# COMPETENCY BASED DYNAMIC CURRICULUM FOR

# FIRST BHMS PROFESSIONAL COURSE

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

### (Homoeopathic Pharmacy)



## HOMOEOPATHY EDUCATION BOARD NATIONAL COMMISSION FOR HOMOEOPATHY MINISTRY OF AYUSH, GOVERNMENT OF INDIA

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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 todate information of changing drug laws related to Homoeopathic Pharmaceutical Industry & Homoeopathy.

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

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

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

#### 2. PROGRAMME OUTCOMES

At the end of BHMS program, a student must

1)Develop the knowledge, skills, abilities and confidence as a primary care homoeopathic practitioner to attend to the health needs of the community in a holistic manner

2) Correctly assess and clinically diagnose common clinical conditions prevalent in the community from time to time

3) Identify and incorporate the socio-demographic, psychological, cultural, environmental & economic factors affecting health and disease in clinical work

4) Recognize the scope and limitation of homoeopathy in order to apply Homoeopathic principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community

5) Be willing and able to practice homoeopathy as per medical ethics and professionalism.

6) Discern the scope and relevance of other systems of medical practice for rational use of cross referrals and role of life saving measures to address clinical emergencies

7) Develop the capacity for critical thinking, self reflection and a research orientation as required for developing evidence based homoeopathic practice.

8) Develop an aptitude for lifelong learning to be able to meet the changing demands of clinical practice

9) Develop the necessary communication skills and enabling attitudes to work as a responsible team member in various healthcare settings and contribute towards the larger goals of national health policies such as school health, community health and environmental conservation.

#### **3.COURSE OUTCOMES**

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

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

#### 1. TEACHING HOURS

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

### Teaching Hours (Theory)

| A. List of Topics a) General Concepts and Orientation:                         |  | B.Term | C.Teaching Hours |
|--|--|--------|------------------|
|  |  |        |                  |
| History of Pharmacy with<br>emphasis on emergence of<br>Homoeopathic Pharmacy. | Pharmacy<br>Concept of Drug substance, Drug, Medicine &<br>Remedy<br>Forming Basic concept of other AYUSH Schools  | 1      | 03               |
|  | of Pharmacy (Ayurveda, Siddha, Sowa Rigpa&<br>Unani Pharmacy)  |        |                  |
| Homoeopathic Pharmacy<br>Basics  | Sources of Homoeopathic Pharmacy<br>Branches of Pharmacy<br>Scope of Homoeopathic Pharmacy<br>Specialty and originality of<br>Homoeopathic Pharmacy<br>The Principles of Homoeopathy | 1      | 04               |

|                               |     | Law of Similia, Simplex & Minimum  |   |    |
|-------------------------------|-----|--|---|----|
|                               |     | Theory of Chronic Disease & Vital Force  |   |    |
|                               |     | Doctrine of Drug Proving & Drug Dynamisation   |   |    |
| Homoeopathic<br>Pharmacopoeia |     | The Evolution, History & Development of<br>Homoeopathic Pharmacopoeias throughout<br>the world (year wise Publications) – GHP, BHP,<br>HPUS, FHP | 1 | 04 |
|                               |     | Official – (HPI) & Unofficial Pharmacopoeias –   |   |    |
|                               |     | (M Bhattacharya & Co's Homoeopathic<br>Pharmacopoeia   |   |    |
|                               |     | Encyclopaedia of Homoeopathic<br>Pharmacopoeia – P N Verma, Homoeopathic<br>Pharmaceutical Codex)  |   |    |
|                               |     | Monograph, Contents of Monograph with its individual importance  |   |    |
| Ideal laboratory              |     | Pre requisites of ideal Laboratory (General Laboratory), Laboratory safety Rules   | I | 02 |
|                               |     | Role of Laboratory in Homoeopathic Pharmacy<br>Education   |   |    |
| Weights                       | and | Metrology  |   | 01 |
| measurements.                 |     | Basics & Units of Apothecary System, British<br>Imperial System, Metric System   |   |    |
|                               |     | Interrelationship between various systems of Weight & Measure  |   |    |
|                               |     | Concept on Domestic Measures with Metric Equivalents   |   |    |

| The Basic Rules of Nomenclature                 | I  | 02  |
|---|--|---|
|   |  |   |
| Nomenclature of Homoeopathic Drugs              |  |   |
| Important terminologies like scientific names   |  |   |
|   |  |   |
|   |  |   |
| Anomalies in Nomenclature                       |  |   |
| Role & contributions of Pioneers in             | 1  | 02  |
| development of Homoeopathic Pharmacy            |  |   |
| Vehicles  |  |   |
| <b>-</b> .                                      | Ι  | 07  |
| kingdom, Mineral kingdom, Nosodes, Sarcodes,    |  |   |
| Imponderabilia, Synthetic source,               |  |   |
| New Sources - Allersode, Isodes with reference  |  |   |
| to their clinical utility                       |  |   |
| Introduction to Bowel Nosodes Tissue            |  |   |
| remedies  |  |   |
| General and Specific guidelines for collecting  | 1  | 03  |
| drugs from all available sources                |  |   |
| Definition, classification, General Use         | 1  | 06  |
| Source, Properties & Particular use of Vehicles |  |   |
| •   |  |   |
|   |  |   |
| Preparation – Commercial Lactose, Alcohol       |  |   |
| Purity tests – Water, Alcohol, Sugar of Milk    |  |   |
| utics:  |  |   |
|   | development of Homoeopathic Pharmacy<br>Vehicles<br>Different sources - Plant kingdom, Animal<br>kingdom, Mineral kingdom, Nosodes, Sarcodes,<br>Imponderabilia, Synthetic source,<br>New Sources - Allersode, Isodes with reference<br>to their clinical utility<br>Introduction to Bowel Nosodes, Tissue<br>remedies<br>General and Specific guidelines for collecting<br>drugs from all available sources<br>Definition, classification, General Use<br>Source, Properties & Particular use of Vehicles<br>with respect to List Provided in Appendix D<br>Preparation – Commercial Lactose, Alcohol | common names, synonymsAnomalies in NomenclatureRole & contributions of Pioneers in<br>development of Homoeopathic PharmacyVehiclesDifferent sources - Plant kingdom, Animal<br>kingdom, Mineral kingdom, Nosodes, Sarcodes,<br>Imponderabilia, Synthetic source,New Sources - Allersode, Isodes with reference<br>to their clinical utilityIntroduction to Bowel Nosodes, Tissue<br>remediesGeneral and Specific guidelines for collecting<br>drugs from all available sourcesDefinition, classification, General Use<br>with respect to List Provided in Appendix D<br>Preparation – Commercial Lactose, Alcohol<br>Purity tests – Water, Alcohol, Sugar of Milk |

| Mathen tincture and its   | Entraction Dringinlag & Variana Matheda   | 11 | 07 |
|---|---|----|----|
| Mother tincture and its preparation                             | Extraction – Principles & Various Methods   | Ш  | 07 |
| preparation   | Old Method (Based on Class I to IX)   |    |    |
|   | Concept of Uniform Drug Strength  |    |    |
|   | Estimation of Moisture Content - Necessity  |    |    |
|   | New Method/Modern Approach of<br>Homoeopathic Drug Preparation  |    |    |
| Various Scales of<br>Potentization in<br>Homoeopathic pharmacy. | History of development, Introducer,<br>Designation, Preparation, Administration &<br>Application with respect to - Centesimal Scale,<br>Decimal Scale & 50 Millesimal Scale | II | 03 |
| Drugs Dynamisation  | The Evolution of Dynamisation Concept in Homoeopathy  | II | 06 |
|   | Potentisation & its types   |    |    |
|   | The Merits of Potentisation   |    |    |
|   | Succussion & Trituration  |    |    |
|   | Various types of Potency– Fluxion Potency,<br>Jumping Potency, Back Potency, Single Vial<br>Potency, Multiple Vial Potency, Mixed Vial<br>Potency                           |    |    |
|   | Post-Hahnemannian Potentization Techniques  |    |    |
| External applications   | Scope of administration of External Applications in Homoeopathic Practice   | II | 05 |
|   | Dr Hahnemann's View as per Organon (5 <sup>th</sup> & 6 <sup>th</sup><br>Ed)  |    |    |
|   | Preparation & Uses of lotion, glycerol, liniment  |    |    |

|   | and ointment.  |     |    |
|---|--|-----|----|
|   | Commercial Preparation of Ointment   |     |    |
| Posology                                | Basic principles of Homoeopathic Posology  | 111 | 06 |
|   | Related aphorisms of Organon of medicine.  |     |    |
|   | Criteria for Selection of Potency & Repetition of Dose   |     |    |
|   | Various Kinds of Dose, Emphasis on Minimum<br>Dose   |     |    |
| Prescription                            | Prescription Writing   |     | 02 |
|   | Important Abbreviations  |     |    |
|   | Parts & Contents of Prescription   |     |    |
|   | Merits & Demerits of Prescription Writing  |     |    |
| Dispensing of<br>Homoeopathic Medicines | Various Dosage Forms – Solid, Liquid Dosage<br>Forms,  | 11  | 02 |
|   | Methods of Dispensing  |     |    |
| Placebo.                                | Concept of Homoeopathic Placebo  |     | 01 |
|   | The Philosophy of administration of placebo  |     |    |
|   | Concept of Placebo Effect  |     |    |
| Pharmaconomy                            | Routes of Homoeopathic drug administration.  | 11  | 02 |
| Preservation                            | Preservation Rules – Raw Materials Drug<br>Substance, Mother Preparations, Finished<br>products & Vehicles | 11  | 02 |

| Pharmacodynamics                               |   |     |    |
|--|---|-----|----|
| <ul> <li>Doctrine of<br/>Signature.</li> </ul> | Basic Concept, Its Evolution & Application in<br>Ancient Medical System<br>Supporters of the Doctrine<br>Dr Hahnemann's view on the Doctrine  | II  | 01 |
| <ul> <li>Drug Proving.</li> </ul>              | Homoeopathic Pharmacodynamics<br>With reference to aphorisms 105 – 145 of<br>Organon of Medicine – 6 <sup>th</sup> Ed)<br>Post Hahnemannian Drug Proving<br>Homoeopathic Pathogenetic Trial (HPT)<br>CCRH & Other Protocols on HPT<br>Other Noted Provers & their work on Drug<br>Proving | 111 | 06 |
| <ul> <li>Adverse Drug<br/>Reactions</li> </ul> | Basic Idea, Reporting of ADE<br>Drug safety with Ref to HPI<br>Medication errors, Causality Assessment<br>Incompatible Remedies   | 11  | 02 |
| <ul> <li>Pharmaco-vigilance.</li> </ul>        | Pharmacovigilance in Homoeopathy<br>Activities of Pharmacovigilance Centres<br>Awareness on Medicinal Preparations against<br>Homoeopathic Principles – Patents,<br>Combinations  | II  | 02 |
| <ul> <li>Pharmacological</li> </ul>            | listed in Appendix-A (Any 15)   | 111 | 05 |

| study of drugs   |  |     |    |
|--|--|-----|----|
| e) Quality Control:  | 1  |     |    |
| • Standardisation in<br>Homoeopathy  | Different Methods of Standardisation<br>Quality Control of Raw Materials – Various<br>Evaluation techniques<br>In Process Quality Control<br>Quality Control of finished products – Various<br>standard parameters | 11  | 02 |
| <ul> <li>Industrial pharmacy.</li> </ul>                                       | Good Manufacturing Practices (GMP)<br>Schedule M1  | 11  | 02 |
| <ul> <li>Homoeopathic<br/>pharmacopoeia<br/>laboratory (HPL)</li> </ul>        | Functions and Activities of HPL relating to<br>quality control of drugs.<br>Pharmacopoeia Commission for Indian<br>Medicines   | 11  | 01 |
| f) Legislations pertaining to  | Homoeopathic Pharmacy:   | III | 04 |
| The Drugs and Cosmetics Act  | , 1940 (23 to 1940)  |     |    |
| Drugs and Cosmetics Rules, 1   | 945  |     |    |
| 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 Psycl   | hotropic Substances Act, 1985 (61 of 1985)   |     |    |
| Dangerous Drug Act, 1930   |  |     |    |

| g) Recent Advances in Homoeopathic Pharmacy  | 111 | 02 |
|--|-----|----|
| Modern theories related with Homoeopathic Drug action  |     |    |
| <ul> <li>Principles of Drug action</li> <li>Introduction to Nanomedicine</li> <li>Molecular Mechanism of Drug Action</li> <li>Mechanism of Action of Homoeopathic Medicines</li> </ul> |     |    |
| Scope of Research in Homoeopathic Pharmacy   | 111 | 01 |
| <ul> <li>Drug Discovery</li> </ul>   |     |    |
| <ul> <li>Principles of New Drug discovery</li> </ul>   |     |    |
| <ul> <li>Clinical evaluation of New Drugs</li> </ul>   |     |    |
| <ul> <li>Pre-Clinical Research in Homoeopathic Pharmacy</li> </ul>   |     |    |
| h) Homoeopathic Pharmacy - Relationships   | 111 | 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,<br>Role of Drug Proving & Other Types of Proving in construction of Materia<br>Medica, Clinical Verification  |     |    |
| Family wise study of Sphere of action – Solanaceae, Loganiaceae, Compositae, Liliaceae, Anacardiaceae, Rubiaceae etc   |     |    |

### Teaching Hours (Practical)

| Hom | Homoeopathic Pharmacy Practicals   |   | 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                           |

| -  | 1   |   |           |  |
|----|---|---|-----------|--|
| 16 | Conversion of Trituration to liquid potency: Centesimal scale 3C to 4C potency.                       | 1 | Execution |  |
| 17 | Preparation of 0/2 potency (Solid form) (LM scale) of 1 Drug from 3 <sup>rd</sup> Degree Trituration. | 2 | Execution |  |
| 18 | Preparation of external applications – Lotion   | 1 | Execution |  |
| 19 | Preparation of external applications – Glycerol   | 1 | Execution |  |
| 20 | Preparation of external applications – Liniment   | 1 | Execution |  |
| 21 | Preparation of external applications – Ointment   | 1 | Execution |  |
| 22 | Writing of prescription & Dispensing the Medicine in Water with preparation of Doses                  | 1 | Execution |  |
| 23 | Writing of prescription & Dispensing the Medicine in Sugar of Milk with Preparation of Doses          | 1 | Execution |  |
| 24 | Preparation of mother tinctures according to Old Hahnemannian method (Class I, II, III, IV)           | 8 | Execution |  |
| 25 | Preparation of mother solutions according to Old Hahnemannian method (Class Va, Vb, Vla, Vlb)         | 4 | Execution |  |

#### 5. COURSE CONTENT

#### A. THEORY

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

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

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

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

| Placebo.                          | Concept of Homoeopathic Placebo  |  |  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|--|--|
|                                   | The Philosophy of administration of placebo  |  |  |  |  |  |  |
|                                   | Concept of Placebo Effect  |  |  |  |  |  |  |
| Pharmaconomy                      | Routes of Homoeopathic drug administration.  |  |  |  |  |  |  |
| Preservation                      | Preservation Rules – Raw Materials Drug Substance, Mother Preparations, Finished products & Vehicles |  |  |  |  |  |  |
| d) Pharmacodynamics               |  |  |  |  |  |  |  |
| <ul> <li>Doctrine</li> </ul>      | of Basic Concept, Its Evolution & Application in Ancient Medical System                              |  |  |  |  |  |  |
| Signature.                        | Supporters of the Doctrine   |  |  |  |  |  |  |
|                                   | Dr Hahnemann's view on the Doctrine  |  |  |  |  |  |  |
| <ul> <li>Drug Proving.</li> </ul> | Homoeopathic Pharmacodynamics  |  |  |  |  |  |  |
|                                   | With reference to aphorisms 105 – 145 of Organon of Medicine – 6 <sup>th</sup> Ed)                   |  |  |  |  |  |  |
|                                   | Post Hahnemannian Drug Proving   |  |  |  |  |  |  |
|                                   | Homoeopathic Pathogenetic Trial (HPT)  |  |  |  |  |  |  |
|                                   | CCRH & Other Protocols on HPT  |  |  |  |  |  |  |
|                                   | Other Noted Provers & their work on Drug Proving   |  |  |  |  |  |  |
|                                   | Drug Basic Idea, Reporting of ADE  |  |  |  |  |  |  |
| Reactions                         | Drug safety with Ref to HPI  |  |  |  |  |  |  |
|                                   | Medication errors, Causality Assessment  |  |  |  |  |  |  |
|                                   | Incompatible Remedies  |  |  |  |  |  |  |

| <ul> <li>Pharmaco-vigilance.</li> </ul>                | Pharmacovigilance in Homoeopathy  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|
|  | Activities of Pharmacovigilance Centres   |  |  |  |  |  |  |  |
|  | Awareness on Medicinal Preparations against Homoeopathic Principles – Patents, Combinations |  |  |  |  |  |  |  |
| <ul> <li>Pharmacological<br/>study of drugs</li> </ul> | listed in Appendix-A (Any 15)   |  |  |  |  |  |  |  |
| e) Quality Control:                                    |   |  |  |  |  |  |  |  |
| • Standardisation in                                   | Different Methods of Standardisation  |  |  |  |  |  |  |  |
| Homoeopathy  | Quality Control of Raw Materials – Various Evaluation techniques                            |  |  |  |  |  |  |  |
|  | In Process Quality Control  |  |  |  |  |  |  |  |
|  | Quality Control of finished products – Various standard parameters                          |  |  |  |  |  |  |  |
| Industrial pharmacy.                                   | Good Manufacturing Practices (GMP)  |  |  |  |  |  |  |  |
|  | Schedule M1   |  |  |  |  |  |  |  |
| Homoeopathic   | Functions and Activities of HPL relating to quality control of drugs.                       |  |  |  |  |  |  |  |
| pharmacopoeia<br>laboratory (HPL)                      | Pharmacopoeia Commission for Indian Medicines   |  |  |  |  |  |  |  |
| f) Legislations pertaining to H                        | omoeopathic Pharmacy:   |  |  |  |  |  |  |  |
| The Drugs and Cosmetics Act,                           | 1940 (23 to 1940)   |  |  |  |  |  |  |  |
| Drugs and Cosmetics Rules, 19                          | 945   |  |  |  |  |  |  |  |
| Medicinal and Toilet Preparati                         | ons (Excise Duties) Act, 1955 (16 of 1955)  |  |  |  |  |  |  |  |
| Drugs and Magic Remedies (O                            | bjectionable Advertisements) Act, 1954 (21 of 1954)   |  |  |  |  |  |  |  |
| The Narcotic Drugs and Psych                           | otropic Substances Act, 1985 (61 of 1985)   |  |  |  |  |  |  |  |

Dangerous Drug Act, 1930

#### g) Recent Advances in Homoeopathic Pharmacy

Modern theories related with Homoeopathic Drug action

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

Scope of Research in Homoeopathic Pharmacy

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

#### h) Homoeopathic Pharmacy - Relationships

Relation of Homoeopathic Pharmacy with Anatomy

Relation of Homoeopathic Pharmacy with Physiology

Relation of Homoeopathic Pharmacy with Materia Medica

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

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

#### **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**

| Tabl | 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 0/2 potency (Solid form) (LM scale) of 1 Drug from 3 <sup>rd</sup> Degree Trituration. |
| 18 | Preparation of external applications – Lotion   |
| 19 | Preparation of external applications – Glycerol   |
| 20 | Preparation of external applications – Liniment   |
| 21 | Preparation of external applications – Ointment   |
| 22 | Writing of prescription & Dispensing the Medicine in Water with preparation of Doses                  |

|   | 23 | Writing of prescription & Dispensing the Medicine in Sugar of Milk with Preparation of Doses  |
|---|----|---|
| 4 | 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, Vla, Vlb) |

#### 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

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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.  | Generi  | Subject    | Miller' | Specifi | Specific   | Bloom'  | Guilb | Must     | Teaching -         | Assessment | /Evaluation | Integrati | on |
|------|---------|------------|---------|---------|------------|---------|-------|----------|--------------------|------------|-------------|-----------|----|
| No   | С       | Area       | s Level | С       | Learning   | S       | ert's | to       | Learning Method    | Formative  | Tupo        | -         |    |
|      | Compe   | ,<br>1     | Does/   | Compe   | Objectives | Domai   | Level | lun au / |                    | FOIMAtive  | Туре        |           | l  |
|      | tencies | ,<br>1     | Shows   | tencies |            | n       | S     | know/    |                    |            | (Sum        |           | l  |
|      |         | 1          | how/    |         |            |         |       | desira   |                    |            | mative      |           |    |
|      |         | 1          | Knows   |         |            |         |       | ble      |                    |            | )           |           | ļ  |
|      |         | 1          | how/    | 1       |            |         |       |          |                    |            |             |           | l  |
|      |         | 1          | Know    | 1       |            |         |       | to ,     |                    |            |             |           | ļ  |
|      |         | ,<br>1     | 1       | 1       |            |         |       | know/    |                    |            |             |           | l  |
|      |         | 1          | 1       | 1       |            |         |       | Nice to  |                    |            |             |           |    |
|      |         |            |         |         |            |         |       | know     |                    |            |             |           |    |
| Но   |         | History of | Knows   | Must    | Define     | Cogniti | Lvel1 | Must     | 1.Lecture          | 1.Structur | Theory &    | Horizont  | al |
| mU   |         | Pharmac    | 1       | be      | Pharmacy   | ve      | Devel | Know     | Demonstrations     | ed Oral    | Viva Voce   | with      |    |
| G-   |         | y with     | 1       | able to |            |         | Recal |          | 2 Gradil Graun     | Examinati  |             | Organon   | of |
| HP-  | Integra | emphasis   | 1       | interpr |            |         | 1     |          | 2. Small Group     | on         |             | Medicine  | e  |
| 1.1. | tion of | to         | 1       | et the  |            |         |       |          | Discussions/       |            |             |           | l  |
| 1    | Knowl   | emergen    | 1       | differe |            |         |       |          | 3.Peer teaching    | 2.         |             |           | ļ  |
|      |         | ce of      |         | nce in  |            |         |       |          | (Think-Pair-Share, | Tutorials  |             |           |    |

|                                   | odgo   | Homooo                           |       | concon  |   |                                      |                 | ligsow Stratogy)  | 2  |  |
|-----------------------------------|--|----------------------------------|-------|---|---|--------------------------------------|-----------------|---|--|--|
| lo<br>hU<br>j-<br>.1.             | edge<br>Synthe<br>sis and<br>applica<br>tion of<br>knowl<br>edge | Homoeo<br>pathic<br>Pharmac<br>y | Knows | concep<br>t of<br>Pharm<br>acy<br>among<br>various<br>system<br>s of<br>AYUSH | Define<br>Homoeop<br>athic<br>Pharmacy  | Level<br>1<br>Recal<br>I             | Must<br>know    | Jigsaw Strategy)<br>4. Quiz<br>5. Student<br>Seminars<br>6. Integrated<br>Teaching with<br>Organon of<br>Medicine | <ul> <li>3.</li> <li>Assignments</li> <li>4. MCQ's</li> <li>5. 2 marksquestion</li> <li>6.SAQ's and LAQ's</li> </ul> |  |
| 2<br>Ho<br>G-<br>HP-<br>1.1.<br>3 |  |                                  | Knows |   | Describe<br>the Basic<br>concepts<br>of<br>Different<br>schools of<br>Pharmacy<br>with<br>reference<br>to AYUSH | Level<br>2<br>Unde<br>rstan<br>d     | Nice to<br>Know |   |  |  |
| Ho<br>m-<br>UG-<br>HP-<br>1.1.    |  |                                  | Knows |   | Differentia<br>te<br>between<br>Drug-<br>Medicine-<br>Remedy  | <br>Level<br>2<br>Unde<br>rstan<br>d | Must<br>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.                          | Generi  | Subjec                                     | Miller's                            | Specific   | Specific  | Bloom'  | Guilbert' | Must to                                 | Teaching -  | Assessmer   | nt                         | Integration   |
|------------------------------|---|--|-------------------------------------|--|---|---------|-----------|---|---|---|----------------------------|---|
| No                           | C<br>Comp   | t Area                                     | Level Does/                         | Compet   | Learnin   | S       | s Levels  | know/                                   | Learning<br>Method  | /Evaluatio  | /Evaluation                |   |
|                              | Comp<br>etenci<br>es                              |  | Shows<br>how/<br>Knows<br>how/ Know | encies   | g<br>Objecti<br>ves   | Domain  |           | desirable<br>to know/Nice<br>to<br>know | Method  | Formativ<br>e   | Summati<br>ve              | Horizontal<br>Integration<br>with<br>Organon of<br>Medicine |
| Но                           | Integr  | Basics                                     | Knows                               | Must   | 1.Enum  | Cogniti | Level 1   | Must Know                               | 1.Lecture   | 1.Structu   | SAQ                        |   |
| mU<br>G-<br>HP-<br>1.2.<br>1 | ation<br>of<br>Knowl<br>edge<br>Synthe<br>sis and | of<br>Homoe<br>opathi<br>c<br>Pharm<br>acy |                                     | be able<br>to state<br>the<br>fundam<br>ental<br>Principl<br>es<br>governi | erate<br>the<br>Sources<br>of<br>Homoe<br>opathic<br>Pharma<br>cy | ve      | Recall    |   | Demonstrat<br>ions<br>2. Small<br>Group<br>Discussions<br>/<br>Peer | red Oral<br>Examinat<br>ion<br>2.<br>Tutorials<br>3.<br>Assignm | MCQ<br>LAQ<br>Viva<br>Voce |   |

| r    | TT     |       |         | <u>г</u>  |           |           | 1            | 1              | 1 | 1 |  |
|------|--------|-------|---------|-----------|-----------|-----------|--------------|----------------|---|---|--|
| Но   | Applic | Knows | ng      | 2.Explai  | Level 2   | Must Know | teaching     | ents           |   |   |  |
| mU   | ation  |       | Homoe   | n the     | Understa  |           | (Think-Pair- | 4. MCQ's       |   |   |  |
| G-   | of     |       | opathic | Branch    |           |           | Share,       | 4. NICQ 5      |   |   |  |
| HP-  | knowl  |       | Pharma  | es of     | nding     |           | Jigsaw       | 5. 2           |   |   |  |
| 1.2. | edge   |       | су      | Homoe     |           |           | Strategy)    | marks          |   |   |  |
| 2    |        |       |         | opathic   |           |           | 2 0:-        | question       |   |   |  |
|      |        |       |         | Pharma    |           |           | 3. Quiz      | C C A O/a      |   |   |  |
|      |        |       |         | су        |           |           | 4. Student   | 6.SAQ's<br>and |   |   |  |
| Но   |        | Knows |         | 3.Illustr | Level 2   | Must Know | Seminars     | LAQ's          |   |   |  |
| mU   |        |       |         | ate the   |           |           | 5. Guest     |                |   |   |  |
| G-   |        |       |         | Scope     | Understa  |           | Lecture      |                |   |   |  |
| HP-  |        |       |         | of        | nding     |           |              |                |   |   |  |
| 1.2. |        |       |         | Homoe     |           |           | 6. Problem   |                |   |   |  |
| 3    |        |       |         | opathic   |           |           | based        |                |   |   |  |
|      |        |       |         | Pharma    |           |           | learning     |                |   |   |  |
|      |        |       |         | су        |           |           |              |                |   |   |  |
| Но   |        | Knows |         | 4.Descr   | Level 2   | Must Know | -            |                |   |   |  |
| m-   |        |       |         | ibe the   | Lindonata |           |              |                |   |   |  |
| UG   |        |       |         | Original  | Understa  |           |              |                |   |   |  |
| HP-  |        |       |         | ity &     | nding     |           |              |                |   |   |  |
| 1.2. |        |       |         | Specialt  |           |           |              |                |   |   |  |
| 4    |        |       |         | y of      |           |           |              |                |   |   |  |
|      |        |       |         | Homoe     |           |           |              |                |   |   |  |
|      |        |       |         | opathic   |           |           |              |                |   |   |  |
|      |        |       |         | Pharma    |           |           |              |                |   |   |  |
|      |        |       |         | су        |           |           |              |                |   |   |  |
| Но   | 1      | Knows |         | 5.Explai  | Level 2   | Must Know | 1            |                |   |   |  |
| mU   |        |       |         | n the     | Understa  |           |              |                |   |   |  |
| G-   |        |       |         | Funda     | Understa  |           |              |                |   |   |  |

| HP-  | mental   | nding |  |  |
|------|----------|-------|--|--|
| 1.2. | Principl | 5     |  |  |
| 5    | es,      |       |  |  |
|      | Laws &   |       |  |  |
|      | Doctrin  |       |  |  |
|      | es       |       |  |  |
|      | related  |       |  |  |
|      | to       |       |  |  |
|      | Homoe    |       |  |  |
|      | opathic  |       |  |  |
|      | Pharma   |       |  |  |
|      | су       |       |  |  |

**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. | Generic          | Subject | Mille  | Specific     | Specific               | Bloom's | Guilber       | Must  | Teaching -         | Assessment /Eva | aluation |      |
|-----|------------------|---------|--|--------------|------------------------|---------|---------------|---|--------------------|-----------------|----------|------|
| No  | Compet<br>encies | Area    | r'sLe<br>vel<br>Does<br>/<br>Sho<br>ws<br>how/ | Competencies | Learning<br>Objectives | Domain  | t's<br>Levels | to<br>know/<br>desira<br>ble<br>to<br>know/ | Learning<br>Method | Formative       | Summat   | tive |
|     |                  |         | Kno  |              |                        |         |               | KHOW/                                       |                    |                 |          |      |

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

| Hom   |   | Kno | 4.Define      |           | Level 1 | Must |              |   |   |          |
|-------|---|-----|---------------|-----------|---------|------|--------------|---|---|----------|
| UG-   |   | ws  | Scientific    |           | Decall  | Know |              |   |   |          |
| HP-   |   |     | Name          |           | Recall  |      |              |   |   |          |
| 1.3.4 |   |     |               |           |         |      |              |   |   |          |
| Hom   |   | Kno | 5.Define      |           | Level 1 | Must | -            |   |   |          |
| UG-   |   | ws  | Common        |           | Desall  | Know |              |   |   |          |
| HP-   |   |     | Name          |           | Recall  |      |              |   |   |          |
| 1.3.5 |   |     |               |           |         |      |              |   |   |          |
| Hom   |   | Kno | 6.Enumerat    | Cognitive | Level 1 | Must | -            |   |   |          |
| UG-   |   | ws  | e the         |           | Recall  | Know |              |   |   |          |
| HP-   |   |     | advantages    |           | Recall  |      |              |   |   |          |
| 1.3.6 |   |     | of Scientific |           |         |      |              |   |   |          |
|       |   |     | Name          |           |         |      |              |   |   |          |
| Hom   |   | Kno | 7.Enumerat    | Cognitive | Level 1 | Must | -            |   |   |          |
| UG-   |   | ws  | e the         | coginate  |         | know |              |   |   |          |
| HP-   |   |     | Advantages    |           | Recall  |      |              |   |   |          |
| 1.3.7 |   |     | of Common     |           |         |      |              |   |   |          |
|       |   |     | Name          |           |         |      |              |   |   |          |
| Hom   |   | Kno | 8.Identify    | Cognitive | Level 3 | Nice | 1.Lecture    |   |   | <u> </u> |
| UG-   |   | ws  | the existing  | U U       |         | to   | Demonstrati  |   |   |          |
| HP-   |   |     | anomalies     |           | Proble  | know | on           |   |   |          |
| 1.3.8 |   |     | in            |           | m       |      |              |   |   |          |
|       |   |     | Nomenclatu    |           | Solving |      | 2.Procedural |   |   |          |
|       |   |     | re of         |           |         |      | Skills       |   |   |          |
|       |   |     | Homoeopat     |           |         |      | Teaching     |   |   |          |
|       |   |     | hic           |           |         |      | 3. Problem   |   |   |          |
|       |   |     | Medicines     |           |         |      | Based        |   |   |          |
|       |   |     |               |           |         |      | Learning     |   |   |          |
| I     | I |     |               | 1         | 1       | 1    | 1            | I | L | <u> </u> |

#### **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.       | Generic          | Subject          | Miller        | Specific          |       | Specific               | Bloom's   | Guilber       | Must to       | Teaching -         | Assessment /Eva | aluation   |     |
|-----------|------------------|------------------|---------------|-------------------|-------|------------------------|-----------|---------------|---------------|--------------------|-----------------|------------|-----|
| No        | Compet<br>encies | Area             | 's<br>Level   | Compet<br>ies     | tenc  | Learning<br>Objectives | Domain    | t's<br>Levels | know/         | Learning<br>Method | Formative       | Summ<br>ve | ati |
|           |                  |                  | Does/<br>Show |                   |       |                        |           |               | desirable     |                    |                 | ve         |     |
|           |                  |                  | S             |                   |       |                        |           |               | to<br>know/Ni |                    |                 |            |     |
|           | ſ                |                  | how/          |                   |       |                        |           |               | ce to         |                    |                 |            |     |
|           |                  |                  | Know          |                   |       |                        |           |               |               |                    |                 |            |     |
|           |                  |                  | S             |                   |       |                        |           |               | know          |                    |                 |            |     |
|           |                  |                  | how/          |                   |       |                        |           |               |               |                    |                 |            |     |
|           |                  |                  | Know          |                   |       |                        |           |               |               |                    |                 |            |     |
| Но        | Integrati        | Pioneers of      | Know          | Must              | be    | 1.Outline the          | Cognitive | Level 1       | Nice to       | 1.Lecture          | 1.Structured    | SAQ        |     |
| mU        | on of            | Homoeopa         | S             | able              | to    | contributions          |           | Recall        | Know          | Demonstrations     | Oral            | MCQ        |     |
| G-<br>HP- | Knowled<br>ge    | thic<br>Pharmacy |               | state<br>contribi | the   | of the<br>Pioneers of  |           | Recall        |               | 2. Small Group     | Examination     | Viva       |     |
| 1.4.      | ge               | Fliatiliacy      |               | ns                | of    | Homoeopath             |           |               |               | Discussions/       | 2. Tutorials    | Voce       |     |
| 1         |                  |                  |               | various           | 0.    | y in the field         |           |               |               | 3. Quiz            | 3. Assignments  |            |     |
|           | Synthesi         |                  |               | pioneer           | 's in | -                      |           |               |               |                    | -               |            |     |
|           | s and            |                  |               | the fiel          | d of  | Homoeopathi            |           |               |               | 4. Student         | 4. MCQ's        |            |     |
|           | Applicati        |                  |               | Homoe             | ора   | c Pharmacy             |           |               |               | Seminars           | 5. 2 marks      |            |     |
|           | on of            |                  |               | thic              |       |                        |           |               |               |                    | question        |            |     |
|           | knowled          |                  |               | Pharma            | су    |                        |           |               |               |                    |                 |            |     |

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#### **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. | Generic          | Subject   | Miller's             | Specific         | Specific               | Bloom'  | Guilbe         | Must to  | Teaching -         | Assessn       |             |
|-----|------------------|-----------|----------------------|------------------|------------------------|---------|----------------|----------|--------------------|---------------|-------------|
| No  | Competencies     | Area      | Level Does/<br>Shows | Competenci<br>es | Learning<br>Objectives | S       | rt's<br>levels | know/    | Learning<br>Method | /Evalua       | tion        |
|     |                  |           | how/                 |                  | Objectives             | Domain  |                | desirabl | Method             | Forma<br>tive | Sum<br>mati |
|     |                  |           | Knows                |                  |                        |         |                | е        |                    | live          | ve          |
|     |                  |           | how/ Know            |                  |                        |         |                | to       |                    |               |             |
|     |                  |           |                      |                  |                        |         |                | know/    |                    |               |             |
|     |                  |           |                      |                  |                        |         |                | Nice to  |                    |               |             |
|     |                  |           |                      |                  |                        |         |                | know     |                    |               |             |
| Hom | Problem solution | Pharmacop | Knows                | Must be          | 1. Define              | Cogniti | Level 1        | Must     | 1.Lecture          | 1.Stru        | SAQ         |
| UG- |                  | oeia      |                      | able abide       | Pharmacop              | ve      | Recall         | Know     | Demonstratio       | cture         | MC          |
| HP- |                  |           |                      | by the           | oeia                   |         |                |          | ns                 | d Oral        | Q           |
| 1.5.1                      | Integration of Knowledge                     |       | homoeopat<br>hic  |  |   |                               |              | 2. Small<br>Group  | Exami<br>nation   | Viva<br>Voce |
|----------------------------|--|-------|---|--|---|-------------------------------|--------------|--|---|--------------|
| Hom<br>UG-<br>HP-<br>1.5.2 | Synthesis and<br>application of<br>knowledge | Knows | pharmacop<br>oeia<br>guidelines<br>for<br>preparation<br>of<br>homoeopat<br>hic<br>medicines. | 2.<br>Enumerate<br>the<br>different<br>types of<br>homoeopat<br>hic<br>pharmacop<br>oeia with<br>suitable<br>examples. |   | evel 1<br>ecall               | Must<br>Know | Discussions/<br>Peer teaching<br>(Think-Pair-<br>Share, Jigsaw<br>Strategy)<br>3. Quiz<br>4. Student<br>Seminars | 2.<br>Tutori<br>als<br>3.<br>Assign<br>ments<br>4.<br>MCQ'<br>s                                       | Volue        |
| Hom<br>UG-<br>HP.1.<br>5.3 |  | Knows |   | 3. Explain<br>the<br>different<br>types of<br>homoeopat<br>hic<br>pharmacop<br>oeia.                                   | U | evel 2<br>Inder<br>tandi<br>g | Must<br>Know |  | <ul> <li>5. 2<br/>marks<br/>questi<br/>on</li> <li>6.SAQ<br/>'s,<br/>LAQ's</li> <li>7.Proj</li> </ul> |              |
| Hom<br>UG-<br>HP-<br>1.5.4 |  | Knows | _   | 4. Explain<br>HPI in detail  | U | evel 2<br>Inder<br>tandi<br>g | Must<br>Know |  | ects  |              |
| Hom<br>UG-<br>HP-<br>1.5.5 |  | Knows |   | 5. Explain<br>what is<br>monogra<br>ph?  | U | evel 2<br>Inder<br>tandi      | Must<br>Know |  |   |              |

|                            |           |               | ng                                |                 |  |  |  |
|----------------------------|-----------|---------------|-----------------------------------|-----------------|--|--|--|
| Hom<br>UG-<br>HP-<br>1.5.6 | Knows how | Cogniti<br>ve | Level 3<br>Proble<br>m<br>solving | Nice to<br>know | <ol> <li>Practical<br/>Demonstratio<br/>n</li> <li>Lecture<br/>Demonstratio<br/>n</li> <li>Projects</li> <li>Herbarium</li> <li>Journal</li> </ol> | <ol> <li>DOPS</li> <li>DOPS</li> <li>OSPE</li> <li>Evalu<br/>ation<br/>of<br/>projec<br/>ts</li> <li>Evalu<br/>ation<br/>of<br/>Journ<br/>al &amp;<br/>Herba<br/>rium</li> </ol> | SAQ<br>MC<br>QLA<br>Viva<br>Voce<br>tical<br>Exa<br>mina<br>tion<br>/<br>Cheo<br>klist |
| Hom<br>UG-<br>HP-<br>1.5.7 | Knows how | Affectiv<br>e | Level 1<br>Receivi<br>ng          | Nice to<br>know | <ol> <li>Practical<br/>Demonstratio</li> <li>Lecture</li> <li>Demonstratio</li> <li>n</li> </ol>   | 1.<br>DOPS<br>2.<br>OSPE<br>3.<br>Evalu<br>ation   | Viva<br>Voce   |

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|  | meticulousl<br>y as given in<br>official<br>homoeopat<br>hic<br>pharmacop<br>oeia w.r.t.<br>identificatio<br>n,<br>collection,<br>preservatio<br>n,<br>preparation<br>and<br>dispensing<br>of<br>homoeopat<br>hic<br>medicine | <ol> <li>3. Projects</li> <li>4. Herbarium</li> <li>5. Journal</li> </ol> | of<br>projec<br>ts<br>4.<br>Evalu<br>ation<br>of<br>Journ<br>al &<br>Herba<br>rium |
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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. | Generic      | Subject | Miller's    | Specific   | Specific | Bloom' | Guilber | Must to | Teaching - | Assessment  |  |
|-----|--------------|---------|-------------|------------|----------|--------|---------|---------|------------|-------------|--|
| No  | Competencies | Area    | Level Does/ | Competenci | Learning | S      | ť's     |         | Learning   | /Evaluation |  |

|                            |  |                     | Shows how/<br>Knows how/<br>Know | es   | Objectives  | Domai<br>n    | Levels                       | know/<br>desirabl<br>e<br>to<br>know/<br>Nice to<br>know | Method  | Formative  | Type<br>Summ<br>ative             |
|----------------------------|--|---------------------|----------------------------------|--|---|---------------|------------------------------|--|---|--|-----------------------------------|
| Hom<br>UG-<br>HP-<br>1.6.1 | Integration of<br>knowledge<br>Synthesis and<br>application of<br>knowledge<br>Classroom to<br>herbarium and<br>lab transfer | Sources<br>of drugs | Knows                            | Must be<br>able to<br>identify the<br>plant drug<br>substances<br>for<br>preparation<br>of<br>homoeopat<br>hic<br>medicines. | 1. Explain in<br>detail the<br>part used<br>and drug<br>prepared<br>from plant<br>kingdom | Cognitiv<br>e | Level 2<br>Unders<br>tanding | Must<br>know   | <ol> <li>1.Lecture<br/>Demonstr<br/>ations</li> <li>2. Small<br/>Group<br/>Discussion<br/>s/</li> <li>Peer<br/>teaching<br/>(Think-<br/>Pair-<br/>Share,</li> </ol> | <ol> <li>Structured<br/>Oral<br/>Examination</li> <li>Tutorials</li> <li>Tutorials</li> <li>Assignments</li> <li>MCQ's</li> <li>2 marks<br/>question</li> <li>SAQ's and</li> </ol> | SAQ<br>MCQ<br>LAQ<br>Viva<br>Voce |
| Hom<br>UG-<br>HP-<br>1.6.2 |  |                     | Knows                            |  | 2. List any 4<br>examples of<br>drugs from<br>particular<br>part of the<br>plant.         |               | Level 1<br>Recall            | Must<br>know   | Jigsaw<br>Strategy)<br>3. Quiz<br>4. Student<br>Seminars<br>5. Guest  | LAQ's<br>7. Herbarium  |                                   |

| Hom<br>UG-<br>HP-<br>1.6.3 | Knows     | 3. Explain<br>classification<br>of plant<br>kingdom<br>with<br>examples.  | Level 2<br>Unders<br>tanding           | Must<br>know    | Lecture<br>6.<br>Problem<br>based<br>learning<br>7. Flipped<br>Classroom<br>8. Videos   |   |                               |
|----------------------------|-----------|---|--|-----------------|---|---|-------------------------------|
| Hom<br>UG-<br>HP-<br>1.6.4 | Does      | 4. Identify Cog<br>the plant and ve<br>its parts used<br>for<br>preparation<br>of<br>homoeopath<br>ic medicines | niti Level 3<br>Proble<br>m<br>solving | Must<br>know    | <ol> <li>Practical<br/>Demonstr<br/>ation</li> <li>Procedu<br/>ral Skills<br/>Teaching</li> <li>Herbarium</li> <li>Experienti<br/>al learning<br/>(Projects)</li> </ol> | <ol> <li>1.DOPS</li> <li>2. OSPE</li> <li>3. Herbarium</li> </ol> | Pract<br>cal<br>Exam<br>natio |
| Hom<br>UG-<br>HP-<br>1.6.5 | Shows how | 5.Demonstra Affe<br>te care while e<br>identifying &<br>collecting the<br>plant drug                            | ectiv Level 1<br>Receivi<br>ng         | Nice to<br>know | <ol> <li>1.Lecture</li> <li>Demonstration</li> <li>2.</li> <li>Problem</li> <li>Based</li> </ol>  | 1.Herbarium   | Pract<br>cal<br>Exam<br>natio |

|  |  | substances |  | Learning |          |  |
|--|--|------------|--|----------|----------|--|
|  |  |            |  |          |          |  |
|  |  |            |  |          | <u> </u> |  |

## **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. | Generic      | Subject | Miller's                               | Specific         | Specific       | Bloom'      | Guilber       | Must to                                    | Teaching -         | Assessment               |     |       |
|-----|--------------|---------|--|------------------|----------------|-------------|---------------|--|--------------------|--------------------------|-----|-------|
| No  | Competencies | Area    | Level<br>Does/                         | Compete<br>ncies | Learnin<br>g   | sDoma<br>in | t's<br>Levels | know/                                      | Learning<br>Method | /Evaluation<br>Formative | Sum | mat   |
|     |              |         | Shows<br>how/<br>Knows<br>how/<br>Know |                  | Objecti<br>ves |             |               | desirable<br>to<br>know/Nice<br>to<br>know |                    | Tomative                 | ive | iniat |

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

| Hom                        | Кронкс       | 2   |   | Muct Know |   |                                      |                      |     |
|----------------------------|--------------|---|---|-----------|---|--------------------------------------|----------------------|-----|
| Hom<br>UG-<br>HP-<br>1.7.3 | Knows        | 3.<br>Explain<br>classific<br>ation of<br>animal<br>kingdo<br>m                                   | Level 2<br>Underst<br>anding            | Must Know |   |                                      |                      |     |
| Hom<br>UG-<br>HP-<br>1.7.4 | Does         | 4.CogIdentifyveIdentifyvetheanimaland itsand itspartsusedforpreparation ofhomoeopathicmedicineses | gniti Level 3<br>Proble<br>m<br>Solving | Must Know | <ol> <li>Practical<br/>Demonstra<br/>tion</li> <li>Procedur<br/>al Skills<br/>Teaching</li> <li>Skills<br/>Teaching</li> <li>Skills</li> <li>Skils</li> <li>Skills</li> <li>Skils</li> <li>Skills&lt;</li></ol> | 1.DOPS<br>2. OSPE<br>3.<br>Herbarium | Prac<br>Exar<br>tion | min |
| Hom<br>UG-<br>HP-<br>1.7.5 | Shows<br>how | 5.Demo Affe<br>nstrate ve<br>care<br>while<br>identify<br>ing &<br>collecti<br>ng the<br>animal   | fecti Level 1<br>Receivi<br>ng          | Must Know | <ol> <li>1.Lecture</li> <li>Demonstra</li> <li>tion</li> <li>2. Problem</li> <li>Based</li> <li>Learning</li> </ol>   | 1.Herbariu<br>m                      | Prac<br>Exar<br>tion | mir |

|                            |   |                     |   |   | drug<br>substan<br>ces   |                   |                              |   |   |  |                                   |
|----------------------------|---|---------------------|---|---|--|-------------------|------------------------------|---|---|--|-----------------------------------|
|                            | Mineral Kingdom<br>g Outcomes (LO):   |                     |   |   |  |                   |                              |   |   |  |                                   |
|                            | At the end of homoeopathic n  | medicines.          | 1   |   |  | -                 | 1                            | -   |   | 1  |                                   |
| Sr.<br>No                  | Generic<br>Competencies   | Subject<br>Area     | Miller's<br>Level                               | Specific<br>Compet  | Specific<br>Learning   | Bloom's<br>Domain | Guilbert's<br>Levels         | Must to<br>know/                            | Teaching -<br>Learning  | Assessmer<br>/Evaluation   |                                   |
|                            |   |                     | Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | encies  | Objectives   |                   |                              | desirable<br>to<br>know/Nic<br>e to<br>know | Method  | Formativ<br>e  | Sumn<br>tive                      |
| Hom<br>UG-<br>HP-<br>1.8.1 | Integration of<br>knowledge<br>Synthesis and<br>application of<br>knowledge | Sources of<br>drugs | Knows   | Must be<br>able to<br>identify<br>the<br>mineral<br>drug<br>substan<br>ces for<br>prepara | 1. Explain<br>the part<br>used and<br>drug<br>prepared<br>from<br>mineral<br>kingdom | Cognitiv<br>e     | Level 2<br>Understa<br>nding | Must<br>know                                | <ol> <li>1.Lecture<br/>Demonstr<br/>ations</li> <li>2. Small<br/>Group<br/>Discussion<br/>s/</li> <li>Peer</li> </ol> | <ol> <li>Structu<br/>red Oral</li> <li>Examinat</li> <li>ion</li> <li>2.</li> <li>Tutorials</li> <li>3.</li> <li>Assignme</li> </ol> | LAQ<br>SAQ<br>MCQ<br>Viva<br>Voce |
| l                          | Classroom to  |                     |   | tion of   |  |                   |                              |   | teaching  | Assignine  |                                   |

|              |               | I     |         |                                       | 1        | I        | T    | 1                                   | T                       |         |
|--------------|---------------|-------|---------|---------------------------------------|----------|----------|------|-------------------------------------|-------------------------|---------|
|              | herbarium and |       | homoeo  |                                       |          |          |      | (Think-                             | nts                     |         |
|              | lab transfer  |       | pathic  |                                       |          |          |      | Pair-                               | 4. MCQ's                |         |
|              |               |       | medicin |                                       |          |          |      | Share,                              |                         |         |
|              |               |       | es.     |                                       |          |          |      | Jigsaw                              | 5. 2                    |         |
| Hom          |               | Knows |         | 2. List any 4                         |          | Level 1  | Must | Strategy)                           | marks                   |         |
| UG-          |               |       |         | examples of                           |          | Devell   | know | 3. Quiz                             | question                |         |
| HP-<br>1.8.2 |               |       |         | drugs from<br>prepared<br>from        |          | Recall   |      | 4. Student<br>Seminars              | 6.SAQ's<br>and<br>LAQ's |         |
|              |               |       |         | minerals.                             |          |          |      | 5. Guest                            |                         |         |
|              |               |       |         |                                       |          |          |      | Lecture                             | 7.<br>Herbariu          |         |
| Hom          |               | Knows |         | 3. Explain                            |          | Level 2  | Must | – 6.<br>Problem                     | m                       |         |
| UG-          |               |       |         | the                                   |          | Understa | know | based                               |                         |         |
| HP-          |               |       |         | classificatio                         |          | nding    |      | learning                            |                         |         |
| 1.8.3        |               |       |         | n of mineral                          |          | nang     |      | _                                   |                         |         |
|              |               |       |         | kingdom                               |          |          |      | 7. Flipped<br>Classroom             |                         |         |
|              |               |       |         |                                       |          |          |      |                                     |                         |         |
|              |               |       |         |                                       |          |          |      | 8. Videos                           |                         |         |
| Hom          |               | Does  |         | 4. Identify                           | Cognitiv | Level 3  | Must | 1.Practical                         | 1.DOPS                  | Practic |
| UG-          |               |       |         | the mineral                           | е        | Problem  | know | Demonstr                            | 2. OSPE                 | al      |
| HP-          |               |       |         | used for                              |          | solving  |      | ation                               |                         | Examin  |
| 1.8.4        |               |       |         | preparation<br>of<br>homoeopat<br>hic |          |          |      | 2.Procedu<br>ral Skills<br>Teaching | 3.<br>Herbariu<br>m     | ation   |
|              |               |       |         | medicines                             |          |          |      | 3.                                  |                         |         |
|              |               |       |         |                                       |          |          |      | Herbariu                            |                         |         |
|              |               |       |         |                                       |          |          |      | m                                   |                         |         |
|              |               |       |         |                                       |          |          |      | 4.                                  |                         |         |

|       | ,                                       | ,     |        | I I         | 1        | 1         | 1    |    | Experienti    |           |                      |
|-------|---|-------|--------|-------------|----------|-----------|------|----|---------------|-----------|----------------------|
|       | ı – – – – – – – – – – – – – – – – – – – | 1     | 1      | 1           | 1        | 1         | 1    | ļ  | al learning   | 1         | 1   <b>/</b>         |
|       | 1                                       | 1     | 1      | 1           | 1        | 1         | 1    | ļ  | (Projects)    | 1         | 1   <b>7</b>         |
|       | 1                                       | 1     | 1      | 1           | 1        | 1         | 1    | ļ  | 1             | 1         | 1   <b>1</b>         |
|       | ı – – – – – – – – – – – – – – – – – – – | 1     | 1      | 1           | 1        | 1         | 1    | ļ  | 1             | 1         | 1   <b>/</b>         |
|       | 1                                       | 1     | 1      | 1           | 1        | 1         | 1    | ļ  | 1             | 1         | 1   <b>1</b>         |
|       | ı – – – – – – – – – – – – – – – – – – – | 1     | 1      | 1           | 1        | 1         | 1    | ļ  | 1             | 1         | 1   <b>/</b>         |
|       | ı – – – – – – – – – – – – – – – – – – – | 1     | 1      | 1           | 1        | 1         | 1    | ļ  | 1             | 1         | 1   <b>/</b>         |
|       | I                                       | 1     | 1      | 1           | 1        | 1         | 1    | ļ  | 1             | 1         | 1 /                  |
| Hom   | ,†                                      | Shows | +<br>  | 5.Demonstr  | Affectiv | Level 1   | Nice | to | 1.Lecture     | 1.Herbari | Practic              |
| UG-   | I                                       | how   | ,<br>1 | ate care    | е        | Deserving | know | ļ  | Demonstr      | um        | al                   |
| HP-   | ı – – – – – – – – – – – – – – – – – – – | 1     | 1      | while       | 1        | Receiving | 1    | ļ  | ation         | 1         | Examin               |
| 1.8.5 | 1                                       | 1     | 1      | identifying | 1        | 1         | 1    | ļ  |               | 1         | at <mark>i</mark> on |
|       | ı – – – – – – – – – – – – – – – – – – – | 1     | 1      | &collecting | 1        | 1         | 1    | ļ  | 2.<br>Drohlom | 1         | 1   I                |
|       | 1                                       | 1     | 1      | the mineral | 1        | 1         | 1    | ļ  | Problem       | 1         | 1 I                  |
|       | ı – – – – – – – – – – – – – – – – – – – | 1     | 1      | drug        | 1        | 1         | 1    | ļ  | Based         |           | 1   !                |
|       | 1                                       | 1     | 1      | substances  | 1        | 1         | 1    | ļ  | Learning      | 1         | 1   !                |
|       | , I                                     | 1 I   | 1      |             | 1        | 1         | 1    | ļ  | 1             | 1         | 1                    |
|       | '                                       | · ·   |        | · ·         |          |           |      |    |               | •         | · ·                  |

### **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. | Generic | Subj | Miller' | Specific  | Specific | Bloom's | Guilbert's | Must to | Teaching - | Assessment  |
|-----|---------|------|---------|-----------|----------|---------|------------|---------|------------|-------------|
| No  | Compet  | ect  | S       | Competenc | Learning |         | Levels     |         | Learning   | /Evaluation |

|      | encies   | Area | Level | ies          | Objectives    | Domain   |            | know/    | Method       | Formative    | Summativ |
|------|----------|------|-------|--------------|---------------|----------|------------|----------|--------------|--------------|----------|
|      | choics   | /    | Does/ |              | objectives    | Domain   |            |          | method       | i onnative   | e        |
|      |          |      | Shows |              |               |          |            | desirabl |              |              | C        |
|      |          |      | how/  |              |               |          |            | е        |              |              |          |
|      |          |      | Knows |              |               |          |            | to       |              |              |          |
|      |          |      | how/  |              |               |          |            | know/Ni  |              |              |          |
|      |          |      | Know  |              |               |          |            | ce to    |              |              |          |
|      |          |      |       |              |               |          |            |          |              |              |          |
|      |          |      |       |              |               |          |            | know     |              |              |          |
| Но   | Integrat | Sour | Knows | Must be      | 1. Explain    | Cognitiv | Level 2    | Must     | 1.Lecture    | 1.Structure  | LAQ SAQ  |
| mU   | ion of   | ces  |       | able to      | the part      | е        | Understand | know     | Demonstrati  | d Oral       | MCQ Viva |
| G-   | knowle   | of   |       | identify the | used and      |          | ing        |          | ons          | Examinatio   | Voce     |
| HP-  | dge      | drug |       | drug         | drug          |          |            |          | 2. Small     | n            |          |
| 1.9. |          | S    |       | substances   | prepared      |          |            |          | Group        | 2. Tutorials |          |
| 1    |          |      |       | from         | from          |          |            |          | Discussions/ |              |          |
|      | Synthesi |      |       | nosodes      | nosodes       |          |            |          |              | 3.           |          |
|      | s and    |      |       | and          |               |          |            |          | Peer         | Assignment   |          |
|      | applicat |      |       | sarcodes     |               |          |            |          | teaching     | S            |          |
|      | ion of   |      |       | for          |               |          |            |          | (Think-Pair- | 4. MCQ's     |          |
|      | knowle   |      |       | preparatio   |               |          |            |          | Share,       |              |          |
|      | dge      |      |       | n of         |               |          |            |          | Jigsaw       | 5. 2 marks   |          |
|      | -        |      |       | homoeopat    |               | -        |            |          | Strategy)    | question     |          |
| Но   |          |      | Knows | hic          | 2. List any 4 |          | Level 1    | Must     | 3. Quiz      | 6.SAQ's and  |          |
| mU   | Classroo |      |       | medicines    | examples of   |          | Recall     | Know     |              | LAQ's        |          |
| G-   | m to     |      |       |              | drugs from    |          |            |          | 4. Student   |              |          |
| HP-  | herbari  |      |       |              | prepared      |          |            |          | Seminars     |              |          |
| 1.9. | um and   |      |       |              | from          |          |            |          | 5. Guest     |              |          |
| 2    | lab      |      |       |              | nosodes.      |          |            |          | Lecture      |              |          |
|      | transfer |      |       |              |               |          |            |          | C Ducki      |              |          |
|      |          |      |       |              |               |          |            |          | 6. Problem   |              |          |

|      |        |                  |            | r     |            |
|------|--------|------------------|------------|-------|------------|
| Но   | Knows  | 3. Explain       | Level 2    | Must  | based      |
| mU   |        | classificatio    | Understand | Know  | learning   |
| G-   |        | n of             |            |       |            |
| HP   |        | nosodes.         | ing        |       | 7. Flipped |
|      |        |                  |            |       | Classroom  |
| 1.9. |        |                  |            |       | 8. Videos  |
| 3    |        |                  |            |       |            |
| Но   | Knows  | 4.Explain        | Level 2    | Must  |            |
| mU   |        | the part         |            | Know  |            |
| G-   |        | used and         | Understand |       |            |
| HP   |        | drug             | ing        |       |            |
|      |        | prepared         |            |       |            |
| 1.9. |        | from             |            |       |            |
| 4    |        | sarcodes         |            |       |            |
|      |        | sarcoues         |            |       |            |
|      |        |                  |            |       |            |
| Но   | Knows  | 5. List any 4    | Level 1    | Must  |            |
| mU   | Kilows | examples of      |            | Know  |            |
| G-   |        | drugs from       | Recall     | KIIOW |            |
| HP   |        |                  |            |       |            |
|      |        | prepared<br>from |            |       |            |
| 1.9. |        |                  |            |       |            |
| 5    |        | sarcodes         |            |       |            |
|      |        |                  |            |       | _          |
| Но   | Knows  | 6. Explain       | Level 2    | Must  |            |
| mU   |        | classificatio    | Understand | Know  |            |
| G-   |        | n of             | ing        |       |            |
| HP   |        | sarcodes         | 0          |       |            |
| 1.9. |        |                  |            |       |            |
| 6    |        |                  |            |       |            |
| 0    |        |                  |            |       |            |

| Ho<br>mU<br>G-<br>HP              | Does         | 7. Identify<br>the<br>sarcode/nos<br>ode used for   | Cognitiv<br>e | Level 3<br>Problem<br>solving | Must<br>know    | 1.Practical<br>Demonstrati<br>on<br>2.Procedural  | 1.DOPS<br>2. OSPE | Practical<br>Examinati<br>on |
|-----------------------------------|--------------|---|---------------|-------------------------------|-----------------|---|-------------------|------------------------------|
| 1.9.<br>7                         |              | preparation<br>of<br>homoeopat<br>hic<br>medicines  |               |                               |                 | Skills<br>Teaching<br>3.<br>Experiential<br>learning<br>(Projects)  |                   |                              |
| Ho<br>mU<br>G-<br>HP<br>1.9.<br>8 | Shows<br>how | 8.Demonstr<br>ate care<br>while<br>identifying<br>& collecting<br>the diseased<br>part/secreti<br>on for<br>preparation<br>of<br>nosodes&he<br>althy<br>part/secreti<br>on for<br>preparation<br>of<br>sarcodes | Affectiv<br>e | Level 1<br>Receiving          | Nice to<br>know | <ol> <li>1.Lecture</li> <li>Demonstrati</li> <li>on</li> <li>2. Problem</li> <li>Based</li> <li>Learning</li> </ol> | 1.Monogra<br>phs  | Practical<br>Examinati<br>on |

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.                             | Generic  | Subject             | Miller's                               | Specific   | Specific   | Bloom's       | Guilber                      | Must to                                     | Teaching   | Assessme  |                                   |
|---------------------------------|--|---------------------|--|--|--|---------------|------------------------------|---|--|---|-----------------------------------|
| No                              | Competencies   | Area                | Level<br>Does/                         | Competen<br>cies   | Learning<br>Objectives   | Domain        | t's<br>Levels                | know/                                       | -<br>Learning  | /Evaluatio  | -                                 |
|                                 |  |                     | Shows<br>how/<br>Knows<br>how/<br>Know |  |  |               |                              | desirable<br>to<br>know/Nic<br>e to<br>know | Method   | e   | ative                             |
| Hom<br>UG-<br>HP-<br>1.10.<br>1 | Integration of<br>knowledge<br>Synthesis and<br>application of<br>knowledge<br>Classroom to<br>herbarium and<br>lab transfer | Sources of<br>drugs | Knows                                  | Must be<br>able to<br>identify<br>the drug<br>substance<br>s from<br>energy<br>sources<br>for<br>preparatio<br>n of<br>homoeop<br>athic<br>medicines | 1. Explain<br>the energy<br>used and<br>drug<br>prepared<br>from<br>imponderab<br>ilia | Cogniti<br>ve | Level 2<br>Underst<br>anding | Must<br>know                                | <ol> <li>1.Lecture<br/>Demonst<br/>rations</li> <li>2. Small<br/>Group<br/>Discussio<br/>ns/</li> <li>Peer<br/>teaching<br/>(Think-<br/>Pair-<br/>Share,<br/>Jigsaw</li> </ol> | <ol> <li>Struct<br/>ured<br/>Oral<br/>Examina<br/>tion</li> <li>Z.<br/>Tutorials</li> <li>Assignm<br/>ents</li> <li>4.<br/>MCQ's</li> </ol> | LAQ<br>SAQ<br>MCQ<br>Viva<br>Voce |
| Hom<br>UG-                      |  |                     | Knows                                  | ].   | 2. List any 4<br>examples of   |               | Level 1<br>Recall            | Must<br>know                                | Strategy)<br>3. Quiz   | 5. 2<br>marks   |                                   |
| HP-<br>1.10.                    |  |                     |  |  | drugs<br>prepared<br>from  |               |                              |   | 4.   | question<br>6.SAQ's   |                                   |

| Knows        | imponderab<br>ilia Student and<br>Seminars LAQ's<br>5. Guest<br>Lecture<br>3. Explain Level 2 Must 6.                     |  |
|--------------|---|--|
| Knows        | 3. Explain Level 2 Must 6.  |  |
|              | classificatio<br>n of<br>imponderab<br>ilia.<br>hnow<br>Underst<br>anding<br>hnow<br>hnow<br>Problem<br>based<br>learning |  |
|              | 7. Flipped<br>Classroo<br>m<br>8. Videos  |  |
| Does         | the energy ve know al   | al   |
| Shows<br>how | 5.DemonstrAffectivLevel 1Nice to1.Lecture1.Monoate care & e<br>commitmen<br>te<br>ngknowDemonst<br>raphs<br>rationraphs   | og Praci<br>al<br>Exan   |
| -            | Shows   | Ilia.Ilia.Ilia.7. Flipped<br>Classroo<br>mDoes4. Identify<br>the energy<br>source used<br>for<br>preparation<br>of<br>homoeopat<br>hic<br>medicines<br>from<br>imponderab<br>iliaCogniti<br>veLevel 3<br>Proble<br>m<br>solvingNice to<br>al<br>Demonst<br>ration1.Practic<br>al<br>Demonst<br>ration1.DOPS<br>al<br>2.OSPEDoes4. Identify<br>the energy<br>source used<br>for<br>preparation<br>of<br>homoeopat<br>hic<br>medicines<br>from<br>imponderab<br>iliaLevel 3<br>veNice to<br>al<br>Demonst<br>ration1.DOPS<br>al<br>2.OSPEShows5.Demonstr<br>ate care &<br>commitmenAffectiv<br>eLevel 1<br>Receivi<br>ngNice to<br>to<br>1.Lecture<br>Tation1.Monop<br>raphs |

| 5 |  |  | identifying  |  | 2.       | natio |
|---|--|--|--------------|--|----------|-------|
|   |  |  | & collecting |  | Problem  |       |
|   |  |  | the          |  | Based    |       |
|   |  |  | different    |  | Learning |       |
|   |  |  | energy       |  |          |       |
|   |  |  | sources for  |  |          |       |
|   |  |  | preparation  |  |          |       |
|   |  |  | of           |  |          |       |
|   |  |  | imponderab   |  |          |       |
|   |  |  | ilia         |  |          |       |
|   |  |  | medicines    |  |          |       |

### **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. | Generic      | Subject | Miller's  | Specific         | Specific               | Bloom's | Guilbert' | Must to                             | Teaching -         | Asses                            |      |
|-----|--------------|---------|---|------------------|------------------------|---------|-----------|-------------------------------------|--------------------|----------------------------------|------|
| No  | Competencies | Area    | Level Does/<br>Shows how/<br>Knows how/<br>Know | Competenci<br>es | Learning<br>Objectives | Domain  | s Levels  | know/<br>desirable<br>to<br>know/Ni | Learning<br>Method | smen<br>t<br>/Eval<br>uatio<br>n |      |
|     |              |         |   |                  |                        |         |           | ce to                               |                    | Form                             | Summ |

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|                                 |  |                     |       |  |   |               |                              | know         |  | ative   | ative                             |
|---------------------------------|--|---------------------|-------|--|---|---------------|------------------------------|--------------|--|---|-----------------------------------|
| Hom<br>UG-<br>HP-<br>1.11.<br>1 | Integration of<br>knowledge<br>Synthesis and<br>application of<br>knowledge<br>Classroom to<br>herbarium and<br>lab transfer | Sources<br>of drugs | Knows | Must be<br>able to<br>identify<br>drug<br>substances<br>of<br>Allersodes,<br>Isodes,<br>Synthetic<br>Source for<br>preparation<br>of<br>homoeopat<br>hic<br>medicines. | 1. Explain<br>the<br>preparation<br>of<br>Allersodes,<br>Isodes&<br>Synthetic<br>Source of<br>homoeopat<br>hic<br>medicines | Cognitiv<br>e | Level 2<br>Underst<br>anding | Must<br>know | <ol> <li>1.Lecture<br/>Demonstr<br/>ations</li> <li>2. Small<br/>Group<br/>Discussio<br/>ns/</li> <li>Peer<br/>teaching<br/>(Think-<br/>Pair-<br/>Share,<br/>Jigsaw<br/>Strategy)</li> <li>3. Quiz</li> <li>4. Student<br/>Seminars</li> </ol> | <ol> <li>Str<br/>uctur<br/>ed</li> <li>Oral</li> <li>Exam<br/>inatio</li> <li>n</li> <li>Z.</li> <li>Tutor</li> <li>ials</li> <li>3.</li> <li>Assig</li> <li>nmen</li> <li>ts</li> <li>4.</li> <li>MCQ'</li> <li>s</li> </ol> | LAQ<br>SAQ<br>MCC<br>Viva<br>Voce |
| Hom<br>UG-<br>HP-<br>1.11.<br>2 |  |                     | Knows |  | 2. List any 4<br>examples of<br>drugs<br>prepared<br>from<br>Allersodes,<br>Isodes&Synt<br>hetic Source                     |               | Level 1<br>Recall            | Must<br>know | <ol> <li>Guest</li> <li>Lecture</li> <li>Problem</li> <li>based</li> <li>learning</li> <li>Flipped</li> <li>Classroo</li> </ol>  | 5. 2<br>mark<br>s<br>quest<br>ion<br>6.SA<br>Q's<br>and<br>LAQ's  |                                   |

|                                 |       |     |   |               |                          |                 | m  |                |                                   |
|---------------------------------|-------|-----|---|---------------|--------------------------|-----------------|--|----------------|-----------------------------------|
|                                 |       |     |   |               |                          |                 | 8. Videos  |                |                                   |
| Hom<br>UG-                      | Does  |     | 3. Identify<br>the part   | Cognitiv<br>e | Level 3<br>Problem       | Must<br>know    | Experienti   | Proje<br>cts   | Practi                            |
| HP-<br>1.11.<br>3               |       |     | used for<br>preparation<br>of<br>Allersodes,<br>Isodes&<br>Synthetic<br>Source.   |               | solving                  |                 | al<br>learning<br>(Projects)   |                | Exami<br>natior                   |
| Hom<br>UG-<br>HP-<br>1.11.<br>4 | Shows | how | 4.Demonstr<br>ate care &<br>commitmen<br>t while<br>identifying<br>& collecting<br>the different<br>parts for<br>preparation<br>of<br>Allersodes,<br>Isodes&<br>Synthetic<br>Source | Affectiv<br>e | Level 1<br>Receivin<br>g | Nice to<br>know | <ul> <li>1.Lecture</li> <li>Demonstration</li> <li>2.</li> <li>Problem</li> <li>Based</li> <li>Learning</li> </ul> | 1.Proj<br>ects | Praction<br>al<br>Exami<br>nation |

## **TOPIC:** Collection of Drug Substances

# Learning Outcomes (LO):

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

| Sr.            | Generic             | Subject Area                        | Miller's                                     | Specific                        | Specific                               | Bloom's       | Guilbert's                   | Must to   | Teachin                 | Assessr                   | ment                  |
|----------------|---------------------|-------------------------------------|--|---------------------------------|--|---------------|------------------------------|---|-------------------------|---------------------------|-----------------------|
| No             | Competencies        |                                     | Level  | Competen                        | Learning                               | Domain        | Levels                       | know/   | g -                     | /Evalua                   |                       |
|                |                     |                                     | Does/<br>Shows<br>how/<br>Knows<br>how/ Know | cies                            | Objectives                             |               |                              | desirabl<br>e<br>to<br>know/Ni<br>ce to<br>know | Learning<br>Method      | Form<br>ative             | Su<br>mm<br>ativ<br>e |
| Ho<br>mU<br>G- | Problem<br>solution | Collection of<br>Drug<br>Substances | Knows  | Must be<br>able to<br>collect a | 1. Explain<br>the general<br>rules for | Cognitiv<br>e | Level 2<br>Understa<br>nding | Must<br>know                                    | 1.Lectur<br>e<br>Demons | 1.Stru<br>cture<br>d Oral | LAQ<br>SAQ<br>MC      |
| HP-<br>1.1     |                     |                                     |  | particular<br>part/             | collecting<br>drugs from               |               |                              |   | trations                | Exami<br>natio            | Q<br>Viv              |

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|     |                |       |           | •           |   |          |      |          |              |     |
|-----|----------------|-------|-----------|-------------|---|----------|------|----------|--------------|-----|
| 2.1 | Integration of | S     | ource for | vegetable   |   |          |      | 2. Small | n            | а   |
|     | Knowledge      | p     | reparatio | kingdom.    |   |          |      | Group    | 2.           | Voc |
|     |                | n     | n of      |             |   |          |      | Discussi | z.<br>Tutori | e   |
|     |                | h     | iomoeop   |             |   |          |      | ons/     | als          |     |
|     | Synthesis and  | а     | thic      |             |   |          |      | Peer     | dis          |     |
|     | application of | d     | lrugs     |             |   |          |      | teaching | 3.           |     |
|     | knowledge      |       |           |             |   |          |      | (Think-  | Assig        |     |
|     |                |       |           |             |   |          |      | Pair-    | nmen         |     |
|     |                |       |           |             |   |          |      | Share,   | ts           |     |
| Но  |                | Knows |           | 2. Explain  |   | Level 2  | Must | Jigsaw   | 4.           |     |
| mU  | Classroom to   |       |           | the         |   | Understa | know | Strategy | 4.<br>MCQ'   |     |
| G-  | Herbarium      |       |           | particular  |   | nding    |      | )        | s            |     |
| HP- | transfer       |       |           | rules for   |   | nuing    |      | ,        |              |     |
| 1.1 |                |       |           | collecting  |   |          |      | 3. Quiz  | 5. 2         |     |
| 2.2 |                |       |           | drugs from  |   |          |      | 4.       | marks        |     |
|     | Practice based |       |           | vegetable   |   |          |      | Student  | quest        |     |
|     | learning and   |       |           | kingdom.    |   |          |      | Seminar  | ion          |     |
|     | improvement    |       |           |             |   |          |      | S        | 6.SAQ        |     |
|     |                |       |           |             | _ |          |      |          | 's and       |     |
| Но  |                | Knows |           | 3. Explain  |   | Level 2  | Must | 5. Guest | LAQ's        |     |
| mU  |                |       |           | the general |   | Understa | know | Lecture  |              |     |
| G-  |                |       |           | rules for   |   | nding    |      | 6.       | 7.Proj       |     |
| HP- |                |       |           | collecting  |   | - 0      |      | Flipped  | ects         |     |
| 1.1 |                |       |           | drugs from  |   |          |      | Classroo | 8.           |     |
| 2.3 |                |       |           | animal      |   |          |      | m        | Herba        |     |
|     |                |       |           | kingdom.    |   |          |      | -        | rium         |     |
| Но  |                | Knows |           | 4. Explain  | _ | Level 2  | Must | - 7.     |              |     |
| mU  |                |       |           | the         |   |          | know | Videos   |              |     |
| G-  |                |       |           | particular  |   | Understa |      |          |              |     |
| HP- |                |       |           | rules for   |   | nding    |      |          |              |     |

| 1.1<br>2.4      |       | collecting<br>drugs from<br>animal     |                     |              |                                 |                     |                   |
|-----------------|-------|--|---------------------|--------------|---------------------------------|---------------------|-------------------|
|                 |       | kingdom.                               |                     |              |                                 |                     |                   |
| Ho<br>mU        | Knows | 5. Explain<br>the                      | Level 2<br>Understa | Must<br>know |                                 |                     |                   |
| G-<br>HP-       |       | collection of<br>drugs from            | nding               |              |                                 |                     |                   |
| 1.1<br>2.5      |       | mineral<br>kingdom.                    |                     |              |                                 |                     |                   |
| Ho<br>mU        | Knows | 6. Explain<br>collection of            | Level 2             | Must<br>know |                                 |                     |                   |
| G-<br>HP-       |       | Nosodes,<br>Sarcodes                   | Understa<br>nding   | KHOW         |                                 |                     |                   |
| 1.1<br>2.6      |       | &Impondera<br>bilia.                   |                     |              |                                 |                     |                   |
| Ho              | Does  |  | sycho Level 3       | Must         | 1.                              | 1.DO                | Pra               |
| mU<br>G-<br>HP- |       | drugs from mo<br>vegetable<br>kingdom. | otor Automati<br>on | know         | Practical<br>Demons<br>trations | PS<br>2.OSP         | ctic<br>al<br>Exa |
| 1.1<br>2.7      |       |  |                     |              | 2.<br>Procedu                   | E<br>3.Proj<br>ects | min<br>atio<br>n  |
|                 |       |  |                     |              | ral Skills<br>Teachin<br>g      | 4.Spo<br>tting      |                   |

|     |   |     | ı         |     |          | ļ                 |          | 1         | 1       | 3.Experi        | 5.Her      | 1    |
|-----|---|-----|-----------|-----|----------|-------------------|----------|-----------|---------|-----------------|------------|------|
|     |   |     | ı         |     |          | ļ                 |          | l I       | 1       | ential          | bariu      |      |
|     |   |     | ı         |     |          | ļ                 |          | 1         | 1       | Learning        | m.         |      |
|     |   |     | ı         |     |          | ļ                 |          | 1         | 1       | '               | 1 '        |      |
|     |   |     | ı         |     |          | ļ                 |          | l I       | 1       | '               | '          |      |
|     |   |     | ı         |     |          | ļ                 |          | 1         | 1       | '               | 1 '        |      |
|     |   |     | ı         |     |          | ļ                 |          | 1         | 1       | '               | '          |      |
|     |   |     | ı         |     |          | ļ                 |          | 1         | 1       | '               | '          |      |
| Но  | 1 | . T | Does      | T T | 8.       | Collect           | 1        | Level 3   | Must    | 1 '             | '          |      |
| mU  |   |     | ı         |     | the      | drugs             |          |           | know    | '               | '          |      |
| G-  |   |     | ı         |     |          | animal            |          | Automati  | 1       | '               | '          |      |
| HP- |   |     | ı         |     | kingde   |                   |          | on        | 1       | '               | '          |      |
| 1.1 |   |     | ı         |     |          | I                 |          | 1         | 1       | '               | '          |      |
| 2.8 |   |     | ı         |     |          | ļ                 |          | 1         | 1       | '               | '          |      |
|     | 4 |     |           | F   | <u> </u> | <u></u>           |          |           |         | 4 '             | '          |      |
| Ho  |   |     | Does      |     |          | ollect the        |          | Level 2   | Must    | '               | '          |      |
| mU  |   |     | ı         |     |          | s from            |          | Control   | know    | '               | '          |      |
| G-  |   |     | ı         |     | nosod    |                   |          | 1         | 1       | '               | 1 '        |      |
| HP. |   |     | ı         |     | sarco    |                   |          | 1         | 1       | '               | '          |      |
| 1.1 |   |     | ı         |     |          | onderabil         |          | 1         | 1       | '               | 1 '        |      |
| 2.9 |   | ]   | ı         |     | ia.      | !                 |          | I I       | 1       | '               | '          | 1    |
| Но  |   |     | Shows how |     | 10.      | Ţ                 | Affectiv | Level 1   | Nice to | 1.              | Herba      | Pra  |
| mU  |   |     | ı         |     | Demo     | onstrate          | e        | Bacioving | know    | Lecture         | rium       | ctic |
| G-  |   |     | ı         |     | care     | &                 |          | Recieving | 1       | Demons          | '          | al   |
| HP- |   |     | ı         |     | comn     | mitment           |          | 1         | 1       | tration         | '          | Exa  |
| 1.1 |   |     | ı         |     | while    | ۱ <u>۱</u>        |          | 1         | 1       | '               | '          | min  |
| 2.1 |   |     | ı         |     | collec   | cting I           |          | 1         | 1       | 2.<br>Practical | 1 '        | atio |
| 0   |   |     | ı         |     |          | s from            |          | 1         | 1       | Demons          | '          | n    |
|     |   |     | ı         |     | veget    |                   |          | 1         | 1       | tration         | '          | 1    |
|     |   |     | ı         |     | kingd    | iom, <sup>I</sup> |          | 1         | 1       |                 | 1 '        | 1    |
|     |   |     |           |     | anima    | al                |          | ۱<br>۱    | 1       | '               | ۱ <u> </u> |      |

|  |  | kingdom,<br>nosodes, |  |  |  |
|--|--|----------------------|--|--|--|
|  |  |                      |  |  |  |
|  |  | sarcodes             |  |  |  |
|  |  | &impondera           |  |  |  |
|  |  | bilia.               |  |  |  |
|  |  |                      |  |  |  |

**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. | Generic          | Subje      | Miller's   | Specific         | Specific               | Bloom'      | Guilbert's | Must to                                   | Teaching -         | Assessment /E | valuation   |
|-----|------------------|------------|--|------------------|------------------------|-------------|------------|---|--------------------|---------------|-------------|
| No  | Competenci<br>es | ct<br>Area | Level<br>Does/<br>Shows<br>how/<br>Knows<br>how/ | Compete<br>ncies | Learning<br>Objectives | s<br>Domain | Levels     | know/<br>desirable<br>to<br>know/Ni<br>ce | Learning<br>Method | Formative     | Summa<br>ve |

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|   |  |  | Know  |   |   |    |  | toknow                                       |   |  |                                |
|---|--|--|-------|---|---|----|--|--|---|--|--------------------------------|
| Hom<br>UG-<br>HP-<br>1.13.<br>1<br>Hom<br>UG-<br>HP-<br>1.13.<br>2<br>Hom<br>UG-<br>HP.1<br>.13.3 | Integration<br>of<br>Knowledge<br>Synthesis<br>and<br>application<br>of<br>knowledge<br>Classroom<br>to Lab<br>transfer<br>Practice<br>based<br>learning | Clean<br>sing<br>of<br>instru<br>ments | Knows | Must be<br>able to<br>clean the<br>instrume<br>nts used<br>in<br>homoeo<br>pathic<br>pharmac<br>eutical<br>laborator<br>y | <ol> <li>Explain<br/>the<br/>cleansing of<br/>mortar &amp;<br/>pestle.</li> <li>Explain<br/>the<br/>cleansing of<br/>spatula.</li> <li>Explain<br/>the<br/>cleansing of<br/>glass<br/>bottles.</li> </ol> | ve | Level 2<br>Understand<br>ing<br>Level 2<br>Understand<br>ing<br>Level 2<br>Understand<br>ing | Must<br>know<br>Must<br>know<br>Must<br>know | 1.LectureDemonstrations2. SmallGroupDiscussions/Peer teaching(Think-Pair-Share, JigsawStrategy)3. Quiz4. StudentSeminars5. FlippedClassroom | <ol> <li>Structured<br/>Oral<br/>Examination</li> <li>Tutorials</li> <li>Tutorials</li> <li>Assignments</li> <li>MCQ's</li> <li>2 marks<br/>question</li> <li>SAQ's</li> <li>Projects</li> </ol> | LAQ SAQ<br>MCQ<br>Viva<br>Voce |
| Hom<br>UG-<br>HP.1<br>.13.4   | and<br>improveme<br>nt   |  | Knows |   | 4. Explain<br>the<br>cleansing of<br>corks.   |    | Level 2<br>Understand<br>ing   | Must<br>know                                 |   |  |                                |

| Hom                             | - Krowe | E Evalatia   |                              | Muct         |   |                                |                              |
|---------------------------------|---------|--|------------------------------|--------------|---|--------------------------------|------------------------------|
| Hom<br>UG-<br>HP.1<br>.13.5     | Knows   | 5. Explain<br>the<br>cleansing of<br>wooden<br>instruments                 | Level 2<br>Understand<br>ing | Must<br>know |   |                                |                              |
| Hom<br>UG-<br>HP.1<br>.13.6     | Does    | 6. Psyc<br>Demonstrat moto<br>e the<br>cleansing of<br>mortar &<br>pestle. |                              | Must<br>know | 1.PracticalDemonstrations2.ProceduralSkillsTeaching3.ExperientialLearning | 1.DOPS<br>2.OSPE<br>3.Spotting | Practical<br>Examinat<br>ion |
| Hom<br>UG-<br>HP.1<br>.13.7     | Does    | 7.<br>Demonstrat<br>e the<br>cleansing of<br>spatula                       | Level 3<br>Automatism        | Must<br>know |   |                                |                              |
| Hom<br>UG-<br>HP-<br>1.13.<br>8 | Does    | 8.<br>Demonstrat<br>e the<br>cleansing of<br>glass<br>bottles.             | Level 3<br>Automatism        | Must<br>know |   |                                |                              |

| 1.13.<br>9<br>Hom<br>UG-<br>HP-<br>1.13.<br>10 | Does         | cleansing of<br>corks.<br>10.<br>Demonstrat<br>e the<br>cleansing of<br>wooden<br>instruments |          | Level 3<br>Automatism | Must<br>know    |  |                  |                      |  |
|--|--------------|---|----------|-----------------------|-----------------|--|------------------|----------------------|--|
| Hom<br>UG-<br>HP-<br>1.13.<br>11               | Shows<br>how |   | <u> </u> | Level 1<br>Receiving  | Nice to<br>know | <ol> <li>Lecture<br/>Demonstrati<br/>on</li> <li>Practical<br/>Demonstrati<br/>on</li> </ol> | 1.DOPS<br>2.OSPE | Pract<br>Exam<br>ion |  |

#### **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. | Generic | Subject | Miller' | Specific | Specific  | Bloom' | Guilbe | Must to | Teaching - | Assessmen | it |
|-----|---------|---------|---------|----------|-----------|--------|--------|---------|------------|-----------|----|
|     |         |         |         |          |           |        |        |         |            |           |    |
|     |         |         |         | Page     | 57 of 161 |        |        |         |            |           |    |

| no Competencies             | Area                      | s  | Competenci   | Learning  | s             | rt's                 | know/                                       | Learning  | /Evaluatio  | on                        |
|-----------------------------|---------------------------|--|--|---|---------------|----------------------|---|---|---|---------------------------|
|                             |                           | Level<br>Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | es   | Objectives  | Domain        | Levels               | desirable<br>to<br>know/Ni<br>ce to<br>know | Method  | Formati<br>ve   | Sur<br>ma<br>e            |
| L Knowledge<br>Synthesis ar | Methods<br>of<br>of<br>of | Knows  | Must be<br>able to<br>select and<br>apply a<br>particular<br>lab method<br>for<br>preparation<br>of<br>homoeopat<br>hic<br>medicines<br>and for<br>standardiza<br>tion of<br>homoeopat<br>hic<br>medicines | 1. Define<br>decantation,<br>sedimentatio<br>n, filteration,<br>distillation,<br>sublimation,<br>precipitation. | Cognitiv<br>e | Level<br>1<br>Recall | Must<br>know                                | <ol> <li>1.Lecture<br/>Demonstrati<br/>ons</li> <li>Small<br/>Group<br/>Discussions/</li> <li>Peer<br/>teaching<br/>(Think-Pair-<br/>Share,<br/>Jigsaw<br/>Strategy)</li> <li>Quiz</li> <li>Student<br/>Seminars</li> <li>Guest<br/>Lecture</li> <li>Problem</li> </ol> | <ol> <li>Struct<br/>ured<br/>Oral<br/>Examina<br/>tion</li> <li>Tutorials</li> <li>Assignm<br/>ents</li> <li>MCQ's</li> <li>S. 2<br/>marks<br/>question</li> <li>SAQ's<br/>and<br/>LAQ's</li> </ol> | LAC<br>SAC<br>Viv:<br>Voc |

|                                  |       |  |   | learning<br>7. Flipped<br>Classroom<br>8. Videos | ts |
|----------------------------------|-------|--|---|--|----|
| Hom<br>.UG-<br>HP-<br>1.14.<br>2 | Knows | 2. Explain the<br>process of<br>decantation,s<br>edimentation<br>, filteration,<br>distillation,<br>sublimation,p<br>recipitation            | Level Must<br>2 know<br>Under<br>standi<br>ng |  |    |
| Hom<br>.UG-<br>HP-<br>1.14.<br>3 | Knows | 3.Explain the<br>homoeopathi<br>c uses of<br>decantatio,<br>sedimentatio<br>n,filteration,d<br>istillation,sub<br>limation,prec<br>ipitation | Level Must<br>2 know<br>Under<br>standi<br>ng |  |    |

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| Hom   | Knows | 4.Differentiat   | Level           | Must     | ı            | 1      |     |
|-------|-------|------------------|-----------------|----------|--------------|--------|-----|
| .UG-  | how   | e between        | 2               | know     | 1            | ,<br>  |     |
| HP-   |       | filteration&di   |                 | 1        | 1            | 1      |     |
| 1.14. |       | stillation       | Under           | 1        | 1            | 1      | 1   |
| 4     |       |                  | standi<br>ng    |          |              | 1      |     |
| Hom   | Knows | 5.               | Level           | Must     |              | 1      |     |
| .UG-  | how   | Differentiate    | 2               | know     | 1            | 1      | 1   |
| HP-   |       | between          | Undor           | 1        | 1            | 1      | 1   |
| 1.14. |       | decantation      | Under<br>standi | 1        | 1            | 1      | 1   |
| 5     |       | &filteration     | standi          | 1        | 1            | 1      |     |
|       |       | in detail.       | ng              |          |              | 1      |     |
| Hom   | Does  | 6. Select a      | Level           | Desirabl |              | 1      |     |
| .UG-  |       | specific lab     | 3               | e to     | 1            | 1      |     |
| HP-   |       | method           | Proble          | know     | 1            | 1      |     |
| 1.14. |       | according to     | m               | 1        | 1            | 1      |     |
| 6     |       | the different    | solvin          | 1        | 1            | 1      |     |
|       |       | processes        | g               | 1        | 1            | 1      |     |
|       |       | carried out in   |                 | 1        | 1            | 1      |     |
|       |       | a                |                 | 1        | 1            | 1      |     |
|       |       | homoeopathi      |                 | 1        | 1            | 1      |     |
|       |       | c pharmacy       |                 | 1        | 1            | 1      |     |
|       |       | laboratory.      |                 |          |              |        |     |
| Hom   | Does  | 7. Psyc          | ycho Level      | Desirabl | 1. Practical | 1.DOPS | Pra |
| .UG-  |       | Demonstrate mot  | otor 2          | e to     | Demonstrati  | 2.OSPE | cal |
| HP-   |       | the processes    | Contr           | know     | ons          |        | Exa |
| 1.14. |       | decantation,s    | ol              | 1        | 2.           | -      | nat |
| 7     |       | edimentation     |                 |          | Procedural   | ts     | n   |
|       |       | ,filteration,di  |                 |          | Skills       | 1      |     |
|       |       | stillation, subl |                 | 1        |              | 1      |     |

|                                  |              | imation,preci<br>pitation |               |                             |              |    | Teaching<br>3.Experienti<br>al Learning  |      |                                 |
|----------------------------------|--------------|---------------------------|---------------|-----------------------------|--------------|----|--|------|---------------------------------|
| Hom<br>.UG-<br>HP-<br>1.14.<br>8 | Shows<br>how |                           | Affectiv<br>e | Level<br>1<br>Receiv<br>ing | Nice<br>know | to | <ol> <li>Lecture<br/>Demonstrati<br/>on</li> <li>Practical<br/>Demonstrati<br/>on</li> </ol> | DOPS | Prac<br>cal<br>Exa<br>nati<br>n |

**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.

| Γ | Sr. No | Generic            | Subject | Miller's | Specific | Specific | Bloom' | Guilbert's | Must to   | Teaching - | Assessmer  | nt |      |
|---|--------|--------------------|---------|----------|----------|----------|--------|------------|-----------|------------|------------|----|------|
|   |        | Competencies       | Area    | Level    | Compete  | Learning | sDomai | Levels     | know/     | Learning   | /Evaluatio | n  |      |
|   |        | ncies Objectives n | Method  |          |          |          |        |            |           |            |            |    |      |
|   |        |                    |         | Does/    |          | ,        |        |            | desirable |            | Formati    | Su | m    |
|   |        |                    |         | Shows    |          |          |        |            | uesiiabie |            | ve         | ma | ativ |
|   |        |                    |         | how/     |          |          |        |            | to        |            |            | e  |      |
|   |        |                    |         | Knows    |          |          |        |            | know/Nic  |            |            |    |      |

| Hom.<br>UG-<br>HP-<br>1.15.<br>1 | Integration of<br>Knowledge<br>Synthesis and<br>application of<br>knowledge   | Standardiz<br>ation of<br>homoeopa<br>thic drugs | how/<br>Know<br>Knows | Must be<br>able to<br>select an<br>appropri<br>ate<br>method<br>for<br>standardi | 1.<br>Enumerate<br>the<br>different<br>methods of<br>standardizat<br>ion of<br>homoeopat                                  | Cogniti<br>ve | Level 1<br>Recall            | e to<br>know<br>Must<br>know | 1.Lecture<br>Demonstr<br>ations<br>2. Small<br>Group<br>Discussion<br>s/                                   | 1.Struct<br>ured<br>Oral<br>Examina<br>tion<br>2.<br>Tutorials  | LAC<br>SAC<br>MC<br>Viv | Q<br>CQ<br>′a |
|----------------------------------|---|--|-----------------------|--|---|---------------|------------------------------|------------------------------|--|---|-------------------------|---------------|
| Hom.<br>UG-<br>HP-<br>1.15.<br>2 | Classroom to Lab<br>transfer<br>Practice based<br>learning and<br>improvement |  | Knows                 | zation of<br>homoeop<br>athic<br>– medicine<br>s                                 | hic drugs<br>2. Explain<br>the<br>individual<br>method of<br>standardizat<br>ion of<br>homoeopat<br>hic drugs             | Cogniti<br>ve | Level 2<br>Understa<br>nding | Must<br>know                 | Peer<br>teaching<br>(Think-<br>Pair-<br>Share,<br>Jigsaw<br>Strategy)<br>3. Quiz<br>4. Student<br>Seminars | <ul> <li>3.</li> <li>Assignm<br/>ents</li> <li>4.</li> <li>MCQ's</li> <li>5. 2<br/>marks<br/>question</li> <li>6.SAQ's</li> <li>7.Projec</li> </ul> |                         |               |
| Hom.<br>UG-<br>HP-<br>1.15.<br>3 |   |  | Does                  |  | <ol> <li>Estimate<br/>the<br/>standard of<br/>homoeopat<br/>hic drugs<br/>before and<br/>after<br/>manufacturi</li> </ol> |               | Level 2<br>Control           | Desirable<br>to know         | - 5. Flipped<br>Classroom<br>6. Videos   | ts  |                         |               |

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|                                  |      | ng of<br>homoeopat<br>hic<br>medicines.  | Psycho<br>motor |                               |                      |  |   |                     |                    |
|----------------------------------|------|--|-----------------|-------------------------------|----------------------|--|---|---------------------|--------------------|
| Hom.<br>UG-<br>HP-<br>1.15.<br>4 | Does | 4.<br>Demonstrat<br>e the<br>microscopic<br>study of<br>triturations.  | Psycho<br>motor | Level 2<br>Control            | Desirable<br>to know | <ol> <li>Practical<br/>Demonstr<br/>ations</li> <li>Procedura</li> <li>Skills<br/>Teaching</li> </ol>          | <ol> <li>Spotting</li> <li>Assessment of research project output</li> </ol> | &<br>Pr<br>ca<br>Ex | acti<br>ami<br>tio |
| Hom.<br>UG-<br>HP-<br>1.15.<br>5 | Does | 5. Identify<br>the drug<br>specimen<br>applying the<br>different<br>methods of<br>standardizat<br>ion of drugs | Cogniti<br>ve   | Level 3<br>Problem<br>solving | Desirable<br>to know | <ul> <li>3.Experien</li> <li>tial</li> <li>Learning</li> <li>4.</li> <li>Research</li> <li>Projects</li> </ul> |   |                     |                    |
| Hom.<br>UG-<br>HP-<br>1.15.<br>6 | Does | 6. Analyze<br>the purity of<br>mother<br>tincture<br>with the<br>help of<br>HPTLC.                             | Psycho<br>motor | Level 2<br>Control            | Nice to<br>know      |  |   |                     |                    |

| Hom.                        | Does         | 7. Analyze                 | Psycho   |            | Nice         | to |                   | · · · · · · · · · · · · · · · · · · ·        |                  |
|-----------------------------|--------------|----------------------------|----------|------------|--------------|----|-------------------|--|------------------|
| UG-                         | DOES         | 7. Analyze<br>and identify | motor    |            | know         | 10 |                   |  |                  |
| HP-                         |              |                            | motor    |            | KIIUW        | ļ  |                   |  |                  |
| 1.15.                       |              | the purity of<br>mother    |          |            |              | I  |                   |  |                  |
| 7                           |              | substances                 |          |            |              | I  |                   |  |                  |
|                             |              | and                        |          |            |              | I  |                   |  |                  |
|                             |              | dilutions                  |          |            |              | I  |                   |  |                  |
|                             |              | with the                   |          |            |              | I  |                   |  |                  |
|                             |              | help of U.V.               |          |            |              | ļ  |                   |  |                  |
|                             |              | Spectroscop                |          |            |              | I  |                   |  |                  |
|                             |              | y.                         |          |            |              | I  |                   |  |                  |
|                             |              |                            |          |            | +            | '  | <u> </u>          | <u> </u> '                                   | $\left  \right $ |
| Hom.<br>UG-                 | Shows<br>how | 8.Abide by the rules of    | Affectiv | Level 3    | Nice<br>know | to | 1. Lecture        |  | Viva<br>Voce     |
| HP-                         | now          | standardizat               | е        | Internaliz | KIIOW        | I  | Demonstr<br>ation | m  | Vulle            |
| 1.15.                       |              | ion of                     |          | ing        |              | I  |                   | Assignm                                      |                  |
| 8                           |              | homoeopat                  |          |            |              | ļ  | 2.                | ents   |                  |
|                             |              | hic drugs                  |          |            |              | I  | Monograp          |  |                  |
|                             |              | laid down                  |          |            |              | I  | hs                |  |                  |
|                             |              | by HPL &                   |          |            |              | I  |                   |  |                  |
|                             |              | value the                  |          |            |              | I  |                   |  |                  |
|                             |              | importance                 |          |            |              | ļ  |                   |  |                  |
|                             |              | of genuine<br>medicine in  |          |            |              | I  |                   |  |                  |
|                             |              | homoeopat                  |          |            |              | ļ  |                   |  |                  |
|                             |              | hic practice.              |          |            |              | I  |                   |  |                  |
|                             |              |                            |          |            |              |    | l!                | <u>                                     </u> | L                |
| TOPIC: Quality Control in H | omoeopathy   |                            |          |            |              |    |                   |  |                  |
| 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 | Subject | Miller's | Specific | Specific | Bloom's | Guilbert | Must to | Teachin | Assessment |
|------------------------------|---------|---------|----------|----------|----------|---------|----------|---------|---------|------------|
|                              |         |         |          |          |          |         |          |         |         |            |
| Page <b>64</b> of <b>161</b> |         |         |          |          |          |         |          |         |         |            |

|                          | Competencies  | Area               | Level   | Competen   | Learning   | Domain        | 's Levels                    | know/   | g-   | /Evaluati  | on                      |               |
|--------------------------|---|--------------------|---|--|--|---------------|------------------------------|---|--|--|-------------------------|---------------|
|                          | Integration of  |                    | Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | cies   | Objectives   |               |                              | desirabl<br>e<br>to<br>know/Ni<br>ce to<br>know | Learning<br>Method   | Formati<br>ve  | Sur<br>ati              | mm<br>ve      |
| Hom.U<br>G-HP-<br>1.16.1 | Integration of<br>Knowledge<br>Synthesis and<br>application of<br>knowledge   | Quality<br>control | Knows   | Must be<br>able to<br>conduct<br>the<br>quality<br>control as<br>per the<br>appropria<br>te method | 1.<br>Enumerate<br>the different<br>methods of<br>quality<br>control.                    | Cognitiv<br>e | Level 1<br>Recall            | Must<br>Know                                    | 1.Lectur<br>e<br>Demons<br>trations<br>2. Small<br>Group<br>Discussi<br>ons/<br>Peer | <ol> <li>Struct<br/>ured</li> <li>Oral</li> <li>Examin<br/>ation</li> <li>2.</li> <li>Tutorial</li> <li>s</li> <li>3.</li> </ol> | LAC<br>SAC<br>Viv<br>Vo | Q<br>CQ<br>va |
| Hom.U<br>G-HP-<br>1.16.2 | Classroom to<br>Lab transfer<br>Practice based<br>learning and<br>improvement |                    | Knows   |  | 2. Explain<br>the<br>individual<br>method of<br>quality<br>control in<br>homoeopath<br>y |               | Level 2<br>Underst<br>anding | Must<br>Know                                    | teaching<br>(Think-<br>Pair-<br>Share,<br>Jigsaw<br>Strategy<br>)<br>3. Quiz<br>4.   | Assign<br>ments<br>4.<br>MCQ's<br>5. 2<br>marks<br>questio<br>n  |                         |               |

|        | 1 1 1 |                |         | I       | I        | <u>г</u> т |  |
|--------|-------|----------------|---------|---------|----------|------------|--|
| Hom.U  | Knows | 3.Explain the  | Level 2 | Must    | Student  | 6.SAQ's    |  |
| G-HP-  |       | functions of   | Underst | Know    | Seminar  | 7.Proje    |  |
| 1.16.3 |       | HPL in         | anding  |         | S        | cts        |  |
|        |       | quality        | anung   |         | 5.       | CLS        |  |
|        |       | control of     |         |         |          |            |  |
|        |       | Homoeopath     |         |         | Flipped  |            |  |
|        |       | ic medicines   |         |         | Classroo |            |  |
|        |       |                |         |         | m        |            |  |
|        |       |                |         |         | 6.       |            |  |
| Hom.U  | Does  | 4. Determine   | Level 3 | Nice to | Videos   |            |  |
| G-HP-  |       | the quality of |         | Know    |          |            |  |
| 1.16.4 |       | homoeopath     | Problem |         |          |            |  |
|        |       | ic medicine    | solving |         |          |            |  |
|        |       | based on the   |         |         |          |            |  |
|        |       | parameters     |         |         |          |            |  |
|        |       | of quality     |         |         |          |            |  |
|        |       | control        |         |         |          |            |  |
|        |       |                |         |         |          |            |  |
| Hom.U  | Does  | 5. Take part   | Level 3 | Nice to |          |            |  |
| G-HP-  |       | in the         | Problem | Know    |          |            |  |
| 1.16.5 |       | process of     | solving |         |          |            |  |
|        |       | quality        | SOIVINg |         |          |            |  |
|        |       | control at     |         |         |          |            |  |
|        |       | different      |         |         |          |            |  |
|        |       | stages of      |         |         |          |            |  |
|        |       | preparation    |         |         |          |            |  |
|        |       | of             |         |         |          |            |  |
|        |       | homoeopath     |         |         |          |            |  |
|        |       | ic medicines.  |         |         |          |            |  |
|        |       |                |         |         |          |            |  |
| Hom II         |              | 6.  | Davaha |         |         | 1   | 1 Spatt:   | Vivo                                  |
|----------------|--------------|---|--------|---------|---------|---|--|---------------------------------------|
| Hom.U<br>G-HP- | D            | ٥.<br>Demonstrate                               | Psycho | Level 2 |         | 1.  | 1.Spotti   |                                       |
|                | oes,         |   | motor  | Control | Nice to | Practical   | ng   | Voce                                  |
| 1.16.6         | shows<br>how | the<br>microscopic<br>study of<br>triturations. |        |         | Know    | Demons<br>trations<br>2.<br>Procedu<br>ral Skills<br>Teachin<br>g<br>3.Experi | 2.Asses<br>sment<br>of the<br>outcom<br>e of<br>researc<br>h<br>project<br>s | &<br>Praction<br>Exami<br>nation<br>s |
| Hom.U          |              | 7. Analyze                                      |        | Level 2 | Nice to | ential  | 5  |                                       |
| G-HP-          |              | the purity of                                   |        |         | know    | Learning  |  |                                       |
| 1.16.7         |              | mother  |        | Control |         | 4.  |  |                                       |
|                |              | tinctures                                       |        |         |         | Researc   |  |                                       |
|                |              | with the help                                   |        |         |         | h   |  |                                       |
|                |              | of HPTLC.                                       |        |         |         | Projects  |  |                                       |
| Hom.U          | Does         | 8. Analyze                                      |        |         | Nice to |   |  |                                       |
| G-HP-          |              | and identify                                    |        |         | know    |   |  |                                       |
| 1.16.8         |              | the purity of                                   |        |         |         |   |  |                                       |
|                |              | mother  |        |         |         |   |  |                                       |
|                |              | substances                                      |        |         |         |   |  |                                       |
|                |              | and dilutions                                   |        |         |         |   |  |                                       |
|                |              | with the help                                   |        |         |         |   |  |                                       |
|                |              | of U.V.   |        |         |         |   |  |                                       |
|                |              | Spectroscop                                     |        |         |         |   |  |                                       |
|                |              | у.  |        |         |         |   |  |                                       |

| HOI<br>G-H<br>1.1 |                        |              |                                       | Does                                     | th<br>qu                  | e rules of<br>ality  | Affectiv<br>e     | Level 3<br>Internali<br>zing | Nice<br>know | to | 1.<br>Lecture<br>Demons                         | SAQ/LA<br>Q<br>Project | al<br>Exa | acti<br>am |
|-------------------|------------------------|--------------|---------------------------------------|--|---------------------------|--|-------------------|------------------------------|--------------|----|---|------------------------|-----------|------------|
|                   |                        |              |                                       |  | do<br>&<br>im<br>of<br>ho | ntrol laid<br>own by HPL<br>value the<br>portance<br>genuine<br>edicine in<br>omoeopath<br>practice. |                   |                              |              |    | tration<br>2.<br>Practical<br>Demons<br>tration | s<br>Assign<br>ments   | na        | tio        |
| т                 | <b>OPIC:</b> Ideal Lab | oratory      |                                       |  |                           |  |                   |                              |              |    |   |                        |           |            |
| L                 |                        | e end of the | e topic, I-BHMS<br>equisites of an Id |  |                           |  |                   |                              |              |    |   |                        |           |            |
| L(                | At the                 | e end of the |                                       | deal Laborator<br>Specific<br>Competenci |                           | Bloom's<br>Domain  | Guilber<br>Levels | t's Mus<br>knov              |              | Le | eaching<br>earning<br>Aethod                    | - Assessi<br>/Evalua   |           |            |

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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<br>Competenc   | Subject<br>Area                | Miller's<br>Level                            | Specific<br>Competenc   | Specific<br>Learning               | Bloom's<br>Domain | Guilbert's<br>Levels         | Must to<br>know/                           | Teaching -<br>Learning   | Assessr<br>/Evalua  |                                   |
|----------------------------------|--|--------------------------------|--|---|------------------------------------|-------------------|------------------------------|--|--|---|-----------------------------------|
|                                  | ies  |                                | Does/<br>Shows<br>how/<br>Knows<br>how/ Know | ies   | Objectives                         |                   |                              | desirable<br>to<br>know/Nice<br>to<br>know | Method   | Forma<br>tive   | Sum<br>mat<br>ve                  |
| Hom.<br>UG-<br>HP-<br>1.18.<br>1 | Integration<br>of<br>Knowledge<br>Synthesis<br>and<br>Application<br>of<br>knowledge | Industri<br>al<br>Pharmac<br>y | Knows  | Must be<br>able to<br>correlate<br>provisions<br>related to<br>Schedule<br>M1 | details the<br>provisions<br>under | Cognitive         | Level 2<br>Understan<br>ding | Must Know                                  | <ul> <li>1.Lecture</li> <li>Demonstrations</li> <li>2. Small</li> <li>Group</li> <li>Discussions</li> <li>/</li> <li>Peer</li> <li>teaching</li> <li>(Think-Pair-Share,</li> <li>Jigsaw</li> </ul> | <ol> <li>Stru<br/>ctured<br/>Oral<br/>Exami<br/>nation</li> <li>Tutori<br/>als</li> <li>Assign<br/>ments</li> </ol> | LAQ<br>SAQ<br>MCC<br>Viva<br>Voce |

|            |  |  |  | Strat | egy)  | 4.     |  |
|------------|--|--|--|-------|-------|--------|--|
| Problem    |  |  |  | 3.    | Field | MCQ's  |  |
| formulatio |  |  |  | Visit |       | 5. 2   |  |
| Classroom  |  |  |  |       |       | marks  |  |
| to lab     |  |  |  |       |       | questi |  |
| transfer   |  |  |  |       |       | on     |  |
|            |  |  |  |       |       | 6.SAQ' |  |
|            |  |  |  |       |       | s and  |  |
|            |  |  |  |       |       | LAQ's  |  |
|            |  |  |  |       |       |        |  |

**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. | Generic    | Subject | Miller's Level | Specific    | Specific   | Bloom's | Guilbert's | Must to | Teaching - | Assess  |    |    |
|-----|------------|---------|----------------|-------------|------------|---------|------------|---------|------------|---------|----|----|
| No  | Competenci | Area    | Does/ Shows    | Competencie | Learning   | Domain  | Levels     | know/   | Learning   | ment    |    |    |
|     | es         |         | how/ Knows     | S           | Objectives | Domain  |            | know/   | Method     | /Evalua |    |    |
|     |            |         | how/ Know      |             |            |         |            | desirab |            | tion    |    |    |
|     |            |         |                |             |            |         |            | le      |            |         |    |    |
|     |            |         |                |             |            |         |            |         |            | Formati | Su | mm |
|     |            |         |                |             |            |         |            | to      |            | ve      | at | ve |
|     |            |         |                |             |            |         |            | know/   |            |         |    |    |
|     |            |         |                |             |            |         |            | Nice to |            |         |    |    |
|     |            |         |                |             |            |         |            |         |            |         |    |    |

|   |  |          |                         |  |   |           |  | know                         |  |   |    |         |
|---|--|----------|-------------------------|--|---|-----------|--|------------------------------|--|---|----|---------|
| Hom<br>.UG-<br>HP-<br>1.19.<br>1<br>Hom<br>.UG-<br>HP-<br>1.19.<br>2<br>Hom | Integration<br>of<br>Knowledge<br>Synthesis<br>and<br>Application<br>of<br>knowledge<br>Problem<br>formulation | Vehicles | Knows<br>Knows<br>Knows | Selecting a<br>particular<br>solid vehicle<br>for<br>preparation<br>or dispensing<br>of<br>homoeopath<br>ic medicines. | Vehicle<br>2.Classify<br>vehicles in<br>detail<br>3. List all the                       | Cognitive | Level 1<br>Recall<br>Level 2<br>Understan<br>ding<br>Level 1 | Must<br>Know<br>Must<br>Know | 1.Lecture<br>Demonstrat<br>ions<br>2. Small<br>Group<br>Discussions<br>/<br>Peer<br>teaching<br>(Think-Pair-<br>Share,<br>Jigsaw<br>Strategy)<br>3. Quiz | 1.Struct<br>ured<br>Oral<br>Examin<br>ation<br>2.<br>Tutorial<br>s<br>3.<br>Assign<br>ments<br>4.<br>MCQ's<br>5. 2<br>marks | Vi | Q<br>CQ |
| .UG-<br>HP-<br>1.19.<br>3   | Classroom<br>to lab<br>transfer  |          |                         |  | solid vehicles<br>used in<br>homoeopath<br>y.   |           | Recall   | Know                         | <ul> <li>4. Student</li> <li>Seminars</li> <li>5. Guest</li> <li>Lecture</li> <li>6. Problem</li> <li>based</li> </ul>                                   | marks<br>questio<br>n<br>6.SAQ's<br>and<br>LAQ's  |    |         |
| Hom<br>.UG-<br>HP-<br>1.19.<br>4  |  |          | Knows                   |  | 4. Explain<br>the<br>preparation,<br>properties<br>and uses of<br>all solid<br>vehicles |           | Level 2<br>Understan<br>ding                                 | Must<br>Know                 | learning   |   |    |         |

| llom                             | Deer      | E Coloct the  |                                   | Must            |   |                   |                                  |
|----------------------------------|-----------|---|-----------------------------------|-----------------|---|-------------------|----------------------------------|
| Hom<br>.UG-<br>HP-<br>1.19.<br>5 | Does      | 5. Select the<br>appropriate<br>solid vehicle<br>for<br>dispensing of<br>homoeopath<br>ic medicines,<br>potentisation<br>etc. | Level 3<br>Problem<br>Solving     | Must<br>Know    |   |                   |                                  |
| Hom<br>.UG-<br>HP-<br>1.19.<br>6 | Does      | 6. Identify Cognit<br>the given<br>solid vehicle.   | ive Level 3<br>Problem<br>solving | Must<br>Know    | <ol> <li>Practical<br/>Demonstrat<br/>ion</li> <li>Procedura</li> <li>Skills</li> <li>Teaching</li> <li>Problem</li> <li>Based</li> <li>Learning</li> </ol> | 1.DOPS<br>2. OSPE | Practi<br>cal<br>Exami<br>nation |
| Hom<br>.UG-<br>HP-<br>1.19.<br>7 | Show How  | 7. Estimate Psycho<br>the purity of otor<br>the given<br>solid vehicle.   | om Level 2<br>Control             | Must<br>know    | 4.<br>Experiential<br>learning  |                   |                                  |
| Hom<br>.UG-<br>HP-<br>1.19.<br>8 | Shows how | 8.Demonstra Affecti<br>te care and<br>commitment<br>in preparing<br>& dispensing<br>of<br>homoeopath                          | ve Level 1<br>Receiving           | Nice to<br>know | <ol> <li>1.Lecture</li> <li>Demonstrat</li> <li>ion</li> <li>2.Procedura</li> <li>I Skills</li> <li>Teaching</li> </ol>                                     | 1.DOPS            | Practi<br>cal<br>Exami<br>nation |

|  |  | ic medicine |  | 3. Problem                        |  |  |
|--|--|-------------|--|-----------------------------------|--|--|
|  |  | with        |  | Based                             |  |  |
|  |  | accuracy    |  | Learning                          |  |  |
|  |  |             |  | 4.<br>Experiential<br>learning    |  |  |
|  |  |             |  | 5. Practical<br>Demonstrat<br>ion |  |  |
|  |  |             |  |                                   |  |  |

**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<br>Competenci | Subject<br>Area | Miller's<br>Level                       | Specific<br>Competen | Specific<br>Learning | Bloom'<br>s   | Guilbert's<br>Levels | Must to<br>know/                    | Teaching -<br>Learning  | Assessme<br>/Evaluation |              |    |
|----------------|-----------------------|-----------------|---|----------------------|----------------------|---------------|----------------------|-------------------------------------|-------------------------|-------------------------|--------------|----|
|                | es                    |                 | Does/<br>Shows<br>how/<br>Knows<br>how/ | cies                 | Objective            | Domai<br>n    |                      | desirable<br>to<br>know/Nic<br>e to | Method                  | Formati<br>ve           | Sumr<br>tive | na |
|                |                       |                 | Know                                    |                      |                      |               |                      | know                                |                         |                         |              |    |
| Hom.U<br>G-HP- | Integration<br>of     | Vehicles        | Knows                                   | Selecting<br>a       | 1.Define<br>Vehicle  | Cogniti<br>ve | Level 1              | Must<br>Know                        | 1.Lecture<br>Demonstrat | 1.Struct<br>ured        | LAQ<br>SAQ   |    |

| 1.20.1                   | Knowledge                             |       | particular                             |  | Recall                        |              | ions   | Oral  | MCC          |
|--------------------------|---------------------------------------|-------|--|--|-------------------------------|--------------|--|---|--------------|
|                          | Ū.                                    |       | liquid<br>vehicle for                  |  |                               |              | 2. Small   | Examin<br>ation   | Viva<br>Voce |
| Hom.U<br>G-HP-<br>1.20.2 | Synthesis<br>and<br>Application<br>of | Knows | preparatio<br>n or<br>dispensing<br>of | 2.Classify<br>vehicles in<br>detail  | Level 2<br>Understan<br>ding  | Must<br>Know | Group<br>Discussions/<br>Peer<br>teaching  | 2.<br>Tutorial<br>s   |              |
| Hom.U<br>G-HP-<br>1.20.3 | knowledge<br>Problem<br>formulation   | Knows | homoeop<br>athic<br>medicines          | <ol> <li>List all<br/>the liquid<br/>vehicles<br/>used in<br/>homoeop<br/>athy.</li> </ol>   | Level 1<br>Recall             | Must<br>Know | <ul> <li>(Think-Pair-Share,</li> <li>Jigsaw</li> <li>Strategy)</li> <li>3. Quiz</li> <li>4. Student</li> </ul>                           | <ul> <li>3.</li> <li>Assign ments</li> <li>4.</li> <li>MCQ's</li> <li>5. 2</li> </ul> |              |
| Hom.U<br>G-HP-<br>1.20.4 | Classroom<br>to lab<br>transfer       | Knows |  | <ul> <li>4. Explain</li> <li>the</li> <li>preparatio</li> <li>n,</li> <li>properties</li> <li>and uses</li> <li>of all</li> <li>liquid</li> <li>vehicles.</li> </ul> | Level 2<br>Understan<br>ding  | Must<br>Know | <ul> <li>4. Student</li> <li>Seminars</li> <li>5. Guest</li> <li>Lecture</li> <li>6. Problem</li> <li>based</li> <li>learning</li> </ul> | 5. 2<br>marks<br>questio<br>n<br>6.SAQ's<br>and<br>LAQ's                              |              |
| Hom.U<br>G-HP-<br>1.20.5 |                                       | Does  |  | 5. Select<br>the<br>appropriat<br>e liquid<br>vehicle for<br>dispensing<br>of<br>homoeop   | Level 3<br>Problem<br>solving | Must<br>Know |  |   |              |

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|                          |              |   |                 |                              |                 |  |                   | ļ                             | 1   |
|--------------------------|--------------|---|-----------------|------------------------------|-----------------|--|-------------------|-------------------------------|-----|
|                          |              | athic<br>medicines<br>,<br>potentisat<br>ion etc. |                 |                              |                 |  |                   |                               |     |
| Hom.U<br>G-HP-<br>1.20.6 | Does         | -   | Cogniti<br>ve   | Level 2<br>Understan<br>ding | Must<br>Know    | 1.Practical<br>Demonstrat<br>ion<br>2.Procedura<br>I Skills<br>Teaching<br>3. Problem  | 1.DOPS<br>2. OSPE | Practi<br>al<br>Exam<br>ation | nin |
| Hom.U<br>G-HP-<br>1.20.7 | Shows<br>how |   | Psycho<br>motor | Level 2<br>Control           | Must<br>Know    | <ul> <li>Based</li> <li>Learning</li> <li>4.</li> <li>Experiential</li> <li>learning</li> </ul>  |                   |                               |     |
| Hom.U<br>G-HP-<br>1.20.8 | Shows<br>how |   | Affecti<br>ve   | Level 1<br>Receiving         | Nice to<br>Know | <ul> <li>1.Lecture<br/>Demonstrat<br/>ion</li> <li>2.Procedura</li> <li>I Skills<br/>Teaching</li> <li>3. Problem<br/>Based</li> </ul> | 1.DOPS            | Practi<br>al<br>Exam<br>ation | nin |

| homoeop<br>athic             | Learning                          |
|------------------------------|-----------------------------------|
| medicine<br>with<br>accuracy | 4.<br>Experiential<br>learning    |
|                              | 5. Practical<br>Demonstrat<br>ion |

#### **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.                         | Generi                         | Subje                   | Miller   | Specific                                   | Specific   | Learning | Bloom's   | Guilbert's        | Must to  | Teaching -                      | Assessment /E                       | Evaluat            | ion      |
|-----------------------------|--------------------------------|-------------------------|--|--|------------|----------|-----------|-------------------|--|---------------------------------|-------------------------------------|--------------------|----------|
| No                          | c<br>Comp<br>etenci<br>es      | ct<br>Area              | 's<br>Level<br>Does/<br>Show<br>s<br>how/<br>Know<br>s<br>how/<br>Know | Competen<br>cies                           | Objective  | S        | Domain    | Levels            | know/<br>desirable<br>to<br>know/Ni<br>ce to<br>know | Learning<br>Method              | Formative                           | Sum                | mati     |
| Hom<br>.UG-<br>HP-<br>1.21. | Integr<br>ation<br>of<br>Knowl | Semis<br>olid<br>Vehicl | Know<br>s  | Selecting<br>a<br>particular<br>semi-solid | 1.Define \ | /ehicle  | Cognitive | Level 1<br>Recall | Must<br>know   | 1.Lecture<br>Demonstrati<br>ons | 1.Structured<br>Oral<br>Examination | LAQ<br>MCC<br>Viva | SAQ<br>Į |

| 1     | edge        | es |       | vehicle for         |                       |            |       | 2. Small      | 2. Tutorials      | Voce |
|-------|-------------|----|-------|---------------------|-----------------------|------------|-------|---------------|-------------------|------|
|       |             |    |       | preparatio          |                       |            |       | Group         | 3.                |      |
|       |             |    |       | n or                |                       |            |       | Discussions/  | S.<br>Assignments |      |
|       | Synthe      |    |       | dispensing          |                       |            |       | Peer teaching |                   |      |
| Hom   | sis and     |    | Know  | of                  | 2.Classify vehicles   | Level 2    | Must  | (Think-Pair-  | 4. MCQ's          |      |
| .UG-  | Applic      |    | s how | homoeop             |                       |            | Know  | Share, Jigsaw | 5. 2 marks        |      |
| HP-   | ation<br>of |    |       | athic<br>medicines. |                       | Understand |       | Strategy)     | question          |      |
| 1.21. | knowl       |    |       | medicines.          |                       | ing        |       | 3. Quiz       | 6.SAQ's and       |      |
| 2     | edge        |    |       |                     |                       |            |       |               | LAQ's             |      |
| Hom   | cuBc        |    | Know  | -                   | 3. List all the semi- | Level 1    | Must  | 4. Student    |                   |      |
| .UG-  |             |    | s     |                     | solid vehicles used   |            | Know  | Seminars      |                   |      |
| HP-   |             |    |       |                     | in homoeopathy        | Recall     | -     | 5. Guest      |                   |      |
| 1.21. | Proble      |    |       |                     |                       |            |       | Lecture       |                   |      |
| 3     | m           |    |       |                     |                       |            |       | 6. Problem    |                   |      |
| Hom   | formul      |    | Know  | -                   | 4. Explain the        | Level 2    | Must  | based         |                   |      |
| .UG-  | ation       |    | S     |                     | preparation,          | Leverz     | Know  | learning      |                   |      |
| HP-   |             |    | 5     |                     | properties and uses   | Understand | KIIOW | 5             |                   |      |
| 1.21. |             |    |       |                     | of all semi-solid     | ing        |       |               |                   |      |
| 4     | Classr      |    |       |                     | vehicles              |            |       |               |                   |      |
|       | oom         |    |       |                     |                       |            |       |               |                   |      |
|       | to lab      |    |       |                     |                       |            |       |               |                   |      |
|       | transf      |    |       |                     |                       |            |       |               |                   |      |
| Hom   | er          |    | Does  | -                   | 5. Select the         | Level 3    | Must  | _             |                   |      |
| .UG-  |             |    | 2000  |                     | appropriate semi-     |            | Know  |               |                   |      |
| HP-   |             |    |       |                     | solid vehicle for     | Problem    |       |               |                   |      |
| 1.21. |             |    |       |                     | dispensing of         | solving    |       |               |                   |      |
| 5     |             |    |       |                     | homoeopathic          |            |       |               |                   |      |
|       |             |    |       |                     | medicines,            |            |       |               |                   |      |
|       |             |    |       |                     | preparation of        |            |       |               |                   |      |

|                                  |               | external applications etc.  |                 |                               |                 |   |                   |                              |
|----------------------------------|---------------|---|-----------------|-------------------------------|-----------------|---|-------------------|------------------------------|
| Hom<br>.UG-<br>HP-<br>1.21.<br>6 | Does          | 6. Identify the<br>given semi-solid<br>vehicle.   | Cognitive       | Level 3<br>Problem<br>solving | Must<br>know    | <ol> <li>Practical</li> <li>Demonstrati</li> <li>on</li> <li>Procedural</li> <li>Skills</li> <li>Teaching</li> </ol>  | 1.DOPS<br>2. OSPE | Practical<br>Examinat<br>ion |
| Hom<br>.UG-<br>HP-<br>1.21.<br>7 | Show<br>s how | 7. Estimate the purity of the given semisolid vehicle.  | Psychom<br>otor | Level 2<br>Control            | Must<br>know    | <ul> <li>3. Problem</li> <li>Based</li> <li>Learning</li> <li>4.</li> <li>Experiential</li> <li>learning</li> </ul>   |                   |                              |
| Hom<br>.UG-<br>HP-<br>1.21.<br>8 | Show<br>s how | 8.Demonstrate<br>care and<br>commitment in<br>preparing &<br>dispensing of<br>homoeopathic<br>medicine with<br>accuracy | Affective       | Level 1<br>Receiving          | Nice to<br>know | <ol> <li>1.Lecture         <ul> <li>Demonstrati</li> <li>On</li> </ul> </li> <li>2.Procedural         <ul> <li>Skills</li> <li>Teaching</li> <li>Problem</li> <li>Based</li> <li>Learning</li> <li>Experiential</li></ul></li></ol> | 1.DOPS            | Practical<br>Examinat<br>ion |

|                                  |   |                              |  |  |   |                   |                   |   | 5. Practi<br>Demonstra<br>on   |   |                                   |               |                                    |
|----------------------------------|---|------------------------------|--|--|---|-------------------|-------------------|---|--|---|-----------------------------------|---------------|------------------------------------|
|                                  |   | nes (LO):                    |  | udent mus <sup>.</sup>   | t be able <sup>.</sup>                          | to prescribe      | an externa        | ıl applicati                                    | on as per the sco  | ope and limita  | ations of                         |               |                                    |
| Sr.<br>No                        | Generic<br>Competenc  | Subject<br>Area              | Miller's<br>Level                            | Specific<br>Compet   | Specific<br>Learnin                             | Bloom'sD<br>omain | Guilber<br>t's    | Must to<br>know/                                | Teaching -<br>Learning   | Assessment<br>/Evaluation   |                                   | In<br>tic     | tegra<br>on                        |
|                                  | ies   |                              | Does/<br>Shows<br>how/<br>Knows<br>how/ Know | encies   | g<br>Objecti<br>ves                             |                   | levels            | desirabl<br>e<br>to<br>know/<br>Nice to<br>know | Method   | Formative   | Summ<br>ative                     |               |                                    |
| Hom<br>.UG-<br>HP-<br>1.22.<br>1 | Integration<br>of<br>Knowledge<br>Synthesis<br>and<br>Application | External<br>Applicatio<br>ns | Knows  | Prescri<br>bing an<br>externa<br>I<br>applica<br>tion as<br>per its<br>scope | 1.Defin<br>e<br>Externa<br>l<br>Applica<br>tion | Cognitive         | Level 1<br>Recall | Must<br>know                                    | <ol> <li>1.Lecture</li> <li>Demonstratio</li> <li>ns</li> <li>Small</li> <li>Group</li> <li>Discussions/</li> <li>Peer teaching</li> </ol> | <ol> <li>Structure</li> <li>Oral</li> <li>Examinatio</li> <li>n</li> <li>Tutorials</li> <li>3.</li> <li>Assignment</li> </ol> | LAQ<br>SAQ<br>MCQ<br>Viva<br>Voce | ta<br>Or<br>n | orizo<br>wit<br>ganc<br>c<br>edici |

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|       | of         |   |       | and      |          |         |      | (Think-Pair-  | S          |  |
|-------|------------|---|-------|----------|----------|---------|------|---------------|------------|--|
|       | knowledge  |   |       | limitati |          |         |      | Share, Jigsaw | 4. MCQ's   |  |
|       |            |   |       | ons      |          |         |      | Strategy)     |            |  |
|       |            |   |       |          |          |         |      | 3. Quiz       | 5. 2 marks |  |
|       |            |   |       |          |          |         |      |               | question   |  |
|       | Problem    |   |       |          |          |         |      | 4. Student    | 6.SAQ's    |  |
|       | formulatio |   |       |          |          |         |      | Seminars      | and LAQ's  |  |
|       | n          |   |       |          |          |         |      | 5. Guest      |            |  |
|       |            |   |       |          |          |         |      | Lecture       |            |  |
|       |            |   |       |          |          |         |      | 6. Problem    |            |  |
| Hom   | Classroom  |   | Knows |          | 2. List  | Level 1 | Must | based         |            |  |
| .UG-  | to lab     |   |       |          | all the  | Recall  | know | learning      |            |  |
| HP-   | transfer   |   |       |          | externa  | needin  |      |               |            |  |
| 1.22. |            |   |       |          | I<br>    |         |      | 7. Flipped    |            |  |
| 2     |            |   |       |          | applica  |         |      | Classroom     |            |  |
|       |            |   |       |          | tions    |         |      |               |            |  |
|       |            |   |       |          | used in  |         |      |               |            |  |
|       |            |   |       |          | homoe    |         |      |               |            |  |
|       |            |   |       |          | opathy   |         |      |               |            |  |
|       |            |   |       |          |          |         |      |               |            |  |
| Hom   |            | _ | Knows |          | 3.       | Level 2 | Must |               |            |  |
| .UG-  |            |   |       |          | Explain  |         | know |               |            |  |
| HP-   |            |   |       |          | the      | Underst |      |               |            |  |
| 1.22. |            |   |       |          | prepara  | anding  |      |               |            |  |
| 3     |            |   |       |          | tion     |         |      |               |            |  |
|       |            |   |       |          | &uses    |         |      |               |            |  |
|       |            |   |       |          | of       |         |      |               |            |  |
|       |            |   |       |          | specific |         |      |               |            |  |
|       |            |   |       |          | homoe    |         |      |               |            |  |

|                                  |       | opathic<br>externa<br>l<br>applica<br>tions  |  |  |  |
|----------------------------------|-------|--|--|--|--|
| Hom<br>.UG-<br>HP-<br>1.22.<br>4 | Knows | 4.<br>Explain<br>the<br>scope<br>&<br>limitati<br>ons of<br>externa<br>l<br>applica<br>tions in<br>homoe<br>opathy | Level 2 Must<br>Underst<br>anding      |  |  |
| Hom<br>.UG-<br>HP-<br>1.22.<br>5 | Does  | 5.<br>Select<br>the<br>approp<br>riate<br>vehicle<br>for   | Level 3 Must<br>Proble<br>m<br>solving |  |  |

|                                  |  |                   | <br>  |                 |                                   |                          |   |                   |                                  |  |
|----------------------------------|--|-------------------|---|-----------------|-----------------------------------|--------------------------|---|-------------------|----------------------------------|--|
| Hom<br>.UG-<br>HP-<br>1.22.<br>6 |  | Does              | prepara<br>tion of<br>externa<br>l<br>applica<br>tion.<br>6.<br>Select<br>approp<br>riate<br>externa<br>l<br>applica<br>tion as<br>per the<br>case. |                 | Level 3<br>Proble<br>m<br>solving | Desirab<br>le to<br>Know |   |                   |                                  |  |
| Hom<br>.UG-<br>HP.1<br>.22.7     |  | Does<br>Shows how | 7.Demo<br>nstrate<br>the<br>prepara<br>tion of<br>specific<br>externa<br>I<br>applica<br>tions  | Psychomo<br>tor | Level 2<br>Control                | Must<br>know             | <ol> <li>1.Practical<br/>Demonstratio</li> <li>n</li> <li>2.Procedural<br/>Skills</li> <li>Teaching</li> <li>3. Problem</li> <li>Based</li> <li>Learning</li> <li>4.</li> <li>Experiential</li> <li>learning</li> </ol> | 1.DOPS<br>2. OSPE | Practi<br>cal<br>Exami<br>nation |  |

| Hom        | Shows how | 8.Demo   | Affective | Level 1 | Nice to | 1.Lecture  | 1.DOPS | Practi |  |
|------------|-----------|--|-----------|---------|---------|--|--------|--------|--|
| .UG-       | Does      | nstrate  |           | Receivi | know    | Demonstratio   |        | cal    |  |
| HP-        | DOES      | care   |           | ng      |         | n  |        | Exami  |  |
| 1.22.<br>8 |           | and<br>commit<br>ment in<br>prepari<br>ng &<br>dispens<br>ing of |           |         |         | <ul><li>2.Procedural</li><li>Skills</li><li>Teaching</li><li>3. Problem</li><li>Based</li><li>Learning</li></ul> |        | nation |  |
|            |           | externa<br>I<br>applica<br>tion<br>with<br>accurac<br>Y          |           |         |         | <ol> <li>Experiential<br/>learning</li> <li>Practical<br/>Demonstratio<br/>n</li> </ol>                          |        |        |  |

# **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.                              | Generic   | Subj              | Miller's   | Specific   | Specific   | Bloom's       |                      | Must to  | Teaching - Learning  | Assessment /  | 'Evaluati          | on          |
|----------------------------------|---|-------------------|--|--|--|---------------|----------------------|--|--|---|--------------------|-------------|
| No                               | Competen<br>cies  | ect<br>Are<br>a   | Level<br>Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | Competen<br>cies   | Learning<br>Objectives   | Domain        | rt's<br>levels       | know/<br>desirabl<br>e<br>to<br>know/N<br>ice to<br>know | Method   | Formative   | Summa              | ative       |
| Hom<br>.UG-<br>HP-<br>1.23.<br>1 | Problem<br>solving<br>Problem<br>formulatio<br>n<br>Integratio<br>n of<br>Knowledg<br>e | Met<br>rolo<br>gy | Knows  | Must be<br>able to<br>select<br>appropriat<br>e scale of<br>measurem<br>ent in the<br>homoeopa<br>thic<br>pharmace<br>utical<br>laboratory | 1.<br>Enumerate<br>the<br>different<br>scales of<br>measureme<br>nt for<br>preparation<br>of<br>homoeopat<br>hic drugs | Cognitiv<br>e | Level<br>1<br>Recall | Must<br>Know   | <ol> <li>1.Lecture<br/>Demonstrations</li> <li>2. Small Group<br/>Discussions/</li> <li>Peer teaching<br/>(Think-Pair-Share,<br/>Jigsaw Strategy)</li> <li>3. Quiz</li> <li>4. Problem Based<br/>learning</li> <li>5. Flipped classroom</li> </ol> | <ol> <li>Structure</li> <li>d Oral</li> <li>Examinatio</li> <li>n</li> <li>Tutorials</li> <li>3.</li> <li>Assignment</li> <li>s</li> <li>MCQ's</li> <li>5. 2 marks</li> <li>question</li> </ol> | LAQ<br>MCQ<br>Voce | SAC<br>Viva |

|                                  | Synthesis<br>and<br>applicatio<br>n of<br>knowledg<br>e |       |   |   | 6.SAQ's |
|----------------------------------|---|-------|---|---|---------|
| Hom<br>.UG-<br>HP-<br>1.23.<br>2 | Classroom<br>to lab<br>tyransfer                        | Knows | 2. Explain<br>the<br>different<br>scales of<br>measureme<br>nt for<br>preparation<br>of<br>homoeopat<br>hic drugs | Level Must<br>2 Know<br>Under<br>standi<br>ng |         |
| Hom<br>.UG-<br>HP-<br>1.23.<br>3 |   | Does  | <ol> <li>Select<br/>appropriate<br/>scale of<br/>measureme<br/>nt for</li> </ol>                                  | Level 3<br>Proble                             |         |

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|                                  |              | preparation<br>of<br>homoeopat<br>hic drugs.  | m<br>solvin<br>g                          |              |   |                    |  |
|----------------------------------|--------------|---|---|--------------|---|--------------------|--|
| Hom<br>.UG-<br>HP-<br>1.23.<br>4 | Does         | 4. Measure Psyc<br>the given otor<br>quantity of<br>the drug<br>substance<br>and vehicle<br>for<br>preparation<br>of<br>homoeopat<br>hic<br>medicines | ychom Level<br>or 3<br>Auto<br>matis<br>m | Must<br>know | <ol> <li>Practical<br/>Demonstrations</li> <li>Experiential<br/>Learning</li> </ol> | 1. DOPS<br>2. OSPE | Viva Voce a<br>Practical<br>Examinatio<br>ns |
| Hom<br>.UG-<br>HP-<br>1.23.<br>5 | Shows<br>how | 5.Show care Affe<br>while<br>measuring<br>the drugs<br>for<br>preparation<br>of<br>homoeopat<br>hic<br>medicines                                      | fective Level<br>2<br>Respo<br>nd         | Must<br>know | <ol> <li>Lecture<br/>Demonstration</li> <li>Practical<br/>Demonstration</li> </ol>  | 1.DOPS<br>2.OSPE   | Theory<br>Practical<br>Examinatio<br>n       |

**TOPIC:** Potentisation& Scales of Potentisation

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

1. Prepare Homoeopathic Medicine according to the scale.

| Sr.<br>No                        | Generic<br>Compe  | Subj<br>ect           | Miller's<br>Level                               | Specific<br>Compet   | Specific<br>Learning   | Bloom's<br>Domain | Guilbert's<br>level          | Must to<br>know/  | Teaching -<br>Learning  | Assessment<br>/Evaluation   |                                | Integra                     | ition |
|----------------------------------|---|-----------------------|---|--|--|-------------------|------------------------------|---|---|---|--------------------------------|-----------------------------|-------|
|                                  | - tencies   | Area                  | Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | encies   | Objectives   |                   |                              | know/<br>desirab<br>le<br>toknow<br>/Nice<br>to<br>know | Method  | Formative   | Summati<br>ve                  |                             |       |
| Hom<br>.UG-<br>HP-<br>1.24.<br>1 | Proble<br>m<br>solutio<br>n<br>Integra<br>tion of<br>knowle<br>dge<br>Practic<br>e based<br>learnin | Pote<br>ntisa<br>tion | Knows   | Prepare<br>Homoe<br>opathic<br>Medici<br>ne<br>accordi<br>ng to<br>the<br>scale. | <ol> <li>Explain<br/>the<br/>different<br/>scales of<br/>potentisati<br/>on</li> </ol> | Cogniti<br>ve     | Level 2<br>Understa<br>nding | Must<br>Know  | <ol> <li>1.Lecture         Demonstration      </li> <li>2.Practical         Demostrations      </li> <li>3. Small Group         Discussions/Pe          er teaching          </li> <li>(Think-Pair-          Share, Jigsaw          </li> <li>4. Problem         based learning         </li> </ol> | <ol> <li>Structur</li> <li>ed Oral</li> <li>Examinati</li> <li>on</li> <li>2.</li> <li>Tutorials</li> <li>3.</li> <li>Assignmen</li> <li>ts</li> <li>4. SAQ's</li> <li>and LAQ's</li> <li>5. MCQ's</li> </ol> | LAQ SAQ<br>MCQ<br>Viva<br>Voce | Organc<br>Medici<br>Horizor | ne-   |

| Hom                              | g and  | Knows        | 2.Explain  | Cogniti         | Level 2                       | Must         | 5. Student  | 1.Structur  |                              |  |
|----------------------------------|--|--------------|--|-----------------|-------------------------------|--------------|---|---|------------------------------|--|
| .UG-<br>HP-<br>1.24.<br>2        | improv<br>ement<br>Synthes<br>is and<br>Applica<br>tion of<br>knowle<br>dge<br>Classro |              | the two<br>methods<br>potentisati<br>on  | ve              | Understa<br>nding             | Know         | Seminars<br>6.Study Tour<br>(Field Visit)<br>7. Integrated<br>Teaching with<br>Organon of<br>Medicine | ed Oral<br>Examinati<br>on<br>2.<br>Tutorials<br>3.<br>Assignmen<br>ts<br>4. SAQ's<br>and LAQ's<br>5. MCQ's |                              |  |
| Hom<br>.UG-<br>HP-<br>1.24.<br>3 | om to<br>lab<br>Practic<br>al skills   | Does         | 3. Select<br>the<br>appropriate<br>vehicles<br>used for<br>potentisati<br>on.          | Cogniti<br>ve   | Level 3<br>Problem<br>solving | Must<br>Know |   | DOPS<br>Spotting<br>OSPE<br>Assessme<br>nt of PBL   |                              |  |
| Hom<br>.UG-<br>HP-<br>1.24.<br>4 |  | Shows<br>How | 4.<br>Demonstrat<br>e<br>trituration<br>according<br>to the scale<br>of<br>potentisati | Psycho<br>motor | Level 3<br>AUTOMA<br>TISM     | Must<br>Know | <ol> <li>Practical<br/>Demonstration</li> <li>Procedural<br/>Skills Teaching</li> </ol>               | 1.DOPS<br>2. OSPE   | Practical<br>Examinat<br>ion |  |

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| Hom                              | Shows                        | on.<br>5.   | Psycho          | Level 3                   | Must            | 1. Practical  | 1.DOPS            |                              |  |
|----------------------------------|------------------------------|---|-----------------|---------------------------|-----------------|---|-------------------|------------------------------|--|
| .UG-<br>HP-<br>1.24.<br>5        | How                          | Demonstrat<br>e<br>succussion<br>according<br>to the scale<br>of<br>potentisati<br>on.  | motor           | AUTOMA<br>TISM            | Know            | Demonstration<br>2.Procedural<br>Skills Teaching  | 2. OSPE           |                              |  |
| Hom<br>.UG-<br>HP-<br>1.24.<br>6 | Shows<br>How                 | <ul> <li>6. Prepare</li> <li>8X (Liq)</li> <li>potency</li> <li>from 6X</li> <li>(Triturate)</li> <li>(Jumping</li> <li>Potency)</li> </ul> | Psycho<br>motor | Level 3<br>AUTOMA<br>TISM | Must<br>Know    | <ol> <li>Practical<br/>Demonstration</li> <li>Procedural<br/>Skills Teaching</li> </ol> | 1.DOPS<br>2. OSPE |                              |  |
| Hom<br>.UG-<br>HP-<br>1.24.<br>7 | Knows<br>how<br>Shoes<br>how | 7.Demonstr<br>ate care<br>and<br>commitme<br>nt in<br>preparing<br>medicine<br>with<br>accuracy   | Affectiv<br>e   | Level 1<br>RECIEVIN<br>G  | Nice to<br>Know | Practical<br>Demonstration  | DOPS              | Practical<br>Examinat<br>ion |  |
|                                  |                              |   |                 |                           |                 |   |                   |                              |  |

## **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    | Subject   | Miller | Specif | Specific    | Bloom's  | Guilbert' | Must    | Teaching -    | Assessment /E | valuatio | n    |
|--------|------------|-----------|--------|--------|-------------|----------|-----------|---------|---------------|---------------|----------|------|
|        | Competen   | Area      | 's     | ic     | Learning    | Domain   | s Levels  | to      | Learning      | Formative     | Summ     | ativ |
|        | cies       |           | Level  | Comp   | Objectives  |          |           | know/   | Method        | . officiative | e        |      |
|        |            |           | Does/  | etenci |             |          |           |         |               |               |          |      |
|        |            |           | Show   | es     |             |          |           | desira  |               |               |          |      |
|        |            |           | S      |        |             |          |           | ble     |               |               |          |      |
|        |            |           | how/   |        |             |          |           | to      |               |               |          |      |
|        |            |           | Know   |        |             |          |           | know/   |               |               |          |      |
|        |            |           | S have |        |             |          |           | Nice to |               |               |          |      |
|        |            |           | how/   |        |             |          |           | lunauu  |               |               |          |      |
|        |            |           | Know   |        |             |          |           | know    |               |               |          |      |
| Hom.U  | Problem    | Old       | Know   | Must   | 1. Classify | Cognitiv | Level 2   | Must    | 1.Lecture     | 1.Structured  | LAQ      | SAQ  |
| G-HP-  | solution   | Methods   | S      | be     | Old Methods | е        | Understa  | know    | Demonstratio  | Oral          | MCQ,     | Viva |
| 1.25.1 |            | of        |        | able   | of          |          | nding     |         | ns            | Examination   | Voce(F   | orm  |
|        |            | Preparati |        | to     | preparation |          | nung      |         | 2. Small      | 2. Tutorials  | ative    |      |
|        | Integratio | on of     |        | prepa  | of          |          |           |         | Group         | 2. 10001015   | &Sumi    | mati |
|        | n of       | Homoeo    |        | re the | homoeopathi |          |           |         | Discussions/  | 3.            | ve)      |      |
|        | Knowledg   | pathic    |        | homo   | c drugs.    |          |           |         |               | Assignments   |          |      |
|        | е          | Drugs     |        | eopat  |             |          |           |         | Peer teaching | 4. MCQ's      |          |      |
|        |            |           |        | hic    |             |          |           |         | (Think-Pair-  |               |          |      |
|        |            |           |        | medic  |             |          |           |         | Share, Jigsaw |               |          |      |
|        | Synthesis  |           |        | ines   |             |          |           |         | Strategy)     | question      |          |      |

|        |            |      | 1      |                        |          | 1     | 1              |             | 1 |
|--------|------------|------|--------|------------------------|----------|-------|----------------|-------------|---|
|        | and        |      | as per |                        |          |       | 3. Quiz        | 6.SAQ's and |   |
|        | applicatio |      | the    |                        |          |       | 4. Student     | LAQ's       |   |
| Hom.U  | n of       | Know | old    | 2.Enlist the           | Level 1  | Must  | Seminars       | 7 Drojacta  |   |
| G-HP-  | knowledg   | S    | meth   | fundamental            | Recall   | know  | Seminars       | 7.Projects  |   |
| 1.25.2 | е          |      | ods    | rule, drug             |          |       | 5. Guest       |             |   |
|        |            |      |        | strength,              |          |       | Lecture        |             |   |
|        |            |      |        | drug: vehicle          |          |       |                |             |   |
|        |            |      |        | ratio nature           |          |       | 6. Problem     |             |   |
|        |            |      |        | of drug                |          |       | based learning |             |   |
|        | Classroom  |      |        | substances &           |          |       | 7. Flipped     |             |   |
|        | to lab     |      |        | 5 examples             |          |       | Classroom      |             |   |
|        | transfer   |      |        | of drugs               |          |       | Classicolli    |             |   |
|        |            |      |        | under Class I-         |          |       |                |             |   |
|        |            |      |        | IX according<br>to Old |          |       |                |             |   |
|        | Practice   |      |        | methods.               |          |       |                |             |   |
|        | based      |      |        | methous.               |          |       |                |             |   |
|        | learning   |      |        |                        |          |       |                |             |   |
| Hom.U  | and        | Know | -      | 3.Explain the          | Level 2  | Must  |                |             |   |
| G-HP-  | improvem   |      |        | preparation            | LEVEIZ   | know  |                |             |   |
| 1.25.3 | ent        | S    |        |                        | Understa | KIIOW |                |             |   |
| 1.25.3 |            |      |        | &potentisati           | nding    |       |                |             |   |
|        |            |      |        | on of mother           |          |       |                |             |   |
|        |            |      |        | tinctures              |          |       |                |             |   |
|        |            |      |        | under class I-         |          |       |                |             |   |
|        |            |      |        | IV according           |          |       |                |             |   |
|        |            |      |        | to the scale.          |          |       |                |             |   |
| Hom.U  | -          | Know | -      | 4.Explain the          | Level 2  | Must  | -              |             |   |
| G-HP-  |            | S    |        | preparation            |          | know  |                |             |   |
| 1.25.4 |            | 3    |        | &potentisati           | Understa | KIOW  |                |             |   |
| 1.23.4 |            |      |        | on of mother           | nding    |       |                |             |   |
|        |            |      |        |                        |          |       |                |             |   |
|        |            |      |        | solutions              |          |       |                |             |   |
|        |            |      |        | under Class V          |          |       |                |             |   |

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

|        |     | according t   | 0         |      |  |  |
|--------|-----|---------------|-----------|------|--|--|
|        |     | the scal      | e         |      |  |  |
|        |     | under Class   | I-        |      |  |  |
|        |     | IV accordin   | g         |      |  |  |
|        |     | to Ol         | d         |      |  |  |
|        |     | Method.       |           |      |  |  |
| Hom.U  | Doe | s 8.Demonstra | a Level 3 | Must |  |  |
| G-HP-  |     | te th         | e Automat | Know |  |  |
| 1.25.8 |     | preparation   |           | 1    |  |  |
|        |     | of mothe      | er sm     |      |  |  |
|        |     | solution      |           |      |  |  |
|        |     | under Clas    | S         |      |  |  |
|        |     | V-VI          |           |      |  |  |
|        |     | according t   | 0         |      |  |  |
|        |     | Old Methods   | 5.        |      |  |  |
| Hom.U  | Doe | s 9.          | Level 3   | Must |  |  |
| G-HP-  |     | Demonstrate   | e Automat | Know |  |  |
| 1.25.9 |     | the           |           | 1    |  |  |
|        |     | potentisatio  | n sm      |      |  |  |
|        |     | of mothe      | er        |      |  |  |
|        |     | solution      |           |      |  |  |
|        |     | according t   | 0         |      |  |  |
|        |     | the scal      | e         |      |  |  |
|        |     | under Clas    | s         |      |  |  |
|        |     | V-VI          |           |      |  |  |
|        |     | according t   | o         |      |  |  |
|        |     | Old Method    |           |      |  |  |
|        |     |               |           |      |  |  |

|                           |               |   | -         |                      |                 |                                   | -    | -                       |  |
|---------------------------|---------------|---|-----------|----------------------|-----------------|-----------------------------------|------|-------------------------|--|
| Hom.U                     | Does          | 10.   |           | Level 3              | Must            |                                   |      |                         |  |
| G-HP-<br>1.25.10          |               | Demonstrate<br>the<br>potentisation<br>of mother<br>substances<br>according to<br>the scale<br>under Class<br>VII, VIII & IX<br>according to<br>Old Method.               |           | Automati<br>sm       | Know            |                                   |      |                         |  |
| Hom.U<br>G-HP-<br>1.25.11 | Show<br>s how | 11.Demonstr<br>ate care &<br>commitment<br>in preparing<br>and<br>dispensing<br>medicine<br>with accuracy<br>according to<br>the scale and<br>Class under<br>Old Methods. | Affective | Level 1<br>Receiving | Nice to<br>know | 1. Practical<br>Demonstratio<br>n | DOPS | Practic<br>Examin<br>on |  |

**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  | Subject  | Miller   | Specific   | Specific   | Bloom's   | Guilbert's                   | Must to  | Teaching -  | Assessment /Eva   | aluation                       |
|-------------------------|--|--|--|--|--|-----------|------------------------------|--|---|---|--------------------------------|
|                         | Compet<br>encies   | Area   | 's<br>Level<br>Does/<br>Show<br>s<br>how/<br>Know<br>S<br>how/<br>Know | Compete<br>ncies   | Learning<br>Objectives   | Domain    | Levels                       | know/<br>desirabl<br>e<br>to<br>know/<br>Nice to<br>know | Learning<br>Method  | Formative   | Summati<br>ve                  |
| HomU<br>G-HP-<br>1.26.1 | Proble<br>m<br>solutio<br>n<br>Integra<br>tion of<br>Knowle<br>dge | New<br>Method<br>s of<br>Preparat<br>ion of<br>Homoeo<br>pathic<br>Drugs | Know<br>s  | Must be<br>able to<br>prepare<br>the<br>homoeop<br>athic<br>medicine<br>s as per<br>the new<br>methods | <ol> <li>Define<br/>Maceration<br/>&amp;<br/>Percolation</li> <li>.</li> </ol> | Cognitive | Level 1<br>Recall            | Must<br>know   | 1.Lecture<br>Demonstrations<br>2. Small Group<br>Discussions/<br>Peer teaching<br>(Think-Pair-<br>Share, Jigsaw<br>Strategy)<br>3. Quiz | <ol> <li>Structured<br/>Oral</li> <li>Examination</li> <li>Tutorials</li> <li>Assignments</li> <li>MCQ's</li> <li>2 marks<br/>question</li> </ol> | LAQ SAQ<br>MCQ<br>Viva<br>Voce |
| HomU<br>G-HP-<br>1.26.2 | Synthes<br>is and<br>applica                                       |  | Know<br>s  |  | 2. Explain<br>the process<br>of<br>maceration                                  |           | Level 2<br>Understan<br>ding | Must<br>know   | <ol> <li>Student</li> <li>Seminars</li> <li>Guest Lecture</li> </ol>  | 6.SAQ's and<br>LAQ's<br>7.Projects  |                                |
| HomU<br>G-HP-<br>1.26.3 | tion of<br>knowle<br>dge   |  | Know<br>s  |  | 3.Explain<br>the process<br>of<br>percolation                                  |           | Level 2<br>Understan<br>ding | Must<br>know   | <ol> <li>Problem</li> <li>based learning</li> <li>Flipped</li> </ol>  |   |                                |

|        | ·       |       |              |         | <b></b>   |      | 1               |             |       |       |
|--------|---------|-------|--------------|---------|-----------|------|-----------------|-------------|-------|-------|
| HomU   |         | Know  | 4.Differenti |         | Level 2   | Must | Classroom       |             | T     |       |
| G-HP-  |         | s how | ate          |         | Understan | know | 8. Videos       |             |       |       |
| 1.26.4 |         |       | between      |         | ding      |      | 0. 14000        |             |       |       |
|        | Classro |       | old & new    |         |           |      |                 |             |       |       |
|        | om to   |       | methods of   |         |           |      |                 |             |       |       |
|        | lab     |       | preparatio   |         |           |      |                 |             |       |       |
|        | transfe |       | n of         |         |           |      |                 |             |       |       |
|        | r       |       | homoeopa     |         |           |      |                 |             |       |       |
|        |         |       | thic drugs   |         |           |      |                 |             |       |       |
| HomU   |         | Know  | 5.Differenti |         | Level 2   | Must | 1               |             |       |       |
| G-HP-  | Practic | s how | ate          |         |           | know |                 |             |       |       |
| 1.26.5 | e based |       | between      |         | Understan |      |                 |             |       |       |
|        | learnin |       | maceration   |         | ding      |      |                 |             |       |       |
|        | g and   |       | &            |         |           |      |                 |             |       |       |
|        | improv  |       | percolation  |         |           |      |                 |             |       |       |
|        | ement   |       | in detail.   |         |           |      |                 |             |       |       |
| HomU   |         | Know  | 6. Define    |         | Recall    | Must | -               |             |       |       |
| G-HP-  |         | S     | the terms-   |         |           | know |                 |             |       |       |
| 1.26.6 |         |       | merc,        |         |           |      |                 |             |       |       |
|        |         |       | magma,       |         |           |      |                 |             |       |       |
|        |         |       | menstrum     |         |           |      |                 |             |       |       |
| HomU   |         |       | 7.           | Psychom | Level 2   |      | 1. Practical    | 1.DOPS      | Pract | tical |
| G-HP-  |         |       |              | otor    |           |      | Demonstrations  |             | Exam  | ninat |
| 1.26.7 |         |       | te the       |         | Control   |      |                 | 2.OSPE      | ion   |       |
|        |         | Does  | preparatio   |         |           | Must | 2. Procedural   | 3. Projects |       |       |
|        |         |       | n of         |         |           | know | Skills Teaching |             |       |       |
|        |         |       | mother       |         |           |      | 3.Experiential  |             |       |       |
|        |         |       | tincture by  |         |           |      | Learning        |             |       |       |
| ļ      |         |       | maceration   |         |           |      |                 |             |       |       |

|                              |               |   | 1                    | 1                        |  |      | 1                    |  |
|------------------------------|---------------|---|----------------------|--------------------------|--|------|----------------------|--|
| HomU<br>G-HP-<br>1.26.8      | Does          | 8.Demonst<br>rate the<br>preparatio<br>n of<br>mother<br>solution by<br>percolation             | Level 2<br>Control   | Must<br>know             |  |      |                      |  |
| HomU<br>G-HP-<br>1.26.9      | Does          | 9.<br>Demonstra<br>te the<br>towing of a<br>percolator  | Level 2<br>Control   | Desirab<br>le to<br>know |  |      |                      |  |
| HomU<br>G-HP-<br>1.26.1<br>0 | Show<br>s how | 10.DemonsAffectivetrate care&&commitment inpreparingofhomoeopathicmedicinewithaccuracyaccording | Level 1<br>Receiving | Nice to<br>know          | <ol> <li>Lecture<br/>Demonstration</li> <li>Practical<br/>Demonstration</li> </ol> | DOPS | Pract<br>Exam<br>ion |  |
|                              |               | Page <b>98</b> of <b>16</b>   | 1                    |                          |  |      |                      |  |

|  |  | to the New              |  |  |  |  |
|--|--|-------------------------|--|--|--|--|
|  |  | methods of              |  |  |  |  |
|  |  | preparatio              |  |  |  |  |
|  |  | n of                    |  |  |  |  |
|  |  | homoeopa                |  |  |  |  |
|  |  | homoeopa<br>thic drugs. |  |  |  |  |
|  |  |                         |  |  |  |  |

**TOPIC:** Pharmaconomy

## Learning Outcomes (LO):

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

| Sr. No | Generic          | Subject | Mille   | Specific         | Specific               | Bloom's | Guilbert's | Must to  | Teaching -         | Assessment /Evaluation |      |      |
|--------|------------------|---------|---|------------------|------------------------|---------|------------|--|--------------------|------------------------|------|------|
|        | Compet<br>encies | Area    | r's<br>Level<br>Does<br>/<br>Show<br>s<br>how/<br>Know<br>s<br>how/<br>Know | Compete<br>ncies | Learning<br>Objectives | Domain  | Levels     | know/<br>desirabl<br>e<br>to<br>know/<br>Nice to<br>know | Learning<br>Method | Formative              | Summ | ativ |

|            | Гг       |         | 1    |           | 1                           | 1       |            |         | 1              | Γ              |        |      |
|------------|----------|---------|------|-----------|-----------------------------|---------|------------|---------|----------------|----------------|--------|------|
| Hom        | Integrat | Pharmac | Know | Must be   | 1. Enumerate                | 0       | Level 1    | Must    | 1.Lecture      | 1.Structured   |        | SAQ  |
| UG-        | ion of   | onomy   | S    | able to   | the different               | е       | Recall     | know    | Demonstration  | Oral           | MCQ    | Viva |
| HP-        | Knowle   |         |      | select    | routes of                   |         | Recan      |         | S              | Examination    | Voce   |      |
| 1.27.      | dge      |         |      | appropria | administratio               |         |            |         | 2. Small Group | 2. Tutorials   |        |      |
| 1          |          |         |      | te route  | n of                        |         |            |         | Discussions/   |                |        |      |
|            |          |         |      | of        | homoeopathi                 |         |            |         |                | 3. Assignments |        |      |
|            | Synthes  |         |      | administr | c medicines.                |         |            |         | Peer teaching  | 4. MCQ's       |        |      |
|            | is and   |         |      | ation of  |                             |         |            |         | (Think-Pair-   |                |        |      |
|            | applicat |         |      | homoeop   |                             |         |            |         | Share, Jigsaw  | 5. 2 marks     |        |      |
| Hom        | ion of   |         |      | athic     | 2. Explain the              |         | Level 2    | Must    | Strategy)      | question       |        |      |
| UG-        | knowle   |         | Know | medicines | different                   |         | Understand | know    | 3. Quiz        | 6.SAQ's        |        |      |
| HP-        | dge      |         | s    |           | routes of                   |         | ing        |         |                |                |        |      |
| 1.27.      |          |         |      |           | administratio               |         | -          |         | 4. Flipped     | 7.Projects     |        |      |
| 2          |          |         |      |           | n of                        |         |            |         | Classroom      |                |        |      |
|            |          |         |      |           | homoeopathi<br>c medicines. |         |            |         | 6. Videos      |                |        |      |
|            | Classro  |         |      |           | c medicines.                |         |            |         |                |                |        |      |
|            | om to    |         |      |           |                             |         |            |         |                |                |        |      |
| Hom        | Clinic   |         | Does |           | 3. Select                   |         |            | Desirab |                |                |        |      |
| UG-        | transfer |         | DUES |           | appropriate                 |         |            | le to   |                |                |        |      |
| HP-        |          |         |      |           | route of                    |         | Level 3    | know    |                |                |        |      |
| 1.27.      |          |         |      |           | administratio               |         | Problem    | KIIO W  |                |                |        |      |
| 3          |          |         |      |           | n of                        |         | solving    |         |                |                |        |      |
| •          |          |         |      |           | homoeopathi                 |         |            |         |                |                |        |      |
|            |          |         |      |           | c medicines                 |         |            |         |                |                |        |      |
|            |          |         |      |           | according to                |         |            |         |                |                |        |      |
|            |          |         |      |           | the case                    |         |            |         |                |                |        |      |
| Hom        |          |         |      |           | 4. Administer               | Psychom |            | Nice to | 1. Practical   | 1. Case based  | Viva V | 0.00 |
| Hom<br>UG- |          |         |      |           | the                         | -       | Level Z    |         | Demonstration  |                | VIVd V | oce  |
| HP-        |          |         |      |           | homoeopathi                 | otor    | Control    | know    |                | assessment     |        |      |
| 176-       |          |         |      |           | nomoeopatm                  |         |            |         | S              | 2. Simulation  |        |      |

| 1.27.      | Show | c medicine              |           | · · · · · · · · · · · · · · · · · · · |         | 2.Experiential | based         |      |      |
|------------|------|-------------------------|-----------|---------------------------------------|---------|----------------|---------------|------|------|
| 4          | S    | through                 |           |                                       |         | Learning       | assessment    |      |      |
|            | how  | appropriate<br>route of |           |                                       |         | 3. Projects    |               |      |      |
|            |      | administratio           |           | 1                                     |         | 4. Case based  |               |      |      |
|            |      | n according             |           | 1                                     |         | Learning       |               |      |      |
|            |      | to the case             |           | 1                                     |         | 5. Simulation  |               |      |      |
|            |      |                         |           | 1                                     |         | teaching       |               |      |      |
| Hom        | Know | 5.Show care             | Affective | Level 2                               | Desirab | 1. Lecture     | Case based    | LAQ  | SAC  |
| UG-        | S    | while                   |           | Bospond                               | le to   | Demonstration  | assessment    | MCQ  | Viva |
| HP-        | how  | administerin            |           | Respond                               | know    | 2. Practical   | 2. Simulation | Voce |      |
| 1.27.<br>5 |      | g<br>homoeopathi        |           | 1                                     |         | Demonstration  | based         |      |      |
|            |      | c medicine              |           | 1                                     |         | 3. Case based  | assessment    |      |      |
|            |      | via different           |           | 1                                     | '       | Learning       |               |      |      |
|            |      | routes                  |           | 1                                     |         | 4. Simulation  |               |      |      |
|            |      |                         |           | , ,                                   | 1 ,     | teaching       |               |      |      |

**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.                             | Generic  | Subje   | Miller's   | Specific  | Specific  | Bloom's | Guilbert's                   | Must to  | Teaching -  | Assessment /  | 'Evalua            | tion  |
|---------------------------------|--|---|--|---|---|---------|------------------------------|--|---|---|--------------------|-------|
| No                              | Compete<br>ncies   | ct<br>Area  | Level<br>Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | Competen<br>cies  | Learning<br>Objectives  | Domain  | Levels                       | know/<br>desirabl<br>e<br>to<br>know/<br>Nice to<br>know | Learning<br>Method  | Formative   | Sumr               | nativ |
| Hom<br>UG-<br>HP-<br>1.28.<br>1 | Problem<br>solution<br>Integratio<br>n of<br>Knowledg<br>e<br>Synthesis<br>and<br>Applicatio | Dispe<br>nsing<br>of<br>homo<br>eopat<br>hic<br>medic<br>ines | Knows  | Select an<br>appropriat<br>e dosage<br>form for<br>dispensing<br>of<br>homoeopa<br>thic<br>medicines. | 1. Enumerate<br>the different<br>dosage forms.                                | 0       | Level 1<br>Recall            | Must<br>know   | <ol> <li>1.Lecture         Demonstration         s         2. Small Group         Discussions/         Peer teaching             (Think-Pair-             Share, Jigsaw             Strategy)         3. Quiz         4. Student      </li> </ol> | <ol> <li>Structure</li> <li>d Oral</li> <li>Examinatio</li> <li>n</li> <li>Tutorials</li> <li>3.</li> <li>Assignment</li> <li>s</li> <li>MCQ's</li> <li>5. 2 marks</li> <li>question</li> </ol> | LAQ<br>MCQ<br>Voce |       |
| Hom<br>UG-<br>HP-<br>1.28.<br>2 | n of<br>Knowledg<br>e<br>Classroo<br>m to  |   | Knows  | homoeopa<br>thic<br>medicine<br>to patients   | 2. Explain the<br>various modes<br>for dispensing<br>of solid dosage<br>forms |         | Level 2<br>Understand<br>ing | Must<br>know   | Seminars<br>5. Problem<br>based learning<br>6. Guest<br>Lecture   | 6.SAQ's and<br>LAQ's  |                    |       |
|                                 |                                  |                      |   |                 | <del>.</del>                 |                 | <del></del>   | <del></del>       |                     | <b> </b> |
|---------------------------------|----------------------------------|----------------------|---|-----------------|------------------------------|-----------------|---|-------------------|---------------------|----------|
| Hom<br>UG-<br>HP-<br>1.28.<br>3 | OPD/IPD/<br>Pharmacy<br>transfer | Knows                | <ol> <li>Explain the various modes for dispensing of liquid dosage forms</li> </ol>         |                 | Level 2<br>Understand<br>ing | Must<br>know    |   |                   |                     |          |
| Hom<br>UG-<br>HP-<br>1.28.<br>4 |                                  | Knows                | 4. Enlist the<br>vehicles used<br>for dispensing<br>of various<br>dosage forms              |                 | Level 1<br>Recall            | Must<br>know    |   |                   |                     |          |
| Hom<br>UG-<br>HP-<br>1.28.<br>5 |                                  | Knows                | 5. Explain the<br>quality<br>assurance<br>while<br>dispensing<br>homoeopathic<br>medicines. |                 | Level 2<br>Understand<br>ing | Nice to<br>know |   |                   |                     |          |
| Hom<br>UG-<br>HP-<br>1.28.<br>6 |                                  | Shows<br>how<br>Does |   | Psychom<br>otor | Level 2<br>Control           | Must<br>know    | <ol> <li>1.Practical</li> <li>Demonstration</li> <li>2.Procedural</li> <li>Skills Teaching</li> <li>3. Problem</li> <li>Based Learning</li> </ol> | 1.DOPS<br>2. OSPE | Pract<br>Exam<br>on |          |
| Hom<br>UG-<br>HP-<br>1.28.      |                                  | Shows<br>how<br>Does | 7.<br>Demonstrate<br>the dispensing<br>of solid dosage                                      |                 | Level 2<br>Control           | Must<br>know    | 4. Experiential<br>learning   |                   |                     |          |

| 7                               |                             |                       |                  |                         | forms                     |                                    |                         |                      |                 |   |      |            |                     |  |
|---------------------------------|-----------------------------|-----------------------|------------------|-------------------------|---------------------------|------------------------------------|-------------------------|----------------------|-----------------|---|------|------------|---------------------|--|
| Hom<br>UG-<br>HP-<br>1.28.<br>8 |                             |                       | Does             |                         |                           | and<br>tment<br>sing of<br>opathic | Affective               | Level 1<br>Receiving | Nice to<br>know | 1.Lecture<br>Demonstra<br>3. Pro<br>Based Lea | blem | 1.DOPS     | Pract<br>Exam<br>on |  |
| Lear                            | PIC: Placebo<br>rning Outco | omes (LO)             |                  |                         |                           |                                    |                         |                      |                 | I   |      | I          |                     |  |
| Sr.                             | Generic                     | ne topic, l<br>Subjec | -BHMS s<br>Mille | tudent must<br>Specific | be able to in<br>Specific | dicate pla                         | acebo in a<br>Guilbert' | particular case      | Teach           |   | 1    | ssment /Ev |                     |  |

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| Hom   | Problem       | Placeb | Kno  | Must     | be   | 1. Define  | Cognit | Level 1   | Must | 1.Lecture                     | 1.Structured   | LAQ  | SAQ  |
|-------|---------------|--------|------|----------|------|------------|--------|-----------|------|-------------------------------|----------------|------|------|
| UG-   | solution      | 0      | ws   | able     | to   | Placebo    | ive    | Recall    | Know | Demonstrations                | Oral           | MCQ  | Viva |
| HP-   |               |        |      | indicate | ē    |            |        | Recall    |      | 2. Small Group                | Examination    | Voce |      |
| 1.29. |               |        |      | placebo  | o in |            |        |           |      | Discussions/                  | 2. Tutorials   |      |      |
| 1     | Integrati     |        |      | а        |      |            |        |           |      |                               |                |      |      |
|       | on of         |        |      | particu  | lar  |            |        |           |      | Peer teaching                 | 3. Assignments |      |      |
|       | Knowle<br>dge |        |      | case     |      |            |        |           |      | (Think-Pair-<br>Share, Jigsaw | 4. MCQ's       |      |      |
|       | -             |        |      |          |      |            |        |           |      | Strategy)                     | 5. 2 marks     |      |      |
|       |               |        |      |          |      |            |        |           |      | - 3. Case based               | question       |      |      |
| Hom   | Synthesi      |        | Kno  |          |      | 2.         |        | Level 1   | Must | learning                      | 6.SAQ's,       |      |      |
| UG-   | s and         |        | WS   |          |      | Enumera    |        | Recall    | Know | icariing                      | 7.Projects     |      |      |
| HP-   | applicati     |        |      |          |      | te the     |        | needii    |      |                               | 7.1.10jeets    |      |      |
| 1.29. | on of         |        |      |          |      | vehicles   |        |           |      |                               |                |      |      |
| 2     | knowled       |        |      |          |      | used as    |        |           |      |                               |                |      |      |
|       | ge            |        |      |          |      | placebo    |        |           |      |                               |                |      |      |
| Hom   |               |        | Kno  | 1        |      | 3. Explain |        | Level 2   | Must |                               |                |      |      |
| UG-   | Classroo      |        | WS   |          |      | the        |        | Understan | Know |                               |                |      |      |
| HP-   | m to          |        |      |          |      | indicatio  |        | ding      |      |                               |                |      |      |
| 1.29. | clinic        |        |      |          |      | ns of      |        | ung       |      |                               |                |      |      |
| 3     | transfer      |        |      |          |      | placebo    |        |           |      |                               |                |      |      |
| Hom   |               |        | Does | -        |      | 4.Select a |        | Level 3   | Must | -                             |                |      |      |
| UG-   |               |        |      |          |      | placebo    |        |           | Know |                               |                |      |      |
| HP-   |               |        |      |          |      | for a      |        | Problem   |      |                               |                |      |      |
| 1.29. |               |        |      |          |      | particular |        | solving   |      |                               |                |      |      |
| 4     |               |        |      |          |      | case       |        |           |      |                               |                |      |      |

**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 shell life.

| Sr.  | Generic   | Subject   | Miller'   | Specific   | Specific   | Bloom's       | Guilbert'   | Must to   | Teaching -  | Assessment /E  | valuation |             |
|--|---|---|---|--|--|---------------|---|---|---|--|-----------|-------------|
| No   | Compe<br>tencies  | Area  | s<br>Level<br>Does/<br>Shows<br>how/<br>Know<br>s<br>how/<br>Know | Compete<br>ncies   | Learning<br>Objectives   | Domain        | s Levels  | know/<br>desirable<br>to<br>know/Nice<br>to<br>know | Learning<br>Method  | Formative  | Summat    | ive         |
| Hom<br>UG-<br>HP-<br>1.30.<br>1<br>Hom<br>UG-<br>HP-<br>1.30.<br>2 | Integra<br>tion of<br>Knowle<br>dge<br>Synthes<br>is and<br>applica<br>tion of<br>knowle<br>dge | Preserv<br>ation of<br>Homoe<br>opathic<br>medicin<br>e | Know<br>s<br>Know<br>s  | Must be<br>able to<br>preserve<br>homoeo<br>pathic<br>medicine<br>s for long<br>shell life | <ol> <li>Enumerate<br/>the different<br/>methods of<br/>preservation of<br/>homoeopathic<br/>medicines</li> <li>Explain the<br/>individual<br/>method of<br/>preservation of<br/>homoeopathic<br/>medicine.</li> </ol> | Cognitiv<br>e | Level 1<br>Recall<br>Level 2<br>Understa<br>nding | Must<br>Know<br>Must<br>Know                        | <ol> <li>1.Lecture<br/>Demonstrati<br/>ons</li> <li>2. Small<br/>Group<br/>Discussions/</li> <li>Peer teaching<br/>(Think-Pair-<br/>Share, Jigsaw<br/>Strategy)</li> <li>3. Quiz</li> </ol> | <ol> <li>Structured<br/>Oral<br/>Examination</li> <li>Tutorials</li> <li>Tutorials</li> <li>Assignments</li> <li>MCQ's</li> <li>2 marks<br/>question</li> <li>SAQ's</li> </ol> |           | SAQ<br>/iva |

| Hom                             |   | Does | 3. Select an  |      | Level 3            | Must                 |   | 7 Projects                            |                              |  |
|---------------------------------|---|------|---|------|--------------------|----------------------|---|---------------------------------------|------------------------------|--|
| Hom<br>UG-<br>HP-<br>1.30.<br>3 | Classro<br>om to<br>Clinic<br>transfe<br>r                | Does | <ol> <li>Select an appropriate mode of preservation of homoeopathic medicines.</li> </ol>     | -    | Problem<br>solving | Know                 |   | 7.Projects                            |                              |  |
|                                 | Practic<br>e based<br>learnin<br>g and<br>improv<br>ement |      |   |      |                    |                      |   |                                       |                              |  |
| Hom<br>UG-<br>HP-<br>1.30.<br>4 |   | Does | 4. Demonstrate<br>the method of<br>preservation of<br>mother<br>substances &<br>preparations  | otor | Level 2<br>Control | Desirable<br>to Know | <ol> <li>Practical<br/>Demonstrati<br/>ons</li> <li>Procedural<br/>Skills<br/>Teaching</li> </ol> | Viva Voce<br>Practical<br>Examination | Practical<br>Examinatio<br>n |  |
| Hom<br>UG-<br>HP-<br>1.30.<br>5 |   | Does | 5. Demonstrate<br>the method of<br>preservation of<br>potentised<br>homoeopathic<br>medicines | :    |                    | Desirable<br>to Know | 3.Experiential<br>Learning<br>4. Projects   |                                       |                              |  |

| Hom<br>UG-<br>HP-<br>1.30.<br>6 | Does         | 6. Demonstrate<br>the method of<br>preservation of<br>homoeopathic<br>mother<br>tinctures                      |           |                    | Desirabl     |    |          |  |  |                             |  |
|---------------------------------|--------------|--|-----------|--------------------|--------------|----|----------|--|--|-----------------------------|--|
| Hom<br>UG-<br>HP-<br>1.30.<br>7 | Shows<br>how | 7.Show care &<br>commitment<br>while preserving<br>homoeopathic<br>preparations<br>and potentised<br>medicine. | Affective | Level 2<br>Respond | Nice<br>know | to | on<br>2. | Lecture<br>nonstrati<br>Practical<br>nonstrati | SAQ,<br>2 marks<br>question<br>Projects<br>Assignments<br>Tutorials<br>Viva Voce<br>Practical<br>Examination | Practical<br>Examinati<br>n |  |

**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

| Sr. | Generic | Subject | Miller's | Specific | Specific | Bloom's | Guilber | Must to | Teaching - | Assessment /Evaluat | tion |
|-----|---------|---------|----------|----------|----------|---------|---------|---------|------------|---------------------|------|
|     |         |         |          |          |          |         |         |         |            |                     |      |

| No           | Competenc              | Area                | Level          | Competen                                   | Learning                     | Domain   | t's     | know/     | Learning                   | Formative              | Sumn        | nativ |
|--------------|------------------------|---------------------|----------------|--|------------------------------|----------|---------|-----------|----------------------------|------------------------|-------------|-------|
|              | ies                    |                     | Does/<br>Shows | cies                                       | Objectives                   |          | levels  | desirable | Method                     |                        | e           |       |
|              |                        |                     | how/           |  |                              |          |         | to        |                            |                        |             |       |
|              |                        |                     | Knows          |  |                              |          |         | know/Ni   |                            |                        |             |       |
|              |                        |                     | how/           |  |                              |          |         | ce to     |                            |                        |             |       |
|              |                        |                     | Know           |  |                              |          |         | know      |                            |                        |             |       |
| Hom          | Problem                | Pharma              | Knows          | Must be                                    | 1. Define                    | Cognitiv | Level 1 | Must      | 1.Lecture                  | 1.Structure            | LAQ         | SAG   |
| UG-<br>HP-   | solution               | covigila<br>nce and |                | able to<br>identify                        | adverse drug reaction        | e        | Recall  | Know      | Demonstrati<br>ons         | d Oral<br>Examinatio   | MCQ<br>Voce | Viv   |
| 1.31.        |                        | adverse             |                | any  |                              |          |         |           | 2. Small                   | n                      |             |       |
| 1            | Integration            | drug                |                | adverse                                    |                              |          |         |           | Group                      | 2. Tutorials           |             |       |
| Hom          | of<br>Knowledge        | reaction            | Knows          | <ul> <li>drug</li> <li>reaction</li> </ul> | 2. Enumerate                 |          | Level 1 | Must      | Discussions/               | 3.                     |             |       |
| UG-          | Knowledge              |                     |                |  | the types of                 |          | Recall  | Know      | Peer teaching              | Assignment             |             |       |
| HP-<br>1.31. |                        |                     |                | Comprehe<br>nd the of                      | adverse drug<br>reactions    |          |         |           | (Think-Pair-               | S                      |             |       |
| 2            | Synthesis<br>and       |                     |                | pharmaco<br>vigilance                      |                              |          |         |           | Share, Jigsaw<br>Strategy) | 4. MCQ's               |             |       |
| Hom          | application<br>of      |                     | Knows          | in   | 3. Explain the               | -        | Level 2 | Must      | 3. Case based              | 5. 2 marks question    |             |       |
| UG-          | knowledge              |                     |                | homoeopa                                   | management                   |          | Unders  | Know      | learning                   |                        |             |       |
| HP-<br>1.31. | 0                      |                     |                | thy  | of adverse<br>drug reactions |          | tanding |           |                            | 6.SAQ's,<br>7.Projects |             |       |
| 1.51.<br>3   |                        |                     |                |  | in                           |          |         |           |                            | 7.Projects             |             |       |
| -            | Classroom<br>to clinic |                     |                |  | homoeopathy                  |          |         |           |                            |                        |             |       |
| Hom          | transfer               |                     | Knows          | -  | 4.Define                     | -        | Level 1 | Desirable | -                          |                        |             |       |
| UG-          |                        |                     |                |  | pharmacovigil                |          | Recall  | to Know   |                            |                        |             |       |
| HP-<br>1.31. |                        |                     |                |  | ance                         |          |         |           |                            |                        |             |       |
| 1.31.<br>4   |                        |                     |                |  |                              |          |         |           |                            |                        |             |       |

| Hom   | Knows | 5.Explain in  | Level 2 | Desirable |  |  |
|-------|-------|---------------|---------|-----------|--|--|
| UG-   |       | detail the    | Li . de | to know   |  |  |
| HP-   |       | process of    | Unders  |           |  |  |
| 1.31. |       | pharmacovigil | tanding |           |  |  |
| 5     |       | ance in       |         |           |  |  |
|       |       | Homoeopathy   |         |           |  |  |
|       |       |               |         |           |  |  |

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

|                                 |   |            |                                       |   | -             |                                   |              |    |   |  |        |     |
|---------------------------------|---|------------|---------------------------------------|---|---------------|-----------------------------------|--------------|----|---|--|--------|-----|
| Hom<br>UG-<br>HP-<br>1.32.<br>3 | edge<br>Synth<br>esis<br>and<br>applic<br>ation | Knows how  | Homo<br>eopath<br>ic<br>simili<br>mum | 3.Apply the<br>logic behind<br>doctrine of<br>signature in<br>patients<br>showing the<br>same signs<br>particularly in          |               | Level 3<br>Proble<br>m<br>solving | Nice<br>know | to | Seminars<br>5. Case based<br>learning<br>6.Case Simulation<br>7. Experiential<br>Learning                   | <ul><li>6.SAQ's</li><li>7.Projects</li><li>8.Assessment<br/>of case</li><li>9. Simulation<br/>assessment</li></ul> |        |     |
| Hom<br>UG-<br>HP-<br>1.32.<br>4 | of<br>- knowl<br>edge                           | Shows how  |                                       | <ul> <li>one sided case.</li> <li>4.Select a remedy for a one -sided case based on the doctrine of signature</li> </ul>         |               | Level 3<br>Proble<br>m<br>solving | Nice<br>know | to |   |  |        |     |
| Hom<br>UG-<br>HP-<br>1.32.<br>5 |   | Shows hows |                                       | 5.Demonstrate<br>care,<br>professionalism<br>&commitment<br>while<br>prescribing on<br>the basis of<br>doctrine of<br>signature | Affectiv<br>e | Level 2<br>Respo<br>nd            | Nice<br>know | to | <ol> <li>Case based<br/>learning</li> <li>Case<br/>Simulation</li> <li>Experiential<br/>Learning</li> </ol> | <ol> <li>Assessment<br/>of case</li> <li>Simulation<br/>assessment</li> </ol>                                      | Viva V | oce |

TOPIC: Drug Proving

Learning Outcomes (LO):

| Sr. No                  | Generic<br>Compete                                      | Subj<br>ect         | Miller's<br>Level                               | Specific<br>Compet                                | Specific<br>Learning   | Bloom's<br>Domain | Guilbert'<br>s level          | Must to<br>know/                            | Teaching -<br>Learning  | Assessment<br>/Evaluation  |                                   | Inte<br>tion            | gra |
|-------------------------|---|---------------------|---|---|--|-------------------|-------------------------------|---|---|--|-----------------------------------|-------------------------|-----|
|                         | ncies   | Area                | Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | encies  | Objectives   |                   |                               | desirable<br>to<br>know/Ni<br>ce to<br>know | Method  | Method<br>Formative  | Type<br>(Sum<br>mativ<br>e)       |                         |     |
| HomUG-<br>HP-<br>1.33.1 | Problem<br>Solution                                     | Drug<br>Prov<br>ing | Knows   | Proving<br>a given<br>drug on<br>healthy<br>human | 1. Define Drug<br>Proving.   | Cognitiv<br>e     | Level 1<br>Recall             | Must<br>Know                                | <ol> <li>1.Lecture</li> <li>Demonstrati</li> <li>ons</li> <li>2. Small</li> <li>Group</li> </ol>                  | 1.Structur<br>ed Oral<br>Examinati<br>on<br>2.                                   | LAQ<br>SAQ<br>MCQ<br>Viva<br>Voce | tal<br>Orga<br>n<br>Med | of  |
| HomUG-<br>HP-<br>1.33.2 | Integrati<br>on of<br>Knowled<br>ge                     |                     | Knows   | - being   | 2. Illustrate<br>the qualities of<br>an ideal<br>prover.   | Cognitiv<br>e     | Level 1<br>Recall             | Must<br>Know                                | Discussions/<br>Peer teaching<br>(Think-Pair-<br>Share, Jigsaw<br>Strategy)                                       | <ul> <li>Tutorials</li> <li>3.</li> <li>Assignments</li> <li>4. MCQ's</li> </ul> |                                   | ne                      |     |
| HomUG-<br>HP-<br>1.33.3 | Synthesis<br>and<br>applicati<br>on of<br>knowled<br>ge |                     | Shows<br>how                                    |   | <ul> <li>3. Apply the selection</li> <li>criteria</li> <li>(inclusion &amp; exclusion) for provers during drug proving.</li> </ul> | Cognitiv<br>e     | Level 3<br>Problem<br>Solving | Desirable<br>to know                        | <ol> <li>4. Quiz</li> <li>5. Student<br/>Seminars</li> <li>6. Guest<br/>Lecture</li> <li>7. Integrated</li> </ol> | 5.SAQ's<br>and LAQ's<br>6. 2 marks<br>questions                                  |                                   |                         |     |

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

| HomUG-<br>HP.1.33.<br>4 | Problem<br>solving | Knows | <ol> <li>Explain the methodology for drug proving.</li> </ol> | Cognitiv<br>e   | Level 2<br>Understa<br>nd     | Must<br>Know         | Teaching<br>with Organon<br>of Medicine  |  |                            |  |
|-------------------------|--------------------|-------|---|-----------------|-------------------------------|----------------------|--|--|----------------------------|--|
| HomUG-<br>HP-<br>1.33.5 |                    | Does  | 5. Design the<br>protocol for<br>Drug Proving.                | Cognitiv<br>e   | Level 3<br>Problem<br>Solving | Nice to<br>know      | <ol> <li>Lecture<br/>Demonstrati<br/>on</li> <li>Procedural<br/>Skills<br/>Teaching</li> </ol>                     | 1.Simulati<br>on based<br>assessmen<br>t | LAQ<br>SAQ<br>Viva<br>Voce |  |
| HomUG-<br>HP-<br>1.33.6 |                    | Does  | 6. Select ideal<br>prover for<br>drug proving                 |                 | Level 3<br>Problem<br>Solving | Desirable<br>to know | <ol> <li>Problem</li> <li>Based</li> <li>Learning</li> <li>Role Plays</li> <li>S.</li> <li>Experiential</li> </ol> |  |                            |  |
| HomUG-<br>HP-<br>1.33.7 |                    | Does  | 7. Prepare the<br>test substance<br>for drug<br>proving.      | Psychom<br>otor | Level 2<br>Control            | Nice to<br>know      | learning<br>6. Team<br>based<br>learning   |  |                            |  |
| HomUG-<br>HP-<br>1.33.8 |                    | Does  | 8. Formulate<br>the team for<br>drug proving                  | Cognitiv<br>e   | Level 3<br>Problem<br>Solving | Nice to<br>know      |  |  |                            |  |
| HomUG-<br>HP-<br>1.33.9 |                    | Does  | 9. Record the<br>symptoms of<br>drug proving                  | Psychom<br>otor | Level 2<br>Control            | Nice to<br>know      |  |  |                            |  |

| HomUG-<br>HP-<br>1.33.10 | Does         | SVINDLOINS   | Cognitiv | Level 3<br>Problem<br>solving | Nice to<br>know |   |  |              |  |
|--------------------------|--------------|--|----------|-------------------------------|-----------------|---|--|--------------|--|
| HomUG-<br>HP-<br>1.33.11 | Does         | 11. Translate<br>the provers<br>symptoms in<br>Materia<br>Medica<br>language |          | Level 3<br>Problem<br>solving | Nice to<br>know |   |  |              |  |
| HomUG-<br>HP-<br>1.33.12 | Shows<br>how | 12. Show professionalis m and care during drug proving towards the provers.  |          | Level 2<br>Respondi<br>ng     | Nice to<br>know | <ol> <li>Lecture<br/>Demonstrati<br/>on</li> <li>Procedural<br/>Skills<br/>Teaching</li> <li>Problem<br/>Based</li> </ol> | 1.Simulati<br>on based<br>assessmen<br>t | Viva<br>Voce |  |
| HomUG-<br>HP-<br>1.33.13 | Does         | 13. Value the privacy & integrity of the provers.                            |          | Level 3<br>Internaliz<br>e    | Nice to<br>know | Learning<br>4. Role Plays<br>5.<br>Experiential<br>learning   |  |              |  |
| HomUG-<br>HP-<br>1.33.14 | Does         | 14. Value the consent of the prover.   |          | Level 3<br>Internaliz<br>e    | Nice to<br>know | 6. Team<br>based<br>learning  |  |              |  |

| HomUG-<br>HP-<br>1.33.15 | Does | 15. Value the<br>ethical<br>considerations<br>during drug<br>proving. | Level 3<br>Internaliz<br>e | Nice to<br>know |  |  |  |
|--------------------------|------|---|----------------------------|-----------------|--|--|--|

#### **TOPIC:** Posology

Learning Outcomes (LO):

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

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

| Sr. No | Generic | Sub  | Miller' | Specific | Specific   | Bloom' | Guilbert' | Must to  | Teaching -      | Assessment /E | valuation | Integra | ati |
|--------|---------|------|---------|----------|------------|--------|-----------|----------|-----------------|---------------|-----------|---------|-----|
|        | Compet  | ject | s Level | Compete  | Learning   | s      | s Levels  | know/    | Learning Method |               |           | on      |     |
|        | encies  | Are  | Does/   | ncies    | Objectives | _ ·    |           | KIIOW/   |                 |               |           |         |     |
|        |         | а    | Shows   |          | -          | Domain |           | desirabl |                 | Formative     | Summative |         |     |
|        |         |      | how/    |          |            |        |           | е        |                 |               |           |         |     |
|        |         |      | Knows   |          |            |        |           |          |                 |               |           |         |     |

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

| Classro<br>om to<br>OPD/IP<br>L     Classro<br>om to<br>OPD/IP<br>D     Knows     Knows     4. Enlist the<br>different<br>types of<br>doses     Level 1     Must<br>know       HomU<br>1.34.4     Knows     5. Explain     Level 2     Must   |  |
|---|--|
| G-HP-     D     different       1.34.4     transfer     Knows       HomU     Knows     5.     Explain   |  |
|   |  |
| G-HP-<br>1.34.5<br>1.34.5   |  |
| HomU<br>G-HP-<br>1.34.6<br>How<br>1.34.6<br>How<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>Above<br>A |  |
| Image: Constraint of the conduct of  |  |

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|                              |              |   |         |                          | 5. Team based<br>learning   |                                     |           |  |
|------------------------------|--------------|---|---------|--------------------------|---|-------------------------------------|-----------|--|
|                              |              |   |         |                          | 6.Case based<br>learning  |                                     |           |  |
|                              |              |   |         |                          | 7. Case<br>simulation<br>learning   |                                     |           |  |
| HomU<br>G-HP-<br>1.34.8      | Does         | 8. Choose<br>the proper<br>dosage for a<br>particular<br>case                                     | Problem | Desirab<br>le to<br>know |   |                                     |           |  |
| HomU<br>G-HP-<br>1.34.9      | Does         | 9. Design<br>the dosage<br>and<br>repetition<br>for a<br>particular<br>case                       |         | Nice to<br>know          |   |                                     |           |  |
| HomU<br>G-HP-<br>1.34.1<br>0 | Shows<br>how | 10.Show Affectiv<br>professional e<br>ism and<br>care while<br>selection of<br>potency &<br>dose. |         | Nice to<br>know          | <ol> <li>1.Lecture<br/>Demonstration</li> <li>2.Procedural<br/>Skills Teaching</li> <li>3. Problem Based<br/>Learning</li> <li>4. Experiential</li> </ol> | 1.Simulation<br>based<br>assessment | Viva Voce |  |

| HomU<br>G-HP-<br>1.34.1<br>1 | Shows<br>how | <ul><li>11. Value</li><li>the privacy</li><li>&amp; integrity</li><li>of the</li><li>patient/cas</li><li>e</li></ul>    | lice to<br>now | learning               | based<br>based<br>Case |  |  |
|------------------------------|--------------|---|----------------|------------------------|------------------------|--|--|
| HomU<br>G-HP-<br>1.34.1<br>2 | Shows<br>how | 12. Value<br>the ethical<br>considerati<br>ons during<br>selection of<br>potency,<br>dose and<br>repetition<br>of doses | ice to<br>now  | simulation<br>learning | Cusc                   |  |  |
| HomU<br>G-HP-<br>1.34.1<br>3 | Shows<br>how | 13. Value<br>the<br>importance<br>of rational<br>prescription   | ice to<br>now  |                        |                        |  |  |

**TOPIC:** Prescription Writing

# Learning Outcomes (LO):

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

| Sr.  | Generic  | Subject                     | Miller's   | Specific                                | Specific   | Bloom's   | Guilbert's  | Must to  | Teaching -  | Assessment /                              | Evaluat   | ion         |
|--|--|-----------------------------|--|---|--|-----------|---|--|---|---|-----------|-------------|
| No   | Compete<br>ncies   | Area                        | Level<br>Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | Competen<br>cies                        | Learning<br>Objectives   | Domain    | Level   | know/<br>desirable<br>to<br>know/Ni<br>ce to<br>know | Learning<br>Method  | Formative                                 | Summ<br>e | ativ        |
| Hom<br>UG-<br>HP-<br>1.35.<br>1<br>Hom<br>UG-<br>HP-<br>1.35.<br>2 | Integratio<br>n of<br>Knowledg<br>e<br>Practice<br>based<br>learning<br>and<br>improve<br>ment | Prescri<br>ption<br>Writing | Knows  | Writing an<br>ideal<br>prescriptio<br>n | <ul> <li>1.Define</li> <li>Prescription</li> <li>writing.</li> <li>2.Explain the parts of an ideal</li> <li>prescription.</li> </ul> | Cognitive | Level 1<br>Recall<br>Level 2<br>Understan<br>ding | Must<br>Know<br>Must<br>Know                         | <ul> <li>1.Lecture</li> <li>Demonstration</li> <li>s</li> <li>2. Small Group</li> <li>Discussions/</li> <li>Peer teaching</li> <li>(Think-Pair-</li> <li>Share, Jigsaw</li> <li>Strategy)</li> <li>3. Quiz</li> <li>4. Student</li> </ul> | Assignment<br>s<br>4. MCQ's<br>5. 2 marks | -         | SAQ<br>Viva |
| Hom<br>UG-<br>HP-<br>1.35.<br>3                                    | Synthesis<br>and<br>applicatio<br>n of   |                             | Knows  |   | 3. List the abbreviations used in prescription writing with  |           | Level 1<br>Recall                                 | Must<br>Know   | Seminars<br>5. Guest<br>Lecture<br>6. Case based  | 6.SAQ's and                               |           |             |

|                                 | I  |              |  |                 | r                             | 1               |   | Г  |                         |
|---------------------------------|--|--------------|--|-----------------|-------------------------------|-----------------|---|--|-------------------------|
|                                 | knowledg<br>e  |              | meaning.   |                 |                               |                 | learning<br>7. Case<br>simulation   |  |                         |
| Hom<br>UG-<br>HP-<br>1.35.<br>4 | Problem<br>solution<br>Classroo<br>m to<br>OPD/IPD<br>Transfer | Knows        | 4. Explain the<br>advantages<br>of<br>prescription<br>to the<br>patients and<br>to the<br>physician. |                 | Level 2<br>Understan<br>ding  | Must<br>Know    | learning  |  |                         |
| Hom<br>UG-<br>HP-<br>1.35.<br>5 |  | Shows<br>how | 5. Critically<br>analyse a<br>prescription<br>for any<br>faults.                                     |                 | Level 3<br>Problem<br>solving | Nice to<br>know |   |  |                         |
| Hom<br>UG-<br>HP-<br>1.35.<br>6 |  | Does         | 6. Write an ideal prescription   | Psychom<br>otor | Level 2<br>Control            | Must<br>know    | <ol> <li>Lecture<br/>Demonstration</li> <li>Procedural<br/>Skills Teaching</li> <li>Problem<br/>Based Learning</li> </ol> | <ol> <li>1.Simulatio</li> <li>n based</li> <li>assessment</li> <li>2. Case</li> <li>based</li> <li>assessment</li> </ol> | Practic<br>Examin<br>on |
| Hom<br>UG-<br>HP-               |  | Shows<br>how | 7. Criticize a<br>wrong<br>prescription  | Cognitive       | Level 3<br>Problem            | Nice to<br>know | 4. Experiential learning  | 3. OSPE  |                         |

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|                                 | <br> |              | <br>   |           |                        |                 |   |                                      |                         |  |
|---------------------------------|------|--------------|--|-----------|------------------------|-----------------|---|--------------------------------------|-------------------------|--|
| 1.35.<br>7                      |      |              |  |           | solving                |                 | <ul> <li>5. Team based learning</li> <li>6.Case based learning</li> <li>7. Case simulation learning</li> </ul>  |                                      |                         |  |
|                                 |      |              |  |           |                        |                 | 8. Practical<br>Demonstration   |                                      |                         |  |
| Hom<br>UG-<br>HP-<br>1.35.<br>8 |      | Shows<br>how | 8.Show<br>professionalis<br>m and<br>commitment<br>while writing<br>a<br>prescription<br>with<br>accuracy. | Affective | Level 2<br>Respond     | Nice to<br>know | <ol> <li>1.Lecture<br/>Demonstration</li> <li>2.Procedural</li> <li>Skills Teaching</li> <li>3. Problem</li> <li>Based Learning</li> <li>4. Experiential<br/>learning</li> <li>5. Team based<br/>learning</li> <li>6. Case based</li> </ol> | 1.Simulatio<br>n based<br>assessment | Practic<br>Examir<br>on |  |
| Hom<br>UG-<br>HP-<br>1.35.<br>9 |      |              | <ol> <li>9. Value the privacy &amp; integrity of the prescription.</li> </ol>                              |           | Level 3<br>Internalize | Nice to<br>know | <ul> <li>6. Case based</li> <li>learning</li> <li>7. Case</li> <li>simulation</li> <li>learning</li> </ul>  |                                      |                         |  |

| Hom   | 10. Value the | Level 3     | Nice to | 8. Practical  |  |
|-------|---------------|-------------|---------|---------------|--|
| UG-   | ethical       |             | know    | Demonstration |  |
|       |               | Internalize | KIIUW   | Demonstration |  |
| HP-   | consideration |             |         |               |  |
| 1.35. | s during      |             |         |               |  |
| 10    | writing a     |             |         |               |  |
|       | prescription  |             |         |               |  |
|       |               |             |         |               |  |
|       |               |             |         |               |  |
| Hom   | 11. Value the | Level 3     | Nice to | -             |  |
| UG-   | importance    |             | know    |               |  |
| HP-   | of rational   | Internalize |         |               |  |
| 1.35. | prescription  |             |         |               |  |
| 11    |               |             |         |               |  |
|       |               |             |         |               |  |

**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. | Generic          | Subje      | Miller's                                 | Specific         | Specific learning |        | Guilbert' | Must to                             | Teaching -         | Assessment / | Evaluati   | ion  |
|-----|------------------|------------|--|------------------|-------------------|--------|-----------|-------------------------------------|--------------------|--------------|------------|------|
| No  | Compete<br>ncies | ct<br>Area | Level<br>Does/<br>Shows<br>how/<br>Knows | Competen<br>cies | Objectives        | Domain | s Levels  | know/<br>desirable<br>to<br>know/Ni | Learning<br>Method | Formative    | Summa<br>e | ativ |

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|  |           |       |  |  | - | -                            |              |   |  |             |      |
|--|-----------|-------|--|--|---|------------------------------|--------------|---|--|-------------|------|
|  |           | how/  |  |  |   |                              | ce to        |   |  |             |      |
|  |           | Know  |  |  |   |                              | know         |   |  |             |      |
| Hom Integ<br>UG- on<br>HP- Know<br>1.36. ge<br>1 | of ation  |       | Must be<br>able to<br>follow and<br>practice<br>ethically<br>all the | 1.List all the acts<br>that govern the<br>legal aspects of<br>homoeopathic<br>pharmacy.                              | 0 | Level 1<br>Recall            | Must<br>know | <ul><li>1.Lecture</li><li>Demonstration</li><li>s</li><li>2. Small Group</li><li>Discussions/</li></ul> | <ol> <li>1.Structure</li> <li>d Oral</li> <li>Examinatio</li> <li>n</li> <li>2. Tutorials</li> </ol> | LAQ<br>Voce | Viva |
| Appli  | and       |       | laws that<br>govern<br>homoeopa                                      |  |   |                              |              | Peer teaching<br>(Think-Pair-<br>Share, Jigsaw  | 3.<br>Assignment<br>s  |             |      |
| Hom<br>UHP-<br>1.36.<br>2                        | of<br>led | Knows | thic<br>pharmacy.  | <ol> <li>Illustrate the provisions<br/>under the Drugs<br/>&amp; Cosmetic Act</li> </ol>                             |   | Level 2<br>Understa<br>nding | Must<br>know | Strategy)<br>3. Quiz<br>4. Student  | 4. MCQ's<br>5. 2 marks<br>question   |             |      |
| Hom<br>UG-<br>HP-<br>1.36.<br>3                  |           | Knows |  | 3. Illustrate the<br>provisions<br>under the<br>Schedule M1  |   | Level 2<br>Understa<br>nding | Must<br>know | Seminars<br>5. Guest<br>Lecture<br>6. Problem<br>based learning   | 6.SAQ's and<br>LAQ's   |             |      |
| Hom<br>UG-<br>HP-<br>1.36.<br>4                  |           | Knows |  | <ul> <li>4. Illustrate the provisions</li> <li>under the Drugs</li> <li>&amp; Magic</li> <li>Remedies Act</li> </ul> | 1 | Level 2<br>Understa<br>nding | Must<br>know | 7. Flipped<br>Classroom   |  |             |      |

| 1     |        |                       |           |      | - 1           | 1       | 1       |      |
|-------|--------|-----------------------|-----------|------|---------------|---------|---------|------|
| Hom   | Knows  | 5. Illustrate the     | Level 2   | Must |               |         |         |      |
| UG-   |        | provisions            | Understa  | know |               |         |         |      |
| HP-   |        | under the             |           |      |               |         |         |      |
| 1.36. |        | Medicinal &           | nding     |      |               |         |         |      |
| 5     |        | Toilet                |           |      |               |         |         |      |
|       |        | Preparation Act       |           |      |               |         |         |      |
| Hom   | Knows  | 6. Illustrate the     | Level 2   | Must | _             |         |         |      |
|       | KIIOWS |                       | Leverz    |      |               |         |         |      |
| UG-   |        | provisions            | Understa  | know |               |         |         |      |
| HP-   |        | under the             | nding     |      |               |         |         |      |
| 1.36. |        | Dangerous             |           |      |               |         |         |      |
| 6     |        | Drugs Act             |           |      |               |         |         |      |
| Hom   | Knows  | 7. Illustrate the     | Level 2   | Must |               |         |         |      |
| UG-   |        | provisions            | Understa  | know |               |         |         |      |
| HP-   |        | under the             | nding     |      |               |         |         |      |
| 1.36. |        | Prevention of         | numb      |      |               |         |         |      |
| 7     |        | Illicit Traffic in    |           |      |               |         |         |      |
|       |        | Narcotic Drugs        |           |      |               |         |         |      |
|       |        | & Psychotropic        |           |      |               |         |         |      |
|       |        | Substances Act        |           |      |               |         |         |      |
| Hom   | Knows  | 8. Illustrate the     | Level 2   | Must |               |         |         |      |
| UG-   |        | provisions            |           | know |               |         |         |      |
| HP-   |        | under the             | Understa  |      |               |         |         |      |
| 1.36. |        | Homoeopathic          | nding     |      |               |         |         |      |
| 8     |        | Central Council       |           |      |               |         |         |      |
|       |        | Act                   |           |      |               |         |         |      |
| Hom   | Does   | 9.Demonstrate Psycho  | m Level 2 | Must | 1.Practical   | 1.DOPS  | LAQ     |      |
| UG-   | Shows  | the labelling of otor | Control   | know | Demonstration | 2. OSPE | Practic | al   |
| HP-   | how    | homoeopathic          | Control   |      | 2.Procedural  | 2. USPE | Examir  | nati |
| 1.36. | now    | medicine              |           |      | 2.Procedural  |         | on      |      |

| 9                                |       | according to<br>Part IX of the<br>Drugs &<br>Cosmetic Act<br>1940   |           |                          |                | <ul><li>Skills Teaching</li><li>3. Problem</li><li>Based Learning</li><li>4. Experiential learning</li></ul> |                        |   |     |
|----------------------------------|-------|---|-----------|--------------------------|----------------|--|------------------------|---|-----|
| Hom<br>UG-<br>HP-<br>1.36.<br>10 | Knows | 10.Demonstrate<br>care and<br>commitment<br>and abide by<br>the provisions<br>laid down in the<br>various acts. | Affective | Level 1<br>Receivin<br>g | Nice t<br>know | <ul> <li>o 1.Lecture<br/>Demonstration</li> <li>3. Problem<br/>Based Learning</li> </ul>                     | Role Pla<br>Assessment |   | oce |
| TOPIC: Drug A                    |       |   |           |                          | 1              |  | 1                      | 1 |     |

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

|     |                       |             |  | 1                |                        | 1       | ſ          | T   |                    | -             |           |       |
|-----|-----------------------|-------------|--|------------------|------------------------|---------|------------|---|--------------------|---------------|-----------|-------|
| Sr. | Generi                | Subj        | Miller's   | Specific         | Specific               | Bloom's | Guilbert's | Must to   | Teaching -         | Assessment /E | valuatior | า     |
| No  | c<br>Compe<br>tencies | ect<br>Area | Level<br>Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | Competen<br>cies | learning<br>Objectives | Domain  | Levels     | know/<br>desirable<br>to<br>know/Nice<br>to<br>know | Learning<br>Method | Formative     | Summa     | ative |

|  | r   |                    | 1                     | 1  |  |           | 1  | 1                                       | 1  | 1   |   |       |
|--|---|--------------------|-----------------------|--|--|-----------|--|---|--|---|---|-------|
| Hom<br>UG-<br>HP-<br>1.37.<br>1<br>Hom<br>UG-<br>HP-<br>1.37.<br>2 | Integra<br>tion of<br>Knowl<br>edge<br>Synthe<br>sis and<br>applica<br>tion of<br>knowle<br>dge | Drug<br>Actio<br>n | Knows<br>how<br>Knows | Must be<br>able to<br>differentia<br>te the<br>different<br>mechanis<br>ms of drug<br>action of<br>homoeopa<br>thic<br>medicines | <ol> <li>Classify the<br/>different<br/>types of drug<br/>action.</li> <li>Explain the<br/>individual<br/>family drug<br/>action<br/>according to<br/>their sphere<br/>of action.</li> </ol> | Cognitive | Level 2<br>Understan<br>ding<br>Level 2<br>Understan<br>ding | Nice to<br>Know<br>Desirable<br>to Know | <ul> <li>1.Lecture<br/>Demonstration</li> <li>2. Small Group<br/>Discussions/</li> <li>Peer teaching<br/>(Think-Pair-<br/>Share, Jigsaw<br/>Strategy)</li> <li>3. Quiz</li> <li>4. Flipped<br/>Classroom</li> <li>6. Videos</li> </ul> | <ol> <li>Structured<br/>Oral</li> <li>Examination</li> <li>Tutorials</li> <li>Tutorials</li> <li>Assignments</li> <li>MCQ's</li> <li>2 marks<br/>question</li> <li>SAQ's</li> <li>Projects</li> <li>Spotting</li> </ol> | LAQ<br>MCQ<br>Practic<br>Examir<br>n<br>Viva Vo | natic |
| Hom<br>UG-<br>HP-<br>1.37.<br>3                                    | Classro<br>om to<br>Clinic<br>transfe<br>r  |                    | Knows                 |  | 3. Explain the<br>individual<br>family drug<br>action<br>according to<br>nature of<br>drug & family<br>relationship.   |           | Level 2<br>Understan<br>ding                                 | Desirable<br>to Know                    | 7. Integrated<br>Teaching  |   |   |       |
| Hom<br>UG-<br>HP-<br>1.37.<br>4                                    |   |                    | Does                  |  | 4. Analyze<br>the action of<br>drug on<br>patients.  | Cognitive | Level 3<br>Problem<br>solving                                | Nice to<br>know                         | <ol> <li>Practical<br/>Demonstration</li> <li>S</li> <li>2.Experiential<br/>Learning</li> </ol>  | <ol> <li>Spotting</li> <li>Pharmaco-<br/>logical action<br/>of 30 drugs<br/>as specified</li> </ol>   |   |       |

| Hom                             | Does  | 5. Co-relate   |                    | Nice         | to | 3. Projects  | in journal            |  |
|---------------------------------|-------|--|--------------------|--------------|----|--|-----------------------|--|
| UG-<br>HP-                      |       | the action of<br>drugs with  |                    | know         |    |  | 3. Projects           |  |
| 1.37.<br>5                      |       | the family<br>characteristic<br>s.   |                    |              |    |  |                       |  |
| Hom<br>UG-<br>HP-<br>1.37.<br>6 | Knows | 6.Show care A<br>in prescribing<br>homoeopathi<br>c medicine<br>based on<br>action of<br>drugs and<br>drug<br>relationships. | Level 2<br>Respond | Must<br>know |    | <ol> <li>Lecture</li> <li>Integrated<br/>teaching of<br/>Pharmacologic<br/>al drug action<br/>with Materia<br/>Medica</li> </ol> | Journal<br>Assessment |  |

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

### Learning Outcomes (LO):

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

| Sr. No | Generic      | Subject | Miller'                | Specific         | Specific               | Bloom      | Guilbert' | Must to                      | Teaching -         | Assessme         |      |   |
|--------|--------------|---------|------------------------|------------------|------------------------|------------|-----------|------------------------------|--------------------|------------------|------|---|
|        | Competencies | Area    | s Level<br>Does/       | Competen<br>cies | Learning<br>Objectives | 's<br>Doma | s Levels  | know/                        | Learning<br>Method | nt<br>/Evaluatio |      |   |
|        |              |         | Shows<br>how/<br>Knows |                  |                        | in         |           | desirable<br>to<br>know/Nice |                    | Form             | Summ | а |

|   |   |   | how/<br>Know |  |   |               |                              | to<br>know                                   |  | ative   | tive                |
|---|---|---|--------------|--|---|---------------|------------------------------|--|--|---|---------------------|
| HomUG-<br>HP<br>1.38.1<br>HomUG-<br>HP-<br>1.38.2 | Problem<br>formulation<br>Integration of<br>Knowledge<br>Synthesis and<br>application of<br>knowledge | Relation<br>of<br>Pharmacy<br>with<br>Materia<br>Medica | Knows        | Must be<br>able to<br>correlate<br>homoeop<br>athic<br>pharmacy<br>with<br>material<br>medica,<br>Anatomy<br>and<br>Physiolog<br>y | <ol> <li>Explain the correlation of homoeopathic pharmacy with the basics of Homoeopathic Materia Medica.</li> <li>Explain the correlation of homoeopathic pharmacy with the basics of Anatomy</li> </ol> | Cognit<br>ive | Level 2<br>Understa<br>nding | Desirable to<br>Know<br>Desirable to<br>Know | 1.Lecture<br>Demonstr<br>ations<br>2. Small<br>Group<br>Discussion<br>s/<br>Peer<br>teaching<br>(Think-<br>Pair-<br>Share,<br>Jigsaw | <ol> <li>Structur<br/>ed Oral<br/>Examinati<br/>on</li> <li>Tutorials</li> <li>Assignmen<br/>ts</li> <li>MCQ's</li> <li>S 2 marks<br/>question</li> </ol> | SAQ<br>Viva<br>Voce |
| HomUG-<br>HP-<br>1.38.3                           |   |   | Knows        |  | 3. Explain the<br>correlation of<br>homoeopathic<br>pharmacy and<br>Physiology  |               |                              | Desirable to<br>Know                         | Strategy)<br>3. Quiz<br>4. Student<br>Seminars<br>5. Flipped<br>Classroom  | 6.SAQ's,<br>LAQ's<br>7.Projects   |                     |

| HomUG- | Knows | 4.Apply the Cogr  | nit Level 3 | Desirable to |            | 1. DOPS          |  |
|--------|-------|-------------------|-------------|--------------|------------|------------------|--|
| HP-    | how   | principles of ive | Problem     | know         | Practical  | 2. OSPE          |  |
| 1.38.4 |       | posology          | Solving     |              | Demonstr   |                  |  |
|        |       | during case       | Serving     |              | ation      | 3.               |  |
|        |       | taking after      |             |              | 2. Lecture | Evaluation       |  |
|        |       | selection of      |             |              | Demonstr   | of projects      |  |
|        |       | similimum         |             |              | ation      | 4.               |  |
|        |       | based on          |             |              |            | <br>Evaluation   |  |
|        |       | knowledge of      |             |              | 3.         | of case          |  |
|        |       | Homoeopathic      |             |              | Experimen  | based            |  |
|        |       | Materia           |             |              | tal        | learning         |  |
|        |       | Medica.           |             |              | Research   | -                |  |
| HomUG- | Knows | 5. Apply the      |             | Desirable to | projects   | 5.               |  |
| HP-    | how   | knowledge of      |             | know         | 4. Case    | Evaluation       |  |
| 1.38.5 | 11000 | drug action       |             | KIIOW        | based      | of PBL           |  |
| 1.50.5 |       | based on          |             |              | learning   | 6.               |  |
|        |       | familial          |             |              | -          | e.<br>Evaluation |  |
|        |       | relationship      |             |              | 5.         | of Case          |  |
|        |       | and remedy        |             |              | Problem    | simulation       |  |
|        |       | relationship as   |             |              | based      | Simulation       |  |
|        |       | noted in          |             |              | learning   |                  |  |
|        |       | Homoeopathic      |             |              | 6. Case    |                  |  |
|        |       | Materia           |             |              | simulation |                  |  |
|        |       | Medica and        |             |              |            |                  |  |
|        |       | organ             |             |              |            |                  |  |
|        |       | affection with    |             |              |            |                  |  |
|        |       | anatomy           |             |              |            |                  |  |
|        |       |                   |             |              |            |                  |  |
| HomUG- | Knows | 6. Apply the      |             | Desirable to |            |                  |  |
| HP-    | how   | knowledge of      |             | know         |            |                  |  |
|        |       | sources of        |             |              |            |                  |  |

|                                   |              |  |               | 1                        | 1                    | 1  | 1  |              |
|-----------------------------------|--------------|--|---------------|--------------------------|----------------------|--|--|--------------|
| 1.38.6<br>HomUG-<br>HP-<br>1.38.7 | Knows<br>how | drugs and<br>collection of<br>drugs while<br>preparation of<br>homoeopathic<br>medicines<br>according to<br>the scale of<br>potentisation.<br>7. Apply the<br>knowledge of<br>pharmacologic<br>al action of<br>drugs with the<br>normal<br>physiology of<br>human body |               |                          | Desirable to<br>know |  |  |              |
| HomUG-<br>HP-<br>1.38.8           | Knows<br>how | 8.Demonstrate<br>care,<br>professionalis<br>m &<br>commitment &<br>follow all the<br>guidelines<br>meticulously<br>as given in 6 <sup>th</sup><br>edition of<br>Organon of   | Affect<br>ive | Level 1<br>Receivin<br>g | Nice to<br>know      | <ol> <li>Practical<br/>Demonstr<br/>ation</li> <li>Lecture<br/>Demonstr<br/>ation</li> <li>S.<br/>Experimen</li> </ol> | <ol> <li>DOPS</li> <li>OSPE</li> <li>Evaluation<br/>of projects</li> <li>Evaluation<br/>of case<br/>based</li> </ol> | Viva<br>Voce |

|        | medicine while              | tal learning        |
|--------|-----------------------------|---------------------|
|        | selecting a                 | Research            |
|        | particular                  | projects            |
|        | homoeopathic                | Evaluation          |
|        | medicine in a               | 4. Case of PBL      |
|        | particular                  | based 6.            |
|        | potency.                    | learning Evaluation |
|        |                             | 5. of Case          |
|        |                             | Problem simulation  |
| HomUG- | 9.                          | based               |
| HP-    | Demonstrate                 | learning            |
| 1.38.9 | care,                       |                     |
|        | professionalis              | 6. Case             |
|        | m &                         | simulation          |
|        | commitment &                |                     |
|        | follow all the              |                     |
|        | guidelines                  |                     |
|        | meticulously                |                     |
|        | as given in 6 <sup>th</sup> |                     |
|        | edition of                  |                     |
|        | Organon of                  |                     |
|        | medicine while              |                     |
|        | preparation of              |                     |
|        | homoeopathic                |                     |
|        | medicine                    |                     |
|        | according to                |                     |
|        | the scale of                |                     |
|        | potentisation.              |                     |
|        |                             |                     |
|        |                             |                     |
|        |                             |                     |

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

|  |  | medicine. |  |  |  |
|--|--|-----------|--|--|--|
|  |  |           |  |  |  |
|  |  |           |  |  |  |
|  |  |           |  |  |  |
|  |  |           |  |  |  |

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

## Learning Outcomes (LO):

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

| Sr. | Generic          | Subject  | Miller's   | Specific         | Specific               | Bloom's  | Guilbert' | Must to   | Teaching -         | Assessment /Eva | aluation   |     |
|-----|------------------|----------|--|------------------|------------------------|----------|-----------|---|--------------------|-----------------|------------|-----|
| No  | Compet<br>encies | Area     | Level<br>Does/<br>Shows<br>how/<br>Knows<br>how/<br>Know | Compete<br>ncies | Learning<br>Objectives | Domain   | s levels  | know/<br>desirable<br>to<br>know/Nice<br>toknow | Learning<br>Method | Formative       | Summ<br>ve | ati |
| Но  | Proble           | Recent   | Knows  | Must be          | 1.Enumerate            | Cognitiv | Level 1   | Nice to   | 1.Lecture          | 1.Structured    |            |     |
| mU  | m                | advance  |  | able to          | the types of           | е        | Decall    | know  | Demonstration      | Oral            |            |     |
| G-  | solutio          | ments    |  | undertak         | research in            |          | Recall    |   | s                  | Examination     |            |     |
| HP- | n                | and      |  | e a short        | homoeopathi            |          |           |   | 2. Small Group     | 2. Assignments  |            |     |
| 1.3 |                  | scope of |  | term             | c pharmacy             |          |           |   | Discussions/       | 2. Assignments  |            |     |
| 9.1 |                  | research |  | research         |                        |          |           |   |                    | 3. MCQ's        |            |     |
|     | Integra          | in       |  | in               |                        |          |           |   | Peer teaching      |                 |            |     |

|     | tion of  | Homoeo |       | Homoeo  |                |          |       |    | (Think-Pair-  | 4.SAQ's |  |
|-----|----------|--------|-------|---------|----------------|----------|-------|----|---------------|---------|--|
|     | Knowle   | pathic |       | pathic  |                |          |       |    | Share, Jigsaw |         |  |
|     | dge      | Pharma |       | Pharmac |                |          |       |    | Strategy)     |         |  |
|     |          | су     |       | у       |                |          |       |    | 3. Visit to   |         |  |
| Но  |          |        | Knows |         | 2.Explain the  | Level 2  | Nice  | to | research      |         |  |
| mU  | Synthes  |        |       |         | recent         |          | Know  |    | laboratories  |         |  |
| G-  | is and   |        |       |         | advancement    | Understa |       |    | laboratories  |         |  |
| HP- | applicat |        |       |         | s in the field | nding    |       |    |               |         |  |
| 1.3 | ion of   |        |       |         | of             |          |       |    |               |         |  |
| 9.2 | knowle   |        |       |         | homoeopathi    |          |       |    |               |         |  |
|     | dge      |        |       |         | c pharmacy     |          |       |    |               |         |  |
| Но  |          |        | Does  |         | 3.Design the   | Level 3  | Nice  | to |               |         |  |
| mU  | Classro  |        | DOCS  |         | protocol for a | LEVEIJ   | know  | 10 |               |         |  |
| G-  | om to    |        |       |         | short term     | Problem  | KIIOW |    |               |         |  |
| HP- | lab      |        |       |         | research       | solving  |       |    |               |         |  |
|     | transfer |        |       |         | proposal in    |          |       |    |               |         |  |
| 9.3 | transfer |        |       |         | homoeopathi    |          |       |    |               |         |  |
|     |          |        |       |         | c pharmacy     |          |       |    |               |         |  |
|     |          |        |       |         |                |          |       |    |               |         |  |
|     |          |        |       |         |                |          |       |    |               |         |  |

#### **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

| Hom | oeopathic 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.             |

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

#### Demonstration

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

9. Medication of Globule (Large Scale)

#### Activities

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

#### Demonstration

- 1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)-06 Hours
- 2. Estimation of moisture content using water bath-02 Hours
- 3. Paper chromatography & TLC of any mother tincture-04 Hours
- 4. Laboratory methods Sublimation, distillation, decantation, filtration, crystallization.-04 Hours
- 5. Preparation of mother tincture Maceration and Percolation- 04 Hours
- 6. Study & demonstration of Drug Substances (listed in Appendix B)- 10 Hours
- i)Macroscopic Characteristic (Any 15)
  - ii) Microscopic characteristic (Any 05)
- 7. Study & demonstration of vehicles (Solid, Liquid & Semi solid as available)- 02 Hours
- 8. Microscopical study of Trituration (One drug up to 3X Potency)-02 Hours
- 9. Medication of Globule (Large Scale)-1 Hour
**Clinical Hospital Work** – Maintain Record (Activities/Posting in Dispensing Section, Prescriptions based on Homoeopathic Principles in IPD/OPD) – Record to be maintained as per format in Appendix G- 20 Hours

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

## 9. ASSESSMENT

## **Assessment Summary**

## 9A- Number of papers and Mark Distribution

| Sr. | Course Code | Papers | Theory | Practical | Viva | Internal    | Electi | ives | Grand Total |
|-----|-------------|--------|--------|-----------|------|-------------|--------|------|-------------|
| No. |             |        |        |           | Voce | Assessment- | Grad   | e    |             |
|     |             |        |        |           |      | Practical   | Obta   | ined |             |
| 1   | HomUG-HP    | 1      | 100    | 50        | 40   | 10          |        |      | 100         |
|     |             |        |        |           |      |             |        |      |             |
|     |             |        |        |           |      |             |        |      |             |

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

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

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

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

| PA2              | PA3                        | Periodical   | TT1  | TT2   | Terminal Test   | Final  |
|------------------|----------------------------|--|--|---|---|--|
| Practical /\/iva | Practical //iva            | Assessment   | Practical/Viva   | Practical/Viva  | Average   | Internal   |
|                  | FTactical/ viva            | Average  | (50 Marks)   |   | TT1+TT2/100*10  | Assessment   |
| 10 Marks)        | (10 Marks)                 | ΡΔ1+ΡΔ2+ΡΔ3/3  | (50 10181 K3)  | (50 Marks)  | 111112/100 10   | Marks  |
| 3                | C                          |  | E  | F   | G   | D+G/2  |
| 5                | C                          | D  |  | •   |   | 0.0/2  |
|                  | ractical/Viva<br>10 Marks) | ractical/Viva Practical/Viva<br>10 Marks) (10 Marks) | Practical/Viva Practical/Viva Assessment<br>Average<br>(10 Marks) PA1+PA2+PA3/3<br>C | Practical/Viva Practical/Viva Assessment Average (50 Marks) PA1+PA2+PA3/3 C | Practical/Viva Practical/Viva Assessment Average (10 Marks) PA1+PA2+PA3/3 C C Practical/Viva (50 Marks) PA1+PA2+PA3/3 E F | Practical/Viva Practical/Viva Assessment Average (50 Marks) PA1+PA2+PA3/3 PA1+PA2+PA3/ |

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

## 9C - Evaluation Methods for Periodical Assessment

| Sr. No | Evaluation Criteria   |
|--------|-----------------------|
| 1      | Practical Performance |
| 2      | Viva Voce             |

## 9 D- Paper Layout

| MCQ | 10 marks |
|-----|----------|
| SAQ | 40 marks |
| LAQ | 50 marks |

## 9 E– I - Distribution of Theory exam

| Sr. No | Paper   | "Yes" ca |   | Type of Que<br>"Yes" can be |        |            |  |
|--------|---|----------|---|-----------------------------|--------|------------|--|
|        | Α   | В        | С                                       | MCQ                         | SAQ    | LAQ        |  |
|        | List of Topics                                      | Term     | Marks                                   | (1 Mark)                    | (5     | (10 Marks) |  |
|        |   |          |   |                             | Marks) |            |  |
| 1      | General Concepts and Orientation                    | 1        | Refer                                   | Yes                         | Yes    | Yes        |  |
| 2      | Raw Material: Drugs and Vehicles                    | 1        | <ul> <li>Next</li> <li>Table</li> </ul> | Yes                         | Yes    | Yes        |  |
| 3      | Homoeopathic Pharmaceutics                          | П        | _                                       | Yes                         | Yes    | Yes        |  |
| 4      | Pharmacodynamics                                    | 111      | _                                       | Yes                         | Yes    | Yes        |  |
| 5      | Quality Control                                     | П        | _                                       | No                          | Yes    | No         |  |
| 6      | Legislations pertaining to Homoeopathic<br>Pharmacy |          |   | No                          | No     | Yes        |  |
| 7      | Homoeopathic Pharmacy - Relationships               | 111      |   | No                          | Yes    | No         |  |

## 9 E – II - Theme table

| Theme* | Topics               | Term | Marks | MCQ's | SAQ's | LAQ's |
|--------|----------------------|------|-------|-------|-------|-------|
| А      | General Concepts and | I    | 16    | Yes   | Yes   | Yes   |

|   | Orientation   |     |    |     |     |     |
|---|---|-----|----|-----|-----|-----|
| В | Raw Material: Drugs and Vehicles                    | I   | 25 | Yes | Yes | Yes |
| С | Homoeopathic<br>Pharmaceutics                       | 11  | 23 | Yes | Yes | Yes |
| D | Pharmacodynamics                                    |     | 16 | Yes | Yes | Yes |
| E | Quality Control                                     | II  | 05 | No  | Yes | No  |
| F | Legislations pertaining to<br>Homoeopathic Pharmacy | 111 | 10 | No  | No  | Yes |
| G | Homoeopathic Pharmacy<br>- Relationships            | 111 | 05 | No  | Yes | No  |

## 9 F Question paper Blueprint

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

|    | Nice to know: Nil                                  | 8. Theme G |
|----|--|------------|
| Q3 | Long answer Questions                              | 1. Theme A |
|    | (LAQ)  | 2.Theme B  |
|    | 5 Questions  | 3. Theme C |
|    | 10 marks each                                      | 4. Theme D |
|    | All compulsory                                     | 5. Theme F |
|    | All questions on must know                         |            |
|    | No Questions on Nice to know and Desirable to know |            |

## 9 G - Distribution of Practical Exam

# Practical, Viva& Internal Assessment → 100 marks

| Spotting   | 20 marks |
|------------|----------|
| Experiment | 20 marks |
| Journal    | 10 marks |

| Viva voce           | 40 marks |
|---------------------|----------|
| Internal assessment | 10 marks |

#### **10.LIST OF RECOMMENDED BOOKS**

#### **Text Books**

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

### **Reference Texts**

1.Banerjee SK & Sinha N. (Reprint edition, 1993). A Treatise on Homoeopathic Pharmacy. B Jain Publishers, New Delhi.

2. Govt. of India, Ministry of Health & Family Welfare, New Delhi (1971 to 2006). Homoeopathic Pharmacopoeia of India (1-9 Vol.)

3. Hughes R (Reprint edition, 1999). A Manual of Pharmacodynamics. B Jain Publishers, New Delhi.

4. Dr. P.N. Verma &Dr. (Mrs.) 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. | Naja tripudians      |
| 9.  | Cannabis indica        | 24. | Nitricum acidum      |
| 10. | Cannabis sativa        | 25. | Nux vomica           |
| 11. | Cinchona officinalis   | 26. | Passiflora incarnate |
| 12. | Coffea cruda           | 27. | Stannum metallicum   |
| 13. | Crataegus oxyacantha   | 28. | Stramonium           |
| 14. | Crotalus horridus      | 29. | Symphytum officinale |
| 15. | Gelsemium sempervirens | 30. | Tabacum              |

| APPEN   | APPENDIX – B                     |                         |  |  |
|---------|----------------------------------|-------------------------|--|--|
| List of | List of drugs for identification |                         |  |  |
| i.      | i. Vegetable Kingdom             |                         |  |  |
|         | 1.                               | Aegle folia             |  |  |
|         | 2.                               | Anacardium orientale    |  |  |
|         | 3.                               | Andrographis paniculata |  |  |
|         | 4.                               | Calendula officianlis   |  |  |
|         | 5.                               | Cassia sophera          |  |  |
|         | 6.                               | Cinchona officinalis    |  |  |
|         | 7.                               | Cocculus indicus        |  |  |
|         | 8.                               | Coffea cruda            |  |  |

| 9.     | Colocynthis                 |  |  |  |
|--------|-----------------------------|--|--|--|
| 10     | . Crocus sativa             |  |  |  |
| 11     | . Croton tiglium            |  |  |  |
| 12     | . Cynodon dactylon          |  |  |  |
| 13     | . Ficus religiosa           |  |  |  |
| 14     | . Holarrhenaantidysenterica |  |  |  |
| 15     | . Hydrocotyle asiatica      |  |  |  |
| 16     | . Justicia adhatoda         |  |  |  |
| 17     | . Lobelia inflata           |  |  |  |
| 18     | . Nux vomica                |  |  |  |
| 19     | . Ocimum sanctum            |  |  |  |
| 20     | . Opium                     |  |  |  |
| 21     | . Rauwolfia serpentina      |  |  |  |
| 22     | . Rheum                     |  |  |  |
| 23     | . Saraca indica             |  |  |  |
| 24     | . Senna                     |  |  |  |
| 25     | . Stramonium                |  |  |  |
| 26     | . Vinca minor               |  |  |  |
| ii. Cł | Chemicals or Minerals       |  |  |  |
| 1.     | Acetic acid                 |  |  |  |
| 2.     | Alumina                     |  |  |  |

| 3.        | Argentum Metallicum  |
|-----------|----------------------|
| 4.        | Argentum Nitricum    |
| 5.        | Arsenicum Album      |
| 6.        | Calcarea Carbonica   |
| 7.        | Carbo Vegetabilis    |
| 8.        | Graphites            |
| 9.        | Magnesium Phosphoric |
| 10.       | Natrum Muriaticum    |
| 11.       | Sulphur              |
|           |                      |
| iii. Anin | mal 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 |  |
|--|--|--|
|--|--|--|

| opendix E   |  |
|---|--|
| Format for Maintaining Record on visit to Homoeopathic Manufactory (GMP Compliant)    |  |
| Date of Visit   |  |
| No. of Visiting Students & Teaching Faculty   |  |
| Name of Teaching Faculty  |  |
| Detail of the Instructor/s at the Manufactory   |  |
| How the Tour was arranged   |  |
| Name & Location of the Homoeopathic Manufactory                                       |  |
| History about the Manufactory   |  |
| Different Sections of the manufactory with its working process                        |  |
| Activities of R&D Dept  |  |
| How the visit helped in correlation with topics studied in Theory                     |  |
| Conclusion  |  |
| (Any other related information, not mentioned in format, if required can be included) |  |

## Appendix F

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

Date of the Visit

No. of visiting Students & Teaching Faculty

Name of Teaching Faculty

Detail of Instructor/s

How the Tour was arranged

Name & Location of the Medicinal Plant Garden

History & about the Medicinal Plant Garden

A list Medicinal Plants seen with brief description,

Conclusion

### Appendix G

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

Record on Prescriptions based on Homoeopathic Principles in IPD/OPD

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

Format -

Patient ID

Complaint

Diagnosis

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

Second Prescription (if Record is available)

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

Record on Activities/Posting in Hospital Dispensing Section

Total No. of Patients Date wise,

SI No as per Prescription Register,

Dosage form- Liquid/solid,

Name of Vehicle used,

Medication Process etc

Conclusion at the end on Lessons learnt on Homoeopathic Dispensing Techniques

Appendix H

Format for Maintaining record on Departmental Seminars

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

Circular/Notice of Departmental Seminar

Title of Topic for Presentation,

Date

Presented by Name of Student/s

Brief Report on the Seminar

Any New Information provided by the Speakers

Rating on a Scale of 10

No of Students & Faculty Members attending the Seminar

Photos

Signed by the Departmental Head

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