

# GDC NAVIGATOR



*The future depends on what you do today*



**“Trust is our foundation;  
We build it Every Day”**



*You're Welcome!*

*I'm glad to be here to help with your  
educational journey.*

*We pride ourselves on being  
synonymous with reliability and  
integrity, setting the standard for  
excellence in field of education.*

*Your satisfaction is our ultimate goal.*

**Thank you for Choosing us as Your  
Trusted Mentor.**

# When it Comes to Your career Aspirations

India's Best Pharma Exam Preparation

- ✓ **PROGRESS**
- ✓ **CONSISTENCY**
- ✓ **ACCOUNTABILITY**



 **RANKED NO. 1**  
Institute In Pharma Education



# About GDC

**GPAT Discussion Center** - GPAT Discussion Center (GDC) is a pioneering institute specializing in coaching for pharmaceutical competitive exams such as GPAT, NIPER, Drug Inspector, Pharmacist, GATE Life Sciences (XL) and other pharma competitive exams. Since its inception, GDC has been instrumental in shaping successful careers, earning a reputation as a hallmark of achievement in the field.

The journey began in 2009, when Dr. Peeyush Jaiswal founded a small coaching center with just a few students. He created handwritten study materials and dedicated himself to supporting pharma aspirants, who soon achieved success in exams like GPAT and DI. These materials, once treasured in their original form, are now available in a fully coloured version, continuing to be highly regarded by students.

The institute's growth was further bolstered when Dr. Abhishek Tripathi joined, expanding GDC's reach and impact across India. Year after year, GDC scaled new heights of success, establishing itself as a leading institute nationwide. In 2026, GDC made history by becoming the first institute to have over 78 students secure ranks below 100 in exams, including top ranks in GPAT.

Now in 2026, GDC proudly celebrates 18 years of legacy (2009–2026), standing as a beacon of excellence for pharmacy aspirants. Guided by Indian values, spiritual principles, and a strong work ethic, GDC continues to thrive under the leadership of Dr. Peeyush Jaiswal, inspiring countless students to achieve their dreams.

— ★ —  
"GDC है तो मुमकिन है"

Embodies the spirit of determination and possibility at

GPAT Discussion Center

**G - Growth, D - Dedication, C - Confidence**

**Empowering students to achieve their highest potential**

# Director's Message..



We are deeply grateful for the trust you've placed in our institute, a responsibility we honor. This is a vibrant era for career education, where learning goes beyond exams to prepare students for life itself. At GDC, we emphasize value-based education, guiding individuals to make ethical and meaningful societal contributions.

Our vision is to guide students on their journey, helping them develop skills and build successful careers. GDC Classes are designed to prepare students for entrance exams such as GPAT, NIPER, Drug Inspector, Pharmacist, GATE Life Sciences (XL), Nursing and other pharma competitive exams across India. Our committed team strives to expand your knowledge and support you in achieving your goals. We aim to not only advance your professional career but also enhance your life in numerous ways. Through our GDC Care Programs, we seek to contribute positively not just to individuals, but to society as a whole.

**Dr. Peeyush Jaiswal**

Director

GPAT Discussion Center Pvt. Ltd

# MENTOR

"The mentor of GPAT Discussion Center (GDC) is a distinguished expert in the field of Pharmacy education. With a wealth of experience and a deep understanding of competitive exams, they guide and inspire students to achieve excellence in GPAT, NIPER, Drug Inspector, Pharmacist, GATE Life Sciences (XL), Nursing and other Pharma-related exams. Their commitment to quality education and personal mentorship has been instrumental in shaping GDC into a leading institution for Pharma exam preparation."

"Your **SUCCESS**, our mentor's mission."



# Why GDC Classes....??

Due to professional life, College timings and many more reasons students are unable to join classroom course and somehow their dream to crack Pharma competitive exam and get a government job seems to be difficult to come true.

Looking at the need and situation of aspirants GDC is launching Live/Online classes for a number of courses which will surely benefit aspirants and given them real classrooms feel.

## **01 Experienced & Best Faculty Team**

Highly qualified and experienced faculty team who are dedicated, hardworking and passionate for your success.

## **02 Ultimate Personal Care**

Personalized attention to each student so that you may not remain just a face in the crowd.

## **03 Result-Oriented Teaching**

### **Methodology**

Highly interactive classes with scientific & result oriented teaching methodology.

## **04 e-Library**

Virtual Book Collection and relevant Study Material

## **05 Regular Test Series & Performance Analysis**

Daily progress monitoring, Regular tests, Performance analysis and Feed back for Improvement

## **06 Success Record & Reputation**

Track record of success for more than 18 years.

## **07 Hi-tech Communication**

Facilities like GDC Classes App, Digital Attendance, Test score reporting through SMS, e-Mail, Online student parent zone etc.

## **08 Great Student Life**

Competitive, Motivation and Encouraging Environment to achieve success



*"Trust in your abilities and the strength within you. Remember, you possess a power that can overcome any challenge."*

# Historic Success by

# GDC Prime

A Revolutionary way to Achieve

students in

# GPAT-2026



1 Shivjiyani Dhruv Rashiklal

2 Anay Prashant Potdar

3 Mohammed Mudassir Nagori

Selection in GPAT-2026 from GDC

# 4000+

8 Students In Top 10 Rank  
78 Students In Top 100 Rank



4 Mayuri Santosh Nikam

5 Pratiksha Harishchandra

6 Nayak Prahee Prashant

8 Manas Prabhu

10 Aniket Kalyan Mane

Top Ranker students in GPAT-2026 are from GDC PRIME Course



CELEBRATING  
**18<sup>th</sup>**  
YEARS  
OF TRUST

पिछले 18 वर्षों से एक ही संकल्प,  
हर विद्यार्थी की मेहनत हो सफल

*GDC Pearl in a Success Rosary*

DRUG INSPECTOR EXAMINATION

GPAT™  
DISCUSSION  
CENTER  
Ranked  
**No. 1 Institute**  
in Pharma Education

## ODISHA DRUG INSPECTOR Results *Heartly Congratulation*



**SAMREEN PARVEEN**

AIR-2  Rojain Samal	AIR-4  Amit Maity	AIR-5  Dipti Ranjan Mohapatra	AIR-9  Prasanjeet Mohanty	AIR-11  Sagar Kumar Subudhi	AIR-13  Rolanca Bhunia	AIR-14  Saurabh Gautam
AIR-15  Sangita Pattanavak	AIR-16  Ananya Kumari Aich	AIR-17  Ashutosh Behera	AIR-19  Chandan Kumar Sahoo	AIR-21  Sudipta Kumar Sahu	AIR-22  Bhagyashree Patra	AIR-24  Jayashree Patra
AIR-29  Hitesh Kumar Behera	AIR-30  Amit Pritam Behera	AIR-31  Deepak Kumar Jaina	AIR-33  Deepak Kumar Singh	AIR-42  Prabin Kumar Jani		

5 Student in TOP 20 | 20 Student in TOP 50

## BPSC DRUG INSPECTOR Results *Heartly Congratulation*



**KUNDAN KUMAR**

AIR-2  Samreen Parveen	AIR-4  Achyut Thakur	AIR-6  MD Sarfraz Alam	AIR-7  Amrendra Kumar	AIR-13  Mahesh Kumar Shaw	AIR-16  Rakesh Singh	AIR-19  Varsha Nishor
AIR-20  Isnu Bhardwaj	AIR-21  Vikash Kumar Gupta	AIR-23  Here Ram Singh	AIR-25  Kiran	AIR-26  Mukesh Kumar Raut	AIR-28  Swarnima	AIR-29  Anil Chaudhary
AIR-33  Sanjeev Kumar	AIR-50  Rahul Kumar	AIR-57  Neha Ranjan Singh	AIR-64  Shrinkhala	AIR-79  Khusi Kumari	AIR-84  Sweta Kumari	AIR-95  Priyanka Bhatti

5 Student in TOP 10 | 22 Student in TOP 50

To All Successful Students & Their Parents

# Testimonial

I am a GDCian because....



**Dsouza Keith Neil**  
AIR-1, GPAT/NIPER-2025

"Dreams turn real when guidance meets determination. GDC transformed my efforts into the No. 1 rank."


**With GDC, GPAT prep gets easier than ever.**



**Shivjiyani Dhruv Rashiklal**  
AIR-1, GPAT-2026


Last year, I secured AIR-62 with GDC, but I knew I could do better. With the same guidance, stronger determination, and consistent effort, I improved my mistakes and trusted the process

**Today, I'm proud to achieve AIR-1 in GPAT 2026.**



**Yogesh**  
AIR-1, NIPER-2024


You have to work hard with dedication moreover we need a constant source of motivation



**Sudipta Bera**  
AIR-1, GPAT-2024

"Work hard in silence success make the noise"

**A line that sparked my Journey... Spoken by Peeyush Jaiswal Sir, in class room... अब की बार 400 पान**



**Shivani Iyer**  
AIR-3, NIPER-2025

"The real strength lies in persistence and patience. With GDC's support, I refined my skills until success became certain."



**Sanjeevan Gupta**  
AIR-2, GPAT-2024

Determination u should always become a goal

**A line that sparked my Journey... Spoken by Abhishek Sir, in Classroom...**

नेटी क्यों जली? घोडा अंडा क्यों? पान नडा क्यों? विद्या झूली क्यों? क्यों का फेन नकी गया?




**Pritam Kumbhar**  
AIR-9, GPAT-2024

**3 mantras of success**  
Struggle, Hard work, Spirituality

**A line that sparked my Journey... Spoken by Abhishek Sir, in Classroom...**

तेरे गिरने में तेरी हार नहीं, तू डंसान है औतार नहीं,  
गिर चल उठ दौड़ क्योंकि जीवन संचित है  
इसका कोई सार नहीं



**Anay Prashant Potdar**  
AIR-2, GPAT-2026

From dreaming big to making it real—this journey has been truly unforgettable.

**I'm deeply thankful to Peeyush Sir, Abhishek Sir, and all the GDC mentors for their constant support and belief.**



Scan the QR Code to download **GDC CLASSES** App

## **"GDC: A RADIANT PATHWAY TO SUCCESS"**

In the halls where dreams take flight,  
GDC shines, a guiding light.

With each student, a story bright,  
You light the path, make futures right.

Your hard work, a guiding star,  
Helping them reach near and far.  
With care and wisdom, strong and true,  
You shape their dreams, thanks to you.

From first steps to dreams so high,  
Your legacy will never die.

With joy and pride, we celebrate,  
Your efforts that make GDC great.

GDC makes history, year by year,  
With hard work and passion clear.  
For many more years of guiding light,  
Inspiring hearts to reach new height.

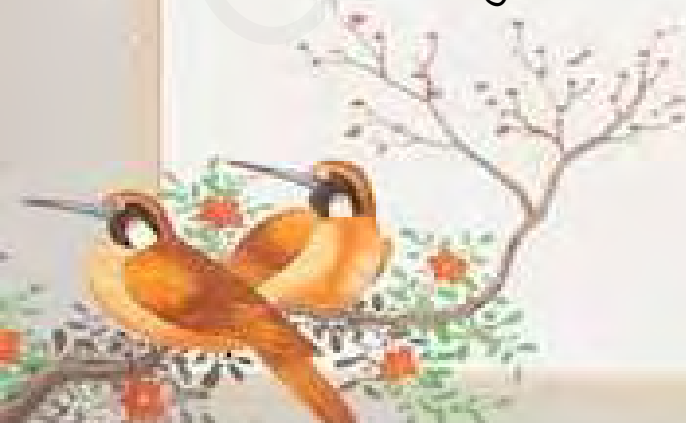
With gratitude and love so true,  
Congratulations and thanks to you.



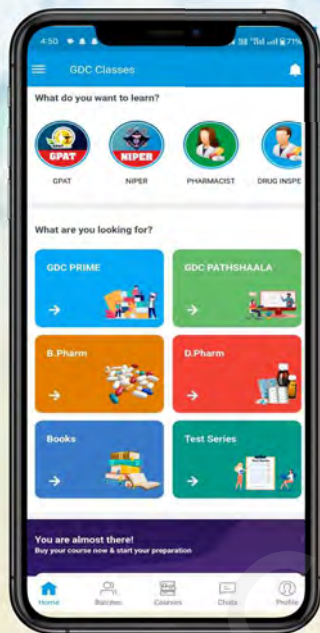
**Anusha Saripalli**

Scientist, CMC, California, US

GDC Raipur (Alumni-2012)



## KNOW YOUR COURSE



### ONLINE FEATURES

01 GDC Information Brochure

02 How to access this Course

03 GDC topper's Talk

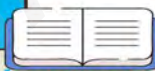
04 Recorded Video Lectures

05 DPP & Live Class Recording

06 Online Test Series

07 GDC Pdf

08 सारथी



### OFFLINE FEATURES

01 Comprehensive Study Material – 23 booklets

## DAILY Live Classes

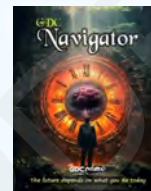
- 👉 8 – 10 live classes in a whole week
- 👉 Special Niper Class (After the GPAT)
- 👉 Special Live Class “Gate Life Science (XL)”
- 👉 Each class will be 1 Hour.
- 👉 Revision and Doubt live class (After Topic Completion)
- 👉 Revision and Doubt live class (After Subject Completion)

## GDC PRIME MEMBERSHIP EXCLUSIVE FEATURES

### Comprehensive Study Materials

- 👉 GDC Navigator – 1 Module
- 👉 GPAT study material – 15 Modules
- 👉 SURE SHOT Question Bank – 6 Modules
- 👉 GPAT Previous Year Book (GATE 1988 to GPAT 2026) – 1 Book

**23**  
Module



### Theory books Colored – 15 Modules



### MCQ Practice Books

### PYQ Book



# Journey of GPAT



Exam mode: Online  
Conducted by : NBEMS  
Questions: 125



2024  
Onwards

Exam mode: Online  
Conducted by : NTA  
Questions: 125



2019-2023

Exam mode: Online  
Conducted by : AICTE  
Questions: 125



2013-2018

Exam mode: Offline  
Conducted by : MS  
University of Baroda  
Questions: 150



GATE

Exam mode: Offline  
Conducted by : GATE  
Questions: Theoretical  
and MCQ type

2010-2012

1988-2009

# WHY GPAT ???



To improve equity and quality in education by administering research, efficient, transparent, and international level assessments.



**To create a system which will**

- Promote teaching (by teachers),
- Learning (by students)
- Assessment (by parents and institutions).



## BENEFITS

Rs.12400/- per month  
Fellowship (For 24 months)

M-Pharmacy

NIPER exams

Ph.D. Course

Better Career Opportunity

Good Rank Colleges

Higher Studies



# GPAT EXAM FORMAT AND PATTERN



- Mode of examination: **CBT**
- Marking Scheme : **Correct Answer: +4**  
**Wrong Answer: -1**
- Questions type : **Objective**
- Total No. of Questions : **125**
- Duration of exam: **3 hours (180 minutes)**
- Time Boudation : **5 Section, each section contain 25 Questions and 36 minutes to solve them.**



- Candidate must hold a **Bachelor's Degree** in Pharmacy or equivalent from a recognized university.
- B. Pharm both **3rd Yrs, 4th Yrs (Appearing) and Pass out** Students can give the Exam and can take admission after the completion of B. pharm.
- Candidate must be a citizen of India..

**NIPER Exams:** Only **GPAT, GATE, NET (National Eligibility Test)** Qualified Students are eligible for NIPER exams.



# TWELVE YEARS CUT OFF OF GPAT EXAM



CATEGORY YEAR	UNRESERVED	EWS	OBC	SC	ST
2026	213	180	177	142	116
2025	216	173	168	120	87
2024	248	204	201	150	110
2023	185	145	148	110	95
2022	148	122	120	94	75
2021	186	155	152	114	87
2020	163	104	131	103	76
2019	141	-	117	95	74
2018	137	-	137	98	67
2017	113	-	113	82	82
2016	115	-	115	90	90
2015	125	-	125	100	100

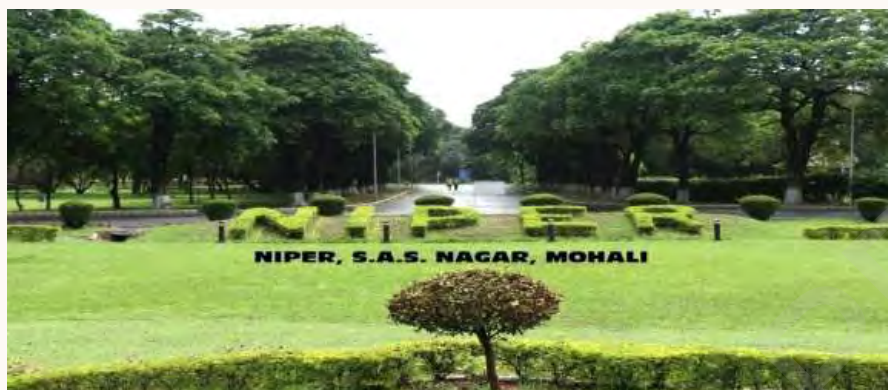
Approximately 65,000+ Students appears every year | 2026 Highest cut off marks - 379  
Average 30-50 Questions in last 12 years to Qualify in GPAT Examination



*“People with goals succeed because they know where they're going.”*



# NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (NIPERS)



**NIPER S.A.S. Nagar (Mohali)**

Official Website: <https://niper.gov.in/>



**NIPER Ahmedabad**

Official Website: <https://niperahm.ac.in/>



**NIPER Hyderabad**

Official Website: <http://www.niperhyd.ac.in/>



**NIPER Kolkata**

Official Website: <https://www.niperkolkata.edu.in/>



**NIPER Hajipur**

Official Website: <https://www.niperhajipur.ac.in/>



**NIPER Guwahati**

Official Website: <https://niperguwahati.ac.in/>



**NIPER Raebareli**

Official Website: <https://niperraebareli.edu.in/>

# NIPER Seat Matrix

## Seats Available in Different NIPERs

NIPER Institutes	MS (Pharm)	M-Pharm	M-Tech	PG Diploma	MBA	Total Seats
Mohali	93	15	37	--	50	195
Ahmedabad	100	--	50	--	--	150
Hajipur	38	10	12	--	--	60
Hyderabad	115	--	55	--	40	210
Kolkata	64	--	36	--	--	100
Guwahati	68	22	22	15	--	127
Raebareli	80	--	40	--	--	120
<b>TOTAL</b>	<b>558</b>	<b>47</b>	<b>252</b>	<b>15</b>	<b>90</b>	<b>962</b>

**NOTE-** Total 28 seats for PH in all NIPER Institute



## COURSES OFFERED IN National Institutes of Pharmaceutical Education and Research



### M.S. (Pharm.) Programmes

1. Medicinal Chemistry
2. Natural Products
3. Traditional Medicine
4. Pharmaceutical Analysis
5. Pharmacology and Toxicology
6. Regulatory Toxicology
7. Pharmaceutics
8. Pharmacoinformatics
9. Regulatory Affairs
10. Pharmaceutical Regulatory Sciences

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

1. Pharmaceutical Technology (Formulations)
2. Pharmacy Practice
3. Clinical Research

### Master of Technology Programmes

1. Biotechnology/ Biopharmaceuticals/ Pharmaceutical Technology (Biotechnology)
2. Pharmaceutical Technology (Process Chemistry) /Medicinal Chemistry
3. Medical Devices/Medical Technology
4. Biopharmaceuticals

### Master of Business Administration (Pharm.) Programme

1. Pharmaceutical Management

- ✓ *M. Tech in Medicinal Chemistry is offered only by NIPER Ahmedabad.*
- ✓ *M. Tech in Pharmaceutical Technology (Biotechnology) is offered only by NIPER Mohali.*
- ✓ *PG Diploma in Medical Devices is offered only by NIPER Guwahati.*
- ✓ *M.S.(Pharm.) in Pharmaceutical Regulatory Sciences is offered only by NIPER Mohali.*

**"Unlock your potential with NIPER's exam —  
a gateway to mastering the Science of Pharmaceuticals."**

# N



NIPER, S.A.S. NAGAR - 2026



NIPER, S.A.S. NAGAR - 2026

# I



NIPER, HYDERABAD - 2025



NIPER, S.A.S. NAGAR - 2025

# P



NIPER, GUWAHATI - 2024



NIPER, KOLKATA - 2025

# E



NIPER, GUWAHATI - 2024



NIPER, KOLKATA - 2025

# R



NIPER, Ahmedabad



NIPER - Ahmedabad

# Placement

These job placements reflect NIPER's success. We are displaying the NIPER Placement Achievement Poster to inspire and motivate prospective candidates.



# M. PHARM COLLEGE LIST 2026-2027

## For (GPAT/ Non - GPAT) Candidates



S.N	INSTITUTE NAME	CITY	ELIGIBLE
1.	National Institute of Pharma. Education & Research	7 NIPERS	GPAT
2.	Jamia Hamdard University	New Delhi	GPAT / NON
3.	Birla Institute of Technology and Science	Pilani	GPAT / NON
4.	Jadavpur University	Kolkata	GPAT
5.	Institute of Chemical Technology (ICT)	Mumbai	GPAT
6.	Indian Institute of Technology (BHU)	Varanasi	GPAT
7.	Delhi Pharma. Sciences & Research University (DPSRU)	New Delhi	GPAT
8.	JSS College of Pharmacy	Mysuru, Ooty	GPAT / NON
9.	Manipal College of Pharmaceutical Sciences	Manipal	GPAT / NON
10.	Birla Institute of Technology and Science	Mesra	GPAT / NON
11.	The Maharaja Sayajirao University of Baroda	Vadodara	GPAT / NON
12.	Guru Jambheshwar University of Science & Technology	Hisar	GPAT / NON
13.	Bombay College of Pharmacy	Mumbai	GPAT / NON
14.	Punjab University	Chandigarh	GPAT / NON
15.	Punjabi University	Patiala	GPAT / NON
16.	Guru Ghasidas Vishwavidyalaya	Bilaspur	GPAT / NON
17.	Indira Gandhi National Tribal University	Amarkantak	GPAT / NON
18.	Central University of Punjab, Haryana, Rajasthan, South Bihar	Bathinda, Mahendragarh, Ajmer, Gaya	GPAT / NON
19.	Dr. Harisingh Gour Vishwavidyalaya	Sagar	GPAT / NON
20.	Dibrugarh University Assam	Dibrugarh	GPAT / NON
21.	Poona College of Pharmacy	Pune	GPAT / NON
22.	ISF College of Pharmacy	Moga	GPAT / NON
23.	L. M. College of Pharmacy	Ahmedabad	GPAT / NON
24.	Nirma University	Ahmedabad	GPAT / NON
25.	SRM Institute of Science & Technology	Chennai	GPAT / NON




THERE WILL BE  
**OBSTACLES.**

THERE WILL BE  
**DOUBTERS.**

THERE WILL BE  
**MISTAKES.**

BUT WITH  
**HARD WORK,**  
THERE ARE  
**NO LIMITS.**





# Problems During Start of Preparations

*‘With discipline, dedication, and diligence, you will achieve the goal’*



How to start ?



What points to cover ?



What is more important ?



What to refer ?

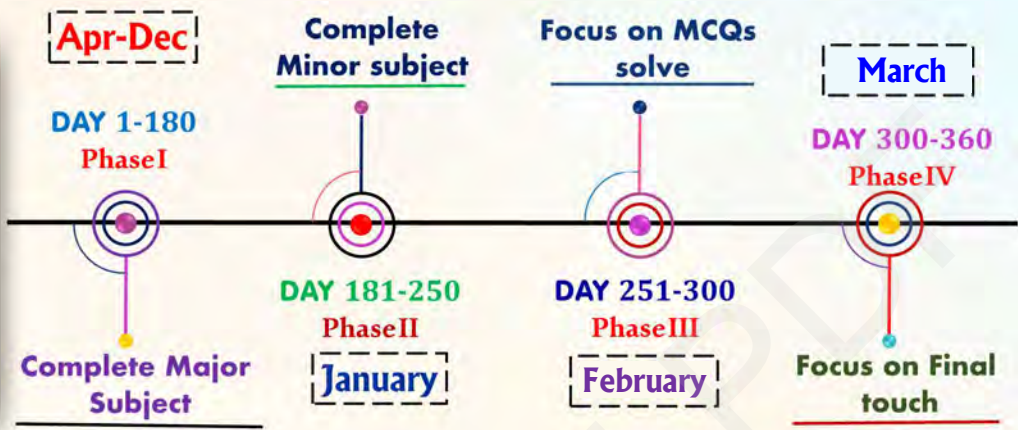
Are you ready for exams?

How to prepare ?

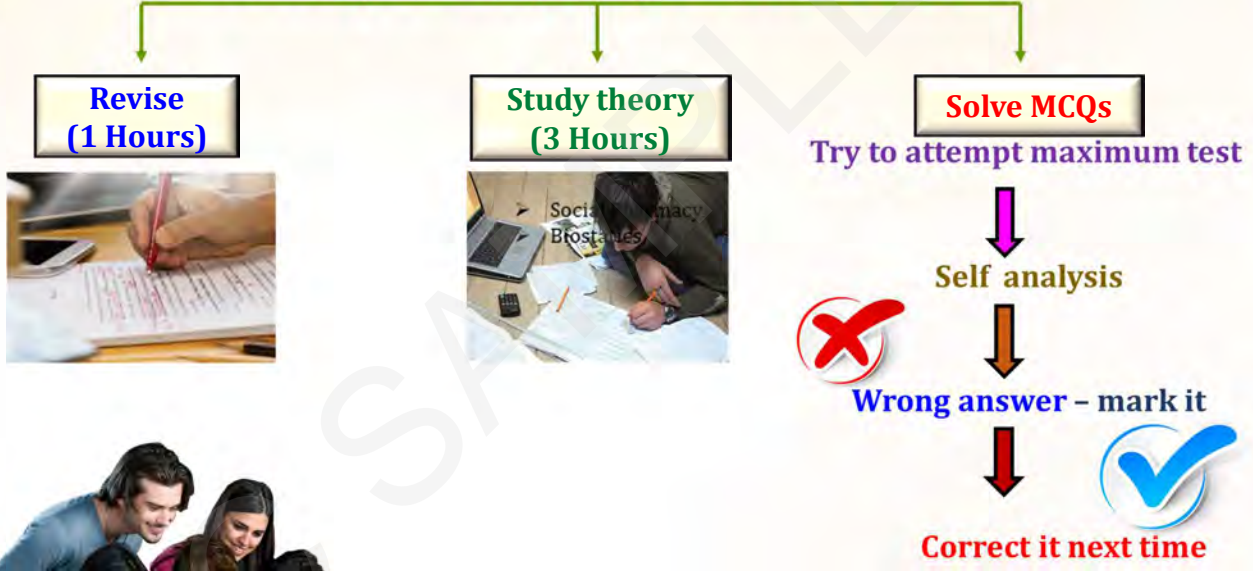


Let overcome this problems with GDC Planner

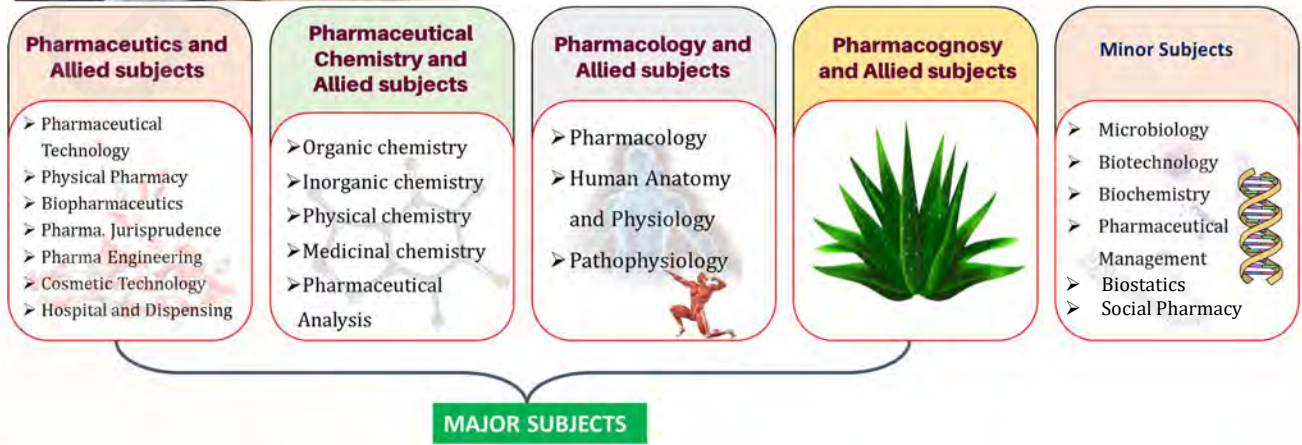
# \*\*\* STUDY PLANNER \*\*\*



## Self Study Everyday 3-4 Hours



## GPAT SUBJECTS



# GPAT STRATEGY



**Revision**



GPAT Fingertips

50 Days Model Papers

PY MCQs 2010-2026 (GPAT Mantra)

Digester 1 - 2 Hours

Marathon Classes

Complete Revision

Follow: Chart, Tables

One Week Schedule



“Revision fuels success”

Recommend these BOOKs and GPAT Mahamarathon Series for GPAT - 2027



**MAHA MARATHON for Class GPAT-2027**

One Stop Destination For GPAT ASPIRANT'S

GPAT 12400+ MCQs

Classes Starting From [Date]

Join Live classes on YouTube Channel

Join Live Class EVERY DAY at 9:00 PM

LET'S READY GDC:ANS FOR MARATHON 2027

Download "GDC CLASSES" App For Practice Online Test Series

**DIGESTER Rapid Revision Notes**

The Success Guide

HARD COPY + e-BOOK

GPAT

Scoring in GPAT MADE EASY

**GPAT AT YOUR FINGERTIPS**

Theory Book

Topper's Trusted Book

Chapterwise Student Friendly Synopsis For Quick-and-Easy Revision

3rd Edition

Boost Your GPAT Score Essential for GPAT Examination

OBJECTIVE **GPAT AT YOUR FINGERTIPS**

Scoring in GPAT MADE EASY

Practice MCQs Extracted from Reference Books

Topper's Trusted Book

Features

- Based on Latest Syllabus
- 8,000+ MCQ Bank
- Topicwise-Subjectwise MCQs
- Up to Date Previous Year Questions
- 3 Model Papers

Boost Your GPAT Score Essential for GPAT Examination

# BIGGEST Announcement

## EVER

for **PHARMA STUDENTS**

GPAT DISCUSSION CENTER

*Announces*

# MERITORIOUS AWARDS

FOR GPAT-2027 TOPPERS

**5** **AIR-1**  
**Lakhs**

**2** **AIR-2** **1** **AIR-3**  
**Lakhs** **Lakh**

**AIR 4-5** **Rs. 50,000**  
Per Student

**AIR 6-10** **Rs. 20,000**  
Per Student

**AIR 11-25** **Rs. 10,000**  
Per Student

**AIR 26-100** **Rs. 5,000**  
Per Student

"These awards will be given only to **GPAT DISCUSSION CENTER** Current/Previous year student enrolled in Classroom/Prime/Crash Course/Postel/Online Test/Interview Guidance."

# Trophy for Every GDCians

## Every GPAT-2027

Qualified student from GDC will get Trophy & Certificate to their doorstep



only for **GDC Students**



GPAT™  
DISCUSSION CENTER

GPAT™  
DISCUSSION CENTER



# SCHOLARSHIP AWARD

FOR B.PHARM 3<sup>RD</sup> YEAR STUDENTS!  
GPAT Qualifiers Under Rank 1000

*Will get*

## Exam Form Fee Back

GDC always With Hardworking and Dedicated Students



# GPAT FELICITATION

Just after GPAT Results



## HIGHLIGHTS



# PLANNER



# Resource Listing

## You Tube Channels

- 
- 
- 
- 
- 



## Mentors

Write the name in box 



## Books



## Test Series

- 
- 
- 
- 
- 



# Monthly Targets.....

Task List



Target



Other subjects

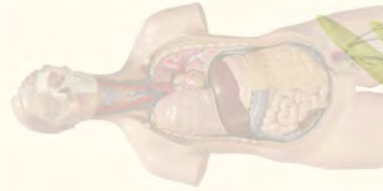
Pharmacognosy

Pharmaceutical Chemistry

Pharmacology

Pharmaceutics

Date



You Can take a print out of this planner or Create your own planner accordingly

# Weekly Planner

Mon	
Tue	
Wed	
Thus	
Fri	
Sat	
Sun	


## Study notes



## Test to attempt



## Revision



reminder

You Can take a print out of this planner or Create your own planner accordingly





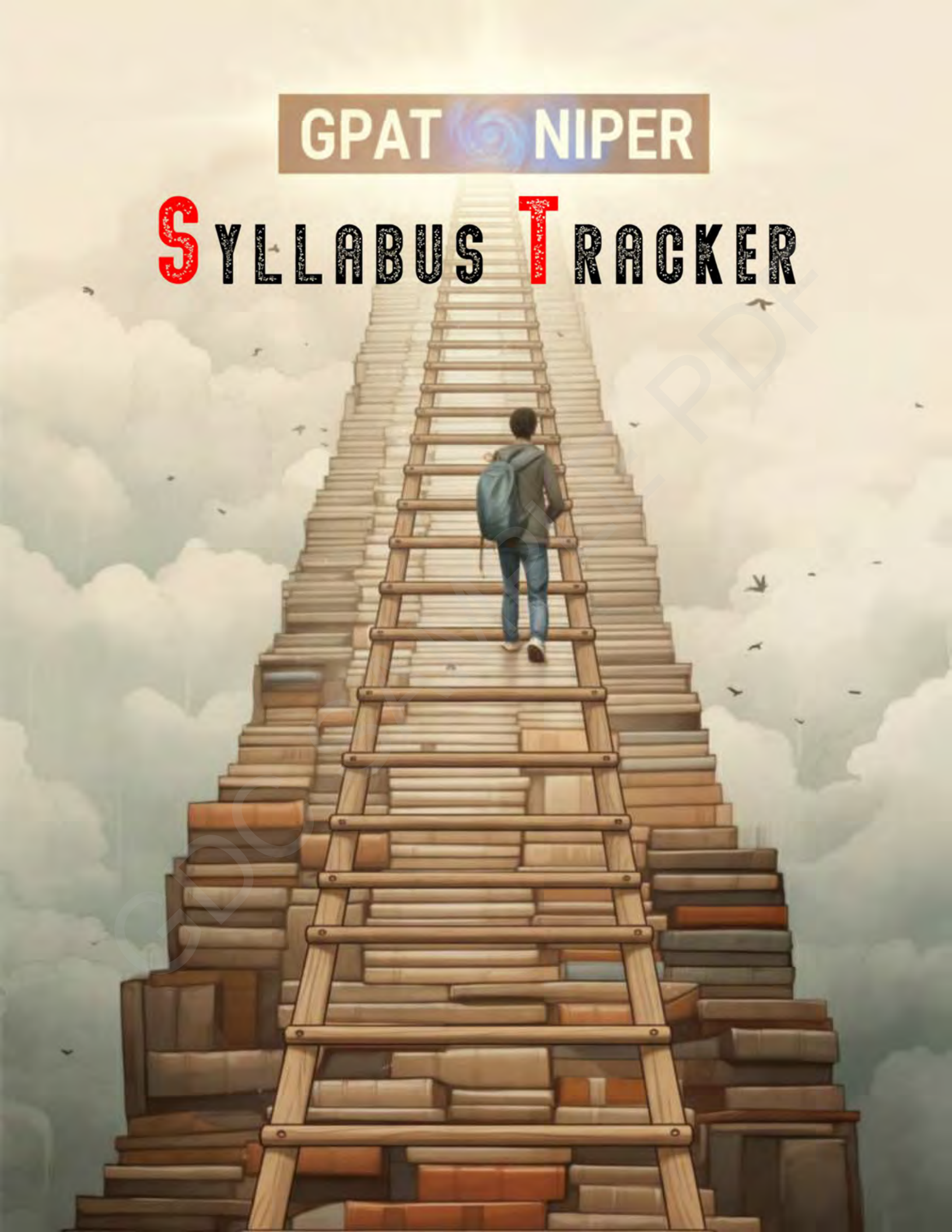
*To Achieve Success,  
Analyse Yourself  
First And Detect  
Your Weakness To  
Overcome Them.*





GPAT NIPER

**S**YLLABUS **T**RACKER





# **PHARMACEUTICS**

**&**

# **ALLIED SUBJECTS**



# HOW TO STUDY PHARMACEUTICS

**P**HARMACEUTICS is the science of medicines design, which involves:

- **Design**
- **Development**
- **Evaluation of drugs in combination with appropriate dosage form**



## PREVIOUS YEAR QUESTION ANALYSIS

SUBJECT	2026	2025	2024	2023	2023	2022
				1 <sup>st</sup> Shift	2 <sup>nd</sup> Shift	
Pharmaceutical Technology	16	12	13	16	09	12
Physical Pharmacy	4	15	04	14	11	10
Bio-Pharmaceutics	4	5	02	03	07	06
Dispensing Pharmacy	0	0	03	02	03	01
Hospital & Clinical Pharmacy	1	0	01	00	00	02
Cosmetic Technology	0	0	00	00	00	01
Pharmaceutical Jurisprudence	7	7	05	04	05	04
Pharmaceutical Engineering	6	2	04	02	06	05
Pharmaceutical Management	0	0	03	02	02	02
<b>TOTAL</b>	<b>38</b>	<b>41</b>	<b>35</b>	<b>43</b>	<b>43</b>	<b>43</b>

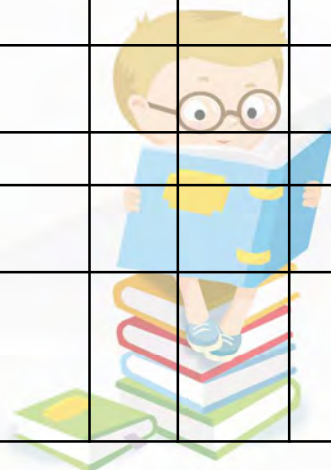
# Chapter Wise Weightage Analysis and Syllabus



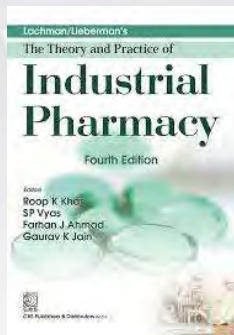
## Pharmaceutical Technology



S. No.	Chapter name	No. of days to complete	PYQ Analysis						Notes	Revision	Remark
			2026	2025	2024	2023- I	2023 - II	2022			
1.	Pharmacy profession & Pharmacopoeia		00	00	00						
2.	Preformulation		03	00	02						
3.	Monophasic Liquids Dosage Form		01	01	00						
4.	Suspension		00	03	00						
5.	Emulsion		01	00	00						
6.	Semisolids Dosage Form		00	00	00						
7.	Suppositories		00	00	00						
8.	Powders		00	00	00						
9.	Tablets		01	03	06						
10.	Capsule		01	01	02						
11.	Microencapsulation		00	00	00						
12.	Aerosols		00	00	00						
13.	Sterilization		02	01	00						
14.	Parenteral preparation		03	02	01						
15.	Ophthalmic preparation		01	00	00						
16.	NDDS, TDDS		01	01	01						
17.	Packaging materials		02	00	00						
18.	Pilot plant scale-up and production management		00	00	01						



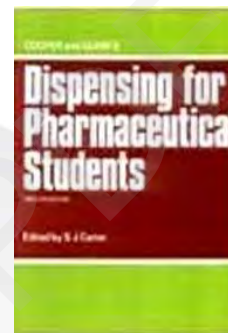
# REFERENCE BOOKS FOR Pharmaceutics and Allied Subjects



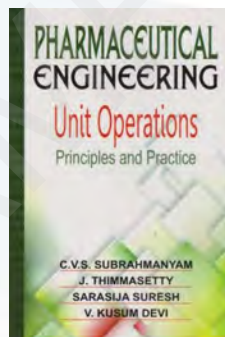
**Lachman/Lieberman's  
Pharmaceutical  
Technology**



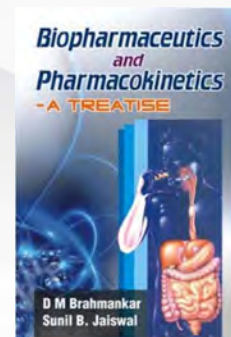
**Martin's  
Physical  
Pharmaceutics**



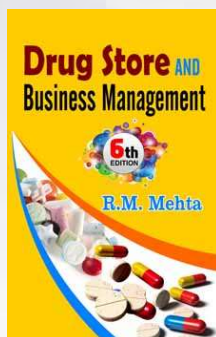
**Cooper and Gunn's  
Dispensing  
Pharmacy**



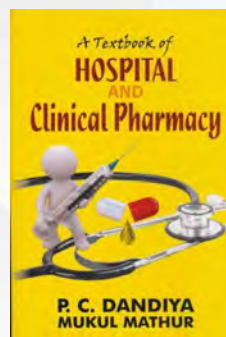
**CVS Subrahmanyam  
Pharmaceutical  
Engineering**



**D.M. Brahmankar  
Bio-pharmaceutics**



**R. M. Mehta  
Drug Store  
AND Business  
Management**



**P. C. Dandiya  
Hospital &  
Clinical  
Pharmacy**



**NK Jain  
Pharmaceutical  
Jurisprudence**





# PHARMACOLOGY



&



# ALLIED

# SUBJECTS



# HOW TO STUDY PHARMACOLOGY

**PHARMACOLOGY** is the scientific study of the effects of drugs and chemicals on living organisms, including any chemical substance, manmade or natural, that has an effect on a biological system.



A  
L  
L  
I  
E  
D  
S  
U  
B  
J  
E  
C  
T  
S

→ Pharmacology and Toxicology

→ Human Anatomy and Physiology

→ Pathophysiology

## PREVIOUS YEAR QUESTION ANALYSIS

SUBJECT	2026	2025	2024	2023 1 <sup>st</sup> Shift	2023 2 <sup>nd</sup> Shift	2022
Pharmacology	26	30	22	29	26	22
Human Anatomy and Physiology	07	03	12	03	03	05
Pathophysiology	02	01	07	01	01	02
<b>TOTAL</b>	<b>35</b>	<b>34</b>	<b>41</b>	<b>33</b>	<b>30</b>	<b>29</b>

# Chapter Wise Weightage Analysis and Syllabus



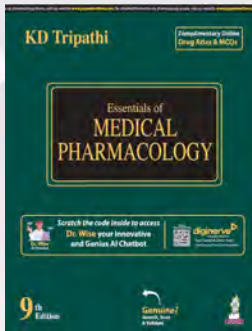
## Pharmacology



S. No.	Chapter name	No. of days to complete	PYQ Analysis						Notes	Revision	Remark
			2026	2025	2024	2023 - I	2023 - II	2022			
1.	General Pharmacology		05	03	06						
2.	Drugs Acting on Autonomic Nervous System		01	03	01						
3.	Autacoids and Related Drugs		03	01	01						
4.	Drugs Acting on Respiratory System		00	03	00						
5.	Hormones and Related Drugs		03	02	01						
6.	Drugs Acting on Peripheral Nervous System		00	01	00						
7.	Drugs Acting on Central Nervous System		05	02	00						
8.	Cardiovascular Drugs		02	02	03						
9.	Drugs Acting on Kidney		01	01	01						
10.	Drugs affecting Blood and Blood Formation		00	03	01						
11.	Gastrointestinal Drugs		00	01	00						
12.	Antimicrobial Drugs		04	05	06						
13.	Chemotherapy of Neoplastic Disease		01	02	00						
14.	Miscellaneous drugs		01	01	01						



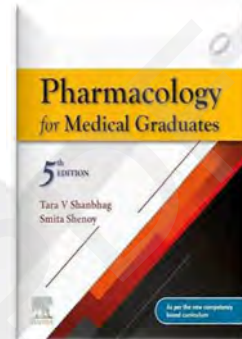
# REFERENCE BOOKS FOR Pharmacology and Allied Subjects



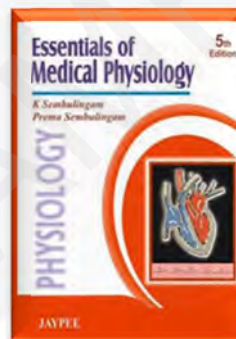
**Essential of Medical  
Pharmacology**  
By: KD Tripathi



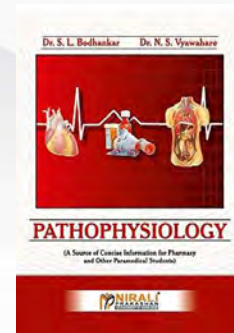
**Review of  
Pharmacology**  
By: Sparsh Gupta



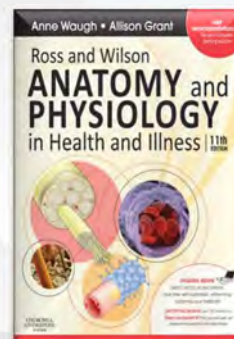
**Pharmacology for  
medical graduates**  
By: Tara V Shanbhag MD



**Essential of Medical  
Physiology**  
By: K. Sembulingam



**Pathophysiology**  
By: Dr. S. L. Bodhankar



**Anatomy and Physiology  
in health and illness**  
By: Ross and Wilson





**PHARMACEUTICAL  
CHEMISTRY  
&  
ALLIED SUBJECTS**



# HOW TO STUDY PHARMACEUTICAL CHEMISTRY

**CHEMISTRY** study of the composition and the physical and chemical properties of various forms of matter.

- Drug Design
- Nomenclature and reactions of compounds
- Synthesis of Drugs
- Physical and Chemical studies of drugs
- Modification of existing Drugs

## PHARMACEUTICAL CHEMISTRY

Medicinal Chemistry

Organic Chemistry

Inorganic Chemistry

Physical Chemistry

Pharmaceutical Analysis

## PREVIOUS YEAR QUESTION ANALYSIS

SUBJECT	2026	2025	2024	2023 1 <sup>st</sup> Shift	2023 2 <sup>nd</sup> Shift	2022
Medicinal Chemistry	12	08	14	04	05	03
Organic Chemistry	09	13	07	14	15	16
Pharmaceutical Analysis	07	12	06	08	08	07
Physical Chemistry	00	04	01	03	02	03
Inorganic Chemistry	03	00	03	00	00	00
<b>TOTAL</b>	<b>31</b>	<b>37</b>	<b>31</b>	<b>29</b>	<b>30</b>	<b>29</b>

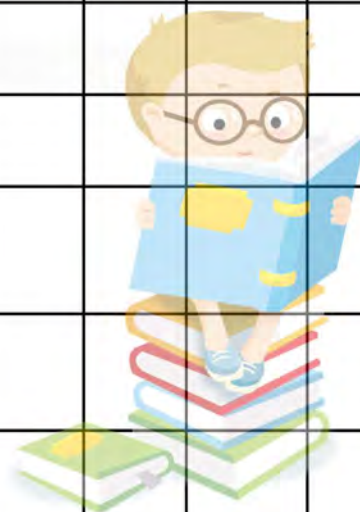
# Chapter Wise Weightage Analysis and Syllabus



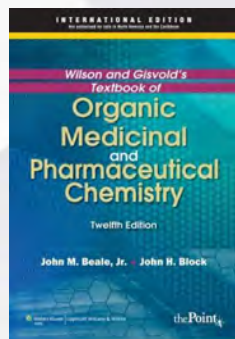
## Medicinal Chemistry



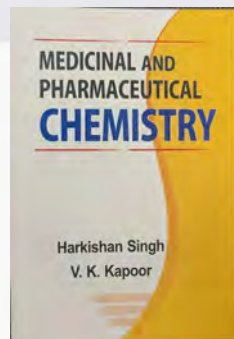
S. No.	Chapter name	No. of days to complete	PYQ Analysis					Notes	Revision	Remark
			2026	2025	2024	2023 S - I	2023 S - II			
1.	Basics of Medicinal Chemistry		01	01	01					
2.	Autonomic Nervous System		00	01	02					
3.	Autacoids and related drugs		00	00	01					
4.	Respiratory System Drugs		00	00	00					
5.	Central Nervous System		00	01	01					
6.	Peripheral Nervous System		01	00	01					
7.	Hormones and Related Drugs		02	03	01					
8.	Cardiovascular system		03	00	00					
9.	Drugs Acting on Kidney		00	00	01					
10.	Drugs Acting on Blood		00	00	01					
11.	Gastro-intestinal Drugs		00	01	01					
12.	Anti-microbial Agents		05	00	02					
13.	Chemotherapy of Neoplastic Agents		00	01	02					



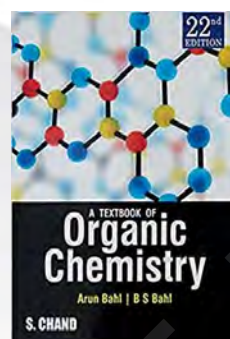
# REFERENCE BOOKS FOR Pharmaceutical chemistry and Allied Subjects



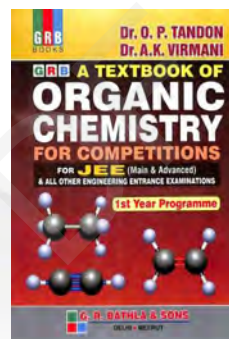
**Wilson and Gisvold's  
Textbook of Organic  
Medicinal and  
Pharmaceutical Chemistry**



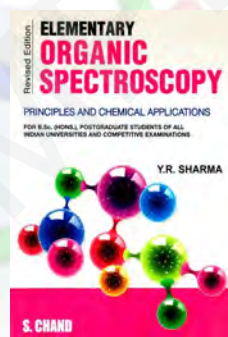
**Medicinal and  
Pharmaceutical Chemistry  
By: Harkishan Singh**



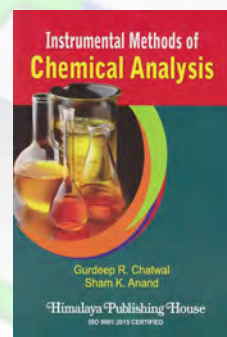
**Organic  
Chemistry  
By: S. Chand**



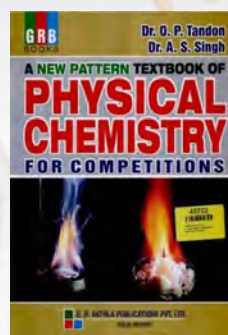
**Organic  
Chemistry  
By: Dr. O.P.Tandon**



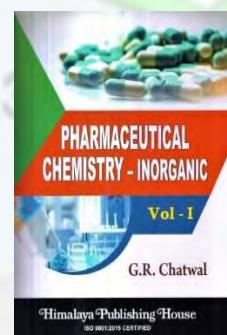
**Pharmaceutical  
Analysis  
By: S. Chand**



**Pharmaceutical  
Analysis  
By: Gurdeep R. Chatwal**

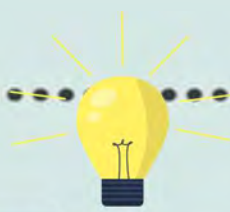


**Physical  
Chemistry  
By: Dr. O. P. Tandon**



**Inorganic  
Chemistry  
By: Gurdeep R. Chatwal**





# PHARMACOGNOSY



# HOW TO STUDY PHARMACOLOGY

**PHARMACOLOGY** is the study of crude drug which obtained from natural source such as plants, microbes, and animals.

Study of crude drugs involves----

Chemical constituent

Synonyms

Uses

Biological source

Adulterants

Microscopy

## PREVIOUS YEAR QUESTION ANALYSIS

TOPIC	2026	2025	2024	2023 1 <sup>st</sup> Shift	2023 2 <sup>nd</sup> Shift	2022
Introduction of Pharmacology	3	2	2	3	4	3
Alkaloids	1	1	0	2	2	2
Glycosides	2	1	2	3	1	3
Lipids and Volatile oil	0	0	2	2	0	2
Resin	0	0	2	0	1	0
Tannins	0	1	2	0	1	0
Carbohydrates	0	0	0	0	1	0
Herbal Drug Technology	3	0	0	0	0	0
<b>TOTAL</b>	<b>09</b>	<b>05</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

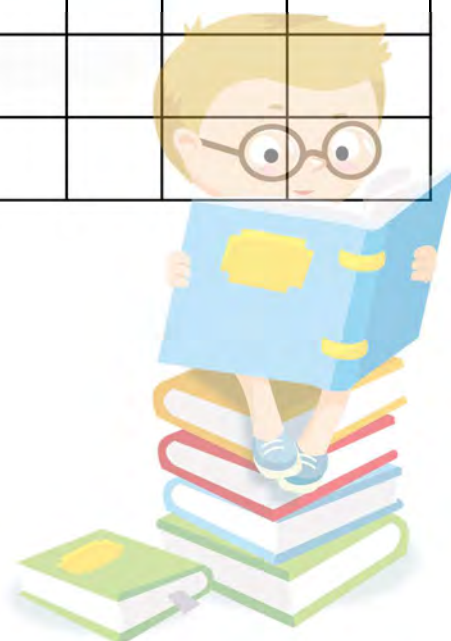
# Chapter Wise Weightage Analysis and Syllabus



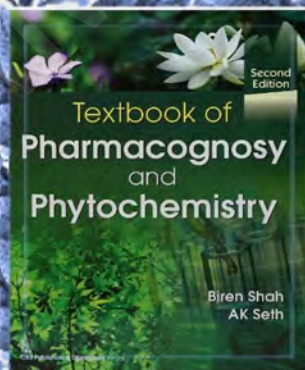
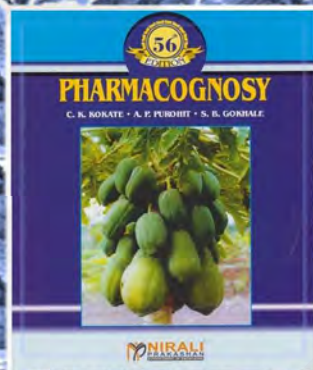
## Pharmacognosy

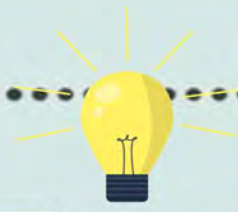


S. No.	Chapter name	No. of days to complete	PYQ Analysis						Notes	Revision	Remark
			2026	2025	2024	2023 - I	2023 - II	2022			
1.	Introduction of Pharmacognosy		03	02	02						
2.	Alkaloids		01	01	00						
3.	Glycosides		02	01	02						
4.	Lipids		00	00	01						
5.	Volatile oil		00	00	01						
6.	Resin		00	00	02						
7.	Tannins		00	01	02						
8.	Carbohydrates		00	00	00						
9.	Plant fibres		00	00	00						
10.	Mineral drug		00	00	00						
11.	Marine drug		00	00	00						
12.	Natural pesticide		00	00	00						
13.	Herbal drug technology		03	00	00						



# REFERENCE BOOKS FOR Pharmacognosy and Allied Subjects



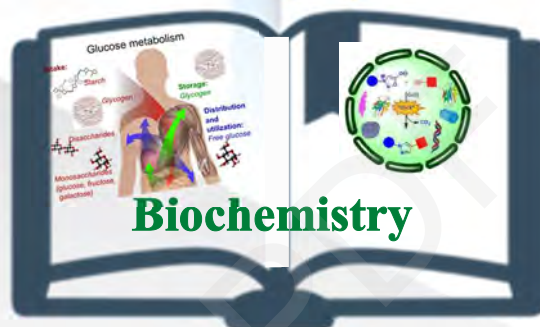


# **Other Subjects of B. Pharm Course**



# HOW TO STUDY Other Subjects

**Biochemistry**, is the study of the chemical processes and substances that occur within living organisms.



**Biotechnology**, is a multidisciplinary field that uses living organisms and natural sciences to create products and services.



**Microbiology**, is the study of microscopic organisms, or microbes, that are too small to be seen with the naked eye.



## PREVIOUS YEAR QUESTION ANALYSIS

SUBJECT	2026	2025	2024	2023 1 <sup>st</sup> Shift	2023 2 <sup>nd</sup> Shift	2022	2021
Biochemistry	00	02	02	04	04	05	07
Biotechnology	03	00	01	01	02	01	01
Microbiology	05	03	05	04	04	03	04
Biostatistics	01	02	03	00	00	00	00
Social and Preventive Pharmacy	03	01	00	00	00	00	00
<b>TOTAL</b>	<b>12</b>	<b>08</b>	<b>11</b>	<b>09</b>	<b>10</b>	<b>09</b>	<b>12</b>

# Chapter Wise Weightage Analysis and Syllabus



## Biochemistry



S. No.	Chapter name	No. of days to complete	PYQ Analysis					Notes	Revision	Remark
			2026	2025	2024	2023-I	2023-II			
1.	Carbohydrates and Metabolism		00	00	01					
2.	Lipids and Metabolism		00	00	00					
3.	Proteins and Metabolism		00	02	00					
4.	Nucleic acids		00	00	00					
5.	Enzymes		00	00	00					
6.	Vitamins		00	00	01					
7.	Biological oxidation and Other topics		00	00	00					



## Biotechnology



S. No.	Chapter name	No. of days to complete	PYQ Analysis					Notes	Revision	Remark
			2026	2025	2024	2023-I	2023-II			
1.	Plant and Tissue Culture		00	00	00					
2.	Animal Cell Culture		00	00	00					
3.	Fermentation Technology		03	00	00					
4.	Recombinant DNA Technology		00	00	01					
5.	Proteomics		00	00	00					



## Biostatistics



S. No.	Chapter name	No. of days to complete	PYQ Analysis					Notes	Revision	Remark
			2026	2025	2024	2023-I	2023-II			
1.	Probability & Graphs		00	00	03					
2.	Parametric test		00	01	00					
3.	Non-Parametric tests		01	01	00					



# Syllabus

- GPAT
- NIPER
- DPP
- LAKSHYA

# PHARMACEUTICS AND ALLIED SUBJECTS

## PHARMACEUTICAL TECHNOLOGY

1. Pharmacy Profession & Pharmacopoeia
2. Preformulation
3. Monophasic Liquids Dosage Form
4. Biphasic Liquids Dosage Form (Suspension, Emulsion)
5. Semisolids Dosage Form
6. Suppositories
7. Powders
8. Tablets
9. Capsules and Microencapsulation
10. Pharmaceutical Aerosols
11. Sterilization
12. Parenteral products
13. Ophthalmic preparations
14. Novel Drug Delivery System
15. Cosmetics
16. Packaging Materials
17. Pilot plant scale up techniques
18. Drug Regulatory Affairs
19. Regulatory requirements for drug approval
20. Indian Regulatory Requirements
21. Quality Management System: Quality Control and Assurance



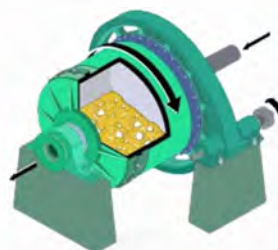
## PHYSICAL PHARMACY

1. States of Matter and properties of matter
2. Micromeritics and powder rheology
3. Surface and interfacial phenomenon
4. Viscosity and rheology
5. Dispersion systems
6. Suspension and emulsion
7. Complexation and protein bindings
8. pH, Buffer and Isotonic solution
9. Solubility
10. Drug stability



## PHARMACEUTICAL ENGINEERING

1. Flow of fluids
2. Size reduction & Size separation
3. Heat transfer
4. Evaporation
5. Distillation
6. Drying
7. Mixing
8. Extraction
9. Crystallization
10. Filtration and Centrifugation
11. Dehumidification and humidity control
12. Materials of construction



## BIOPHARMACEUTICS AND PHARMACOKINETICS

1. Introduction to Biopharmaceutics and Pharmacokinetics (ADME of Drugs)
2. Protein Binding of drugs
3. Compartment Models
4. Nonlinear Pharmacokinetics
5. Bioavailability and Bioequivalence
6. Drug Response and pharmacological Response



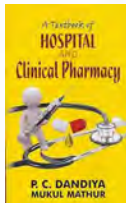
*"In pharmaceuticals, precision and passion combine to create life-changing medicines."*



# PHARMACEUTICS AND ALLIED SUBJECTS

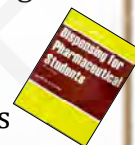
## HOSPITAL AND CLINICAL PHARMACY

1. Hospital and its organization
2. Hospital pharmacy and its organization
3. Adverse drug reaction
4. Community Pharmacy
5. Drug distribution system
6. Hospital formulary
7. Therapeutic drug monitoring
8. Medication adherence
9. Pharmacy and Therapeutic Committee
10. Drug Information Services
11. Clinical Pharmacy
12. Over the counter (OTC) sales
13. Drug store management and inventory
14. Interpretation of Clinical Laboratory Tests



## DISPENSING PHARMACY

1. Prescription
2. Compounding and dispensing of following prescriptions
3. Posology
4. Pharmaceutical calculations
5. Pharmaceutical incompatibilities



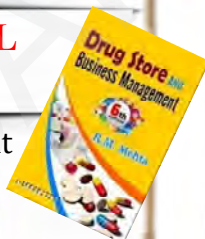
## PHARMACEUTICAL JURISPRUDENCE

1. History of Drug legislation in India
2. Code of Ethics for Pharmacists
3. Pharmacy Act
4. Drugs and Cosmetics Act
5. Narcotic Drugs and Psychotropic Substances Act and Rules
6. Drugs and Magic Remedies Act 1954
7. Medicinal and Toilet Preparations (Excise Duties) Act 1955, Rules 1976
8. Medical Termination of Pregnancy Act 1970 and Rules 1975
9. Prevention of Cruelty to Animals Act
10. Drug (Price Control) Order
11. Factory Act
12. Consumer Protection Act
13. Industrial Development and Act 1951
14. Intellectual Property Rights and Indian Patent Act 1970
15. An Introduction to Standard Institutions and Regulatory Authorities such as BIS, ASTM, ISO, TGA, USFDA, MHRA, ICH, WHO, CDSCO
16. Minimum Wages Act 1948
17. Prevention of Food Adulteration Act
18. Right to information



## PHARMACEUTICAL MANAGEMENT

1. Introduction to management
2. Planning and Forecasting
3. Organization
4. Research & Inventory Management
5. Communication
6. Marketing and pharmaceutical markets
7. Pharmaceutical marketing channels
8. Product Decision & Promotion
9. Leadership and motivation
10. Human Resource and Development Professional Sales Representatives
11. GATT
12. World trade organization (WTO) and trade related IPR (TRIPS)
13. Regulatory authorities (BIS, ISO, USFDA, CDSCO, ICH, WHO)



# PHARMACOLOGY & ALLIED SUBJECTS

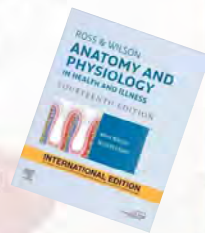
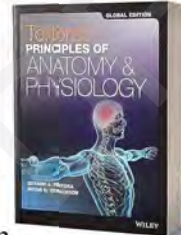
## PHARMACOLOGY

1. General Pharmacology
2. Drugs acting on Autonomic Nervous System
3. Drugs acting on Peripheral Nervous System
4. Drugs acting on Central Nervous System
5. Drugs acting on Cardiovascular System
6. Drugs acting on Urinary System
7. Drugs acting on Respiratory System
8. Drugs acting on Endocrine System
9. Drugs Affecting Blood and Blood Formation
10. Drugs acting on the Gastrointestinal Tract
11. Antineoplastic agents
12. Chemotherapy
13. Autacoids and Related Drugs
14. Chronopharmacology
15. Immunopharmacology
16. Principles of toxicology
17. Pharmacological Screening Methods



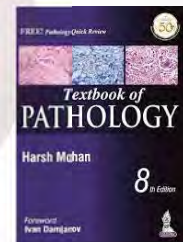
## HUMAN ANATOMY AND PHYSIOLOGY

1. Cell physiology
2. Tissues
3. Blood
4. Sense Organs
5. Skeletal System
6. Cardiovascular system
7. Nervous System (ANS, PNS, CNS)
8. Digestive System
9. Respiratory System
10. Urinary System
11. Endocrine System
12. Reproductive System
13. Lymphatic system



## PATHOPHYSIOLOGY

1. Basic principles of cell injury and adaptation
2. Basic mechanisms of inflammation and repair
3. Hypersensitivity
4. Auto-immunity & diseases of immunity
5. Neoplastic diseases
6. Shock
7. Protein calorie malnutrition, vitamins, obesity, starvation
8. Pathophysiology of common diseases (CVS, Respiratory system, Renal system, Haematological, Endocrine system, Gastrointestinal system, Nervous system, Bones and joint)
9. Sexually transmitted diseases
10. Infectious diseases



*“Studying pharmacology is about understanding the language of drugs and their impact on the human body.”*



# Speak 5 lines to Yourself Every Morning

**1. God is always with me.**

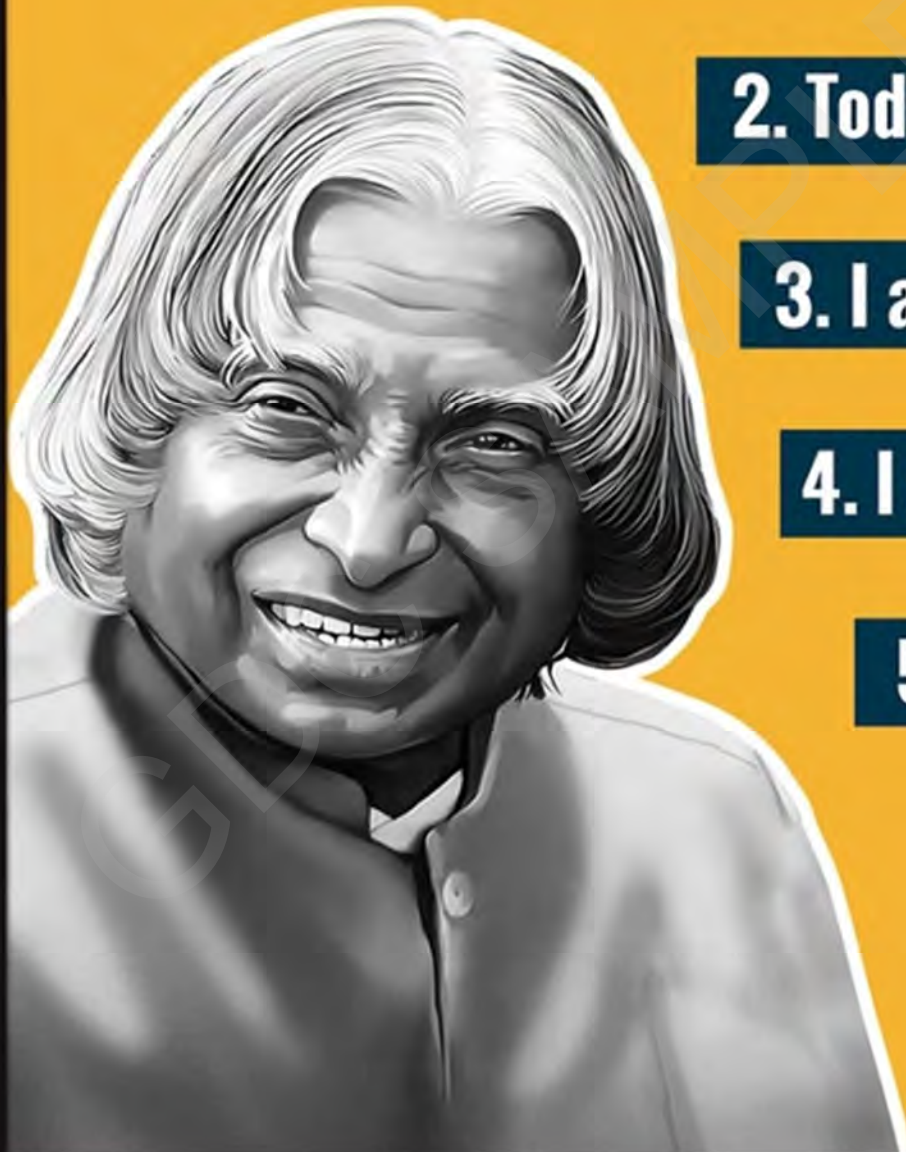
**2. Today is my day.**

**3. I am a Winner.**

**4. I am the Best.**

**5. I can do it.**

*A. P. J. Abdul Kalam*



# NIPER

# Syllabus

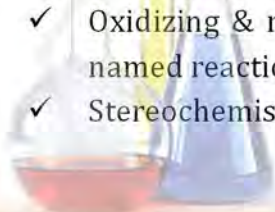


# NIPER Syllabus

## Based on B. Pharm

### ORGANIC CHEMISTRY AND BULK DRUGS

- ✓ IUPAC nomenclature, R and S nomenclature, E and Z isomerism, atropisomerism, Conformations laws. Hybridization, aromaticity, Huckel's rule reaction mechanisms- Electrophilic, Nucleophilic, SN1, Sn2, Elimination E1, E2 etc.
- ✓ Ester hydrolysis, Aac1 Aac2..all eight mechanisms (Jerry march) Markovnikov's rule with examples, Bredt's rule, Stereoselectivity, stereospecificity, regioselectivity, chemoselectivity, chirality, stereochemistry, conformations, rearrangements, acids and bases.
- ✓ Imine-enamine Tautomerism, keto-enol tautomerism, pericyclic reactions, racemic mixture, Resolution methods.
- ✓ Amino acids, proteins, various methods for amino acid detection, Ninhydrin test, peptide sequencing, structures of amino acids, essential and nonessential amino acids.
- ✓ Introduction to thermal methods of analysis like, TGA, DSC, DTA etc.
- ✓ Carbohydrates, osazone test, mutarotation, etc.
- ✓ Various Heterocycles, Heterocycle synthesis, reactions.
- ✓ Introduction to Redox reactions.
- ✓ Spectroscopy: (basics specially): Very very IMP topic. NMR, and C-NMR ranges from Morrison & Boyd or Pavia Mass -Basic concepts about various peaks M+1, molecular ion, base peak etc. (Silverstein)
- ✓ Chromatography: Details of every chromatographic method.
- ✓ Reaction kinetics, first second third and pseudo first order reactions, radio labeling for determination of mechanism.
- ✓ IR - Frequencies of various groups specially carbonyls. UV.
- ✓ Common condensation reactions like Aldol, Claisen, Perkin, Dickmann, Darzen etc
- ✓ Other reactions like Cannizzaro reaction, Prins reaction, especially reactions of carbonyl
- ✓ Oxidizing & reducing agents like sodium borohydride, chromic acid & their use in named reactions
- ✓ Stereochemistry chiefly, UV ranges, IR delta values, NMR peaks, Numerical



## PHARMACEUTICAL ANALYSIS

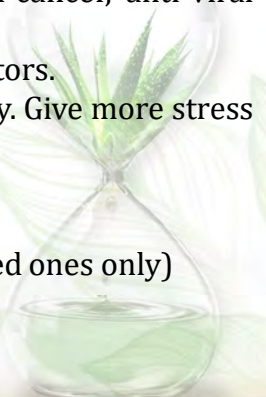
- ✓ Stability testing of pharmaceuticals, various stability tests, kinetic studies, shelf-life determination, thermal stability, formulation stability.
- ✓ Various analytical techniques
- ✓ Tests: physical and chemical tests, limit tests, microbiological tests, biological tests, disintegration and dissolution tests.
- ✓ Spectroscopic methods; UV, NMR, IR, MS, GCMS, FT-IR, FT-NMR, ATR (Attenuated Total Reflectance), FT-Raman- basics and applications.
- ✓ Thermal techniques: DSC, DTA, TGA, etc.
- ✓ Particle sizing: law of diffraction.
- ✓ Electrophoresis: capillary electrophoresis.
- ✓ Chromatography- detailed.
- ✓ QA and QC: GLP, TQM, ISO system.
- ✓ Preformulation, cyclodextrin inclusion compounds
- ✓ Solubility: pH, pka, surfactant HLB values, Rheology.
- ✓ Crystallinity, polymorphism, solvates and hydrates, crystal habits, porosity, surface area flow properties.
- ✓ Dosage forms, Stages of dosage form development
- ✓ Osmolality, osmolarity, osmotic pressure, conductivity, Preservatives, Media for bioassay



## PHARMACOGNOSY AND NATURAL PRODUCTS

In natural products more stress should be given on phytochemistry part rather than biological aspects.

- ✓ Methods of extraction, isolation and characterization of natural products. Various separation techniques used for isolation of natural products.
- ✓ Biosynthetic pathways.
- ✓ Primary metabolites, their examples.
- ✓ Secondary metabolites, various classes of secondary metabolites (e.g. Alkaloids, glycosides, tannins, lignans, saponins, lipids, flavonoids, coumarins, anthocyanidins etc.). Here most imp. Part is chemistry of these classes.
- ✓ Important therapeutic classes: antidiabetics, hepatoprotectives, immunomodulators, nutraceuticals, natural products for gynecological disorders, anti-cancer, anti-viral (mainly anti HIV), adaptogens etc.
- ✓ Dietary antioxidants, Marine natural products, Plant growth regulators.
- ✓ Spectroscopy: Basic concepts of UV, NMR, IR and Mass spectroscopy. Give more stress on IR and NMR.
- ✓ Stereochemistry: Basic concepts.
- ✓ Fischer, sawhorse and Newman's projection formula
- ✓ Biological sources of important classes of natural products. (Selected ones only)
- ✓ Standardization of natural products.
- ✓ What is difference between natural products and pharmacognosy
- ✓ Natural products as anti-viral & anti-cancer agents with examples.



# PHARMACOLOGY AND TOXICOLOGY

- ✓ Pharmacokinetics, pharmacodynamics, pharmacological effect, desired, undesired, toxic, adverse effects.
- ✓ Bioavailability, bioequivalence, various factors of ADME. (From Bramhankar)
- ✓ Drug metabolism: various pathways and other details.
- ✓ Drug interactions, agonist, antagonist, partial agonist, protein binding, drug distribution, distribution volume, excretion pathways etc.
- ✓ Pharmacological screening: general principles, various screening models, screening methodologies (in vitro and in vivo tests).
- ✓ Mechanism of drug action, drug-receptor interaction.
- ✓ Various adrenergic, cholinergic and other receptors.
- ✓ Detailed study of CNS pharmacology.
- ✓ Study of basis of threshold areas of work in NIPER in pharmacology dept. mentioned in brochure.
- ✓ Diseases: study of the pharmacology of the diseases and drugs used with mode of action especially of diabetes, malaria, leishmaniasis, TB, hypertension, myocardial ischemia, inflammation, and immunomodulation.
- ✓ Chemotherapy and pathophysiology- knowledge of antibiotics, their mode of action and the microorganisms responsible for various common diseases.
- ✓ Bioassay methods, various requirements. Brief knowledge of the statistical tests.
- ✓ Basic mechanism of all drugs with major side effects & classification.
- ✓ Receptors classification with examples.



**"Success is no Accident. it is Hard work, Perseverance, Learning, Studying, Sacrifice and most of all, love of what you are doing or Learning to do."**

## PHARMACEUTICS AND FORMULATION (PHARMACEUTICAL TECHNOLOGY)

- ✓ Drug Delivery Systems (DDS): NDDS models, osmotic pumps, various release patterns eg. Controlled release, delayed release. Sustained release etc. order of release. Oral controlled DDS, factors affecting controlled release.
- ✓ Carriers in DDS: polymers and their classification, types, carbohydrates, surfactants, proteins, lipids, prodrugs etc.
- ✓ Transdermal drug delivery systems (TDDS): principles, absorption enhancers, evaluation of TDDS.
- ✓ Parenterals: requirements, advantages, disadvantages, release pattern, route of drug delivery.
- ✓ Drug targeting: microspheres, nano particles, liposomes, monoclonal antibodies, etc.
- ✓ Preformulation detailed.
- ✓ Complexation, solubilization, polymerization, viscosity measurements.
- ✓ Dosage form development- stages, implications of dosage form.
- ✓ Additives of formulation, types, examples, advantages, disadvantages, drug excipient interaction, incompatibility, various types of incompatibilities.
- ✓ Dosage forms: solid (tablets, capsules, pills etc), liquid (emulsion, suspension etc), sterile (injectables), aerosols. Principles, advantages, disadvantages and problems.
- ✓ Coating - in detail.
- ✓ Packaging: materials, labeling etc. Types of containers (Tamper-proof containers)
- ✓ In process controls, Product specification, documentation.
- ✓ Compartmental modeling. (From Bramhankar)
- ✓ Bioavailability, bioequivalence studies. Methods of improvement of oral bioavailability.
- ✓ Evaluation of formulation, principles and methods of release control in oral formulations.

## PHARMACEUTICAL JURISPRUDENCE

- ✓ The Pharmacy Act
- ✓ Drugs and Cosmetics Act & Rules
- ✓ Narcotic Drugs and Psychotropic Substances Act
- ✓ Drugs and Magic Remedies
- ✓ Medicinal and Toilet Preparations
- ✓ Medical Termination of Pregnancy Act
- ✓ Prevention of Cruelty to Animals Act
- ✓ Drug (Price Control) Order.
- ✓ Intellectual Property Rights and Indian Patent Act
- ✓ Prevention of Food Adulteration Act and Rules



**Arise! Awake! Stop not until the  
goal is reached.**

***Swami Vivekananda***



**GPAT DISCUSSION CENTER PVT. LTD.**



**DPP**

**(DAILY PRACTICE  
PAPER)**

## PHYSICAL PHARMACY

DPP NO.	TOPIC NAME
<b>1. STATES OF MATTER</b>	
DPP - 1	Introduction, Gaseous State, Liquid State, Solid State and Change in States of Matter
<b>2. MICROMERITICS AND POWER RHEOLOGY</b>	
DPP - 2	Introduction, Particle Size and Particle Size Distribution, Powder Characteristics, Types of Powder According to Particle Size, Particle Size Determination (Methods), Surface Area and Determination of Surface Area
DPP - 3	Derived Properties of Powders (Density, Porosity or Voids, Packing Arrangements, Flow Properties), Factors Affecting Flow Ability
<b>3. SURFACE AND INTERFACIAL TENSION</b>	
DPP - 4	Surface and Interfacial Tension, Expression of Surface Tension, Measurement of S.T. and I.T., HLB System, Determination, RHLB, HLB Values of Some Common Surface Active Agent
DPP - 5	Classification of Surfactants, Wetting Agents, Detergency, Spreading, Adsorption, Adsorption Isotherm, Factors Affecting Adsorption, Critical Micelle Concentration (C.M.C.), Electrical Properties of Interface, Electrical Double Layer, Nernst Potential, Zeta Potential
<b>4. RHEOLOGY</b>	
DPP - 6	Introduction, Flow of Liquids, Newtonian System, Non-Newtonian System, Thixotropy, Anti thixotropy, Thixotropic Effect, Rheopexy, Determination of Rheologic Properties (Viscometer)
<b>5. DISPERSION SYSTEM</b>	
DPP - 7	Introduction, Classification, Colloidal Dispersion, Types Preparation, Purification and Properties of Colloids, Electrical Double Layer, Donnan Membrane Effect, Interaction and Stability of Colloids
<b>6. SUSPENSION</b>	
DPP - 8	Introduction, Advantages, Classification, Ideal Suspension Characteristics, Interfacial Properties of Solid, physical Stability and Settling behaviour of Suspension
DPP - 9	Formulation of Suspension, Wetting of Particles, Structured Vehicle, Controlled Flocculation, Controlled Flocculation in Structured Vehicle, Rheological Consideration and Evaluation Parameters
<b>7. EMULSION</b>	
DPP - 10	Introduction, Advantages, Classification, Identification test, Theories of Emulsification, Emulsifying Agents, Bancroft's Rule, Preparation of Emulsions, Physical Stability of Emulsion and Factors Improving Physical Stability

## PHARMACEUTICAL CHEMISTRY

ORGANIC CHEMISTRY	
DPP NO.	TOPIC NAME
<b>1. ORGANIC CHEMISTRY GENERAL PRINCIPLE</b>	
DPP - 1	Classification of organic chemistry
DPP - 2	IUPAC nomenclature
DPP - 3	Bridge ring
DPP - 4	Hybridization
DPP - 5	Bond parameter
DPP - 6	Hydrogen bonding
<b>2. REACTION MECHANISM</b>	
DPP - 7	Reaction intermediate
DPP - 8	Inductive effect-I
DPP - 9	Inductive effect-II
DPP - 10	Electromeric effect
DPP - 11	Resonance / Mesomeric effect-I
DPP - 12	Resonance / Mesomeric effect-II
DPP - 13	Aromaticity (Huckel's rule)
DPP - 14	Hyperconjugation
DPP - 15	Addition reaction-I
DPP - 16	Addition reaction-II
DPP - 17	Substitution reaction-I
DPP - 18	Substitution reaction-II
DPP - 19	Elimination reaction-I
DPP - 20	Elimination reaction-II
<b>3. ISOMERISM</b>	
DPP - 21	Structural isomerism
DPP - 22	Conformational isomerism - I
DPP - 23	Conformational isomerism - II
DPP - 24	Geometrical isomerism - I
DPP - 25	Geometrical isomerism - II
DPP - 26	Optical isomerism - I
DPP - 27	Optical isomerism - II
DPP - 28	Stereoselective organic reactions

# ONLINE TEST SERIES

# LAKSHYA GPAT

$$42 + 28 + 30 = 100$$

- ☑ One Demo Test Free
- ☑ 42 Topic Wise Test
- ☑ 28 Subject Wise Test
- ☑ 30 Mock Test
- ☑ Personalized Report

Join Us On Social Media



# LAKSHYA GPAT

## TEST SERIES SYLLABUS

Gpat Discussion Centre All India Test Series

S. no.	Test Type	Test Description	Topic	No. of Question
<b>TOPIC WISE TEST</b>				
1	Basic Level	Pharmacology- 1	General Pharmacology	100
2	Basic Level	Pharmacology-2	Drugs Acting on ANS	100
3	Basic Level	Pharmacology-3	Drugs Acting on CNS and PNS	100
4	Basic Level	Pharmacology-4	Diuretics & Respiratory System	100
5	Basic Level	Pharmacology-5	Drugs acting on GIT and Haematology	100
6	Basic Level	Pharmacology-6	Cardiovascular System,	100
7	Basic Level	Pharmacology-7	Autocoids	100
8	Basic Level	Pharmacology-8	Endocrinology-I(Full Syllabus)	100
9	Basic Level	Pharmacology-9	Endocrinology-I(Full Syllabus)	100
10	Basic Level	Pharmacology-10	Chemotherapy-I(Full Syllabus)	100
11	Basic Level	Pharmacology-11	Chemotherapy-II(Full Syllabus)	100
12	Basic Level	Pharmaceutics -1	Solution, Suspension, Emulsion, Semisolid, Suppository	100
13	Basic Level	Pharmaceutics -2	Tablet, Capsules, Microencapsulation, Aerosol, Ophthalmic, Parenteral -1	100
14	Basic Level	Pharmaceutics -3	Tablet, Capsules, Microencapsulation, Aerosol, Ophthalmic, Parenteral -2	100
15	Basic Level	Pharmaceutics -4	Cosmetic Technology	100
16	Basic Level	Pharmaceutics -5	Pharmaceutical Engineering (Drying, Evaporation, Distillation, Corrosion, Size Reduction, Mixing, Crystallization etc.)	100
17	Basic Level	Pharmaceutics -6	Dispensing Pharmacy	100
18	Basic Level	Pharmaceutics -7	Physical Pharmacy(Micromeretics and Powder Rheology, Surface and Interfacial Phenomenon, Viscosity and Rheology etc)	100
19	Basic Level	Pharmaceutics-8	Biopharmaceutics and Pharmacokinetics	100
20	Basic Level	Pharmaceutics-9	Pharmaceutical Jurisprudence	100
21	Basic Level	Pharmaceutics -10	Pharmaceutical Jurisprudence	100

# NIPER JEE 2025

M.S. (Pharm.)/M. Pharm.

8

Students in  
TOP 10 RANK

65

Students in  
TOP 100 RANK

Most of the Top Rankers students in **GPAT/NIPER -2025** are from **GDC PRIME Course**

1

**DSOUZA KEITH NEIL**  
M.S. (Pharm.)/M. Pharm.

AIR 2

**RAHUL CHOUHAN**  
M.S. (Pharm.)/M. Pharm.  
Classroom Student

AIR 3

**SHIVANI IYER**  
M.S. (Pharm.)/M. Pharm.  
Classroom Student

AIR 5

**ANUBHAV PANCHAL**  
M.S. (Pharm.)/M. Pharm.  
Classroom Student

AIR 4

**TAMOGHNO SARKAR**  
M.S. (Pharm.)/M. Pharm.  
Classroom Student

AIR 9

**SIMRAN RANE**  
M.S. (Pharm.)/M. Pharm.  
Classroom Student

AIR 10

**TUHIN MUKHERJEE**  
M.S. (Pharm.)/M. Pharm.  
Classroom Student

AIR 8

**SOURABH RATH**  
M.S. (Pharm.)/M. Pharm.  
Classroom Student

## GPAT DISCUSSION CENTER

Head Office : 3<sup>rd</sup> Floor, Shiv Hari Tower, Ashok Nagar,  
Sarkanda, Bilaspur (C.G.)

Phone : 9770765680, 8602227444

E-mail: [gdcgpat037@gmail.com](mailto:gdcgpat037@gmail.com)

Website : [www.gdcclclasses.com](http://www.gdcclclasses.com) | [www.gdconlinetest.in](http://www.gdconlinetest.in)



EASY TO LEARN STUDY MODULES FOR GPAT/NIPER  
(SET OF 16 BOOKS)

ISBN : 978-81-973484-7-1



9 788197 348471

Price : ₹ 5000.00