

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

J R KISSAN COLLEGE OF PHARMACY AND HEALTH SCIENCE
NEAR JIND BYE PASS CHOWK ROHTAK
PHONE NO. 9255825678, 8199001707
jrkissancollpharmacy@gmail.com

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

- HUKMI DEVI JAN KALYAN TRUST
PHONE NO. 9255825678, 8199001707
- jrkissancollpharmacy@gmail.com

3 Name and Address of the Principal/ Director

Dr. Amarender Nandal
H.no-1620, sec – 3 Rohtak
Phon no. 9255825678

4 Name of the affiliating Board

**H.S.B.T.E. ,
PCI.**

5 Governance

• **Members of the Board and their brief background**

S.No	Name	Position	Qualification	Present Professional position / Occupation	Telephone Numbers	E-mail	Address
01.	Dr. Amarender nandal	Chairman	MD	Doctor	8199001791	Nandalamarender@gmail.com	H.no.-1620, Sec-3, Rohtak
02.	Sh.Abhender singh	Member Secretary	Ph.D	Doctor	9255825678	Nandalamarender@gmail.com	VPO. Bohar, Rohtak
03.	Sh. Ajender singh	Members	M.S	Doctor	-	-	Rohtak
04.	Sh. Manjeet singh		M.COM	-	-	-	H.no.-1620, Sec-3, Rohtak

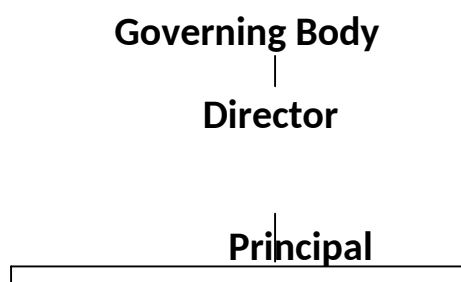
• **Members of Academic Advisory Body**

SR. NO.	Position	Qualification	Designation	Telephone No.	Email
1.	Dr. Savita Devi	M. Pharma	Member	8199001707	Dahiya.savita20@gmail.com
2.	Mr. Yogesh	M. Pharma	Member	8607700036	jrkissancollpharmacy@gmail.com
3.	Mrs. Megha	B. Pharma	Member	8199001783	jrkissanhealth@gmail.com

- Frequency of the Governing Body Meetings : - Half Yearly

- Frequency of Academic Advisory Body : - Annually

• **Organizational chart and processes**



Controller of Exam

Sr. Lecturer

Lab Technician

Lab Attendant

Office Superintendent

Steno Typist, Clerk Lecturer

Class IV

- **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?

SR. NO.	Position	Qualification	Designation	Telephone No.	Email
1	Dr. Meena Malik	Ph.D	Member	8199001784	principal@jrkcoe.com
2	Dr. Savita Devi	M. Pharma	Member	8199001707	Dahiya.savita20@gmail.com
3	Mr. Yogesh	M. Pharma	Member	8607700036	jrkissancollpharmacy@gmail.com
4	Mrs. Monika	B. Pharma	Member	8199001783	jrkissanhealth@gmail.com

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- Establishment of Online Grievance Redressal Mechanism

SR. NO.	Position	Qualification	Designation	Telephone No.	Email
1	Dr. Savita Devi	M. Pharma	Member	8199001707	Dahiya.savita20@gmail.com
2	Mrs. megha	B. pharma	member	8199001784	jrkissancollpharmacy@gmail.com
3	Mr. Yogesh	M. Pharma	Member	8607700036	jrkissancollpharmacy@gmail.com
4	Mrs. Monika	B. Pharma	Member	8199001783	jrkissanhealth@gmail.com

- Establishment of Internal Complaint Committee (ICC)

SR. NO.	Position	Qualification	Designation	Telephone No.	Email
1	Dr. Savita Devi	M. Pharma	Member	8199001707	Dahiya.savita20@gmail.com
2	Mrs. Megha	B. pharma	member	8199001784	jrkissancollpharmacy@gmail.com
3	Mrs. Monika	M. Pharma	Member	9050706034	jrkissancollpharmacy@gmail.com
4	Mr. Vikas	B. Pharma	Member	8199001783	jrkissanhealth@gmail.com

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- Establishment of Committee for SC/ ST

SR. NO.	Position	Qualification	Designation	Telephone No.	Email
1	Dr. Amarender Nanadal	Bhms. MD	Member	9255825678	jrkissancollpharmacy@gmail.com
2	Dr. Meena Malik	Ph.D	Member	8199001784	principal@jrkcoe.com
3	Dr. Savita Devi	M. Pharma	Member	8199001707	Dahiya.savita20@gmail.com
4	Mr. Yogesh	M. Pharma	Member	8607700036	jrkissancollpharmacy@gmail.com

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- Internal Quality Assurance Cell

SR. NO.	Position	Qualification	Designation	Telephone No.	Email
1	Dr. Savita Devi	M. Pharma	Member	8199001707	Dahiya.savita20@gmail.com
2	Mrs. megha	B. pharma	member	8199001784	jrkissancollpharmacy@gmail.com
3	Mr. Yogesh	M. Pharma	Member	8607700036	jrkissancollpharmacy@gmail.com
4	Mr. vikas	B. Pharma	Member	8199001783	jrkissanhealth@gmail.com

- **PROGRAMMES:**

Name of the Programmes Approved by the PCI:

Name of Program	D. Pharmacy
Number of Seats in 1st 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 3 years: For**D. Pharmacy**

In 2020-21	Pass in 10+2 (Science) with 70.00% Marks at Institute Level
In 2021-22	Pass in 10+2 (Science) with 72.15 % Marks at Institute Level
In 2022-23	Pass in 10+2 (Science) with 70.5% Marks at Institute Level

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

Admissions and Fee Regulatory Committee, Haryana,

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

Phone No. 0172-2703839

Email ID:- haryanasfc@gmail.com

From

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

To

The Principal,
J.R.Kissan College of Pharmacy and Health Science,
Old Sunderpur Road/ Gas Godown Road,
Near Jind Bye Pass Chowk, Rohtak (Haryana)


Memo No: 41 /A&FRC

dated: 14.01.2021

Subject:- Regarding Provisional Tuition fee, Development Fund, Student Fund, Caution Money fees for D.Pharmacy Institute.

Kindly refer to your office Memo No JRK/COL/EST/01/95 dated 07.01.2021 on the subject noted above.

In this regard you are requested to submit affiliation copy issued by HSBTE Panchkula alongwith fee Proposal in the prescribed fee proforma available on the website www.techeduhry.gov.in so that the name of your institute alongwith fee may be included in the fee chart of the department. The provisional fee for the session 2021-22 in respect of Diploma Tuition Fee Rs.23000/- and Development Fund Rs.3400/-, Students Fund Rs.1500/-, Caution Money College (one time refundable Rs.1500/-) and Caution Money Hostel/Mess (one time from boarders/hostlers only, refundable Rs. 1500/-) is already hosted on the department website.


Anil Kumar
 Deputy Director,
 Admission and Fee Regulatory Committee,
 Chandigarh.

• **Placement Facilities:-**

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

- **Faculty**

- Branch wise list Faculty members:

Sr. no.	Name	Designation	Branch
1	Dr. Savita Dahiya	Principal	Pharmaceutics
2	Megha Malik	Lect.	Pharmacognosy
3	Yogesh	Asst. Professor	Pharmachemistry
4	Himanshu	Lect.	Pharmacotherapeutics
5	Yogesh	Lect.	Pharmacology
6	Monika	Lect.	Human anatomy and physiology
7	Vikas	Lect.	Bio - chemistry

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- 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

- **Profile of Director/ Principal/ Faculty**

For each Faculty give a page covering with Passport size photograph



- Name – Dr. Savita Devi
- Date of Birth - 20 July 1986
- Education Qualifications - M – Pharmacy, Ph.D
- Work Experience
 - Teaching – 12 year
 - Industry- 1 year
- Area of Specialization - Pharmaceutics
- Courses taught at Diploma

- **Fee**

- **Details of fee, as approved by State Fee Committee:-**

Course

Tuition Fee/ Development Fund/Student Fun

- **D. Pharmacy Approval is under process**

**Admissions and Fee Regulatory Committee, Haryana,
SCO 38-39, Sector 17-A, Chandigarh.**

Phone No. 0172-2703839 Email ID:- haryanasfc@gmail.com

From

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

To

The Principal,
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Anita
Deputy Director,
Admission and Fee Regulatory Committee,
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

- **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

- **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

- **CRITERIA AND WEIGHTAGE FOR**

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% Marks at
Institute Level In 2021-22	Pass in 10+2 (Science) with 61.15% Marks at

**Institute Level In 2022-23 Pass in 10+2 (Science) with 64.5% Marks at
Institute Level**

MARKS SCORED :

As per admission records

- **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. Savita Devi, Amit Singh,

Yogesh, **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
GOVERNMENT POLYTECHNIC CAMPUS, SECTOR-26, PANCHKULA
 Phone No. & Fax No: 0172-2584224
 E-Mail ID-dsaffiliation@hsbte.org.in, Website: www.hsbte.org.in

Letter No: 808/AH/HSBTE
 Dated: 28-11-2022

To

The Principal
 JR Kissan College of Pharmacy and Health Science,
 Jind Bye Pass Chowk, Rohtak 124001

Subject: Extension of Provisional Affiliation for the Academic year 2022-23.

Sir/Madam,

Kindly refer to your proposal regarding Extension of Affiliation for the academic year 2022-23 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 extension of provisional affiliation to JR Kissan College of Pharmacy and Health Science, Jind Bye Pass Chowk, Rohtak to conduct following diploma courses with PCI approved intake for the academic year 2022-23:

Sr. No.	Duration	Course	Intake
1	2 Years	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 amended from time to time. If found that there are no deficiencies then only the institute shall be entitled for affiliation otherwise only after the compliance





PHARMACY COUNCIL OF INDIA

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

E - MAIL : registrar@pci.nic.in
WEBSITE : www.pci.nic.in
Telephone : 011-61299900
 011 - 61299901, 011 - 61299902
 011-61299903

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

DECISION LETTER

Institute Name / Inst ID J R Kissan College Of Pharmacy And Health
 Science Jind Bye Chowk Rohtak / PCI-2861
State HARYANA
District ROHTAK
Sub-District Rohtak
Village/Town/City ROHTAK
Pin Code 124001



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	D.Pharm Extend approval upto 2023-2024 academic session for 60 admissions for D.Pharm course.	Approved	2023-2024	60

Date 15th May 2023

For
 (I/C) 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

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

• **Information of Infrastructure and Other Resources Available**
PART F: INFRASTRUCTURAL FACILITIES

Norms for Land requirement and built-up area for Diploma Level Technical Institution (for Diploma Courses as per PCI)

PHYSICAL INFRASTRUCTURE - COMPLETE DETAILS OF BUILT-UP AREA					
S. No	Built-up (Carpet) Area	FIRST YEAR & SECOND YEAR			Shortfall, if any
		Type of Structure [RCC/ACC]	Required Area [sq.m] as per PCI	Available Area [sq.m]	
(a)	Instructional area [INA]	RCC		985	
(b)	Administrative area [ADA]	RCC		985	
(c)	Amenities area [AMA]	RCC		497	
(d)	Circulation area [CIA]	RCC		415	
[CIA = 0.25 x (INA+ADA+AMA)]		TOTAL AREA :	TOTAL AREA :	2882	
ADMINISTRATIVE AREA REQUIREMENT FOR DIPLOMA COURSES					
Particulars	Number of rooms required	Minimum Carpet Area required	Carpet Area available	Shortfall w.r.t. Number of Room & Carpet Area	
Principal / Director room	01	30 sqm	46 Sqm	Available	
Board room	01	20 sqm	23.25 Sqm	Available	
Office all inclusive	Campus having one program	150 sqm	151 Sqm	Available	
	Campus having more than one program	300 sqm	-	Available	
Cabins for HOD's	01 per Deptt.	20 sqm	20 Sqm	Available	
Faculty rooms	05 (1 st year student / 15 for new technical institution)	05 sqm each	40 Sqm	Available	
Central stores	01	30 sqm	72 Sqm	Available	
Maintenance Room	01	10 sqm	23.23 Sqm	Available	
Security Room	01	10 sqm	10 Sqm	Available	
Housekeeping Room	01	10 sqm	18.60 Sqm	Available	
Pantry for staff (Desirable)	01	10 sqm	20.90 Sqm	Available	
Examination control office (Confidential Room)	01	30 sqm	48 Sqm	Available	

Placement office	01	30 sqm	41.45 Sqm	Available
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IMPORTANT INFRASTRUCTURE REQUIREMENT FOR DIPLOMA COURSES				
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	75 sqm	150 Sqm	
Library	01	150 sqm	153.8 Sqm.	
Seminar Hall	01	132 sqm	261 Sqm.	
Smart class room	01	66 sqm	80sqm	

INFRASTRUCTURE REQUIREMENT FOR DIPLOMA COURSES IN PHARMACY					
Particulars	Number of rooms required	Number of rooms available	Minimum Carpet Area required (as per PCI)	Carpet Area available	Shortfall w.r.t. Number of Rooms & Carpet Area
I	II		III	IV	V
Lecture Rooms	Number of divisions of course X 0.75 of course		66 sqm each room	128 sqm	
Tutorial Rooms	25% of Total Lecture rooms		33 sqm each room	50 sqm	
Total no. of Labs for 1 st year diploma	03		75 sqm each lab	128 sqm	
Laboratory (other than 1 st year)	01 per course per year		75 sqm each lab	120 sqm	
Machine Room	01		75 sqm	120 sqm	
Instrument Room (2nd year)	01		75 sqm	95 sqm	

BASIC AMENITIES FOR DIPLOMA COURSES				
Toilets (Ladies & Gents)	01	150 sqm (Campus having one program)	155 sqm	
		350 sqm (Campus having more than one program)		
Toilets for <i>Divyang</i>	01	---	25 sqm	
Girls Common Room	01	75 sqm	75.25 sqm	
Boys Common Room	01	75 sqm	75.25 sqm	
Canteen/cafeteria (Desirable)	01	150 sqm	160 sqm	
Stationary Store and reprography	01	10 sqm	20 sqm	
First aid-cum-sick room	01	10 sqm	72 sqm	
Drinking water facility (water cooler) essential	Adequate nos. (with attached	--	2 available	

	water purifiers)			
Principal's Quarters	Desirable	150 sqm	-	
Guest House	Desirable	30 sqm	-	
Sports Club / Gymnasium / Playground	Desirable	200 sqm	-	
Auditorium / Amphi Theater	Desirable	400 sqm	-	
Boys Hostel	Desirable	Adequate	-	
Girls Hostel	Desirable	Adequate	-	

COMPUTERS, SOFTWARE, INTERNET AND PRINTERS

Program	Number of PCs/ Laptops to students ratio (Min 20 PCs)	Legal System Software @	Legal Application Software**	LAN and Internet	Mail Server and Client	Printers including Color Printer (% of total number of PCs/ Laptops)
Pharmacy	1:8	01	10	All	Desirable	5%

@ Adequate number of software licences is required

** Includes Plagiarism checking Software

NOTE:

1. At least 4Mbps Wi-Fi connectivity at 4 or 5 hotspots shall be made available.
2. Arrangement to view NPTEL/SWAYAM etc. shall be made available
3. Library, Administrative offices and Faculty members shall be provided with exclusive computing facilities along with LAN and Internet. This shall be considered as over and above the requirement meant for PCs to student's ratio.

BOOKS, JOURNALS AND LIBRARY FACILITIES						
Program	Total number of Divisions	Titles	Volumes	National Journals	Reading Room seating	Multimedia PCs for Digital Library/ internet Surfing located in reading room
		Number			Percentage of total students	
Pharmacy	B	50#	250xB#	3xB#	15 % (Max 150)	(Minimum 10)
		25 per* Course	125 per*Course			
NOTE:						
1. B=Number of divisions at 1st year (Shift 1+2) + Number of 2nd year direct divisions (Shift 1+2)						
2. #Book titles and volumes required at the time of starting new Institution.						
3. Total numbers of titles and volumes shall be increased in continuation till 15 years, which shall be the minimum stock of books. However, Institutions shall have to add annual increment of books based on the changes in curriculum and syllabus from time to time by the Board.						
4. *Annual increment equally distributed per subject.						
5. Digital Library facility with multimedia facility is essential.						
6. Reprographic facility in the library is essential.						
7. Document scanning facility in the library is essential.						
8. Library books/ non books classification as per standard classification methods is essential.						
9. Facilities to access the online courses is essential.						
10. The institution shall be a member of National Digital Library. Aggregators shall also be used.						

• **PART G – EQUIPMENT AND APPARATUS**

Laboratory wise List of Minimum equipments required for D. Pharm 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	01	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	01	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	
19.	Digital balance	01	01	Yes	
20.	Distillation unit for distilled water	02	02	Yes	
21.	Deionisation 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	Adequate	Yes	
26.	Millipore filter (3 grades)	Adequate	Adequate	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 (Pharmacopoeial standard)	02	02	Yes	
34.	Lab Centrifuge	01	01	Yes	
35.	Ointment slab	Adequate	Adequate	Yes	
36.	Ointment spatula	Adequate	Adequate	Yes	
37.	Pestle and mortar porcelain	Adequate	Adequate	Yes	
38.	Pestle and mortar glass	Adequate	Adequate	Yes	
39.	Suppository moulds of three sizes	Adequate	Adequate	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	Adequate	Yes	

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

PHYSIOLOGY & 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	1	Yes	
4.	Sherington's rotating drum	1	1	Yes	
5.	Frog board	Adequate	Adequate	Yes	
6.	Tray (dissecting)	Adequate	Adequate	Yes	
7.	Frontal writing lever	Adequate	Adequate	Yes	
8.	Aeration tube	Adequate	Adequate	Yes	
9.	Telethermometer	1	1	Yes	
10.	Pole climbing apparatus	1	1	Yes	
11.	Histamine chamber	1	1	Yes	
12.	Simple lever	Adequate	Adequate	Yes	
13.	Staring heart lever	Adequate	Adequate	Yes	
14.	Aerator	Adequate	Adequate	Yes	
15.	Histological Slides	Adequate	Adequate	Yes	
16.	Sphygmomanometer (B.P. apparatus)	5	5	Yes	
17.	Stethoscope	5	5	Yes	
18.	First aid equipment	Adequate	Adequate	Yes	
19.	Contraceptive device	Adequate	Adequate	Yes	
20.	Dissecting (surgical) instruments	Adequate	Adequate	Yes	
21.	Balance for weighing small Animals	1	1	Yes	
22.	Kymograph paper	Adequate	Adequate	Yes	
23.	Actophotometer	1	1	Yes	
24.	Analgesiometer	1	1	Yes	
25.	Thermometer	Adequate	Adequate	Yes	
26.	Plastic animal cage	Adequate	Adequate	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	Adequate	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	Adequate	Yes	
35.	Clamp, boss heads, screw clips	Adequate	Adequate	Yes	
36.	Syme's Cannula	Adequate	Adequate	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	Adequate	Yes	
3.	Models (different types)	Adequate	Adequate	Yes	
4.	Permanent Slides	Adequate	Adequate	Yes	
5.	Slides and Cover Slips	Adequate	Adequate	Yes	

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

PHARMACY PRACTICE LABORATORY

Sr. No.	Name	Minimum required Nos.	Available Nos.	Working Yes/No	Remarks
1.	Colorimeter	2	2	Yes	
2.	Microscope	Adequate	Adequate	Yes	
3.	Permanent slides (skin, kidney, pancreas, smooth muscle, liver etc.,)	Adequate	Adequate	Yes	
4.	Watch glass	Adequate	Adequate	Yes	
5.	Centrifuge	1	1	Yes	
6.	Biochemical reagents for analysis of normal and pathological constituents in urine and blood facilities	Adequate	Adequate	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	Adequate	Yes	
13.	Small disposable membrane filter for IV admixture filtration	Adequate	Adequate	Yes	
14.	Laminar air flow bench	1	1	Yes	
15.	Vacuum pump	1	1	Yes	
16.	Oven	1	1	Yes	
17.	Surgical dressing	Adequate	Adequate	Yes	
18.	Incubator	1	1	Yes	
19.	PH meter	1	1	Yes	
20.	Disintegration test apparatus	1	1	Yes	
21.	Hardness tester	1	1	Yes	

22.	Centrifuge	1	1	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	

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	

PART H – LIBRARY BOOKS AND PERIODICALS

Subject wise Classification of Books:

Sl. No	Subject	Available		Remarks
		Titles	Numbers	
	1st year	5	30	
1.	Pharmaceutics	5	30	
2.	Pharmaceutical Chemistry	5	30	
3.	Pharmacognosy	5	30	
4.	Human Anatomy and Physiology	5	30	
5.	Social Pharmacy	5	30	
	2nd Year			
1.	Pharmacology	5	30	
2.	Community Pharmacy & Management	5	30	

3.	Biochemistry & Clinical Pathology	5	30	
4.	Pharmacotherapeutics	5	30	
5.	Hospital & Clinical Pharmacy	5	30	
6.	Pharmacy Law & Ethics	5	30	
Sr. No.	Subject	Available		Remarks
		Titles	Numbers	
1.	Pharmaceutics – I	28	200	
2.	Pharmaceutical Chemistry – I	15	130	
3.	Pharmacognosy	20	132	
4.	Biochemistry and Clinical Pathology	20	140	
5.	Human Anatomy and Physiology	35	190	
6.	Health Education and Community Pharmacy	19	50	
7.	Pharmaceutics – II	15	70	
8.	Pharmaceutical Chemistry – II	14	60	
9.	Pharmacology and Toxicology	16	55	
10.	Pharmaceutical Jurisprudence	09	65	
11.	Drug Store and Business Management	07	26	
12.	Hospital and Clinical Pharmacy	22	102	

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 and Appointment of OMBUDSMAN by the University.	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.	Implementation of teacher training policy	YES	
12.	Implementation of examination reforms	YES	
13.	Implementation of student Induction Programme	YES	
14.	Atleast 5 MoUs with Industries	YES	
15.	Compliance of the National Academic Depository (NAD) as per MHRD directives, applicable to PGCM/ PGDM Institutions and University Departments	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 MHRD directives	YES	

19.	Standalone Language Laboratory	YES	
20.	Potable Water supply and outlets for drinking water at strategic locations	YES	
21.	Electrical Grid Power Supply Connection	YES	
22.	Backup Electric Supply	YES	
23.	Sports facilities	YES	
24.	Sewage Disposal System	YES	
25.	Display board within the premises as well as on the Web site of the of Institution indicating the feedback facility of students and Faculty available in AICTE Web-Portal	YES	
26.	First aid, Medical and Counselling Facilities	YES	
27.	Students Safety Insurance	No	
28.	Group Accident Policy to be provided for the employees	YES	
29.	General Insurance provided for assets against fire, burglary and other calamities	YES	
30.	Provision to watch MOOCS Course(s) through SWAYAM	YES	
31.	Road suitable for use by Motor vehicle- Motorized Road	YES	
32.	Institution-Industry Cell	YES	
33.	Applied for membership of National Digital Library	YES	
34.	Copies of 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	YES	
35.	Appointment of Student Counsellor	YES	
36.	Telephone	YES	
37.	Vehicle Parking	YES	
38.	General Notice Board and Departmental Notice Boards	YES	
Desirable Requirements			
1.	Implementation of the schemes announced by Government of India	Yes	
2.	Offering of Skill development Courses approved by the Council	Yes	
3.	Fabrication facility Laboratory (FABLAB)/ Tinkering Laboratory/ Innovation Laboratory	Yes	
4.	Availability of at least ONE Smart Class Room per Department	Yes	
5.	Rain Water Harvesting and installation of grid connected solar rooftops/ Power Systems	Yes	
6.	Waste Management and environment improvement measures to ensure a sustainable Green Campus	Yes	
7.	Public announcement system at strategic locations for general announcements/ paging and announcements in emergency.	Yes	
8.	Enterprise Resource Planning (ERP) Software for Student-Institution-Parent interaction	Yes	
9.	Efforts to encourage Final Year students to appear GATE examination	Yes	
10.	Transport	Yes	
11.	Post Office, Banking Facility/ ATM	No	

12.	LCD (or similar) projectors in Class Rooms	Yes	
13.	Auditorium	Yes	
14.	Staff Quarters	No	
15.	Display of Course(s) and "Approved Intake" in the Institution at the entrance of the Institution. Course(s) taken through duly recognized MOOCs shall be used as Supplementary Course(s)	Yes	
16.	Intellectual Property Right Cell	Yes	
17.	Implementation of Unnat Bharat Abhiyan/ Saansad Adarsh Gram Yojana (SAGY)	Yes	
18.	Implementation of Startup Policy	Yes	
19.	Innovation Cell/Club	Yes	
20.	Social Media Cell	Yes	
21.	Participation in the National Institutional Ranking Framework (NIRF)	Yes	
22.	Participation in the National Innovation Ranking	Yes	
23.	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	

- List of facilities available:**

Games and Sports facilities	:	Indoor & outdoor games
Extracurricular activities	:	Periodically Conducted
Soft skill 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.

PART I – FINANCIAL & PHYSICAL RESOURCES

Budgeted Expenditure for the year 2022-23

Expenditure Heads	Budget (In lakhs)	Actual Expenditure	Shortfall if any
I. Academic Buildings: - Construction - Maintenance Expenses	200000	50000	
II. Laboratories/Computing Centre - New Equipment - Furniture - Operation & Maintenance	150000	100000	
III. Salary - Salary of Teaching Staff - Salary of Non-Teaching Staff	3500000	3200000	
IV. Faculty/Staff Development (Seminars/Workshops/Incentive Schemes/Training/Higher Studies)	2000000	1500000	

V. Library - Books - Journals ,e-journals - E-library	50000	40000	
VI. Services - Administration/Transport/Hostels/Canteen/Security/Water/Electricity/P&T: - Hostel Maintenance - Landscaping - Internet facility	100000	75000	
VII. Students Activities - Extracurricular/Co-curricular/ Sports/Cultural /extra classes	30000	25000	
VIII. Medical Expenses -Full time or otherwise	115000	105000	
IX. Any Other, please specify			

Latest Balance Sheet of the Society certified from CA is to be attached.

Ph. 01262- 250 488

MUNICIPAL CORPORATION, ROHTAK

Renewal of No Objection Certificate/Under 15 Metr. Height)

Ref No F.S. 2018-22

Dated...31/12/2022

Certified that *M/s J.R Kishan College of Pharmacy and Health Science Rohtak*

.....has made satisfactory Fire Safety Arrangement as per requirement , hence this office has No Objection towards running of this *E.D.U. INSTITUTE*.....from fire safety point of view with the condition of keeping trained staff and fire fighting system tested during inspection shall always be available in good working condition. During Inspection, any lapse regarding the none functioning of fire fighting system will be the sole responsibility of the owner/management. The above NOC can be cancelled at any time. The validity of the NOC is one year i.e. from *31/12/2022*..... After the completion of validation period you have to go renewed this NCC from Municipal Corporation,Rohtak.

FIRE STATION OFFICER
Rohatak Equipat Road,
Fire Station Officer
ROHTAK



कार्यालय, तहसीलदार, तहसील रोहतक, जिला रोहतक, (हरि०)

पत्रांक. 445

दिनांक. 19/02/2016

प्रमाण पत्र

प्रमाणित किया जाता है कि, खेवट संख्या 239,1678 खतौनी सं०2548 मुस्तकिल किला नं०. 3729 (3क. 0म.), 3730 (4क. 19म.), 3731 (2क. 01म.), 3734(4क. 0म.), 3735(2क. 0म.) कुल रकबा 16 कनाल, स्थित निकट जींद बाईपास चौक, रोहतक (हरियाणा) जो कि हुकमी देवी जन कल्याण ट्रस्ट से सम्बन्धित है।


उक्त भूमि मे कोई सरकारी रास्ता, नदी अथवा सरकारी नाली, रेलवे लाईन व हाई टेन्सन लाईन इत्यादि नहीं हैं। उक्त भूमि उक्त भूमि में संस्थागत भू उपयोग मान्य है।

सेवा में,

अध्यक्ष

हुकमी देवी जन कल्याण ट्रस्ट

जिला रोहतक (हरियाणा)


तहसीलदार
रोहतक

Teaching Learning Process

Curricula and syllabus for each of the programmes as approved by the Board

SYLLABUS

D.Pharm.

Annexure - I



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”**

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	√	√	√		√	√	√		√	√	√	√

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

Total =	40 marks
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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)	=	$6 \times 5 = 30$
II. Short Answers (Answer 10 out of 11)	=	$10 \times 3 = 30$
III. Objective type Answers (Answer all 20) (Multiple Choice Questions / Fill-in the Blanks / One word OR one Sentence questions)	=	$20 \times 1 = 20$

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
		80
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 [§]
		20
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
		<hr/>
Total	=	80 marks
		<hr/>

* 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: Direct Acting: 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*, Cycloquanil, 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	Biological source, chemical constituents and therapeutic efficacy of the following categories of crude drugs.	30
	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, Punamava
	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
6	Plant fibres used as surgical dressings: Cotton, silk, wool and regenerated fibres Sutures – Surgical Catgut and Ligatures	3
7	<ul style="list-style-type: none"> • Basic principles involved in the traditional systems of medicine like: Ayurveda, Siddha, Unani and Homeopathy • Method of preparation of Ayurvedic formulations like: Arista, Asava, Gutika, Taila, Churna, Lehya and Bhasma 	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	Nutrition and Health <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	Drugs Acting on the Peripheral Nervous System <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	Drugs Acting on the Eye Definition, classification, pharmacological actions, dose, indications and contraindications of <ul style="list-style-type: none"> • Miotics • Mydriatics • Drugs used in Glaucoma 	2
4	Drugs Acting on the Central Nervous System Definition, classification, pharmacological actions, dose, indications, and contraindications of <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	Drugs Acting on the Cardiovascular System Definition, classification, pharmacological actions, dose, indications, and contraindications of <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	Communication skills <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	Patient counselling <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	Medication Adherence Definition, factors influencing non-adherence, strategies to overcome non-adherence	2
7	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	5
9	Over The Counter (OTC) Medications <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	Community Pharmacy Management <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	Proteins <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	Lipids <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	Nucleic acids <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	Enzymes <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	Vitamins <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	Metabolism (Study of cycle/pathways without chemical structures) <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	Water and Electrolytes <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	Organ function tests <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	Introduction to Pathology of Blood and Urine <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	Narcotic Drugs and Psychotropic Substances Act 1985 and Rules Objectives, Definitions, Authorities and Officers, Prohibition, Control and Regulation, Offences and Penalties.	2
5	Drugs and Magic Remedies (Objectionable Advertisements) Act 1954 Objectives, Definitions, Prohibition of certain advertisements, Classes of Exempted advertisements, Offences and Penalties.	2
6	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.	2
7	Poisons Act-1919: Introduction, objective, definition, possession, possession for sales and sale of any poison, import of poisons	2
8	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	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
Essential: Running Model Community Pharmacy	01	80 Sq. Mts. (Including 10 Sq. mt. for Drug Information Centre & 10 Sq. mt. for Patient Counselling)
Desirable: 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 liter 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](http://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 Svayambhi Yuva, Aatam Nirbhar Yuva thereby making Aatam Nirbhar Haryana.

Dated: 23/8/2023


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

Endst. No.641-643/Exam/HSBTE

Dated: 23/8/2023

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 (Acad.), DTE Office Panchkula


**Controller of Exam
HSBTE, Panchkula**

Day/Time	09-10 AM	10-11 AM	11-12 Noon	12-01 PM	01-02 PM	02-03 PM	03-04 PM
Monday	Anatomy and Physiology (SD)	P'Ceutics (Y)	Social Pharmacy (MS)	L U N C H	Batch A – Anatomy and Physiology Batch B -P'Cognosy (VK) Batch C -P'Chem (YR)		
Tuesday	P'Cognosy (VK)	Social Pharmacy (MS)	P'Chem (YR)		Batch A -P'Chem (YR) Batch B -Social Pharmacy (VK) Batch C -P'Ceutics (MS)		
Wednesday	P'Ceutics (Y)	Anatomy and Physiology (SD)	P'Chem (HS)		Batch A -P'Ceutics (Y) Batch B -P'Chem (HS) Batch C –Social Pharmacy (VK)		

Day/Time	09-10 AM	10-11 AM	11-12 PM	12-01 PM	01-02 PM	02-03 PM	03-04 PM
Monday	Biochemistry & Clinical Pathology (YR)	Pharmacy Law and Ethics (VK)	Pharmacology (MM)	L U N C H	Community Pharmacy and Management (SD)	Batch A- Pharmacology Batch B- P'cotherapeutics Batch C- Hospital and Pharmacy (MS)	
Tuesday	Pharmacology (MM)	P'cotherapeutics (Y)	Hospital and Clinical Pharmacy (MS)		Community Pharmacy and Management (HS)	Batch A- Community Pharmacy and Management (HS) Batch B- Pharmacology Batch C-P'cotherapeutics	
Wednesday	P'cotherapeutics (Y)	Biochemistry & Clinical Pathology (YR)	Pharmacy Law and Ethics (VK)		Hospital and Clinical Pharmacy (MS)	Batch A- Biochemistry Pathology (YR) Batch B- Hospital and Pharmacy (MS) Batch C-Pharmacology	
Thursday	Biochemistry & Clinical Pathology (YR)	Pharmacy Law and Ethics (VK)	Pharmacology (MM)		Community Pharmacy and Management (HS)	Batch A- Hospital and Pharmacy (MS) Batch B- Community Pharmacy and Management (SD) Batch C- Biochemistry Pathology (YR)	
Friday	Pharmacology (MM)	P'cotherapeutics (Y)	Community Pharmacy and Management (HS)		Hospital and Clinical Pharmacy (MS)	Batch A- P'cotherapeutics Batch B- Biochemistry Pathology (YR) Batch C- Community Pharmacy and Management (HS)	
Saturday	P'cotherapeutics (Y)	Hospital and Clinical Pharmacy (MS)	Biochemistry & Clinical Pathology (YR)		Pharmacy Law and Ethics (VK)	Activity/ Seminar	

Thursday	P'Cognosy (VK)	P'Ceutics (SD)	Anatomy and Physiology (SD)		Batch A -P'Cognosy (VK) Batch B -P'Ceutics (Y) Batch C – Anatomy and Physiology
Friday	Social Pharmacy (MS)	P'Chem (HS)	P'Cognosy (VK)		Batch A -Social Pharmacy (MS) Batch B – Anatomy and Physiology Batch C –P'Cognosy (VK)
Saturday	P'Chem (YR)	Social Pharmacy (MS)	Anatomy and Physiology (SD)	P'Ceutics (Y)	P'Cognosy (VK)

TIME TABLE D.PHARMACY 2nd YEAR (2023-2024)

TIME TABLE D.PHARMACY 1ST YEAR (2023-2024)

2020 batch

Candidate Name	Father Name	Mother Name	Gender	Board Roll No.
AASHISH	SHRI KRISHAN	DARSHANA	Male	202422100001
AJIT SINGH	DHARAM BIR	USHA DEVI	Male	202422100002
AKASH	RAJ KUMAR	MAYA DEVI	Male	202422100003
AMAN	JAI BHAGWAN	RAJESH	Male	202422100004
AMAN	JASBIR	MANJU	Male	202422100005
AMANDEEP	ISHWAR	RANI	Male	202422100006
AMIT	SURENDER	SHAKUNTALA	Male	202422100007
AMIT KUMAR	MOHINDER SINGH	NIRMALA	Male	202422100008
ANKIT	RAJESH	SUMAN	Male	202422100009
ANNU NARWAL	KARMAVIR	NIRMLA	Male	202422100010
ANUJ	JAGDISH PARSHAD	SATYAWATI DEVI	Male	202422100011
ASHESH	KHAZAN SAINI	KIRTI SAINI	Male	202422100012
ASHWANI KUMAR	DHARAM SINGH	LAKSHMI DEVI	Male	202422100013
BHANU PRASAD	CHATRAM	SUSHILA	Male	202422100014
BHARTI	VIJAY	LAXMI	Female	202422100015
BUDHVIR	ASHOK KUMAR	SHEELA DEVI	Male	202422100016
DEEPAK	WAZIR SINGH	SANTOSH	Male	202422100017
DEEPAK SHARMA	JAGAT RAM SHARMA	RAJBALA	Male	202422100018
FURKAN AHMAD ALI	SAFI AAS MOHAMMAD	KANIJA BEGAM	Male	202422100019
GANGESH GUNJAN	SUNIL KUMAR	SHASHIKALA DEVI	Male	202422100020
GOUTAM	VIJAY	LAKSHMI	Male	202422100021
HARSH	SURENDER	NIRMALA	Male	202422100022

JASVINDER SINGH	DALBIR SINGH	KAMLESH	Male	202422100023
JATIN	TEKRAM	JAGMATI	Male	202422100024
JITENDAR	VIRENDAR	ROSHANI	Male	202422100025
JITENDER SINGH	BALBIR SINGH	SUMITRA	Male	202422100026
KAPIL	BHUP SINGH	BABLI	Male	202422100027
KAPIL	VIKRAM SINGH	SUNITA	Male	202422100028
KM. SHAILA QASIM	NAYAB JAHAN	MOHD QASIM	Female	202422100029
KULWANT	RAJESH	SUNITA	Male	202422100030
LAKHVINDER	BHAGWAT DAYAL	SUNITA DEVI	Male	202422100031
MANISH	DHARAMBIR	ASHA DEVI	Male	202422100032
MAYANK	SUNIL KUMAR	MANJU	Male	202422100033
MOHD MOHSIN KHAN	ASLAM ALI KHAN	RUKSHAR ALI KHAN	Male	202422100034
MOHD NAUSHAD	MOHD KHURSHEED	KULSOOM KHATON	Male	202422100035
MOHIT	SUNIL KUMAR	SEEMA DEVI	Male	202422100036
MOHIT	SATYAWAN	SUDESH	Male	202422100037
NAVEEN	RAMESH	ANITA	Male	202422100038
NIKHIL	BALKISHAN	SUMITRA	Male	202422100039
NIKKY	JAGDISH	ANITA	Female	202422100040
PANKAJ	RAJESH MALIK	KAUSHALAYA DEVI	Male	202422100041
PARVEEN KAUSHIK	SHRINIWAS	YASH WANTI	Male	202422100042
PAWAN	RAJESH	SUNITA	Male	202422100043
PHOOL SINGH	JAGDISH	RAJESH	Male	202422100044
PREETI ROHILLA	JAI BHAGWAN ROHILLA	SUNITA ROHILLA	Female	202422100045
RAHUL	RAMNIWAS	DARSHANA DEVI	Male	202422100046
RAHUL DUHAN	BIJENDER SINGH	SUNITA	Male	202422100047
RAJAT	NARESH KUMAR	SHEELA DEVI	Male	202422100048
RAJESH	JAIPAL	KRISHNA	Male	202422100049
RAKESH KUMAR	KRISHAN KUMAR	SHAKUNTALA DEVI	Male	202422100050
RAVI KANT	ANAND KUMAR		Male	202422100051
RAVINDER	RAJENDER SINGH	MANJU LATA	Male	202422100052
RAVINDER SINGH MALIK	SUSHIL MALIK	RAJ BALA	Male	202422100053
REHNUMA PARVEEN	AAS MOHAMMED KHAN	SHAKEELA KHANAM	Female	202422100054
REKHA	RAMESH	NIRMALA	Female	202422100055
REKHA RANI	SUMESH CHANDER	KAMLESH	Female	202422100056
RICKY	DALEL SINGH	KRISHANA	Male	202422100057
ROHIT	SATBIR SINGH	NIRMLA	Male	202422100058
RUCHI	VINOD KUMAR	SUMAN	Female	202422100059
SACHIN	RANBIR SINGH	SAROJ BALA	Male	202422100060
SACHIN	RANBIR	SHAKUNTALA DEVI	Male	202422100061
SAHIL KUMAR	ASHOK KUMAR	SANTOSH DEVI	Male	202422100062
SAURAV	RAJENDER KUMAR	ASHA RANI	Male	202422100063
SUBHASH	SURAJ BHAN	SANTOSH DEVI	Male	202422100064
SUMIT ARYA	BRIJESH KUMAR	LAXMI	Male	202422100065
VINEET KUMAR	DHARMVIR	RATAN KAUR	Male	202422100066
VINOD	TARA CHAND	BIR MATI	Male	202422100067
VISHAL BAGRI	SANDEEP	POONAM DEVI	Male	202422100068
YOGESH KUMAR	JAGDISH	ANITA	Male	202422100069

Candidate Name	Father Name	Mother Name	Gender	Board Roll No.
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AMAN	JAIBHAGWAN	MEENA	Male	212422100001
AMAN	DALBIR SINGH	SUNIL	Male	212422100002
AMAN DESWAL	SANTRAM	MUKESH	Male	212422100003
AMIT KUMAR SHARMA	OM PRAKASH	KUNTI DEVI	Male	212422100004
AMIT SINGH	VIRENDER SINGH	SUSHILA DEVI	Male	212422100005
ANIL	JAIBIR	RAJ BALA	Male	212422100006
ANISH ARORA	MADAN ARORA	LALITA ARORA	Male	212422100007
ANKIT	RAMDIYA	POONAM	Male	212422100008
ANKIT HOODA	SURENDER SINGH	MEENA	Male	212422100009
CHANDAN JAISHWAL	RAM KISHOR JAISHWAL	RAM KISHOR JAISHWAL	Male	212422100010
CHARANJEET	BALJEET	GEETA	Male	212422100011
CHETAN SHARMA	ARVIND SHARMA	SOMWATI	Male	212422100012
DAVENDER	DAYANAND	RAM RATI	Male	212422100013
DEEPAK	RAMESH	SUNITA	Male	212422100014
DEEPAK SHARMA	PHOOL KUMAR SHARMA	LUXMI DEVI	Male	212422100015
DEVENDER SHARMA	PHOOL KUMAR SHARMA	RAJ BALA	Male	212422100016
GOURAV	RAJ SINGH	SAROJ	Male	212422100017
HIMANSHU	SURENDER	SUDESH	Male	212422100018
INDERVESH	SURESH	KRISHNA	Male	212422100019
KAPIL	RAVI BHUSHAN	LOKESH	Male	212422100020
KAPIL	RAGHUBIR SINGH	SAROJ	Male	212422100021
KAPIL	JAI BHAGWAN	RAJ RANI	Male	212422100022
KESHAV	RAJESH KUMAR	SANGEETA	Male	212422100023
KHUSHBOO PUNIANI	SURINDER PAL PUNIANI	ANITA	Female	212422100024
KM SHAIMA NAZ	MUKHTAR AHMED	SALMA NAZ	Female	212422100025
KRISHAN KUMAR	PARVEEN KUMAR	SUDESH	Male	212422100026
LAKSHAY KHURANA	MANGAL KHURANA	RAJNI	Male	212422100027
MANJEET	JAGDISH HOODA	SUMITRA DEVI	Male	212422100028
MOHIT	RAM BHAGAT	LAKSHMI	Male	212422100029
MS. MUNESH	RAJENDER SINGH	SUDESH DEVI	Female	212422100030
NAMAN	MAHESHWAR SINGH	SANGITA	Male	212422100031
NAVEEN	RAJ KUMAR	LAJWANTI DEVI	Male	212422100032
NEERAJ	NARESH KUMAR	SUMAN	Male	212422100033
NEERAJ KUMAR	SAMAR PAL	REKHA DEVI	Male	212422100034
NEETU	KULDEEP	SUMITRA	Male	212422100035
NIKHIL	NARENDER SINGH	SUNITA	Male	212422100036
NIKITA RANI	PARDEEP SINGH DABAS	ASHA RANI	Female	212422100037
PARMOD KUMAR	DHRAMPAL SINGH	MUKESH KUMARI	Male	212422100038
PARVEEN	BALBIR	SUMITRA	Male	212422100039
PAWAN	SATYAWAN	ANAND	Male	212422100040
PRIYANKA	ROHTASH	RAJBALA	Female	212422100041
RAHUL	SUNIL KUMAR	SUNIL	Male	212422100042
RATTAN DEV	KRISHAN DEV	PRAMBAI	Male	212422100043
RAVI BHUSAN PANDEY	SURESH CHANDRA PANDEY	KAMALA DEVI	Male	212422100044
RITIK JAIN	ANAND JAIN	SUSHMA JAIN	Male	212422100045
RITU SONI	RAJENDRA SONI	SHASHI SONI	Female	212422100046

ROHIT	SATISH	BABITA	Male	212422100047
ROHIT	JAGDISH	PINKI	Male	212422100048
ROHIT YADAV	SURENDER YADAV	MUKESH DEVI	Male	212422100049
RONAK	SATYA PRAKASH	SANJU DEVI	Male	212422100050
SACHIN	PHOOL KUMAR	INDU	Male	212422100051
SACHIN	VINOD SINGH	ROSHANI DEVI	Male	212422100052
SACHIN	RAMESH KUMAR	SUNITA	Male	212422100053
SANJU RANI	AJMER SINGH	NEELAM DEVI	Female	212422100054
SHIVANI	PREM SINGH	POONAM	Female	212422100055
SONU	SATVIR SINGH	KALASHO	Male	212422100056
SUMIT	AJEET SINGH	SARLA	Male	212422100057
SUMIT KUMAR	SHAMSHER	USHA RANI	Male	212422100058
SUNIL KUMAR	RANBIR	SANTI DEVI	Male	212422100059
SUNNY SINGH	SH. SANJAY KUMAR	SAROJ	Male	212422100060
SUSHANT SHARMA	RAMBHAGAT	SUNITA	Male	212422100061
TARUN KUMAR	SATISH	RENU	Male	212422100062
VIKAS	SUKHBIR	BIRMATI	Male	212422100063
VIKAS	SATYAWAN	GEETA	Male	212422100064
VIKRAM	BHAGAT SINGH	MEENA	Male	212422100065
VIKRAM	JAIVEER	PRAMILA DEVI	Male	212422100066
VINIT NEHRA	AJIT SINGH	SUREKHA	Male	212422100067
YOGESH	KULDEEP	RAJBALA	Male	212422100068
ZIKRA	MASHKOOR ALI	KHALIDA	Female	212422100069

Roll No	Candidate Name	Father Name
222422100001	AASHU	DAYACHAND
222422100002	ADEEBA	AZHER AHMED
222422100003	ADITYA	SURESH KUMAR
222422100004	AMAN	SALEEM
222422100005	AMAN KHAN	MAJEED KHAN
222422100006	AMIT	RAMNARAYAIN
222422100007	AMIT KUMAR	CHHABIL DAS
222422100008	ANKIT	ANIL KUMAR
222422100009	ANKIT KUMAR	SURENDRA KUMAR
222422100010	ANKIT KUNDU	RAMMEHAR
222422100011	ANSHUL PAL	DALCHAND
222422100012	ASHISH	SUNDER SINGH
222422100013	ASHISH	RAJESH
222422100014	ASHOK	HARMENDER
222422100015	DEEPANSHU	RAMNATH
222422100016	DINESH KUMAR	PRADEEP KUMAR
222422100017	FAHEEM UR REHMAN	JAMIL UR REHMAN
222422100018	GARVIT SHARMA	DURGESH SHARMA
222422100019	GEETA	SATYA NARAYAN
222422100020	HARSH	BISHAMBAR KUMAR
222422100021	HARSH	KARTAR SINGH
222422100022	HARSH KUMAR SONI	SURIENDER KUMAR SONI
222422100023	HARSH RANA	SANJAY KUMAR
222422100024	JITENDER	SURESH
222422100025	JONY	PAWAN
222422100026	KAPIL KUMAR	KRISHAN KUMAR
222422100027	KM SHAZIA AKHTAR	AKHTAR HUSAIN
222422100028	KOMAL YADAV	MADAN LAL
222422100029	LALIT	RANBIR SHARMA
222422100030	MANISH	SURENDER

222422100031	MANJEET KUMAR	RAM KISHAN
222422100032	MAYANK	AJIT SINGH
222422100033	MEENAKSHI	DALBIR
222422100034	MOHIT	NIRANJAN
222422100035	MOHIT	JOGINDER SINGH
222422100036	MOHIT	OMBIR SINGH
222422100037	MOHIT	SAJJAN
222422100038	MOHIT	SATYAWAN
222422100039	PANKAJ NAGPAL	ASHOK NAGPAL
222422100040	PRASHANT	ANAND PARKASH
222422100041	PRITI	SAJJAN
222422100042	PRITI	RAJKUMAR
222422100043	PRIYANKA KUMARI	MAHENDRA SINGH
222422100044	RAHUL	SUBHASH CHANDER
222422100045	RAHUL	NARESH KUMAR
222422100046	RAHUL PANCHAL	PAWAN KUMAR
222422100047	RISHI	PARMOD KUMAR
222422100048	ROHIT	RAJESH
222422100049	ROHIT	DEVENDER
222422100050	ROHIT	SAJJAN KUMAR
222422100051	SACHIN	RAJESH
222422100052	SAHIL AKHTAR	AKHTAR HUSSAIN
222422100053	SANDEEP	RAMESH CHANDER
222422100054	SEEMA	RAMESH KUMAR
222422100055	SHIVAM PARMAR	SATYAPAL SINGH
222422100056	SIKANDER	SHREE BHAGWAN
222422100057	SOMBIR	JAGVINDER
222422100058	SONU KUMAR	MAHENDER SINGH
222422100059	SUJAL	SUNIL KUMAR
222422100060	SUMIT	BALRAJ SINGH
222422100061	SUMIT KATARIA	RAMESH KATARIA
222422100062	SUNIL DUTT	MOLU RAM
222422100063	TANNU	JAGDEEP
222422100064	TUSHAR JAIN	RAJESH JAIN
222422100065	VAIBHAV YADAV	RAJNESH KUMAR YADAV
222422100066	VIKASH	NAND LAL
222422100067	VINAYAK	SRI RAM
222422100068	VIRENDER KUMAR	SHRIRAM
222422100069	YOGESH KUMAR	RAM MEHAR

- **LoA and subsequent EoA till the current Academic Year**



1st Approval letter

All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

F.No. North-West/2016/1-2875076131

Date: 30-Apr-2016

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

Sub: Letter of Approval for New Institute 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F.No.37-3/Legal/2012 dated 27/09/2012 and other notifications, as applicable and published from time to time, I am directed to convey the approval to

Regional Office	North-West	Application Id	1-2875076131
Name of the Institute	JR KISSAN COLLEGE OF PHARMACY & HEALTH SCIENCE	Institute Address	JIND BYE PASS CHOWK, ROHTAK, ROHTAK, ROHTAK, Haryana, 124001
Name of the Society/Trust	HUKMI DEVI JAN KALYAN TRUST	Society/Trust Address	26, RAJ GARDEN, ROHTAK, ROHTAK, ROHTAK, Haryana, 124001
Institute Type	Unaided - Private		

to conduct following courses with the intake indicated below for the academic year 2016-2017

Application Id: 1-2875076131									
S. No.	Programme	Shift	Level	Course	Full/Part Time	Affiliating Body	Intake approved for 2016-17	PIO/F N/Gulf Quota	NR
1	PHARMACY	1st Shift	DIPLOMA	PHARMACY	FULL TIME	DIRECTORATE OF TECHNICAL EXAMINATION HARYANA	60	NA	NA

Note: The approval is valid for two years from the date of issue of this letter for getting affiliation with respective University/ Board of Technical Education (BTE)/ Board of Technical Education & Training (BTET) (as applicable) and fulfilling State Govt. requirements for admission. If institution is unable to start in the academic session 2016-17 due to reason mentioned above, the institution will have to apply On-line on AICTE web portal in next academic session for continuation of approval.

The Society/Trust/Institution shall obtain necessary affiliation / permission from the concerned affiliating University/ Board of Technical Education (BTE)/ Board of Technical Education & Training (BTET)(as applicable) as per the prescribed schedule of the University/ Board of Technical Education (BTE)/ Board of Technical Education & Training (BTET)(as applicable) Admission authority etc. The Applicant Society/Trust/Institution shall send information about commencement of the above courses to AICTE. In case the Institution is not in a position to commence the above mentioned courses for whatever reason during the two years period from the date of issue of this letter, the approval becomes invalid and the applicant Society/Trust/Institution shall make fresh application to AICTE for grant of approval as per the norms prevailing at that time.

Application Number: 1-2875076131

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

Printed By : AICT00913

Page 1 of 4
Letter Printed On: 7 May 2016

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/1-4261150108/2019/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,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2018 notified by 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	1-2875076131	Application id	1-4261150108
Name of the Institute	JR KISSAN COLLEGE OF PHARMACY & HEALTH SCIENCE	Name of the Society/Trust	HUKMI DEVI JAN KALYAN TRUST
Institute Address	JIND BYE PASS CHOWK, ROHTAK, ROHTAK, Haryana, 124001	Society/Trust Address	26, RAJ GARDEN, ROHTAK, ROHTAK, ROHT AK, Haryana, 124001
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	NIR Approval Status	PHD / FN / Gulf quota/ OCI Approval Status
Pharmacy	1st	Diploma	Pharmacy	FT	Directorate of Technical Education, Haryana	60	NA	NA

+FT –Full Time, PT-Part Time

- Accounted audited statement for the last three years

Jr kisan Pharmacy & Health Science
(Run By Hukmi Devi Jan Kalyan Trust)
Income & Expenditure account as on 31 mar 2022

Expenditure	Amount(in Rs.)	Income	Amount(in Rs.)
To Advertisement	48,600.00	By Fees Receipt	35,48,830.00
To Salary & wages	28,58,600.00		
To PSI HSBT Charges	2,82,100.00		
TO Electricity Exp	47,529.00		
To Telephone Exp	5,250.00		
To Printing & stationery	20,500.00		
To postage & courier	4,850.00		
To Travelling & Conveyance	74,500.00		
To Office Exp.	32,200.00		
To Miscell. Exp	93,620.00		
To Fuel Exp	56,800.00		
To Excess of Income Over Exp.	24,281.00		
	35,48,830.00		35,48,830.00


The accompanying notes are an integral part of the financial statements.
As per our report of even date


For Sajjan Beniwal & Associates
Chartered Accountants
(Registration No.027828N)



Sajjan Beniwal
Proprietor
Membership No. :-531936
Place: Rohtak
Date: 22/09/2022

For Hukmi Devi Jan Kalyan Trust


President


Secretary

Jr kissan Pharmacy & Health Science
(Run by Hukmi Devi Jan Kalyan Trust)
Balance Sheet as on 31 mar 2022

Liabilities	Amount(in Rs.)	Assets	Amount(in Rs.)
Opening Corpus Fund	65,48,159.00	Fixed Assets	
Add: Excess of Income over Exp	24,281.00	(As per Annexure)	62,80,456.00
		Cash & Bank Balance	2,91,984.00
	65,72,440.00		65,72,440.00

The accompanying notes are an integral part of the financial statements.
As per our report of even date

For Sajjan Beniwal & Associates
Chartered Accountants
(Registration No.027828N)



Sajjan Beniwal
Proprietor
Membership No. :-531936
Place: Rohtak
Date: 22/09/2022

For Hukmi Devi Jan Kalyan Trust


President


Secretary

Jr Kissan Pharmacy & Health Science
Fixed Asset chart as on 31 mar 2022

S.no	Particulars	Opening Bal	Addition	Deletion	Total
1	Building	5914842.00	0.00	0.00	5914842.00
2	Furniture & fittings	183526.00	0.00	0.00	183526.00
3	Office Equipments	91360.00	0.00	0.00	91360.00
4	Generator	20678.00	0.00	0.00	20678.00
5	Electric Equipments	19142.00	0.00	0.00	19142.00
6	Computer	7168.00	0.00	0.00	7168.00
7	Sports Goods	17820.00	0.00	0.00	17820.00
8	Library Books	25920.00	0.00	0.00	25920.00
		6280456.00			6280456.00

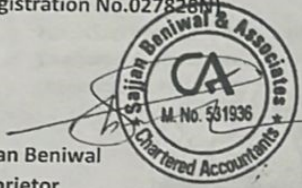


Jr kissan Pharmacy & Health Science
 (Run by Hukmi Devi Jan Kalyan Trust)
Balance Sheet as on 31 mar 2023

Liabilities	Amount(in Rs.)	Assets	Amount(in Rs.)
Opening Corpus Fund	65,72,440.00	Fixed Assets (As per Annexure)	62,80,456.00
Add: Excess of Income over Exp	38,790.00	Cash & Bank Balance	3,30,774.00
	66,11,230.00		66,11,230.00

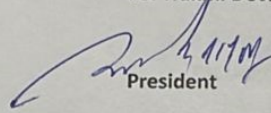
The accompanying notes are an integral part of the financial statements.
 As per our report of even date

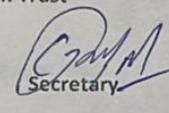
For Sajjan Beniwal & Associates
 Chartered Accountants
 (Registration No.02782801)



Sajjan Beniwal
 Proprietor
 Membership No. :-531936
 Place: Rohtak
 Date: 25/08/2023

For Hukmi Devi Jan Kalyan Trust


 President


 Secretary

Jr kissan Pharmacy & Health Science
(Run By Hukmi Devi Jan Kalyan Trust)
Income & Expenditure account as on 31 mar 2023

Expenditure	Amount(in Rs.)	Income	Amount(in Rs.)
To Advertisement	20,200.00	By Fees Receipt	71,90,210.00
To Salary & wages	74,71,200.00	By Other Income	8,41,200.00
To PSI HSBT Charges	2,84,000.00		
To Electricity Exp	1,00,200.00		
To Telephone Exp	-		
To Printing & stationary	15,800.00		
To postage & courier	2,220.00		
To Travelling & Conveyance	28,000.00		
To Office Exp.	31,000.00		
To Miscell. Exp	-		
To Fuel Exp	40,000.00		
To Excess of Income Over Exp.	38,790.00		
	80,31,410.00		80,31,410.00

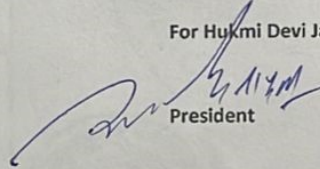
The accompanying notes are an integral part of the financial statements.
As per our report of even date

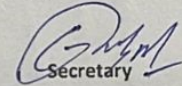
For Sajjan Beniwal & Associates
Chartered Accountants
(Registration No.0278231)



Sajjan Beniwal
Proprietor
Membership No.: -531936
Place: Rohtak
Date: 25/08/2023

For Hukmi Devi Jan Kalyan Trust


President


Secretary

Jr Kissan Pharmacy & Health Science
Fixed Asset chart as on 31 mar 2023

S.no	Particulars	Opening Bal	Addition	Deletion	Total
1	Building	5914842.00	0.00	0.00	5914842.00
2	Furniture & fittings	183526.00	0.00	0.00	183526.00
3	Office Equipments	91360.00	0.00	0.00	91360.00
4	Generator	20678.00	0.00	0.00	20678.00
5	Electric Equipments	19142.00	0.00	0.00	19142.00
6	Computer	7168.00	0.00	0.00	7168.00
7	Sports Goods	17820.00	0.00	0.00	17820.00
8	Library Books	25920.00	0.00	0.00	25920.00
		6280456.00			6280456.00



(Handwritten signature)

- BEST PRACTICES ADOPTED, IF ANY:**

Power Point Presentations by students, faculty & guest lecture are conducted.