



हिमालयन भेषजी विज्ञान स्कूल

स्वामी राम हिमालयन विश्वविद्यालय की एक शैक्षणिक इकाई

Himalayan School of Pharmaceutical Sciences

A Constituent Academic Unit of Swami Rama Himalayan University



Roll No. _____

Date: _____

B. Pharm. – 4th Semester

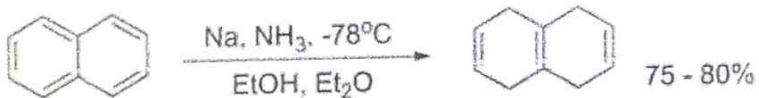
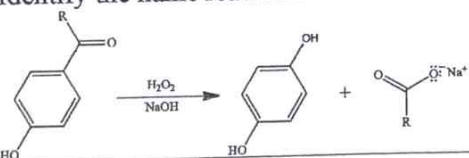
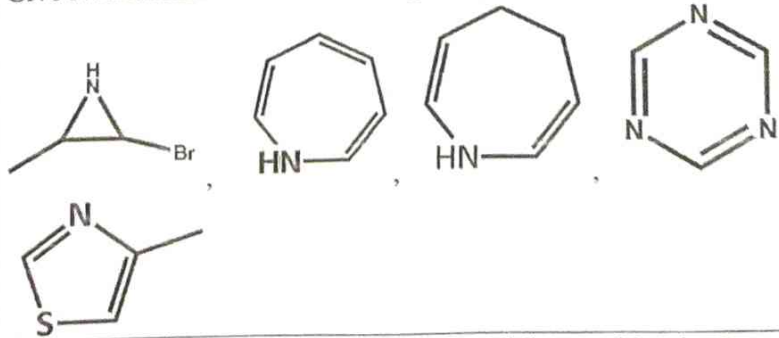
Second Sessional Theory Examination (2025)

Subject Code: BP401T

Subject Name: Pharmaceutical Organic Chemistry-III

Time: 1.5 Hours

Total Marks: 30

Part	Q. No		Marks	CO	BT Level
A		Attempt all questions	10		
	1.	Draw the structure of Pyridine.	1	3	1
	2.	Draw the structure of a fused heterocyclic compound.	1	3	2
	3.	Name Pyrrole as per Hantzsch Widman Nomenclature.	1	3	1
	4.	Which is more basic Pyridine or Pyrrole?	1	3	2
	5.	Write the order of aromatic character between Pyrrole, Thiophene and Furan.	1	3	1
	6.	MPV reduction is the opposite of.....	1	3	1
	7.	Identify the name reaction: 	1	3	2
	8.	Give chemical reaction used for conversion of Aldehyde directly into Alkane.	1	3	1
	9.	Give any one use of Furan.	1	5	1
B	10.	Identify the name reaction: 	1	5	1
		Attempt any one question	10		
	1.	Explain Wolff Kishner Reduction with mechanism.	10	5	2
C	2.	Explain in detail the methods of preparation and chemical properties of Pyrrole.	10	3	2
		Attempt any two questions	10		
	1.	Explain and Oppeneaur Oxidation with its mechanism.	5	5	2
	2.	Give Nomenclature of the following compounds: 	5	3	2
	3.	Draw the structures of: Piperidine, Pyrrolidine, Imidazole, Pyrazine, Quinoline.	5	3	1



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Roll No. 16

Date: 2-05-25

B. Pharm. – 4th Semester
Second Sessional Theory Examination (2025)

Subject Code: BP402T

Subject Name: Medicinal Chemistry-I

Time: 1.5 Hours

Total Marks: 30

Part	Q. No		Marks	CO	BT Level
A		Attempt all questions	10		
	1.	Name any reversible indirectly acting cholinergic drug. ✓	1	1	1
	2.	Name a cholinesterase reactivator. ✓	1	1	1
	3.	Give an example of Antisecretory antispasmodic which has quaternary nitrogen.	1	1	1
	4.	Give an example of anticholinergic used as antiparkinson drug.	1	1	2
	5.	What is the effect of atropine on eye? {Miosis/Mydriasis} ✓	1	1	1
	6.	Give an example of organophosphate. ✓	1	1	1
	7.	Sweating, Salivation and Lachrymation are the symptoms of hyper..... (cholinergic/anticholinergic) activity.	1	1	1
	8.	Cholinestrerase enzyme has (one/two) sites out of which(estaractic/anionic) site is the main. ✓	1	1	1
	9.	The other name for hyoscine is.....	1	2	1
	10.	The other name for Trihexyphenydydyl is.....	1	2	2
B		Attempt any one question	10		
	1.	Write SAR of Cholinergic Drugs OR Anticholinergic drugs.	10	5	2
	2.	Write the synthesis of: Carbachol, Neostigmine, Ipratropium bromide, Dicyclomine hydrochloride, Procyclidine hydrochloride.	10	4	2
C		Attempt any two questions	10		
	1.	Write a short note on the uses of Anticholinergic drugs.	5	1	2
	2.	Write the classification of Cholinergic Drugs with their structures.	5	2	1
	3.	Draw the structures of: Acetylcholine, Carbachol, Atropine, Physostigmine, Pralidoxime	5	2	1

BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analyzing, 5 –Evaluating, 6 – Creating)



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B. Pharm. – 4th Semester
Mid-Semester (Second Sessional) Examination (2024-25)

Subject Code: BP403T

Subject Name: PHYSICAL PHARMACEUTICS-II (Theory)

Time: 1.5 Hour

Total Marks: 30

Part	Q. No		Marks	CO	BL
A		Attempt all questions	10		
	1.	What is Coarse Dispersion.	1	2	1
	2.	Write about the general characteristics of Suspension.	1	2	1
	3.	Write the importance of wetting.	1	3	2
	4.	Write about the Interfacial region.	1	2	2
	5.	Define the settling.	1	2	1
	6.	Define the Surfactant with examples.	1	3	4
	7.	What is Creaming.	1	2	3
	8.	Define the Ostwald Ripening.	1	3	2
	9.	What is Microemulsion and Multiple Emulsion.	1	2	2
	10.	Write about the Micromeritics.	1	2	3
B		Attempt any one question	10		
	1.	Discuss about the Formulation of Flocculated & Deflocculated suspension.	10	2	3
	2.	Write the methods for determining Particle Size.	10	4	5
C		Attempt any two questions	10		
	1.	Write about the settling in suspension and its factors.	5	4	3
	2.	Write about the stability and preservation of Emulsion.	5	2	3
	3.	Write in role of HLB method in formulation of emulsion.	5	4	5



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B. Pharm. —4th Semester
Second Sessional Theory Examination (2025)

Subject Code: BP 404T

Subject Name: Pharmacology I

Time: 1.5 Hours

Total Marks: 30

Part	Q. No		Marks	CO	BL
A		Attempt all questions.	10		
	1.	What is neurotransmitter?	1	2	1,2
	2.	Give definition of sedative.	1	2,3	1,2
	3.	Enlist the name and location of Muscarinic Receptor.	1	2	1,2
	4.	Define the term neurohumoral transmission.	1	2	1,2
	5.	What is myasthenia gravis?	1	2,3	1,2
	6.	Give example of excitatory neurotransmitter.	1	2,3	1,2
	7.	What is the difference between parasympathomimetic and Para sympatholytic?	1	2,3	1,2
	8.	Enlist the use of Acetyl-choline.	1	2,3	1,2
	9.	Write name of cholinergic receptor antagonist drug.	1	2,3	1,2
	10.	Location of beta-2 Receptor is.....	1	2,3	1,2
B		Attempt any one question	10		
	1.	Give classification Anticholinergic drugs and Pharmacological action and uses of Atropine.		2,3	2
	2.	Give classification beta blocker drugs and Pharmacological action and uses of propranolol.		2	2
C		Attempt any two questions	10		
	1.	Write a note on Neurohumoral transmission.	5	2	2
	2.	Write a short note on Glaucoma and its treatment	5	2,3	2
	3.	Write a short note on stages of general Anaesthetics.	5	2,3	2



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**B. Pharm. – 4th Semester
(2nd Sessional) Examination (2025)**

Subject Code: BP405T

Subject Name: PHARMACOGNOSY AND PHYTOCHEMISTRY-I

Time: 1.5 Hour

Total Marks: 30

Part	Q. No		Marks	CO	BL
A		Attempt all questions	10		
	1.	Shinoda test is used for the identification of-----?	1	4	1
	2.	Which test is used for the identification of cardiac glycosides?	1	4	1&2
	3.	Vata, Pitta and kapha combined known as-----?	1	4	1
	4.	Write in brief about Law of similia.	1	4	2
	5.	Mayer's test is used for the identification of-----?	1	4	1
	6.	What is the end point of Hager's test.	1	4	1
	7.	Write down the full form of AYUSH.	1	4	1&2
	8.	Write down the example of true alkaloid containing herb.	1	4	2
	9.	Write the basic structure of Flavonoids	1	4	1
	10.	Dragondorff's test is used in the identification of -----?	1	4	1
B		Attempt any one question	10		
	1.	What do you understand by the Ayurveda system of medicine?	10	4	1&2
	2.	Write a brief note on Alkaloids.	10	4	1&2
C		Attempt any two questions	10		
	1.	What do you understand by Principles of Homeopathy?	5	4	1
	2.	Write the classification of glycosides.	5	4	1&2
	3.	Write the identification tests for Alkaloids	5	4	1

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