

GPAT ORIENTATION

BY:

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GPAT.....

Graduate Pharmacy Aptitude Test.

- ✓ Important for admission in Master courses.(M.Pharm, M.tech)
- ✓ **Online GPAT once in a year** conducted by AICTE, New Delhi
- ✓ 125 MCQ's (each for 4 marks) - 3 hrs duration – negative marking (wrong answer - 1 mark deduction).
- ✓ No deduction of marks if not attempted.
- ✓ The **GPAT 2018 exam score** will be **valid for three years.**
- ✓ Provision for re-grading/re-checking or re-totaling is present.
- ✓ Online test **at test centres** only.

✓ For more information visit to

<http://www.aicte-gpat.in>



GPAT-2018

GRADUATE PHARMACY APTITUDE TEST

Home Eligibility Payment Process Test Cities Syllabus Notification Past Results FAQs

GPAT 2018 Result Announced



Important Dates

Registration Start Date
Date : 20th October 2017

Registration End Date
Date : 25th December 2017

Exam Date



Eligibility Criteria

Applicant must be a citizen of India.

They must be Bachelor's degree holders in Pharmacy (4 years after 10+2, including lateral entry candidates)

Those who are in the final year of B. Pharmacy



Registration Info

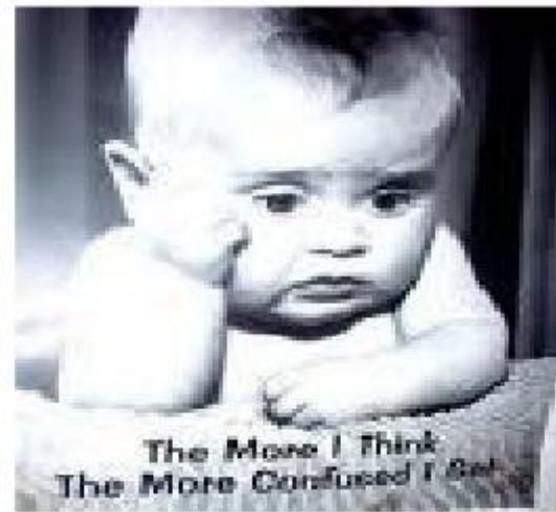
View Result

Existing User Login

Instructions For Filling Form

Eligibility Criteria

- ✓ Applicant must be a **citizen of India**.
- ✓ They must be **Bachelor's degree holders** in Pharmacy (4 years after 10+2, including lateral entry candidates)
- ✓ Those who are in the **final year of B. Pharmacy** course are also **eligible** for appearing in GPAT exam.
- ✓ B.Tech (Pharmaceutical and fine chemical technology) / Equivalent' Students are **not eligible** to appear for GPAT examination.
- ✓ No age limit



How to start ?



What to refer ?



What points to cover ?



What is more important ?

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How to prepare ?

How to start?

- ✓ Refer **Syllabus** 1st.
- ✓ Use following types of books -
 - (1) Fundamental and basic concepts
 - (2) Problem oriented-the one's used for GPAT
- ✓ Previous questions papers - **GATE- A companion**(by Inamdar madam) helpful to understand **Logic behind answer and type of questions frequently asked.**
- ✓ Keep contact with some experts and GPAT experienced persons.
- ✓ Start from the basic chapters.(like study nomenclature method, basic rings, types of receptors, chemical & pharmacological classification of drugs, etc.
- ✓ Refer **2 or 3 books**, keep 1 book as **standard** and add to it points from other.

- **Note down or mark** the probable concepts (definitions, unit, dimensions, theories, formulae, etc).
- Solve problems as much as possible.
- Use **tricks** in solving problems.
- **Self assessment**-most important.
- Continue the self assessment until getting a very good score.
- Solve more and more problems, discover more and more new tricks...
- **REMEMBER.....**
 - “No study No problems,
less study more problems,
more study few problems....”
- If you study well you will yourself have confidence of qualifying. So on the day of exam...you will be at your best & who can stop you then?

What to refer ?

- Study important subjects first.
- Do the rest of subject then - **They decide the toppers.**

Major:

- ❖ PH
- ❖ P'COLOGY
- ❖ MEDI.CHEM.
- ❖ PA
- ❖ P'COGNOSY
- ❖ OC

Minor:

- ❖ Biochem
- ❖ PJ
- ❖ PP
- ❖ Micro & Immunology
- ❖ Biotech
- ❖ Biopharmaceutics
- ❖ Clinical Pharmacy
- ❖ PE (UO)

SYLLABUS

“JUST READING MCQ’S FROM BOOKS DOESN’T ENSURE SUCCESS IN GPAT. IT WORKS ONLY SOMETIMES.”

DIVISION OF GPAT SYLLABUS

	Medicinal Chemistry & Pharmacology	Pharmaceutics & Cosmetics	Pharmaceutical Analysis	Biochemistry & Biopharmaceutics	Microbiology	Pharmacognosy
Part -I	Chemotherapeutic Agents: Structural formulae, Classification, nomenclature, Uses, Mechanism of action & structure- activity relationship of drugs belonging to categories of antibacterial, anti- protozoal, anti-malarial, anthelmintic	Manufacture, Standards, Presentation, labeling, Packing & storage of formulations belongs to categories of tablet & capsules. microencapsulation	Principle & applications of: Potentiometry, Conductometry & polarography	Vitamins deficiency & diseases caused, reactions catalyzed by them.	General Principles of microbiology, classification of different microbes, microbial flora of human pathogenicity.	Chemistry tests, uses & mode of action of pharmacognosy of bioflavonoid.
Part -II	sulphonamides, antibiotics, anti-amoebic agents, antiviral drugs, anti-tubercular drugs, anticancer	liquid orals & Ophthalmic Preparations. Semisolids, suppositories, D & C: schedules	Pharmacopoeial assays: A to F UV-visible, IR	Adverse Drug interaction	Methods used for identification, principles & methods of microbiological assays of the pharmacopoeia.	Steroids
Part -III	Pharmacotherapeutic Agents: Preparation structure, nomenclature, uses, mechanism of action & SAR of diuretics, analgesics, anti-histaminic, Stereochemistry, vitamins	Parenterals & aerosols. Pharmacy act, pharmaceutical Calculations	Chromatography, Pharmacopoeial assays G to L.	Enzymes & Hormones.	Immunological techniques used in pharmacy. Sterilization of different pharmaceutical, dosage forms, sterility testing.	Chemistry, tests, uses & mode of actions of terpenes/terpenoids Pharmacognosy of glycosides,
Part -IV	Anti-hypertensive, anti-anginal, cardiotoxic anti-lipidemic, anti-arrhythmic & vasodilators, anticoagulant, coagulants, anti-platelets, NSAIDS, antifungal, steroids, Eicosonoids & their application.	New Drug Delivery Systems. Basics of pharmacokinetics & their importance in formulation. Jurisprudence, Drying, Filtration	Principle of NMR, ESR Spectroscopy, Nephelometry, Pharmacopoeial assays M to R	Nucleic acid. Bioenergetics	Methods of preparation of official sera & vaccines.	Chemistry tests; uses & mode of action of Alkaloids, Purines, resins
Part -V	Drugs Acting on CNS i.e., sedative, hypnotics, neuroleptics, anti-depressants, anxiolytic, anti-convulsant, local anesthetic, diagnostic GIT, anti-parkinson drug, general anesthetics, anti-thyroid, anti-leprotic.	Biopharmaceutics. Packaging of pharmaceuticals D & C act: forms Kinetics, Viscosity, Rheology	Mass Spectroscopy Pharmacopoeial Assays S to Z	Immunological techniques, general tests, principles of immunology, bioassays.	Bioconversion, Genetic recombination	Quantitative microscopy modern techniques. Biotechnological principles, tissue Culture.
Part -VI	ANS i.e., adrenergic cholinergic, Respiratory, autacoids, hormones, hypoglycemic agents, Immunopharmacology, Bioassay, radio pharmaceuticals, general pharmacology, drug interaction	Cosmetics: Lipsticks, shampoo, creams, nail preparation dentifrices, D & C Act: miscellaneous, Micromeritics	Fluorimetry X-ray diffraction Flame Photometry	Introduction to biopharmaceutics, Pharmacokinetics, Bioavailability & bioequivalence	Serological & diagnostic	Guggul lipids Standardization of raw materials & herbal products, WHO guidelines.

1) PHARMACEUTICS

Lachman*, Aulton, Ansel, Banker, Remington, B. M. Mittal, Gupta & Bajaj, Piyush publication, etc.

- All Charts in **Lachman**,
- Semisolid –make charts that is enough
- Tablets(Q.C. tests, Dissolution apparatus,defects,coating defects)
- Capsules,
- Aerosols,
- Parenterals,
- Sterilisation,
- Pharmaceutical calculations(**Remington**)
- NDDS(niosomes, liposomes, resealed erythrocytes) .

2) PHARMACOLOGY

Rang & Dale, K. D. Tripathi*, Barar*, Lippincott, etc.

- Classification (**Vikas Sethi**-pocket book),
- MOA & Adverse effects,
- Drug-Drug Interaction,
- General Pharmacology,
- CNS,
- ANS,
- BIO ASSAY,
- ANTICANCER,
- GI SYSTEM,
- CVS

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3) MEDICINAL CHEMISTRY

Wilson and Grisvold*, Foye*, S. N. Pandeya, etc.

- Classification (prepare chart),
- Structure and Nomenclature (refer std. book only),
- SAR, stereoisomers (its importance).
- MOA
- Metabolism (metabolic product & its action).
- Adverse effects (major once only).
- Synthesis (from **S. N. Pandeya** or **Ashutoshkar**) - starting material, name of reaction if any, major catalyst used.

“Go for Retrosynthesis”

4) PHARMACEUTICAL ANALYSIS

Chatwal, Skoog, Willard, Remington, Pavia, Y. R. Sharma, Kasture, etc.

- U.V. Visible (Woodward Fischer rule & its problems).
- NMR (**Pavia**), ESR (**Chatwal**), Mass spectroscopy
- I.R- Ranges, sources, detectors, instrumentation.
- X- ray diffraction only (**Chatwal**)
- Problems(**Y. R. Sharma**)
- Chromatography methods- detectors (**Remington**)
- Assays (charts given in **Piyush publication**)
- Graphs of X Vs Y , methods & reagents used for calibration of instruments.
- Prepare Charts (principle,source, sample holders, detectors,use ,units of all spectroscopy)

5) PHARMACOGNOSY

Trease and Evans, Gokhale & Kokate*, Khandelwal*, Rangari, Wallis.

- General Pharmacognosy-imp (starting pages of **Gokhale & Kokate & Khandelwal**)
- All Biosynthetic Pathways
- Plant tissue culture
- Chemical tests (**Khandelwal**)-cross check some are wrong.
- Then start with Alkaloids, Glycosides, terpenoids, volatile oils, guggul lipid.etc – “**all drugs & make charts**”
- Hydrolysis products of few drugs(e.g., digitalis)
- Quantitative determinations(acid value etc.) (**Gokhale & Kokate**)
- WHO guidelines.(**Gokhale & Kokate**)

CHARTS

NAME (SYNONYMS)	PART USED	B.S. (FAMILY)	C.C	ADUL./ SUBS.	USES
1)					
2)					
3)					
4)					

Important chapter in **Khandelwal**

- Stomata
- Trichomes
- Chemical tests
- Cal. Oxalate crystals
- Barks
- Starch
- Leave
- Microscope & practical aspects.

6) MICROBIOLOGY & IMMUNOLOGY

Kokare, Pelzar, Tortora, Bentley's, etc.

- **Microbiological assays (Indian Pharmacopoeia-Appendix)**
- Microbial diseases – causative agents (**Piyush publication**)
- Antibodies-types, function, structure, etc.
- Antigens and antibodies reactions
- Diagnostic & serological tests. (**Piyush publication**)

7) BIOCHEMISTRY

U. Satyanarayan*, Lehninger, A. C. Deb, etc.

- Vitamines(structure, uses, deficiency),
- Enzymes (bindings sites),
- Hormones (roles only),
- Carbohydrates,
- Proteins (DNA, RNA)
- Fats,
- Cycles (rate limiting enzymes only)
- Organ function tests, etc.

8) CLINICAL PHARMACY

Remington, Yadav, Paradkar, etc.

- Drug – Drug Interaction
- Drug - food Interaction
- Drug affecting during Pregnancy, in pediatrics condition, in geriatrics condition
- Adverse Drug Reaction.

“Do it simultaneously while studying drugs”

9) PHARMACEUTICAL JURISPRUDENCE

B. S. Kuchekar, Agrawal.

- D & C act. (**SCHEDULES** & forms)
- Pharmacy Act
- Schedules and committee members(refer charts given in books)
- Offences and penalties.

10) PHYSICAL PHARMACEUTICS.

CVS Subramanyam, Martin, etc.

- Rate & kinetics of reaction.(problems on order of reaction- zero, first, second, pseudo order reactions & only formula for 3rd order reaction)
- Rheology,
- Drying,
- Micromeretics,
- Filtration.

11) ORGANIC CHEMISTRY

S. N. Sanyal (rearrangements) & refer all other books same as for NMU

- Most important subject for **NIPER**
- Basics of chemistry.
- Name reactions (**S.N.Sanyal**)
- Rearrangements.(general reactions)

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12) BIOPHARMACEUTICS.

Bramhankar , Leon Sargel.

- Charts,
- Std. equations.
- Novel Drug Delivery System.

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13) BIOTECHNOLOGY.

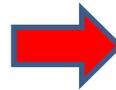
U. Satyanarayana.

- Plant cell culture.
- PCR technique.
- Commercial production of vaccines and antibiotics.(starting material or microorganism used live or dead form of M.O. used & uses)

OTHER BOOKS...

- Std. official books like IP (**Appendix & blue pages**) etc.
- GATE Companion-by Inamdar madam,
- Piyush publication
- Mohammed Ali
- For other topics of subjects like Unit operation, DSBM, hospital pharmacy, etc. refer same books as for University exams

APPENDIX & BLUE PAGES



READ COMPLETELY

Do's

- 1) Plan your study well.
- 2) Confidence & Continuity.
- 3) Concentration.
- 4) Revision & Group discussion - **Things are volatile.**
- 5) Search & collect.
- 6) Try to **mark points** in books while 1st reading and it make 2nd reading short and simple.
- 7) If time permits please go through other least important topics also to minimize the risk factor.
- 8) Read classifications daily.

Dont's

- 1) Don't panic at the time of exam.
- 2) Don't go for answer directly, Cross wrong options 1st. So read all options 1st.
- 3) Don't leave question without reading & thinking about it.
- 4) Solve simple questions 1st so as to begin with it, it will boost your confidence.
- 3) Never fumble & change answers in last minute of exam .
- 4) Don't attempt the question if you are having no idea about it or it will lead to unnecessary negative marking.

Study even beyond GPAT exam.....

GPAT Qualified or GPAT Disqualified matters...

- 1) NIPER (eligibility is to qualifying GPAT) – for M. Pharm and MBA
- 2) UDCT (eligibility is to qualifying GPAT)
- 3) MANIPAL (forms are available now also)
- 4) BITS PILANI (eligibility is to qualifying GPAT)
- 5) VIIT (Vellore - M. tech.)
- 6) NMIMS – for M. Pharm and MBA
- 7) BHARATI VIDYAPEETH

**ANY
QUESTIONS**

BEST OF LUCK

&

THANKS