

PARUL UNIVERSITY

R/Notification-1472/2024-25

Office of the Registrar
January 20, 2025

NOTIFICATION

Sub: - Syllabus and course structures of a four year UG programme, B.Sc. in Pharmaceutical Chemistry (Honours)/ B.Sc. in Pharmaceutical Chemistry (Honours with Research) in Faculty of Applied Sciences from AY 2024-25 onwards

**Ref: (i) Proposal submitted by Dean, Faculty of Applied Sciences and Principal, PIAS
(ii) Approval of the Provost**

Dean, Faculty of Applied Sciences proposed syllabus and course structures of a four year UG programme viz, "B.Sc. in Pharmaceutical Chemistry (Honours)"/ "B.Sc. in Pharmaceutical Chemistry (Honours with Research)" in Faculty of Applied Sciences from AY 2024-25 onwards.

The Provost has approved the proposal. Hence, the order.

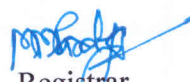
ORDER:

Course structures of a four year UG programme viz, "B.Sc. in Pharmaceutical Chemistry (Honours)"/ "B.Sc. in Pharmaceutical Chemistry (Honours with Research)" are enclosed in the annexure.

Dean, Faculty of Applied Sciences shall arrange to upload syllabus of a four year UG programme viz, "B.Sc. in Pharmaceutical Chemistry (Honours)"/ "B.Sc. in Pharmaceutical Chemistry (Honours with Research)" on MIS.

This is subject to the approval of the Academic Council and the Governing Body.

By Order


Registrar

To,

Dean, Faculty of Applied Sciences and Principal, PIAS

Copy to,

- The Controller of Examinations
- Director (IQAC)
- PUMIS Coordinator

Submitted to,

- The President
- The Provost

ANNEXURE

Course Structure of B.Sc. in Pharmaceutical Chemistry (Single Major-)			
Semester-I			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11010501DS01	Basics of Organic Chemistry - I	2
2	11010501DS02	Lab - 1 : Organic Chemistry Practicals - I	2
3	11010501DS03	Basics of Inorganic Chemistry	2
4	11010501DS04	Lab - 2 : Inorganic Chemistry Practicals	2
5	11013301DS01	Basics of Pharmaceutical & Biochemical Studies	4
6	11010501SE01	Chemical Practices	2
7	11011401VA01	Climate Change & Sustainable Environment	2
8		Ability Enhancement Course - I	2
9		University Elective Course - I	4
			22
Semester-II			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11010502DS01	Basics of Organic Chemistry - II	2
2	11010502DS02	Inorganic Chemistry - II	2
3	11010502DS03	Lab-1 : Organic Practicals	2
4	11010502DS04	Lab-2 : Inorganic Qualitative Analysis	2
5	11013302DS01	Fundamentals of Pharmaceutical Chemistry - I	2
6	11013302DS02	Lab-3 (Fundamentals of Pharmaceutical Chemistry-I)	2

7	00019302VA01	IPDC including history and culture of India and IKS - I	2
8	05010102SE01	Mathematical Aptitude	2
9		Ability Enhancement Course - II	2
10		University Elective Course - II	4
			22
Semester-III			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11013303DS01	Fundamentals of Pharmaceutical Chemistry - II	4
2	11013303DS02	Lab-1 (Fundamentals of Pharmaceutical Chemistry-II)	2
3	11013303DS03	Human Physiology and Anatomy	4
4	11013303DS04	Lab-2 (Physiology and Anatomy)	2
5	00019303VA01	IPDC including History and Culture of India and IKS - II	2
6	03010602UE01	Maintenance of Household Apparatus	4
7	03010503SE01	AI/Web Development and Design	2
8		Ability Enhancement Course - III	2
			22
Semester-IV			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11013304DS01	Fundamentals of Pharmaceutical Chemistry - III	4
2	11013304DS02	Lab - 1 (Fundamentals of Pharmaceutical Chemistry - III)	2
3	11013304DS03	Medicinal Chemistry	4

4	11013304DS04	Lab - 2 (Medicinal and Biophysical Chemistry)	2
5	11013304DS05	Biophysical Chemistry	4
6	19010204VA01	Positive Mental Health/Physical Education: Yoga/NCC	2
7	11010504SE01	Computational Chemistry	2
8		Ability Enhancement Course - IV	2
			22
Semester-V			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11013305DS01	Pharma Formulation and Development	3
2	11013305DS02	Lab - 1 (Pharma Formulation and Development)	2
2	11013305DS03	Pharmaceutical Organic Chemistry	4
4	11013305DS04	Lab - 2 (Pharmaceutical Organic Chemistry)	2
5	11013305DS05	Analytical Chemistry - I	3
6	11013305DS06	Fluid Transport Mechanism	4
7	11013305DS07	Lab - 3 (Fluid Transport Mechanism)	2
8	06010105SE01	Digital Literacy/Finance for Everyone	2
			22
Semester-VI			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11013306DS01	Pharmaceutical Operations	4
2	11013306DS02	Lab - 1 (Pharmaceutical Operations)	2
3	11013306DS03	Formulation Analysis	4

4	11013306DS04	Lab - 2 (Formulation Analysis)	2
5	11013306DS05	Analytical Chemistry - II	4
6	11010506IN01	Internship	4
7	00019306AE01	Professional Ethics & Communication	2
			22
Semester-VII (Honours)			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11013307DS01	Chemistry of Natural Products	3
2	11013307DS02	Aspects of Industrial Safety	4
3	11013307DS03	Regulatory Guidelines in Chemical Industry	3
4	11013307DS04	Drug Discovery, Design and Development	4
5	11013307DS05	Lab - 1 (Drug Synthesis)	2
6	11013307IN01	OJT (On Job Training)	6
			22
Semester-VII (Research)			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11013307DS01	Chemistry of Natural Products	3
2	11013307DS02	Aspects of Industrial Safety	4
3	11013307DS03	Regulatory Guidelines in Chemical Industry	3
4	11013307DS04	Drug Discovery, Design and Development	4
5	11013307DS05	Lab - 1 (Drug Synthesis)	2
6	11013307RP01	Research Methodology	6
			22

Semester-VIII (Honours)			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11013308DS01	Advanced Analytical Techniques	4
2	11013308DS02	Catalysis	4
3	11013308DS03	Drug, Action and Toxicity	4
4	11013308DS04	Pharmaceutical Processing	4
5	11013308IN01	OJT (On Job Training)	6
			22
Semester-VIII (Research)			
Sr.No.	Subject Code	Name of the Subjects	Credits
1	11013308DS01	Advanced Analytical Techniques	4
2	11013308DS02	Catalysis	4
3	11013308DS03	Drug, Action and Toxicity	4
4	11013308DS04	Pharmaceutical Processing	4
5	11013308RP01	Research Project	6
			22
		Total Credit	176

List of University Elective - 1		Offering Faculty
1	Office Automation	FITCS
2	Introduction to MATLAB Programming	FET-Mech
3	First Aid and Life Support	Nursing
4	Basic Photography	Design

List of University Elective - 2		Offering Faculty
1	Maintenance of Household Apparatus	FET-EE
2	Content Writing	FLA
3	Internet Technology and Web Design	FIT-CS

4	Introduction to Gender, Health & Rights	FSW
5	Digital Health	PIPHS

	List of University Elective - 3 (Int. Multi. Course)	Offering Faculty
1	Scientific Writing	PIPH
2	Green Technology	FET
3	Cyber Law	LAW
4	IT Return and E-Filing	Commerce
5	Social Work and Disaster Management	FSW