## **GURU KASHI UNIVERSITY**



**Bachelor of Pharmacy** 

Session: 2023-24

**Department of Pharmacy** 

## GRADUATE OUTCOME OF THE PROGRAMME

Graduates will show integrate knowledge and skills with clinical research to provide healthcare solutions for the benefit of the society; excellent in current way of things and technologies, doing excellent problem solving and will possess professional, ethical, kind behaviour and standards.

## PROGRAMME LEARNING OUTCOMES

- To acquire comprehensive knowledge and basic principles of Pharmaceutical agents and devices along with other associated sciences.
- 2 To develop an ability to identify, formulate and solve complex problems of Pharmaceutical Industry, Community & Hospital Pharmacy.
- 3 To design solutions for complex pharmacy problems that meet the specified needs with appropriate concern for the public health and safety and the cultural and environmental considerations.
- To use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.
- To implement appropriate methods, procedures, resources and modern pharmacy-related computing tools.
- To execute contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional Pharmacy Practice.
- To recognize the impact of the professional pharmacy solutions in community and environmental contexts, and demonstrate the knowledge and need for sustainable development.
- To possess personal & universal values and apply ethical principles in professional and social contexts.
- 9 To realize responsibility as an individual and as a member, or leader in professional team or multidisciplinary settings.
- To communicate effectively in the professional settings and with society at large.
- To execute and demonstrate their professional skills and comprehensive knowledge to manage projects, to carry out research in the core and applied areas of Pharmaceutical sciences.
- To recognize the need for self-assessment and effectively use the feedback from others to identify learning needs to compete globally.

## Course Structure of the Program

	Se	mester- I				
Course Code	Course Title	Type of Course	L	Т	P	Credit
BP101T	Human Anatomy and Physiology I–Theory	Core Course	3	1	0	4
BP102T	Pharmaceutical Analysis I – Theory	Core Course	3	1	0	4
BP103T	Pharmaceutics I –Theory	Core Course	3	1	0	4
BP104T	Pharmaceutical Inorganic Chemistry - Theory	Core Course	3	1	0	4
BP105T	Communication skills– Theory *	Ability Enhancement	2	0	0	2
BP106RBT	Remedial Biologyy	Deficient				
BP106RMT	Remedial Mathematics – Theory*	Course	2	0	0	2
BP107P	Human Anatomy and Physiology I– Practical	Technical Enhancement	0	0	4	2
BP108P	Pharmaceutical Analysis I – Practical	Technical Enhancement	0	0	4	2
BP109P	Pharmaceutics I – Practical	Technical Enhancement	0	0	4	2
BP1110P	Pharmaceutical Inorganic Chemistry- Practical	Technical Enhancement	0	0	4	2
BP111P	Communication skills– Practical*	Ability Enhancement	0	0	2	1
BP1112RBP	Remedial Biology – Practical*	Ability Enhancement	0	0	2	1
	Total		32	2/34\$	/36#	27/29\$/30#

<sup>\*</sup>Applicable ONLY for the students who have studied Mathematics /Physics/ Chemistry at HSC and appearing for Remedial Biology (RB) course.

<sup>\$</sup>Applicable ONLY for the students who have studied Physics /Chemistry /Botany /Zoology at HSC and appearing for Remedial Mathematics (RM) course.

	Semester- II							
Course Code	Course Title	Type of Course	L	Т	P	Credit		
BP201T	Human Anatomy and Physiology II – Theory	Core Course	3	1	0	4		
BP202T	Pharmaceutical Organic Chemistry I – Theory	Core Course	3	1	0	4		
BP203T	Biochemistry – Theory	Core Course	3	1	0	4		

	Total			4	14	29
BP210P	Computer Applications in Pharmacy – Practical*	Technical Enhancement	0	0	2	1
BP209P	Biochemistry – Practical	Technical Enhancement	0	0	4	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	Technical Enhancement	0	0	4	2
BP207P	Human Anatomy and Physiology II –Practical	Technical Enhancement	0	0	4	2
BP206T	Environmental sciences – Theory *	Ability Enhancement	3	0	0	3
BP205T	Computer Applications in Pharmacy – Theory *	Technical Enhancement	3	0	0	3
BP204T	Pathophysiology – Theory	Core Course	3	1	0	4

<sup>\*</sup>Non University Examination (NUE)

	Semester- III					
Course	Course Title	Type of				
Code		Course	L	T	P	Credit
BP301T	Pharmaceutical Organic Chemistry II – Theory	Core Course	3	1	0	4
BP302T	Physical Pharmaceutics I – Theory	Core Course	3	1	0	4
BP303T	Pharmaceutical Microbiology – Theory	Core Course	3	1	0	4
BP304T	Pharmaceutical Engineering – Theory	Core Course	3	1	0	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	Technical Enhancement	0	0	4	2
BP306P	Physical Pharmaceutics I – Practical	Technical Enhancement	0	0	4	2
BP307P	Pharmaceutical Microbiology – Practical	Technical Enhancement	0	0	4	2
BP308P	Pharmaceutical Engineering –Practical	Technical Enhancement	0	0	4	2
	Total		12	4	16	24

	Semester- IV						
Course Code	Course Title	Type of Course					
Code		Course	L	T	P	Credit	
BP401T	Pharmaceutical Organic Chemistry III– Theory	Core Course	3	1	0	4	
BP402T	Medicinal Chemistry I – Theory	Core Course	3	1	0	4	

Total				5	16	28
21 .031	Practical	Billiancement				
BP409P	Phytochemistry I –	Enhancement	0	0	4	2
	Pharmacognosy and	Technical				
		Enhancement				
BP408P	Pharmacology I – Practical	Technical	0	0	4	2
	- Practical	Enhancement				
BP407P	Physical Pharmaceutics II	Technical	0	0	4	2
	Practical	Enhancement				
BP406P	Medicinal Chemistry I –	Technical	0	0	4	2
	Phytochemistry I– Theory					
BP405T	Pharmacognosy and	Core Course	3	1	0	4
BP404T	Pharmacology I – Theory	Core Course	3	1	0	4
BP403T	Physical Pharmaceutics II  – Theory	Core Course	3	1	0	4

	Semester -V						
Course Code	Course Title	itle Type of Course					
			L	T	P	Credit	
BP501T	Medicinal Chemistry II – Theory	Core Course	3	1	0	4	
BP502T	Industrial Pharmacy I– Theory	Core Course	3	1	0	4	
BP503T	Pharmacology II – Theory	Core Course	3	1	0	4	
BP504T	Pharmacognosy and Phytochemistry II– Theory	Core Course	3	1	0	4	
BP505T	Pharmaceutical Jurisprudence – Theory	Core Course	3	1	0	4	
BP506P	Industrial Pharmacy I – Practical	Technical Enhancement	0	0	4	2	
BP507P	Pharmacology II – Practical	Technical Enhancement	0	0	4	2	
BP508P	Pharmacognosy and Phytochemistry II – Practical	Technical Enhancement	0	0	4	2	
Total 15 5 12					12	26	

	Semester -VI						
Course Code	Course Title	Type of Course					
Couc			L	T	P	Credit	
BP601T	Medicinal Chemistry III – Theory	Core Course	3	1	0	4	
BP602T	Pharmacology III – Theory	Core Course	3	1	0	4	
BP603T	Herbal Drug Technology- Theory	Core Course	3	1	0	4	
	Biopharmaceutics and	Core Course					
BP604T	Pharmacokinetics –Theory		3	1	0	4	
BP605T	Pharmaceutical Biotechnology – Theory	Core Course	3	1	0	4	
BP606T	Quality Assurance – Theory	Core Course	3	1	0	4	
BP607P	Medicinal chemistry III – Practical	Technical Enhancement	0	0	4	2	
BP608P	Pharmacology III – Practical	Technical Enhancement	0	0	4	2	
BP609P	Herbal Drug Technology – Practical	Technical Enhancement	0	0	4	2	
	Total		18	6	12	30	

	Semester -VII							
Course Code	Course Title	Type of Course	L	T	P	Credit		
BP701T	Instrumental Methods of Analysis – Theory	Core Course	3	1	0	4		
BP702T	Industrial Pharmacy II – Theory	Core Course	3	1	0	4		
BP703T	Pharmacy Practice – Theory	Core Course	3	1	0	4		
BP704T	Novel Drug Delivery System – Theory	Core Course	3	1	0	4		
BP705P	Instrumental Methods of Analysis – Practical	Technical Enhancement	0	0	4	2		
BP706PS	Practice School*	Technical Enhancement	0	0	12	6		
	Total				16	24		

	Semes	ster –VIII				
Course	Course Title	Type of				
Code		Course	L	<b>T</b> B.	Phpmac	y ( <b>Gregdit</b>
BP801T	Biostatistics and ResearchMethodology	Foundation Compulsory	3	1	0	4
BP802T	Social and Preventive Pharmacy	Ability Enhancement	3	1	0	4
	Elective (A	Any two of the f	ollowi	i <b>ng)</b>		
BP803ET	Pharma Marketing Management					
BP804ET	Pharmaceutical RegulatoryScience	_				
BP805ET	Pharmacovigilance					
BP806ET	Quality Control and Standardization of Herbals					
BP807ET	Computer Aided Drug Design	Discipline				
BP808ET	Cell and Molecular Biology	Elective				
BP809ET	Cosmetic Science					
BP810ET	Experimental Pharmacology		6	2	0	8
BP811ET	Advanced Instrumentation Techniques					
BP812ET	Dietary Supplements and Nutraceuticals					
BP813PW	Project Work	Technical Enhancement	0	0	12	6
	Total		12	4	12	22
	Grand Total		135	36	118	212

Total Number of	76
Course	
Number of Theory	49
Course	
Number of Practical	27
Course	
Total Number of	212
Credits	