16 Members who have rich experiences in various domains such as education, hospital

pharmacy practice, community pharmacy practice, clinical pharmacy practice, administrative and regulatory affairs to design the syllabus for the individual theory and practical courses as per the curriculum framework defined in ER-2020. The Committee with its clear understanding about the philosophy and objectives of the ER-2020, drafted the syllabus for individual theory and practical courses with utmost care to avoid repetitions, redundancy, over/under utilization of hours, etc. Every course is defined with scope, set of course objectives and course outcomes which will help to understand the significance and the expectations of the course from both teachers and students. Lots of scope has been given in the syllabus for the active learning by the students through the assignment topics and field visit activities which will enhance their critical thinking, searching scientific literatures, interpretational skills and communication skills.

According to the ER-2020 curriculum framework, the students do not earn any credits based on the academic hours they spend. However, as per the conventional methodology of credit calculations, the curriculum of ER-2020 shall be deemed equivalent to 80 credits that shall be used for the administrative purposes, wherever necessary.

Further, the 'Competencies for the Indian D.Pharm Holders' based on the knowledge, skill, attitude and value that are essential for the successful practice of the profession have been derived. These competencies have also been mapped with the individual courses of the curriculum based on the expected outcomes of the individual course. Thus, the courses and the competencies are interlaced in such a way that multiple courses contribute to build one competency and one course contributes to build more than one competency, which reveal the strength of the competency mapping.

The Council strongly believes that the ER-2020 regulations, curriculum and syllabus will uplift the knowledge and skills of the students on par with the contemporary and future professional demands and enable them to be a successful practitioner in the chosen field of pharmacy.

By considering the substantial changes and inclusion of advanced and current subject matters in the new syllabus, the Council shall conduct series of meetings, seminars, conferences, workshops, and webinars for the faculty members handling D.Pharm courses and equip them to deliver such new courses / topics more effectively and efficiently.

The Council appreciate all the efforts of the Members for successfully bringing out the Education Regulations 2020, curriculum and syllabus. Also, profound gratitude to all the stakeholders who contributed directly or indirectly in completing this task.

2. Competencies for the Indian D.Pharm Holders

Competency is defined as “A distinct composite of knowledge, skill, attitude and value that is essential to the practice of the profession in real life contexts”.

The candidates who successfully complete the Diploma in Pharmacy (D.Pharm) program of Education Regulations 2020 (ER-2020), from the institutions approved by the Pharmacy Council of India are expected to attain the following professional competencies.

1. Review Prescriptions
2. Dispense Prescription / Non-Prescription Medicines
3. Provide Patient Counselling / Education
4. Hospital and Community Pharmacy Management
5. Expertise on Medications
6. Proficiency on drugs / pharmaceuticals
7. Entrepreneurship and Leadership
8. Deliver Primary and Preventive Healthcare
9. Professional, Ethical and Legal Practice
10. Continuing Professional Development

1. Review Prescriptions: The student should receive and handle prescriptions in a professional manner and be able to check for their completeness and correctness. Also, the prescribers should be contacted for any clarifications and corrections in the prescriptions with suggestions if any.

2. Dispense Prescription / Non-Prescription Medicines: The student should be able to dispense the various scheduled drugs / medicines as per the implications of the Drug & Cosmetics Act and Rules thereunder. Also, the non-prescription medicines (over-the-counter drugs) should be dispensed judiciously to the patients as required.

3. Provide Patient Counselling / Education: The student should be able to effectively counsel / educate the patients / caretakers about the prescription / non-prescription medicines and other health related issues. Effective communication includes using both oral and written communication skills and various communication techniques.

4. Hospital and Community Pharmacy Management: The student should be able to manage the drug distribution system as per the policies and guidelines of the hospital pharmacy, good community pharmacy practice and the recommendations of regulatory agencies. Also, be able to manage the procurement, inventory, and distribution of medicines in hospital / community pharmacy settings.

5. Expertise on Medications: The student should be able to provide an expert opinion on medications to health care professionals on safe and effective medication-use, relevant policies and procedures based on available evidences.

6. Proficiency on Pharmaceutical Formulations: The student should be able to describe the chemistry, characteristics, types, merits and demerits of both drugs and excipients used in pharmaceutical formulations based on her/his knowledge and scientific resources.

7. Entrepreneurship and Leadership: The student should be able to acquire the entrepreneurial skills in the dynamic professional environments. Also, be able to achieve leadership skills through teamwork and sound decision-making skills.

8. Deliver Primary and Preventive Healthcare: The student should be able to contribute to various healthcare programs of the nation including disease prevention initiatives to improve public health. Also contribute to the promotion of national health policies.

9. Professional, Ethical and Legal Practice: The student should be able to deliver professional services in accordance with legal, ethical, and professional guidelines with integrity.

10. Continuing Professional Development: The student should be able to recognize the gaps in the knowledge and skills in the effective delivery of professional services from time to time and be self-motivated to bridge such gaps by attending continuing professional development programs.

3. Competency Mapping with the Courses (Part I, II & III) of Education Regulations 2020

Competencies	Pharmaceutics	Pharmaceutical Chemistry	Pharmacognosy	Human Anatomy & Physiology	Social Pharmacy	Pharmacology	Community Pharmacy & Management	Biochemistry & Clinical Pathology	Pharmacotherapeutics	Hospital & Clinical Pharmacy	Pharmacy Law & Ethics	Practical Training
1. Review the Prescriptions	√	√	√	√		√	√	√	√	√	√	√
2. Dispense Prescription / Non-Prescription Medicines	√	√	√		√	√	√	√	√	√	√	√
3. Provide Patient Counselling / Education	√	√	√	√	√	√	√	√	√	√	√	√
4. Hospital and Community Pharmacy Management					√		√			√	√	√
5. Expertise on Medications	√	√	√	√	√	√	√	√	√	√	√	√
6. Proficiency on Pharmaceutical Formulations	√	√	√			√			√			√
7. Entrepreneurship and Leadership							√			√		√
8. Deliver Primary and Preventive Healthcare				√	√	√	√	√	√	√	√	√
9. Professional, Ethical and Legal Practice					√		√		√	√	√	√
10. Continuing Professional Development	√	√	√		√	√	√		√	√	√	√

4. ER-2020 D.Pharm Syllabus – An Overview

The ER-2020 D.Pharm Syllabus has the following structure in every course. Though the theory and practical courses are not mutually exclusive, as per the Regulations, the theory and practical are to be considered as individual courses.

Scope: These are broader statements on the purpose of the course in the curriculum, key contents of the course that will contribute to the specific knowledge and or skill developments. The teacher is expected to orient the students about the scope of the particular course at the beginning and intermittently.

Course Objectives: The course objectives describe the key topics that are intended by the teacher to be covered in the course. In general, these are more specific than the scope and broader than the course outcomes. The teacher is expected to discuss the objectives of the course with the students and break-down the course objectives into micro levels as objectives of a specific topic / objectives of a specific lecture, etc. Such an exercise shall make the students to understand the significance of the course / topic / lecture and enhance their attention on the course / topic / lecture.

Course Outcomes: The course outcomes are more specific than the course objectives describe that describe the abilities of the students to perform/act, upon successful completion of the course. Hence, conventionally the course outcomes are described with verbs that are measurable or observable actions. The teacher is expected to describe the desired outcomes of the particular course, so that the students shall understand the various assessment criteria, modalities, and parameters. This also serves as a broader guideline for the teachers for preparing the assessment plan. A well-structured assessment plan associated with the course outcomes shall enable to mapping with the professional competencies and their attainment levels that are attributed to the program outcomes.

Theory Courses: The theory courses basically provide concepts and explain the relationships between the concepts. Understanding of the theoretical courses enable the students to identify the problems in real life situation and make a plan for addressing such problems. Also, the theory course helps to understand what is not known and thus is the tool for accumulation of knowledge. The syllabus of the theory courses has been systematically and logically described as different chapters and the minimum number of hours to be spent on teaching are mentioned chapter wise and course wise. The teachers shall further distribute the total hours of any given chapter among the sub-topics as required by the subject matter.

Practical Courses: The practical courses are designed for applying the theoretical knowledge in the given experimental / simulated conditions. The practical courses deepen the understanding of theories, develop the skills, hone professional competencies, provide opportunities to observe, think and analyse problem solving methods. Further, they help to gain experience with the real things in practice. The teachers shall train the students in actual / simulated practical conditions.

Tutorials: The purpose of the tutorial hour is typically to engage the students in smaller groups in order to pay a closer attention on their learning process. This is an opportunity for the students to complete their assignments, develop specific skills, discuss any problems in the study topics in a less formal way. During the tutorial hour, the students shall exchange their ideas within the small group, and learn to accept constructive criticism and listen to others. Also, the tutorial hour enables the teachers to closely monitor the progress of the individual student and provide additional academic support to individuals, if necessary.

Assignments: The purpose the assignments are to encourage the students for self-directed learning. Further, the assignments will provoke critical thinking, enhance the skills such as literature search, data mining, data interpretation, report formatting, time-management, and written communication. This is also a mode of self-assessment for the student about the level of understanding of the concepts of a particular course. The teachers shall apply their knowledge and wisdom in choosing the assignment topics at a micro level in alignment with the topics given in the syllabus. The assignments shall be evaluated against a set of criteria. A typical format for the assessment of an assignment is given in Appendix-1.

Field Visits: The purpose of field visits is to provide a real-world experience to the students. The field visits will help them to realize that what they learn within the walls of the classroom / laboratory can help them solve the problems they see in the world around them. Also, this is helpful to the teachers to widen their horizons of knowledge and broadening the scope of the syllabus. Every student shall submit a report describing their objectives, experience, learning points, etc. pertaining to the field trip, in the typical format given in Appendix-2.

Recommended Books: For each course, a list of recommended books is given in the syllabus. The list shall be considered as an important and common resource for the teaching-learning process, but not the complete list. It is always encouraged to use the latest edition of the books specified. Further, the teachers and students are encouraged to explore more primary, secondary, and tertiary resources as required.

Practical Training: The goal of the practical training for the students is to provide a real-time, supervised experience on the professional tasks emphasised in their course of study. Further, it helps them to apply their acquired knowledge and skills in the professional working environment. The practical training intensively prepares the students with adequate competencies and qualifications required for the career opportunity in the future.

Thus, the ER 2020 D.Pharm syllabus is designed to nurture the students in all the three domains of Bloom’s Taxonomy viz. cognitive (knowledge), affective (attitude) and psychomotor (skills). Further, it also provides ample of scope to the students for different learning styles viz. visual, auditory and kinaesthetic, i.e., ‘see, hear and do’.

The summary of the curriculum, courses and other activities and their metrics across the ER-2020 D.Pharm program (Part I, II & III) are given here.

Criteria	Metrics
Number of subject areas (considering both theory & practical together)	11
Number of theory courses	11
Number of practical courses	10
Number of theory hours	825
Number of practical hours	600
Number of practical training hours	500
Number of tutorial hours	275
Number of course outcomes for theory courses	45
Number of course outcomes for practical courses	40
Number of courses which have given assignments	9
Number of assignment topics given	75
Number of assignments reports each student shall submit	27
Number of courses which have field visit	5
Number of field visit reports each student shall submit	9
Number of professional competencies	10

5. Guidelines for the conduct of theory examinations

Sessional Examinations

There shall be two or more periodic sessional (internal assessment) examinations during each academic year. The duration of the sessional exam shall be 90 minutes. The highest aggregate of any two performances shall form the basis of calculating the sessional marks. The scheme of the question paper for theory sessional examinations shall be as given below.

I. Long Answers (Answer 3 out of 4)	3 x 5 = 15
II. Short Answers (Answer 5 out of 6)	5 x 3 = 15
III. Objective type Answers (Answer all 10 out of 10) (Multiple Choice Questions / Fill-in the Blanks / One word OR one Sentence questions)	10 x 1 = 10

Total = 40 marks

Internal assessment: The marks secured by the students out of the total 40 shall be reduced to 20 in each sessional, and then the internal assessment shall be calculated based on the best two averages for 20 marks.

Final Board / University Examinations

The scheme of the question paper for the theory examinations conducted by the examining authority (Board / University) shall be as given below. The duration of the final examination shall be 3 hours.

I. Long Answers (Answer 6 out of 7)	=	6 x 5 = 30
II. Short Answers (Answer 10 out of 11)	=	10 x 3 = 30
III. Objective type Answers (Answer all 20) (Multiple Choice Questions / Fill-in the Blanks / One word OR one Sentence questions)	=	20 x 1 = 20

Total = 80 marks

6. Guidelines for the conduct of practical examinations

Sessional Examinations

There shall be two or more periodic sessional (internal assessment) practical examinations during each academic year. The duration of the sessional exam shall be three hours. The highest aggregate of any two performances shall form the basis of calculating the sessional marks. The scheme of the question paper for practical sessional examinations shall be as given below.

I. Synopsis	=	10
II. Experiments	=	50*
III. Viva voce	=	10
IV. Practical Record Maintenance	=	10

Total	=	80 marks

* The marks for the experiments shall be divided into various categories, viz. major experiment, minor experiment, spotters, etc. as per the requirement of the course.

Internal assessment: The marks secured by the students out of the total of 80 shall be reduced to 10 in each sessional, and then the internal assessment shall be calculated based on the best two averages for 10 marks from the sessional and other 10 marks shall be awarded as per the details given below.

Actual performance in the sessional examination	=	10 marks
Assignment marks (Average of three)	=	5 marks*
Field Visit Report marks (Average for the reports)	=	5 marks ^{\$}

Total	=	20 marks

*, ^{\$} Only for the courses given with both assignments and field visit/s

Note:

1. For the courses having either assignments or field visit/s, the assessments of assignments or field visit/s shall be done directly for 10 marks and added to the sessional marks.
2. For the courses not having both assignment and field visit, the whole 20 marks shall be calculated from the sessional marks.

Final Board / University Examinations

The scheme of the question paper for the practical examinations conducted by the examining authority (Board / University) shall be as given below. The duration of the final examination shall be 3 hours.

I. Synopsis	=	10
II. Experiments	=	60*
III. Viva voce	=	10

Total	=	80 marks

* The marks for the experiments shall be divided into various categories, viz. major experiment, minor experiment, spotters, etc. as per the requirement of the course.

7. ER-2020 D.Pharm Syllabus – Part I

S. No.	Course Code	Name of the Course	Total Theory / Practical Hours	Total Tutorial Hours	Theory / Practical Hours per Week	Tutorial Hours per Week
1.	ER20-11T	Pharmaceutics – Theory	75	25	3	1
2.	ER20-11P	Pharmaceutics – Practical	75	-	3	-
3.	ER20-12T	Pharmaceutical Chemistry – Theory	75	25	3	1
4.	ER20-12P	Pharmaceutical Chemistry – Practical	75	-	3	-
5.	ER20-13T	Pharmacognosy – Theory	75	25	3	1
6.	ER20-13P	Pharmacognosy – Practical	75	-	3	-
7.	ER20-14T	Human Anatomy & Physiology – Theory	75	25	3	1
8.	ER20-14P	Human Anatomy & Physiology – Practical	75	-	3	-
9.	ER20-15T	Social Pharmacy – Theory	75	25	3	1
10.	ER20-15P	Social Pharmacy – Practical	75	-	3	-

PHARMACEUTICS – THEORY

Course Code: ER20-11T

75 Hours (3 Hours/week)

Scope: This course is designed to impart basic knowledge and skills on the art and science of formulating and dispensing different pharmaceutical dosage forms.

Course Objectives: This course will discuss the following aspects of pharmaceutical dosage forms

1. Basic concepts, types and need
2. Advantages and disadvantages, methods of preparation / formulation
3. Packaging and labelling requirements
4. Basic quality control tests, concepts of quality assurance and good manufacturing practices

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Describe about the different dosage forms and their formulation aspects
2. Explain the advantages, disadvantages, and quality control tests of different dosage forms
3. Discuss the importance of quality assurance and good manufacturing practices

Chapter	Topics	Hours
1	<ul style="list-style-type: none">• History of the profession of Pharmacy in India in relation to Pharmacy education, industry, pharmacy practice, and various professional associations.• Pharmacy as a career• Pharmacopoeia: Introduction to IP, BP, USP, NF and Extra Pharmacopoeia. Salient features of Indian Pharmacopoeia	7
2	Packaging materials: Types, selection criteria, advantages and disadvantages of glass, plastic, metal, rubber as packaging materials	5
3	Pharmaceutical aids: Organoleptic (Colouring, flavouring, and sweetening) agents Preservatives: Definition, types with examples and uses	3
4	Unit operations: Definition, objectives/applications, principles, construction, and workings of: Size reduction: hammer mill and ball mill Size separation: Classification of powders according to IP, Cyclone separator, Sieves and standards of sieves	9

	Mixing: Double cone blender, Turbine mixer, Triple roller mill and Silverson mixer homogenizer	
	Filtration: Theory of filtration, membrane filter and sintered glass filter	
	Drying: working of fluidized bed dryer and process of freeze drying	
	Extraction: Definition, Classification, method, and applications	
5	Tablets – coated and uncoated, various modified tablets (sustained release, extended-release, fast dissolving, multi-layered, etc.)	8
	Capsules - hard and soft gelatine capsules	4
	Liquid oral preparations - solution, syrup, elixir, emulsion, suspension, dry powder for reconstitution	6
	Topical preparations - ointments, creams, pastes, gels, liniments and lotions, suppositories, and pessaries	8
	Nasal preparations, Ear preparations	2
	Powders and granules - Insufflations, dusting powders, effervescent powders, and effervescent granules	3
	Sterile formulations – Injectables, eye drops and eye ointments	6
	Immunological products: Sera, vaccines, toxoids, and their manufacturing methods.	4
6	Basic structure, layout, sections, and activities of pharmaceutical manufacturing plants Quality control and quality assurance: Definition and concepts of quality control and quality assurance, current good manufacturing practice (cGMP), Introduction to the concept of calibration and validation	5
7	Novel drug delivery systems: Introduction, Classification with examples, advantages, and challenges	5

PHARMACEUTICS – PRACTICAL

Course Code: ER20-11P

75 Hours (3 Hours/week)

Scope: This course is designed to train the students in formulating and dispensing common pharmaceutical dosage forms.

Course Objectives: This course will discuss and train the following aspects of preparing and dispensing various pharmaceutical dosage forms

1. Calculation of working formula from the official master formula

2. Formulation of dosage forms based on working formula
3. Appropriate Packaging and labelling requirements
4. Methods of basic quality control tests

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Calculate the working formula from the given master formula
2. Formulate the dosage form and dispense in an appropriate container
3. Design the label with the necessary product and patient information
4. Perform the basic quality control tests for the common dosage forms

Practicals

1. Handling and referring the official references: Pharmacopoeias, Formularies, etc. for retrieving formulas, procedures, etc.
2. Formulation of the following dosage forms as per monograph standards and dispensing with appropriate packaging and labelling
 - **Liquid Oral:** Simple syrup, Piperazine citrate elixir, Aqueous Iodine solution
 - **Emulsion:** Castor oil emulsion, Cod liver oil emulsion
 - **Suspension:** Calamine lotion, Magnesium hydroxide mixture
 - **Ointment:** Simple ointment base, Sulphur ointment
 - **Cream:** Cetrimide cream
 - **Gel:** Sodium alginate gel
 - **Liniment:** Turpentine liniment, White liniment BPC
 - **Dry powder:** Effervescent powder granules, Dusting powder
 - **Sterile Injection:** Normal Saline, Calcium gluconate Injection
 - **Hard Gelatine Capsule:** Tetracycline capsules
 - **Tablet:** Paracetamol tablets
3. Formulation of at least five commonly used cosmetic preparations – e.g. cold cream, shampoo, lotion, toothpaste etc
4. Demonstration on various stages of tablet manufacturing processes
5. Appropriate methods of usage and storage of all dosage forms including special dosage such as different types of inhalers, spacers, insulin pens
6. Demonstration of quality control tests and evaluation of common dosage forms viz. tablets, capsules, emulsion, sterile injections as per the monographs

Assignments

The students shall be asked to submit written assignments on the following topics (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

1. Various systems of measures commonly used in prescribing, compounding and dispensing practices
2. Market preparations (including Fixed Dose Combinations) of each type of dosage forms, their generic name, minimum three brand names and label contents of the dosage forms mentioned in theory/practical
3. Overview of various machines / equipments / instruments involved in the formulation and quality control of various dosage forms / pharmaceutical formulations.
4. Overview of extemporaneous preparations at community / hospital pharmacy vs. manufacturing of dosage forms at industrial level
5. Basic pharmaceutical calculations: ratios, conversion to percentage fraction, alligation, proof spirit, isotonicity

Field Visit

The students shall be taken for an industrial visit to pharmaceutical industries to witness and understand the various processes of manufacturing of any of the common dosage forms viz. tablets, capsules, liquid orals, injectables, etc. Individual reports from each student on their learning experience from the field visit shall be submitted.

PHARMACEUTICAL CHEMISTRY – THEORY

Course Code: ER20-12T

75 Hours (3 Hours/week)

Scope: This course is designed to impart basic knowledge on the chemical structure, storage conditions and medicinal uses of organic and inorganic chemical substances used as drugs and pharmaceuticals. Also, this course discusses the impurities, quality control aspects of chemical substances used in pharmaceuticals.

Course Objectives: This course will discuss the following aspects of the chemical substances used as drugs and pharmaceuticals for various disease conditions

1. Chemical classification, chemical name, chemical structure
2. Pharmacological uses, doses, stability and storage conditions
3. Different types of formulations / dosage form available and their brand names
4. Impurity testing and basic quality control tests

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Describe the chemical class, structure and chemical name of the commonly used drugs and pharmaceuticals of both organic and inorganic nature
2. Discuss the pharmacological uses, dosage regimen, stability issues and storage conditions of all such chemical substances commonly used as drugs
3. Describe the quantitative and qualitative analysis, impurity testing of the chemical substances given in the official monographs
4. Identify the dosage form & the brand names of the drugs and pharmaceuticals popular in the marketplace

Chapter	Topic	Hours
1	Introduction to Pharmaceutical chemistry: Scope and objectives Sources and types of errors: Accuracy, precision, significant figures Impurities in Pharmaceuticals: Source and effect of impurities in Pharmacopoeial substances, importance of limit test, Principle and procedures of Limit tests for chlorides, sulphates, iron, heavy metals and arsenic.	8
2	Volumetric analysis: Fundamentals of volumetric analysis, Acid-base titration, non-aqueous titration, precipitation titration, complexometric titration, redox titration Gravimetric analysis: Principle and method.	8

3	<p>Inorganic Pharmaceuticals: Pharmaceutical formulations, market preparations, storage conditions and uses of</p> <ul style="list-style-type: none"> ● Haematinics: Ferrous sulphate, Ferrous fumarate, Ferric ammonium citrate, Ferrous ascorbate, Carbonyl iron ● Gastro-intestinal Agents: Antacids :Aluminium hydroxide gel, Magnesium hydroxide, Magaldrate, Sodium bicarbonate, Calcium Carbonate, Acidifying agents, Adsorbents, Protectives, Cathartics ● Topical agents: Silver Nitrate, Ionic Silver, Chlorhexidine Gluconate, Hydrogen peroxide, Boric acid, Bleaching powder, Potassium permanganate ● Dental products: Calcium carbonate, Sodium fluoride, Denture cleaners, Denture adhesives, Mouth washes ● Medicinal gases: Carbon dioxide, nitrous oxide, oxygen 	7
4	Introduction to nomenclature of organic chemical systems with particular reference to heterocyclic compounds containing up to Three rings	2
<p>Study of the following category of medicinal compounds with respect to classification, chemical name, chemical structure (compounds marked with*) uses, stability and storage conditions, different types of formulations and their popular brand names</p>		
5	<p>Drugs Acting on Central Nervous System</p> <ul style="list-style-type: none"> ● Anaesthetics: Thiopental Sodium*, Ketamine Hydrochloride*, Propofol ● Sedatives and Hypnotics: Diazepam*, Alprazolam*, Nitrazepam, Phenobarbital* ● Antipsychotics: Chlorpromazine Hydrochloride*, Haloperidol*, Risperidone*, Sulpiride*, Olanzapine, Quetiapine, Lurasidone ● Anticonvulsants: Phenytoin*, Carbamazepine*, Clonazepam, Valproic Acid*, Gabapentin*, Topiramate, Vigabatrin, Lamotrigine ● Anti-Depressants: Amitriptyline Hydrochloride*, Imipramine Hydrochloride*, Fluoxetine*, Venlafaxine, Duloxetine, Sertraline, Citalopram, Escitalopram, Fluvoxamine, Paroxetine 	9
6	<p>Drugs Acting on Autonomic Nervous System</p> <ul style="list-style-type: none"> ● Sympathomimetic Agents: <i>Direct Acting:</i> Nor-Epinephrine*, Epinephrine, Phenylephrine, 	9

	<p>Dopamine*, Terbutaline, Salbutamol (Albuterol), Naphazoline*, Tetrahydrozoline. Indirect Acting Agents: Hydroxy Amphetamine, Pseudoephedrine. Agents With Mixed Mechanism: Ephedrine, Metaraminol</p> <ul style="list-style-type: none"> ● Adrenergic Antagonists: Alpha Adrenergic Blockers: Tolazoline, Phentolamine ● Phenoxybenzamine, Prazosin. Beta Adrenergic Blockers: Propranolol*, Atenolol*, Carvedilol ● Cholinergic Drugs and Related Agents: Direct Acting Agents: Acetylcholine*, Carbachol, And Pilocarpine. Cholinesterase Inhibitors: Neostigmine*, Edrophonium Chloride, Tacrine Hydrochloride, Pralidoxime Chloride, Echothiopate Iodide ● Cholinergic Blocking Agents: Atropine Sulphate*, Ipratropium Bromide <p>Synthetic Cholinergic Blocking Agents: Tropicamide, Cyclopentolate Hydrochloride, Clidinium Bromide, Dicyclomine Hydrochloride*</p>	
7	<p>Drugs Acting on Cardiovascular System</p> <ul style="list-style-type: none"> ● Anti-Arrhythmic Drugs: Quinidine Sulphate, Procainamide Hydrochloride, Verapamil, Phenytoin Sodium*, Lidocaine Hydrochloride, Lorcaïnide Hydrochloride, Amiodarone and Sotalol ● Anti-Hypertensive Agents: Propranolol*, Captopril*, Ramipril, Methyldopate Hydrochloride, Clonidine Hydrochloride, Hydralazine Hydrochloride, Nifedipine, ● Antianginal Agents: Isosorbide Dinitrate 	5
8	<p>Diuretics: Acetazolamide, Frusemide*, Bumetanide, Chlorthalidone, Benzthiazide, Metolazone, Xipamide, Spironolactone</p>	2
9	<p>Hypoglycemic Agents: Insulin and Its Preparations, Metformin*, Glibenclamide*, Glimepiride, Pioglitazone, Repaglinide, Gliflozins, Gliptins</p>	3
10	<p>Analgesic And Anti-Inflammatory Agents: Morphine Analogues, Narcotic Antagonists; Nonsteroidal Anti-Inflammatory Agents (NSAIDs) - Aspirin*, Diclofenac, Ibuprofen*, Piroxicam, Celecoxib, Mefenamic Acid, Paracetamol*, Aceclofenac</p>	3
11	<p>Anti-Infective Agents</p> <ul style="list-style-type: none"> ● Antifungal Agents: Amphotericin-B, Griseofulvin, Miconazole, Ketoconazole*, Itraconazole, Fluconazole*, Naftifine Hydrochloride 	8

	<ul style="list-style-type: none"> ● Urinary Tract Anti-Infective Agents: Norfloxacin, Ciprofloxacin, Ofloxacin*, Moxifloxacin, ● Anti-Tubercular Agents: INH*, Ethambutol, Para Amino Salicylic Acid, Pyrazinamide, Rifampicin, Bedaquiline, Delamanid, Pretomanid* ● Antiviral Agents: Amantadine Hydrochloride, Idoxuridine, Acyclovir*, Foscarnet, Zidovudine, Ribavirin, Remdesivir, Favipiravir ● Antimalarials: Quinine Sulphate, Chloroquine Phosphate*, Primaquine Phosphate, Mefloquine*, Cycloguanil, Pyrimethamine, Artemisinin ● Sulfonamides: Sulfanilamide, Sulfadiazine, Sulfamethoxazole, Sulfacetamide*, Mafenide Acetate, Cotrimoxazole, Dapsone* 	
12	Antibiotics: Penicillin G, Amoxicillin*, Cloxacillin, Streptomycin, Tetracyclines: Doxycycline, Minocycline, Macrolides: Erythromycin, Azithromycin, Miscellaneous: Chloramphenicol* Clindamycin	8
13	Anti-Neoplastic Agents: Cyclophosphamide*, Busulfan, Mercaptopurine, Fluorouracil*, Methotrexate, Dactinomycin, Doxorubicin Hydrochloride, Vinblastine Sulphate, Cisplatin*, Dromostanolone Propionate	3

PHARMACEUTICAL CHEMISTRY – PRACTICAL

Course Code: ER20-12P

75 Hours (3 Hours/week)

Scope: This course is designed to impart basic training and hands-on experiences to synthesis chemical substances used as drugs and pharmaceuticals. Also, to perform the quality control tests, impurity testing, test for purity and systematic qualitative analysis of chemical substances used as drugs and pharmaceuticals.

Course Objectives: This course will provide the hands-on experience on the following aspects of chemical substances used as drugs and pharmaceuticals

1. Limit tests and assays of selected chemical substances as per the monograph
2. Volumetric analysis of the chemical substances
3. Basics of preparatory chemistry and their analysis
4. Systematic qualitative analysis for the identification of the chemical drugs

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Perform the limit tests for various inorganic elements and report
2. Prepare standard solutions using the principles of volumetric analysis
3. Test the purity of the selected inorganic and organic compounds against the monograph standards
4. Synthesize the selected chemical substances as per the standard synthetic scheme
5. Perform qualitative tests to systematically identify the unknown chemical substances

Practicals

S. No.	Experiment
1	Limit test for <ul style="list-style-type: none"> • Chlorides; sulphate; Iron; heavy metals
2	Identification tests for Anions and Cations as per Indian Pharmacopoeia
3	Fundamentals of Volumetric analysis Preparation of standard solution and standardization of Sodium Hydroxide, Potassium Permanganate
4	Assay of the following compounds <ul style="list-style-type: none"> • Ferrous sulphate- by redox titration • Calcium gluconate-by complexometric • Sodium chloride-by Modified Volhard's method • Ascorbic acid by iodometry • Ibuprofen by alkalimetry
5	Fundamentals of preparative organic chemistry Determination of Melting point and boiling point of organic compounds
6	Preparation of organic compounds <ul style="list-style-type: none"> • Benzoic acid from Benzamide • Picric acid from Phenol
7	Identification and test for purity of pharmaceuticals Aspirin, Caffeine, Paracetamol, Sulfanilamide
8	Systematic Qualitative analysis experiments (4 substances)

Assignments

The students shall be asked to submit the written assignments on the following topics (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

1. Different monographs and formularies available and their major contents
2. Significance of quality control and quality assurance in pharmaceutical industries
3. Overview on Green Chemistry
4. Various software programs available for computer aided drug discovery
5. Various instrumentations used for characterization and quantification of drug

PHARMACOGNOSY – THEORY

Course Code: ER20-13T

75 Hours (3 Hours/week)

Scope: This course is designed to impart knowledge on the medicinal uses of various drugs of natural origin. Also, the course emphasizes the fundamental concepts in the evaluation of crude drugs, alternative systems of medicine, nutraceuticals, and herbal cosmetics.

Course Objectives: This course will discuss the following aspects of drug substances derived from natural resources.

1. Occurrence, distribution, isolation, identification tests of common phytoconstituents
2. Therapeutic activity and pharmaceutical applications of various natural drug substances and phytoconstituents
3. Biological source, chemical constituents of selected crude drugs and their therapeutic efficacy in common diseases and ailments
4. Basic concepts in quality control of crude drugs and various system of medicines
5. Applications of herbs in health foods and cosmetics

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Identify the important/common crude drugs of natural origin
2. Describe the uses of herbs in nutraceuticals and cosmeceuticals
3. Discuss the principles of alternative system of medicines
4. Describe the importance of quality control of drugs of natural origin

Chapter	Topic	Hours
1	Definition, history, present status and scope of Pharmacognosy	2
2	Classification of drugs: <ul style="list-style-type: none">● Alphabetical● Taxonomical● Morphological● Pharmacological● Chemical● Chemo-taxonomical	4
3	Quality control of crude drugs: <ul style="list-style-type: none">● Different methods of adulteration of crude drugs● Evaluation of crude drugs	6

4	Brief outline of occurrence, distribution, isolation, identification tests, therapeutic activity and pharmaceutical applications of alkaloids, terpenoids, glycosides, volatile oils, tannins and resins.	6																																						
5	<p>Biological source, chemical constituents and therapeutic efficacy of the following categories of crude drugs.</p> <table border="1" data-bbox="352 445 1289 1693"> <tr> <td data-bbox="352 445 715 488">Laxatives</td> <td data-bbox="715 445 1289 488">Aloe, Castor oil, Ispaghula, Senna</td> </tr> <tr> <td data-bbox="352 488 715 530">Cardiotonic</td> <td data-bbox="715 488 1289 530">Digitalis, Arjuna</td> </tr> <tr> <td data-bbox="352 530 715 663">Carminatives and G.I. regulators</td> <td data-bbox="715 530 1289 663">Coriander, Fennel, Cardamom, Ginger, Clove, Black Pepper, Asafoetida, Nutmeg, Cinnamon</td> </tr> <tr> <td data-bbox="352 663 715 745">Astringents</td> <td data-bbox="715 663 1289 745">Myrobalan, Black Catechu, Pale Catechu</td> </tr> <tr> <td data-bbox="352 745 715 878">Drugs acting on nervous system</td> <td data-bbox="715 745 1289 878">Hyoscyamus, Belladonna, Ephedra, Opium, Tea leaves, Coffee seeds, Coca</td> </tr> <tr> <td data-bbox="352 878 715 920">Anti-hypertensive</td> <td data-bbox="715 878 1289 920">Rauwolfia</td> </tr> <tr> <td data-bbox="352 920 715 963">Anti-tussive</td> <td data-bbox="715 920 1289 963">Vasaka, Tolu Balsam</td> </tr> <tr> <td data-bbox="352 963 715 1005">Anti-rheumatics</td> <td data-bbox="715 963 1289 1005">Colchicum seed</td> </tr> <tr> <td data-bbox="352 1005 715 1048">Anti-tumour</td> <td data-bbox="715 1005 1289 1048">Vinca, Podophyllum</td> </tr> <tr> <td data-bbox="352 1048 715 1090">Antidiabetics</td> <td data-bbox="715 1048 1289 1090">Pterocarpus, Gymnema</td> </tr> <tr> <td data-bbox="352 1090 715 1133">Diuretics</td> <td data-bbox="715 1090 1289 1133">Gokhru, Punarnava</td> </tr> <tr> <td data-bbox="352 1133 715 1176">Anti-dysenteric</td> <td data-bbox="715 1133 1289 1176">Ipecacuanha</td> </tr> <tr> <td data-bbox="352 1176 715 1258">Antiseptics and disinfectants</td> <td data-bbox="715 1176 1289 1258">Benzoin, Myrrh, Neem, Turmeric</td> </tr> <tr> <td data-bbox="352 1258 715 1301">Antimalarials</td> <td data-bbox="715 1258 1289 1301">Cinchona, Artemisia</td> </tr> <tr> <td data-bbox="352 1301 715 1344">Oxytocic</td> <td data-bbox="715 1301 1289 1344">Ergot</td> </tr> <tr> <td data-bbox="352 1344 715 1386">Vitamins</td> <td data-bbox="715 1344 1289 1386">Cod liver oil, Shark liver oil</td> </tr> <tr> <td data-bbox="352 1386 715 1469">Enzymes</td> <td data-bbox="715 1386 1289 1469">Papaya, Diastase, Pancreatin, Yeast</td> </tr> <tr> <td data-bbox="352 1469 715 1601">Pharmaceutical Aids</td> <td data-bbox="715 1469 1289 1601">Kaolin, Lanolin, Beeswax, Acacia, Tragacanth, Sodium alginate, Agar, Guar gum, Gelatine</td> </tr> <tr> <td data-bbox="352 1601 715 1693">Miscellaneous</td> <td data-bbox="715 1601 1289 1693">Squill, Galls, Ashwagandha, Tulsi, Guggul</td> </tr> </table>	Laxatives	Aloe, Castor oil, Ispaghula, Senna	Cardiotonic	Digitalis, Arjuna	Carminatives and G.I. regulators	Coriander, Fennel, Cardamom, Ginger, Clove, Black Pepper, Asafoetida, Nutmeg, Cinnamon	Astringents	Myrobalan, Black Catechu, Pale Catechu	Drugs acting on nervous system	Hyoscyamus, Belladonna, Ephedra, Opium, Tea leaves, Coffee seeds, Coca	Anti-hypertensive	Rauwolfia	Anti-tussive	Vasaka, Tolu Balsam	Anti-rheumatics	Colchicum seed	Anti-tumour	Vinca, Podophyllum	Antidiabetics	Pterocarpus, Gymnema	Diuretics	Gokhru, Punarnava	Anti-dysenteric	Ipecacuanha	Antiseptics and disinfectants	Benzoin, Myrrh, Neem, Turmeric	Antimalarials	Cinchona, Artemisia	Oxytocic	Ergot	Vitamins	Cod liver oil, Shark liver oil	Enzymes	Papaya, Diastase, Pancreatin, Yeast	Pharmaceutical Aids	Kaolin, Lanolin, Beeswax, Acacia, Tragacanth, Sodium alginate, Agar, Guar gum, Gelatine	Miscellaneous	Squill, Galls, Ashwagandha, Tulsi, Guggul	30
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6	<p>Plant fibres used as surgical dressings: Cotton, silk, wool and regenerated fibres</p> <p>Sutures – Surgical Catgut and Ligatures</p>	3																																						
7	<p>● Basic principles involved in the traditional systems of medicine like: Ayurveda, Siddha, Unani and Homeopathy</p> <p>● Method of preparation of Ayurvedic formulations like: Arista, Asava, Gutika, Taila, Churna, Lehya and Bhasma</p>	8																																						

8	Role of medicinal and aromatic plants in national economy and their export potential	2
9	Herbs as health food: Brief introduction and therapeutic applications of: Nutraceuticals, Antioxidants, Pro-biotics, Pre-biotics, Dietary fibres, Omega-3-fatty acids, Spirulina, Carotenoids, Soya and Garlic	4
10	Introduction to herbal formulations	4
11	Herbal cosmetics: Sources, chemical constituents, commercial preparations, therapeutic and cosmetic uses of: Aloe vera gel, Almond oil, Lavender oil, Olive oil, Rosemary oil, Sandal Wood oil	4
12	Phytochemical investigation of drugs	2

PHARMACOGNOSY – PRACTICAL

Course Code: ER20-13P

75 Hours (3 Hours/week)

Scope: This course is designed to train the students in physical identification, morphological characterization, physical and chemical characterization, and evaluation of commonly used herbal drugs.

Course Objectives: This course will provide hands-on experiences to the students in

1. Identification of the crude drugs based on their morphological characteristics
2. Various characteristic anatomical characteristics of the herbal drugs studied through transverse section
3. Physical and chemical tests to evaluate the crude drugs

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Identify the given crude drugs based on the morphological characteristics
2. Take a transverse section of the given crude drugs
3. Describe the anatomical characteristics of the given crude drug under microscopical conditions
4. Carry out the physical and chemical tests to evaluate the given crude drugs

Practicals

1. Morphological Identification of the following drugs:

Ispaghula, Senna, Coriander, Fennel, Cardamom, Ginger, Nutmeg, Black Pepper, Cinnamon, Clove, Ephedra, Rauwolfia, Gokhru, Punarnava, Cinchona, Agar.

2. Gross anatomical studies (Transverse Section) of the following drugs:

Ajwain, Datura, Cinnamon, Cinchona, Coriander, Ashwagandha, Liquorice, Clove, Curcuma, Nux_vomica, Vasaka

3. Physical and chemical tests for evaluation of any FIVE of the following drugs:

Asafoetida, Benzoin, Pale catechu, Black catechu, Castor oil, Acacia, Tragacanth, Agar, Guar gum, Gelatine.

Assignments

The students shall be asked to submit the written assignments on the following topics (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

1. Market preparations of various dosage forms of Ayurvedic, Unani, Siddha, Homeopathic (Classical and Proprietary), indications, and their labelling requirements
2. Market preparations of various herbal formulations and herbal cosmetics, indications, and their labelling requirements
3. Herb-Drug interactions documented in the literature and their clinical significances

Field Visit

The students shall be taken in groups to a medicinal garden to witness and understand the nature of various medicinal plants discussed in theory and practical courses. Additionally, they shall be taken in groups to the pharmacies of traditional systems of medicines to understand the availability of various dosage forms and their labelling requirements. Individual reports from each student on their learning experience from the field visit shall be submitted.

HUMAN ANATOMY AND PHYSIOLOGY – THEORY

Course Code: ER20-14T

75 Hours (3 Hours/week)

Scope: This course is designed to impart basic knowledge on the structure and functions of the human body. It helps in understanding both homeostasis mechanisms and homeostatic imbalances of various systems of the human body.

Course Objectives: This course will discuss the following:

1. Structure and functions of the various organ systems and organs of the human body
2. Homeostatic mechanisms and their imbalances in the human body
3. Various vital physiological parameters of the human body and their significances

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Describe the various organ systems of the human body
2. Discuss the anatomical features of the important human organs and tissues
3. Explain the homeostatic mechanisms regulating the normal physiology in the human system
4. Discuss the significance of various vital physiological parameters of the human body

Chapter	Topic	Hours
1	Scope of Anatomy and Physiology Definition of various terminologies	2
2	Structure of Cell: Components and its functions	2
3	Tissues of the human body: Epithelial, Connective, Muscular and Nervous tissues – their sub-types and characteristics.	4
4	Osseous system: structure and functions of bones of axial and appendicular skeleton Classification, types and movements of joints, disorders of joints	3 3
5	Haemopoietic system <ul style="list-style-type: none">● Composition and functions of blood● Process of Hemopoiesis● Characteristics and functions of RBCs, WBCs, and platelets● Mechanism of Blood Clotting● Importance of Blood groups	8

6	Lymphatic system <ul style="list-style-type: none"> ● Lymph and lymphatic system, composition, function and its formation. ● Structure and functions of spleen and lymph node. 	3
7	Cardiovascular system <ul style="list-style-type: none"> ● Anatomy and Physiology of heart ● Blood vessels and circulation (Pulmonary, coronary and systemic circulation) ● Cardiac cycle and Heart sounds, Basics of ECG ● Blood pressure and its regulation 	8
8	Respiratory system <ul style="list-style-type: none"> ● Anatomy of respiratory organs and their functions. ● Regulation, and Mechanism of respiration. ● Respiratory volumes and capacities – definitions 	4
9	Digestive system <ul style="list-style-type: none"> ● Anatomy and Physiology of the GIT ● Anatomy and functions of accessory glands ● Physiology of digestion and absorption 	8
10	Skeletal muscles <ul style="list-style-type: none"> ● Histology ● Physiology of muscle contraction ● Disorder of skeletal muscles 	2
11	Nervous system <ul style="list-style-type: none"> ● Classification of nervous system ● Anatomy and physiology of cerebrum, cerebellum, mid brain ● Function of hypothalamus, medulla oblongata and basal ganglia ● Spinal cord-structure and reflexes ● Names and functions of cranial nerves. ● Anatomy and physiology of sympathetic and parasympathetic nervous system (ANS) 	8
12	Sense organs - Anatomy and physiology of <ul style="list-style-type: none"> ● Eye ● Ear ● Skin ● Tongue ● Nose 	6
13	Urinary system <ul style="list-style-type: none"> ● Anatomy and physiology of urinary system ● Physiology of urine formation ● Renin - angiotensin system ● Clearance tests and micturition 	4

14	Endocrine system (Hormones and their functions) <ul style="list-style-type: none"> ● Pituitary gland ● Adrenal gland ● Thyroid and parathyroid gland ● Pancreas and gonads 	6
15	Reproductive system <ul style="list-style-type: none"> ● Anatomy of male and female reproductive system ● Physiology of menstruation ● Spermatogenesis and Oogenesis ● Pregnancy and parturition 	4

HUMAN ANATOMY AND PHYSIOLOGY – PRACTICAL

Course Code: ER20-14P

75 Hours (3 Hours/week)

Scope: This course is designed to train the students and instil the skills for carrying out basic physiological monitoring of various systems and functions.

Course Objectives: This course will provide hands-on experience in the following:

1. General blood collection techniques and carrying out various haematological assessments and interpreting the results
2. Recording and monitoring the vital physiological parameters in human subjects and the basic interpretations of the results
3. Microscopic examinations of the various tissues permanently mounted in glass slides
4. Discuss the anatomical and physiological characteristics of various organ systems of the body using models, charts, and other teaching aids

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Perform the haematological tests in human subjects and interpret the results
2. Record, monitor and document the vital physiological parameters of human subjects and interpret the results
3. Describe the anatomical features of the important human tissues under the microscopical conditions
4. Discuss the significance of various anatomical and physiological characteristics of the human body

Practicals

1. Study of compound microscope
2. General techniques for the collection of blood
3. Microscopic examination of Epithelial tissue, Cardiac muscle, Smooth muscle, Skeletal muscle, Connective tissue, and Nervous tissue of ready / pre-prepared slides.
4. Study of Human Skeleton-Axial skeleton and appendicular skeleton
5. Determination of
 - a. Blood group
 - b. ESR
 - c. Haemoglobin content of blood
 - d. Bleeding time and Clotting time
6. Determination of WBC count of blood
7. Determination of RBC count of blood
8. Determination of Differential count of blood
9. Recording of Blood Pressure in various postures, different arms, before and after exertion and interpreting the results
10. Recording of Body temperature (using mercury, digital and IR thermometers at various locations), Pulse rate/ Heart rate (at various locations in the body, before and after exertion), Respiratory Rate
11. Recording Pulse Oxygen (before and after exertion)
12. Recording force of air expelled using Peak Flow Meter
13. Measurement of height, weight, and BMI
14. Study of various systems and organs with the help of chart, models, and specimens
 - a) Cardiovascular system
 - b) Respiratory system
 - c) Digestive system
 - d) Urinary system
 - e) Endocrine system
 - f) Reproductive system
 - g) Nervous system
 - h) Eye
 - i) Ear
 - j) Skin

SOCIAL PHARMACY – THEORY

Course Code: ER20-15T

75 Hours (3 Hours/week)

Scope: This course is designed to impart basic knowledge on public health, epidemiology, preventive care, and other social health related concepts. Also, to emphasize the roles of pharmacists in the public health programs.

Course Objectives: This course will discuss about basic concepts of

1. Public health and national health programs
2. Preventive healthcare
3. Food and nutrition related health issues
4. Health education and health promotion
5. General roles and responsibilities of pharmacists in public health

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Discuss about roles of pharmacists in the various national health programs
2. Describe various sources of health hazards and disease preventive measures
3. Discuss the healthcare issues associated with food and nutritional substances
4. Describe the general roles and responsibilities of pharmacists in public health

Chapter	Topic	Hours
1	Introduction to Social Pharmacy <ul style="list-style-type: none">• Definition and Scope. Social Pharmacy as a discipline and its scope in improving the public health. Role of Pharmacists in Public Health. (2)• Concept of Health -WHO Definition, various dimensions, determinants, and health indicators. (3)• National Health Policy – Indian perspective (1)• Public and Private Health System in India, National Health Mission (2)• Introduction to Millennium Development Goals, Sustainable Development Goals, FIP Development Goals (1)	9
2	Preventive healthcare – Role of Pharmacists in the following <ul style="list-style-type: none">• Demography and Family Planning (3)• Mother and child health, importance of breastfeeding, ill effects of infant milk substitutes and bottle feeding (2)• Overview of Vaccines, types of immunity and immunization (4)	18

	<ul style="list-style-type: none"> • Effect of Environment on Health – Water pollution, importance of safe drinking water, waterborne diseases, air pollution, noise pollution, sewage and solid waste disposal, occupational illnesses, Environmental pollution due to pharmaceuticals (7) • Psychosocial Pharmacy: Drugs of misuse and abuse – psychotropics, narcotics, alcohol, tobacco products. Social Impact of these habits on social health and productivity and suicidal behaviours (2) 	
3	<p>Nutrition and Health</p> <ul style="list-style-type: none"> • Basics of nutrition – Macronutrients and Micronutrients (3) • Importance of water and fibres in diet (1) • Balanced diet, Malnutrition, nutrition deficiency diseases, ill effects of junk foods, calorific and nutritive values of various foods, fortification of food (3) • Introduction to food safety, adulteration of foods, effects of artificial ripening, use of pesticides, genetically modified foods (1) • Dietary supplements, nutraceuticals, food supplements – indications, benefits, Drug-Food Interactions (2) 	10
4	<p>Introduction to Microbiology and common microorganisms (3)</p> <p>Epidemiology: Introduction to epidemiology, and its applications. Understanding of terms such as epidemic, pandemic, endemic, mode of transmission, outbreak, quarantine, isolation, incubation period, contact tracing, morbidity, mortality, . (2)</p> <p>Causative agents, epidemiology and clinical presentations and Role of Pharmacists in educating the public in prevention of the following communicable diseases:</p> <ul style="list-style-type: none"> • Respiratory infections – chickenpox, measles, rubella, mumps, influenza (including Avian-Flu, H1N1, SARS, MERS, COVID-19), diphtheria, whooping cough, meningococcal meningitis, acute respiratory infections, tuberculosis, Ebola (7) • Intestinal infections – poliomyelitis, viral hepatitis, cholera, acute diarrheal diseases, typhoid, amebiasis, worm infestations, food poisoning (7) 	28

	<ul style="list-style-type: none"> • Arthropod-borne infections - dengue, malaria, filariasis and, chikungunya (4) • Surface infections – trachoma, tetanus, leprosy (2) • STDs, HIV/AIDS (3) 	
5	Introduction to health systems and all ongoing National Health programs in India, their objectives, functioning, outcome, and the role of pharmacists.	8
6	Pharmacoeconomics – Introduction, basic terminologies, importance of pharmacoeconomics	2

SOCIAL PHARMACY – PRACTICAL

Course Code: ER20-15P

75 Hours (3 Hours/week)

Scope: This course is designed to provide simulated experience in various public health and social pharmacy activities.

Course Objectives: This course will train the students on various roles of pharmacists in public health and social pharmacy activities in the following areas:

1. National immunization programs
2. Reproductive and child health programs
3. Food and nutrition related health programs
4. Health education and promotion
5. General roles and responsibilities of the pharmacists in public health
6. First Aid for various emergency conditions including basic life support and cardiopulmonary resuscitation

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Describe the roles and responsibilities of pharmacists in various National health programs
2. Design promotional materials for public health awareness
3. Describe various health hazards including microbial sources
4. Advice on preventive measures for various diseases
5. Provide first aid for various emergency conditions

Note: Demonstration / Hands-on experience / preparation of charts / models / promotional materials / role plays / enacting / e-brochures / e-flyers / podcasts / video podcasts / any other innovative activities to understand the concept of various elements of social pharmacy listed here. (At least one activity to be carried out for each one of the following):

Practicals

1. National immunization schedule for children, adult vaccine schedule, Vaccines which are not included in the National Immunization Program.
2. RCH – reproductive and child health – nutritional aspects, relevant national health programmes.
3. Family planning devices
4. Microscopical observation of different microbes (readymade slides)
5. Oral Health and Hygiene
6. Personal hygiene and etiquettes – hand washing techniques, Cough and sneeze etiquettes.
7. Various types of masks, PPE gear, wearing/using them, and disposal.
8. Menstrual hygiene, products used
9. First Aid – Theory, basics, demonstration, hands on training, audio-visuals, and practice, BSL (Basic Life Support) Systems [SCA - Sudden Cardiac Arrest, FBAO - Foreign Body Airway Obstruction, CPR, Defibrillation (using AED) (Includes CPR techniques, First Responder).
10. Emergency treatment for all medical emergency cases viz. snake bite, dog bite, insecticide poisoning, fractures, burns, epilepsy etc.
11. Role of Pharmacist in Disaster Management.
12. Marketed preparations of disinfectants, antiseptics, fumigating agents, antilarval agents, mosquito repellents, etc.
13. Health Communication: Audio / Video podcasts, Images, Power Point Slides, Short Films, etc. in regional language(s) for mass communication / education / Awareness on 5 different communicable diseases, their signs and symptoms, and prevention.
14. Water purification techniques, use of water testing kit, calculation of Content/percentage of KMnO_4 , bleaching powder to be used for wells/tanks
15. Counselling children on junk foods, balanced diets – using Information, Education and Communication (IEC), counselling, etc. (Simulation Experiments).
16. Preparation of various charts on nutrition, sources of various nutrients from Locally available foods, calculation of caloric needs of different groups (e.g. child, mother, sedentary lifestyle, etc.). Chart of glycemic index of foods.
17. Tobacco cessation, counselling, identifying various tobacco containing products through charts/pictures

Assignment

The students shall be asked to submit the written assignments on the following topics (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

1. An overview of Women's Health Issues
2. Study the labels of various packed foods to understand their nutritional contents
3. Breastfeeding counselling, guidance – using Information, Education and Communication (IEC)
4. Information about the organizations working on de-addiction services in the region (city / district, etc.)
5. Role of a pharmacist in disaster management – A case study
6. Overview on the National Tuberculosis Elimination Programme (NTEP)
7. Drug disposal systems in the country, at industry level and citizen level
8. Various Prebiotics or Probiotics (dietary and market products)
9. Emergency preparedness: Study of local Government structure with respect to Fire, Police departments, health department
10. Prepare poster/presentation for general public on any one of the Health Days. e.g. Day, AIDS Day, Handwashing Day, ORS day, World Diabetes Day, World Heart Day, etc.
11. List of home medicines, their storage, safe handling, and disposal of unused medicines
12. Responsible Use of Medicines: From Purchase to Disposal
13. Collection of newspaper clips (minimum 5) relevant to any one topic and its submission in an organized form with collective summary based on the news items
14. Read a minimum of one article relevant to any theory topic, from Pharma /Science/ or other Periodicals and prepare summary of it for submission
15. Potential roles of pharmacists in rural India

Field Visits

The students shall be taken in groups to visit any THREE of the following facilities to witness and understand the activities of such centres/facilities from the perspectives of the topics discussed in theory and/or practical courses. Individual reports from each student on their learning experience from the field visits shall be submitted.

1. Garbage Treatment Plant
2. Sewage Treatment Plant
3. Bio-medical Waste Treatment Plant
4. Effluent Treatment Plant
5. Water purification plant
6. Orphanage / Elderly-Care-Home / School and or Hostel/Home for persons with disabilities
7. Primary health care centre

8. ER-2020 D.Pharm Syllabus – Part II

S. No.	Course Code	Name of the Course	Total Theory / Practical Hours	Total Tutorial Hours	Theory / Practical Hours per Week	Tutorial Hours per Week
1.	ER20-21T	Pharmacology – Theory	75	25	3	1
2.	ER20-21P	Pharmacology – Practical	50	-	2	-
3.	ER20-22T	Community Pharmacy & Management – Theory	75	25	3	1
4.	ER20-22P	Community Pharmacy & Management – Practical	75	-	3	-
5.	ER20-23T	Biochemistry & Clinical Pathology – Theory	75	25	3	1
6.	ER20-23P	Biochemistry & Clinical Pathology – Practical	50	-	2	-
7.	ER20-24T	Pharmacotherapeutics – Theory	75	25	3	1
8.	ER20-24P	Pharmacotherapeutics – Practical	25	-	1	-
9.	ER20-25T	Hospital & Clinical Pharmacy – Theory	75	25	3	1
10.	ER20-25P	Hospital & Clinical Pharmacy – Practical	25	-	1	-
11.	ER20-26T	Pharmacy Law & Ethics	75	25	3	1

PHARMACOLOGY – THEORY

Course Code: ER20-21T

75 Hours (3 Hours/week)

Scope: This course provides basic knowledge about different classes of drugs available for the pharmacotherapy of common diseases. The indications for use, dosage regimen, routes of administration, pharmacokinetics, pharmacodynamics, and contraindications of the drugs discussed in this course are vital for successful professional practice.

Course Objectives: This course will discuss the following:

1. General concepts of pharmacology including pharmacokinetics, pharmacodynamics, routes of administration, etc.
2. Pharmacological classification and indications of drugs
3. Dosage regimen, mechanisms of action, contraindications of drugs
4. Common adverse effects of drugs

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Describe the basic concepts of pharmacokinetics and pharmacodynamics
2. Enlist the various classes and drugs of choices for any given disease condition
3. Advise the dosage regimen, route of administration and contraindications for a given drug
4. Describe the common adverse drug reactions

Chapter	Topic	Hours
1	General Pharmacology <ul style="list-style-type: none">• Introduction and scope of Pharmacology• Various routes of drug administration - advantages and disadvantages• Drug absorption - definition, types, factors affecting drug absorption• Bioavailability and the factors affecting bioavailability• Drug distribution - definition, factors affecting drug distribution• Biotransformation of drugs - Definition, types of biotransformation reactions, factors influencing drug metabolisms• Excretion of drugs - Definition, routes of drug excretion• General mechanisms of drug action and factors modifying drug action	10

2	<p>Drugs Acting on the Peripheral Nervous System</p> <ul style="list-style-type: none"> • Steps involved in neurohumoral transmission • Definition, classification, pharmacological actions, dose, indications, and contraindications of <ul style="list-style-type: none"> a) Cholinergic drugs b) Anti-Cholinergic drugs c) Adrenergic drugs d) Anti-adrenergic drugs e) Neuromuscular blocking agents f) Drugs used in Myasthenia gravis g) Local anaesthetic agents h) Non-Steroidal Anti-Inflammatory drugs (NSAIDs) 	11
3	<p>Drugs Acting on the Eye</p> <p>Definition, classification, pharmacological actions, dose, indications and contraindications of</p> <ul style="list-style-type: none"> • Miotics • Mydriatics • Drugs used in Glaucoma 	2
4	<p>Drugs Acting on the Central Nervous System</p> <p>Definition, classification, pharmacological actions, dose, indications, and contraindications of</p> <ul style="list-style-type: none"> • General anaesthetics • Hypnotics and sedatives • Anti-Convulsant drugs • Anti-anxiety drugs • Anti-depressant drugs • Anti-psychotics • Nootropic agents • Centrally acting muscle relaxants • Opioid analgesics 	8
5	<p>Drugs Acting on the Cardiovascular System</p> <p>Definition, classification, pharmacological actions, dose, indications, and contraindications of</p> <ul style="list-style-type: none"> • Anti-hypertensive drugs • Anti-anginal drugs • Anti-arrhythmic drugs • Drugs used in atherosclerosis and Congestive heart failure • Drug therapy for shock 	6

6	Drugs Acting on Blood and Blood Forming Organs Definition, classification, pharmacological actions, dose, indications, and contraindications of <ul style="list-style-type: none"> • Hematinic agents • Anti-coagulants • Anti-platelet agents • Thrombolytic drugs 	4
7	Definition, classification, pharmacological actions, dose, indications, and contraindications of <ul style="list-style-type: none"> • Bronchodilators • Expectorants • Anti-tussive agents • Mucolytic agents 	2
8	Drugs Acting on the Gastro Intestinal Tract Definition, classification, pharmacological actions, dose, indications, and contraindications of <ul style="list-style-type: none"> • Anti-ulcer drugs • Anti-emetics • Laxatives and purgatives • Anti-diarrheal drugs 	5
9	Drugs Acting on the Kidney Definition, classification, pharmacological actions, dose, indications, and contraindications of <ul style="list-style-type: none"> • Diuretics • Anti-Diuretics 	2
10	Hormones and Hormone Antagonists Physiological and pathological role and clinical uses of <ul style="list-style-type: none"> • Thyroid hormones • Anti-thyroid drugs • Parathormone • Calcitonin • Vitamin D • Insulin • Oral hypoglycemic agents • Estrogen • Progesterone • Oxytocin • Corticosteroids 	8

11	Autocoids <ul style="list-style-type: none"> • Physiological role of Histamine, 5 HT and Prostaglandins • Classification, clinical uses, and adverse effects of antihistamines and 5 HT antagonists 	3
12	Chemotherapeutic Agents: Introduction, basic principles of chemotherapy of infections, infestations and neoplastic diseases, Classification, dose, indication and contraindications of drugs belonging to following classes: <ul style="list-style-type: none"> • Penicillins • Cephalosporins • Aminoglycosides • Fluoroquinolones • Macrolides • Tetracyclines • Sulphonamides • Anti-tubercular drugs • Anti-fungal drugs • Anti-viral drugs • Anti-amoebic agents • Anthelmintics • Anti-malarial agents • Anti-neoplastic agents 	12
13	Biologicals Definition, types, and indications of biological agents with examples	2

PHARMACOLOGY – PRACTICAL

Course Code: ER20-21P

50 Hours (2 Hours/week)

Scope: This course provides the basic understanding about the uses, mechanisms of actions, dose dependent responses of drugs in simulated virtual animal models and experimental conditions.

Course Objectives: This course will demonstrate / provide hands-on experience in the virtual platform using appropriate software on the following

1. Study of pharmacological effects of drugs like local anaesthetics, mydriatic and mitotic on rabbit eye
2. Screening the effects of various drugs acting in the central nervous system
3. Study of drug effects on isolated organs / tissues
4. Study of pyrogen testing on rabbit

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Study and report the local anaesthetic, mydriatic and mitotic effects of the given drug on the rabbit eye
2. Choose appropriate animal experiment model to study the effects of the given drugs acting on the central nervous system and submit the report
3. Perform the effects of given tissues (simulated) on isolated organs / tissues and interpret the results
4. Interpret the dose dependent responses of drugs in various animal experiment models

Practicals

Introduction to the following topics pertaining to the experimental pharmacology have to be discussed and documented in the practical manuals.

1. Introduction to experimental pharmacology
2. Study of laboratory animals
(a) Mice; (b) Rats; (c) Guinea pigs; (d) Rabbits
3. Commonly used instruments in experimental pharmacology
4. Different routes of administration of drugs in animals
5. Types of pre-clinical experiments: In-Vivo, In-Vitro, Ex-Vivo, etc.
6. Techniques of blood collection from animals

Experiments

Note: Animals shall not be used for doing / demonstrating any of the experiments given. The given experiments shall be carried-out / demonstrated as the case may be, ONLY with the use of software program(s) such as 'Ex Pharm' or any other suitable software

1. Study of local anaesthetics on rabbit eye
2. Study of Mydriatic effect on rabbit eye
3. Study of Miotic effect on rabbit eye
4. Effect of analgesics using Analgesiometer
5. Study of analgesic activity by writhing test
6. Screening of anti-convulsant using Electro Convulsiometer
7. Screening of Muscle relaxants using Rota-Rod apparatus
8. Screening of CNS stimulants and depressants using Actophotometer
9. Study of anxiolytic activity using elevated plus maze method
10. Study of effect of drugs (any 2) on isolated heart
11. Effect of drugs on ciliary motility on frog's buccal cavity
12. Pyrogen testing by rabbit method

Assignments

The students shall be asked to submit written assignments on the following topics (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

1. Introduction to Allergy Testing
2. Introduction to Toxicity Studies
3. Drug Facts Labels of US FDA
4. Pre-clinical studies in new drug development
5. Medicines and meals: Before or After food
6. Pre-clinical studies in new drug development
7. Drugs available as paediatric formulations
8. Drug information apps

COMMUNITY PHARMACY AND MANAGEMENT – THEORY

Course Code: ER20-22T

75 Hours (3 Hours/week)

Scope: The course is designed to impart basic knowledge and skills to provide various pharmaceutical care services to patients and general practitioners in the community setup.

Course Objectives: This course will discuss the following:

1. Establishing and running a community pharmacy and its legal requirements
2. Professional aspects of handling and filling prescriptions
3. Patient counselling on diseases, prescription and or non-prescription medicines
4. Scope for performing basic health screening in community pharmacy settings

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Describe the establishment, legal requirements, and effective administration of a community pharmacy
2. Professionally handle prescriptions and dispense medications
3. Counsel patients about the disease, prescription and or non-prescription medicines
4. Perform basic health screening on patients and interpret the reports in the community pharmacy settings

Chapter	Topic	Hours
1	Community Pharmacy Practice – Definition, history and development of community pharmacy - International and Indian scenarios	2
2	Professional responsibilities of community pharmacists Introduction to the concept of Good Pharmacy Practice and SOPs.	3
3	Prescription and prescription handling <ul style="list-style-type: none">• Definition, parts of prescriptions, legality of prescriptions, prescription handling, labelling of dispensed medications (Main label, ancillary label, pictograms), brief instructions on medication usage• Dispensing process, Good Dispensing Practices, dispensing errors and strategies to minimize them	7

4	<p>Communication skills</p> <ul style="list-style-type: none"> • Definition, types of communication skills • Interactions with professionals and patients • Verbal communication skills (one-to-one, over the telephone) • Written communication skills • Body language • Patient interview techniques 	6
5	<p>Patient counselling</p> <ul style="list-style-type: none"> • Definition and benefits of patient counselling • Stages of patient counselling - Introduction, counselling content, counselling process, and closing the counselling session • Barriers to effective counseling - Types and strategies to overcome the barriers • Patient counselling points for chronic diseases/disorders - Hypertension, Diabetes, Asthma, Tuberculosis, Chronic obstructive pulmonary disease, and AIDS • Patient Package Inserts - Definition, importance and benefits, Scenarios of PPI use in India and other countries • Patient Information leaflets - Definition and uses 	10
6	<p>Medication Adherence Definition, factors influencing non-adherence, strategies to overcome non-adherence</p>	2
7	<p>Health Screening Services in Community Pharmacy Introduction, scope, and importance of various health screening services - for routine monitoring of patients, early detection, and referral of undiagnosed cases</p>	5
9	<p>Over The Counter (OTC) Medications</p> <ul style="list-style-type: none"> • Definition, need and role of Pharmacists in OTC medication dispensing • OTC medications in India, counseling for OTC products • Self-medication and role of pharmacists in promoting the safe practices during self-medication • Responding to symptoms, minor ailments, and advice for self-care in conditions such as - Pain management, Cough, Cold, Diarrhea, Constipation, Vomiting, Fever, Sore throat, Skin disorders, Oral health (mouth ulcers, dental pain, gum swelling) 	15

10	<p>Community Pharmacy Management</p> <ul style="list-style-type: none"> • Legal requirements to set up a community pharmacy • Site selection requirements • Pharmacy designs and interiors • Vendor selection and ordering • Procurement, inventory control methods, and inventory management • Financial planning and management • Accountancy in community pharmacy – Day book, Cash book • Introduction to pharmacy operation softwares – usefulness and availability • Customer Relation Management (CRM) • Audits in Pharmacies • SOP of Pharmacy Management • Introduction to Digital Health, mHealth and Online pharmacies 	25
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COMMUNITY PHARMACY AND MANAGEMENT – PRACTICAL

Course Code: ER20-22P

75 Hours (3 Hours/week)

Scope: The course is designed to train the students and improve professional skills to provide various pharmaceutical care services in community pharmacy.

Course Objectives: This course will train the students in the following

1. Professional handling and filling prescriptions
2. Patient counselling on diseases and minor ailments
3. Patient counselling on prescription and / or non-prescription medicines
4. Preparation of counselling materials such as patient information leaflets
5. Performing basic health screening tests

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Handle and fill prescriptions in a professional manner
2. Counsel patients on various diseases and minor ailments
3. Counsel patients on prescription and or non-prescription medicines
4. Design and prepare patient information leaflets
5. Perform basic health screening tests

Practicals

Note: The following practicals shall be carried out in the model community pharmacy with appropriate simulated scenarios and materials. Students shall be trained through role plays wherever necessary. The activities of the students shall be assessed / evaluated using a structured objective assessment form.

1. Handling of prescriptions with professional standards, reviewing prescriptions, checking for legal compliance and completeness (minimum 5)
2. Identification of drug-drug interactions in the prescription and follow-up actions (minimum 2)
3. Preparation of dispensing labels and auxiliary labels for the prescribed medications (minimum 5)
4. Providing the following health screening services for monitoring patients / detecting new patients (one experiment for each activity)
Blood Pressure Recording, Capillary Blood Glucose Monitoring, Lung function assessment using Peak Flow Meter and incentive spirometer, recording capillary oxygen level using Pulse Oximeter, BMI measurement
5. Providing counselling to simulated patients for the following chronic diseases / disorders including education on the use of devices such as insulin pen, inhalers, spacers, nebulizers, etc. where appropriate (one experiment for each disease)
Type 2 Diabetes Mellitus, Primary Hypertension, Asthma, Hyperlipidaemia, Rheumatoid Arthritis
6. Providing counselling to simulated patients for the following minor ailments (any three)
Headache, GI disturbances (Nausea, Vomiting, Dyspepsia, diarrhoea, constipation), Worm infestations, Pyrexia, Upper Respiratory Tract infections, Skin infections, Oral and dental disorders.
- 7 Appropriate handling of dummy dosage forms with correct administration techniques - oral liquids with measuring cup/cap/dropper, Eye Drops, Inhalers, Nasal drops, Insulin pen, nebulizers, different types of tablets, patches, enemas, suppositories
- 8 Use of Community Pharmacy Software and digital health tools

Assignments

The students shall be asked to submit written assignments on the following topics (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

1. SOPs for various activities in Community Pharmacy (as discussed in Theory and Practical)

2. List out the various abbreviations, short forms used in prescriptions and their interpretation
3. Patient Information Leaflet for a given chronic disease / disorder
4. Patient Information Leaflet for prescription / non-prescription medicines
5. Preparation of window / shelf display materials for the model community pharmacy
6. Overview of Software available for retail pharmacy management including billing, inventory, etc.
7. Dosage / Medication Reminder Aids
8. Overview on the operations and marketing strategies of various online pharmacies
9. Overview on the common fixed dose combinations
10. Overview on the medications requiring special storage conditions
11. Role of Community Pharmacists in preventing Antimicrobial Resistance
12. Jan Aushadhi and other Generic Medicine initiatives in India
13. Global Overview of Online Pharmacies
14. Community Pharmacy Practice Standards: Global Vs. Indian Scenario
15. Overview of pharmacy associations in India

Field Visit

The students shall be taken in groups to visit community pharmacies and medicine distributors to understand and witness the professional activities of the community pharmacists, and supply chain logistics. Individual reports from each student on their learning experience from the field visit shall be submitted.

BIOCHEMISTRY & CLINICAL PATHOLOGY – THEORY

Course Code: ER20-23T

75 Hours (3 Hours/week)

Scope: This course is designed to impart basic knowledge on the study of structure and functions of biomolecules and the chemical processes associated with living cells in normal and abnormal states. The course also emphasizes on the clinical pathology of blood and urine.

Course Objectives: This course will discuss the following at the fundamental level

1. Structure and functions of biomolecules
2. Catalytic activity, diagnostic and therapeutic importance of enzymes
3. Metabolic pathways of biomolecules in health and illness (metabolic disorders)
4. Biochemical principles of organ function tests and their clinical significance
5. Qualitative and quantitative determination of biomolecules / metabolites in the biological sample
6. Clinical pathology of blood and urine

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Describe the functions of biomolecules
2. Discuss the various functions of enzymes in the human system
3. Explain the metabolic pathways of biomolecules in both physiological and pathological conditions
4. Describe the principles of organ function tests and their clinical significances
5. Determine the biomolecules / metabolites in the given biological samples, both qualitatively and quantitatively
6. Describe the clinical pathology of blood and urine

Chapter	Topic	Hours
1	Introduction to biochemistry: Scope of biochemistry in pharmacy; Cell and its biochemical organization.	2
2	Carbohydrates <ul style="list-style-type: none">• Definition, classification with examples, chemical properties• Monosaccharides - Structure of glucose, fructose, and galactose• Disaccharides - structure of maltose, lactose, and sucrose• Polysaccharides - chemical nature of starch and glycogen• Qualitative tests and biological role of carbohydrates	5

3	<p>Proteins</p> <ul style="list-style-type: none"> • Definition, classification of proteins based on composition and solubility with examples • Definition, classification of amino acids based on chemical nature and nutritional requirements with examples • Structure of proteins (four levels of organization of protein structure) • Qualitative tests and biological role of proteins and amino acids • Diseases related to malnutrition of proteins. 	5
4	<p>Lipids</p> <ul style="list-style-type: none"> • Definition, classification with examples • Structure and properties of triglycerides (oils and fats) • Fatty acid classification - Based on chemical and nutritional requirements with examples • Structure and functions of cholesterol in the body • Lipoproteins - types, composition and functions in the body • Qualitative tests and functions of lipids 	5
5	<p>Nucleic acids</p> <ul style="list-style-type: none"> • Definition, purine and pyrimidine bases • Components of nucleosides and nucleotides with examples • Structure of DNA (Watson and Crick model), RNA and their functions 	4
6	<p>Enzymes</p> <ul style="list-style-type: none"> • Definition, properties and IUB and MB classification • Factors affecting enzyme activity • Mechanism of action of enzymes, Enzyme inhibitors • Therapeutic and pharmaceutical importance of enzymes 	5
7	<p>Vitamins</p> <ul style="list-style-type: none"> • Definition and classification with examples • Sources, chemical nature, functions, coenzyme form, recommended dietary requirements, deficiency diseases of fat-and water-soluble vitamins 	6
8	<p>Metabolism (Study of cycle/pathways without chemical structures)</p> <ul style="list-style-type: none"> • Metabolism of Carbohydrates: Glycolysis, TCA cycle and glycogen metabolism, regulation of blood glucose 	20

	<p>level. Diseases related to abnormal metabolism of Carbohydrates</p> <ul style="list-style-type: none"> • Metabolism of lipids: Lipolysis, β-oxidation of Fatty acid (Palmitic acid) ketogenesis and ketolysis. Diseases related to abnormal metabolism of lipids such as Ketoacidosis, Fatty liver, Hypercholesterolemia • Metabolism of Amino acids (Proteins): General reactions of amino acids and its significance— Transamination, deamination, Urea cycle and decarboxylation. Diseases related to abnormal metabolism of amino acids, Disorders of ammonia metabolism, phenylketonuria, alkaptonuria and Jaundice. • Biological oxidation: Electron transport chain and Oxidative phosphorylation 	
9	Minerals: Types, Functions, Deficiency diseases, recommended dietary requirements	05
10	<p>Water and Electrolytes</p> <ul style="list-style-type: none"> • Distribution, functions of water in the body • Water turnover and balance • Electrolyte composition of the body fluids, Dietary intake of electrolyte and Electrolyte balance • Dehydration, causes of dehydration and oral rehydration therapy 	05
11	Introduction to Biotechnology	01
12	<p>Organ function tests</p> <ul style="list-style-type: none"> • Functions of kidney and routinely performed tests to assess the functions of kidney and their clinical significances • Functions of liver and routinely performed tests to assess the functions of liver and their clinical significances • Lipid profile tests and its clinical significances 	06
13	<p>Introduction to Pathology of Blood and Urine</p> <ul style="list-style-type: none"> • Lymphocytes and Platelets, their role in health and disease • Erythrocytes - Abnormal cells and their significance • Normal and Abnormal constituents of Urine and their significance 	06

BIOCHEMISTRY & CLINICAL PATHOLOGY – PRACTICAL

Course Code: ER20-23P

50 Hours (2 Hours/week)

Scope: This course is designed to train the students in the qualitative testing of various biomolecules and testing of biological samples for determination of normal and abnormal constituents

Course Objectives: This course will train and provide hands-on experiences on the following

1. Qualitative determination of biomolecules / metabolites in simulated biological samples
2. Determination of normal and abnormal constituents of simulated blood and urine samples

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Qualitatively determine the biomolecules / metabolites in the given biological samples
2. Determine the normal and abnormal constituents in blood and urine samples and interpret the results of such testing

Practicals

1. Qualitative analysis of carbohydrates (4 experiments)
2. Qualitative analysis of Proteins and amino acids (4 experiments)
3. Qualitative analysis of lipids (2 experiments)
4. Qualitative analysis of urine for normal and abnormal constituents (4 experiments)
5. Determination of constituents of urine (glucose, creatinine, chlorides) (2 experiments)
6. Determination of constituents of blood/serum (simulated) (Creatine, glucose, cholesterol, Calcium, Urea, SGOT/SGPT) (5 experiments)
7. Study the hydrolysis of starch from acid and salivary amylase enzyme (1 experiment)

Assignments

The students shall be asked to submit written assignments on Various Pathology Lab Reports (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

PHARMACOTHERAPEUTICS - THEORY

Course Code: ER20-24T

75 Hours (3 Hours/week)

Scope: This course is designed to impart basic knowledge on etiopathogenesis of common diseases and their management along with quality use of medicines.

Course Objectives: This course will discuss about

1. Etiopathogenesis of selected common diseases and evidence-based medicine therapy
2. Importance of individualized therapeutic plans based on diagnosis
3. Basic methods for assessing the clinical outcomes of drug therapy

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Help assessing the subjective and objective parameters of patients in common disease conditions
2. Assist other healthcare providers to analyse drug related problems and provide therapeutic interventions
3. Participate in planning the rational medicine therapy for common diseases
4. Design and deliver discharge counselling for patients

Chapter	Topic	Hours
1	Pharmacotherapeutics – Introduction, scope, and objectives. Rational use of Medicines, Evidence Based Medicine, Essential Medicines List, Standard Treatment Guidelines (STGs)	8
2	Definition, etiopathogenesis, clinical manifestations, non-pharmacological and pharmacological management of the diseases associated with	
	(a) Cardiovascular System <ul style="list-style-type: none">• Hypertension• Angina and Myocardial infarction• Hyperlipidaemia• Congestive Heart Failure	8
	(b) Respiratory System <ul style="list-style-type: none">• Asthma• COPD	4
	(c) Endocrine System <ul style="list-style-type: none">• Diabetes• Thyroid disorders - Hypo and Hyperthyroidism	5
	(d) Central Nervous System <ul style="list-style-type: none">• Epilepsy	8

<ul style="list-style-type: none"> • Parkinson's disease • Alzheimer's disease • Stroke • Migraine 	
(e) Gastro Intestinal Disorders <ul style="list-style-type: none"> • Gastro oesophageal reflux disease • Peptic Ulcer Disease • Alcoholic liver disease • Inflammatory Bowel Diseases (Crohn's Disease and Ulcerative Colitis) 	8
(f) Haematological disorders <ul style="list-style-type: none"> • Iron deficiency anaemia • Megaloblastic anaemia 	4
(g) Infectious diseases <ul style="list-style-type: none"> • Tuberculosis • Pneumonia • Urinary tract infections • Hepatitis • Gonorrhoea and Syphilis • Malaria • HIV and Opportunistic infections • Viral Infections (SARS, CoV2) 	12
(h) Musculoskeletal disorders <ul style="list-style-type: none"> • Rheumatoid arthritis • Osteoarthritis 	3
(i) Dermatology <ul style="list-style-type: none"> • Psoriasis • Scabies • Eczema 	3
(j) Psychiatric Disorders <ul style="list-style-type: none"> • Depression • Anxiety • Psychosis 	4
(k) Ophthalmology <ul style="list-style-type: none"> • Conjunctivitis (bacterial and viral) • Glaucoma 	2
(l) Anti-microbial Resistance	2
(m) Women's Health <ul style="list-style-type: none"> • Polycystic Ovary Syndrome • Dysmenorrhea • Premenstrual Syndrome 	4

PHARMACOTHERAPEUTICS – PRACTICAL

Course Code: ER20-24P

25 Hours (1 Hour/week)

Scope: This course is designed to train the students in the basic skills required to support the pharmaceutical care services for selected common disease conditions.

Course Objectives: This course will train the students on

1. How to prepare a SOAP (Subjective, Objective, Assessment and Plan) note for clinical cases of selected common diseases
2. Patient counselling techniques/methods for common disease conditions

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Write SOAP (Subjective, Objective, Assessment and Plan) notes for the given clinical cases of selected common diseases
2. Counsel the patients about the disease conditions, uses of drugs, methods of handling and administration of drugs, life-style modifications, and monitoring parameters.

Practicals

I. Preparation and discussion of SOAP (Subjective, Objective, Assessment and Plan) notes for at least SIX clinical cases (real / hypothetical) of the following disease conditions.

1. Hypertension
2. Angina Pectoris
3. Myocardial Infarction
4. Hyperlipidaemia
5. Rheumatoid arthritis
6. Asthma
7. COPD
8. Diabetes
9. Epilepsy
10. Stroke
11. Depression
12. Tuberculosis
13. Anaemia (any one type as covered in theory)
14. Viral infection (any one type as covered in theory)
15. Dermatological conditions (any one condition as covered in theory)

- II. Patient counselling exercises using role plays based on the real / hypothetical clinical case scenarios. The students are expected to provide counselling on disease condition, medications, life-style modifications, monitoring parameters, etc. and the same shall be documented. (Minimum 5 cases)

- III. Simulated cases to enable dose calculation of selected drugs in paediatrics, and geriatrics under various pathological conditions. (Minimum 4 cases)

HOSPITAL AND CLINICAL PHARMACY – THEORY

Course Code: ER20-25T

75 Hours (3 Hours/week)

Scope: This course is designed to impart fundamental knowledge and professional skills required for facilitating various hospital and clinical pharmacy services.

Course Objectives: This course will discuss and train the students in the following

1. Hospital and Hospital Pharmacy organization and set-ups
2. Basics of hospital pharmacy services including the procurement, supply chain, storage of medicines and medical supplies
3. Basics of clinical pharmacy including introduction to comprehensive pharmaceutical care services
4. Basic interpretations of common laboratory results used in clinical diagnosis towards optimizing the drug therapy

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Explain about the basic concepts of hospital pharmacy administration
2. Manage the supply chain and distribution of medicines within the hospital settings
3. Assist the other healthcare providers in monitoring drug therapy and address drug related problems
4. Interpret common lab investigation reports for optimizing drug therapy

S. No.	Topic	Hours
1	Hospital Pharmacy <ul style="list-style-type: none">• Definition, scope, national and international scenario• Organisational structure• Professional responsibilities, Qualification and experience requirements, job specifications, work-load requirements and inter professional relationships• Good Pharmacy Practice (GPP) in hospital• Hospital Pharmacy Standards (FIP Basel Statements, AHSP)• Introduction to NAQS guidelines and NABH Accreditation and Role of Pharmacists	6
2	Different Committees in the Hospital <ul style="list-style-type: none">• Pharmacy and Therapeutics Committee - Objectives, Composition, and functions• Hospital Formulary - Definition, procedure for development and use of hospital formulary	4

	<ul style="list-style-type: none"> • Infection Control Committee – Role of Pharmacist in preventing Antimicrobial Resistance 	
4	Supply Chain and Inventory Control <ul style="list-style-type: none"> • Preparation of Drug lists - High Risk drugs, Emergency drugs, Schedule H1 drugs, NDPS drugs, reserved antibiotics • Procedures of Drug Purchases – Drug selection, short term, long term, and tender/e-tender process, quotations, etc. • Inventory control techniques: Economic Order Quantity, Reorder Quantity Level, Inventory Turnover etc. • Inventory Management of Central Drug Store – Storage conditions, Methods of storage, Distribution, Maintaining Cold Chain, Devices used for cold storage (Refrigerator, ILR, Walk-in-Cold rooms) • FEFO, FIFO methods • Expiry drug removal and handling, and disposal. Disposal of Narcotics, cytotoxic drugs • Documentation - purchase and inventory 	14
5	Drug distribution <ul style="list-style-type: none"> • Drug distribution (in- patients and out - patients) – Definition, advantages and disadvantages of individual prescription order method, Floor Stock Method, Unit Dose Drug Distribution Method, Drug Basket Method. • Distribution of drugs to ICCU/ICU/NICU/Emergency wards. • Automated drug dispensing systems and devices • Distribution of Narcotic and Psychotropic substances and their storage 	7
6	Compounding in Hospitals. Bulk compounding, IV admixture services and incompatibilities, Total parenteral nutrition	4
7	Radio Pharmaceuticals - Storage, dispensing and disposal of radiopharmaceuticals	2
8	Application of computers in Hospital Pharmacy Practice, Electronic health records, Softwares used in hospital pharmacy	2
9	Clinical Pharmacy: Definition, scope, and development - in India and other countries Technical definitions, common terminologies used in clinical settings and their significance such as Paediatrics, Geriatric, Anti-natal Care, Post-natal Care, etc.	12

	<p>Daily activities of clinical pharmacists: Definition, goal, and procedure of</p> <ul style="list-style-type: none"> • Ward round participation • Treatment Chart Review • Adverse drug reaction monitoring • Drug information and poisons information • Medication history • Patient counselling • Interprofessional collaboration <p>Pharmaceutical care: Definition, classification of drug related problems. Principles and procedure to provide pharmaceutical care</p> <p>Medication Therapy Management, Home Medication Review</p>	
10	<p>Clinical laboratory tests used in the evaluation of disease states - significance and interpretation of test results</p> <ul style="list-style-type: none"> • Haematological, Liver function, Renal function, thyroid function tests • Tests associated with cardiac disorders • Fluid and electrolyte balance • Pulmonary Function Tests 	10
11	<p>Poisoning: Types of poisoning: Clinical manifestations and Antidotes</p> <p>Drugs and Poison Information Centre and their services – Definition, Requirements, Information resources with examples, and their advantages and disadvantages</p>	6
12	<p>Pharmacovigilance</p> <ul style="list-style-type: none"> • Definition, aim and scope • Overview of Pharmacovigilance 	2
13	<p>Medication errors: Definition, types, consequences, and strategies to minimize medication errors, LASA drugs and Tallman lettering as per ISMP</p> <p>Drug Interactions: Definition, types, clinical significance of drug interactions</p>	6

HOSPITAL AND CLINICAL PHARMACY – PRACTICAL

Course Code: ER20-25P

25 Hours (1 Hour / Week)

Scope: This course is designed to train the students to assist other healthcare providers in the basic services of hospital and clinical pharmacy.

Course Objectives: This course will train the students with hands-on experiences, simulated clinical case studies in the following:

1. Methods to systematically approach and respond to drug information queries
2. How to interpret common laboratory reports to understand the need for optimizing dosage regimens
3. How to report suspected adverse drug reactions to the concerned authorities
4. Uses and methods of handling various medical/surgical aids and devices
5. How to interpret drug-drug interactions in the treatment of common diseases.

Course Outcomes: Upon completion of the course, the students will be able to

1. Professionally handle and answer the drug information queries
2. Interpret the common laboratory reports
3. Report suspected adverse drug reactions using standard procedures
4. Understand the uses and methods of handling various medical/surgical aids and devices
5. Interpret and report the drug-drug interactions in common diseases for optimizing the drug therapy

Note: Few of the experiments of Hospital and Clinical Pharmacy practical course listed here require adequate numbers of desktop computers with internet connectivity, adequate drug information resources including reference books, different types of surgical dressings and other medical devices and accessories. Various charts, models, exhibits pertaining to the experiments shall also be displayed in the laboratory.

Practicals

1. Systematic approach to drug information queries using primary / secondary / tertiary resources of information (2 cases)
2. Interpretation of laboratory reports to optimize the drug therapy in a given clinical case (2 cases)
3. Filling up IPC's ADR Reporting Form and perform causality assessments using various scales (2 cases)
4. Demonstration / simulated / hands-on experience on the identification, types, use / application /administration of
 - Orthopaedic and Surgical Aids such as knee cap, LS belts, abdominal belt, walker, walking sticks, etc.

- Different types of bandages such as sterile gauze, cotton, crepe bandages, etc.
 - Needles, syringes, catheters, IV set, urine bag, RYLE's tube, urine pots, colostomy bags, oxygen masks, etc.
5. Case studies on drug-drug interactions (any 2 cases)
 6. Wound dressing (simulated cases and role play –minimum 2 cases)
 7. Vaccination and injection techniques (IV, IM, SC) using mannequins (5 activities)
 8. Use of Hospital Pharmacy Software and various digital health tools

Assignments

The students shall be asked to submit written assignments on the following topics (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

1. Typical profile of a drug to be included in the hospital formulary
2. Brief layout and various services of the Central Sterile Supplies Department (CSSD)
3. Various types of sterilizers and sterilization techniques used in hospitals
4. Fumigation and pesticide control in hospitals
5. Role of Pharmacists in Transition of Care: Discharge cards, post hospitalization care, medicine reconciliation activities in developed countries
6. Total parenteral nutrition and IV admixtures and their compatibility issues
7. Concept of electronic health records
8. Invasive and Non-invasive diagnostic tests - HRCT, MRI, Sonography, 2D ECHO, X-rays, Mammography, ECG, EMG, EEG
9. Home Diagnostic Kits - Pregnancy Test, COVID testing etc
10. Measures to be taken in hospitals to minimize Antimicrobial Resistance
11. Role and responsibilities of a pharmacist in public hospital in rural parts of the country
12. Safe waste disposal of hospital waste

Field Visit

The students shall be taken in groups to visit a Government / private healthcare facility to understand and witness the various hospital and clinical pharmacy services provided. Individual reports from each student on their learning experience from the field visit shall be submitted.

PHARMACY LAW AND ETHICS – THEORY

Course Code: ER20-26T

75 Hours (3 Hours/week)

Scope: This course is designed to impart basic knowledge on several important legislations related to the profession of pharmacy in India

Course Objectives: This course will discuss the following

1. General perspectives, history, evolution of pharmacy law in India
2. Act and Rules regulating the profession and practice of pharmacy in India
3. Important code of ethical guidelines pertaining to various practice standards
4. Brief introduction to the patent laws and their applications in pharmacy

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Describe the history and evolution of pharmacy law in India
2. Interpret the act and rules regulating the profession and practice of pharmacy in India
3. Discuss the various codes of ethics related to practice standards in pharmacy
4. Interpret the fundamentals of patent laws from the perspectives of pharmacy

Chapter	Topics	Hours
1	General Principles of Law, History and various Acts related to Drugs and Pharmacy profession	2
2	Pharmacy Act-1948 and Rules: Objectives, Definitions, Pharmacy Council of India; its constitution and functions, Education Regulations, State and Joint state pharmacy councils, Registration of Pharmacists, Offences and Penalties. Pharmacy Practice Regulations 2015	5
3	Drugs and Cosmetics Act 1940 and Rules 1945 and New Amendments Objectives, Definitions, Legal definitions of schedules to the Act and Rules Import of drugs – Classes of drugs and cosmetics prohibited from import, Import under license or permit.	23

	<p>Manufacture of drugs – Prohibition of manufacture and sale of certain drugs, Conditions for grant of license and conditions of license for manufacture of drugs, Manufacture of drugs for test, examination and analysis, manufacture of new drug, loan license and repacking license.</p> <p>Study of schedule C and C1, G, H, H1, K, P, M, N, and X.</p> <p>Sale of Drugs – Wholesale, Retail sale and Restricted license, Records to be kept in a pharmacy Drugs Prohibited for manufacture and sale in India</p> <p>Administration of the Act and Rules – Drugs Technical Advisory Board, Central Drugs Laboratory, Drugs Consultative Committee, Government analysts, licensing authorities, controlling authorities, Drug Inspectors.</p>	
4	<p>Narcotic Drugs and Psychotropic Substances Act 1985 and Rules Objectives, Definitions, Authorities and Officers, Prohibition, Control and Regulation, Offences and Penalties.</p>	2
5	<p>Drugs and Magic Remedies (Objectionable Advertisements) Act 1954 Objectives, Definitions, Prohibition of certain advertisements, Classes of Exempted advertisements, Offences and Penalties.</p>	2
6	<p>Prevention of Cruelty to Animals Act-1960: Objectives, Definitions, CPCSEA - brief overview, Institutional Animal Ethics Committee, Breeding and Stocking of Animals, Performance of Experiments, Transfer and Acquisition of animals for experiment, Records, Power to suspend or revoke registration, Offences and Penalties.</p>	2
7	<p>Poisons Act-1919: Introduction, objective, definition, possession, possession for sales and sale of any poison, import of poisons</p>	2
8	<p>FSSAI (Food Safety and Standards Authority of India) Act and Rules: brief overview and aspects related to manufacture, storage, sale, and labelling of Food Supplements</p>	2

9	National Pharmaceutical Pricing Authority: Drugs Price Control Order (DPCO) - 2013. Objectives, Definitions, Sale prices of bulk drugs, Retail price of formulations, Retail price and ceiling price of scheduled formulations, Pharmaceutical Policy 2002, National List of Essential Medicines (NLEM)	5
10	Code of Pharmaceutical Ethics: Definition, ethical principles, ethical problem solving, registration, code of ethics for Pharmacist in relation to his job, trade, medical profession and his profession, Pharmacist's oath.	5
11	Medical Termination of Pregnancy Act and Rules – basic understanding, salient features, and Amendments	2
12	Role of all the government pharma regulator bodies – Central Drugs Standards Control Organization (CDSCO), Indian Pharmacopoeia Commission (IPC)	1
13	Good Regulatory practices (documentation, licenses, renewals, e-governance) in Community Pharmacy, Hospital pharmacy, Pharma Manufacturing, Wholesale business, inspections, import, export of drugs and medical devices	3
14	Introduction to BCS system of classification, Basic concepts of Clinical Trials, ANDA, NDA, New Drug development, New Drugs and Clinical Trials Rules, 2019. Brand v/s Generic, Trade name concept, Introduction to Patent Law and Intellectual Property Rights, Emergency Use Authorization	7
15	Blood bank – basic requirements and functions	2
16	Clinical Establishment Act and Rules – Aspects related to Pharmacy	2
17	Biomedical Waste Management Rules 2016 – Basic aspects, and aspects related to pharma manufacture to disposal of pharma / medical waste at homes, pharmacies, and hospitals	2
18	Bioethics - Basic concepts, history and principles. Brief overview of ICMR's National Ethical Guidelines for Biomedical and Health Research involving human participants	2
19	Introduction to the Consumer Protection Act	1
20	Introduction to the Disaster Management Act	1
21	Medical Devices – Categorization, basic aspects related to manufacture and sale	2

Assignments

The students shall be asked to submit written assignments on the following topics (One assignment per student per sessional period. i.e., a minimum of THREE assignments per student)

1. Requirements for Ayurvedic, Homeopathic manufacturing, sale, and licensing requirements
2. Layout and contents of official websites of various agencies regulating the profession of pharmacy in India: e.g., CDSCO, SUGAM portal, PCI, etc.
3. Licenses required, application processes (online/offline), drug regulatory office website of the respective state
4. Case studies – actions taken on violation of any act / rule related to pharmacy
5. Schedule H1 drugs and its implementation in India
6. Counterfeit / Spurious medicines
7. Drug Testing Labs in India
8. Overview of Pharma marketing practices
9. Generic Medicines

9. Appendices

No	Appendix Document
1.	A typical format for the assessment of an Assignment
2.	A typical format for the assessment of a Field Visit Report
3.	List of instruments and equipment required for the conduct of D.Pharm program as per ER-2020

Appendix – 1

A typical format for the assessment of an Assignment

Name of the College:

Name of the Student:	
Academic Year of the Student:	
Name of the Subject:	
Title of the Assignment:	
Date on which the Assignment was given:	
Date on which the Assignment was submitted:	
Name & Designation of the Evaluator:	
Signature of the Evaluator with Date:	

Directions: For evaluation, enter rating of the student utilizing the following scale:

5 – Excellent; 4 - Very Good; 3 – Good; 2 – Satisfactory; 1 - Poor

Assessment Criteria	Score	Comments if any
a. Relevance with the content		
b. Use of resource material		
c. Organization & mechanical accuracy		
d. Cohesion & coherence		
e. Language proficiency & Timely submission		
Total Score		

Signature of the Student with Date:

Note: Subject teacher should try to cover all assignments mentioned in the list for each practical subject by assigning the topics to the students. Students should be encouraged to submit an assignment (in a format decided by the Institute) and encouraged to present assignments (at least any one assignment per subject) in the class.

Appendix – 2

A typical format for the assessment of a Field Visit Report

Name of the College:

Name of the Student:	
Academic Year of the Student:	
Name of the Subject:	
Name & full address of the organization visited:	
Date and Duration of Visit:	
Name & Designation of the Evaluator:	
Signature of the Evaluator with Date:	

Objectives set for the field visit: (give 2 – 4 objectives one by one)
Prior preparation of the student for the field visit: (minimum 100 words)
Describe the general experiences during the field visit: (minimum 100 words)
Learning points: Describe what theoretical concept that is correlated during the field visit: (minimum 300 words)

Appendix – 3

List of Instruments and Equipment required for the Conduct of D.Pharm program as per ER-2020

As per ER 2020 regulation;

At least four laboratories specified below should be provided for:

1. Pharmaceutics Lab.
2. Pharm. Chemistry Lab.
3. Physiology, Pharmacology and Pharmacognosy Lab.
4. Biochemistry, Clinical Pathology, Hospital and Clinical Pharmacy Lab.

The institutions shall provide “Model Pharmacy” as per following details

Model Pharmacy	No.	Area
<u>Essential:</u> Running Model Community Pharmacy	01	80 Sq. Mts. (Including 10 Sq. mt. for Drug Information Centre & 10 Sq. mt. for Patient Counselling)
<u>Desirable:</u> Drug Model Store		

NOTE: Wherever animal experimentations are prescribed in the curriculum, the required knowledge and skill should be imparted by using computer assisted modules. Animal hold area shall be as per the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) guidelines.

Practical of Social Pharmacy, Pharmacotherapeutics can be conducted in any one of the laboratories by making necessary provisions.

Department wise List of Minimum Equipment required for D.Pharm
(For a practical batch of 20 students)

1. Physiology, Pharmacology and Pharmacognosy Lab.

S. No.	Name	Minimum required Nos. for DPharm 60 intake
1	Microscopes	20
2	Haemocytometer with Micropipettes	20
3	Sahli's haemoglobinometers	20
4	Sphygmomanometers	5
5	Stethoscopes	10
6	Human Permanent Slides for various tissues	One pair of each tissue Organs and endocrine glands
7	Models for various organs	One model of each organ system
8	Specimen for various organs and systems	One model for each organ system
9	Human Skeleton and bones	One set of skeleton and one spare bone
10	Different Contraceptive Devices and Models	One set of each device
11	Digital Balance (10 mg Sensitivity)	1
12	Computer with LCD	1
13	Licensed Software packages for Physiological & Pharmacological experiment	1
14	IR Thermometer	2
15	Refrigerator	1
16	First aid equipment	Adequate number
17	Stop watch	20
18	Dummy Inhalers and Nebulizer	1
19	Pharmacotherapeutic charts for various diseases & disorders	Adequate number
20	Surgical devices and Sutures	Adequate number
21	Digital BP Instrument	5
22	Mercury Thermometer	10
23	Digital Thermometer	10
24	Pulse Oximeter	5
25	ESR Apparatus (Westergren and Wintrobe)	10
26	Peak Flow meter	10
27	Stadiometer	2
28	Adult Weighing Scale (150 kg)	5
29	Glucometer	10
30	Projection microscope	1
31	Permanent slide set of plants and charts for Pharmacognosy Lab	Adequate number
32	Drug information resources	Adequate number
33	Various types of PPE Kits,	Adequate number

34	Charts /displays/ AVs on tobacco control, glycemic index of foods, nutrition, reproductive health	Adequate number
35	Menstrual hygiene products	Adequate number
36	Display for various disinfectants, mosquito repellents etc	Adequate number
37	Water Testing Kit	Adequate number
38	Permanent slide of different microbes	Adequate number

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department

2. Pharmaceutical Chemistry/ Biochemistry, Clinical Pathology

S. No.	Name	Minimum required Nos. for DPharm 60 intake
1	Hot plates	5
2	Hot Air Oven	1
3	Refrigerator	1
4	Analytical Balances for demonstration	1
5	Digital balance 10mg sensitivity	5
6	Magnetic Stirrers with Thermostat	10
7	Vacuum Pump	1
8	Digital pH meter	1
9	Wall Mounted Water Distillation Unit	2
10	Nessler's Cylinders	40
11	Digital Melting Point Apparatus	2
12	Thieles Tube	20
13	Digital Colorimeter	2
14	Thermostatic Water Bath	1

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department

3. Pharmaceutics

S. No.	Name	Minimum required Nos. for DPharm 60 intake
1	Digital balance (10mg)	5
2	Microscopes	10
3	Autoclave	1
4	Vacuum Pump	1
5	Standard sieves, sieve no. 8, 10, 12,22,24, 44, 54, 60, 80, 85, 100, 120	10 sets
6	Tablet dissolution test apparatus IP (Digital single/double Unit)	1
7	Magnetic stirrer, 500ml and 1 litter capacity with speed control	5

8	Digital pH meter	1
9	Capsule Counter	2
10	Hot Plate	2
11	Distillation Unit	1
12	Tablet counter – small size	2
13	Hot air oven	1
14	Electric water bath unit	2
15	Stalagmometer	5
16	Desiccator	5
17	Buchner Funnels (Medium)	10
18	Filtration assembly with Vacuum Pump	1
19	Andreasen's Pipette	5
20	Ointment slab	20
21	Ointment spatula	20
22	Pestle and mortar porcelain	20
23	Refrigerator	1
24	Micrometre slide Eyepiece	5
25	Micrometre slide Stage	5
26	Viscometer Ostwald/Brookfield	1
27	Stop watch	1
28	Sintered glass filter with vacuum	4

NOTE: Aseptic cabinet or area should be provided as per Appendix A of ER 2020
Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department

Machine Room

S. No.	Name	Minimum required Nos. for D.Pharm 60 intake
1	Capsule filling machine	1
2	Automated Single Station Tablet punching machine	1
3	Tablet disintegration test apparatus IP (Digital Single/Double unit)	1
4	Monsanto's hardness tester	2
5	Pfizer type hardness tester	2
6	Friability test apparatus (Digital Single/Double unit)	1
7	Sieve shaker with sieve set	1
8	Ointment filling machine	1
9	All-purpose equipment with all accessories	1
10	Bottle washing Machine	1
11	Bottle Sealing Machine	1
12	Liquid Filling Machine	1
13	Ampoule washing machine	1
14	Ampoule filling and sealing machine (Jet Burner)	1

15	Clarity test apparatus	1
16	Collapsible tube – Filling and Sealing	1
17	Liquid Mixer	1

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department

4. Hospital and Clinical Pharmacy Lab

S. No.	Name	Minimum required Nos for D.Pharm 60 intake
1	Orthopaedical & Surgical Aids such as knee cap, LS belts, abdominal belt, walker, walking sticks, etc	Adequate Number
2	Different Types of bandages such as sterile gauze, cotton, crepe bandages, roll bandage etc	Adequate Number
3	Mannequins for CPR-1 (with indication Signals)	2
4	Mannequins for injection IV Arm	2
5	Variety of Needles	20
6	Variety of Syringes	20
7	Variety of catheters	5
8	IV set	20
9	Urine Bag	2
10	RYLE's tube	2
11	Urine pots	2
12	Colostomy bags	2
13	Oxygen masks	10
14	Inventory Software for Retail Pharmacy	1

NOTE: Adequate number of glassware commonly used in the laboratory should be provided in each laboratory and department

5. Model Pharmacy

S. No.	Name	Minimum required Nos. for D.Pharm 60 intake (
1	<ul style="list-style-type: none"> • Empty cartons of variety medicines (across variety dosage forms) • Various name plates indicating different parts of Pharmacy, • Proper arrangement of medicines, shelves, racks, drawers • Box/area for expiry medicines, • Display windows, shelves • Computer • Refrigerator • Designated patient counselling area, • Patient Information Leaflets/Cards • Patient waiting area, • Drug Information books • Health information display, • Various devices for screening services (B.P. monitor, glucometer etc) • Height and body weight chart • Dummy devices (eg. Inhalers) • Display of pharmacist registration, license and other licenses • Display of name of owner • Inspection book, • Lock and key arrangement for Schedule X and NDPS medicines, • Bill book (dummy) , Computer stationary for bill printing 	Adequate
2	Computers: hospital and community pharmacy management software	1

APPENDIX 4

Subject wise list of Recommended Books (Latest Edition)

Pharmaceutics

1. History of Pharmacy in India by Dr. Harikishan Singh
2. Indian Pharmacopoeia, Govt. of India Publication
3. A Text book of Pharmaceuticals Formulation by B.M. Mithal, Vallabh Prakashan.
4. Bentleys' Text book of Pharmaceutics, Editor E.A. Rawlins, Elsevier Int.,
5. The Theory and Practice of Industrial Pharmacy. Leon Lachman, Herbert Lieberman and Joseph Kanig, Editors, Lea and Febiger, Philadelphia. Varghese Publishing House
6. Responsible Use of Medicines: A Layman's Handbook, www.ipapharma.org / publications

Pharmaceutical Chemistry

1. Medicinal & Pharmaceutical chemistry by Harikishan Singh and VK Kapoor
2. Wilson and Griswold's Text book of Organic Medicinal and pharmaceutical Chemistry
3. Practical Organic Chemistry by Mann and Saunders.
4. Practical Pharmaceutical Chemistry, Volume- I & II by Beckett and J. B. Stenlake
5. Indian Pharmacopoeia
6. Vogel's text book of Practical Organic Chemistry

Pharmacognosy

1. Text book of Pharmacognosy by C. K. Kokate, S. B. Gokhale, A.P. Purohit, Nirali Prakashan
2. Text book of Pharmacognosy by C.S. Shah and J. S. Qadry, CBS Publishers & Distributors Pvt. Ltd.
3. Text Book of Pharmacognosy by T. E. Wallis. CBS Publishers & Distributors Pvt. Ltd.
4. Study of crude drugs by M. A. Iyengar, Manipal Press Ltd, Manipal
5. Powder crude drugs by M. A. Iyengar, Manipal Press Ltd, Manipal
6. Anatomy of crude drugs by M. A. Iyengar, Manipal Press Ltd, Manipal
7. Augmented Text Book of Homeopathic Pharmacy by Dr. D D Banerjee, B Jain Publishers (P) Ltd

Human Anatomy and Physiology

1. Human Physiology by C. C. Chatterjee
2. Human Anatomy and Physiology by S. Chaudhary and A. Chaudhary
3. Derasari and Gandhi's elements of Human Anatomy, Physiology and Health Education
4. S.R. Kale and R.R. Kale, Textbook of Practical Anatomy and Physiology
5. Ross and Wilson Anatomy and Physiology in Health and illness
6. Human Anatomy and Physiology by Tortora Gerard J
7. Fundamentals of Medical Physiology by K. Sambulingam and P Sambulingam
8. Ranade V.G. Text Book of Practical Physiology
9. Goyal R.K., Natvar M.P. and Shah S.A., Practical Anatomy, Physiology and Biochemistry, Experimental Physiology

Social Pharmacy

1. Social Pharmacy – Innovation and development. Geoff Harding, Sarah Nettleton and Kevin Taylor. The Pharmaceutical Press.
2. Text Book of Community Pharmacy Practice. RPSGB Publication
3. Community Pharmacy Handbook- Jonathan Waterfield
4. S Khurana, P Suresh and R Kalsi. Health Education & Community Pharmacy. S Vikas & Co
5. Social Pharmacy: Tayler, Geoffrey. Pharmaceutical Press. London.
6. Textbook by Dandiya PC, Zafer ZYK, Zafer A. Health education & Community Pharmacy. Vallabh Prakashan.
7. Websites of Ministry of Health and Family Welfare, National Health Portal
8. Pharmacists at the Frontlines: A Novel Approach at Combating TB www.ipapharma.org Visit Publications
9. Where There Is No Doctor: A Village Health Care Handbook by David Werner ,2015 updated version
10. Various WHO publications www.who.int

Pharmacology

1. Pharma Satoskar, R.S. and Bhandarkar, S.D. Pharmacology and Pharmacotherapeutics
2. B. Suresh, A Text Book of Pharmacology
3. Derasari and Gandhi's Elements of Pharmacology
4. S.K. Kulkarni, Practical Pharmacology and Clinical Pharmacy
5. H.K. Sharma. Principles of Pharmacology
6. Mary J. Mycek, Lippincott Williams and Wilkins. Lippincott's illustrated Reviews: Pharmacology
7. Tripathi, K.D. Essentials of Medical Pharmacology.
8. Various Drug Information Books like British National Formulary, MIMS, CIMS, Drug Today etc., WHO, NIH Websites

Community Pharmacy and Management

1. Health Education and Community Pharmacy by N.S. Parmar.
2. WHO consultative group report.
3. Drug store and Business management by Mohammed Ali and Jyoti.
4. Handbook of pharmacy – health care. Edt. Robin J Harman. The Pharmaceutical Press
5. Comprehensive Pharmacy Review – Edt. Leon Shargel. Lippincott Williams and Wilkins.
6. Good Pharmacy Practices Training Manual by IPA/CDSCO/WHO India
7. Training Module for Community Pharmacists in TB Care and Control/ by MoH/IPA
8. Hand Book of PharmaSoS, Drugs in Special population- Pregnancy and Lactation, Tobacco free future- Choice is yours: KSPC Publications.
9. Responsible Use of Medicines: A Layman's Handbook, www.ipapharma.org/publications
10. Community Pharmacy Practice around the Globe: Part One: www.ipapharma.org/publications

Biochemistry and Clinical Pathology

1. Essentials of Biochemistry by U. Satyanarayana, Books and Allied (P) Ltd.
2. A Textbook of Biochemistry by A.V.S.S. Rama Rao, UBS Publishers' Distributors Pvt. Ltd.
3. Practical Biochemistry by R.C. Gupta and S. Bhargava.
4. Laboratory manual of Biochemistry by Pattabiraman and Sitaram Acharya

Pharmacotherapeutics

1. Clinical Pharmacy and Therapeutics - Roger and Walker, Churchill Livingstone Publication
2. Clinical Pharmacy and Therapeutics - Eric T. Herfindal, Williams and Wilkins Publication
3. Applied Therapeutics: The clinical Use of Drugs. Lloyd Young and Koda-Kimble MA Lippincott, Williams and Wilkins Publication.
4. Pharmacotherapy: A Pathophysiologic approach - Joseph T. Dipiro et al. Appleton and Lange Publication.
5. National Formulary of India, Indian Pharmacopoeia Commission, Ghaziabad.

Hospital and Clinical Pharmacy

1. A Textbook of Clinical Pharmacy Practice - Essential concepts and skills - Parthasarathi G, Karin Nyfort-Hansen and Milap Nahata. Orient Longman Pvt. Ltd. Hyderabad.
2. Text Book of Hospital and Clinical Pharmacy by Dr. Pratibha Nand and Dr. Roop K Khar, Birla publications, New Delhi.
3. Gupta B.K and Gupta R.N., GPP in Hospital Pharmacy, Vallabh Prakashan.
4. Basic skills in interpreting laboratory data - Scott LT, American Society of Health System Pharmacists Inc.
5. Australian drug information- Procedure manual. The Society of Hospital Pharmacists of Australia.

Pharmacy Law and Ethics

1. Text book of Forensic Pharmacy by B.M. Mithal
2. Forensic Pharmacy by B. Suresh
3. Hand book of drug law-by M.L. Mehra
4. A text book of Forensic Pharmacy by N.K. Jain
5. Drugs and Cosmetics Act/Rules by Govt. of India publications.
6. Medicinal and Toilet preparations Act 1955 by Govt. of India publications.
7. Narcotic Drugs and Psychotropic Substances Act by Govt. of India publications
8. Drugs and Magic Remedies Act by Govt. of India publications.
9. CDSCO Website, NPPA Website
10. Books on Drugs and Cosmetic Act by Nilesh Gandhi and Sudhir Deshpande
11. Text Book of Forensic Pharmacy by Dr Guruprasad Mohanta

Haryana State Board of Technical Education, Panchkula

Notification No.: 41

/Exam/HSBTE

Dated: 23/8/2023

ACADEMIC CALENDER SESSION 2023-24

ODD SEMESTERS (1st, 3rd and 5th)

Sr. No.	Name of Activity	Proposed Dates and Months
1.	Preparation and Uploading of Lesson Plans of 1 st , 3 rd and 5 th semester and Pharmacy 2 nd year (Teacher wise) on Institute	Upto 01.09.2023
2.	Orientation program for 1 st semester	23.08.2023 to 31.08.2023
3.	Starting of Classes / Academic Session of 1 st , 3 rd and 5 th semester and pharmacy 2 nd year	01.09.2023
4.	Readmissions	Within 15 days from start of new session
5.	Teaching period	From 01.09.2023 to 15.12.2023
6.	Review of teaching by Principal with HOD's, Faculty members and students	First Monday of every month (Oct., Nov. and Dec.-23)
7.	Class Tests/ Quiz	First Wednesday of every month (Oct., Nov. and Dec-23)
8.	Assignments	Three (One in every month)
9.	Conduct of 1st Sessional Test	From 09.10.2023 to 13.10.2023
10.	Display/ Intimation of 1 st Sessional Test marks and identification of weak students for extra classes	By 16.10.2023
11.	Submission of Concrete Plan/ Time Table by Concerned HoDs to the Principal for conduct of remedial classes for weak students	By 18-10-2023
12.	1 st Parent Teachers Meeting	18-10-2023
13.	Mentor-Mentee Meeting	At least Once in every month
14.	Checking of Lesson Plan compliance, coverage of Syllabus, Monitoring of Attendance & Teachers Diaries by HOD's & Principal(s)	On 2 nd and 4 th Friday of every month of Semester
15.	Notification by the Polytechnics to the concerned students having less than 80% attendance.	Last working day of every month
16.	Communication to Parents / Guardians of students regarding attendance record and Sessionals	1 st Working day of next month
17.	Extension/Expert Lectures	Minimum two lectures per month per
18.	Webinar on Technical topics / quiz contest/ Technical seminars / group discussion / debate / declamation etc.	At least one activity per month on last Friday of every month

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19.	Conduct of 2nd Sessional Test	From 06.11.2023 to 10.11.2023
20.	Display/ Intimation of 2 nd Sessional Test marks and Identification of weak students for extra classes	By 15.11.2023
21.	Submission of Concrete Plan/ Time Table by Concerned HoDs to the Principal for conduct of remedial classes for weak students	By 15.11.2023
22.	2 nd Parent Teachers Meeting	15.11.2023
23.	Conduct of 3rd Sessional Test	From 04.12.2023 to 08.12.2023
24.	Display/ Intimation of 3 rd Sessional Test marks	By 12.12.2023
25.	3 rd Parent Teachers Meeting	12.12.2023
26.	Rationalization / uploading of rationalized internal marks	Upto 15.12.2023
27.	Academic evaluation-analysis of Sessionals, practical work, labs & teachers diary by the Principal / HOD & further remedial action as per evaluation.	Upto 15.12.2023
28.	Conduct of external Practical exams	18-12-2023 to 22-12-2023
29.	Uploading of External Practical awards on the HSBTE Exam Portal-ONLINE	Up to 29.12.2023
30.	Final Theory Examinations	From 04-01-2024 (Tentative)
31.	Start of next Session	Will be notified in accordance with the AICTE guidelines

Note:-

1. As discussed in Academic Committee meeting the students who are already on Industrial Training their attendance of Industry will be counted towards the total attendance.
2. Those student who have not gone on Industrial Training the concern Teacher may give them Minor Project alongwith the classes in place of Industrial Training which will be counted as Industrial Training. This is one time exemption for Industrial Training.
3. If the proposed date of certain activity happens to be a holiday, next working date shall be taken as date of activity.
4. The classes shall be conducted in Physical Mode by following instructions / SOPs issued by the State / Central Government from time to time and the Institutions shall have the flexibility to arrange the timetable/ Theory & Practical Classes as per their convenience.
5. Throughout the semester, every Principal / HoD shall ensure that their faculty (Regular as well as Guest faculty) will be fostering a continuous connectivity with their respective students for effective teaching learning.
6. Mentor for admitted students:
Each faculty deputed as mentor for 15-20 students at the time of their admission shall be in continuous association with the students for their proper guidance in academics, training, placement etc.

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7. Communicate the attendance status of each month to students & parents i.e. attendance if less than 80%.
8. Medical leave as per Medical Performa only.
9. The institute must ensure that proper record of all activities is maintained so that the same can be verified by the Board.
10. Emphasis to be given on the following activities for overall development of students ;
 - Improving communication skills, Soft Skills, presentation skills, motivating lectures, time management etc.
 - Organizing entrepreneurship development program, energy & water conservation programs, disaster & environment management program, alumni meetings, career counseling, improving pedagogy/ teaching learning process etc.
 - Extra classes for SC/ST, weaker students may be conducted on weekends to reduce dropout rate and to improve pass percentage.
 - Women's Grievance Redressal & Counseling Cell
11. Additional activities for Polytechnics;
 - Aadhar Card enrolment for all students and faculty
 - To facilitate the students to get their passport issued
 - Learners Driving License of students
 - Entrepreneurship Clubs and Initiatives for creating an ecosystem towards Self Reliant India Campaign preparing Svavlambhi Yuva, Aatam Nirbhar Yuva thereby making Aatam Nirbhar Haryana.

Dated: 23/8/2023


Dr. Rajesh Goyal,
Secretary
Haryana State Board of Technical Education,
Panchkula

Dated: 23/8/2023

Endst. No. 641-643/Exam/HSBTE

A copy of the above is forwarded to the following for kind information and further necessary action please:

1. PS to DGTE for kind information of W/DGTE please.
2. Principals of all Govt./Aided/Self Financing Polytechnics.
3. Joint Director (Ac.), DTE Office Panchkula


Controller of Exam
HSBTE, Panchkula

Rama & Krishana College of Pharmacy

Maksuspur, Narnaul.123001

TIME TABLE

D. pharmacy 1st year

Session 2023-2024

Day	Practical			Recess	Theory			
	9.00-10.00	10.00-11.00	11.00-12.00		12.00-1.00	1.00-2.00	2.00-3.00	3.00-4.00
Monday	Gp-A Priyanka)	Pharmaceutical Chemistry (Ms. Priyanka)		L	Social Pharmacy (Dr. Shallu)	HAP (Ms. Riya)	Pharmacoognosy (Mr. Vikas Soni)	Pharmaceutica Chemistry (Ms. Priyanka)
	Gp-B	HAP(Ms. Riya)						
	Gp-C	Social Pharmacy (Dr. Shallu)						
Tuesday	Gp-A	Pharmaceutics (Mrs. Mamta)		U	Pharmacoognosy (Mr. Vikas Soni)	Library	Social Pharmacy (Dr. Shallu)	Pharmaceutica Chemistry (Ms. Priyanka)
	Gp-B	Pharmacoognosy (Mr. Vikash Soni)						
	Gp-C	HAP(Ms. Riya)						
Wednesday	Gp-A	HAP(Ms. Riya)		N	HAP (Ms. Riya)	Library	Pharmacoognosy (Mr. Vikas Soni)	Pharmaceutica Chemistry (Ms. Priyanka)
	Gp-B	Pharmaceutics (Mrs. Mamta)						
	Gp-C	Pharmacoognosy (Mr. Vikas Soni)						
Thursday	Gp A	Social Pharmacy (Dr. Shallu)		C	Social Pharmacy (Dr. Shallu)	Library	Pharmaceutics (Dr. Atul Kumar)	Pharmaceutics (Dr. Atul Kumar)
	Gp B	Library						
	GpC	Library						
Friday	Gp-A	Pharmacoognosy (Mr. Vikas Soni)		H	Pharmaceutics (Dr. Atul Kumar)	Pharmaceutica Chemistry (Ms. Priyanka)	Pharmaceutics Chemistry (Ms. Priyanka)	HAP (Mr. Riya)
	Gp-B	Pharmaceutical Chemistry (Ms. Priyanka)						
	Gp-C	Pharmaceutics (Mrs. Mamta)						
Saturday	Gp A	Library			Pharmaceutica Chemistry (Ms. Priyanka)	Library	Pharmaceutics (Dr. Atul Kumar)	Pharmaceutics (Dr. Atul Kumar)
	Gp B	Social Pharmacy (Dr. Shallu)						
	GpC	Pharmaceutical Chemistry (Ms. Priyanka)						

(Signature)
Principal

Rama & Krishana College
of Pharmacy
Maksuspur, Narnaul

(Signature)
(Signature)

(Signature)

Rama & Krishana College of Pharmacy

Maksuspur, Narnaul.123001

TIME TABLE

D,pharmacy 2nd year

Session 2023-2024

Day	Theory			Recess	Practical			
	9.00-10.00	10.00-11.00	11.00-12.00		1.00-2.00	2.00-3.00	3.00-4.00	4.00-5.00
Monday	GPM (Mr. Talim)	Pharmacy law & ethics (Mr. Vikas soni)	HCP (Dr. Anil)	1.00 ---L---	Gp-A CPM (Mr. Talim)			Tutorial
					Gp-B Pharmacotherapeutics (Ms. Priyanka)			Tutorial
					Gp-C H.C.P (Mrs. Mamta)			Tutorial
Tuesday	Pharma Cology (Dr. Shalju)	Pharma Cothertapeutic (Priyanka)	Pharma Cology (Dr. Shalju)	----U--	Gp-A Bio-Chemistry (Ms. Riya)			
					Gp B CPM (Mr. Talim)			Tutorial
Wednesday	Pharma Cothertapeutic (Ms. Priyanka)	CPM (Mr. Talim)	HCP (Dr. Anil)	---N---	Gp-A Pharmacotherapeutics (Ms. Priyanka)			Tutorial
					Gp-B Bio-Chemistry (Mr. Vikas Soni)			
					Gp-C Pharma Cology (Dr. Shalju)			
Thursday	HCP (Dr. Anil)	Pharmacy law & ethics (Mr. Vikas Soni)	Bio Chemistry (Ms. Riya)	----C---	Gp A H.C.P (Mr. Talim)			Tutorial
					GpC Bio-Chemistry (Ms. Riya)			
Friday	Bio Chemistry (Ms. Riya)	CPM (Mr. Talim)	Pharma Cology (Dr. Shalju)	----H--	Gp-B Pharmacology (Dr. Shalju)			Tutorial
					Gp-C Pharmacotherapeutics (Ms. Mamta)			
					Gp A Pharma Cology (Dr. Shalju)			
					Gp B H.C.P (Mr. Talim)			
					GpC CPM (Ms. Mamta)			
Saturday	Pharmacy law & ethics (Mr. Vikas soni)	Bio Chemistry (Ms. Riya)	Pharma Cothertapeutic (Ms. Priyanka)					

Principal
 Rama & Krishna College
 of Pharmacy
 Maksuspur, Narnaul

Principal

SrNo.	RollNo.	Name	Father Name
1	212552100001	AJIT	JAGDISH PARSAD
2	212552100002	AMAN	RAJENDER SINGH
3	212552100003	AMIT KUMAR	LAXMAN
4	212552100004	ANIL SAINI	RAMESH SAINI
5	212552100005	ANKIT	BIJENDER SINGH
6	212552100006	ANKIT	ABHAY SINGH
7	212552100007	ASHISH	PAWAN KUMAR
8	212552100008	ASHISH	HANUMAN SINGH
9	212552100009	AYUSH SHARMA	AVINASH KUMAR
10	212552100010	BAJRANG	VIJAY KUMAR
11	212552100011	BHIM SINGH	HARPHOOL
12	212552100012	BHUPENDER	RATTAN LAL
13	212552100013	CHANCHAL KUMARI	PHOOL CHAND SAINI
14	212552100014	DEEPAK	SURESH
15	212552100015	DEVENDER	KIRSHAN KUMAR
16	212552100016	DEVENDRA KUMAR	RAMAWATAR
17	212552100017	GAURAV	RAJESH KUMAR
18	212552100018	HANUMAN PARSHAD	SULTAN SINGH
19	212552100019	HAPPY	RAJ KUMAR
20	212552100020	HARISH	DINESH KUMAR
21	212552100021	HAWA SINGH	DHARMPAL
22	212552100022	HEMENT	RAGHU VEER
23	212552100023	HIMANSHU SAINI	RATTAN LAL
24	212552100024	HITESH KUMAR JANGRA	KAMAL SINGH JANGRA
25	212552100025	INDERJEET	CHANDAN SINGH
26	212552100026	JITENDER	RAJENDER PRASAD
27	212552100027	KAPIL	HANUMAN
28	212552100028	KULDEEP	BHUPENDER
29	212552100029	KULDEEP	ABHAY SINGH
30	212552100030	LOKESH	SUBHASH CHAND
31	212552100031	LOKESH KUMAR	MOHAN LAL
32	212552100032	MANISH KUMAR	RAJESH KUMAR
33	212552100033	MANJEET	RAMPAL
34	212552100034	MANOJ	MAMCHAND
35	212552100035	MANOJ	PREM CHAND
36	212552100036	MOHIT	RANDHIR SINGH
37	212552100037	MOHIT	DINESH KUMAR
38	212552100038	MOHIT YADAV	SURESH YADAV
39	212552100039	NARENDER KUMAR	JITENDER PRASAD
40	212552100040	NAVEEN KUMAR	SURESH KUMAR
41	212552100041	NAVEEN YADAV	HAWA SINGH

42	212552100042	NISHI SHARMA	OM PRAKASH SHARMA
43	212552100043	NITIN KUMAR	SURINDER MOHAN
44	212552100044	PANKAJ	RANJEET SINGH
45	212552100045	PARVEEN KUMAR	MAHENDER SINGH
46	212552100046	PRADEEP	SUBE SINGH
47	212552100047	PRADEEP KUMAR	LAXMI NARAYAN
48	212552100048	PRASHANT	HARIPARSAD
49	212552100049	PRINCE	VIJAYPAL
50	212552100050	PUNIT	SHYAMSUNDER
51	212552100051	RAJEEV YADAV	NARESH YADAV
52	212552100052	RAKESH	KAILASH KUMAR
53	212552100053	RAVI	SUBE SINGH
54	212552100054	SAKSHI	SATISH SHARMA
55	212552100055	SANDEEP SAINI	KHEMCHAND
56	212552100056	SANJAY KUMAR	RAMESHWAR
57	212552100057	SHAKSHI	RAJESH KUMAR
58	212552100058	SONU	MAMCHAND
59	212552100059	SUBHAM YADAV	SUBE SINGH YADAV
60	212552100060	SUMAN	RAJA RAM
61	212552100061	SUNIL	BAJRANG LAL
62	212552100062	TILAK GUPTA	SOUBHAGYA GUPTA
63	212552100063	TINKU	RAM SINGH
64	212552100064	VIKRAM SINGH	HARPAL SINGH
65	212552100065	VINAY KUMAR	SATYA PAL
66	212552100066	VISHAL KUMAR	SATYA VEER SINGH

Sno.	Roll No.	student name	father name
1	222552100001	AAYUSH SHARMA	DURGESH SHARMA
2	222552100002	AJAY KUMAR	VED PRAKASH
3	222552100003	AJAY KUMAR YADAV	RURMAL YADAV
4	222552100004	AMAN	ATTAR SINGH
5	222552100005	AMIT KUMAR	KRISHAN KUMAR
6	222552100006	AMIT KUMAR	MUKESH KUMAR
7	222552100007	ANISH	BHUPENDER SINGH
8	222552100009	ANKIT	RAJESH
9	222552100010	ANOOP	DHARM PAL
10	222552100011	ASHISH YADAV	KRISHAN KUMAR YADAV
11	222552100012	ASHU	ASHOK KUMAR
12	222552100013	ASHWANI	RAJ KUMAR
13	222552100014	ASHWANI KUMAR	RAM NIWAS SAINI
14	222552100015	ATUL YADAV	SIKANDER

15	222552100016	DEEPAK	VIJAY SINGH
16	222552100017	DILIP SAINI	MAHENDERA SAINI
17	222552100018	GAURAV JAMINI	HARI PRAKASH JAMINI
18	222552100019	HEMANT	SUBHASH CHAND
19	222552100020	JAI KRISAN	JAGDISH PRASAD
20	222552100022	KARTIK	YASHPAL SINGH
21	222552100024	KULDEEP	SURENDER SINGH
22	222552100025	MAHESH YADAV	ASHOK KUMAR
23	222552100026	MANISH	SHISH RAM
24	222552100027	MANISHA YADAV	RAJESH KUMAR
25	222552100028	MANJEET KUMAR	RAJBIR SINGH
26	222552100029	MANJEET YADAV	BHUP SINGH
27	222552100030	MOHAN	ASHOK KUMAR
28	222552100031	MONU	KARAN SINGH
29	222552100032	NARVEER	HAWA SINGH
30	222552100033	NEELAM	MANOJ
31	222552100034	NIKESH	DARYAV SINGH
32	222552100035	NITESH YADAV	RAJ KUMAR YADAV
33	222552100036	NITIN	RAJPAL
34	222552100038	PARSHANT	SUBHASH CHAND
35	222552100039	PAWAN	DALIP SINGH
36	222552100040	POOJA	ROOPCHAND
37	222552100041	POOJA	ASHOK KUMAR
38	222552100042	PRASHANT SINGH	RAJKUMAR SINGH
39	222552100043	PRAVEEN KUMAR	SATYAPAL
40	222552100044	PRINCE	KARAN SINGH
41	222552100045	PRITAM SINGH	KULDEEP SHERAWAT
42	222552100046	PRIYANKA	BALWAN
43	222552100047	RAHUL	MUKESH CHAND
44	222552100048	RAHUL	MAHER SINGH
45	222552100049	RAJESH	VIJAY SINGH
46	222552100050	RAMAKANT KACHHAWA	MAHESH KUMAR
47	222552100051	RITIK	MANOJ KUMAR
48	222552100053	ROHIT YADAV	PRAVEEN YADAV
49	222552100055	SACHIN KUMAR	NANDKISHOR
50	222552100056	SACHIN KUMAR	CHHITARMAL
51	222552100057	SANJAY	SHISH RAM
52	222552100058	SANJAY SAIMI	MUKESH KUMAR
53	222552100059	SANJAY SANGWAN	MANOJ SANGWAN
54	222552100060	SANJEEV	KAMLESH KUMAR
55	222552100061	SOURABH	MOTI LAL

56	222552100062	SUBHAM YADAV	ASHOK YADAV
57	222552100063	SUMIT KUMAR	DEVI DUTT
58	222552100064	SUSHIL KUMAR	RAJESH YADAV
59	222552100065	TARNESH	RAJBIR
60	222552100066	TEJPAL	SUBHASH
61	222552100067	VAIBHAV YADAV	PUSHPENDARA
62	222552100068	YOGINDER	SHIV CHARAN

S.NO.	ROLL NO.	STUDENT NAME	FATHER NAME
1	232552100001	AKSHAT	KHEM CHAND
2	232552100002	ANKIT YADAV	LALCHAND
3	232552100003	ANKUSH	SAJJAN SINGH
4	232552100004	ASHISH YADAV	ANIL YADAV
5	232552100005	BABLU	JAMUNA
6	232552100006	BHARAT BHUSHAN	KARAN SINGH
7	232552100007	DEEPAK	MANOJ SHARMA
8	232552100008	DEEPAK SAINI	MAHENDER KUMAR
9	232552100009	DHARMENDER	DARIYAV SINGH
10	232552100010	DHRUV	SURESH KUMAR
11	232552100011	DILEEP SINGH	NARPAT SINGH
12	232552100012	DINESH	SUMER SINGH
13	232552100013	GOURI SHANKAR UPADHYAY	BHANWAR LAL UPADHYAY
14	232552100014	HARSHIL ANUJ	AKHILESH KUMAR
15	232552100015	HEMANT	SURJAN SINGH
16	232552100016	HITESH KUMAR	TEJA SINGH
17	232552100017	INDER MOHAN	MANOJ KUMAR
18	232552100018	JAIVIK KUMAR	BALBIR SINGH
19	232552100019	KAVITA RAJVANSHI	YOGESH CHANDRA RAJVANSHI
20	232552100020	MANISH KUMAR	NARESH KUMAR

21	232552100021	MOHIT	ASHOK KUMAR
22	232552100022	MOHIT KUMAR	SHAKTI SINGH
23	232552100023	MONIKA	LALARAM
24	232552100024	MS. KASHIFA	MOHAMMED AASIF
25	232552100025	MS. ANITA SAINI	RAMAVATAR
26	232552100026	NAVEEN KUMAR	CHHITARMAL
27	232552100027	NISHA KUMARI	SATISH KUMAR
28	232552100028	NITESH	RAJESH
29	232552100029	NITIN	GHANSHYAM SHARMA
30	232552100031	PARVESH YADAV	SATVIR SINGH
31	232552100032	PAWAN KUMAR	BHARAT BHUSHAN
32	232552100033	PAYAL	RAJPAL SAINI
33	232552100034	PAYAL KUMARI	VISHWESHWAR YADAV
34	232552100035	POOJA SHARMA	KESHAV DUTT
35	232552100036	PRAMESH KUMAR	ABHAY SINGH
36	232552100037	PREM LATA UPADHYAY	BHANWAR LAL
37	232552100038	RAHUL	RAJESH KUMAR
38	232552100039	RAHUL	MUKESH KUMAR
39	232552100040	RAHUL SHARMA	SURESH SHARMA
40	232552100041	RAJENDRA PRASAD SINGH	HIRDAYA NARAYAN SINGH
41	232552100042	RAJPAL	JAIDAYAL
42	232552100043	RAKESH	SURESH KUMAR
43	232552100044	ROHIT	NIRANJAN LAL
44	232552100045	ROHIT NITHARWAL	SURESH KUMAR
45	232552100046	SAPANA YADAV	MAHENDRA SINGH
46	232552100047	SARITA JANGIR	SHYO RAM
47	232552100048	SATENDER	BHAGWAT DAYAL

48	232552100049	SHRIKANT PANDEY	KANHAIYA PANDEY
49	232552100050	SONU	RAMDHAN
50	232552100051	SUDESH	RAJENDRA KUMAR
51	232552100052	SUJATA	NAND KISHOR
52	232552100053	SUMAN KUMARI	MADAN LAL
53	232552100054	SUMIT	DAYAKISHAN
54	232552100055	SUMIT KUMAR	ANOOP SINGH
55	232552100056	SUNIL SINGH	OMPAL SINGH
56	232552100057	TANYA BHANDARI	J.S BHANDARI
57	232552100058	TINKU	RAM SINGH
58	232552100059	VIKAS JOSHI	OM PRAKASH
59	232552100060	VIKASH SINGH	JAGMAL SINGH
60	232552100061	YASH	SANJAY
61	232552100062	YOGESH	BHOOP SINGH

- LoA and subsequent EoA till the current Academic Year

All India Council for Technical Education

(A Statutory body under Ministry of HRD, Govt. of India)

Nelson Mandela Marg, Vasant Kunj, New Delhi-110070 Website: www.aicte-india.org

APPROVAL PROCESS 2019-20

Extension of Approval (EoA)

F.No. North-West/1-4260746821/2019/EOA

Date: 10-Apr-2019

To,

The Financial Commissioner & Principal Secretary
(Technical) Govt. of Haryana,
Room No. 503/5,
Sector -17 New Secretariat,
Chandigarh-160017

Sub: Extension of Approval for the Academic Year 2019-20

Ref: Application of the Institution for Extension of approval for the Academic Year 2019-20

Sir/Madam,

Terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2018 notified the Council vide notification number F.No.AB/AICTE/REG/2018 dated 31/12/2018 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-2865742771	Application Id	1-4260746821
Name of the Institute	RAMA AND KRISHANA COLLEGE OF PHARMACY	Name of the Society/Trust	RAMA AND KRISHANA RURAL EDUCATIONAL AND RESEARCH SOCIETY
Institute Address	VILLAGE-MAKSUSPUR, TEHSIL-NARNAUL, DISTT-MAHINDERGARH, HARYANA, NARNAUL, MAHENDERGARH, Haryana, 123001	Society/Trust Address	C/O RAM NURSING HOME SINGHANA ROAD NARNAUL, NARNAUL, MAHENDERGARH, Haryana, 123001
Institute Type	Unaided - Private	Region	North-West

Opted for Change from Women to Co-Ed and vice versa	No	Change from Women to Co-Ed and vice versa Approved or Not	NA
Opted for Change of Name	No	Change of Name Approved or Not	NA
Opted for Change of Site/Location	No	Change of Site/Location Approved or Not	NA
Opted for Conversion from Degree to Diploma or vice versa	No	Conversion for Degree to Diploma or vice versa Approved or Not	NA
Opted for Organization Name Change	No	Change of Organization Name Approved or Not	NA
Opted for Merger of Institution	No	Merger of Institution Approved or Not	NA
Opted for Introduction of New Program/Level	No	Introduction of Program/Level Approved or Not	NA

To conduct following Courses with the Intake Indicated below for the Academic Year 2019-20

Program	Shift	Level	Course	FT/PT	Affiliating Body (Univ/Body)	Intake Approved for 2019-20	NRI Approval Status	PIO /FN/Quif quota/OCl/ Approval Status
Pharmacy	1st	Diploma	Pharmacy	FT	DIRECTORATE OF TECHNICAL EXAMINATION HARYANA	60	NA	NA

FT - Full Time, PT - Part Time

Application No: 1-4260746821

This is a Computer generated Report. No signature is required.

Printed By: aicte00817

Page 1 of 2

Letter Printed On: 18 April 2019

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation: - Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

It is mandatory to comply all the essential requirements as given in APH 2019-20(appendix 6)

NOTE: If the State Government / UT / DTE / DME has a reservation policy for admission in Technical Education Institutes and the same is applicable to Private & Self-financing Technical Institutions, then the State Government / UT/ DTE / DME shall ensure that 10 % of Reservation for EWS would be operational from the Academic year 2019-20 without affecting the percentage reservations of SC/ST/OBC/General. However, this would not be applicable in the case of Minority Institutions referred to the clause (1) of Article 30 of Constitution of India.

Prof. A.P Mittal
Member Secretary, AICTE

Copy to:

1. The Director Of Technical Education**, Haryana
2. The Registrar**,
Directorate Of Technical Examination Haryana
3. The Principal / Director,
Rama And Krishana College Of Pharmacy
Village-Maksuspur, Tehsil-Namaul,
Distt-Mahendergarh, Haryana,
Namaul, Mahendergarh,
Haryana, 123001
4. The Secretary / Chairman,
Rama And Krishana Rural Educational And Research Society
C/O Ram Nursing Home Singhana Road Namaul,
Namaul, Mahendergarh,
Haryana, 123001
5. The Regional Officer,
All India Council for Technical Education
Plot No. 1A, 5th Floor, DTE(Pb..) Building,
Dakshin Mark, Sector 36-A, Chandigarh-160 036
6. Guard File(AICTE)

Note: Validity of the Course details may be verified at <http://www.aicte-india.org/>

** Individual Approval letter copy will not be communicated through Post/Email. However, consolidated list of Approved Institutions(bulk) will be shared through official Email Address to the concerned Authorities mentioned above.

Application No:1-4260746821
Note: This is a Computer generated Report. No signature is required.
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APPROVAL PROCESS 2020-21

Application Deficiency Report

DEFICIENCY REPORT AS PER APPLIED INTAKE (Applicable for Existing Institutions only)

Regional Office	North-West	Overall Deficiency of Institution:	No
Application ID	1-7013283786	Permanent ID	1-2865742771
Name of the Institution	Rama And Krishana College Of Pharmacy	Address	Village-Maksuspur, Tehsil-Narnaul, Distt-Mahendergarh, Haryana
City/Village	Narnaul	District	Mahendergarh
State	Haryana	PIN	123001

Director/Principal Details

Designation	Name	Appointment Type	Qualification	PhD	Qualified as per AICTE Norms (YES/NO)
Director/Principal	Atul Kumar	Regular	YES, YES,	No	No

Other Details

Sr. No.	Particulars	Status Provided by the Institution	Deficiency
1.	List of Faculty Member and Data Uploaded on the Institution Web Portal	Yes	No
2.	Are all Approved Teaching Faculty Member being Paid as per Present Pay Scale/Commission?	Yes	No
3.	Whether Institution is Operating from Permanent Site?	Yes	No
4.	Fees to be Charged, Reservation Policy, Admission Policy and Document Retention Policy are Uploaded in Institution's Website?	Yes	No
5.	Courses/Approved Intake Displayed at the Entrance of the Institution?	Yes	No

Anti-Ragging Related Deficiency Status

Sr. No.	Particulars	Status Provided by the Institution	Deficiency
1.	Constitution of Anti-Ragging Committee	Yes	No
2.	Constitution of Anti-Ragging Squad	Yes	No
3.	Undertaking Obtained from all Students	Yes	No
4.	Appointment of Counselors	Yes	No
5.	Undertaking Obtained from Parents of all the Students	Yes	No
6.	Undertaking Obtained from Students Staying in Hostel	Yes	No
7.	Undertaking Obtained from Parents of Students Staying in Hostel	Yes	No

Ombudsman Related Deficiency Status

Sr. No.	Particulars	Status Provided by the Institution	Deficiency
1.	Grievance Committee	Yes	No

Institution Level Faculty Member

Sr. No.	Particulars	Actual No.	Required No. as per CI	Deficiency
1.	Total Faculty(UG+PG+Diploma)	8	6	No

Date of Signature(dd/mm/yyyy)

Seal of Institution

Name & Signature of Director/Principal

Application Deficiency Report



Application Status: Submitted
Application Sub-Status: Payment Received

Report Generated on :-11/03/2020

Administrative Area				
Sr. No.	Particulars	Actual Room Area (Sq.m.)	Expected Room Area (Sq.m.)	Deficiency
1.	Board Room	20	20	No
2.	Department Offices/Cabin for Head of Dept	30	20	No
3.	Central Store	30	30	No
4.	Exam Control Office	30	30	No
5.	Housekeeping	10	10	No
6.	Maintenahce	10	10	No
7.	Office All Inclusive	150	150	No
8.	Placement Office	150	30	No
9.	Principal Directors Office	30	30	No
10.	Security	10	10	No
TOTAL		470.00	340.00	

Amenities Area				
Sr. No.	Particulars	Actual Room Area (Sq. m.)	Expected Room Area (Sq. m.)	Deficiency
1.	Boys Common Room	75	75	No
2.	Cafeteria	160	150	No
3.	First aid cum Sick Room	18	10	No
4.	Girls Common Room	75	75	No
5.	Stationery Store	20	10	No
TOTAL		348.00	320.00	

Computational Facilities				
Sr. No.	Particulars	Available	Required	Deficiency
1.	Internet Bandwidth	100	32	No
2.	Printers	2	1	No
3.	A1 size Color Printers	1	0	No
4.	Number of PCs in Language lab	20	20	No
5.	Legal Application S/W	20	10	No
6.	Legal System S/W	20	1	No
7.	PCs to Student ratio	20	15	No

Library Facilities				
Sr. No.	Particulars	Available	Required	Deficiency
1.	Volumes	1442	1250	No
2.	Titles	274	150	No
3.	Journals	7	3	No
4.	Library Management Software	1	1	No
5.	Reading Room Seating Capacity	60	18	No
6.	MultiMediaPC	10	10	No
			2	

Date of Signature(dd/mm/yyyy)

Seal of Institution

Name & Signature of Director/Principal

Printed By : alct00817

Page 2 of 5

Application Deficiency Report

Application Status: Submitted
Application Sub-Status: Payment Received

Report Generated on :-11/03/2020



Instructional Area-Common Facilities

Sr. No.	Particulars	Available	Required	Deficiency
1.	Computer Center inclusive of Language Laboratory	150	75	No
2.	Library & Reading Room	150	150	No
TOTAL		300.00	225.00	No

Land Area Details

Sr. No.	Particulars	Available	Required	Deficiency
1.	Total Area of Land	12	2	No
2.	Maximum number of Pieces	1	1	No

Existing Programme / PHARMACY-Diploma

Sr. No.	Particulars	Level	Actual Room Area (Sqm)	Expected Room Area (Sqm)	Deficiency
1.	Classroom	DIPLOMA	207	132	No
2.	Tutorial Room	DIPLOMA	33	33	No
3.	Seminar Hall	DIPLOMA	300	132	No
4.	Machine Room	DIPLOMA	270	75	No
5.	Instrument Room	DIPLOMA	90	75	No
6.	Laboratory	DIPLOMA	630	300	No
TOTAL			1530.00	747.00	No

Other Facilities

Sr. No.	Particulars	Availability	Deficiency
1.	All Weather Approach (Motorised Road)	Yes	No
2.	Safety Provisions	Yes	No
3.	Sewage Disposal System	Yes	No
4.	Telephone	Yes	No
5.	Vehicle Parking	Yes	No
6.	First Aid	Yes	No
7.	Appointment: Student Counselor	Yes	No
8.	Establishment: Anti-Ragging Committee	Yes	No
9.	Establishment: Committee for SC/ST	Yes	No
10.	Establishment: Internal Complaint Committee (ICC)	Yes	No
11.	Estb: Grievance Redressal Committee/OMBUDSMAN	Yes	No
12.	Barrier free Environment	Yes	No
13.	AICTE Approval Letters- EoA/LoA	Yes	No
14.	Institution-Industry Cell	Yes	No
15.	Digital Payment-Financial Transactions	Yes	No
16.	Food Safety and Standards	Yes	No
17.	Insurance for Students	Yes	No
18.	Applied membership-National Digital Library	Yes	No

Date of Signature(dd/mm/yyyy)

Seal of Institution

Name & Signature of Director/Principal

Printed By : aict00817

Application Deficiency Report

Application Status: Submitted
Application Sub-Status: Payment Received

Report Generated on :-11/03/2020



19.	Online Grievance Rederssal Mechanism		
20.	Internal Quality Assurance Cell	Yes	No
21.	Fire and Safety Certificate	Yes	No
22.	Atleast 5 MoUs with Industries	Yes	No
23.	Display of info submitted to AICTE on website	Yes	No
24.	General Insurance	Yes	No
25.	Backup Electric Supply	Yes	No
26.	Group accident policy for employees	Yes	No
27.	Rain Water Harvesting	Yes	No
28.	Implementation of student Induction Programme	Yes	No
29.	Waste Management and a sustainable Green Campus	Yes	No
30.	Institution Web Site	Yes	No
31.	Medical & Counseling	Yes	No
32.	Notice Boards	Yes	No
33.	Potable Water Supply	Yes	No
		Yes	No

Date of Signature(dd/mm/yyyy)

Seal of Institution

Name & Signature of Director/Principal

Printed By : aic100817

Application Status: Submitted
Application Sub-Status: Payment Received

Application Deficiency Report

Report Generated on :-11/03/2020



DECLARATION

BY THE PRINCIPAL/DIRECTOR/REGISTRAR OF THE INSTITUTION DEPARTMENT

I, as the Head of the Institution, hereby declare that:

- a) I have carefully gone through the AICTE Regulations 2020, published in the Gazette of India Extraordinary Part III, Section- 4 dated 04th February, 2020, also all provisions mentioned in the Approval Process Hand Book 2020-21.
- b) I am fully aware of the data uploaded by me in respect of my Institution on the web portal.
- c) I am aware that there is no provision for correction of data, alteration of data, subsequent editing and appeal etc. for the online application once uploaded on the web portal.
- d) I am also aware that application for seeking Extension of Approval(EOA), Increase/Reduction of intake, Addition of new courses, Change of site, Closure of course, Supernumerary Seats under PIO/FN/Gulf quota Approval status/OCI, NRI, Change of name, and Conversion of women Institution into Co-ed Institution and vice versa (as applicable), shall be processed as per relevant provisions enumerated in the Approval Process Hand Book 2020-21.
- e) I am aware of the Deficiencies (if any) pointed out in the Report generated online, based on the factual data uploaded by my Institution on the portal.
- f) I am also aware that Institution is eligible for grant of Extension of Approval to the Existing Institutions, Extended EoA(if Applicable as per APH 2020-21), only on fulfillment of prescribed norms & requirements as mentioned in the Approval Process Hand Book 2020-21.

Signature of Director/Registrar/ Principal

Name :

Seal/Stamp of the University /Institution Department

Date of Signature(dd/mm/yyyy)

Seal of Institution

Name & Signature of Director/Principal

Printed By : aict00817

Page 5 of 5

RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

Balance Sheet as at 31st March' 2021
Schedules

<u>SOURCES OF FUNDS</u>	Schedules	Amount (INR)
Genral Fund		2,189,307
Add : Excess of Income over Expenditure		<u>2,076,891</u>
		4,266,198
Inter unit Balance		
Rama Krishna Edu. & Recerch Society		12,769,422
Other Current Liabilities		<u>102,201</u>
	Total	<u><u>17,137,821</u></u>
<u>APPLICATION OF FUNDS</u>		
Fixed Assets	'A'	
		16,612,875
Cash and Bank Balance	'B'	
		524,946
	Total	<u><u>17,137,821</u></u>

The Schedules referred to above form an integral part of the Financial Statement.
Signed in terms of our Audit Report of even date.

For Mahesh Jain & Associates
Chartered Accountants

RAMA & KRISHNA EDUCATIONAL & REASEARCH SOCIETY

(Mahesh Kumar)
Proprietor
M No. 413739
FRN 026997N



President

Devsu

Secretary

R. Jindal

Dated : 18/12/2021
Place : NARNAUL

RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

Income and Expenditure Account for the period ended 31st March, 2021

Expenditure	Amount	Income	Amount
To Affiliation Fee	427,011	By Fees Collection	5,533,594
To Bank Charges	2,468	By Bank Interest	10,861
To Electricity Exp.	205,794		
To Printing & Stationery	109,896		
To Salary	1,226,000		
To Library Exp.	40,920		
To Misc Expenses	47,670		
To Laboratory Exp.	303,188		
To Admin Expenses	140,804		
To Building Rep. Exp.	77,651		
To Tea & Refreshment	23,374		
To Travelling Expenses	21,549		
To Board Fee	50,000		
To Computer Repair Exp.	29,417		
To Diesel & Petrol Exp	32,463		
To EPF Exp.	27,800		
To Gardening Exp.	164,521		
To Professional Exp.	13,000		
To Repair & Maintenance Exp.	181,171		
To Staff Welfare Exp.	39,481		
To Telephone & Internet Exp.	13,500		
To Water Exp.	17,800		
To Depreciation	272,086		
To Excess of Income Over Expenditure	2,076,891		
	5,544,455		5,544,455

The Schedules referred to above form an integral part of the Financial Statement.
Signed in terms of our Audit Report of even date.

For Mahesh Jain & Associates
Chartered Accountants

RAMA & KRISHNA EDUCATIONAL & RESEARCH SOCIETY

(Mahesh Kumar)
Proprietor
M No. 413739
FRN 026997N



President

[Signature]

Secretary

[Signature]

Dated : 18/12/2021
Place : NARNAUL

RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

SCHEDULE 'A' "Details of Fixed Assets during the year "

Particulars	WDV as on 1st April' 2020	Addition During the year before 03/10/2020	Addition During the year on or after 03/10/2020	Deduction/ Adjustments	As at 31st march'21	Rate of Depreciation	Depreciation during the year	Net Block a at 31st March'21
Bio Matric Machine	7,585	-	-	-	7,585	15%	1,138	6,447
Camera	200,343	-	63,033	-	63,033	15%	4,727	58,306
Composite Lab Items	127,208	150,000	-	-	350,343	15%	52,552	297,792
Computer Laptop & Printer	66,831	150,000	-	-	143,208	40%	54,083	89,125
Fire Systems	-	-	-	-	216,831	15%	32,525	184,307
Electricity Transformer	-	-	-	-	-	15%	-	-
Freeze	496,526	520,800	-	-	1,017,326	10%	101,733	915,593
Furniture & Fixtures	14,917,767	-	-	-	14,917,767	0%	-	14,917,767
Land & Building	153,389	-	-	-	153,389	15%	23,008	130,381
Library Books & Journals	15,475	-	-	-	15,475	15%	2,320	13,155
Projector	15,985,125	820,800	79,033	-	16,884,958	-	272,086	16,612,875
Total								



RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

SCHEDULE FORMING PART OF THE FINANCIAL STATEMENT FOR
THE PERIOD ENDED 31ST MARCH 2021

SCHEDULE 'B'

Details of Cash and Bank Balance

Amount (INR)

Cash in Hand

85,392

Canara Bank Narnaul

439,554

Total

524,946



RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)

(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

Balance Sheet as at 31st March' 2022

<u>SOURCES OF FUNDS</u>	Schedules	Amount (INR)
Genral Fund		4,266,198
Add : Excess of Income over Expenditure		1,098,725
		5,364,924
Inter unit Balance		
Rama Krishna Edu. & Recerch Society		23,069,422
Other Current Liabilities		169,091
	Total	28,603,437
 <u>APPLICATION OF FUNDS</u>		
Fixed Assets	'A'	28,390,332
Cash and Bank Balance	'B'	213,105
	Total	28,603,437

The Schedules referred to above form an integral part of the Financial Statement.
Signed in terms of our Audit Report of even date.

For **Mahesh Jain & Associates**
Chartered Accountants

(Mahesh Kumar)
Proprietor
M No. 413739
FRN 026997N



RAMA & KRISHNA EDUCATIONAL & RESEARCH SOCIETY

Devi Sh...
President

President
Rama & Krishana Rural Educational
And Research Society
MAKSUSPUR (HR.)

Roder
Secretary

Dated : 21/09/2022
Place : NARNAUL

RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

Income and Expenditure Account for the period ended 31st March, 2022

Expenditure	Amount	Income	Amount	
To Affiliation Fee		210,974	By Fees Collection	6,934,499
To Bank Charges		1,761	By Bank Interest	12,752
To Electricity Exp.	183,077			
To Printing & Stationery	102,946			
To Salary	1,642,461			
To Library Exp.	- 16,287			
To Misc Expenses	70,275			
To Laboratory Exp.	52,186			
To Insurance Exp.	5,327			
To Tea & Refreshment	29,754			
To Travelling Expenses	24,262			
To Computer Repair Exp.	26,517			
To Diesel & Petrol Exp.	34,785			
To EPF Exp.	20,355			
To Gardening Exp.	42,637			
To Professional Exp.	13,500			
To Software Exp.	49,260			
To Staff Welfare Exp.	28,794			
To Student Welfare Exp.	36,597			
To Telephone & Internet Exp.	14,628			
To Water Exp.	19,600			
To Depreciation	3,222,543			
To Excess of Income Over Expenditure	1,098,725			
	6,947,251			6,947,251

The Schedules referred to above form an integral part of the Financial Statement.
Signed in terms of our Audit Report of even date.

For Mahesh Jain & Associates
Chartered Accountants



(Mahesh Kumar)
Proprietor
M No. 413739
FRN 026997N

RAMA & KRISHNA EDUCATIONAL & RESEARCH SOCIETY

Ram Kumar
President
President
Rama & Krishana Rural Educational
And Research Society
MAKSUSPUR (HR)

R. K. S.
Secretary

Dated : 21/09/2022
Place : NARNAUL

RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishna Rural Educational and Research Society, Narnaul)

SCHEDULE 'A' "Details of Fixed Assets during the year "

Particulars	WDV as on 1st April' 2021	Addition During the year before 03/10/2021	Addition During the year on or after 03/10/2021	Deduction/ Adjustments	As at 31st march'22	Rate of Depreciation	Depreciation during the year	Net Block a at 31st March'22
Bio Matic Machine	6,447	-	-	-	6,447	15%	967	5,480
Camera	58,306	-	-	-	58,306	15%	8,746	49,560
Composite Lab Items	297,792	-	-	-	297,792	15%	44,669	253,123
Computer Laptop & Printer	89,125	-	-	-	89,125	40%	35,650	53,475
Fire Systems	184,307	-	-	-	184,307	15%	27,646	156,661
Furniture & Fixtures	915,593	-	-	-	915,593	10%	91,559	824,034
Land & Building	14,917,767	15,000,000	-	-	29,917,767	10%	2,991,777	26,925,990
Library Books & Journals	130,381	-	-	-	130,381	15%	19,557	110,824
Projector	13,155	-	-	-	13,155	15%	1,972	11,183
Total	16,612,872	15,000,000	-	-	31,612,872	-	3,222,543	28,390,332



Ram Singh
Roda

President
Rama & Krishna Rural Educational
And Research Society
MAKSUSPUR - HR

(R) MAKSUSPUR
And Research Society
Rama & Krishna Rural Educational
President

RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

SCHEDULE FORMING PART OF THE FINANCIAL STATEMENT FOR
THE PERIOD ENDED 31ST MARCH 2022

SCHEDULE 'B'	Amount (INR)
Details of Cash and Bank Balance	
Cash in Hand	58,912
Canara Bank Narnaul	154,193
Total	<u><u>213,105</u></u>

Rajesh

R. Jodan

President
Rama & Krishana Rural Educational
And Research Society
MAKSUSPUR (HR.)



RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

Balance Sheet as at 31st March' 2023

<u>SOURCES OF FUNDS</u>	Schedules	Amount (INR)
General Fund		5,364,924
Add Excess of Income over Expenditure		576,596
		<u>5,941,520</u>
Inter unit Balance		
Rama Krishna Edu. & Reserch Society		19,929,422
Other Current Liabilities		97,500
	Total	<u>25,968,442</u>
 <u>APPLICATION OF FUNDS</u>		
Fixed Assets	'A'	25,505,915
Cash and Bank Balance	'B'	462,527
	Total	<u>25,968,442</u>

The Schedules referred to above form an integral part of the Financial Statement.
Signed in terms of our Audit Report of even date.

For Mahesh Jain & Associates
Chartered Accountants

RAMA & KRISHNA EDUCATIONAL & REASEARCH SOCIETY

(Mahesh Kumar)
Proprietor
M No. 413739
FRN 026997N

President

Rajeshwari

Secretary

Dated : 25/07/2023
Place : NARNAUL

RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksiapur, Teh- Narnaul, Distt Mahendergarh)
(Run by Rama & Krishna Rural Educational and Research Society, Narnaul)

Income and Expenditure Account for the period ended 31st March, 2023

Expenditure	Amount	Income	Amount	
To Affiliation Fee		269,020	By Fees Collection	5,976,858
To Bank Charges		1,016	By Bank Interest	4,474
To Electricity Exp	121,397			
To Printing & Stationery	91,246			
To Salary	1,576,288			
To Advertisement Exp	15,600			
To Library Exp	21,536			
To Misc Expenses	81,482			
To Laboratory Exp	41,349			
To Tea & Refreshment	32,763			
To Travelling Expenses	28,216			
To Computer Repair Exp	24,316			
To Diesel & Petrol Exp	42,638			
To EPF Exp	14,400			
To Gardening Exp	45,638			
To Professional Exp.	13,500			
To Software Exp	6,200			
To Staff Welfare Exp	17,218			
To Student Welfare Exp.	42,596			
To Telephone & Internet Exp.	13,570			
To Water Exp.	20,300			
To Depreciation	2,884,417			
To Excess of Income Over Expenditure	576,596			
	5,981,332			5,981,332

The Schedules referred to above form an integral part of the Financial Statement.
Signed in terms of our Audit Report of even date.

For Mahesh Jain & Associates
Chartered Accountants

RAMA & KRISHNA EDUCATIONAL & RESEARCH SOCIETY

(Mahesh Kumar)
Proprietor
M No. 413739
FRN 026997N

President

Ray Wilkerson

Secretary

Dated : 25/07/2023
Place : NARNAUL

RAMA & KRISHNA COLLEGE OF PHARMACY
(Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
(Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

SCHEDULE FORMING PART OF THE FINANCIAL STATEMENT FOR
THE PERIOD ENDED 31ST MARCH 2023

SCHEDULE 'B'	
Details of Cash and Bank Balance	Amount (INR)
Cash in Hand	411,689
Canara Bank Narnaul	50,838
Total	<u>462,527</u>

Dakshin

RAMA & KRISHNA COLLEGE OF PHARMACY
 (Village- Maksuspur, Teh.-Narnaul, Distt. Mahendergarh)
 (Run by Rama & Krishana Rural Educational and Research Society, Narnaul)

SCHEDULE 'A' "Details of Fixed Assets during the year "

Particulars	WDV as on 1st April 2022	Addition During the year before 03/10/2022	Addition During the year on or after 03/10/2022	Deduction/ Adjustments	As at 31st march '23	Rate of Depreciation	Depreciation during the year	Net Block a at 31st March '23
Buildings	1,32,000				5,480	15%	822	4,658
Computer & Software	49,560				49,560	15%	7,434	42,126
Plant & Furniture	25,123				25,123	15%	3,769	21,354
Motor Vehicle	53,475				53,475	40%	21,390	32,085
Prepaid Expenses	15,661				15,661	15%	2,349	13,312
Loan & Advances	824,031				824,031	10%	82,403	741,628
Other Assets	75,935,090				75,935,090	10%	2,692,599	73,242,491
Total	1,10,824				1,10,824	15%	16,624	94,201
	1,183				1,183	15%	1,678	95,065
	28,330,333				28,330,333		2,884,417	25,505,915

Narnaul

- **BEST PRACTICES ADOPTED,IF ANY:**

PowerPoint Presentations by students, faculty & guest lecture are conducted.