

# COMPETENCY BASED DYNAMIC CURRICULUM FOR FIRST BHMS PROFESSIONAL COURSE

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification by National Commission for Homoeopathy whichever is earlier)

(Homoeopathic Pharmacy)



**HOMOEOPATHY EDUCATION BOARD**

**NATIONAL COMMISSION FOR HOMOEOPATHY**

**MINISTRY OF AYUSH, GOVERNMENT OF INDIA**

JAWAHAR LAL NEHRU BHARTIYA CHIKITSA AVUM HOMOEOPATHY ANUSANDHAN BHAVAN

No.61-65, Institutional Area, opp. 'D' block, Janak Puri, New Delhi-110 058

**Course-Homoeopathic Pharmacy**

**Course code:** Hom-UG-HP

**INDEX**

<b>Sr. No</b>	<b>Description</b>	<b>Page Number</b>
1	Preamble	02
2	Program Outcomes (PO)	03
3	Course Outcomes (CO)	04
4	Teaching Hours	05
5	Course Content	13
6	Teaching Learning Methods	21
7	Content Mapping (Competencies Table)	22
8	Practical Topics	107
9	Assessment	110
10	List of Recommended Books	115
11	List of Contributors	122

## 1. PREAMBLE

Pharmacy holds a unique place in Homoeopathic practice and education. It involves knowledge of sources of drugs and the process through which these are processed to obtain dynamic, potent homoeopathic drugs for use at the bedside. It encompasses knowledge of drug action, drug proving, methods of Quality testing, standardization & storage with up to date information of changing drug laws related to Homoeopathic Pharmaceutical Industry & Homoeopathy.

We all know the travails which Master went through while establishing the right to manufacture and dispense what he had so painfully discovered. The challenges have not lessened in the modern era when 'scientific' evidence has been gathered for dubbing Homoeopathic medicines as nothing more than a placebo. It is important that the entrant to our science is introduced to the scientific nature of the process employed to prepare our medicines and he develops confidence in the soundness of the practices as well as its efficacy. The student should also appreciate the more than 250 year advance that Hahnemann was able to establish of Homoeopathic science. We now know that Homoeopathy is the 'greenest' of all medical systems in existence and that is sustainable, eco-friendly and the most economic while being effective over a wide range of conditions.

The way that this can be conveyed is by adopting an integrated approach to Pharmacy education and training. Effective linkages with the subjects of Homoeopathic Philosophy and Materia Medica will be able to convey the strong roots that the practice of Pharmacy has not only in the philosophical approach but also the experimental results as seen through the proving from which the world of Materia Medica has evolved.

Simultaneously, the recent advances in the bio-physical and quantum physics has opened new avenues to address the age-old question of how homoeopathic medicines act. A host of researchers are already doing work which the student needs to be made conversant with. That will produce an insight of the way new researches and developments in related fields of the 21<sup>st</sup> century are able to start explaining Hahnemann's insights of the 18<sup>th</sup>! This will also firmly root the student in the first year itself to being a participant in ongoing research related to the discipline which will be his own. Hence the teacher of Pharmacy has a crucial role to play in being abreast of the developments in the field and lend to the student the excitement that becomes a part of teaching-learning.

## **2. PROGRAMME OUTCOMES**

At the end of BHMS program, a student must

- 1) Develop the knowledge, skills, abilities and confidence as a primary care homoeopathic practitioner to attend to the health needs of the community in a holistic manner
- 2) Correctly assess and clinically diagnose common clinical conditions prevalent in the community from time to time
- 3) Identify and incorporate the socio-demographic, psychological, cultural, environmental & economic factors affecting health and disease in clinical work
- 4) Recognize the scope and limitation of homoeopathy in order to apply Homoeopathic principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community
- 5) Be willing and able to practice homoeopathy as per medical ethics and professionalism.
- 6) Discern the scope and relevance of other systems of medical practice for rational use of cross referrals and role of life saving measures to address clinical emergencies
- 7) Develop the capacity for critical thinking, self reflection and a research orientation as required for developing evidence based homoeopathic practice.
- 8) Develop an aptitude for lifelong learning to be able to meet the changing demands of clinical practice
- 9) Develop the necessary communication skills and enabling attitudes to work as a responsible team member in various healthcare settings and contribute towards the larger goals of national health policies such as school health, community health and environmental conservation.

### 3.COURSE OUTCOMES

At the end of the course of Homoeopathic Pharmacy, I BHMS Student will be able to

1. Explain the principles that govern homoeopathic pharmacy.
2. Discuss the pharmacognosical basis of homoeopathic drugs with respect to their identification, nomenclature, source, part used, method of collection and preparation.
3. Prepare homoeopathic medicines from their respective sources according to the different scales & methods of potentisation on a small scale in the laboratory.
4. Describe the pharmacology of homoeopathic drugs with respect to the types of drug action, sphere of action and pharmacological action of homoeopathic drugs integrated with Homoeopathic Materia Medica, Anatomy and physiology.
5. Relate the methodology of Homoeopathic Drug Proving integrated with Organon of Medicine.
6. Apply the principles of Homoeopathic Posology in different health care setting like OPD/IPD integrated with Organon of Medicine and Homoeopathic Materia Medica.
7. State the methods of standardization and quality control of homoeopathic medicines to ensure the genuineness of homoeopathic medicines.
8. Explain the principles of pharmaconomy, dispensing and preservation of homoeopathic medicines.
9. Engage the principles of pharmaco-vigilance, and adverse drug reaction in relation to homoeopathic medicines.
10. Write an ideal prescription.
11. Evaluate the scope for research in homoeopathic pharmacy in the context of the recent advancements in pharmaceutical sciences

## 1. TEACHING HOURS

Sr No.	Subject	Theoretical Lecture	Practical + Posting at IPD/OPD/Hospital Dispensing Section
01	Homeopathic Pharmacy	100 hrs.	110 hrs.

### Teaching Hours (Theory)

A. List of Topics		B.Term	C.Teaching Hours
<b>a) General Concepts and Orientation:</b>			
History of Pharmacy with emphasis on emergence of Homoeopathic Pharmacy.	Definition of Pharmacy & Homoeopathic Pharmacy  Concept of Drug substance, Drug, Medicine & Remedy  Forming Basic concept of other AYUSH Schools of Pharmacy (Ayurveda, Siddha, Sowa Rigpa & Unani Pharmacy)	I	03
Homoeopathic Pharmacy Basics	Sources of Homoeopathic Pharmacy  Branches of Pharmacy  Scope of Homoeopathic Pharmacy  Specialty and originality of Homoeopathic Pharmacy  The Principles of Homoeopathy	I	04

	<p>Law of Similia, Simplex &amp; Minimum</p> <p>Theory of Chronic Disease &amp; Vital Force</p> <p>Doctrine of Drug Proving &amp; Drug Dynamisation</p>		
Homoeopathic Pharmacopoeia	<p>The Evolution, History &amp; Development of Homoeopathic Pharmacopoeias throughout the world (year wise Publications) – GHP, BHP, HPUS, FHP</p> <p>Official –(HPI) &amp;Unofficial Pharmacopoeias – (M Bhattacharya &amp; Co's Homoeopathic Pharmacopoeia</p> <p>Encyclopaedia of Homoeopathic Pharmacopoeia – P N Verma, Homoeopathic Pharmaceutical Codex)</p> <p>Monograph, Contents of Monograph with its individual importance</p>	I	04
Ideal laboratory	<p>Pre requisites of ideal Laboratory (General Laboratory), Laboratory safety Rules</p> <p>Role of Laboratory in Homoeopathic Pharmacy Education</p>	I	02
Weights and measurements.	<p>Metrology</p> <p>Basics &amp; Units of Apothecary System, British Imperial System, Metric System</p> <p>Interrelationship between various systems of Weight &amp; Measure</p> <p>Concept on Domestic Measures with Metric Equivalents</p>	I	01

Nomenclature	The Basic Rules of Nomenclature Nomenclature of Homoeopathic Drugs Important terminologies like scientific names, common names, synonyms Anomalies in Nomenclature	I	02
Pioneers of Homoeopathic Pharmacy	Role & contributions of Pioneers in development of Homoeopathic Pharmacy	I	02
<b>b) Raw Material: Drugs and Vehicles</b>			
Source of drugs in Homoeopathy	Different sources - Plant kingdom, Animal kingdom, Mineral kingdom, Nosodes, Sarcodes, Imponderabilia, Synthetic source, New Sources - Allersode, Isodes with reference to their clinical utility Introduction to Bowel Nosodes, Tissue remedies	I	07
Collection of drug substances	General and Specific guidelines for collecting drugs from all available sources	I	03
Vehicles.	Definition, classification, General Use Source, Properties & Particular use of Vehicles with respect to List Provided in Appendix D Preparation – Commercial Lactose, Alcohol Purity tests – Water, Alcohol, Sugar of Milk	I	06
<b>c) Homoeopathic Pharmaceutics:</b>			



Mother tincture and its preparation	Extraction – Principles & Various Methods Old Method (Based on Class I to IX) Concept of Uniform Drug Strength Estimation of Moisture Content - Necessity New Method/Modern Approach of Homoeopathic Drug Preparation	II	07
Various Scales of Potentization in Homoeopathic pharmacy.	History of development, Introducer, Designation, Preparation, Administration & Application with respect to - Centesimal Scale, Decimal Scale & 50 Millesimal Scale	II	03
Drugs Dynamisation	The Evolution of Dynamisation Concept in Homoeopathy Potentisation & its types The Merits of Potentisation Succussion & Trituration Various types of Potency– Fluxion Potency, Jumping Potency, Back Potency, Single Vial Potency, Multiple Vial Potency, Mixed Vial Potency Post-Hahnemannian Potentization Techniques	II	06
External applications	Scope of administration of External Applications in Homoeopathic Practice Dr Hahnemann’s View as per Organon (5 <sup>th</sup> & 6 <sup>th</sup> Ed)	II	05

	Preparation & Uses of lotion, glycerol, liniment and ointment. Commercial Preparation of Ointment		
Posology	Basic principles of Homoeopathic Posology Related aphorisms of Organon of medicine. Criteria for Selection of Potency & Repetition of Dose Various Kinds of Dose, Emphasis on Minimum Dose	III	06
Prescription	Prescription Writing Important Abbreviations Parts & Contents of Prescription Merits & Demerits of Prescription Writing	III	02
Dispensing of Homoeopathic Medicines	Various Dosage Forms – Solid, Liquid Dosage Forms, Methods of Dispensing	II	02
Placebo.	Concept of Homoeopathic Placebo The Philosophy of administration of placebo Concept of Placebo Effect	II	01
Pharmaconomy	Routes of Homoeopathic drug administration.	II	02
Preservation	Preservation Rules – Raw Materials Drug Substance, Mother Preparations, Finished products & Vehicles	II	02

<b>d) Pharmacodynamics</b>			
▪ Doctrine of Signature.	Basic Concept, Its Evolution & Application in Ancient Medical System Supporters of the Doctrine Dr Hahnemann's view on the Doctrine	II	01
▪ Drug Proving.	Homoeopathic Pharmacodynamics With reference to aphorisms 105 – 145 of Organon of Medicine – 6 <sup>th</sup> Ed) Post Hahnemannian Drug Proving Homoeopathic Pathogenetic Trial (HPT) CCRH & Other Protocols on HPT Other Noted Provers & their work on Drug Proving	III	06
▪ Adverse Reactions	Drug Basic Idea, Reporting of ADE Drug safety with Ref to HPI Medication errors, Causality Assessment Incompatible Remedies	II	02
▪ Pharmaco-vigilance.	Pharmacovigilance in Homoeopathy Activities of Pharmacovigilance Centres Awareness on Medicinal Preparations against Homoeopathic Principles – Patents, Combinations	II	02

▪ Pharmacological study of drugs	listed in Appendix-A (Any 15)	III	05
<b>e) Quality Control:</b>			
• Standardisation Homoeopathy	in Different Methods of Standardisation Quality Control of Raw Materials – Various Evaluation techniques In Process Quality Control Quality Control of finished products – Various standard parameters	II	02
• Industrial pharmacy.	Good Manufacturing Practices (GMP) Schedule M1	II	02
• Homoeopathic pharmacopoeia laboratory (HPL)	Functions and Activities of HPL relating to quality control of drugs. Pharmacopoeia Commission for Indian Medicines	II	01
<b>f) Legislations pertaining to Homoeopathic Pharmacy:</b>		<b>III</b>	<b>04</b>
The Drugs and Cosmetics Act, 1940 (23 of 1940)			
Drugs and Cosmetics Rules, 1945			
Medicinal and Toilet Preparations (Excise Duties) Act, 1955 (16 of 1955)			
Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 (21 of 1954)			
The Narcotic Drugs and Psychotropic Substances Act, 1985 (61 of 1985)			
Dangerous Drug Act, 1930			

<b>g) Recent Advances in Homoeopathic Pharmacy</b>	<b>III</b>	<b>02</b>
<p>Modern theories related with Homoeopathic Drug action</p> <ul style="list-style-type: none"> <li>▪ Principles of Drug action</li> <li>▪ Introduction to Nanomedicine</li> <li>▪ Molecular Mechanism of Drug Action</li> <li>▪ Mechanism of Action of Homoeopathic Medicines</li> </ul>		
<p>Scope of Research in Homoeopathic Pharmacy</p> <ul style="list-style-type: none"> <li>▪ Drug Discovery</li> <li>▪ Principles of New Drug discovery</li> <li>▪ Clinical evaluation of New Drugs</li> <li>▪ Pre-Clinical Research in Homoeopathic Pharmacy</li> </ul>	III	01
<b>h) Homoeopathic Pharmacy - Relationships</b>	<b>III</b>	<b>02</b>
Relation of Homoeopathic Pharmacy with Anatomy		
Relation of Homoeopathic Pharmacy with Physiology		
<p>Relation of Homoeopathic Pharmacy with Materia Medica</p> <p>With reference to Source of Drugs, Identification, Common Name of Drugs, Role of Drug Proving &amp; Other Types of Proving in construction of Materia Medica, Clinical Verification</p> <p>Family wise study of Sphere of action – Solanaceae, Loganiaceae, Compositae, Liliaceae, Anacardiaceae, Rubiaceae etc</p>		

**Teaching Hours (Practical)**

Homoeopathic Pharmacy Practicals		Teaching Hours	Peyton's 4 step assessment criteria
	Particulars of Experiments		
1	Estimation of size of globules	2	Execution
2	Medication of globules (Small Scale)	2	Execution
3	Purity test of Sugar of milk	2	Comprehension & Execution
4	Purity test of water	2	Comprehension & Execution
5	Purity test of Ethyl alcohol	2	Comprehension & Execution
6	Determination of Specific gravity of a given liquid Vehicle & identifying the same.	2	Execution
7	Preparation of dispensing alcohol from strong alcohol.	1	Comprehension & Execution
8	Preparation of dilute alcohol from strong alcohol.	1	Comprehension & Execution
9	Trituration of drug in Old Method (One each of Class VII, VIII & IX)	3	Execution
10	Trituration of one drug as per HPI	1	Execution
11	Succussion in decimal scale from Mother Tincture (Prepared in Old Method) to 3X potency.	2	Execution
12	Succussion in decimal scale from Mother Tincture (Prepared in New Method) to 3X potency	2	Execution
13	Succussion in centesimal scale from Mother Tincture (Prepared in Old Method) to 3C	2	Execution
14	Succussion in centesimal scale from Mother Tincture (Prepared in New Method) to 3C	2	Execution
15	Conversion of Trituration to liquid potency: Decimal scale 6X to 8X potency.	1	Execution
16	Conversion of Trituration to liquid potency: Centesimal scale 3C to 4C potency.	1	Execution

17	Preparation of 0/2 potency (Solid form) (LM scale) of 1 Drug from 3 <sup>rd</sup> Degree Trituration.	2	Execution
18	Preparation of external applications – Lotion	1	Execution
19	Preparation of external applications – Glycerol	1	Execution
20	Preparation of external applications – Liniment	1	Execution
21	Preparation of external applications – Ointment	1	Execution
22	Writing of prescription & Dispensing the Medicine in Water with preparation of Doses	1	Execution
23	Writing of prescription & Dispensing the Medicine in Sugar of Milk with Preparation of Doses	1	Execution
24	Preparation of mother tinctures according to Old Hahnemannian method (Class I, II, III, IV)	8	Execution
25	Preparation of mother solutions according to Old Hahnemannian method (Class Va, Vb, VIa, VIb)	4	Execution

## 5. COURSE CONTENT

### A. THEORY

<b>Table 4: Homoeopathic Pharmacy Theory</b>	
<b>a) General Concepts and Orientation:</b>	
History of Pharmacy with emphasis on emergence of Homoeopathic Pharmacy.	Definition of Pharmacy & Homoeopathic Pharmacy Concept of Drug substance, Drug, Medicine & Remedy Forming Basic concept of other AYUSH Schools of Pharmacy (Ayurveda, Siddha, Sowa Rigpa & Unani Pharmacy)
Homoeopathic Pharmacy Basics	Sources of Homoeopathic Pharmacy Branches of Pharmacy Scope of Homoeopathic Pharmacy Specialty and originality of Homoeopathic Pharmacy The Principles of Homoeopathy Law of Similia, Simplex & Minimum Theory of Chronic Disease & Vital Force Doctrine of Drug Proving & Drug Dynamisation



Homoeopathic Pharmacopoeia	<p>The Evolution, History &amp; Development of Homoeopathic Pharmacopoeias throughout the world (year wise Publications) – GHP, BHP, HPUS, FHP</p> <p>Official –(HPI) &amp; Unofficial Pharmacopoeias –</p> <p>(M Bhattacharya &amp; Co's Homoeopathic Pharmacopoeia</p> <p>Encyclopaedia of Homoeopathic Pharmacopoeia – P N Verma, Homoeopathic Pharmaceutical Codex)</p> <p>Monograph, Contents of Monograph with its individual importance</p>
Ideal laboratory	<p>Pre requisites of ideal Laboratory (General Laboratory), Laboratory safety Rules</p> <p>Role of Laboratory in Homoeopathic Pharmacy Education</p>
Weights and measurements.	<p>Metrology</p> <p>Basics &amp; Units of Apothecary System, British Imperial System, Metric System</p> <p>Interrelationship between various systems of Weight &amp; Measure</p> <p>Concept on Domestic Measures with Metric Equivalents</p>
Nomenclature	<p>The Basic Rules of Nomenclature</p> <p>Nomenclature of Homoeopathic Drugs</p> <p>Important terminologies like scientific names, common names, synonyms</p> <p>Anomalies in Nomenclature</p>
Pioneers of Homoeopathic Pharmacy	<p>Role &amp; contributions of Pioneers in development of Homoeopathic Pharmacy</p>
<b>b) Raw Material: Drugs and Vehicles</b>	

Source of drugs in Homoeopathy	Different sources - Plant kingdom, Animal kingdom, Mineral kingdom, Nosodes, Sarcodes, Imponderabilia, Synthetic source,  New Sources - Allersode, Isodes with reference to their clinical utility  Introduction to Bowel Nosodes, Tissue remedies
Collection of drug substances	General and Specific guidelines for collecting drugs from all available sources
Vehicles.	Definition, classification, General Use  Source, Properties & Particular use of Vehicles with respect to List Provided in Appendix D  Preparation – Commercial Lactose, Alcohol  Purity tests – Water, Alcohol, Sugar of Milk
<b>c) Homoeopathic Pharmaceutics:</b>	
Mother tincture and its preparation	Extraction – Principles & Various Methods  Old Method (Based on Class I to IX)  Concept of Uniform Drug Strength  Estimation of Moisture Content - Necessity  New Method/Modern Approach of Homoeopathic Drug Preparation
Various Scales of Potentization in Homoeopathic pharmacy.	History of development, Introducer, Designation, Preparation, Administration & Application with respect to - Centesimal Scale, Decimal Scale & 50 Millesimal Scale

Drugs Dynamisation	<p>The Evolution of Dynamisation - Concept in Homoeopathy</p> <p>Potentisation &amp; its types</p> <p>The Merits of Potentisation</p> <p>Succussion &amp; Trituration</p> <p>Various types of Potency– Fluxion Potency, Jumping Potency, Back Potency, Single Vial Potency, Multiple Vial Potency, Mixed Vial Potency</p> <p>Post-Hahnemannian Potentization Techniques</p>
External applications	<p>Scope of administration of External Applications in Homoeopathic Practice</p> <p>Dr Hahnemann’s View as per Organon (5<sup>th</sup>&amp; 6<sup>th</sup> Ed)</p> <p>Preparation &amp; Uses of lotion, glycerol, liniment and ointment.</p> <p>Commercial Preparation of Ointment</p>
Posology	<p>Basic principles of Homoeopathic Posology</p> <p>Related aphorisms of Organon of medicine.</p> <p>Criteria for Selection of Potency &amp; Repetition of Dose</p> <p>Various Kinds of Dose, Emphasis on Minimum Dose</p>
Prescription	<p>Prescription Writing</p> <p>Important Abbreviations</p> <p>Parts &amp; Contents of Prescription</p> <p>Merits &amp; Demerits of Prescription Writing</p>
Dispensing of Homoeopathic Medicines	<p>Various Dosage Forms – Solid, Liquid Dosage Forms,</p> <p>Methods of Dispensing</p>

Placebo.	<p>Concept of Homoeopathic Placebo</p> <p>The Philosophy of administration of placebo</p> <p>Concept of Placebo Effect</p>
Pharmaconomy	Routes of Homoeopathic drug administration.
Preservation	Preservation Rules – Raw Materials Drug Substance, Mother Preparations, Finished products & Vehicles
<b>d) Pharmacodynamics</b>	
<ul style="list-style-type: none"> <li>▪ Doctrine of Signature.</li> </ul>	<p>Basic Concept, Its Evolution &amp; Application in Ancient Medical System</p> <p>Supporters of the Doctrine</p> <p>Dr Hahnemann's view on the Doctrine</p>
<ul style="list-style-type: none"> <li>▪ Drug Proving.</li> </ul>	<p>Homoeopathic Pharmacodynamics</p> <p>With reference to aphorisms 105 – 145 of Organon of Medicine – 6<sup>th</sup> Ed)</p> <p>Post Hahnemannian Drug Proving</p> <p>Homoeopathic Pathogenetic Trial (HPT)</p> <p>CCRH &amp; Other Protocols on HPT</p> <p>Other Noted Provers &amp; their work on Drug Proving</p>
<ul style="list-style-type: none"> <li>▪ Adverse Reactions</li> </ul>	<p>Drug</p> <p>Basic Idea, Reporting of ADE</p> <p>Drug safety with Ref to HPI</p> <p>Medication errors, Causality Assessment</p> <p>Incompatible Remedies</p>

<ul style="list-style-type: none"> <li>▪ Pharmaco-vigilance.</li> </ul>	Pharmacovigilance in Homoeopathy Activities of Pharmacovigilance Centres Awareness on Medicinal Preparations against Homoeopathic Principles – Patents, Combinations
<ul style="list-style-type: none"> <li>▪ Pharmacological study of drugs</li> </ul>	listed in Appendix-A (Any 15)
<b>e) Quality Control:</b>	
<ul style="list-style-type: none"> <li>• Standardisation Homoeopathy</li> </ul>	in Different Methods of Standardisation Quality Control of Raw Materials – Various Evaluation techniques In Process Quality Control Quality Control of finished products – Various standard parameters
<ul style="list-style-type: none"> <li>• Industrial pharmacy.</li> </ul>	Good Manufacturing Practices (GMP) Schedule M1
<ul style="list-style-type: none"> <li>• Homoeopathic pharmacopoeia laboratory (HPL)</li> </ul>	Functions and Activities of HPL relating to quality control of drugs. Pharmacopoeia Commission for Indian Medicines
<b>f) Legislations pertaining to Homoeopathic Pharmacy:</b>	
The Drugs and Cosmetics Act, 1940 (23 to 1940)	
Drugs and Cosmetics Rules, 1945	
Medicinal and Toilet Preparations (Excise Duties) Act, 1955 (16 of 1955)	
Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 (21 of 1954)	
The Narcotic Drugs and Psychotropic Substances Act, 1985 (61 of 1985)	

Dangerous Drug Act, 1930

**g) Recent Advances in Homoeopathic Pharmacy**

Modern theories related with Homoeopathic Drug action

1. Principles of Drug action
2. Introduction to Nanomedicine
3. Molecular Mechanism of Drug Action
4. Mechanism of Action of Homoeopathic Medicines

Scope of Research in Homoeopathic Pharmacy

1. Drug Discovery
2. Principles of New Drug discovery
3. Clinical evaluation of New Drugs
4. Pre-Clinical Research in Homoeopathic Pharmacy

**h) Homoeopathic Pharmacy - Relationships**

Relation of Homoeopathic Pharmacy with Anatomy

Relation of Homoeopathic Pharmacy with Physiology

Relation of Homoeopathic Pharmacy with Materia Medica

With reference to Source of Drugs, Identification, Common Name of Drugs, Role of Drug Proving & Other Types of Proving in construction of Materia Medica, Clinical Verification

Family wise study of Sphere of action – Solanaceae, Loganiaceae, Compositae, Liliaceae, Anacardiaceae, Rubiaceae etc

**B. Practical – Lab Work – Field – Clinical Hospital Work**

**1. Laboratory Work –**

Practical Class (Experiments) - Maintaining Record of Experiments Conducted

(Principle, Requirements, Calculation if applicable, Process, Label, Conclusion/Inference)

Practical Class (Demonstration) – Maintaining Records of Practical Demonstrated

(Principle, Requirements, Calculation if applicable, Process, Label, Conclusion/Inference)

**Field Visits-**

- A) Maintain File/Report on Visit to GMP Compliant Large Scale Medicine Manufacturing Unit (Format should be as per Appendix – E)**
  
- B) Maintain File/Report on Visit to Medicinal Plant Garden (Format should be as per Appendix - F)**

**Activity –**

- (a) Clinical Hospital Work** – Maintain Record (Activities/Posting in Dispensing Section, Prescriptions based on Homoeopathic Principles in IPD/OPD) – Record to be maintained as per format in Appendix G
  
- (b) Seminar** – Maintain Record on Seminar Presentation on Topics of Homoeopathic Pharmacy as assigned – Record to be maintained as per Appendix - H
  
- (c) Herbarium** – Maintenance of 30 Plant Drug Substances Samples

**B. PRACTICALS**

<b>Table 5 : Homoeopathic Pharmacy Practicals</b>	
<b>Sr No.</b>	<b>Particulars of Experiments</b>
1	Estimation of size of globules

2	Medication of globules (Small Scale)
3	Purity test of Sugar of milk
4	Purity test of water
5	Purity test of Ethyl alcohol
6	Determination of Specific gravity of a given liquid Vehicle & identifying the same.
7	Preparation of dispensing alcohol from strong alcohol.
8	Preparation of dilute alcohol from strong alcohol.
9	Trituration of drug in Old Method (One each of Class VII, VIII & IX)
10	Trituration of one drug as per HPI
11	Succussion in decimal scale from Mother Tincture (Prepared in Old Method) to 3X potency.
12	Succussion in decimal scale from Mother Tincture (Prepared in New Method) to 3X potency
13	Succussion in centesimal scale from Mother Tincture (Prepared in Old Method) to 3C
14	Succussion in centesimal scale from Mother Tincture (Prepared in New Method) to 3C
15	Conversion of Trituration to liquid potency: Decimal scale 6X to 8X potency.
16	Conversion of Trituration to liquid potency: Centesimal scale 3C to 4C potency.
17	Preparation of 0/2 potency (Solid form) (LM scale) of 1 Drug from 3 <sup>rd</sup> Degree Trituration.
18	Preparation of external applications – Lotion
19	Preparation of external applications – Glycerol
20	Preparation of external applications – Liniment
21	Preparation of external applications – Ointment
22	Writing of prescription & Dispensing the Medicine in Water with preparation of Doses



23	Writing of prescription & Dispensing the Medicine in Sugar of Milk with Preparation of Doses
24	Preparation of mother tinctures according to Old Hahnemannian method (Class I, II, III, IV)
25	Preparation of mother solutions according to Old Hahnemannian method (Class Va, Vb, VIa, VIb)

### **Demonstration**

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)
2. Estimation of moisture content using water bath
3. Paper chromatography & TLC of any mother tincture
4. Laboratory methods – Sublimation, distillation, decantation, filtration, crystallization.
5. Preparation of mother tincture – Maceration and Percolation
6. Study & demonstration of Drug Substances (listed in Appendix B)-
  - i) Macroscopic Characteristic (Any 15)
  - ii) Microscopic characteristic (Any 05)
7. Study & demonstration of vehicles (Solid, Liquid & Semi solid – as available)
8. Microscopical study of Trituration (One drug up to 3X Potency)
9. Medication of Globule (Large Scale)

### **Activities**

1. Collection of 30 drugs for herbarium
2. Visit to a Large-scale manufacturing unit of Homoeopathic medicine (GMP compliant).
3. Visit to a Medicinal Plant /Botanical Garden & shall keep details Visit report
4. Clinical Class: Visit to IPD, OPD to take note on prescriptions as per Homoeopathic Principles & keep record

5. Visit to Hospital dispensing section to observe & gain knowledge on Dispensing techniques & Keep Records

### **Demonstration**

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)-06 Hours

2. Estimation of moisture content using water bath-02 Hours

3. Paper chromatography & TLC of any mother tincture-04 Hours

4. Laboratory methods – Sublimation, distillation, decantation, filtration, crystallization.-04 Hours

5. Preparation of mother tincture – Maceration and Percolation- 04 Hours

6. Study & demonstration of Drug Substances (listed in Appendix B)- 10 Hours

i) Macroscopic Characteristic (Any 15)

ii) Microscopic characteristic (Any 05)

7. Study & demonstration of vehicles (Solid, Liquid & Semi solid – as available)- 02 Hours

8. Microscopical study of Trituration (One drug up to 3X Potency)-02 Hours

9. Medication of Globule (Large Scale)-1 Hour

**Clinical Hospital Work** – Maintain Record (Activities/Posting in Dispensing Section, Prescriptions based on Homoeopathic Principles in IPD/OPD) – Record to be maintained as per format in Appendix G- 20 Hours

**Seminar** – Maintain Record on Seminar Presentation on Topics of Homoeopathic Pharmacy as assigned- 07 Hours

### **6. TEACHING LEARNING METHODS**

The Teaching Learning activities in Homoeopathic Pharmacy requires change in structure & process in order to be more skill based & providing hands on experience. The Teaching Learning methods with respect to Homoeopathic Pharmacy may be covered in the following manner –

- a) **Class Room Lectures** – Oral Presentation, Board Work, Power point Presentation
- b) **Tutorials** – Special Classes on Doubt Clearing of Completed topics/Chapters, Special Classes for Slow Learners (involving Students in Groups comprising 5-10)
- c) **Practical Class** – Demonstration & Explanation of the Experiments, this would follow by conduction of the Experiment by the students on their own, write up of the Experiment conducted
- d) **Clinical Class** – Visit to IPD/OPD for gaining Knowledge on Prescription writing, Administration of Homoeopathic medicines based on Homoeopathic Posology, Visiting Hospital Pharmacy to observe & Gain Knowledge on dispensing techniques
- e) **Field Visit** – Visit to One GMP Compliant Homoeopathic Manufactory.  
  
Visit to One Medicinal Plant Garden
- f) **Student Activities** – Working out the Assignments, Projects, Power point presentations as assigned

## 7.CONTENT MAPPING (COMPETENCY TABLE)

**Topic:** History of Pharmacy

### Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to –

Interpret the difference in concept of Pharmacy in different AYUSH systems of medicine

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation		Integration
										Formative	Type (Summative)	
HomUG-HP-1.1.1	Integration of	History of Pharmacy with emphasis to emergence of	Knows	Must be able to interpret the difference in	Define Pharmacy	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/	1.Structured Oral Examination 2. Tutorials	Theory & Viva Voce	Horizontal with Organon of Medicine

	Knowledge	Homoeopathic Pharmacy		concept of Pharmacy among various systems of AYUSH				3. Peer teaching (Think-Pair-Share, Jigsaw Strategy)	3. Assignments			
Ho mU G-HP-1.1.2	Synthesis and application of knowledge		Knows		Define Homoeopathic Pharmacy	Level 1	Recall	Must know	4. Quiz	4. MCQ's		
Ho mU G-HP-1.1.3			Knows		Describe the Basic concepts of Different schools of Pharmacy with reference to AYUSH	Level 2	Understand	Nice to Know	5. Student Seminars	5. 2 marks question		
Ho m-UG-HP-1.1.4			Knows		Differentiate between Drug-Medicine-Remedy	Level 2	Understand	Must know	6. Integrated Teaching with Organon of Medicine	6. SAQ's and LAQ's		

**TOPIC:** Basics of Homoeopathic Pharmacy

**Topic:** Basics of Homoeopathic Pharmacy

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to –  
Enumerate the fundamental Principles of Homoeopathic Pharmacy

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	
HomUG-HP-1.2.1	Integration of Knowledge  Synthesis and	Basics of Homoeopathic Pharmacy	Knows	Must be able to state the fundamental Principles governi	1.Enumerate the Sources of Homoeopathic Pharmacy	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations  2. Small Group Discussions /	1.Structured Oral Examination  2. Tutorials	SAQ MCQ LAQ Viva Voce	

Ho mU G- HP- 1.2. 2	Applic ation of knowl edge		Knows	ng Homoe opathic Pharma cy	2.Explai n the Branch es of Homoe opathic Pharma cy		Level 2  Understa nding	Must Know	Peer teaching (Think-Pair- Share, Jigsaw Strategy)  3. Quiz  4. Student Seminars  5. Guest Lecture  6. Problem based learning	3. Assignm ents  4. MCQ's  5. 2 marks question  6.SAQ's and LAQ's			
Ho mU G- HP- 1.2. 3			Knows		3.Illustr ate the Scope of Homoe opathic Pharma cy		Level 2  Understa nding	Must Know					
Ho m- UG HP- 1.2. 4			Knows		4.Descr ibe the Original ity & Specialt y of Homoe opathic Pharma cy		Level 2  Understa nding	Must Know					
Ho mU G-			Knows		5.Explai n the Funda		Level 2	Must Know					

HP-1.2.5					mental Principles, Laws & Doctrines related to Homoeopathic Pharmacy	Understanding							
----------	--	--	--	--	--	---------------	--	--	--	--	--	--	--

**TOPIC:** Nomenclature of Homoeopathic Medicines

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to –  
State the basic rules of Nomenclature of Homoeopathic medicines

Sr. No	Generic Competencies	Subject Area	Miller's Level Does / Shows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative



			ws how/ Know w					Nice to know				
Hom UG- HP- 1.3.1	Integrati on of Knowled ge	Nomencla ture of Homoeop athic Medicines	Know ws	Must be able to describe the principles followed in nomenclature of Homoeopathic medicines	1.State the Basic rules of Nomenclatu re	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrati ons  2. Small Group Discussions/ Peer teaching (Think-Pair- Share, Jigsaw Strategy)  3. Quiz  4. Student Seminars  5. Guest Lecture  6. Problem based learning	1.Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's  5. 2 marks question	SAQ  Viva Voce	
Hom UG- HP- 1.3.2	Synthesi s and Applicati on of knowled ge		Know ws				2.Describe the nomenclatu re of Homoeopat hic Drugs	Level 2 Unders tanding				Must Know
Hom UG- HP- 1.3.3			Know ws				3.Enumerat e the important terminologi es related to Nomenclatu re	Level 1 Recall				Must Know
Hom UG-			Know ws				4.Define Scientific Name	Level 1 Recall				Must Know

HP-1.3.4											
Hom UG-HP-1.3.5			Knows		5. Define Common Name		Level 1 Recall	Must Know			
Hom UG-HP-1.3.6			Knows		6. Enumerate the advantages of Scientific Name	Cognitive	Level 1 Recall	Must Know			
Hom UG-HP-1.3.7			Knows		7. Enumerate the Advantages of Common Name	Cognitive	Level 1 Recall	Must know			
Hom UG-HP-1.3.8			Knows		8. Identify the existing anomalies in Nomenclature of Homoeopathic Medicines	Cognitive	Level 3 Problem Solving	Nice to know	1. Lecture Demonstration 2. Procedural Skills Teaching 3. Problem Based Learning		

**TOPIC: Pioneers of Homoeopathic Pharmacy**

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to.-

State the Contribution of various Pioneers in the field of Homoeopathic Pharmacy

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative
Ho mU G- HP- 1.4. 1	Integrati on of Knowled ge  Synthesi s and Applicati on of knowled ge	Pioneers of Homoeopa thic Pharmacy	Know s	Must be able to state the contributi ons of various pioneers in the field of Homoeopa thic Pharmacy	1.Outline the contributions of the Pioneers of Homoeopath y in the field of Homoeopathi c Pharmacy	Cognitive	Level 1 Recall	Nice to Know	1.Lecture Demonstrations 2. Small Group Discussions/ 3. Quiz 4. Student Seminars	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	SAQ MCQ Viva Voce

--	--	--	--	--	--	--	--	--	--	--	--	--	--

**TOPIC:** Pharmacopoeia

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able abide by the homoeopathic pharmacopoeia guidelines for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-	Problem solution	Pharmacopoeia	Knows	Must be able to abide by the	1. Define Pharmacopoeia	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations	1.Structured Oral	SAQ MCQ

HP-1.5.1	Integration of Knowledge			homoeopathic pharmacopoeia guidelines for preparation of homoeopathic medicines.					2. Small Group Discussions/	Examination	Viva Voce
Hom UG-HP-1.5.2	Synthesis and application of knowledge		Knows		2. Enumerate the different types of homoeopathic pharmacopoeia with suitable examples.		Level 1 Recall	Must Know	Peer teaching (Think-Pair-Share, Jigsaw Strategy)	2. Tutorials	
Hom UG-HP.1.5.3			Knows		3. Explain the different types of homoeopathic pharmacopoeia.		Level 2 Understanding	Must Know	3. Quiz	3. Assignments	
Hom UG-HP-1.5.4			Knows		4. Explain HPI in detail		Level 2 Understanding	Must Know	4. Student Seminars	4. MCQ's	
Hom UG-			Knows		5. Explain what is		Level 2	Must Know		5. 2 marks question	
										6.SAQ's, LAQ's	
										7.Proj ects	

HP-1.5.5					monograph?		Understanding				
Hom UG-HP-1.5.6			Knows how		6. Apply the guidelines laid down in the official homoeopathic pharmacopoeia w.r.t. identification, collection, preservation, preparation and dispensing of homoeopathic medicine	Cognitive	Level 3 Problem solving	Nice to know	1. Practical Demonstration 2. Lecture Demonstration 3. Projects 4. Herbarium 5. Journal	1. DOPS 2. OSPE 3. Evaluation of projects 4. Evaluation of Journal & Herbarium	SAQ MC QLA Q Viya Voce Practical Examination / Checklist
Hom UG-HP-1.5.7			Knows how		7. Demonstrate care, professionalism & commitment	Affective	Level 1 Receiving	Nice to know	1. Practical Demonstration	1. DOPS 2. OSPE	Viva Voce

					<p>t &amp; follow all the guidelines meticulously as given in official homoeopathic pharmacopoeia w.r.t. identification, collection, preservation, preparation and dispensing of homoeopathic medicine</p>				<p>2. Lecture Demonstration 3. Projects 4. Herbarium 5. Journal</p>	<p>3. Evaluation of projects 4. Evaluation of Journal &amp; Herbarium</p>	
--	--	--	--	--	--	--	--	--	---	---	--

**TOPIC:** Plant Kingdom

**Topic:** Plant Kingdom

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to identify the plant drug substances for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Type Summative
Hom UG-HP-1.6.1	Integration of knowledge  Synthesis and application of knowledge  Classroom to herbarium and lab transfer	Sources of drugs	Knows	Must be able to identify the plant drug substances for preparation of homoeopathic medicines.	1. Explain in detail the part used and drug prepared from plant kingdom	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations  2. Small Group Discussion/  Peer teaching (Think-Pair-Share, Jigsaw Strategy)  3. Quiz  4. Student Seminars	1.Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's  5. 2 marks question  6.SAQ's and LAQ's  7. Herbarium	SAQ MCQ LAQ Viva Voce
Hom UG-HP-1.6.2			Knows								



									5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos		
Hom UG-HP-1.6.3			Knows		3. Explain classification of plant kingdom with examples.		Level 2 Understanding	Must know			
Hom UG-HP-1.6.4			Does		4. Identify the plant and its parts used for preparation of homoeopathic medicines	Cognitive	Level 3 Problem solving	Must know	1. Practical Demonstration 2. Procedural Skills Teaching 3. Herbarium 4. Experiential learning (Projects)	1. DOPS 2. OSPE 3. Herbarium	Practical Examination
Hom UG-HP-1.6.5			Shows how		5. Demonstrate care while identifying & collecting the	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration	1. Herbarium	Practical Examination

					plant drug substances				2. Problem Based Learning		
--	--	--	--	--	-----------------------	--	--	--	---------------------------	--	--

**TOPIC:** Animal Kingdom

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to identify the animal drug substances for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG- HP- 1.7.1	Integration of knowledge  Synthesis and application of knowledge  Classroom to herbarium and lab transfer	Sources of drugs	Knows	Must be able to identify the animal drug substanc es for preparati on of homoeop athic medicine s.	1. Explain the part used and drug prepare d from animal kingdo m	Cogniti ve	Level 2  Underst anding	Must know	1.Lecture Demonstra tions  2. Small Group Discussions / Peer teaching (Think- Pair-Share, Jigsaw Strategy)  3. Quiz  4. Student Seminars  5. Guest Lecture  6. Problem based learning  7. Flipped Classroom  8. Videos	1.Structure d Oral Examinatio n  2. Tutorials  3. Assignment s  4. MCQ's  5. 2 marks question  6.SAQ's and LAQ's  7. Herbarium	LAQ SAQ MCQ Viva Voce
Hom UG- HP- 1.7.2			Knows		2. List any 4 exampl es of drugs from particul ar part of the animal.		Level 1  Recall	Must Know			

Hom UG- HP- 1.7.3			Knows		3. Explain classific ation of animal kingdo m		Level 2 Underst anding	Must Know			
Hom UG- HP- 1.7.4			Does		4. Identify the animal and its parts used for prepara tion of homoe opathic medicin es	Cogniti ve	Level 3 Proble m Solving	Must Know	1.Practical Demonstra tion  2.Procedur al Skills Teaching  3. Herbarium  4. Experientia l learning (Projects)	1.DOPS  2. OSPE  3. Herbarium	Practical Examina tion
Hom UG- HP- 1.7.5			Shows how		5.Demo nstrate care while identifi ing & collecti ng the animal	Affecti ve	Level 1 Receivi ng	Must Know	1.Lecture Demonstra tion  2. Problem Based Learning	1.Herbariu m	Practical Examina tion

					drug substances						
--	--	--	--	--	-----------------	--	--	--	--	--	--

**TOPIC:** Mineral Kingdom

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to identify the mineral drug substances for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-HP-1.8.1	Integration of knowledge  Synthesis and application of knowledge	Sources of drugs	Knows	Must be able to identify the mineral drug substances for preparation of	1. Explain the part used and drug prepared from mineral kingdom	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations  2. Small Group Discussions/  Peer teaching	1.Structured Oral Examination  2. Tutorials	LAQ SAQ MCQ  Viva Voce

	Classroom to herbarium and lab transfer			homoeopathic medicines.					(Think-Pair-Share, Jigsaw Strategy)	3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7. Herbarium	
Hom UG-HP-1.8.2			Knows		2. List any 4 examples of drugs from prepared from minerals.		Level 1 Recall	Must know	3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos		
Hom UG-HP-1.8.3			Knows		3. Explain the classification of mineral kingdom		Level 2 Understanding	Must know			
Hom UG-HP-1.8.4			Does		4. Identify the mineral used for preparation of homoeopathic medicines	Cognitive	Level 3 Problem solving	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Herbarium	1.DOPS 2. OSPE 3. Herbarium	Practical Examination

									4. Experi- ential learning (Projects)		
Hom UG- HP- 1.8.5			Shows how		5.Demonstr ate care while identifying &collecting the mineral drug substances	Affectiv e	Level 1  Receiving	Nice to know	1.Lecture Demonstr ation  2. Problem Based Learning	1.Herbari um	Practi cal Exami ation

**TOPIC:** Sarcodes & Nosodes

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to identify the drug substances from nosodes and sarcodes for preparation of homoeopathic medicines.

Sr. No			Miller's			Bloom's	Guilbert's Levels	Must to		Assessment /Evaluation
-----------	--	--	----------	--	--	---------	----------------------	---------	--	---------------------------

	Generic Competencies	Subject Area	Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Domain		know/ desirable to know/Nice to know	Teaching Learning Method	Formative	Summative
Ho mU G-HP-1.9.1	Integration of knowledge  Synthesis and application of knowledge	Sources of drugs	Knows	Must be able to identify the drug substances from nosodes and sarcodes for preparation of homoeopathic medicines	1. Explain the part used and drug prepared from nosodes	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy)	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAQ SAQ MCQ Viva Voce
Ho mU G-HP-1.9.2	Classroom to herbarium and lab transfer		Knows		2. List any 4 examples of drugs from prepared from nosodes.		Level 1 Recall	Must Know	3. Quiz 4. Student Seminars 5. Guest Lecture	6.SAQ's and LAQ's	



Ho mU G- HP  1.9. 3			Knows		3. Explain classification of nosodes.		Level 2  Understanding	Must Know	6. Problem based learning  7. Flipped Classroom  8. Videos		
Ho mU G- HP  1.9. 4			Knows		4.Explain the part used and drug prepared from sarcodes		Level 2  Understanding	Must Know			
Ho mU G- HP  1.9. 5			Knows		5. List any 4 examples of drugs from prepared from sarcodes		Level 1  Recall	Must Know			
Ho mU G- HP  1.9. 6			Knows		6. Explain classification of sarcodes		Level 2  Understanding	Must Know			

Ho mU G- HP  1.9. 7			Does		7. Identify the sarcodes/nosodes used for preparation of homeopathic medicines	Cognitive	Level 3 Problem solving	Must know	1. Practical Demonstration  2. Procedural Skills Teaching  3. Experiential learning (Projects)	1. DOPS 2. OSPE	Practical Examination
Ho mU G- HP  1.9. 8			Shows how		8. Demonstrate care while identifying & collecting the diseased part/secretion for preparation of nosodes & healthy part/secretion for preparation of sarcodes	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration  2. Problem Based Learning	1. Monographs	Practical Examination

**TOPIC:** Imponderabilia

### Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to identify the drug substances from energy sources for preparation of homoeopathic medicines.

Sr. No	Generic Competencies		Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
											Formative	Summative
Hom UG-HP-1.10.1	Integration of knowledge  Synthesis and application of knowledge  Classroom to and herbarium lab transfer		Sources of drugs	Knows	Must be able to identify the drug substances from energy sources for preparation of homoeopathic medicines.	1. Explain the energy used and drug prepared from imponderabilia	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAQ SAQ MCQ Viva Voce
Hom UG-HP-		Knows		2. List any 4 examples of drugs prepared from								

1.10.2					imponderabilia					4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos	6.SAQ's and LAQ's	
Hom UG-HP-1.10.3				Knows	3. Explain classification of imponderabilia.		Level 2 Understanding	Must know				
Hom UG-HP-1.10.4				Does	4. Identify the energy source used for preparation of homoeopathic medicines from imponderabilia	Cognitive	Level 3 Problem solving	Nice to know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Experiential learning (Projects)	1.DOPS 2. OSPE		Practical Examination

Hom UG- HP- 1.10. 5				Shows how		5.Demonstrate care & commitment while identifying & collecting the different energy sources for preparation of imponderabilia medicines	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2. Problem Based Learning	1.Monographs	Practical Examination
---------------------------------	--	--	--	--------------	--	---	-----------	----------------------	--------------	--	--------------	-----------------------

**TOPIC:** Allersodes, Isodes, Synthetic Source

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to identify drug substances of Allersodes, Isodes, Synthetic Source for preparation of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/	Teaching - Learning Method	Assessment /Eval
--------	----------------------	--------------	---------------------------------	-----------------------	------------------------------	----------------	-------------------	---------------	----------------------------	------------------

			Knows how/ Know					desirable to know/Ni ce to know		uation n	
										Form ative	Summ ative
Hom UG- HP- 1.11. 1	Integration of knowledge  Synthesis and application of knowledge  Classroom to herbarium and lab transfer	Sources of drugs	Knows	Must be able to identify drug substances of Allersodes, Isodes, Synthetic Source for preparation of homoeopat hic medicines.	1. Explain the preparation of Allersodes, Isodes& Synthetic Source of homoeopat hic medicines	Cognitiv e	Level 2  Underst anding	Must know	1.Lecture Demonstr ations  2. Small Group Discussio ns/  Peer teaching (Think- Pair- Share, Jigsaw Strategy)  3. Quiz	1.Str uctur ed Oral Exam inatio n  2. Tutor ials  3. Assig nmen ts  4. MCQ' s	LAQ SAQ MCQ Viva Voce

Hom UG- HP- 1.11. 2			Knows		2. List any 4 examples of drugs prepared from Allersodes, Isodes&Synt hetic Source		Level 1 Recall	Must know	4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos	5. 2 mark s question 6.SA Q's and LAQ's	
Hom UG- HP- 1.11. 3			Does		3. Identify the part used for preparation of Allersodes, Isodes& Synthetic Source.	Cognitiv e	Level 3 Problem solving	Must know	Experienti al learning (Projects)	Proje cts	Practi cal Exam nation

Hom UG- HP- 1.11. 4			Shows how		4.Demonstrate care & commitment while identifying & collecting the different parts for preparation of Allersodes, Isodes& Synthetic Source	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2. Problem Based Learning	1.Proj ects	Pract al Exam nation
---------------------------------	--	--	-----------	--	--	-----------	----------------------	--------------	--	----------------	-------------------------------

**TOPIC:** Collection of Drug Substances

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to collect a particular part/ source for preparation of homoeopathic drugs

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative



								to know/Nice to know			
Ho mU G- HP- 1.1 2.1	Problem solution  Integration of Knowledge  Synthesis and application of knowledge	Collection of Drug Substances	Knows	Must be able to collect a particular part/ source for preparation of homoeopathic drugs	1. Explain the general rules for collecting drugs from vegetable kingdom.	Cognitive	Level 2 Understanding	Must know	1. Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy ) 3. Quiz 4. Student	1. Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAC SAC MCQ Q Viva a Voc e
Ho mU G- HP- 1.1 2.2	Classroom to Herbarium transfer		Knows		2. Explain the particular rules for collecting drugs from vegetable kingdom.		Level 2 Understanding	Must know			

Ho mU G- HP- 1.1 2.3	Practice based learning and improvement		Knows		3. Explain the general rules for collecting drugs from animal kingdom.		Level 2 Understa nding	Must know	Seminar s  5. Guest Lecture  6. Flipped Classroom  7. Videos	6.SAQ 's and LAQ's  7.Proj ects  8. Herba rium
Ho mU G- HP- 1.1 2.4			Knows		4. Explain the particular rules for collecting drugs from animal kingdom.		Level 2 Understa nding	Must know		
Ho mU G- HP- 1.1 2.5			Knows		5. Explain the collection of drugs from mineral kingdom.		Level 2 Understa nding	Must know		
Ho mU G- HP- 1.1 2.6			Knows		6. Explain collection of Nosodes, Sarcodes &Impondera bilia.		Level 2 Understa nding	Must know		

Ho mU G- HP- 1.1 2.7			Does		7. Collect the drugs from vegetable kingdom.	Psycho motor	Level 3 Automati on	Must know	1. Practical Demonstrations 2. Procedural Skills Teaching 3. Experiential Learning	1.DO PS 2.OSP E 3.Proj ects 4.Spo tting 5.Her bariu m.	Prac tical Exa mira tion
Ho mU G- HP- 1.1 2.8			Does		8. Collect the drugs from animal kingdom.		Level 3 Automati on	Must know			
Ho mU G- HP. 1.1 2.9			Does		9. Collect the drugs from nosodes, sarcodes & imponderabilia.		Level 2 Control	Must know			
Ho mU G- HP- 1.1			Shows how		10. Demonstrate care & commitment while	Affective	Level 1 Recieving	Nice to know	1. Lecture Demonstration	Herba rium	Prac tical Exa mira tion

2.1 0					collecting drugs from vegetable kingdom, animal kingdom, nosodes, sarcodes & imponderabilia.					2. Practical Demonstration	atic n
----------	--	--	--	--	--	--	--	--	--	----------------------------	-----------

**TOPIC:** Cleansing

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to clean the instruments used in homoeopathic pharmaceutical laboratory.

			Miller's					Must to		Assessment /Evaluation
--	--	--	----------	--	--	--	--	---------	--	------------------------

Sr. No	Generic Competencies	Subject Area	Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	know/ desirable to know/ Nice toknow	Teaching Learning Method	Formative	Summative
Hom UG-HP-1.13.1	Integration of Knowledge	Cleansing of instruments	Knows	Must be able to clean the instruments used in homoeopathic pharmaceutical laboratory	1. Explain the cleansing of mortar & pestle.	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Flipped Classroom	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects	LAQ SAC MCQ Viva Voce
Hom UG-HP-1.13.2	Synthesis and application of knowledge		Knows		2. Explain the cleansing of spatula.		Level 2 Understanding	Must know			
Hom UG-HP.1.13.3	Classroom to Lab transfer		Knows		3. Explain the cleansing of glass bottles.		Level 2 Understanding	Must know			
	Practice based learning and										

Hom UG-HP.1.13.4	improvement		Knows		4. Explain the cleansing of corks.		Level 2 Understanding	Must know			
Hom UG-HP.1.13.5			Knows		5. Explain the cleansing of wooden instruments .		Level 2 Understanding	Must know			
Hom UG-HP.1.13.6			Does		6. Demonstrate the cleansing of mortar & pestle.	Psycho motor	Level 3 Automatism	Must know	1. Practical Demonstrations 2. Procedural Skills Teaching 3.Experiential Learning	1.DOPS 2.OSPE 3.Spotting	Practical Examination
Hom UG-HP.1.13.7			Does		7. Demonstrate the cleansing of spatula		Level 3 Automatism	Must know			
Hom UG-HP-			Does		8. Demonstrate the cleansing of		Level 3 Automatism	Must know			

1.13.8					glass bottles.						
Hom UG-HP-1.13.9			Does		9. Demonstrate the cleansing of corks.		Level 3 Automatism	Must know			
Hom UG-HP-1.13.10			Does		10. Demonstrate the cleansing of wooden instruments.		Level 3 Automatism	Must know			
Hom UG-HP-1.13.11			Shows how		11. Demonstrate care while cleaning the instruments.	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	1.DOPS 2.OSPE	Practical Examination

**TOPIC:** Lab Methods

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to select and apply a particular lab method for preparation of homoeopathic medicines and for standardization of homoeopathic medicines.

Sr. no	Generic Competencies	Subject Area		Miller's	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation	
				Level Does/ Shows how/ Knows how/ Know							Formative	Summative
Hom .UG-HP-1.14.1	<p>Problem solution</p> <p>Integration of Knowledge</p> <p>Synthesis and application of knowledge</p> <p>Classroom to lab transfer</p>	Lab Methods		Knows	Must be able to select and apply a particular lab method for preparation of homoeopathic medicines and for standardization of homoeopat	1. Define decantation, sedimentation, filtration, distillation, sublimation, precipitation.	Cognitive	Level 1 Recall	Must know	<p>1.Lecture Demonstrations</p> <p>2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy)</p> <p>3. Quiz</p> <p>4. Student Seminars</p>	<p>1.Structured Oral Examination</p> <p>2. Tutorials</p> <p>3. Assignments</p> <p>4. MCQ's</p> <p>5. 2 marks question</p>	LAQ SAQ MCQ Viva Voce



	Practice based learning and improvement				hic medicines					5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos	6.SAQ's and LAQ's 7.Projects
Hom .UG-HP-1.14.2				Knows		2. Explain the process of decantation, sedimentation, filtration, distillation, sublimation, precipitation		Level 2 Understanding	Must know		
Hom .UG-HP-1.14.3				Knows		3.Explain the homoeopathic uses of decantation, sedimentation, filtration, distillation, sublimation, precipitation		Level 2 Understanding	Must know		

Hom .UG-HP-1.14.4				Knows how		4. Differentiate between filtration & distillation		Level 2 Understanding	Must know			
Hom .UG-HP-1.14.5				Knows how		5. Differentiate between decantation & filtration in detail.		Level 2 Understanding	Must know			
Hom .UG-HP-1.14.6				Does		6. Select a specific lab method according to the different processes carried out in a homoeopathic pharmacy laboratory.		Level 3 Problem solving	Desirable to know			
Hom .UG-HP-1.14.7				Does		7. Demonstrate the processes decantation, sedimentation, filtration, distillation, sublimation	Psychomotor	Level 2 Control	Desirable to know	1. Practical Demonstrations 2. Procedural	1. DOPS 2. OSPE 3. Projects	Practical Examination

						imation, precipitation				Skills Teaching 3. Experiential Learning		
Hom .UG-HP-1.14.8				Shows how		8. Demonstrate care & commitment while carrying out the different lab methods involved in preparation of homoeopathic medicine	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	DOPS	Practical Examination

**TOPIC:** Standardization of homoeopathic drugs

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to select an appropriate method for standardization of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

			Knows how/ Know					to know/Nic e to know								
Hom. UG-HP-1.15.1	Integration of Knowledge  Synthesis and application of knowledge	Standardization of homoeopathic drugs	Knows	Must be able to select an appropriate method for standardization of homoeopathic medicines	1. Enumerate the different methods of standardization of homoeopathic drugs	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy)	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects	LAQ SAQ MCQ Viva Voce					
Hom. UG-HP-1.15.2	Classroom to Lab transfer  Practice based learning and improvement		Knows									2. Explain the individual method of standardization of homoeopathic drugs	Cognitive	Level 2 Understanding	Must know	3. Quiz 4. Student Seminars 5. Flipped Classroom 6. Videos
Hom. UG-HP-1.15.3			Does									3. Estimate the standard of homoeopathic drugs before and		Level 2 Control	Desirable to know	

					after manufacturing of homoeopathic medicines.	Psycho motor					
Hom. UG-HP-1.15.4			Does		4. Demonstrate the microscopic study of triturations.	Psycho motor	Level 2 Control	Desirable to know	1. Practical Demonstrations 2. Procedural Skills Teaching	1. Spottings 2. Assessment of research project output	Viva Voce & Practical Examinations
Hom. UG-HP-1.15.5			Does		5. Identify the drug specimen applying the different methods of standardization of drugs	Cognitive	Level 3 Problem solving	Desirable to know	3. Experiential Learning 4. Research Projects		
Hom. UG-HP-1.15.6			Does		6. Analyze the purity of mother tincture with the	Psycho motor	Level 2 Control	Nice to know			

					help of HPTLC.						
Hom. UG-HP-1.15.7			Does		7. Analyze and identify the purity of mother substances and dilutions with the help of U.V. Spectroscopy.	Psycho motor		Nice to know			
Hom. UG-HP-1.15.8			Shows how		8. Abide by the rules of standardization of homoeopathic drugs laid down by HPL & value the importance of genuine medicine in homoeopathic practice.	Affective	Level 3 Internalizing	Nice to know	1. Lecture Demonstration 2. Monographs	Herbarium Assignments	Viva Voce

**TOPIC:** Quality Control in Homoeopathy

### Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to conduct the quality control as per the appropriate method

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching- Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom.U G-HP- 1.16.1	Integration of Knowledge  Synthesis and application of knowledge	Quality control	Knows	Must be able to conduct the quality control as per the appropriate method	1. Enumerate the different methods of quality control.	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations  2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw	1.Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's	LAQ SAQ MCQ Viva Voce
Hom.U G-HP- 1.16.2	Classroom to Lab transfer		Knows								

	Practice based learning and improvement			homoeopathy				Strategy )	5. 2 marks question
Hom.U G-HP- 1.16.3			Knows	3.Explain the functions of HPL in quality control of Homoeopathic medicines		Level 2 Underst anding	Must Know	3. Quiz	6.SAQ's
Hom.U G-HP- 1.16.4			Does	4. Determine the quality of homoeopathic medicine based on the parameters of quality control		Level 3 Problem solving	Nice to Know	4. Student Seminars	7.Proje cts
Hom.U G-HP- 1.16.5		Does	5. Take part in the process of quality control at different stages of preparation of		Level 3 Problem solving	Nice to Know	5. Flipped Classroom	6. Videos	



					homoeopathic medicines.						
Hom.U G-HP- 1.16.6			Does, shows how		6. Demonstrate the microscopic study of triturations.	Psychomotor	Level 2 Control	Nice to Know	1. Practical Demonstrations 2. Procedural Skills Teaching 3. Experiential Learning 4. Research Projects	1. Spotting 2. Assessment of the outcome of research projects	Viva Voce & Practical Examination
Hom.U G-HP- 1.16.7					7. Analyze the purity of mother tinctures with the help of HPTLC.		Level 2 Control	Nice to know			
Hom.U G-HP- 1.16.8			Does		8. Analyze and identify the purity of mother substances and dilutions with the help of U.V.			Nice to know			

					Spectroscopy.						
Hom.U G-HP- 1.16.9			Does		9. Abide by the rules of quality control laid down by HPL & value the importance of genuine medicine in homoeopathic practice.	Affective	Level 3 Internalizing	Nice to know	1. Lecture Demonstrations 2. Practical Demonstrations	SAQ/LAQ Projects Assignments	Practical Examination

**TOPIC:** Ideal Laboratory

**Learning Outcomes (LO):**

- At the end of the topic, I-BHMS student must be able to –
1. State the pre requisites of an Ideal Laboratory

Sr. No	Subject Area	Miller's Level Does/			Bloom's Domain	Guilbert's Levels	Must to		Assessment /Evaluation
--------	--------------	----------------------	--	--	----------------	-------------------	---------	--	------------------------

	Generic Competencies		Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives			know/ desirable to know/Nice to know	Teaching - Learning Method	Formative	Summative
Hom .UG-HP-1.17.1	Integration of Knowledge  Synthesis	Ideal Laboratory	Knows	Must be able to state the prerequisites of an ideal laboratory	List the prerequisites for an ideal Laboratory	Cognitive	Level 2  Understanding	Must Know	1.Lecture Demonstrations  2. Small Group Discussions/	1.Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's  5. 2 marks question	LAQ SAQ MCQ Viva Voce
Hom .UG-HP-1.17.2	and Application of knowledge		Knows		Formulate the Laboratory Safety Rules		Level 3  Problem solving	Nice to know	Peer teaching (Think-Pair-Share, Jigsaw Strategy)		
Hom .UG-HP-1.17.3	Problem formulation  Classroom to lab transfer		Knows		Describe the role of Laboratory in Homoeopathic Pharmacy education		Level 2  Understanding	Desirable to know	3. Quiz 4. Student Seminars 5. Guest Lecture		

										6. Problem based learning	6.SAQ's and LAQ's	
--	--	--	--	--	--	--	--	--	--	---------------------------	-------------------	--

**TOPIC:** Industrial Pharmacy

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to –  
Correlate the provisions under Schedule M-I

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom. UG-HP-1.18.1	Integration of Knowledge  Synthesis and Application of knowledge  Problem formulation  Classroom to lab transfer	Industrial Pharmacy	Knows	Must be able to correlate provisions related to Schedule M1	Explain in details the provisions under Schedule M-I	Cognitive	Level 2 Understanding	Must Know	1.Lecture Demonstrations 2. Small Group Discussions / Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Field Visit	1. Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6. SAQ's and LAQ's	LAG SAC MC Viva Voc
-------------------	--	---------------------	-------	---	--	-----------	-----------------------	-----------	--	---	---------------------------------

**TOPIC:** Homoeopathic Vehicles- Solid Vehicles

**Topic:** Homoeopathic Vehicles- Solid Vehicles

### Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select a particular solid vehicle for preparation or dispensing of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation	Summative
										Formative	
Hom .UG-HP-1.19.1	Integration of Knowledge  Synthesis and Application of knowledge	Vehicles	Knows	Selecting a particular solid vehicle for preparation or dispensing of homoeopathic medicines.	1. Define Vehicle	Cognitive	Level 1 Recall	Must Know	1. Lecture Demonstrations 2. Small Group Discussions / Peer teaching (Think-Pair-Share, Jigsaw Strategy)	1. Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's	
Hom .UG-HP-1.19.2			Knows		2. Classify vehicles in detail		Level 2 Understanding				

Hom .UG-HP-1.19.3	Problem formulation  Classroom to lab transfer		Knows		3. List all the solid vehicles used in homoeopathy.		Level 1 Recall	Must Know	3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning	5. 2 marks question 6.SAQ's and LAQ's	
Hom .UG-HP-1.19.4			Knows		4. Explain the preparation, properties and uses of all solid vehicles		Level 2 Understanding	Must Know			
Hom .UG-HP-1.19.5			Does		5. Select the appropriate solid vehicle for dispensing of homoeopathic medicines, potentisation etc.		Level 3 Problem Solving	Must Know			
Hom .UG-HP-1.19.6				Does		6. Identify the given solid vehicle.	Cognitive	Level 3 Problem solving	Must Know	1.Practical Demonstration 2.Procedural Skills Teaching	1.DOPS 2. OSPE

									3. Problem Based Learning		
Hom .UG-HP-1.19.7			Show How		7. Estimate the purity of the given solid vehicle.	Psychomotor	Level 2 Control	Must know	4. Experiential learning		
Hom .UG-HP-1.19.8			Shows how		8. Demonstrate care and commitment in preparing & dispensing of homoeopathic medicine with accuracy	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning 5. Practical Demonstration	1. DOPS	Practical Examination

**TOPIC:** Homoeopathic Vehicles- Liquid Vehicles

**Learning Outcomes (LO):**



At the end of the topic, I-BHMS student must be able to select a particular liquid vehicle for preparation or dispensing of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objective	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation		
										Formative	Summative	
Hom.U G-HP- 1.20.1	Integration of Knowledge	Vehicles	Knows	Selecting a particular liquid vehicle for preparation or dispensing of homoeopathic medicines	1. Define Vehicle	Cognitive	Level 1 Recall	Must Know	1. Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz	1. Structured Oral Examination	LAQ SAQ MCQ Viva Voce	
Hom.U G-HP- 1.20.2	Synthesis and Application of knowledge		Knows		2. Classify vehicles in detail		Level 2 Understanding	Must Know				2. Tutorials
Hom.U G-HP- 1.20.3	Problem formulation		Knows		3. List all the liquid vehicles used in homoeopathy.		Level 1 Recall	Must Know				3. Assignments 4. MCQ's

Hom.U G-HP- 1.20.4	Classroom to lab transfer		Knows		4. Explain the preparatio n, properties and uses of all liquid vehicles.		Level 2  Understan ding	Must Know	4. Student Seminars  5. Guest Lecture  6. Problem based learning	5. 2 marks questio n  6.SAQ's and LAQ's		
Hom.U G-HP- 1.20.5			Does		5. Select the appropriat e liquid vehicle for dispensing of homoeop athic medicines , potentisa tion etc.		Level 3  Problem solving	Must Know				
Hom.U G-HP- 1.20.6			Does		6. Identify the given liquid vehicle.	Cogniti ve	Level 2  Understan ding	Must Know	1.Practical Demonstrat ion  2.Procedura l Skills Teaching	1.DOPS  2. OSPE	Practic al Examin ation	

									3. Problem Based Learning		
Hom.U G-HP- 1.20.7			Shows how		7. Estimate the purity of the given liquid vehicle.	Psycho motor	Level 2 Control	Must Know	4. Experiential learning		
Hom.U G-HP- 1.20.8			Shows how		8.Demons trate care and commitm ent in preparing & dispensing of homoeop athic medicine with accuracy	Affecti ve	Level 1 Receiving	Nice to Know	1.Lecture Demonstrat ion  2.Procedura l Skills Teaching  3. Problem Based Learning  4. Experiential learning  5. Practical Demonstrat ion	1.DOPS	Practic al Examin ation

**TOPIC:** Homoeopathic Vehicles- Semi-solid Vehicles

### Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to select a particular semi solid vehicle for preparation or dispensing of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom .UG-HP-1.21.1	Integration of Knowledge	Semisolid Vehicles	Knows	Selecting a particular semi-solid vehicle for preparation or dispensing of homoeopathic medicines.	1. Define Vehicle	Cognitive	Level 1 Recall	Must know	1. Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz	1. Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAQ SAC MCQ Viva Voce
Hom .UG-HP-1.21.2	Synthesis and Application of		Knows how		2. Classify vehicles		Level 2 Understanding	Must Know			

Hom .UG-HP-1.21.3	knowl edge		Know s		3. List all the semi-solid vehicles used in homoeopathy		Level 1 Recall	Must Know	4. Student Seminars 5. Guest Lecture	6.SAQ's and LAQ's	
Hom .UG-HP-1.21.4	Proble m formul ation		Know s		4. Explain the preparation, properties and uses of all semi-solid vehicles		Level 2 Understand ing	Must Know	6. Problem based learning		
Hom .UG-HP-1.21.5	Classr oom to lab transf er		Does		5. Select the appropriate semi-solid vehicle for dispensing of homoeopathic medicines, preparation of external applications etc.		Level 3 Problem solving	Must Know			
Hom .UG-HP-1.21.6			Does		6. Identify the given semi-solid vehicle.	Cognitive	Level 3 Problem solving	Must know	1.Practical Demonstrati on 2.Procedural Skills Teaching	1.DOPS 2. OSPE	Practical Examination

Hom .UG-HP-1.21.7			Show s how		7. Estimate the purity of the given semisolid vehicle.	Psychomotor	Level 2 Control	Must know	3. Problem Based Learning 4. Experiential learning		
Hom .UG-HP-1.21.8			Show s how		8. Demonstrate care and commitment in preparing & dispensing of homoeopathic medicine with accuracy	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning 5. Practical Demonstration	1. DOPS	Practical Examination

**TOPIC:** External Applications

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to prescribe an external application as per the scope and limitations of external applications.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	
Hom .UG-HP-1.22.1	Integration of Knowledge  Synthesis and Application of knowledge  Problem formulation	External Applications	Knows	Prescribing an external application as per its scope and limitations	1. Define External Application	Cognitive	Level 1 Recall	Must know	1. Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture	1. Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6. SAQ's and LAQ's	LAQ SAQ MCQ Viva Voce	Horizontal with Organ n Medicine

Hom .UG-HP-1.22.2	Classroom to lab transfer		Knows		2. List all the external applications used in homoeopathy		Level 1 Recall	Must know	6. Problem based learning 7. Flipped Classroom			
Hom .UG-HP-1.22.3			Knows		3. Explain the preparation & uses of specific homoeopathic external applications		Level 2 Understanding	Must know				



Hom .UG- HP- 1.22. 4			Knows		4. Explain the scope & limitati ons of externa l applica tions in homoe opathy		Level 2 Underst anding	Must know				
Hom .UG- HP- 1.22. 5			Does		5. Select the appropri ate vehicle for prepara tion of externa l applica tion.		Level 3 Proble m solving	Must know				

Hom .UG- HP- 1.22. 6			Does		6. Select appropriate external application as per the case.		Level 3 Problem solving	Desirable to Know				
Hom .UG- HP.1 .22.7			Does Shows how		7. Demonstrate the preparation of specific external applications	Psychomotor	Level 2 Control	Must know	1. Practical Demonstration 2. Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1. DOPS 2. OSPE	Practical Examination	
Hom .UG- HP- 1.22. 8			Shows how Does		8. Demonstrate care and commitment in preparation	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Procedural Skills Teaching	1. DOPS	Practical Examination	

					ng & dispensing of external application with accuracy				3. Problem Based Learning 4. Experiential learning 5. Practical Demonstration			
--	--	--	--	--	---	--	--	--	---	--	--	--

**TOPIC:** Metrology

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to select appropriate scale of measurement in the homoeopathic pharmaceutical laboratory.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation		
										Formative	Summative	
Hom .UG-HP-1.23.1	Problem solving  Problem formulation  Integration of Knowledge	Metrology	Knows	Must be able to select appropriate scale of measurement in the homoeopathic pharmaceutical laboratory	1. Enumerate the different scales of measurement for preparation of homoeopathic drugs	Cognitive	Level 1  Recall	Must Know	1.Lecture Demonstrations  2. Small Group Discussions/  Peer teaching (Think-Pair-Share, Jigsaw Strategy)  3. Quiz  4. Problem Based learning  5. Flipped classroom	1.Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's  5. 2 marks question	LAQ MCQ Voce	SA Viv

	Synthesis and application of knowledge											6.SAQ's
	Classroom to lab transfer											
Hom .UG-HP-1.23.2			Knows		2. Explain the different scales of measurement for preparation of homoeopathic drugs		Level 2 Understanding	Must Know				
Hom .UG-HP-1.23.3			Does		3. Select appropriate scale of measurement for		Level 3	Must Know				

					preparation of homoeopathic drugs.		Problem solving					
Hom .UG-HP-1.23.4			Does		4. Measure the given quantity of the drug substance and vehicle for preparation of homoeopathic medicines	Psychomotor	Level 3 Automation	Must know	1. Practical Demonstrations 2. Experiential Learning	1. DOPS 2. OSPE	Viva Voce Practical Examinations	
Hom .UG-HP-1.23.5			Shows how		5. Show care while measuring the drugs for preparation of homoeopathic medicines	Affective	Level 2 Response	Must know	1. Lecture Demonstration 2. Practical Demonstration	1. DOPS 2. OSPE	Theory Practical Examinations	

**TOPIC:** Potentisation & Scales of Potentisation

**Learning Outcomes (LO):** At the end of the topic of Potentisation, I-BHMS student must be able to:

1. Prepare Homoeopathic Medicine according to the scale.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's level	Must to know/ desirable to know	Teaching Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	
Hom .UG-HP-1.24.1	Problem solution  Integration of knowledge  Practice based learning	Potentisation	Knows	Prepare Homoeopathic Medicine according to the scale.	1. Explain the different scales of potentisation	Cognitive	Level 2 Understanding	Must Know	1.Lecture Demonstrations 2.Practical Demonstrations 3. Small Group Discussions/Peer teaching (Think-Pair-Share, Jigsaw Strategy) 4. Problem based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. SAQ's and LAQ's 5. MCQ's	LAQ SAQ MCQ Viva Voce	Organon of Medicine-Horizontal

Hom .UG-HP-1.24.2	g and improvement  Synthesis and Application of knowledge  Classroom to lab		Knows		2.Explain the two methods potentiation	Cognitive	Level 2 Understanding	Must Know	5. Student Seminars 6.Study Tour (Field Visit) 7. Integrated Teaching with Organon of Medicine	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. SAQ's and LAQ's 5. MCQ's		
Hom .UG-HP-1.24.3	Practical skills		Does		3. Select the appropriate vehicles used for potentiation.	Cognitive	Level 3 Problem solving	Must Know		DOPS Spotting OSPE Assessment of PBL		
Hom .UG-HP-1.24.4			Shows How		4. Demonstrate trituration according to the scale of potentiation.	Psychomotor	Level 3 AUTOMATISM	Must Know	1. Practical Demonstration 2.Procedural Skills Teaching	1.DOPS 2. OSPE	Practical Examination	



Hom .UG-HP-1.24.5			Shows How		5. Demonstrate succussion according to the scale of potentisation.	Psychomotor	Level 3 AUTOMATISM	Must Know	1. Practical Demonstration 2. Procedural Skills Teaching	1.DOPS 2. OSPE		
Hom .UG-HP-1.24.6			Shows How		6. Prepare 8X (Liq) potency from 6X (Triturate) (Jumping Potency)	Psychomotor	Level 3 AUTOMATISM	Must Know	1. Practical Demonstration 2. Procedural Skills Teaching	1.DOPS 2. OSPE		
Hom .UG-HP-1.24.7			Knows how Shows how		7. Demonstrate care and commitment in preparing medicine with accuracy	Affective	Level 1 RECEIVING	Nice to Know	Practical Demonstration	DOPS	Practical Examination	

**TOPIC:** Old Methods of Preparation of Homoeopathic Drugs

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to prepare the homoeopathic medicines as per the old methods.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation		
										Formative	Summative	
Hom.U G-HP- 1.25.1	Problem solution  Integration of Knowledge  Synthesis and applicatio	Old Methods of Preparation of Homoeopathic Drugs	Knows	Must be able to prepare the homoeopathic medicines as per the	1. Classify Old Methods of preparation of homoeopathic drugs.	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	LAQ MCQ, Viva Voice (Formative &Summative)	SAC

Hom.U G-HP- 1.25.2	n of knowledg e	Classroom to lab transfer	Know s	old meth ods	2.Enlist the fundamental rule, drug strength, drug: vehicle ratio nature of drug substances & 5 examples of drugs under Class I-IX according to Old methods.		Level 1 Recall	Must know	4. Student Seminars	6.SAQ's and LAQ's		
Hom.U G-HP- 1.25.3	learning and improvem ent						Know s	3.Explain the preparation &potentisati on of mother tinctures under class I- IV according to the scale.	Level 2 Understa nding	Must know	5. Guest Lecture	7.Projects
Hom.U G-HP- 1.25.4							Know s	4.Explain the preparation &potentisati on of mother solutions under Class V & VI	Level 2 Understa nding	Must know	6. Problem based learning	7. Flipped Classroom

					according to the scale.						
Hom.U G-HP- 1.25.5			Know s		5.Explain the potentiation of mother substances under Class VII, VIII & IX according to the scale.		Level 2 Understa nding	Must know			
Hom.U G-HP- 1.25.6			Does		6. Demonstrate the preparation of mother tincture under Class I-IV according to Old Methods.	Psycho motor	Level 3 Automati sm	Must know	1. Practical Demonstratio ns 2. Procedural Skills Teaching	1. DOPS 2. OSPE	Practical Examinati on
Hom.U G- HP.1.25 .7			Does		7. Demonstrate the potentiation of mother tincture		Level 3 Automati sm	Must Know			

					according to the scale under Class I-IV according to Old Method.						
Hom.U G-HP- 1.25.8			Does		8.Demonstrate the preparation of mother solution under Class V-VI according to Old Methods.	Level 3 Automatism	Must Know				
Hom.U G-HP- 1.25.9			Does		9. Demonstrate the potentiation of mother solution according to the scale under Class V-VI according to Old Method	Level 3 Automatism	Must Know				

Hom.U G-HP- 1.25.10			Does		10. Demonstrate the potentisation of mother substances according to the scale under Class VII, VIII & IX according to Old Method.		Level 3 Automatism	Must Know				
Hom.U G-HP- 1.25.11			Show show		11. Demonstrate care & commitment in preparing and dispensing medicine with accuracy according to the scale and Class under Old Methods.	Affective	Level 1 Receiving	Nice to know	1. Practical Demonstration	DOPS		Practical Examination

**TOPIC:** New Methods of Preparation of Homoeopathic Drugs

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to prepare the homoeopathic medicines as per the new methods.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Knows	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative
HomU G-HP-1.26.1	Problem solution  Integration of Knowledge  Synthesis and application of knowledge	New Methods of Preparation of Homoeopathic Drugs	Knows	Must be able to prepare the homoeopathic medicines as per the new methods	1. Define Maceration & Percolation.	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's 7.Projects	LAQ SAC MCQ Viva Voce
HomU G-HP-1.26.2			Knows		2. Explain the process of maceration		Level 2 Understanding	Must know			
HomU G-HP-1.26.3			Knows		3.Explain the process of percolation		Level 2 Understanding	Must know			

HomU G-HP- 1.26.4	Classro om to lab transfe r  Practic e based learnin g and improv ement		Know s how		4.Differenti ate between old & new methods of preparatio n of homoeopa thic drugs		Level 2  Understan ding	Must know	7. Flipped Classroom  8. Videos		
HomU G-HP- 1.26.5			Know s how		5.Differenti ate between maceration & percolation in detail.		Level 2  Understan ding	Must know			
HomU G-HP- 1.26.6				Know s		6. Define the terms- merc, magma, menstrum		Recall	Must know		
HomU G-HP- 1.26.7			Does		7. Demonstra te the preparatio n of mother tincture by maceration	Psychom otor	Level 2  Control	Must know	1. Practical Demonstrations  2. Procedural Skills Teaching  3.Experiential Learning	1.DOPS  2.OSPE  3.Projects	Practical Examinat ion



HomU G-HP- 1.26.8			Does		8.Demonstrate the preparation of mother solution by percolation		Level 2 Control	Must know			
HomU G-HP- 1.26.9			Does		9. Demonstrate the towing of a percolator		Level 2 Control	Desirable to know			
HomU G-HP- 1.26.10			Show show		10.Demonstrate care & commitment in preparing of homoeopathic medicine with accuracy according	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	DOPS	Practical Examination

					to the New methods of preparation of homoeopathic drugs.							
--	--	--	--	--	--	--	--	--	--	--	--	--

**TOPIC:** Pharmaconomy

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to select appropriate route of administration of homoeopathic medicines.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does / Shows / Knows / how/ Knows	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG-HP-1.27.1	Integration of Knowledge  Synthesis and application of knowledge	Pharmacology	Knows	Must be able to select appropriate route of administration of homeopathic medicines	1. Enumerate the different routes of administration of homeopathic medicines.	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Flipped Classroom 6. Videos	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects	LAQ MCQ Voce	SAC Viva
Hom UG-HP-1.27.2	Classroom to Clinic transfer		Knows		2. Explain the different routes of administration of homeopathic medicines.		Level 2 Understanding	Must know				
Hom UG-HP-1.27.3			Does		3. Select appropriate route of administration of homeopathic medicines according to the case		Level 3 Problem solving	Desirable to know				
Hom UG-HP-					4. Administer the homeopathi	Psychomotor	Level 2 Control	Nice to know	1. Practical Demonstrations	1. Case based assessment	Viva Voce	

1.27.4			Show show		c medicine through appropriate route of administration according to the case				2.Experiential Learning 3. Projects 4. Case based Learning 5. Simulation teaching	2. Simulation based assessment		
Hom UG-HP-1.27.5			Know show		5.Show care while administering homoeopathic medicine via different routes	Affective	Level 2 Respond	Desirable to know	1. Lecture Demonstration 2. Practical Demonstration 3. Case based Learning 4. Simulation teaching	Case based assessment 2. Simulation based assessment	LAQ MCQ Voce	SAC Viva

**TOPIC:** Dispensing of Medicines

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be to

1. Select an appropriate dosage form for dispensing of homoeopathic medicines.
2. Dispense homoeopathic medicine to patients.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative
Hom UG-HP-1.28.1	Problem solution  Integration of Knowledge  Synthesis and Application of Knowledge	Dispensing of homeopathic medicines	Knows	Select an appropriate dosage form for dispensing of homeopathic medicines.	1. Enumerate the different dosage forms.  2. Explain the various modes for dispensing of solid dosage forms	Cognitive	Level 1  Recall	Must know	1.Lecture Demonstrations  2. Small Group Discussions/  Peer teaching (Think-Pair-Share, Jigsaw Strategy)  3. Quiz  4. Student Seminars  5. Problem based learning  6. Guest Lecture	1.Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's  5. 2 marks question  6.SAQ's and LAQ's	LAQ SAQ MCQ Viva Voice
Hom UG-HP-1.28.2	Classroom to		Knows	Dispense homeopathic medicine to patients			Level 2  Understanding				

Hom UG- HP- 1.28. 3	OPD/IPD/ Pharmacy transfer		Knows		3. Explain the various modes for dispensing of liquid dosage forms		Level 2 Understand ing	Must know			
Hom UG- HP- 1.28. 4			Knows		4. Enlist the vehicles used for dispensing of various dosage forms		Level 1 Recall	Must know			
Hom UG- HP- 1.28. 5			Knows		5. Explain the quality assurance while dispensing homoeopathic medicines.		Level 2 Understand ing	Nice to know			
Hom UG- HP- 1.28. 6			Shows how Does		6. Demonstrate the dispensing of liquid dosage forms	Psychom otor	Level 2 Control	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.DOPS 2. OSPE	Practical Examinat on
Hom UG- HP-			Shows how Does		7. Demonstrate the dispensing		Level 2 Control	Must know			

1.28.7					of solid dosage forms						
Hom UG-HP-1.28.8			Does		8. Demonstrate care and commitment while dispensing of homoeopathic medicines.	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 3. Problem Based Learning	1.DOPS	Practical Examination

**TOPIC:** Placebo

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to indicate placebo in a particular case

Sr. No	Generic Competencies	Subject Area	Miller's Level Does / Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG-HP-1.29.1	Problem solution	Placebo	Knows	Must be able to indicate placebo in a particular case	1. Define Placebo	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Case based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's, 7.Projects	LAQ MCQ Voce	SAC Viva	
Hom UG-HP-1.29.2	Synthesis and application of knowledge		Knows		2. Enumerate the vehicles used as placebo		Level 1 Recall						Must Know
Hom UG-HP-1.29.3	Classroom to clinic transfer		Knows		3. Explain the indications of placebo		Level 2 Understanding						Must Know
Hom UG-HP-1.29.4			Does		4.Select a placebo for a particular case		Level 3 Problem solving						Must Know

**TOPIC:** Preservation of Homoeopathic Medicines



### Learning Outcomes (LO):

At the end of the topic, I-BHMS student must be able to preserve homoeopathic medicines for long shelf life.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation		
										Formative	Summative	
Hom UG-HP-1.30.1	Integration of Knowledge	Preservation of Homoeopathic medicine	Knows	Must be able to preserve homoeopathic medicines for long shelf life	1. Enumerate the different methods of preservation of homoeopathic medicines	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/	1.Structured Oral Examination 2. Tutorials 3. Assignments	LAQ MCQ Voce	SAQ Viva
Hom UG-HP-1.30.2	Synthesis and application of knowledge		Knows		2. Explain the individual method of preservation of homoeopathic medicine.		Level 2 Understanding	Must Know	Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz	4. MCQ's 5. 2 marks question 6.SAQ's		

Hom UG- HP- 1.30. 3	Classro om to Clinic transfe r  Practic e based learnin g and improv ement		Does		3. Select an appropriate mode of preservation of homoeopathic medicines.		Level 3 Problem solving	Must Know		7.Projects	
Hom UG- HP- 1.30. 4			Does		4. Demonstrate the method of preservation of mother substances & preparations	Psychomotor	Level 2 Control	Desirable to Know	1. Practical Demonstrations 2. Procedural Skills Teaching	Viva Voce Practical Examination	Practical Examination
Hom UG- HP- 1.30. 5			Does		5. Demonstrate the method of preservation of potentised homoeopathic medicines			Desirable to Know	3.Experiential Learning 4. Projects		

Hom UG- HP- 1.30. 6			Does		6. Demonstrate the method of preservation of homoeopathic mother tinctures			Desirable to Know			
Hom UG- HP- 1.30. 7			Shows how		7. Show care & commitment while preserving homoeopathic preparations and potentised medicine.	Affective	Level 2 Respond	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	SAQ, 2 marks question Projects Assignments Tutorials Viva Voce Practical Examination	Practical Examination

**TOPIC:** Pharmacovigilance and adverse drug reaction

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to identify any adverse drug reaction and comprehend the necessity of pharmacovigilance in homoeopathy

						Bloom's		Must to		Assessment /Evaluation
--	--	--	--	--	--	---------	--	---------	--	------------------------

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Domain	Guilbert's levels	know/ desirable to know/ Nice to know	Teaching Learning Method	Formative	Summative
Hom UG-HP-1.31.1	Problem solution	Pharmacovigilance and adverse drug reaction	Knows	Must be able to identify any adverse drug reaction  Comprehend the of pharmacovigilance in homoeopathy	1. Define adverse drug reaction  2. Enumerate the types of adverse drug reactions  3. Explain the management of adverse drug reactions in homoeopathy  4. Define pharmacovigilance	Cognitive	Level 1 Recall	Must Know	1. Lecture Demonstrations  2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy)  3. Case based learning	1. Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's  5. 2 marks question  6. SAQ's, 7. Projects	LAQ SA MCQ Vivo Voice
Hom UG-HP-1.31.2	Integration of Knowledge		Knows				Level 1 Recall	Must Know			
Hom UG-HP-1.31.3	Synthesis and application of knowledge		Knows				Level 2 Understanding	Must Know			
Hom UG-HP-1.31.4	Classroom to clinic transfer		Knows				Level 1 Recall	Desirable to Know			

Hom UG- HP- 1.31. 5			Knows		5.Explain in detail the process of pharmacovigilance in Homoeopathy		Level 2 Unders tanding	Desirable to know				
---------------------------------	--	--	-------	--	---	--	------------------------------	----------------------	--	--	--	--

**TOPIC:** Doctrine of Signature

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to apply doctrine of signature while selecting a Homoeopathic simillimum.

Sr. No	Generi c Comp etenci es	Subje ct Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specifi c Compe tencie s	Specific Learning Objectives	Domain	Guilbe rt's Levels	Must to know/ desirable to know/Nice toknow	Teaching - Learning Method	Assessment /Evaluation		
										Formative	Summative	
Hom UG- HP- 1.32. 1	Proble m formul ation	Doctr ine of Signa ture	Knows	Must be able to apply doctri ne of signat ure while selecti ng a	1. Define Doctrine of Signature  2. Explain doctrine of signature with suitable examples	Cognitiv e	Level 1 Recall	Must Know	1.Lecture Demonstrations  2. Small Group Discussions/  Peer teaching (Think-Pair-Share, Jigsaw Strategy)  3. Quiz	1.Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's  5. 2 marks question	LAQ MCQ Voce	SAC Viva
Hom UG- HP- 1.32. 2	Integr ation of		Knows				Level 2 Unders tandin g	Must Know				

Hom UG-HP-1.32.3	Knowledge  Synthesis and application of knowledge		Knows how	Homo eopathic similitum	3. Apply the logic behind doctrine of signature in patients showing the same signs particularly in one sided case.		Level 3 Problem solving	Nice to know	4. Student Seminars 5. Case based learning 6. Case Simulation 7. Experiential Learning	6. SAQ's 7. Projects 8. Assessment of case 9. Simulation assessment		
Hom UG-HP-1.32.4			Shows how		4. Select a remedy for a one-sided case based on the doctrine of signature		Level 3 Problem solving	Nice to know				
Hom UG-HP-1.32.5			Shows hows		5. Demonstrate care, professionalism & commitment while prescribing on the basis of doctrine of signature	Affective	Level 2 Respond	Nice to know	1. Case based learning 2. Case Simulation 3. Experiential Learning	1. Assessment of case 2. Simulation assessment	Viva Voce	

**TOPIC:** Drug Proving

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to prove a given drug on healthy human being

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's level	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation		Integration
										Method Formative	Type (Summative)	
HomUG-HP-1.33.1	Problem Solution  Integration of Knowledge  Synthesis and application of knowledge	Drug Proving	Knows	Proving a given drug on healthy human being	1. Define Drug Proving.	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 4. Quiz 5. Student Seminars 6. Guest Lecture	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5.SAQ's and LAQ's 6. 2 marks questions	LAQ SAQ MCQ Viva Voce	Horizontal with Organon of Medicine
HomUG-HP-1.33.2			Knows		2. Illustrate the qualities of an ideal prover.	Cognitive	Level 1 Recall	Must Know				
HomUG-HP-1.33.3			Shows how		3. Apply the selection criteria (inclusion & exclusion) for provers during drug proving.	Cognitive	Level 3 Problem Solving	Desirable to know				

HomUG-HP.1.33.4	Problem solving		Knows		4. Explain the methodology for drug proving.	Cognitive	Level 2 Understand	Must Know	7. Integrated Teaching with Organon of Medicine			
HomUG-HP-1.33.5			Does		5. Design the protocol for Drug Proving.	Cognitive	Level 3 Problem Solving	Nice to know	1. Lecture Demonstration 2.Procedural Skills Teaching	1.Simulation based assessment	LAQ SAQ Viva Voce	
HomUG-HP-1.33.6			Does		6. Select ideal prover for drug proving		Level 3 Problem Solving	Desirable to know	3. Problem Based Learning 4. Role Plays 5. Experiential learning			
HomUG-HP-1.33.7			Does		7. Prepare the test substance for drug proving.	Psychomotor	Level 2 Control	Nice to know	6. Team based learning			
HomUG-HP-1.33.8			Does		8. Formulate the team for drug proving	Cognitive	Level 3 Problem Solving	Nice to know				
HomUG-HP-1.33.9			Does		9. Record the symptoms of drug proving	Psychomotor	Level 2 Control	Nice to know				



HomUG-HP-1.33.10			Does		10. Interpret the provers symptoms	Cognitive	Level 3 Problem solving	Nice to know				
HomUG-HP-1.33.11			Does		11. Translate the provers symptoms in Materia Medica language		Level 3 Problem solving	Nice to know				
HomUG-HP-1.33.12			Shows how		12. Show professionalism and care during drug proving towards the provers.	Affective	Level 2 Responding	Nice to know	1. Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning	1.Simulation based assessment	Viva Voce	
HomUG-HP-1.33.13			Does		13. Value the privacy & integrity of the provers.		Level 3 Internalize	Nice to know	4. Role Plays 5. Experiential learning			
HomUG-HP-1.33.14			Does		14. Value the consent of the prover.		Level 3 Internalize	Nice to know	6. Team based learning			

HomUG-HP-1.33.15			Does		15. Value the ethical considerations during drug proving.		Level 3 Internalize	Nice to know				
------------------	--	--	------	--	---	--	---------------------	--------------	--	--	--	--

**TOPIC:** Posology

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to

1. Select a particular potency for a particular case.
2. Select a particular dose for a particular case.
3. Repeat the dose as per the criteria for repletion of doses.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable	Teaching Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	

			how/ Know					to know/ Nice to know					
HomU G-HP- 1.34.1	Proble m solutio n	Pos olo gy	Knows	Selecting a particula r potency for a particula r case. Selecting a particula r dose for a particula r case.	1.Define posology	Cogniti ve	Level 1 Recall	Must Know	1.Lecture Demonstrations  2. Small Group Discussions/  Peer teaching (Think-Pair-Share, Jigsaw Strategy)  3. Quiz  4. Student Seminars  5. Guest Lecture	1.Structured Oral Examination  2. Tutorials  3. Assignments  4. MCQ's  5. 2 marks question  6.SAQ's and LAQ's	LAQ SAQ MCQ  Viva Voce	Horizont al with Organon of Medicine	
HomU G-HP- 1.34.2	Integra tion of Knowle dge  Practic e based learnin g and improv ement		Knows	Repeatin g the dose as per the criteria for repletion of doses.	2.Explain the criteria for selection of potency		Level 2 Understan d	Must know	6. Integrated Teaching with Organon of Medicine  7. Case based learning  8. Case simulation learning	7. Simulation based assessment  8. Case based assessment			
HomU G-HP- 1.34.3	Synthes is and applicat ion of knowle dge		Knows how		3.Apply the criteria for selection of potency for a particular case.		Level 3 Problem solving	Desirab le to know					

HomU G-HP- 1.34.4	Classro om to OPD/IP D transfer		Knows		4. Enlist the different types of doses		Level 1 Recall	Must know					
HomU G-HP- 1.34.5			Knows		5. Explain the criteria for repetition of doses.		Level 2 Understa nding	Must know					
HomU G-HP- 1.34.6			Shows how		6. Apply the criteria for repetition of doses for a particular case.		Level 3 Problem Solving	Desirab le to know					
HomU G-HP- 1.34.7			Does		7. Choose the correct potency for a particular case		Level 3 Problem Solving	Desirab le to know	1. Lecture Demonstration 2. Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning 5. Team based learning	1. Simulation based assessment 2. Case based assessment 3. OSPE	LAQ SAQ MCQ Practical Examinati on		

								6. Case based learning 7. Case simulation learning				
HomU G-HP- 1.34.8			Does	8. Choose the proper dosage for a particular case		Level 3 Problem Solving	Desirable to know					
HomU G-HP- 1.34.9			Does	9. Design the dosage and repetition for a particular case		Level 3 Problem Solving	Nice to know					
HomU G-HP- 1.34.10			Shows how	10. Show professionalism and care while selection of potency & dose.	Affective	Level 2 Respond	Nice to know	1. Lecture Demonstration 2. Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1. Simulation based assessment	Viva Voce		
HomU G-HP- 1.34.11			Shows how	11. Value the privacy & integrity of the patient/case		Level 3 Internalize	Nice to know	5. Team based learning 6. Case based learning				

									7. Case simulation learning				
HomU G-HP- 1.34.1 2			Shows how		12. Value the ethical considerations during selection of potency, dose and repetition of doses		Level 3 Internalize	Nice to know					
HomU G-HP- 1.34.1 3			Shows how		13. Value the importance of rational prescription		Level 3 Internalize	Nice to know					

**TOPIC:** Prescription Writing

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must have knowledge of writing an ideal prescription

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Level	Must to know/ desirable to know/ Nice to know	Teaching Learning Method	Assessment /Evaluation		
										Formative	Summative	
Hom UG-HP-1.35.1	Integratio n of Knowledg e  Practice based learning and improvement  Synthesis and applicatio n of knowledg e	Prescri ption Writing	Knows	Writing an ideal prescriptio n	1.Define Prescription writing.	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Case based learning	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	LAQ MCQ Voce	SAC Viva
Hom UG-HP-1.35.2			Knows		2.Explain the parts of an ideal prescription.		Level 2 Understand ing	Must Know				
Hom UG-HP-1.35.3			Knows		3. List the abbreviations used in prescription writing with meaning.		Level 1 Recall	Must Know				

Hom UG-HP-1.35.4	Problem solution		Knows		4. Explain the advantages of prescription to the patients and to the physician.		Level 2 Understanding	Must Know	7. Case simulation learning		
Hom UG-HP-1.35.5	Classroom to OPD/IPD Transfer		Shows how		5. Critically analyse a prescription for any faults.		Level 3 Problem solving	Nice to know			
Hom UG-HP-1.35.6			Does		6. Write an ideal prescription	Psychomotor	Level 2 Control	Must know	1. Lecture Demonstration 2. Procedural Skills Teaching 3. Problem Based Learning	1. Simulation based assessment 2. Case based assessment	Practical Examination
Hom UG-HP-1.35.7			Shows how		7. Criticize a wrong prescription	Cognitive	Level 3 Problem solving	Nice to know	4. Experiential learning 5. Team based learning 6. Case based learning	3. OSPE	



									7. Case simulation learning 8. Practical Demonstration			
Hom UG-HP-1.35.8			Shows how		8.Show professionalism and commitment while writing a prescription with accuracy.	Affective	Level 2 Respond	Nice to know	1.Lecture Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning 5. Team based learning 6. Case based learning	1.Simulation based assessment	Practical Examination	
Hom UG-HP-1.35.9					9. Value the privacy & integrity of the prescription.		Level 3 Internalize	Nice to know	7. Case simulation learning			
Hom UG-HP-					10. Value the ethical considerations during		Level 3 Internalize	Nice to know	8. Practical Demonstration			

1.35.10					writing a prescription							
Hom UG-HP-1.35.11					11. Value the importance of rational prescription		Level 3 Internalize	Nice to know				

**TOPIC:** Legislation

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to follow and practice ethically all the laws that govern homoeopathic pharmacy.

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG-HP-1.36.1	Integration of Knowledge  Synthesis and Application of knowledge  Problem solution	Legislation	Knows	Must be able to follow and practice ethically all the laws that govern homoeopathic pharmacy.	1. List all the acts that govern the legal aspects of homoeopathic pharmacy.	Cognitive	Level 1 Recall	Must know	1. Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom	1. Structure and Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6. SAQ's and LAQ's	LAQ Viva Voice	
Hom UHP-1.36.2			Knows		2. Illustrate the provisions under the Drugs & Cosmetic Act		Level 2 Understanding					Must know
Hom UG-HP-1.36.3			Knows		3. Illustrate the provisions under the Schedule M1		Level 2 Understanding					Must know
Hom UG-HP-1.36.4			Knows		4. Illustrate the provisions under the Drugs & Magic Remedies Act		Level 2 Understanding					Must know
Hom UG-HP-1.36.5			Knows		5. Illustrate the provisions under the Medicinal & Toilet Preparation Act		Level 2 Understanding					Must know

Hom UG- HP- 1.36. 6			Knows		6. Illustrate the provisions under the Dangerous Drugs Act		Level 2 Understa nding	Must know			
Hom UG- HP- 1.36. 7			Knows		7. Illustrate the provisions under the Prevention of Illicit Traffic in Narcotic Drugs & Psychotropic Substances Act		Level 2 Understa nding	Must know			
Hom UG- HP- 1.36. 8			Knows		8. Illustrate the provisions under the Homoeopathic Central Council Act		Level 2 Understa nding	Must know			
Hom UG- HP- 1.36. 9			Does Shows how		9. Demonstrate the labelling of homoeopathic medicine according to Part IX of the Drugs &	Psychom otor	Level 2 Control	Must know	1. Practical Demonstration 2. Procedural Skills Teaching 3. Problem Based Learning	1. DOPS 2. OSPE	LAQ Practical Examinati on

					Cosmetic Act 1940				4. Experiential learning			
Hom UG-HP-1.36.10			Knows		10. Demonstrate care and commitment and abide by the provisions laid down in the various acts.	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 3. Problem Based Learning	Role Play Assessment	Viva Voce	

**TOPIC:** Drug Action

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to differentiate the different mechanisms of drug action of homoeopathic medicines

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation		
										Formative	Summative	
Hom UG-HP-1.37.1	Integration of Knowledge	Drug Action	Knows how	Must be able to differentiate the different mechanisms of drug	1. Classify the different types of drug action.	Cognitive	Level 2 Understanding	Nice to Know	1. Lecture Demonstration 2. Small Group Discussions/ 3. Assignments	1. Structured Oral Examination 2. Tutorials 3. Assignments	LAQ MCQ Practical Examination Viva Voce	SA

Hom UG-HP-1.37.2	Synthesis and application of knowledge		Knows	action of homoeopathic medicines	2. Explain the individual family drug action according to their sphere of action.		Level 2 Understanding	Desirable to Know	Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz 4. Flipped Classroom	4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects 8. Spotting	
Hom UG-HP-1.37.3	Classroom to Clinic transfer		Knows		3. Explain the individual family drug action according to nature of drug & family relationship.		Level 2 Understanding	Desirable to Know	6. Videos 7. Integrated Teaching		
Hom UG-HP-1.37.4			Does		4. Analyze the action of drug on patients.	Cognitive	Level 3 Problem solving	Nice to know	1. Practical Demonstrations 2.Experiential Learning	1. Spotting 2. Pharmacological action of 30 drugs as specified in journal	-----
Hom UG-HP-1.37.5			Does		5. Co-relate the action of drugs with the family characteristics.			Nice to know	3. Projects	3. Projects	

HomUG-HP-1.37.6			Knows		6.Show care in prescribing homoeopathic medicine based on action of drugs and drug relationships.	Affective	Level 2 Respond	Must know	1. Lecture 2. Integrated teaching of Pharmacological drug action with Materia Medica	Journal Assessment	
-----------------	--	--	-------	--	---	-----------	-----------------	-----------	---	--------------------	--

**TOPIC:** Relation of Pharmacy with Materia Medica, Anatomy, Physiology

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to correlate homoeopathic pharmacy with Materia Medica, Anatomy and Physiology

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
HomUG-HP 1.38.1	Problem formulation	Relation of Pharmacy with	Knows	Must be able to correlate homoeop	1. Explain the correlation of homoeopathic pharmacy with	Cognitive	Level 2 Understanding	Desirable to Know	1.Lecture Demonstrations	1.Structured Oral Examination	SAQ Viva Voce

	Integration of Knowledge	Materia Medica		athic pharmacy with material medica, Anatomy and Physiology	the basics of Homoeopathic Materia Medica.				2. Small Group Discussion s/	2. Tutorials	
HomUG-HP-1.38.2	Synthesis and application of knowledge		Knows		2. Explain the correlation of homoeopathic pharmacy with the basics of Anatomy			Desirable to Know	Peer teaching (Think-Pair-Share, Jigsaw Strategy)	3. Assignments	
HomUG-HP-1.38.3			Knows		3. Explain the correlation of homoeopathic pharmacy and Physiology			Desirable to Know	3. Quiz 4. Student Seminars 5. Flipped Classroom	4. MCQ's 5. 2 marks question 6.SAQ's, LAQ's 7.Projects	
HomUG-HP-1.38.4			Knows how		4.Apply the principles of posology during case taking after selection of similimum based on knowledge of Homoeopathic	Cognitive	Level 3 Problem Solving	Desirable to know	1. Practical Demonstration 2. Lecture Demonstration 3. Experiment	1. DOPS 2. OSPE 3. Evaluation of projects 4. Evaluation of case	-----



					Materia Medica.				tal Research projects	based learning
HomUG-HP-1.38.5			Knows how		5. Apply the knowledge of drug action based on familial relationship and remedy relationship as noted in Homoeopathic Materia Medica and organ affection with anatomy			Desirable to know	4. Case based learning 5. Problem based learning 6. Case simulation	5. Evaluation of PBL 6. Evaluation of Case simulation
HomUG-HP-1.38.6			Knows how		6. Apply the knowledge of sources of drugs and collection of drugs while preparation of homoeopathic medicines according to			Desirable to know		

				the scale of potentiation.							
HomUG-HP-1.38.7			Knows how	7. Apply the knowledge of pharmacological action of drugs with the normal physiology of human body				Desirable to know			
HomUG-HP-1.38.8			Knows how	8. Demonstrate care, professionalism & commitment & follow all the guidelines meticulously as given in 6 <sup>th</sup> edition of Organon of medicine while selecting a particular homoeopathic medicine in a particular potency.	Affective	Level 1 Receiving	Nice to know	<ol style="list-style-type: none"> <li>1. Practical Demonstration</li> <li>2. Lecture Demonstration</li> <li>3. Experimental Research projects</li> <li>4. Case based learning</li> </ol>	<ol style="list-style-type: none"> <li>1. DOPS</li> <li>2. OSPE</li> <li>3. Evaluation of projects</li> <li>4. Evaluation of case based learning</li> <li>5. Evaluation of PBL</li> <li>6. Evaluation</li> </ol>	Viva Voce	

									5. Problem based learning	of Case simulation	
HomUG-HP-1.38.9					9. Demonstrate care, professionalism & commitment & follow all the guidelines meticulously as given in 6 <sup>th</sup> edition of Organon of medicine while preparation of homoeopathic medicine according to the scale of potentisation.				6. Case simulation		

HomUG-HP-1.38.10					10. Demonstrate care, professionalism & commitment & follow all the guidelines meticulously as given in 6 <sup>th</sup> edition of Organon of medicine while prescribing a particular external application for a particular case.						
HomUG-HP-1.38.11					11. Should ensure that all the resources are used to the fullest without any wastage while preparing						

					homoeopathic medicine.							
--	--	--	--	--	------------------------	--	--	--	--	--	--	--

**TOPIC:** Recent advancements and scope of research in Homoeopathic Pharmacy

**Learning Outcomes (LO):**

At the end of the topic, I-BHMS student must be able to undertake a short term research in Homoeopathic Pharmacy

Sr. No	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable to know/Nice toknow	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative
Ho mU G- HP- 1.3 9.1	Proble m solutio n	Recent advance ments and scope of research in	Knows	Must be able to undertak e a short term research in	1.Enumerate the types of research in homoeopathi c pharmacy	Cognitiv e	Level 1 Recall	Nice to know	1.Lecture Demonstrations 2. Small Group Discussions/	1.Structured Oral Examination 2. Assignments 3. MCQ's	-----

	Integra tion of Knowle dge	Homoeo pathic Pharma cy		Homoeo pathic Pharmac y				Peer teaching (Think-Pair- Share, Jigsaw Strategy)	4.SAQ's
Ho mU G- HP- 1.3 9.2	Synthes is and applicat ion of knowle dge		Knows		2.Explain the recent advancement s in the field of homoeopathi c pharmacy	Level 2  Understa nding	Nice to Know	3. Visit to research laboratories	
Ho mU G- HP- 1.3 9.3	Classro om to lab transfer		Does		3.Design the protocol for a short term research proposal in homoeopathi c pharmacy	Level 3  Problem solving	Nice to know		

### Non-Lecture Activities

1. Collection of 30 drugs for herbarium
2. Visit to a Large-scale manufacturing unit of Homoeopathic medicine (GMP compliant).
3. Visit to a Medicinal Plant /Botanical Garden & shall keep details Visit report
4. Clinical Class: Visit to IPD, OPD to take note on prescriptions as per Homoeopathic Principles and keep record

5. Visit to Hospital dispensing section to observe & gain knowledge on Dispensing techniques & Keep Records

## 8.PRACTICAL TOPICS

<b>Homoeopathic Pharmacy Practicals</b>	
<b>Sr No.</b>	<b>Particulars of Experiments</b>
1	Estimation of size of globules
2	Medication of globules (Small Scale)
3	Purity test of Sugar of milk
4	Purity test of water
5	Purity test of Ethyl alcohol
6	Determination of Specific gravity of a given liquid Vehicle & identifying the same.
7	Preparation of dispensing alcohol from strong alcohol.
8	Preparation of dilute alcohol from strong alcohol.
9	Trituration of drug in Old Method (One each of Class VII, VIII & IX)
10	Trituration of one drug as per HPI
11	Succussion in decimal scale from Mother Tincture (Prepared in Old Method) to 3X potency.
12	Succussion in decimal scale from Mother Tincture (Prepared in New Method) to 3X potency
13	Succussion in centesimal scale from Mother Tincture (Prepared in Old Method) to 3C
14	Succussion in centesimal scale from Mother Tincture (Prepared in New Method) to 3C
15	Conversion of Trituration to liquid potency: Decimal scale 6X to 8X potency.

16	Conversion of Trituration to liquid potency: Centesimal scale 3C to 4C potency.
17	Preparation of 0/2 potency (Solid form) (LM scale) of 1 Drug from 3 <sup>rd</sup> Degree Trituration.
18	Preparation of external applications – Lotion
19	Preparation of external applications – Glycerol
20	Preparation of external applications – Liniment
21	Preparation of external applications – Ointment
22	Writing of prescription & Dispensing the Medicine in Water with preparation of Doses
23	Writing of prescription & Dispensing the Medicine in Sugar of Milk with Preparation of Doses
24	Preparation of mother tinctures according to Old Hahnemannian method (Class I, II, III, IV)
25	Preparation of mother solutions according to Old Hahnemannian method (Class Va, Vb, VIa, VIb)

### **Demonstration**

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)
2. Estimation of moisture content using water bath
3. Paper chromatography & TLC of any mother tincture
4. Laboratory methods – Sublimation, distillation, decantation, filtration, crystallization.
5. Preparation of mother tincture – Maceration and Percolation
6. Study & demonstration of Drug Substances (listed in Appendix B)-
  - i) Macroscopic Characteristic (Any 15)
  - ii) Microscopic characteristic (Any 05)
7. Study & demonstration of vehicles (Solid, Liquid & Semi solid – as available)
8. Microscopical study of Trituration (One drug up to 3X Potency)



## 9. Medication of Globule (Large Scale)

### **Activities**

1. Collection of 30 drugs for herbarium
2. Visit to a Large-scale manufacturing unit of Homoeopathic medicine (GMP compliant).
3. Visit to a Medicinal Plant /Botanical Garden & shall keep details Visit report
4. Clinical Class: Visit to IPD, OPD to take note on prescriptions as per Homoeopathic Principles &keep record
5. Visit to Hospital dispensing section to observe & gain knowledge on Dispensing techniques & Keep Records

### **Demonstration**

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)-06 Hours
2. Estimation of moisture content using water bath-02 Hours
3. Paper chromatography & TLC of any mother tincture-04 Hours
4. Laboratory methods – Sublimation, distillation, decantation, filtration, crystallization.-04 Hours
5. Preparation of mother tincture – Maceration and Percolation- 04 Hours
6. Study & demonstration of Drug Substances (listed in Appendix B)- 10 Hours
  - i) Macroscopic Characteristic (Any 15)
  - ii) Microscopic characteristic (Any 05)
7. Study & demonstration of vehicles (Solid, Liquid & Semi solid – as available)- 02 Hours
8. Microscopical study of Trituration (One drug up to 3X Potency)-02 Hours
9. Medication of Globule (Large Scale)-1 Hour

**Clinical Hospital Work** – Maintain Record (Activities/Posting in Dispensing Section, Prescriptions based on Homoeopathic Principles in IPD/OPD) – Record to be maintained as per format in Appendix G- 20 Hours

**Seminar** – Maintain Record on Seminar Presentation on Topics of Homoeopathic Pharmacy as assigned- 07 Hours

## 9. ASSESSMENT

### Assessment Summary

#### 9A- Number of papers and Mark Distribution

Sr. No.	Course Code	Papers	Theory	Practical	Viva Voce	Internal Assessment- Practical	Electives Grade Obtained		Grand Total
1	HomUG-HP	1	100	50	40	10			100

#### 9B - Scheme of Assessment (formative and Summative)

Sr. No	Professional Course	1 <sup>st</sup> term (1-6 Months)			2 <sup>nd</sup> Term (7-12 Months)			3 <sup>rd</sup> Term (13-18 Months)	
1	First Professional BHMS	1 <sup>st</sup> PA	1 <sup>ST</sup> TT		2 <sup>nd</sup> PA	2 <sup>ND</sup> TT		3 <sup>rd</sup> PA	UE
		10 Marks Practical/Viva	50 Marks Theory	50 Marks Practical/Viva	10 Marks Practical/Viva	50 Marks Theory	50 Marks Practical/Viva	10 Marks Practical/Viva	

**For Internal assessment, Only Practical/Viva marks will be considered. Theory marks will not be counted.**

**Method of Calculation of Internal Assessment Marks for Final University Examination:**

PA1 Practical/Viva (10 Marks) <b>A</b>	PA2 Practical/Viva (10 Marks) <b>B</b>	PA3 Practical/Viva (10 Marks) <b>C</b>	Periodical Assessment Average $PA1+PA2+PA3/3$ <b>D</b>	TT1 Practical/Viva (50 Marks) <b>E</b>	TT2 Practical/Viva (50 Marks) <b>F</b>	Terminal Test Average $TT1+TT2/100*10$ <b>G</b>	Final Internal Assessment Marks <b>D+G/2</b>
---	---	---	--	---	---	--	--

**PA-** Periodical Assessment **TT-** Terminal Test **UE-** University Examination

**9C - Evaluation Methods for Periodical Assessment**

Sr. No	Evaluation Criteria
1	Practical Performance
2	Viva Voce

**9 D- Paper Layout**

MCQ	10 marks
SAQ	50 marks
LAQ	40 marks

**9 E– I - Distribution of Theory exam**

Sr. No	Paper	B	C	D		
				Type of Questions "Yes" can be asked. "No" should not be asked.		
	A List of Topics	Term	Marks	MCQ (1 Mark)	SAQ (5 Marks)	LAQ (10 Marks)
1	General Concepts and Orientation	I	Refer Next Table	Yes	Yes	No
2	Raw Material: Drugs and Vehicles	I		Yes	Yes	Yes
3	Homoeopathic Pharmaceutics	II		Yes	Yes	Yes
4	Pharmacodynamics	III		Yes	Yes	Yes
5	Quality Control	II		No	Yes	No
6	Legislations pertaining to Homoeopathic Pharmacy	III		No	No	Yes
7	Homoeopathic Pharmacy - Relationships	III		No	Yes	No

**9 E – II - Theme table**

Theme*	Topics	Term	Marks	MCQ's	SAQ's	LAQ's
--------	--------	------	-------	-------	-------	-------

A	General Concepts and Orientation	I	11	Yes	Yes	No
B	Raw Material: Drugs and Vehicles	I	25	Yes	Yes	Yes
C	Homoeopathic Pharmaceutics	II	23	Yes	Yes	Yes
D	Pharmacodynamics	III	16	Yes	Yes	Yes
E	Quality Control	II	10	No	Yes	No
F	Legislations pertaining to Homoeopathic Pharmacy	III	10	No	No	Yes
G	Homoeopathic Pharmacy - Relationships	III	05	No	Yes	No

### 9 F Question paper Blueprint

A Question Serial Number	B Type of Question	Question Paper Format (Refer table 7 F II Theme table for themes)
Q1	Multiple choice Questions (MCQ) 10 Questions 1 mark each All compulsory Must know part: 6 MCQ Desirable to know: 2 MCQ. Nice to know: 2 MCQ	1. Theme A 2. Theme B 3. Theme B 4. Theme B 5. Theme B 6. Theme B 7. Theme C 8. Theme C 9. Theme C 10. Theme D
Q2	Short answer Questions (SAQ) 10 Questions 5 Marks Each All compulsory Must know part: 9 SAQ Desirable to know: 1 SAQ	1. Theme A 2. Theme A 3. Theme B 4. Theme B 5. Theme C 6. Theme C 7. Theme D

	Nice to know: Nil	8. Theme E 9. Theme E 10. Theme G
Q3	Long answer Questions (LAQ) 4 Questions 10 marks each All compulsory All questions on must know No Questions on Nice to know and Desirable to know	1. Theme B 2. Theme C 3. Theme D 4. Theme F

### 9 G - Distribution of Practical Exam

**Practical, Viva& Internal Assessment** → 100 marks

Spotting	20 marks
Experiment	20 marks
Journal	10 marks



Viva voce	40 marks
Internal assessment	10 marks

## 10.LIST OF RECOMMENDED BOOKS

### Text Books

1. Dr. Partha Mandal & Dr. Biman Mandal, A Textbook of Homoeopathic Pharmacy, Revised and Enlarged 3rd Edition, 2012, New Central Book Agency Publishers.
2. Dr. Sumit Goel, Art and Science of Homoeopathic Pharmacy, 4<sup>TH</sup> Enlarged Revised Edition, 2021, IBPP Publishers.
3. Dr. D.D. Banerjee, Augmented Textbook of Homoeopathic Pharmacy, 2<sup>nd</sup> Edition, 2012, B. Jain Publishers.
4. Dr. K.P. Mujumdar, Textbook of Homoeopathic Pharmacy, 2013, New Central Book Agency Publishers

### Reference Texts

1. Banerjee SK & Sinha N. (Reprint edition, 1993). A Treatise on Homoeopathic Pharmacy. B Jain Publishers, New Delhi.
2. Govt. of India, Ministry of Health & Family Welfare, New Delhi (1971 to 2006). Homoeopathic Pharmacopoeia of India (1-9 Vol.)
3. Hughes R (Reprint edition, 1999). A Manual of Pharmacodynamics. B Jain Publishers, New Delhi.
4. Dr. P.N. Verma & Dr. (Mrs.) Indu Vaid, Encyclopaedia of Homoeopathic Pharmacopoeia, Vol- I, II, III, Edition 2002, B. Jain Publishers.

APPENDIX – A	
List of drugs included in the syllabus of Homoeopathic Pharmacy for study of Pharmacological action: -	
1. Aconitum Napellus	16. Glonoinum
2. Adonis vernalis	17. Hydrastis Canadensis
3. Allium cepa	18. Hyoscyamus niger
4. Argentum Nitricum	19. Kali bichromicum
5. Arsenicum album	20. Lachesis
6. Atropa Belladonna	21. Lithium carbonicum
7. Cactus grandifloras	22. Mercurius corrosivus
8. Cantharis vesicatoria	23. Naja tripudians

9. Cannabis indica	24. Nitricum acidum
10. Cannabis sativa	25. Nux vomica
11. Cinchona officinalis	26. Passiflora incarnate
12. Coffea cruda	27. Stannum metallicum
13. Crataegus oxyacantha	28. Stramonium
14. Crotalus horridus	29. Symphytum officinale
15. Gelsemium sempervirens	30. Tabacum

**APPENDIX – B**

List of drugs for identification

**i. Vegetable Kingdom**

1. Aegle folia
2. Anacardium orientale
3. Andrographis paniculata
4. Calendula officianlis
5. Cassia sophera
6. Cinchona officinalis
7. Cocculus indicus
8. Coffea cruda
9. Colocynthis
10. Crocus sativa

11. Croton tiglium
12. Cynodon dactylon
13. Ficus religiosa
14. Holarrhenaantidysenterica
15. Hydrocotyle asiatica
16. Justicia adhatoda
17. Lobelia inflata
18. Nux vomica
19. Ocimum sanctum
20. Opium
21. Rauwolfia serpentina
22. Rheum
23. Saraca indica
24. Senna
25. Stramonium
26. Vinca minor

**ii. Chemicals or Minerals**

1. Acetic acid
2. Alumina
3. Argentum Metallicum
4. Argentum Nitricum

5. Arsenicum Album
6. Calcareo Carbonica
7. Carbo Vegetabilis
8. Graphites
9. Magnesium Phosphoric
10. Natrum Muriaticum
11. Sulphur

**iii. Animal Kingdom**

1. Apis mellifica
2. Blatta orientalis
3. Formica rufa
4. Sepia
5. Tarentula cubensis

**Appendix C**

**List of Instrument & Appliances for Demonstration & Study**

Crucible with lid	Test Tube	Tripod stand	Hot Air Oven
Porcelain Basin	Conical Flask	Wire gauze	Water bath

Mortar & Pestle Porcelain	Volumetric flask	Spatula	Macerating Jar
Ointment Slab	Minim glass	Leather pad	Percolator
Chemical Balance	Thermometer	Stop watch	Microscope
Hydrometer	Mortar & Pestle - Glass	Chopping Board	pH Meter
Alcoholometer	Glass Phials	Chopping Knife	Burette
Lactometer	Pyknometer	Sieve	Pipette
Spoon	Measuring Cylinder	Tincture Press	Dropper
Beaker	Graduated Conical Flask	Funnel	Glass Rod

#### Appendix – D (List of Important Vehicles for Study)

Appendix – D (List of Important Vehicles for Study)		
Solid	Liquid	Semisolid
Sugar of Milk	Water	Vaseline
Globules	Ethyl Alcohol	Beeswax
Tablets	Glycerine	Lanolin
Cane Sugar	Olive Oil	Spermaceti
	Simple Syrup	Isin glass
	Lavender Oil, Sesame Oil, Rosemary Oil, Almond Oil	

**Appendix E**

**Format for Maintaining Record on visit to Homoeopathic Manufactory (GMP Compliant)**

Date of Visit

No. of Visiting Students & Teaching Faculty

Name of Teaching Faculty

Detail of the Instructor/s at the Manufactory

How the Tour was arranged

Name & Location of the Homoeopathic Manufactory

History about the Manufactory

Different Sections of the manufactory with its working process

Activities of R&D Dept

How the visit helped in correlation with topics studied in Theory

Conclusion

**(Any other related information, not mentioned in format, if required can be included)**

**Appendix F**

**Format for Maintaining Record on visit to Medicinal Plant Garden**

Date of the Visit

No. of visiting Students & Teaching Faculty

Name of Teaching Faculty

Detail of Instructor/s

How the Tour was arranged

Name & Location of the Medicinal Plant Garden

History & about the Medicinal Plant Garden

A list Medicinal Plants seen with brief description,

Conclusion

## **Appendix G**

### **Format for maintaining record on Hospital Activities (Visit to OPD/IPD & Dispensing Section)**

Record on Prescriptions based on Homoeopathic Principles in IPD/OPD

No of Cases: Total 10 cases (5 Acute, 5 Chronic)

Format -

Patient ID

Complaint

Diagnosis

Details of 1<sup>st</sup> Prescription – Name of Medicine, Potency, Dose with its Repetition,

Second Prescription (if Record is available)



Conclusion at the end of Acute & Chronic Cases on Lessons learnt on Homoeopathic Principles

Record on Activities/Posting in Hospital Dispensing Section

Total No. of Patients Date wise,

SI No as per Prescription Register,

Dosage form- Liquid/solid,

Name of Vehicle used,

Medication Process etc

Conclusion at the end on Lessons learnt on Homoeopathic Dispensing Techniques

**Appendix H**

**Format for Maintaining record on Departmental Seminars**

Maintenance of Record on Seminar Presentation on Topics of Homoeopathic Pharmacy as assigned

Circular/Notice of Departmental Seminar

Title of Topic for Presentation,

Date

Presented by Name of Student/s

Brief Report on the Seminar

Any New Information provided by the Speakers

Rating on a Scale of 10

No of Students & Faculty Members attending the Seminar

Photos

Signed by the Departmental Head

## **11.LIST OF CONTRIBUTORS**

### **Dr.Parth Aphale**

Professor & H.O.D. Department of Homoeopathic Pharmacy, Dr. D.Y. Patil Homoeopathic Medical College & Research Centre, Pimpri, Pune-411018

### **DR KAUSHIK DEB DAS**

Professor & Head, Dept of Homoeopathic PharmacyCollege - The Calcutta Homoeopathic Medical College & HospitalKolkata , WB

### **DR RAM JYOTHIS**

ANSSHMC, Kottayam, Kerala

### **DR VIVEK SAKTHIDHARAN**

Father Muller Homoeopathic Medical College, Karnataka