

**OFFICE ORDER: 14/2020**

**Formation of Student's Club - Graduate Pharmacy Aptitude Test (GPAT) @ KSOP**

**Reference:** Suggestion by students during CRs meet

1. GPAT student's club @ KSOP is hereby constituted with an objective to support the aspiring Pharmacy students (from 3<sup>rd</sup> semester onwards) towards their preparation for National level exam GPAT.
2. A well-structured policy doc. covering the **Structure of Club** involving faculty & Student's core team their **roles & responsibilities** and **separate guidelines** for each is attached for more detailed understanding and clarity (**Appendix-A**).
3. **Dr. Puspendra Kumar, KSOP** is hereby assigned the role of **GPAT Club Coordinator** supported by Joint Coordinators, faculty & student's core team under the overall direction and support of Addl. HoD KSOP as mentioned in **Appendix-A**. He shall be performing the above duties in addition to his regular academic engagement.
4. The overall responsibility of running the club's activities smoothly @ dept. level shall be with Principal-KSOP. The entire team associated with **GPAT student's club** at **para 3** shall be responsible to **Principal KSOP** for their duties in their designated capacities.
5. Principal KSOP shall apprise **Dean (A)** on regular basis *w.r.t.* Club's periodic progress/ time table / planning etc.

**Dr. (Col) A Garg**  
**Director**

**Distribution:**

- Joint Director/ Deans/ Principal-KSOP/ HoDs (CS/IT/EC/EN/EI/CE/ME/AS/MCA/MBA/HS)/ Addl. HoDs (CSI/CO), GM-TBI & Dean IEC, Head-CRPC, Head-CAM, Head-AEC, Head-IRCDC, Head-IC, Addl. Head-IIPC, Chairperson-ICC, Head-IT Operations, Manager-IA, Head-HR, Registrar, Admin Officer, Accts Officer, Librarian, Purchase Officer

**Copy to:**

- GPAT Student's Club – All concerned members & faculty
- Dean A, Principal -KSOP

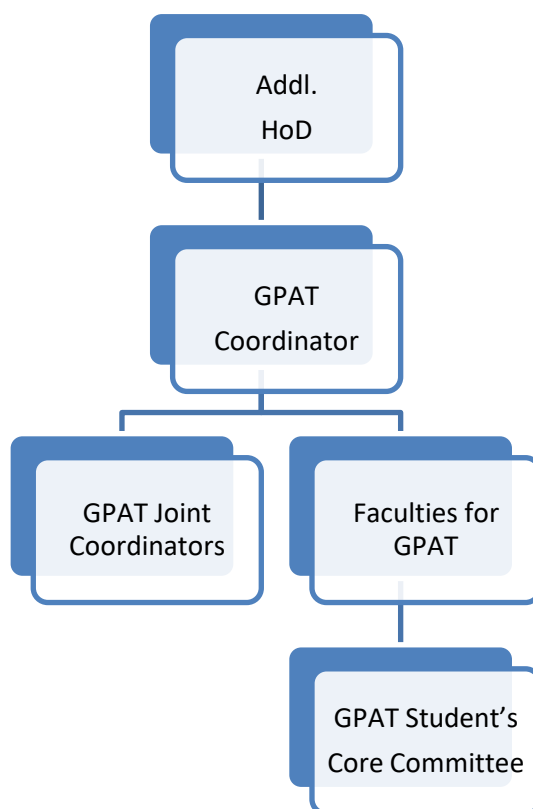


## **GPAT Student's Club**

### **Introduction**

- GPAT (Graduate Pharmacy Aptitude Test) is a national level of exam for Pharmacy students.
- GPAT is conducted by NTA.
- GPAT qualified students are eligible to take admission in reputed institutes with the fellowship of Rs 12400 per month.
- GPAT Scorecard is valid for admission in PhD for many universities.
- GPAT is helpful for NIRF ranking, NBA and NAAC accreditation.
- Students preparing for GPAT will be automatically ready for the future exams and interviews.

### **Structure of the Team**



1. **Addl. HoD:** Dr. K. Nagarajan
2. **GPAT Coordinator:** Dr. Puspendra Kumar
3. **GPAT Joint Coordinator:** Mr. Surya Prakash and Dr. Abhishek Kumar

## **Roles and Responsibilities**

### **Addl. HoD:**

- Responsible to take the decision for the club.
- Review and approve the proposals of coordinator, joint coordinators and faculties.
- Responsible for reporting of monthly activities to Dean Academics for perusal by JD/ Director. **(Annexure-I).**
- To take feedback from Students and Faculty members in every fifteen days, analyse them and to make effective implementation of activities for smooth functioning.
- To take all the decisions about indiscipline students.
- Smooth coordination with Coordinator, joint coordinators, faculties, student's core committee and student members.
- To hold Mock Test, Declaration of Result and Analysis of Result periodically.

### **Co-ordinator:**

- Smooth coordination with Additional HoD, joint coordinators, faculties, student's core committee and student members.
- Responsible for design and smooth conduction of the club.
- Class coordinator for final year students.
- Responsible to communicate the information with the faculties.
- Responsible for taking the MCQs from faculties and conducting the tests.
- Responsible for taking feedback of students on regular basis.
- Responsible to discuss the feedback of students with Additional HoD.

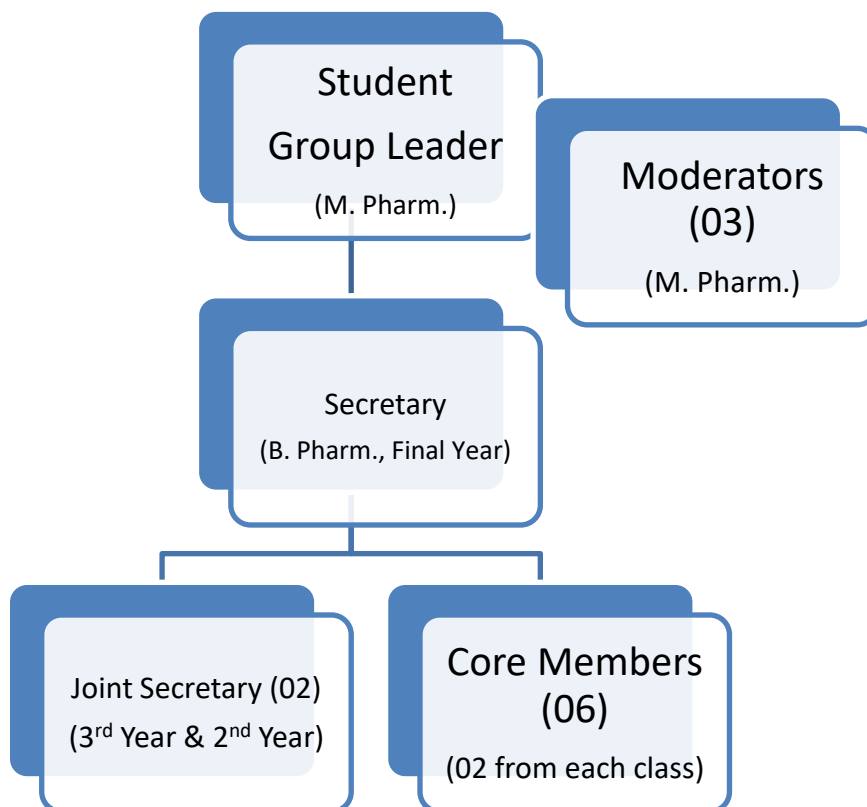
### **Joint Co-ordinators:**

- He / She will complement the coordinator and play the same role in the absence of Coordinator. He will be responsible for design and smooth conduction of the club.
- He will be the class coordinator for final year students.
- He will be responsible to communicate the information with the faculties.
- He will be responsible for taking the MCQs from faculties and conducting the tests.
- He will be responsible for taking feedback of students on regular basis.
- He will be responsible to discuss the feedback of students with Additional HoD.

### **Faculty members:**

They will be responsible for smooth conduction of classes. They will be conducting open discussion among group of students on the covered topics and test questions will be done after each test to improve the understanding of topics and pattern of exam. They will be giving appropriate number of MCQs of the respective subject/topic whenever asked by the co-ordinator/ joint co-ordinator. Faculties will be facilitating the open discussion session to the respective classes.

**Structure of the Student's Core Team**



**Student Group Leader:** Shubham Sharma (M. Pharm.)

**Moderators:** Vardan Gupta (M. Pharm.)

Shivam Arya (M. Pharm.)

Varnika Sharma (M. Pharm.)

**Secretary:** Dhruv Gaur (B. Pharm., Final Year)

**Joints Secretary:** Kavya Gupta (B. Pharm., Third Year)

Isha Garg (B. Pharm., Second Year)

**Members:** Punit Jain (B. Pharm., Final Year)

Anubha Andhiwal (B. Pharm., Final Year)

Vartika (B. Pharm., Third Year)

Km. Anshika Sharma (B. Pharm., Third Year)

Harshita Sadhana (B. Pharm., Second Year)

Musaib Ziya (B. Pharm., Second Year)

## **Role of the Student's Core Committee**

**Student Group Leader:** He / She will lead the student's core committee for various club activities and can take some classes depending upon their interest and availability.

**Moderators:** They will be the moderator for the student discussion forum, so that the openness of students may be increased and can take some classes depending upon their interest and availability. Open question answers session can be moderated by moderators, it will increase the interactions and concept understanding among the students during and after the classes.

**Secretary:** He / She is responsible for ensuring that all the affairs of a club are carried out in a smooth and transparent manner. The club secretary has to make necessary arrangements for the club meetings. These include deciding the date, time of the meeting and sending invitations to club members. One of the most important duties of a club secretary is to take down the minutes of a meeting. This includes noting down the important decisions or recommendations that came up in the meeting. The club secretary is also entrusted with keeping a record of the members who attended the meeting and those who were absent.

**Joint Secretaries:** He / She will complement the secretary and play the same role in the absence of secretary.

**Core Committee Members:** They will directly communicate with the club members/ students of respective class. Welcomes new members and invites them to club/group activities.

**Club Members (Students):** Students will attend the classes and they will take part in various activities of the club like discussion forum, questionnaire and doubt sessions etc.

### **Guidelines for the Students**

- Official GPAT classes will start from 8<sup>th</sup> June, 2020.
- All interested students are requested to register for the club membership and to attend the GPAT Classes (**Annexure-II**)
- Classes will be conducted only through online mode till the regular classes resumed. (5 Hrs/ Week).
- Classes will be conducted online/offline mode after the regular classes resumed. (4 Hrs/ Week).
- The scheduled time table of GPAT Classes should be allotted separately for B. Pharm. (3<sup>rd</sup> Semester/ 5<sup>th</sup> Semester/ 7<sup>th</sup> Semester Students)
- Attendance shall be taken into record to the students attending GPAT classes.
- Students giving the consent to attend GPAT classes to be present in >90% classes. Student fails to achieve the attendance criteria will be debarred from the GPAT classes or have to give genuine reason for not attending.
- If students of 3<sup>rd</sup> sem. and 5<sup>th</sup> sem. are not registering, then they will not get the chance to register in next year for 5<sup>th</sup> and 7<sup>th</sup> semester GPAT Classes respectively.
- If any student wants to join in later semester, he/she has to score minimum 60% score in three consecutive tests. However, no direct entry in 7<sup>th</sup> Semester for the students admitted from the session 2018-19.
- If student shall not be able to score 40% or more in any three-consecutive test (with negative marking); then he/she will not be eligible to continue the classes.
- If student shall not be able to score 20% or more in any test (with negative marking); then he/she will not be eligible to continue the classes.
- Online test will be conducted through Moodle and results shall be displayed in WhatsApp group.
- All classes shall be free of cost for all the interested students.
- GPAT guidelines shall be given time to time by faculty members.
- Important topics shall be covered during the classes.
- Feedback will be taken from the students twice in a month.
- Students can discuss the problems with their GPAT Class Coordinators.

**Guidelines for the Faculties**

- No remuneration shall be given to the faculty members taking GPAT classes.
- Interested Faculty members shall take the classes.
- Class schedule will be given by class coordinators for the respective faculty members.  
**(Annexure -III)**
- According to the availability of the classes; faculty members will submit the topics to be covered (important topics for GPAT) in advance for further approval process.  
**(Annexure -III)**
- Addl. HoD will review the topics and approve. Finalized topics will be sent to Dean Academics and Director-KIET.
- Dean Academics, Joint Director and Director (KIET) will monitor the class once in a month.
- Topics to be covered shall be informed to the students at least one week in advance.
- Faculties will submit the report of the class to the respective class coordinator.  
**(Annexure -IV)**
- Interactive question answer session shall be taken by the faculty members.
- Mentoring and motivation shall be given to the students' time to time.
- Faculty members of respective subject will send at least 10-15 good quality MCQs to conduct the test.
- Students shall be encouraged to solve maximum number of questions every day.
- Previous year questions shall be discussed by the faculty members.
- Coordinator and Joint Coordinators can suggest to change the questions for test.
- GPAT Class Coordinators will conduct the test twice in a month.



**List of Faculty Members**

S. No.	Name of the Faculty	Specialization	Allotted Subjects to cover
<b>7<sup>th</sup> Semester</b>			
1.	<b>Dr. Puspendra Kumar</b> (Class coordinator)	Analysis and Miscellaneous	Pharmaceutical analysis Pharmacognosy Miscellaneous
2.	Dr. Ashok Jangra	Pharmacology	Pharmacology Microbiology
3.	Dr. Ashu Mittal	Pharmaceutics	Biopharmaceutics and pharmacokinetics Pharmaceutics
4.	Mr. Himanshu Aggarwal	Pharmacology	Pharmacology Microbiology
5.	Dr. K. Nagarajan	Pharm. Chemistry	Biochemistry Pharmaceutical analysis
6.	Dr. Parul Grover	Pharm. Chemistry	Medicinal chemistry Pharmaceutical inorganic chemistry
7.	Mr. Shadab A. Siddiqui	Pharm. Chemistry	Organic chemistry Medicinal chemistry
8.	Ms. Monika Bhardwaj	Pharmacology	Pharmacology Pharmaceutics Biotechnology (plant cell and tissue culture, animal cell culture)
9.	Ms. Richa Goel	Pharmacognosy	Pharmacognosy
10.	Ms. Kiran Sharma	Pharmaceutics	Pharmaceutical jurisprudence Physical pharmacy Pharmaceutics

**\*Faculties Taking same subjects can distribute the topics with mutual discussion.**

<b>5<sup>th</sup> Semester</b>			
11.	<b>Mr. Surya Prakash</b> (Class coordinator)	Pharm. Chemistry	Organic chemistry Biochemistry Miscellaneous
12.	Dr. Abhay Bhardwaj	Pharm. Chemistry	Medicinal chemistry Pharmaceutical analysis
13.	Dr. Deepti Katiyar	Pharmacognosy	Pharmacognosy Pharmaceutical inorganic chemistry
14.	Dr. Mandeep Kumar Arora	Pharmacology	Pharmacology
15.	Ms. Vidhu Saxena	Pharmacology	Pharmacology Pharmaceutical Management
16.	Mr. Anuj Pathak	Pharmaceutics	Pharmaceutics Cosmetics
17.	Mr. Debaprasad Ghosh	Pharmaceutics	Pharmaceutics Pharmaceutical jurisprudence
18.	Ms. Monika Kaurav	Biotechnology	Microbiology Biotechnology

**\*Faculties Taking same subjects can distribute the topics with mutual discussion.**

<b>3<sup>rd</sup> Semester</b>			
19.	<b>Dr Abhishek Kumar</b> (Class coordinator)	Pharmacology	Pharmacology Miscellaneous
20.	Ms. Lakshmi	Pharmaceutics	Pharmaceutics Dispensing Pharmacy
21.	Mr. Praveen Dixit	Pharmacology	Human anatomy & physiology Pathophysiology
22.	Mr. Sanjeev Chauhan	Pharmaceutics	Dispensing Pharmacy Pharmaceutics
23.	Ms. Garima Kapoor	Pharm. Chemistry	Biochemistry Organic Chemistry
24.	Dr. Roma Ghai	Pharmacology	Human anatomy & physiology Pathophysiology
25.	Ms. Shipra Singhal	Pharm. Chemistry	Organic Chemistry Biochemistry

**\*Faculties Taking same subjects can distribute the topics with mutual discussion.**

## Annexure-I

Class		2 <sup>nd</sup> Year/ 3 <sup>rd</sup> Year/ 4 <sup>th</sup> Year	
S. No.	Details	Planned	Conducted
1.	Total Number of Classes		
2.	Total Number of Tests		
3.	Total Number of Open Discussions		
4.	Student's Feedback		
5.	Faculties remarks		
6.	Coordinator/ Joint coordinators remarks		
7.	Addl. HoD Remarks		
8.	Signature of Addl. HoD		

**Annexure-II**

**Registration Form**

**Name of the Student** :

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**University Roll No.** :

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**Father's Name** :

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**Batch** :

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**Section** :

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**KIET Mail ID** :

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**Mobile Number** :

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**Reason(s) to do the GPAT Classes** :

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**Declaration** : **I am interested in GPAT Preparation Classes. I will attend the GPAT Classes. I have read the terms and conditions for GPAT Classes and I am giving my consent.**

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**Signature of the participant** :

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## Annexure-III

Classes Schedule (Class: 2<sup>nd</sup> Year)

S. No.	Date of the Lecture/ Test	Assigned Faculty	Topics
1.	08-06-2020	Dr. Abhishek Kumar	
2.	09-06-2020	Ms. Lakshmi	Pharmacy Profession & Introduction to Pharmaceuticals
3.	10-06-2020	Mr. Praveen Dixit	Basic principles of cell injury: Causes, pathogenesis and morphology of cell injury.
4.	11-06-2020	Mr. Sanjeev Chauhan	Weighing methodology
5.	12-06-2020	Ms. Garima Kapoor	Ultrastructure of the cell, functions of various cellular constituents, Applications of biochemical principles to the pharmacy.
6.	15-06-2020	Dr. Roma Ghai	Sense organs
7.	16-06-2020	Ms. Shipra Singhal	A brief review of classification & sources of organic compounds
8.	17-06-2020	Dr. Abhishek Kumar	Pharmacology basics
9.	18-06-2020	Ms. Lakshmi	Definition, importance of pharmaceuticals, areas concerned, scope of Pharmaceutics,
10.	19-06-2020	Mr. Praveen Dixit	Cellular adaptation
11.	20-06-2020 (Test)	Dr. Abhishek Kumar	Test from syllabus covered in last 15 days
12.	22-06-2020	Mr. Sanjeev Chauhan	Handling of prescriptions, labeling instructions for dispensed products
13.	23-06-2020	Ms. Garima Kapoor	Types of carbohydrates, their functions, digestion, & absorption. Aerobic & anaerobic oxidation with energetics. Glycogenesis, glycogenolysis, & gluconeogenesis.
14.	24-06-2020	Dr. Roma Ghai	Infectious diseases Hepatitis - Infective hepatitis. Sexually transmitted diseases (syphilis, gonorrhea, HIV). Pneumonia, typhoid, urinary tract infections. Tuberculosis. Leprosy. Malaria. Dysentery (Bacterial and amoebic).
15.	25-06-2020	Ms. Shipra Singhal	Sp <sup>3</sup> , sp <sup>2</sup> , sp hybridization
16.	26-06-2020	Dr. Abhishek Kumar	Pharmacology in relation with Pathophysiology and HAP covered till now
17.	29-06-2020	Ms. Lakshmi	History and development of the profession of Pharmacy and Pharmaceutical industry in India.
18.	30-06-2020	Mr. Praveen Dixit	Apoptosis and Necrosis.

**Appendix-A**

19.	01-07-2020	Mr. Sanjeev Chauhan	Handling of prescriptions, labeling instructions for dispensed products
20.	02-07-2020	Ms. Garima Kapoor	Hexose monophosphate shunt [HMP shunt]. Diseases associated with carbohydrate metabolism.
21.	03-07-2020	Dr. Roma Ghai	Neoplastic diseases
22.	04-07-2020 (Test)	Dr. Abhishek Kumar	Test from syllabus covered in last 15 days
23.	06-07-2020	Ms. Shipra Singhal	Sigma & pi- bonds, bond lengths, bond angles & bond energies along with their significance in reactions should be carried out.
24.	07-07-2020	Dr. Abhishek Kumar	Pharmacology in relation with Pathophysiology and HAP covered till now
25.	08-07-2020	Ms. Lakshmi	A brief review of present Indian Pharma. Industry in global perspective.
26.	09-07-2020	Mr. Praveen Dixit	Pathogenesis of inflammation. Chemical mediators in inflammation
27.	10-07-2020	Mr. Sanjeev Chauhan	Enlarging and reducing formula, displacement value.
28.	13-07-2020	Ms. Garima Kapoor	Definition. Classification, structures [except B12] biochemical role, sources, daily requirements, & deficiency symptoms.
29.	14-07-2020	Dr. Roma Ghai	Laboratory tests for Liver function tests and kidney function tests
30.	15-07-2020	Ms. Shipra Singhal	Bond polarization, hydrogen bonds, inductive effects
31.	16-07-2020	Dr. Abhishek Kumar	Basics of Pharmacology
32.	17-07-2020	Ms. Lakshmi	Introduction to Pharmacopoeia with reference to IP, BP, USP and International Pharmacopoeia.
33.	18-07-2020 (Test)	Dr. Abhishek Kumar	Test from syllabus covered in last 15 days
34.	20-07-2020	Mr. Praveen Dixit	Pathogenesis of chronic inflammation. Repair of wounds in the skin, factors influencing healing of wounds.
35.	21-07-2020	Mr. Sanjeev Chauhan	Preparations of formulations involving allegation, alcohol dilution.
36.	22-07-2020	Ms. Garima Kapoor	Vitamins as co-factors in biochemical reactions.
37.	23-07-2020	Dr. Roma Ghai	Disorders of fluid, electrolyte and acid-base balance
38.	24-07-2020	Ms. Shipra Singhal	Resonance, and hyperconjugation
39.	27-07-2020	Dr. Abhishek Kumar	Pharmacology in relation with Pathophysiology and HAP covered till now
40.	28-07-2020	Ms. Lakshmi	Classification of information, primary, secondary and tertiary. Nomenclature of the drug.

## Appendix-A

<b>41.</b>	29-07-2020	Mr. Praveen Dixit	Immune response: <input type="checkbox"/> Specific immunity & immune response <input type="checkbox"/> Humoral immunity antibody response, mediators of Humoral immunity, basic structure of antibody, antibody classes & functions, maturation of immune response, immunologic memory. Antigens: specificity & Immunogenicity, Natural vs. Artificial Antigens, Soluble, cellular antigens, thymus independent antigen, adjuvant.
<b>42.</b>	30-07-2020	Mr. Sanjeev Chauhan	Introduction to dosage forms. New drug and dosage form. The desirable properties of a dosage form, the need of dosage form.
<b>43.</b>	31-07-2020	Ms. Garima Kapoor	Different types of proteins. Their functions, digestion & absorption. Denaturation & its effect on biological activity. Renaturation of proteins.



## Annexure-III

Classes Schedule (Class: 3<sup>rd</sup> Year)

S. No	Date of the Lecture/ Test	Assigned Faculty	Topics
1.	08-06-2020	Mr. Surya Prakash	Orientation of GPAT Class
2.	09-06-2020	Dr. Abhay Bhardwaj	Introduction to medicinal chemistry
3.	10-06-2020	Dr. Deepti Katiyar	Introduction to Pharmacognosy
4.	11-06-2020	Dr. Mandeep Kumar Arora	Introduction of hemodynamics and Electrophysiology of heart. Anti-hypertensive drugs, Anti-anginal agents.
5.	12-06-2020	Ms. Vidhu Saxena	General Pharmacology    Pharmacokinetics Topic to be covered: 1. Concept of Pharmacokinetics 2. Routes of Administration 3. Definition of Absorption 4. Mechanism of Absorption
6.	15-06-2020	Mr. Anuj Pathak	Introduction to Pharmaceutics
7.	16-06-2020	Mr. Debaprasad Ghosh	1. Suspensions 2. Emulsions
8.	17-06-2020	Ms. Monika Kaurav	Microbiology   Introduction to Microbiology Topic to be covered: (1)Scope and application to pharmacy field. (2) Whittaker's Five Kingdom concept (3) historical development - biogenesis Vs. abiogenesis,
9.	18-06-2020	Mr. Surya Prakash	Classification of Organic Compounds
10.	19-06-2020	Dr. Abhay Bhardwaj	Benzodiazepine
11.	20-06-2020 (Test)	Mr. Surya Prakash	Test Conducted
12.	22-06-2020	Dr. Deepti Katiyar	Introduction to Phytoconstituents
13.	23-06-2020	Dr. Mandeep Kumar Arora	Anti-arrhythmic drugs, Drugs used in congestive heart failure.
14.	24-06-2020	Ms. Vidhu Saxena	General Pharmacology    Pharmacokinetics Topic to be covered: 1. Factors affecting Absorption 2. Bioavailability
15.	25-06-2020	Mr. Anuj Pathak	Tablets

**Appendix-A**

16.	26-06-2020	Mr. Debaprasad Ghosh	1. Suppositories 2. Semisolids
17.	29-06-2020	Ms. Monika Kaurav	Microbiology   Introduction to Microbiology Topic to be covered: (1)Germ theory of fermentation (2)Germ theory of disease (3) the contribution of Leeuwenhoek, Robert Koch, Jenner, Louis Pasteur and Ehrlich.
18.	30-06-2020	Mr. Surya Prakash	Nomenclature of Organic Compounds
19.	01-07-2020	Dr. Abhay Bhardwaj	Sedative and Hypnotics
20.	02-07-2020	Dr. Deepti Katiyar	Alkaloid & Glycoside
21.	03-07-2020	Dr. Mandeep Kumar Arora	Anti-hyperlipidemic drugs. Drugs used in the therapy of shock.
22.	04-07-2020 (Test)	Mr. Surya Prakash	
23.	06-07-2020	Ms. Vidhu Saxena	General Pharmacology    Pharmacokinetics Topic to be covered: 1. Drug Distribution 2. Factors affecting drug distribution 3. Volume of Distribution
24.	07-07-2020	Mr. Anuj Pathak	Methods of Formulations
25.	08-07-2020	Mr. Debaprasad Ghosh	1. The Pharmacy Act 1948 (inclusive of recent amendments). 2. Drugs and Cosmetics Act 1940, Rules 1945, including New Drug applications.
26.	09-07-2020	Ms. Monika Kaurav	The contribution of Leeuwenhoek, Robert Koch, Jenner, Louis Pasteur and Ehrlich.
27.	10-07-2020	Mr. Surya Prakash	Stereochemistry of Organic chemistry
28.	13-07-2020	Dr. Abhay Bhardwaj	Sedative
29.	14-07-2020	Dr. Deepti Katiyar	Volatile oil, carbohydrate, fat
30.	15-07-2020	Dr. Mandeep Kumar Arora	Haematinics, anticoagulants and haemostatic agents.
31.	16-07-2020	Ms. Vidhu Saxena	General Pharmacology    Pharmacokinetics Topic to be covered: 1. Binding of drugs to tissue components 2. Metabolism

## Appendix-A

			3. Types of metabolic reactions
32.	17-07-2020	Mr. Anuj Pathak	Equipment's used in tablet manufacturing.
33.	18-07-2020 (Test)	Mr. Surya Prakash	
34.	20-07-2020	Mr. Debaprasad Ghosh	Pharmaceutical Aerosols
35.	21-07-2020	Ms. Monika Kaurav	Microbiology   Microscopy and staining technique: Topic to be covered: (1)Electron microscopy (2) The concept of resolving power, Magnification power, numerical aperture and angular aperture and working distance. The principle application of oil immersion microscopy.
36.	22-07-2020	Mr. Surya Prakash	Alkane & Alkene
37.	23-07-2020	Dr. Abhay Bhardwaj	Local Anesthetics
38.	24-07-2020	Dr. Deepti Katiyar	Resin & Tannin
39.	27-07-2020	Dr. Mandeep Kumar Arora	Fibrinolytics and antiplatelet drugs. Blood and plasma volume expanders
40.	28-07-2020	Ms. Vidhu Saxena	General Pharmacology    Pharmacokinetics Topic to be covered: 1. Conversion by Metabolism (active to inactive, active to active, inactive to active/Prodrug) 2. Definition of Excretion 3. Renal and Non-Renal Excretion 4. Rate of Excretion 5. Renal Clearance
41.	29-07-2020	Mr. Anuj Pathak	1. An Introduction to Standard Institutions and Regulatory Authorities such as BIS, ASTM, ISO, TGA, USFDA, MHRA, ICH, WHO. 2. Indian Pharmaceutical Industry- An Overview.
42.	30-07-2020	Mr. Debaprasad Ghosh	1. Pharmaceutical Aerosols 2. Liquids
43.	31-07-2020	Ms. Monika Kaurav	Microbiology   Microscopy and staining technique: Topic to be covered: (1) Theory of staining, principle and technique of staining procedure - Monochrome, (2) Gram, acid-fast, (3) negative, capsule, endospore.

## Annexure-III

Classes Schedule (Class: 4<sup>th</sup> Year)

S. No	Date of the Lecture/ Test	Assigned Faculty	Topics
1.	08-06-2020	Dr. Puspendra Kumar	How to prepare for GPAT and Orientation Class
2.	09-06-2020	Dr. Ashok Jangra	General anesthetics. Alcohols and disulfiram. Sedatives, and hypnotics
3.	10-06-2020	Dr. Ashu Mittal	The fate of drug after drug absorption, various mechanisms for drug absorption
4.	11-06-2020	Mr. Himanshu Aggarwal	Introduction to microbiology Classification of micro-organisms (Bacteria and Virus) Staining techniques Applications of micro-organisms (Sources of anti-biotics)
5.	12-06-2020	Dr. K. Nagarajan	Carbohydrates and their metabolic pathways
6.	15-06-2020	Mr. Shadab A. Siddiqui	General principles: A brief review of classification & sources of organic compounds, sp <sup>3</sup> , sp <sup>2</sup> , sp hybridization, sigma & pi- bonds, bond lengths, bond angles & bond energies along with their significance in reactions should be carried out.
7.	16-06-2020	Dr. Parul Grover	Sedative hypnotic (Medicinal Chemistry)
8.	17-06-2020	Ms. Monika Bhardwaj	Anticancer Drugs
9.	18-06-2020	Ms. Richa Goel	Volatile Oils
10.	19-06-2020	Ms. Kiran Sharma	Micromeritics
11.	20-06-2020 (Test)	Dr. Puspendra Kumar	Mock Test
12.	22-06-2020	Dr. Puspendra Kumar	Chromatography-I
13.	23-06-2020	Dr. Ashok Jangra	Centrally acting muscle relaxants, Psychopharmacological agents: Antipsychotics, antidepressants
14.	24-06-2020	Dr. Ashu Mittal	Compartment Pharmacokinetics
15.	25-06-2020	Mr. Himanshu Aggarwal	Sterilization (Types and applications) Disinfection and antiseptics (Applications and methods of evaluation)
16.	26-06-2020	Dr. K. Nagarajan	Proteins and their metabolic pathways
17.	29-06-2020	Dr. Parul Grover	General anaesthetics (Medicinal Chemistry)
18.	30-06-2020	Mr. Shadab A. Siddiqui	An overview of bond polarization, hydrogen bonds, inductive effects, resonance, and hyperconjugation be taken. Concept of homolytic & heterolytic bond fission, acidity & basicity with different theories should be covered briefly.

**Appendix-A**

19.	01-07-2020	Ms. Monika Bhardwaj	Antibiotics
20.	02-07-2020	Ms. Richa Goel	Volatile Oils
21.	03-07-2020	Ms. Kiran Sharma	Interfacial phenomena
22.	04-07-2020 (Test)	Dr. Puspendra Kumar	Mock Test
23.	06-07-2020	Dr. Puspendra Kumar	Chromatography-II
24.	07-07-2020	Dr. Ashok Jangra	Antianxiety agents, anti-manics and hallucinogens. Anti-epileptic drugs
25.	08-07-2020	Dr. Ashu Mittal	Post Marketing Surveillance
26.	09-07-2020	Mr. Himanshu Aggarwal	Microbiological assays (Types) Test organism for antibiotic assays Sterility testing
27.	10-07-2020	Dr. K. Nagarajan	Lipids and their metabolism
28.	13-07-2020	Dr. Parul Grover	Cholinergic agents (Medicinal Chemistry)
29.	14-07-2020	Mr. Shadab A. Siddiqui	Ease of formation & order of stabilities of electron deficient & electron rich species along with the reasons for the same should be covered.
30.	15-07-2020	Ms. Monika Bhardwaj	Cardiovascular Drugs
31.	16-07-2020	Ms. Richa Goel	Tannins
32.	17-07-2020	Ms. Kiran Sharma	Rheology
33.	18-07-2020 (Test)	Dr. Puspendra Kumar	Mock Test
34.	20-07-2020	Dr. Puspendra Kumar	Analytical Pharmacognosy
35.	21-07-2020	Dr. Ashok Jangra	Anti-parkinsonism drugs. Nootropics. Narcotic analgesics, drug addiction, drug abuse, tolerance and dependence
36.	22-07-2020	Dr. Ashu Mittal	Development, scale up & post approval changes [SUPAC] & <i>in vitro</i> [dissolution] <i>in vivo</i> [plasma concentration profile] correlation or IV/IV correlation (IVIVC).
37.	23-07-2020	Mr. Himanshu Aggarwal	Biochemical tests
38.	24-07-2020	Dr. K. Nagarajan	Enzymes & Types of Inhibition including kinetics
39.	27-07-2020	Dr. Parul Grover	Dental Products (Pharmaceutical Inorganic Chemistry)
40.	28-07-2020	Mr. Shadab A. Siddiqui	Relationships between energy content, stability, reactivity & their importance in chemical reactions should be covered. Calculations for determining empirical & molecular formula should be covered.
41.	29-07-2020	Ms. Monika Bhardwaj	Antipsychotics
42.	30-07-2020	Ms. Richa Goel	Tannins
43.	31-07-2020	Ms. Kiran Sharma	Complexation

**Annexure-IV**

**Class Report**

<b>S. No.</b>	<b>Details</b>	<b>Remarks</b>
<b>1.</b>	<b>Topic</b>	
<b>2.</b>	<b>Detailed Subtopics</b>	
<b>3.</b>	<b>Date of the Class</b>	
<b>4.</b>	<b>Class Duration</b>	
<b>5.</b>	<b>Number of Students Present</b>	
<b>6.</b>	<b>Name of the Absent Students</b>	
<b>7.</b>	<b>Major Outcome</b>	
<b>8.</b>	<b>Any Other Details</b>	

**Signature of the Faculty:** .....

**Signature of the Co-ordinator:** .....

