

Course-Homoeopathic Pharmacy

Course code: Hom-UG-HP

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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 21st century are able to start explaining Hahnemann's insights of the 18th! 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 competencies essential for primary health care in clinical diagnosis and treatment of diseases through the judicious application of homoeopathic principles
2. Recognize the scope and limitation of homoeopathy and to apply the Homoeopathic Principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community.
3. Discern the relevance of other systems of medical practice for rational use of cross referral and life saving measures, so as to address clinical emergencies
4. Develop capacity for critical thinking and research aptitude as required for evidence based homoeopathic practice.
5. Demonstrate aptitude for lifelong learning and develop competencies as and when conditions of practice demand.
6. Be competent enough to practice homoeopathy as per the medical ethics and professionalism.
7. Develop the necessary communication skills to work as a team member in various healthcare setting and contribute towards the larger goals of national policies such as school health, community health, environmental conservation.

8. Identify and respect the socio-demographic, psychological, cultural, environmental & economic factors that affect health and disease and plan homoeopathic intervention to achieve the sustainable development Goal.

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 potentiation 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

3. 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
a) General Concepts and Orientation:			
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	I	04

	<p>Specialty and originality of Homoeopathic Pharmacy</p> <p>The Principles of Homoeopathy</p> <p>Law of Similia, Simplex & Minimum</p> <p>Theory of Chronic Disease & Vital Force</p> <p>Doctrine of Drug Proving & Drug Dynamisation</p>		
Homoeopathic Pharmacopoeia	<p>The Evolution, History & Development of Homoeopathic Pharmacopoeias throughout the world (year wise Publications) – GHP, BHP, HPUS, FHP</p> <p>Official –(HPI) &Unofficial Pharmacopoeias – (M Bhattacharya & 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>	1	04
Ideal laboratory	<p>Pre requisites of ideal Laboratory (General Laboratory), Laboratory safety Rules</p> <p>Role of Laboratory in Homoeopathic Pharmacy Education</p>	1	02

Weights and measurements.	<p>Metrology</p> <p>Basics & Units of Apothecary System, British Imperial System, Metric System</p> <p>Interrelationship between various systems of Weight & Measure</p> <p>Concept on Domestic Measures with Metric Equivalents</p>	I	01
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>	I	02
Pioneers of Homoeopathic Pharmacy	<p>Role & contributions of Pioneers in development of Homoeopathic Pharmacy</p>	I	02
b) Raw Material: Drugs and Vehicles			
Source of drugs in Homoeopathy	<p>Different sources - Plant kingdom, Animal kingdom, Mineral kingdom, Nosodes, Sarcodes, Imponderabilia, Synthetic source,</p> <p>New Sources - Allersode, Isodes with reference to their clinical utility</p> <p>Introduction to Bowel Nosodes, Tissue remedies</p>	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
c) Homoeopathic Pharmaceutics:			
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	II	06

	<p>The Merits of Potentisation</p> <p>Succussion & 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 (5th& 6th Ed)</p> <p>Preparation & Uses of lotion, glycerol, liniment and ointment.</p> <p>Commercial Preparation of Ointment</p>	II	05
Posology	<p>Basic principles of Homoeopathic Posology</p> <p>Related aphorisms of Organon of medicine.</p> <p>Criteria for Selection of Potency & Repetition of Dose</p> <p>Various Kinds of Dose, Emphasis on Minimum Dose</p>	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
d) Pharmacodynamics			
▪ 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	III	06

		With reference to aphorisms 105 – 145 of Organon of Medicine – 6 th Ed) Post Hahnemannian Drug Proving Homoeopathic Pathogenetic Trial (HPT) CCRH & Other Protocols on HPT Other Noted Provers & their work on Drug Proving		
▪ Adverse Reactions	Drug	Basic Idea, Reporting of ADE Drug safety with Ref to HPI Medication errors, Causality Assessment Incompatible Remedies	II	02
▪ Pharmacovigilance.		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
e) Quality Control:				

<ul style="list-style-type: none"> Standardisation Homoeopathy 	in	<p>Different Methods of Standardisation</p> <p>Quality Control of Raw Materials – Various Evaluation techniques</p> <p>In Process Quality Control</p> <p>Quality Control of finished products – Various standard parameters</p>	II	02
<ul style="list-style-type: none"> Industrial pharmacy. 		<p>Good Manufacturing Practices (GMP)</p> <p>Schedule M1</p>	II	02
<ul style="list-style-type: none"> Homoeopathic pharmacopoeia laboratory (HPL) 		<p>Functions and Activities of HPL relating to quality control of drugs.</p> <p>Pharmacopoeia Commission for Indian Medicines</p>	II	01
f) Legislations pertaining to Homoeopathic Pharmacy:			III	04
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				

g) Recent Advances in Homoeopathic Pharmacy	III	02
Modern theories related with Homoeopathic Drug action <ul style="list-style-type: none"> ▪ Principles of Drug action ▪ Introduction to Nanomedicine ▪ Molecular Mechanism of Drug Action ▪ Mechanism of Action of Homoeopathic Medicines 		
Scope of Research in Homoeopathic Pharmacy <ul style="list-style-type: none"> ▪ Drug Discovery ▪ Principles of New Drug discovery ▪ Clinical evaluation of New Drugs ▪ Pre-Clinical Research in Homoeopathic Pharmacy 	III	01
h) Homoeopathic Pharmacy - Relationships	III	02
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		

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 o/2 potency (Solid form) (LM scale) of 1 Drug from 3 rd 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

Table 4: Homoeopathic Pharmacy Theory	
a) General Concepts and Orientation:	
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 & Development of Homoeopathic Pharmacopoeias throughout the world (year wise Publications) – GHP, BHP, HPUS, FHP</p> <p>Official –(HPI) &Unofficial Pharmacopoeias –</p> <p>(M Bhattacharya & 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 & Units of Apothecary System, British Imperial System, Metric System</p> <p>Interrelationship between various systems of Weight & Measure</p> <p>Concept on Domestic Measures with Metric Equivalentents</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 & contributions of Pioneers in development of Homoeopathic Pharmacy</p>

b) Raw Material: Drugs and Vehicles	
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
c) Homoeopathic Pharmaceutics:	

Mother tincture and its preparation	<p>Extraction – Principles & Various Methods</p> <p>Old Method (Based on Class I to IX)</p> <p>Concept of Uniform Drug Strength</p> <p>Estimation of Moisture Content - Necessity</p> <p>New Method/Modern Approach of Homoeopathic Drug Preparation</p>
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 & its types</p> <p>The Merits of Potentisation</p> <p>Succussion & 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 (5th & 6th Ed)</p> <p>Preparation & 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 & 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 & Contents of Prescription</p> <p>Merits & 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	<p>Routes of Homoeopathic drug administration.</p>
Preservation	<p>Preservation Rules – Raw Materials Drug Substance, Mother Preparations, Finished products & Vehicles</p>
d) Pharmacodynamics	

<ul style="list-style-type: none"> ▪ Doctrine Signature. 	of	<p>Basic Concept, Its Evolution & 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"> ▪ Drug Proving. 		<p>Homoeopathic Pharmacodynamics</p> <p>With reference to aphorisms 105 – 145 of Organon of Medicine – 6th Ed)</p> <p>Post Hahnemannian Drug Proving</p> <p>Homoeopathic Pathogenetic Trial (HPT)</p> <p>CCRH & Other Protocols on HPT</p> <p>Other Noted Provers & their work on Drug Proving</p>
<ul style="list-style-type: none"> ▪ Adverse Reactions 	Drug	<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"> ▪ Pharmaco-vigilance. 		<p>Pharmacovigilance in Homoeopathy</p> <p>Activities of Pharmacovigilance Centres</p> <p>Awareness on Medicinal Preparations against Homoeopathic Principles – Patents, Combinations</p>
<ul style="list-style-type: none"> ▪ Pharmacological study of drugs 		<p>listed in Appendix-A (Any 15)</p>
<p>e) Quality Control:</p>		

<ul style="list-style-type: none"> Standardisation Homoeopathy 	in	<p>Different Methods of Standardisation</p> <p>Quality Control of Raw Materials – Various Evaluation techniques</p> <p>In Process Quality Control</p> <p>Quality Control of finished products – Various standard parameters</p>
<ul style="list-style-type: none"> Industrial pharmacy. 		<p>Good Manufacturing Practices (GMP)</p> <p>Schedule M1</p>
<ul style="list-style-type: none"> Homoeopathic pharmacopoeia laboratory (HPL) 		<p>Functions and Activities of HPL relating to quality control of drugs.</p> <p>Pharmacopoeia Commission for Indian Medicines</p>
f) Legislations pertaining to Homoeopathic Pharmacy:		
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		
g) Recent Advances in Homoeopathic Pharmacy		

<p>Modern theories related with Homoeopathic Drug action</p> <ol style="list-style-type: none"> 1. Principles of Drug action 2. Introduction to Nanomedicine 3. Molecular Mechanism of Drug Action 4. Mechanism of Action of Homoeopathic Medicines
<p>Scope of Research in Homoeopathic Pharmacy</p> <ol style="list-style-type: none"> 1. Drug Discovery 2. Principles of New Drug discovery 3. Clinical evaluation of New Drugs 4. Pre-Clinical Research in Homoeopathic Pharmacy
<p>h) Homoeopathic Pharmacy - Relationships</p>
<p>Relation of Homoeopathic Pharmacy with Anatomy</p>
<p>Relation of Homoeopathic Pharmacy with Physiology</p>
<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 & 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, Rubiaceaeetc</p>

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

Table 5 : Homoeopathic Pharmacy Practicals	
Sr No.	Particulars of Experiments
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 o/2 potency (Solid form) (LM scale) of 1 Drug from 3 rd 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 Comp	Subject Area	Miller's Level Does/	Specific Comp	Specific Learning Objectives	Bloom's	Guilbert's	Must to	Teaching Learning Method	Assessment /Evaluation		Integration
										Formative	Type (Sum	

	etenci es		Shows how/ Know s how/ Know	etenci es		Domai n	Level s	know/ desira ble to know/ Nice to know			mativ e)	
Ho mU G- HP- 1.1. 1	Integr ation of Knowl edge	History of Pharmac y with emphasis to emergen ce of Homoeo pathic Pharmac y	Know s	Must be able to interpr et the differe nce in concep t of Pharm acy among various system s of AYUS H	Define Pharmacy	Cogniti ve	Level 1 Recal l	Must Know	1.Lecture Demonstrations 2. Small Group Discussions/ 3.Peer teaching (Think-Pair-Share, Jigsaw Strategy) 4. Quiz 5. Student Seminars 6. Integrated Teaching with Organon Medicine	1.Structur ed Oral Examinati on 2. Tutorials 3. Assignme nts 4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	Theory & Viva Voce	Horizontal with Organon of Medicine
Ho mU G-	Synth esis and applic ation		Know s		Define Homoeop		Level 1	Must know				

HP-1.1.2	of knowledge			athic Pharmacy		Recal l						
Ho mUG-HP-1.1.3			Know s	Describe the Basic concepts of Different schools of Pharmacy with reference to AYUSH		Level 2 Under stand d	Nice to Know					
Ho m-UG-HP-1.1.4			Know s	Differentiate between Drug-Medicine-Remedy		Level 2 Under stand d	Must know					

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	Gilbert's Levels	Must to know/ desirable to know/Nice to know	Teaching Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	
Ho mU G-HP-1.2.1	Integration of Knowledge Synthesis and Application of	Basics of Homoeopathic Pharmacy	Knows	Must be able to state the fundamental Principles governing Homoeopathic Pharmacy	1. Enumerate the Sources of Homoeopathic Pharmacy	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	SAQ MCQ LAQ Viva Voce	Horizontal integration with Organon of Medicine
Ho mU G-HP-			Knows		2. Explain the Branches of Homoeopathic Pharmacy		Level 2 Understanding	Must Know				

1.2.2	knowledge			opathic Pharmacy				3. Quiz	5. 2 marks question		
Ho mU G-HP-1.2.3			Knows	3. Illustrate the Scope of Homoeopathic Pharmacy	Level 2 Understanding	Must Know		4. Student Seminars	6. SAQ's and LAQ's		
Ho m-UG HP-1.2.4			Knows	4. Describe the Originality & Specialty of Homoeopathic Pharmacy	Level 2 Understanding	Must Know		5. Guest Lecture			
Ho mU G-HP-			Knows	5. Explain the Fundamental Principles	Level 2 Understanding	Must Know		6. Problem based learning			

1.2.5					es, Laws & Doctrin es related to Homoe opathic Pharm acy							
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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	Mille r'sLe vel Does / Sho ws	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilber t's Levels	Must to know/ desira ble	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative

			how/ Knows how/ Know					to know/ Nice to know				
Hom UG- HP- 1.3.1	Integrati on of Knowle dge Synthesi s and Applicat ion of knowled ge	Nomencla ture of Homoeop athic Medicines	Knows	Must be able to describe the principles followed in nomenclature of Homoeopathic medicines	1.State the Basic rules of Nomenclature	Cognitiv e	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	SAQ LAQ Voce	MCQ Viva
Hom UG- HP- 1.3.2			Knows		2.Describe the nomenclature of Homoeopathic Drugs		Level 2 Unders tanding	Must Know	3. Quiz 4. Student Seminars			
Hom UG- HP- 1.3.3			Knows		3.Enumerate the important terminologies related		Level 1 Recall	Must Know	5. Guest Lecture			

					to Nomenclat ure				6. Problem based learning		
Hom UG- HP- 1.3.4			Know s		4. Define Scientific Name		Level 1 Recall	Must Know			
Hom UG- HP- 1.3.5			Know s		5. Define Common Name		Level 1 Recall	Must Know			
Hom UG- HP- 1.3.6			Know s		6. Enumerat e the advantages of Scientific Name	Cognitiv e	Level 1 Recall	Must Know			
Hom UG- HP- 1.3.7			Know s		7. Enumerat e the Advantages of Common Name	Cognitiv e	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		
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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	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative

			how/ Know					know			
Ho mU G- HP- 1.4. 1	Integrati on of Knowled ge Synthesi s and Applicat ion of knowled ge	Pioneers of Homoeop athic Pharmacy	Know s	Must be able to state the contributio ns of various pioneers in the field of Homoeopa thic Pharmacy	1.Outline the contributions of the Pioneers of Homoeopath y in the field of Homoeopath ic Pharmacy	Cognitiv e	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 LAQ 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-HP-1.5.1	Problem solution of Knowledge	Pharmacopoeia	Knows	Must be able abide by the homoeopathic pharmacopoeia guidelines for preparation of homoeopathic	1. Define Pharmacopoeia	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	SAQ MCQ LAQ Viva Voce
Hom UG-HP-1.5.2	Synthesis and application of knowledge		Knows		2. Enumerate the different types of homoeopathic pharmacopoeia with		Level 1 Recall	Must Know			

				hic medicines.	suitable examples.				3. Quiz	5. 2 marks question
Hom UG-HP-1.5.3			Knows		3. Explain the different types of homoeopathic pharmacopoeia.	Level 2 Understanding	Must Know		4. Student Seminars	6.SAQ's, LAQ's
Hom UG-HP-1.5.4			Knows		4. Explain HPI in detail	Level 2 Understanding	Must Know			7.Projects
Hom UG-HP-1.5.5			Knows		5. Explain what is monograph?	Level 2 Understanding	Must Know			

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 MCQ LAQ Viva Voce Practical Examination / Checklist
Hom UG- HP- 1.5.7			Knows how		7. Demonstrate care, professionalism & commitment & follow all the	Affective	Level 1 Receiving	Nice to know	1. Practical Demonstration 2. Lecture Demonstration	1. DOPS 2. OSPE 3. Evaluation	Viva Voce

					guidelines meticulously as given in official homoeopathic pharmacopoeia w.r.t. identification, collection, preservation, preparation and dispensing of homoeopathic medicine				3. Projects 4. Herbarium 5. Journal	on of projects 4. Evaluation of Journal & Herbarium	
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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,	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	SAQ MCQ LAQ Viva Voce

Hom UG- HP- 1.6.2			Knows		2. List any 4 examples of drugs from particular part of the plant.		Level 1 Recall	Must know	Jigsaw Strategy) 3. Quiz 4. Student Seminars 5. Guest Lecture	6.SAQ's and LAQ's 7. Herbarium	
Hom UG- HP- 1.6.3			Knows		3. Explain classification of plant kingdom with examples.		Level 2 Understanding	Must know	6. Problem based learning 7. Flipped Classroom 8. Videos		
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	1.DOPS 2. OSPE 3. Herbarium	Practical Examination / Checklist

									3. Herbarium 4. Experiential learning (Projects)		
Hom UG- HP- 1.6.5			Shows how		5. Demonstrate care while identifying & collecting the plant drug substances	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Problem Based Learning	1. Herbarium	Practical Examination / Checklist

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 substances for preparation of homoeopathic medicines.	1. Explain the part used and drug prepared from animal kingdom	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussion/ Peer teaching (Think-Pair-Share, Jigsaw Strategy) 3. Quiz	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

									4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos	7. Herbarium	
Hom UG- HP- 1.7.2			Knows		2. List any 4 examples of drugs from particular part of the animal.		Level 1 Recall	Must Know			
Hom UG- HP- 1.7.3			Knows		3. Explain classification of		Level 2 Understanding	Must Know			

					animal kingdom						
Hom UG-HP-1.7.4			Does		4. Identify the animal and its parts used for preparation of homeopathic 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 / Checklist
Hom UG-HP-1.7.5			Shows how		5. Demonstrate care while identifying & collecting the	Affective	Level 1 Receiving	Must Know	1. Lecture Demonstration 2. Problem Based Learning	1. Herbarium	Practical Examination / Checklist

					animal drug substances						
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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	Sources of drugs	Knows	Must be able to identify the mineral	1. Explain the part used and drug prepared	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations	1.Structured Oral Examination	LAQ SAQ MCQ

	Synthesis and application of knowledge			drug substances for preparation of homoeopathic medicines.	from mineral kingdom				2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy)	2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question	Viva Voce
Hom UG-HP-1.8.2	Classroom to herbarium and lab transfer		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. SAQ's and LAQ's 7. Herbarium	
Hom UG-HP-1.8.3			Knows		3. Explain the classification of mineral kingdom		Level 2 Understanding		Must know	6. Problem based learning 7. Flipped Classroom 8. Videos	

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 4. Experiential learning (Projects)	1. DOPS 2. OSPE 3. Herbarium	Practical Examination / Checklist
Hom UG- HP- 1.8.5			Shows how		5. Demonstrate care while identifying & collecting the mineral drug substances	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Problem Based Learning	1. Herbarium	Practical Examination / Checklist

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	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- 1.9. 1	Integration of knowledge Synthesis and applicat	Sources of drugs	Knows	Must be able to identify the drug substances from nosodes and sarcodes	1. Explain the part and drug prepared from nosodes	Cognitive	Level 2 Understanding	Must know	1. Lecture Demonstrations 2. Small Group Discussions/ Peer teaching	1. Structure d Oral Examination 2. Tutorials	LAQ SAQ MCQ Viva Voce

	ion of knowledge			for preparation of homoeopathic medicines				(Think-Pair-Share, Jigsaw Strategy)	3. Assignments	
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. MCQ's	
Ho mU G-HP-1.9.3		Knows		3. Explain classification of nosodes.		Level 2 Understanding	Must Know	4. Student Seminars	5. 2 marks question	
Ho mU G-HP-1.9.4		Knows		4. Explain the part used and drug prepared from sarcodes		Level 2 Understanding	Must Know	5. Guest Lecture	6. SAQ's and LAQ's	
								6. Problem based learning		
								7. Flipped Classroom		
								8. Videos		

Ho mU G- HP 1.9. 5			Know s		5. List any 4 examples of drugs from prepared from sarcodes		Level 1 Recall	Must Know		
Ho mU G- HP 1.9. 6			Know s		6. Explain classificatio n of sarcodes		Level 2 Understand ing	Must Know		
Ho mU G- HP 1.9. 7			Does		7. Identify the sarcodes/nos ode used for preparation of homoeopat hic medicines	Cogniti ve	Level 3 Problem solving	Must know	1. Practical Demonstrati on 2. Procedural Skills Teaching 3. Experiential	1. DOPS 2. OSPE Practical Examinati on / Checklist

									learning (Projects)		
Ho mU G- HP 1.9. 8			Show s 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 / Checklist

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 herbarium and lab transfer		Sources of drugs	Knows	Must be able to identify the drug substances from energy sources for preparation of homoeopathic	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,	1. Structured Oral Examination 2. Tutorials 3. Assignments	LAQ SAQ MCQ Viva Voce

Hom UG- HP- 1.10. 2				Knows	medicines	2. List any 4 examples of drugs prepared from imponderabilia		Level 1 Recall	Must know	Jigsaw Strategy) 3. Quiz 4. Student Seminars	4. MCQ's 5. 2 marks question 6.SAQ's and LAQ's	
Hom UG- HP- 1.10. 3				Knows		3. Explain classification of imponderabilia.		Level 2 Understanding	Must know	5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos		
Hom UG- HP- 1.10. 4				Does		4. Identify the energy source used for preparation of homoeopathic medicines	Cognitive	Level 3 Problem solving	Nice to know	1.Practical Demonstration 2.Procedural Skills Teaching	1.DOPS 2. OSPE	Practical Examination / Checklist

						from imponderabilia				3. Experiential learning (Projects)		
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 / Checklist

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/ 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	Assesment /Evaluation	
										Formative	Summative
Hom UG-HP-1.11.1	Integration of knowledge Synthesis and application of knowledge	Sources of drugs	Knows	Must be able to identify drug substances of Allersodes, Isodes, Synthetic Source for preparation	1. Explain the preparation of Allersodes, Isodes& Synthetic Source of homoeopathic medicines	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-	1.Structured Oral Examination 2. Tutorials	LAQ SAQ MCQ Viva Voce

	Classroom to herbarium and lab transfer			of homoeopathic medicines.					Pair-Share, Jigsaw Strategy)	3. Assignments	
Hom UG-HP-1.11.2			Knows		2. List any 4 examples of drugs prepared from Allersodes, Isodes& Synthetic Source		Level 1 Recall	Must know	3. Quiz 4. Student Seminars 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom 8. Videos	4. MCQ's 5. 2 marks 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.	Cognitive	Level 3 Problem solving	Must know	Experiential learning (Projects)	Projects	Practical Examination / Checklist
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. Projects	Practical Examination / Checklist

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 to know/Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative
Ho mU G- HP- 1.12 .1	Problem solution Integration of Knowledge	Collection of Drug Substances	Knows	Must be able to collect a particular part/ source for preparation of homoeop	1. Explain the general rules for collecting drugs from vegetable kingdom.	Cognitive	Level 2 Understanding	Must know	1.Lecture Demonstrations 2. Small Group Discussions/	1.Structured Oral Examination 2. Tutorials	LA Q SA Q MC Q Viva Voc e

	Synthesis and application of knowledge			athic drugs					Peer teaching (Think-Pair-Share, Jigsaw Strategy)	3. Assignments	
Ho mU G-HP-1.12.2	Classroom to Herbarium transfer		Knows		2. Explain the particular rules for collecting drugs from vegetable kingdom.		Level 2 Understanding	Must know	3. Quiz	4. MCQ's	
Ho mU G-HP-1.12.3	Practice based learning and improvement		Knows		3. Explain the general rules for collecting drugs from animal kingdom.		Level 2 Understanding	Must know	4. Student Seminar	5. 2 marks question	
Ho mU G-HP-1.12.4			Knows		4. Explain the particular rules for collecting drugs from animal kingdom.		Level 2 Understanding	Must know	5. Guest Lecture	6. SA Q's and LAQ's	
									6. Flipped Classroom	7. Projects	
									7. Videos	8. Herbarium	

Ho mU G- HP- 1.12 .5			Knows		5. Explain the collection of drugs from mineral kingdom.		Level 2 Understa nding	Must know			
Ho mU G- HP- 1.12 .6			Knows		6. Explain collection of Nosodes, Sarcodes & Imponderabilia.		Level 2 Understa nding	Must know			
Ho mU G- HP- 1.12 .7			Does		7. Collect the drugs from vegetable kingdom.	Psycho motor	Level 3 Automati on	Must know	1. Practical Demonstrations 2. Procedural Skills	1.DO PS 2.OS PE 3.Proj ects	Pra ctic al Exa min atio n / Che

									Teaching 3. Experiential Learning	4. Spotting 5. Herbarium.	cklist
Ho mU G- HP- 1.12 .8			Does		8. Collect the drugs from animal kingdom.		Level 3 Automation	Must know			
Ho mU G- HP. 1.12 .9			Does		9. Collect the drugs from nosodes, sarcodes & imponderabilia.		Level 2 Control	Must know			
Ho mU G- HP-			Shows how		10. Demonstrate care & commitment while collecting	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration	Herbarium	Practical Examination

1.12 .10					drugs from vegetable kingdom, animal kingdom, nosodes, sarcodes & imponderabilia.					2. Practical Demonstration	ation
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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.

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-1.13.1	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	LAO SAQ MCQ Viva Voce
Hom UG-HP-1.13.2	Classroom to Lab transfer		Knows		2. Explain the cleansing of spatula.		Level 2 Understanding	Must know			
Hom UG-HP.1.13.3	Practice based learning and improvement		Knows		3. Explain the cleansing of glass bottles.		Level 2 Understanding	Must know			
Hom UG-			Knows		4. Explain the		Level 2 Understanding	Must know			

HP.1 .13.4					cleansing of corks.						
Hom UG- HP.1 .13.5			Knows		5. Explain the cleansing of wooden instruments .		Level 2 Understand ing	Must know			
Hom UG- HP.1 .13.6			Does		6. Demonstrat e the cleansing of mortar & pestle.	Psycho motor	Level 3 Automatis m	Must know	1. Practical Demonstrati ons 2. Procedural Skills Teaching 3. Experientia l Learning	1.DOPS 2.OSPE 3.Spotting	Practical Examina tion / Checklist
Hom UG- HP.1 .13.7			Does		7. Demonstrat e the cleansing of spatula		Level 3 Automatis m	Must know			

Hom UG- HP- 1.13. 8			Does		8. Demonstrate the cleansing of glass bottles.		Level 3 Automatism	Must know			
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	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration	1.DOPS 2.OSPE	Practical Examination / Checklist

					instruments				2. Practical Demonstration		
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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 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-1.14.1	<p>Problem solution of Knowledge</p> <p>Synthesis and application of knowledge</p> <p>Classroom to lab transfer</p> <p>Practice based learning and improvement</p>	Lab Methods		Knows	Must be able to select and apply a particular lab method for preparation of homoeopathic medicines and for standardization of homoeopathic medicines	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>5. Guest Lecture</p> <p>6. Problem based learning</p> <p>7. Flipped Classroom</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> <p>6. SAQ's and LAQ's</p> <p>7. Projects</p>	<p>LAQ</p> <p>SAQ</p> <p>MCQ</p> <p>Viva Voce</p>
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										8. Videos		
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		

					blimation,pre cipitation							
Hom .UG- HP- 1.14. 4				Knows how	4.Differentiat e between filtration&di stillation		Level 2	Under standi ng	Must know			
Hom .UG- HP- 1.14. 5				Knows how	5. Differentiate between decantation &filtration in detail.		Level 2	Under standi ng	Must know			
Hom .UG- HP- 1.14. 6				Does	6. Select a specific lab method according to the different processes carried out in		Level 3	Probl em solvin g	Desirabl e to know			

						a homoeopathi c pharmacy laboratory.						
Hom .UG- HP- 1.14. 7				Does		7. Demonstrate the processes decantation, sedimentation, filtration, distillation, sublimation, precipitation	Psycho motor	Level 2 Control	Desirable to know	1. Practical Demonstrations 2. Procedural Skills Teaching 3. Experiential Learning	1.DOPS 2.OSPE 3.Projects	Practical Examination / Checklist
Hom .UG- HP- 1.14. 8				Shows how		8. Demonstrate care & commitment while carrying out the different lab methods involved in preparation of	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	DOPS	Practical Examination / Checklist

						homoeopathi c medicine							
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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/ 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- 1.15.1	Integration of Knowledge Synthesis and application of knowledge	Standardization of homoeopathic drugs	Knows	Must be able to select an appropriate method for standardization of	1. Enumerate the different methods of standardization of	Cognitive	Level 1 Recall	Must know	1. Lecture Demonstrations 2. Small Group Discussions/	1. Structured Oral Examination 2. Tutorials	LAQ SAQ MCQ Viva Voce

	Classroom to Lab transfer			homoeopathic medicines	homoeopathic drugs				Peer teaching (Think-Pair-Share, Jigsaw Strategy)	3. Assignments	
Hom. UG-HP-1.15.2	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. 2 marks question
Hom. UG-HP-1.15.3			Does		3. Estimate the standard of homoeopathic drugs before and after manufacturing of homoeopathic medicines.						
									3. Quiz	4. Student Seminars	5. 2 marks question
									4. Student Seminars	5. 2 marks question	6. SAQ's
									5. Flipped Classroom	6. SAQ's	7. Projects
									6. Videos		

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. Spotting 2. Assessment of research project output	Viva Voce & Practical Examinations / Checklist
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 help of HPTLC.	Psycho motor	Level 2 Control	Nice to know			

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-	1.Structured Oral Examination 2. Tutorials 3. Assignments	LAQ SAQ MCQ Viva Voce
Hom.U G-HP- 1.16.2	Classroom to Lab transfer		Knows				2. Explain the individual method of				

	Practice based learning and improvement			quality control in homoeopathy				Share, Jigsaw Strategy)	4. MCQ's	
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	5. 2 marks question	
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 5. Flipped Classroom 6. Videos	6.SAQ's 7.Projects	

Hom.U G-HP- 1.16.5			Does		5. Take part in the process of quality control at different stages of preparation of homoeopathic medicines.		Level 3 Problem solving	Nice to Know			
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	1. Spotting 2. Assessment of the outcome of research projects	Viva Voce & Practical Examinations / Checklists
Hom.U G-HP- 1.16.7					7. Analyze the purity of mother tinctures		Level 2 Control	Nice to know			

					with the help of HPTLC.				4. Research Projects		
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. Spectroscopy.			Nice to know			
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 / Checklist

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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	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-			Knows	Must be able to state	List the pre requisites for	Cognitive	Level 2	Must Know		1.Structure	LAQ SAQ

HP-1.17.1	Integration of Knowledge	Ideal Laboratory		the pre requisites of an ideal laboratory	an ideal Laboratory		Understanding		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	d Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SA Q's and LAQ's	MCQ Viva Voce		
Hom .UG-HP-1.17.2	Synthesis and Application of knowledge		Knows				Formulate the Laboratory Safety Rules					Level 3 Problem solving	Nice to know
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

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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	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

								know			
Hom. UG- HP- 1.18.1	Integration of Knowledge Synthesis and Applicatio n of knowledge Problem formulatio Classroom to lab transfer	Industri al Pharma cy	Knows	Must be able to correlate provisions related to Schedule M1	Explain in details the provisions under Schedule M-I	Cognitive	Level 2 Understan ding	Must Know	1.Lecture Demonstra tions 2. Small Group Discussion s/ Peer teaching (Think- Pair-Share, Jigsaw Strategy) 3. Field Visit	1.Stru ctured Oral Exami nation 2. Tutori als 3. Assign ments 4. MCQ's 5. 2 marks questi on 6.SAQ 's and LAQ's	LAQ SAQ MC Q Viva Voce

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	Vehicles	Knows	Selecting a particular solid vehicle for preparation or dispensing of	1.Define Vehicle	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations 2. Small Group Discussions /	1.Structured Oral Examination	LAQ SAQ MCQ Viva Voce

	of knowledge			homoeopathic medicines.					Peer teaching (Think-Pair-Share, Jigsaw Strategy)	2. Tutorials	
Hom .UG-HP-1.19.2	Problem formulation		Knows		2. Classify vehicles in detail		Level 2 Understanding	Must Know	3. Quiz	3. Assignments	
Hom .UG-HP-1.19.3	Classroom to lab transfer		Knows		3. List all the solid vehicles used in homoeopathy.		Level 1 Recall	Must Know	4. Student Seminars	4. MCQ's	
Hom .UG-HP-1.19.4			Knows		4. Explain the preparation, properties and uses of all solid vehicles		Level 2 Understanding	Must Know	5. Guest Lecture	5. 2 marks question	
									6. Problem based learning	6. SAQ's and LAQ's	

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 3. Problem Based Learning	1.DOPS 2. OSPE	Practical Examination / Checklist
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 / Checklist
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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. UG-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 2. Tutorials 3. Assignments 4. MCQ's	LAQ SAQ MCQ Viva Voce
Hom. UG-HP-1.20.2	Synthesis and Application of knowledge		Knows		2. Classify vehicles in detail		Level 2 Understanding	Must Know			
Hom. UG-HP-1.20.3	Problem formulation		Knows		3. List all the liquid vehicles used in homoeopathy.		Level 1 Recall	Must Know			

Hom. UG-HP-1.20.4	Classroom to lab transfer		Knows		4. Explain the preparation, properties and uses of all liquid vehicles.		Level 2 Understanding	Must Know	4. Student Seminars 5. Guest Lecture 6. Problem based learning	5. 2 marks question 6.SAQ's and LAQ's	
Hom. UG-HP-1.20.5			Does		5. Select the appropriate liquid vehicle for dispensing of homoeopathic medicines, potentisation etc.		Level 3 Problem solving	Must Know			
Hom. UG-HP-1.20.6			Does		6. Identify the given liquid vehicle.	Cognitive	Level 2 Understanding	Must Know	1.Practical Demonstration 2. OSPE	1.DOPS 2. OSPE	Practical Examination /

									2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning		Checklist
Hom. UG-HP-1.20.7			Shows how		7. Estimate the purity of the given liquid vehicle.	Psychomotor	Level 2 Control	Must Know			
Hom. UG-HP-1.20.8			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	1.DOPS	Practical Examination / Checklist

										5. Practical Demonstration		
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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-	Integration of	Semisolid Vehicles	Knows	Selecting a particular semi-solid	1.Define Vehicle	Cognitive	Level 1 Recall	Must know	1.Lecture Demonstrations	1.Structured Oral Examination	LAQ SAQ MCQ

1.21.1	Knowledge			vehicle for preparation or dispensing of homoeopathic medicines					2. Small Group Discussions/	2. Tutorials	Viva Voce
Hom .UG-HP-1.21.2	Synthesis and Application of knowledge	Knows how		2. Classify vehicles		Level 2 Understanding	Must Know	Peer teaching (Think-Pair-Share, Jigsaw Strategy)	3. Assignments	3. Assignments	
Hom .UG-HP-1.21.3		Knows		3. List all the semi-solid vehicles used in homoeopathy		Level 2 Understanding	Must Know	3. Quiz	4. MCQ's	5. 2 marks question	
Hom .UG-HP-1.21.4	Problem formulation	Knows		4. Explain the preparation, properties and uses of all semi-solid vehicles		Level 2 Understanding	Must Know	4. Student Seminars	5. 2 marks question	6. SAQ's and LAQ's	
Hom .UG-HP-	Classroom to lab transfer	Does		5. Select the appropriate semi-solid vehicle for dispensing of		Level 3 Problem solving	Must Know	5. Guest Lecture	6. SAQ's and LAQ's		
								6. Problem based learning			

1.21.5				homoeopathic medicines, preparation of external applications etc.						
Hom .UG-HP-1.21.6			Does	6. Identify the given semi-solid vehicle.	Cognitive	Level 3 Problem solving	Must know	1.Practical Demonstration 2.Procedural Skills Teaching 3. Problem Based Learning	1.DOPS 2. OSPE	Practical Examination / Checklist
Hom .UG-HP-1.21.7			Show s how	7. Estimate the purity of the given semisolid vehicle.	Psychomotor	Level 2 Control	Must know	4. Experiential learning		
Hom .UG-HP-1.21.8			Show s how	8.Demonstrate care and commitment in preparing & dispensing of homoeopathic	Affective	Level 1 Receiving	Nice to know	1.Lecture Demonstration 2.Procedural Skills Teaching	1.DOPS	Practical Examination Checklist

					medicine with accuracy					3. Problem Based Learning 4. Experiential learning 5. Practical Demonstration		
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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	Teaching Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	

								to know/Nice to know				
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 Organization of Medicine

Hom .UG- HP- 1.22. 2	Classroom to lab transfer		Knows		2. List all the externa l applica tions used in homoe opathy		Level 1 Recall	Must know	6. Problem based learning 7. Flipped Classroom			
Hom .UG- HP- 1.22. 3			Knows		3. Explain the prepara tion &uses of specific homoe opathic externa l applica tions		Level 2 Unders tanding	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 Unders tanding	Must know				
Hom .UG- HP- 1.22. 5			Does		5. Select the approp riate 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 appropri ate externa l applica tion as per the case.		Level 3 Proble m solving	Desirab le to Know				
Hom .UG- HP.1 .22.7			Does Shows how		7.Demo strate the prepara tion of specific externa l applica tions	Psychomo tor	Level 2 Control	Must know	1.Practical Demonstratio n 2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning	1.DOPS 2. OSPE	Practi cal Exami natio n / Check list	

Hom .UG- HP- 1.22. 8			Shows how Does		8. Dem onstrat e care and commit ment in prepari ng & dispens ing of externa l applica tion with accurac y	Affective	Level 1 Receivi ng	Nice to know	1. Lecture Demonstratio n 2. Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning 5. Practical Demonstratio n	1. DOPS	Practi cal Exami natio n / Check list	
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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	Metrology	Knows	Must be able to select appropriate scale of measurement in the homoeopathic pharmaceutical	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	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's	LAQ MCQ Voce	SAQ Viva

	Knowledge Synthesis and application of knowledge Classroom to laboratory transfer			laboratory					4. Problem Based learning 5. Flipped classroom	5. 2 marks question 6.SAQ's	
Hom .UG-HP-1.23.2		Knows			2. Explain the different scales of measurement for preparation of		Level 2 Understanding	Must Know			

					homoeopathic drugs						
Hom .UG-HP-1.23.3			Does		3. Select appropriate scale of measurement for preparation of homoeopathic drugs.		Level 3 Problem solving	Must Know			
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 / Checklist

Hom .UG-HP-1.23.5			Shows how		5.Show care while measuring the drugs for preparation of homoeopathic medicines	Affective	Level 2 Respond	Must know	1. Lecture Demonstration 2. Practical Demonstration	1.DOPS 2.OSPE	Theory & Practical Examination / Checklist
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TOPIC: Potentisation& Scales of Potentisation

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

10. 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	Gilbert's level	Must to know/ desirable to know /Nice to know	Teaching Learning Method	Assessment /Evaluation		Integration
										Formative	Summative	

Hom .UG-HP-1.24.1	Problem solution Integration of knowledge Practice based learning and improvement	Potentiation	Knows	Prepar eHomo eopathi c Medici ne accordi ng to the scale.	1. Explain the different scales of potentisati on	Cogniti ve	Level 2 Understanding	Must Know	1.Lecture Demonstrations 2.Practical Demonstrations 3. Small Group Discussions/Pe er teaching (Think-Pair-Share, Jigsaw Strategy) 4. Problem based learning 5. Student Seminars	1.Structur ed Oral Examinati on 2. Tutorials 3. Assignme nts 4. SAQ's and LAQ's 5. MCQ's	LAQ SAQ MCQ Viva Voce	Organon of Medicine-Horizontal
Hom .UG-HP-1.24.2	Synthe sis and Applica tion of		Knows		2.Explain the two methods potentisati on	Cogniti ve	Level 2 Understanding	Must Know	6.Study Tour (Field Visit) 7. Integrated Teaching with Organon of Medicine	1.Structur ed Oral Examinati on 2. Tutorials 3. Assignme nts		

	knowle dge								4. SAQ's and LAQ's 5. MCQ's		
Hom .UG- HP- 1.24. 3	Classro om to lab Practic al skills		Does		3. Select the appropriate vehicles used for potentisati on.	Cogniti ve	Level 3 Problem solving	Must Know		DOPS Spotting OSPE Assessme nt of PBL	
Hom .UG- HP- 1.24. 4			Shows How		4. Demonstra te trituration according to the scale of potentisati on.	Psycho motor	Level 3 AUTOMA TISM	Must Know	1. Practical Demonstration 2.Procedural Skills Teaching	1.DOPS 2. OSPE	Practical Examina tion / Checklist
Hom .UG- HP-			Shows How		5. Demonstra te succussion according	Psycho motor	Level 3 AUTOMA TISM	Must Know	1. Practical Demonstration 2.Procedural Skills Teaching	1.DOPS 2. OSPE	

1.24.5					to the scale of potentisation.							
Hom .UG-HP-1.24.6			Shows How		6. Prepare 8X (Liq) potency from 6X (Triturate) (Jumping Potency)	Psycho motor	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 / Checklist	

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	
										Method	Type (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 SAQ MCQ, Viva Voce(For formative & Summative)

Hom.U G-HP- 1.25.2	n of knowledg e		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 5. Guest Lecture 6. Problem based learning 7. Flipped Classroom	6.SAQ's and LAQ's 7.Projects	
Hom.U G-HP- 1.25.3	Classroom to lab transfer Practice based 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			

Hom.U G-HP- 1.25.4			Know s		4.Explain the preparation &potentisation of mother solutions under Class V & VI according to the scale.		Level 2 Understa nding	Must know			
Hom.U G-HP- 1.25.5			Know s		5.Explain the potentisation 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	Psycho motor	Level 3 Automati sm	Must know	1. Practical Demonstrations 2. Procedural Skills Teaching	1. DOPS 2. OSPE	Practical Examination / Checklist (Formative/Summative)

				to Old Methods.						
Hom.U G- HP.1.25 .7			Does	7. Demonstrate the potentiation of mother tincture according to the scale under Class I-IV according to Old Method.		Level 3 Automatism	Must Know			
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 potentisation of mother solution according to the scale under Class V-VI according to Old Method		Level 3 Automati sm	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 Automati sm	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 / Checklist (Formative/Summative)
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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/ Know	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative

			show/ Know					to know/N ice to know			
HomU G-HP- 1.26.1	Problem solution	New Methods of Preparation of Homoeo pathic Drugs	Know s	Must be able to prepare the homoeo pathic medicine s as per the new methods	1. Define Maceratio n & Percolatio n.	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 SAQ MCQ Viva Voce
HomU G-HP- 1.26.2	Synthe sis and applica tion of knowle dge		Know s		2. Explain the process of maceratio n		Level 2 Understan ding	Must know	4. Student Seminars 5. Guest Lecture 6. Problem based learning	6.SAQ's and LAQ's 7.Projects	
HomU G-HP- 1.26.3			Know s		3.Explain the process of percolation		Level 2 Understan ding	Must know	7. Flipped Classroom		

HomU G-HP- 1.26.4	Classro om to lab transfe r Practic e based learnin g and improv ement		Know s how		4.Different iate between old & new methods of preparatio n of homoeopa thic drugs		Level 2 Understan ding	Must know	8. Videos		
HomU G-HP- 1.26.5			Know s how		5.Different iate between maceratio n & 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		Psychom otor	Level 2 Control			

					mother tincture by maceration			Must know	2. Procedural Skills Teaching 3. Experiential Learning		
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	Affective	Level 1 Receiving	Nice to know	1. Lecture Demonstration 2. Practical Demonstration	DOPS	Practical Examination / Checklist

					of homoeopa thic medicine with accuracy according to the New methods of preparatio n of homoeopa thic drugs.						
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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.

						Bloom's		Must to		Assessment /Evaluation
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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-1.27.1	Integration of Knowledge Synthesis and application	Pharmacology	Knows	Must be able to select appropriate route of administration of homoeopathic medicines.	1. Enumerate the different routes of administration of homoeopathic medicines.	Cognitive	Level 1 Recall	Must know	1. Lecture Demonstrations 2. Small Group Discussions/ Peer teaching (Think-Pair-Share)	1. Structured Oral Examination 2. Tutorials 3. Assignments	LAQ SAQ MCQ Viva Voce

Hom UG-HP-1.27.2	ion of knowledge		Knows	athic medicines	2. Explain the different routes of administration of homoeopathic medicines.		Level 2 Understanding	Must know	Share, Jigsaw Strategy) 3. Quiz 4. Flipped Classroom 6. Videos	4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects	
Hom UG-HP-1.27.3	Classro om to Clinic transfer		Does		3. Select appropriate route of administration of homoeopathic medicines according to the case		Level 3 Problem solving	Desirab le to know			
Hom UG-HP-1.27.4			Show s how		4. Administer the homoeopath ic medicine through appropriate route of administrati	Psycho motor	Level 2 Control	Nice to know	1. Practical Demonstratio ns 2.Experiential Learning 3. Projects	1. Case based assessment 2. Simulation based assessment	Viva Voce

					on according to the case				4. Case based Learning 5. Simulation teaching		
Hom UG-HP-1.27.5			Knows how		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 SAQ MCQ Viva Voce

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	Dispensing of homeopathic medicines	Knows	Select an appropriate dosage form for dispensing of homeopathic medicines.	1. Enumerate the different dosage forms.	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	LAQ SAQ MCQ Viva Voce

Hom UG- HP- 1.28. 2	on of Knowled ge Classroo m to	Knows	Dispense homoeop athic medicine to patients	2. Explain the various modes for dispensing of solid dosage forms	Level 2 Understand ing	Must know	4. Student Seminars 5. Problem based learning 6. Guest Lecture	5. 2 marks question 6.SAQ's and LAQ's
Hom UG- HP- 1.28. 3	OPD/IPD/ Pharmac y 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	Psycho motor	Level 2 Control	Must know	1.Practical Demonstratio n 2.Procedural Skills Teaching 3. Problem Based Learning	1.DOPS 2. OSPE	Practical Examinati on / Checklist
Hom UG- HP- 1.28. 7			Shows how Does		7. Demonstrate the dispensing of solid dosage forms		Level 2 Control	Must know	4. Experiential learning		
Hom UG- HP- 1.28. 8			Does		8. Demonstrate care and commitment while dispensing of homoeopathic medicines.	Affectiv e	Level 1 Receiving	Nice to know	1.Lecture Demonstratio n 3. Problem Based Learning	1.DOPS	Practical Examinati on / Checklist

TOPIC: Placebo

Learning Outcomes (LO):

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

								Must to		Assessment /Evaluation
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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	know/ desirable to know/Nice to know	Teaching Learning Method	Formative	Summative
Hom UG-HP-1.29.1	Problem solution Integration of Knowledge	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 SAQ Viva
Hom UG-HP-	Synthesis and applicat		Knows		2. Enumerate the vehicles		Level 1 Recall	Must Know			

1.29.2	ion of knowledge				used as placebo						
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/Show/show/	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Gilbert's Levels	Must to know/desirable	Teaching Learning Method	Assessment /Evaluation	
										Method	Type (Formative/Summative)

			Know show/ Know					to know/Nice to know			
Hom UG-HP-1.30.1	Integration of Knowledge	Preservation of Homoeopathic medicine	Knows	Must be able to preserve homoeopathic medicines for long shell life	1. Enumerate the different methods of preservation of homoeopathic medicines	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 6.SAQ's 7.Projects	LAQ SAQ MCQ Viva Voce(Formative & Summative)
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			
Hom UG-HP-1.30.3	Classroom to Clinic transfer Practice based learning		Does		3. Select an appropriate mode of preservation of homoeopathic medicines.		Level 3 Problem solving	Must Know			

	g and improvement										
Hom UG-HP-1.30.4			Does		4. Demonstrate the method of preservation of mother substances & preparations	Psycho motor	Level 2 Control	Desirable to Know	1. Practical Demonstrations 2. Procedural Skills Teaching	Viva Voce Practical Examination	(Formative/ Summative)
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			Show show		7.Show care & commitment while preserving homoeopathic preparations and potentised medicine.	Affectiv e	Level 2 Respond	Nice to know	1. Lecture Demonstrati on 2. Practical Demonstrati on	SAQ, 2 marks question Projects Assignments Tutorials Viva Voce Practical Examination	(Formative/ Summative)

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
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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	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 SAQ MCQ Viva Voce
Hom UG-HP-1.31.2	Integration of Knowledge		Knows		2. Enumerate the types of adverse drug reactions		Level 1 Recall	Must Know			
Hom UG-HP-1.31.3	Synthesis and application of knowledge		Knows		3. Explain the management of adverse drug reactions in homoeopathy		Level 2 Understanding	Must Know			

Hom UG-HP-1.31.4	Classroom to clinic transfer		Knows		4. Define pharmacovigilance		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 Understanding	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	Generic Competencies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competencies	Specific Learning Objectives	Domain	Guilbert's Levels	Must to know/ desirable to know/ Nice to know	Teaching - Learning Method	Assessment /Evaluation	
										Formative	Summative

Hom UG-HP-1.32.1	Problem formulation	Doctrine of Signature	Knows	Must be able to apply doctrine of signature while selecting a Homoeopathic simillimum	1. Define Doctrine of Signature	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. Case based learning 6. Case Simulation 7. Experiential Learning	1. Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6. SAQ's 7. Projects 8. Assessment of case 9. Simulation assessment	LAQ SAQ MCQ Viva Voce
Hom UG-HP-1.32.2	Integration of Knowledge		Knows		2. Explain doctrine of signature with suitable examples		Level 2 Understanding	Must Know			
Hom UG-HP-1.32.3	Synthesis and application of knowledge		Knows how		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			
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	Affectiv e	Level 2 Respo nd	Nice to know	1. Case based learning 2. Case Simulation 3.Experiential Learning	1. Assessment of case 2. Simulation assessment	Viva Voce
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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		Drug	Knows	Proving a given drug on healthy	1. Define Drug Proving.	Cognitive	Level 1 Recall	Must Know	1.Lecture Demonstrations	1.Structured Oral	LAQ SAQ MCQ	Horizontal with Organo

	Problem Solution	Proving		human being					2. Small Group Discussions/ Peer teaching (Think-Pair-Share, Jigsaw Strategy)	Examination	Viva Voce	n of Medicine
HomUG-HP-1.33.2	Integration of Knowledge Synthesis and application of knowledge		Knows		2. Illustrate the qualities of an ideal prover.	Cognitive	Level 1 Recall	Must Know	4. Quiz 5. Student Seminars 6. Guest Lecture 7. Integrated Teaching with Organon of Medicine	2. Tutorials 3. Assignments 4. MCQ's 5. SAQ's and LAQ's 6. 2 marks questions		
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			Knows		4. Explain the methodology for drug proving.	Cognitive	Level 2 Understand	Must Know				
HomUG-HP-1.33.5			Does		5. Design the protocol for Drug Proving.	Cognitive	Level 3 Problem Solving	Nice to know	1. Lecture Demonstration	1. Simulation based assessment	LAQ SAQ MCQ Practical Exami	

HomUG-HP-1.33.6			Does		6. Select ideal prover for drug proving		Level 2 Control	Must know	2.Procedural Skills Teaching	nation / Check list	
HomUG-HP-1.33.7			Does		7. Prepare the test substance for drug proving.		Level 2 Control	Desirable to know	3. Problem Based Learning		
HomUG-HP-1.33.8			Does		8. Formulate the team for drug proving		Level 2 Control	Nice to know	4. Role Plays		
HomUG-HP-1.33.9			Does		9. Record the symptoms of drug proving		Level 2 Control	Nice to know	5. Experiential learning		
HomUG-HP-1.33.10			Does		10. Interpret the provers symptoms		Level 2 Control	Nice to know	6. Team based learning		
HomUG-HP-1.33.11			Does		11. Translate the provers symptoms in Materia		Level 2 Control	Nice to know			

					Medica language							
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	LAQ SAQ MCQ Practical Examination / Checklist	
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		Level 3 Internalize	Nice to know				

					during drug proving.							
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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 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)	

Hom UG-HP-1.34.1	Problem solution Integration of Knowledge Practice based learning and improvement	Posology	Knows	Selecting a particular potency for a particular case. Selecting a particular dose for a particular case.	1. Define posology	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	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 Organon of Medicine
Hom UG-HP-1.34.2	Synthesis and application of knowledge		Knows	Repeating the dose as per the criteria for repletion of doses.	2. Explain the criteria for selection of potency		Level 2 Understand	Must know	5. Guest Lecture 6. Integrated Teaching with Organon of Medicine 7. Case based learning	7. Simulation based assessment 8. Case based assessment		
Hom UG-HP-1.34.3			Knows how		3. Apply the criteria for selection of potency for a particular case.		Level 3 Problem solving	Desirable to know	8. Case simulation learning			

	Classroom to OPD/IPD transfer										
Hom UG-HP-1.34.4		Knows	4. Enlist the different types of doses	Level 1 Recall	Must know						
Hom UG-HP-1.34.5		Knows	5. Explain the criteria for repetition of doses.	Level 2 Understanding	Must know						
Hom UG-HP-1.34.6		Shows how	6. Apply the criteria for repetition of doses for a particular case.	Level 3 Problem Solving	Desirable to know						
Hom UG-HP-1.34.7		Does	7. Choose the correct potency for a particular case	Level 3 Problem Solving	Desirable to know	1. Lecture Demonstration 2. Procedural Skills Teaching	1. Simulation based assessment 2. Case based assessment	LAQ SAQ MCQ Practical Examination / Checklist			

								3. Problem Based Learning 4. Experiential learning 5. Team based learning 6. Case based learning 7. Case simulation learning	3. OSPE		
Hom UG-HP-1.34.8			Does		8. Choose the proper dosage for a particular case		Level 3 Problem Solving	Desirable to know			
Hom UG-HP-1.34.9			Does		9. Design the dosage and repetition for a particular case		Level 3 Problem Solving	Nice to know			

Hom UG- HP- 1.34.1 0			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	LAQ SAQ MCQ Practical Examination / Checklist	
Hom UG- HP- 1.34.1 1			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			
Hom UG- 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				

Hom UG- HP- 1.34.1 3			Shows how		13. Value the importance of rational prescription		Level 3 Internali ze	Nice to know				
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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 Compete ncies	Subject Area	Miller's Level Does/ Shows how/ Knows how/ Know	Specific Competen cies	Specific Learning Objectives	Bloom's Domain	Guilbert's Level	Must to know/ desirable to know/Ni ce to know	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summativ e

Hom UG-HP-1.35.1	Integration of Knowledge	Prescription Writing	Knows	Writing an ideal prescription	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 7. Case simulation learning	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
Hom UG-HP-1.35.2	Practice based learning and improvement		Knows		2. Explain the parts of an ideal prescription.		Level 2 Understanding				
Hom UG-HP-1.35.3	Synthesis and application of knowledge		Knows		3. List the abbreviations used in prescription writing with meaning.		Level 1 Recall				
Hom UG-HP-1.35.4	Problem solution		Knows		4. Explain the advantages of prescription to the patients and		Level 2 Understanding				

	Classroom to OPD/IPD Transfer			to the physician.						
Hom UG-HP-1.35.5		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 4. Experiential learning 5. Team based learning 6. Case based learning	1. Simulation based assessment 2. Case based assessment 3. OSPE	LAQ SAQ MCQ Practical Examination / Checklist
Hom UG-HP-1.35.7		Shows how		7. Criticize a wrong prescription	Cognitive	Level 3 Problem solving	Nice to know			

									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	LAQ SAQ MCQ Practical Examination / Checklist
Hom UG-HP-1.35.9					9. Value the privacy & integrity of the prescription.		Level 3 Internalize	Nice to know			

Hom UG- HP- 1.35. 10					10. Value the ethical considerations during writing a prescription		Level 3 Internalize	Nice to know	7. Case simulation learning 8. Practical Demonstration		
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	Legislation	Knows	Must be able to follow and practice ethically all the	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/	1.Structured Oral Examination 2. Tutorials	LAQ SAQ MCQ Viva Voce

	Synthesis and Application of knowledge			laws that govern homoeopathic pharmacy.					Peer teaching (Think-Pair-Share, Jigsaw Strategy)	3. Assignments
Hom UHP-1.36.2	Problem solution	Knows			2. Illustrate the provisions under the Drugs & Cosmetic Act	Level 2 Understanding	Must know		3. Quiz	4. MCQ's
Hom UG-HP-1.36.3		Knows			3. Illustrate the provisions under the Schedule M1	Level 2 Understanding	Must know		4. Student Seminars	5. 2 marks question
Hom UG-HP-1.36.4		Knows			4. Illustrate the provisions under the Drugs & Magic Remedies Act	Level 2 Understanding	Must know		5. Guest Lecture	6.SAQ's and LAQ's
Hom UG-HP-1.36.5		Knows			5. Illustrate the provisions under the Medicinal & Toilet Preparation Act	Level 2 Understanding	Must know		6. Problem based learning	
									7. Flipped Classroom	

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-			Does Shows how		9. Demonstrate the labelling of homoeopathic medicine	Psycho motor	Level 2 Control	Must know	1. Practical Demonstratio n	1. DOPS 2. OSPE	LAQ SAQ MCQ Practical Examinati

1.36.9					according to Part IX of the Drugs & Cosmetic Act 1940				2.Procedural Skills Teaching 3. Problem Based Learning 4. Experiential learning		on / Checklist
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	LAQ SAQ MCQ Practical Examination / Checklist

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	Specific Competencies	Specific learning Objectives	Bloom's Domain	Guilbert's Levels	Must to know/ desirable	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative

			how/ Know					to know/Nice to know					
Hom UG- HP- 1.37.1	Integra tion of Knowl edge	Drug Actio n	Knows how	Must be able to differentia te the different mechanis ms of drug action of homoeop athic medicines	1. Classify the different types of drug action.	Cognitiv e	Level 2	Nice to Know	1.Lecture Demonstratio ns 2. Small Group Discussions/ Peer teaching (Think-Pair- Share, Jigsaw Strategy) 3. Quiz 4. Flipped Classroom 6. Videos 7. Integrated Teaching	1.Structured Oral Examination 2. Tutorials 3. Assignments 4. MCQ's 5. 2 marks question 6.SAQ's 7.Projects 8. Spotting	LAQ MCQ Voce	SAQ Viva	
Hom UG- HP- 1.37. 2	Synthe sis and applica tion of knowl edge		Knows		2. Explain the individual family drug action according to their sphere of action.		Level 2						Desirable to Know
Hom UG- HP- 1.37.3	Classr oom to Clinic transfe r		Knows		3. Explain the individual family drug action according to nature of		Level 2						Desirable to Know

					drug & family relationship.						
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	Practical Examination / Checklist
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	
Hom UG-HP-1.37.6			Knows		6. Show care in prescribing homoeopathic medicine based on action of drugs and	Affective	Level 2 Respond	Must know	1. Lecture 2. Integrated teaching of Pharmacological drug action with Materia Medica	Journal Assessment	

					drug relationships.							
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TOPIC: Relation of Pharmacy with Materia Medica

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	Gilbert'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 homoeopathic pharmacy	1. Explain the correlation of homoeopathic pharmacy with the basics of Homoeopathic	Cognitive	Level 2 Understanding	Desirable to Know	1.Lecture Demonstrations 2. Small Group	1.Structured Oral Examination	LAQ SAQ MCQ Viva Voce

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

				Homoeopathic Materia Medica.				3. Experimental Research projects	of case based learning	Checklist Viva
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			Desirable to know			

					drugs while preparation of homoeopathic medicines according to the scale of potentisation.						
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 th edition of	Affective	Level 1 Receiving	Nice to know	1. Practical Demonstration 2. Lecture Demonstration	1. DOPS 2. OSPE 3. Evaluation of projects 4. Evaluation of case	Viva Voce

				Organon of medicine while selecting a particular homoeopathic medicine in a particular potency.				3. Experimental Research projects 4. Case based learning 5. Problem based learning 6. Case simulation	based learning 5. Evaluation of PBL 6. Evaluation of Case simulation	
HomUG-HP-1.38.9				9. Demonstrate care, professionalism & commitment & follow all the guidelines meticulously as given in 6 th edition of Organon of medicine while preparation of homoeopathic medicine according to						

					the scale of potentiation.						
HomUG-HP-1.38.10					10. Demonstrate care, professionalism & commitment & follow all the guidelines meticulously as given in 6 th 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.						
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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	Specific Competencies	Specific Learning Objectives	Bloom's Domain	Guilbert's levels	Must to know/ desirable	Teaching Learning Method	Assessment /Evaluation	
										Formative	Summative

			how/ Know					to know/Nice toknow			
Ho mU G- HP- 1.39 .1	Proble m solutio n Integra tion of Knowle dge	Recent advance ments and scope of research in Homoe opathic Pharma cy	Knows	Must be able to undertak e a short term research in Homoeo pathic Pharmac	1.Enumerate the types of research in homoeopathi c pharmacy	Cognitiv e	Level 1 Recall	Desirable to know	1.Lecture Demonstratio ns 2. Small Group Discussions/ Peer teaching (Think-Pair- Share, Jigsaw Strategy)	1.Structured Oral Examination 2. Assignments 3. MCQ's 4.SAQ's	LAQ SAQ MCQ Viva Voce
Ho mU G- HP- 1.39 .2	Synthe sis and applica tion of knowle dge		Knows	y	2.Explain the recent advancemen ts in the field of homoeopathi c pharmacy		Level 2 Understa nding	Nice to Know	3. Visit to research laboratories		
Ho mU G- HP-	Classro om to lab		Does		3.Design the protocol for a short term research proposal in		Level 3 Problem solving	Desirable to know			

1.39	transfer				homoeopathic pharmacy						
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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

Homoeopathic Pharmacy Practicals	
Sr No.	Particulars of Experiments
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 o/2 potency (Solid form) (LM scale) of 1 Drug from 3 rd 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 st term (1-6 Months)	2 nd Term (7-12 Months)	3 rd Term (13-18 Months)	
1	First Professional BHMS	First PA + 1 ST TT	2 nd PA+2 ND TT	3 rd PA	UE

PA: Periodical Assessment; TT: Term Test; UE: University Examinations

9C - Evaluation Methods for Periodical Assessment

Sr. No	Evaluation Criteria
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1	Practical Performance
2	Viva Voce, MCQs, MEQ(Modified Essay Questions/Structured Questions)

9 D- Paper Layout

MCQ	10 marks	15 min
SAQ	50 marks	85 min
LAQ	40 marks	80 min

9 E- I - Distribution of Theory exam

Sr. No	Paper			D Type of Questions "Yes" can be asked. "No" should not be asked.		
	A List of Topics	B Term	C 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	MCO'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	<p>Short answer Questions (SAQ)</p> <p>10 Questions</p> <p>5 Marks Each</p> <p>All compulsory</p> <p>Must know part: 10 SAQ</p> <p>Desirable to know: Nil</p> <p>Nice to know: Nil</p>	<ol style="list-style-type: none"> 1. Theme A 2. Theme A 3. Theme B 4. Theme B 5. Theme C 6. Theme C 7. Theme D 8. Theme E 9. Theme E 10. Theme G
Q3	<p>Long answer Questions (LAQ)</p> <p>4 Questions</p> <p>10 marks each</p> <p>All compulsory</p> <p>All questions on must know</p> <p>No Questions on Nice to know and Desirable to know</p>	<ol style="list-style-type: none"> 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. D.D. Banerjee, Augmented Textbook of Homoeopathic Pharmacy, 2 nd Edition, 2012, B. Jain Publishers.
3. 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.) InduVaid, 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. Najatripudians
9. Cannabis indica	24. Nitricumacidum
10. Cannabis sativa	25. Nux vomica
11. Cinchona officinalis	26. Passiflora incarnate
12. Coffea cruda	27. Stannummetallicum
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. Cynodondactylon
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

<p>Complaint</p> <p>Diagnosis</p> <p>Details of 1st Prescription – Name of Medicine, Potency, Dose with its Repetition,</p> <p>Second Prescription (if Record is available)</p> <p>Conclusion at the end of Acute & Chronic Cases on Lessons learnt on Homoeopathic Principles</p>
<p>Record on Activities/Posting in Hospital Dispensing Section</p> <p>Total No. of Patients Date wise,</p> <p>Sl No as per Prescription Register,</p> <p>Dosage form- Liquid/solid,</p> <p>Name of Vehicle used,</p> <p>Medication Process etc</p> <p>Conclusion at the end on Lessons learnt on Homoeopathic Dispensing Techniques</p>

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

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