

CURRICULUM DOCUMENT
M.D. (Homoeopathy) Homoeopathic Pharmacy

I. TITLE OF THE SPECIALITY COURSE, AND ITS ABBREVIATION.

M.D. (Homoeopathy) Homoeopathic Pharmacy.; **Hom-PG- HP**

II. COMPONENTS OF THE CURRICULUM

II (1). Part I

- (i) Fundamentals of Homoeopathic Pharmacy.
- (ii) Fundamentals of Clinical Medicine in Homoeopathic Pharmacy; and
- (iii) Research Methodology and Biostatistics.

II (2). Part II

- (i) Homoeopathic Pharmacy. Paper 1
- (ii) Homoeopathic Pharmacy. Paper 2.

III. BRIEF DESCRIPTION OF SPECIALITY AND ITS RELEVANCE IN HOMOEOPATHY POST-GRADUATE COURSE.

Homoeopathic Pharmacy prospects with discovering and manufacturing new medicines in an industrial set-up along with their quality assurance, effectiveness, drug laws and pharmaceutical ethics binding them. With the ever-expanding Homoeopathic Pharmaceutical industries, the course shall deal with administration, production management, marketing strategies, communication, sales and distribution channels.

The fundamental sciences like Chemistry, Botany, Zoology, Physics, specially biophysics and quantum physics serves to provide a stronghold to the subject of Homoeopathic Pharmacy. With preclinical research conducted in the pharmacy field, answers to the age-old question about the action of homoeopathic medicines have been presented. Adhering to the principles of Homoeopathy, integrating with Homoeopathic Philosophy and Materia Medica, the new paths of Agro-Homoeopathy and Veterinary Homoeopathy have been explored under Pharmacy showcasing the beautiful results by our medicines.

As medicines serve as a strong backbone for a prescription, understanding the concepts of clinical trial, rational use of drugs, posology, pharmacovigilance, medical auditing, and hospital pharmacy is necessary during patient care.

The study of Homoeopathic Pharmacy at the postgraduate level is to create good academicians and clinicians along with trained professionals for Pharmacovigilance, Pharmaceutical industries, Pharmacopoeia Commission, Regulatory bodies, as Research officers and Scientific writers.

IV. COURSE OBJECTIVES. (ENTRUSTABLE PROFESSIONAL ACTIVITIES – EPAS)

1. Collect information necessary to ensure the quality, purity, and stability of drugs by conducting a series of standardisation tests to assay the role of a **drug analyst** in the Homoeopathic Pharmaceutical industry.
2. Perform **Good Manufacturing Practices (GMP)** in the Homoeopathic Pharmaceutical Industry at every stage of manufacturing for distribution and consumption of drugs.
3. Demonstrate qualities of **Good Marketing skills** in Homoeopathic Pharmacy professionals.
4. Perform duties of an academician by imparting knowledge of Homoeopathic Pharmacy for postgraduates through lectures and conducting guest lectures by experts for enhancing the subject depth of Homoeopathic Pharmaceutical Industries.
5. Provide medication-related expertise/ consultation as a homoeopathic physician and as a part of an interprofessional health care team in homoeopathic hospitals.
6. Report adverse drug reactions and /or medication errors (Pharmacovigilance).
7. Perform administrative responsibilities for inventory level checking, drug order review, and coordination with outside vendors in hospital pharmacies.
8. Collect authenticated drug sources for primary assays in Plants and chemicals.
9. Function in R and D branch to design research protocol to ensure pharmaco-therapeutic follow-up, interpret data, analyse results and publish records in International and UGC care journals.
10. Perform specific laboratory skills that are required for new drug development.
11. Internalise the essential skills in industrial manufacturing processes for the preparation of homoeopathic medicines.
12. Manage medication stores and plan for medication budgets by way of providing statistics for medicine consumption.
13. Conduct preclinical & clinical research relevant to validate the sphere of action and efficacy of homoeopathic medicines.
14. Develop the domain of Agro homoeopathy by conducting research on plants for assessing the effect of homoeopathic medicines on growth & production, biotic and abiotic stresses along with undertaking treatment of various plant diseases.
15. Develop the domain of Veterinary Homoeopathy through clinical research conducted on animals.
16. Formulate new drugs.
17. Publish evidence-based documentation of Homoeopathic Pharmacy based on experimentation and clinical research outcomes in credible journals.
18. Consistently demonstrate characteristics of self-directed learning by recognising continuing educational needs with the conduction of seminars, conferences, CMEs and workshops.
19. Apply various teaching-learning techniques for imparting undergraduate and postgraduate education.

IV (1). MAPPING OF EPASAND DOMAIN COMPETENCIES

KS	:	Knowledge & Scholarship
PC	:	Patient care
HO	:	Homoeopathic Orientation
CS	:	Communication skills
PBL	:	Practice based learning
Prf	:	Professionalism

Sl. No	EPA (Entrustable Professional Activities)	KS	PC	HO	CS	PBL	Prf
1.	Collect information necessary to ensure the quality, purity, and stability of drugs by conducting a series of standardisation tests to assay the role of a drug analyst in the Homoeopathic Pharmaceutical industry.	√	-	√	-	√	√
2.	Perform Good Manufacturing Practices (GMP) in the Homoeopathic Pharmaceutical Industry at every stage of manufacturing for distribution and consumption of drugs.	-	-	√	√	-	√
3.	Demonstrate qualities of Good Marketing skills in Homoeopathic Pharmacy professionals.	√	-	√	√	√	√
4.	Perform duties of an academician by imparting knowledge of Homoeopathic Pharmacy for postgraduates through lectures and conducting guest lectures by experts for enhancing the subject depth of Homoeopathic Pharmaceutical Industries.	√	-	√	√	√	-
5.	Provide medication-related expertise/consultation as a homoeopathic physician and as a part of an interprofessional health care team in homoeopathic hospitals.	√	√	√	√	-	√
6.	Report adverse drug reactions and /or medication errors (Pharmaco vigilance).	-	√	-	√	-	√
7.	Undertake administrative responsibilities for inventory level checking, drug order review, and coordination with outside vendors in hospital pharmacies.	-	-	-	√	-	√
8.	Collect authenticated drug sources for primary assays in Plants and chemicals.	√	-	√	-	√	-

9.	Function in R and D branch to design research protocol to ensure pharmacotherapeutic follow-up, interpret data, analyse results and publish records in International and UGC care journals.	√	-	√	-	√	√
10.	Perform specific laboratory skills that are required for new drug development.	√	-	√	√	√	-
11.	Internalise the essential skills in industrial manufacturing processes for the preparation of homoeopathic medicines.	-	-	√	√	√	-
12.	Manage medication stores and plan for medication budgets by way of providing statistics for medicine consumption.	√	-	√	√	√	√
13.	Conduct preclinical & clinical research relevant to validate the sphere of action and efficacy of homoeopathic medicines.	√	-	√	-	√	√
14.	Develop the domain of Agro homoeopathy by conducting research on plants for assessing the effect of homoeopathic medicines on growth& production, biotic and abiotic stresses along with undertaking treatment of various plant diseases.	√	-	√	-	√	√
15.	Develop the domain of Veterinary Homoeopathy through clinical research conducted on animals.	√	-	√	-	√	√
16.	Formulate new drugs.	√	-	√	√	√	√
17.	Publish evidence-based documentation of Homoeopathic Pharmacy based on experimentation and clinical research outcomes in credible journals.	-	-	-	√	-	√
18.	Consistently demonstrate characteristics of self-directed learning by recognising continuing educational needs with the conduction of seminars, conferences, CMEs and workshops.	-	-	-	-	√	√
19.	Apply various teaching-learning techniques for imparting undergraduate and postgraduate education.	√			√	√	√

IV(2). SEMESTER WISE TABLE EPA LEVELS AND COMPETENCIES APPLICABLE TO EACH EPA.

EPA Level:-

1 = No permission to act

2 = Permission to act with direct, proactive supervision present in the room

3 = Permission to act with indirect supervision, not present but quickly available if needed

4 = Permission to act under distant supervision not directly available (unsupervised)

5 = Permission to provide supervision to junior trainees

Sl. no	EPAs	Hom-PG- HP- Part – I			Hom-PG- HP- Part – II		
		Sem /Mod1	Sem /Mod2	Sem/Mod3	Sem/Mod4	Sem/Mod5	Sem /Mod6
1.	Collect information necessary to ensure the quality, purity, and stability of drugs by conducting a series of standardisation tests to assay the role of a drug analyst in the Homoeopathic Pharmaceutical industry.	EPA LEVEL: 1 Study the ideal methods of standardisation of drugs			EPA LEVEL: 2 Perform the series of standardisation tests to assay the role of a drug analyst in the Homoeopathic Pharmaceutical industry.	EPA LEVEL: 5 Guiding the juniors	
2.	Perform Good Manufacturing Practices (GMP) in the Homoeopathic Pharmaceutical Industry at every stage of manufacturing for distribution and consumption of drugs.				EPA LEVEL: 2 Perform Good Manufacturing Practices (GMP) in the Homoeopathic Pharmaceutical Industry at every stage of manufacturing	EPA LEVEL: 5 Guiding the juniors	

					g for distribution and consumption of drugs.	
3.	Demonstrate qualities of Good Marketing skills in Homoeopathic Pharmacy professionals.				EPA LEVEL: 2 Understand qualities of Good Marketing skills in Homoeopathic Pharmacy professionals.	EPA LEVEL: 3 Demonstrate qualities of Good Marketing skills in Homoeopathic Pharmacy professionals.
4.	Perform duties of an academician by imparting knowledge of Homoeopathic Pharmacy for postgraduates through lectures and conducting guest lectures by experts for enhancing the subject depth of Homoeopathic Pharmaceutical Industries.	EPA LEVEL: 2 Perform duties of an academician by imparting knowledge of Homoeopathic Pharmacy for postgraduates through lectures and conducting guest lectures by experts for enhancing the subject	EPA LEVEL: 3 Perform duties of an academician by imparting knowledge of Homoeopathic Pharmacy for postgraduates through lectures and conducting guest lectures by experts for enhancing the subject			EPA LEVEL: 5 Guiding the juniors

		depth of Homoeopathic Pharmaceutical Industries.	depth of Homoeopathic Pharmaceutical Industries.				
5.	Provide medication-related expertise/consultation as a homoeopathic physician and as a part of an interprofessional health care team in homoeopathic hospitals.	EPA LEVEL: 2 Learn the case management with homoeopathic drugs.	EPA LEVEL: 3 Case management with interprofessional experts	EPA LEVEL: 4 Understand the cardinal principles of homoeopathy and its application in selection of simillimum			EPA LEVEL: 5 Guiding the juniors
6.	Report adverse drug reactions and /or medication errors (Pharmacovigilance).	EPA LEVEL: 2 Understanding the adverse drug reactions in the cases during the house job.	EPA LEVEL: 3 Observing & analysing the adverse drug reactions in the cases during the house job.		EPA LEVEL: 4 Apply this knowledge in clinical practice.	EPA LEVEL: 4 Apply this knowledge in clinical practice.	
7.	Undertake administrative responsibilities for inventory level checking, drug order review, and coordination	EPA LEVEL:2 Understanding the process of inventory level checking	EPA LEVEL: 3 Learn the process of drug order review	EPA LEVEL: 4 Learn the coordination skills and Liaisoning		EPA LEVEL: 4 Application in clinical practice	

	with outside vendors in hospital pharmacies.			with outside vendors in hospital pharmacy			
8.	Collect authenticated drug sources for primary assays in Plants and chemicals.	EPA LEVEL: 2 Understand the concept of authentication and the rules for the collection of authenticated sources of drugs	EPA LEVEL: 3 Understand the concept of authentication and the rules for the collection of authenticated sources of drugs	EPA LEVEL:3 Process of collection under the supervision of experts like Botanist / zoologist/ chemist during internship at pharmaceutical industry .			

9.	Function in R and D branch to design research protocol to ensure pharmacotherapeutic follow-up, interpret data, analyse results and publish records in International and UGC care journals.	EPA LEVEL: 1 Understanding the fundamentals of Pre-clinical & Clinical Research	EPA LEVEL:2 Execution of the Research Knowledge in clinical practice.	EPA LEVEL :3 Execution of the Research Knowledge in clinical practice	EPA LEVEL: 4 Function in R and D branch to design research protocol to ensure pharmacotherapeutic follow-up, interpret data, analyse results and publish records in International and UGC care journals.	EPA LEVEL: 4 Function in R and D branch to design research protocol to ensure pharmacotherapeutic follow-up, interpret data, analyse results and publish records in International and UGC care journals.	EPA LEVEL: 5 Guiding the Juniors.
10.	Perform specific laboratory skills that are required for new drug development.	EPA Level : 1 Study the concept of different Laboratory skills required for new drug development.			EPA LEVEL :2 Perform specific laboratory skills that are required for new drug development.	EPA LEVEL :3 Perform specific laboratory skills that are required for new drug development.	
11.	Internalise the essential skills in industrial manufacturing processes for the	EPA LEVEL: 1 Understanding the concept of	EPA LEVEL :2 Perform the role of a drug	EPA LEVEL:2 Application of this knowledge	EPA LEVEL: 2 Application of this		EPA LEVEL :5 Guiding the Juniors.

	preparation of homoeopathic medicines.	Drug Standardisation.	analyst in relations to drug standardisation.	e in the departmental laboratory .	knowledge in the Industrial laboratory level.		
12.	Manage medication stores and plan for medication budgets by way of providing statistics for medicine consumption.	EPA LEVEL: 2 Understanding the concept of GMP and its fundamentals.	EPA LEVEL:3 Understanding the rules of different stages of manufacturing, distribution and consumption of drugs.	EPA LEVEL:4 Understanding the rules of different stages of manufacturing, distribution and consumption of drugs.	EPA LEVEL: 4 Understanding the practical aspects of different stages of manufacturing, distribution and consumption of drugs at the industry level during the Internship.		EPA LEVEL: 5 Guiding the Juniors
13.	Conduct preclinical & clinical research relevant to validate the sphere of action and efficacy of homoeopathic medicines.	EPA LEVEL: 2 Understanding the fundamentals of Pre-clinical & Clinical Research	EPA LEVEL:3 Execution of the Research Knowledge in clinical practice.	EPA LEVEL:4 Execution of the Research Knowledge in clinical practice			EPA LEVEL: 5 Guiding the Juniors
14.	Develop the domain of Agro homoeopathy by conducting research on plants for assessing the	EPA LEVEL: 2 Understanding the concept of Agro homoeopathy.	EPA LEVEL: 3 Application of Homoeopathic Medicines in plant	EPA LEVEL:4 Application of Homoeopathic Medicines in plant	EPA LEVEL: 4 Application of this knowledge in the Industrial laboratory level.		EPA LEVEL: 5 Guiding the Juniors

	effect of homoeopathic medicines on growth & production, biotic and abiotic stresses along with undertaking treatment of various plant diseases.		diseases as well as growth and production of plants / crops in Agriculture .	diseases as well as growth and production of plants / crops in Agriculture.			
15.	Develop the domain of Veterinary Homoeopathy through clinical research conducted on animals.	EPA LEVEL: 2 Understanding the veterinary diseases.	EPA LEVEL :3 Homoeopathic management of veterinary diseases.	EPA LEVEL :4 Apply in practice			EPA LEVEL: 5 Guiding the Juniors.
16.	Formulate new drugs.	EPA LEVEL: 1 Understanding the basics of pharmaceutical infrastructure.			EPA LEVEL: 2 Exposure to the Production of medicines at the industry level during Internship.		EPA LEVEL: 5 Guiding the Juniors.
17.	Publish evidence-based documentation of Homoeopathic Pharmacy based on experimentation and clinical research outcomes in credible			EPA LEVEL:3 Publication of Articles in Peer Reviewed Journals under the supervision of the Guide.		EPA LEVEL: 3 Publication of Articles in Peer Reviewed Journals under the supervision of the	

	journals.					Guide.	
18.	Consistently demonstrate characteristics of self-directed learning by recognising continuing educational needs with the conduction of seminars, conferences, CMEs and workshops.	EPA LEVEL :2 Conduction of intradepartmental seminars.	EPA LEVEL :2 Conduction of interdepartmental seminars.				EPA LEVEL: 5 Guiding the Juniors for seminars.
19.	Apply various teaching-learning techniques for imparting undergraduate and postgraduate education.	EPA LEVEL :2 Justify the need for educational methodology as a component of PG Course.	EPA LEVEL:3 Identify the learning objectives for their domain in Bloom's taxonomy . Identify the contexts of learning.	EPA LEVEL :3 Recognise the levels of Guilbert. Indicate the level in Miller's Pyramid. Select appropriate instructional activities.	EPA LEVEL:4 Write objectives for all domains of Bloom and levels of Guilbert. Identify assessment tools appropriate for the context.	EPA LEVEL :5 Conduct evidence driven TL and Assessment of UG students.	EPA LEVEL:5 Apply various teaching-learning techniques for imparting undergraduate and postgraduate education.

**PART - I; Paper 1:
FUNDAMENTALS OF HOMOEOPATHIC PHARMACY**

V. TOPICS AND TOPIC OBJECTIVES.

Part – I: Paper 1: FUNDAMENTALS OF HOMOEOPATHIC PHARMACY (HOM-PG-FHP)

- **Hom-PG-FHP-01** : Philosophy and Development of Homoeopathic Pharmacy
- **Hom-PG-FHP-02** : Homoeopathic Pharmacopoeia
- **Hom-PG-FHP-03** :Pharmaconomy
- **Hom-PG-FHP-04** : Knowledge of Drug Substance (Pharmacognosy and Pharmacology)
- **Hom-PG-FHP-05** : Drug Proving
- **Hom-PG-FHP-06** : Homoeopathic Pharmaceutics

COURSE CONTENT

- **Hom-PG-FHP-01: PHILOSOPHY AND DEVELOPMENT OF HOMOEOPATHIC PHARMACY**
 - The basis of development of Homoeopathic Pharmacy.
 - The different schools of medicine – with emphasis on Introduction, principles of pharmaceutics & their inter-relationship.
 - The concept of Potentization and its development with difference between homoeopathic pharmacy during and after Hahnemann’s time.
- **Hom-PG-FHP-02: HOMOEOPATHIC PHARMACOPOEIA**
 - Preparation of homoeopathic medicines by abiding by the guidelines of homoeopathic pharmacopoeias.
- **Hom-PG-FHP-03: PHARMACONOMY**
 - The various routes of administration in general and in Homoeopathy.
 - The principles of Pharmacokinetics.
- **Hom-PG-FHP-04: KNOWLEDGE OF DRUG SUBSTANCE (PHARMACOGNOSY AND PHARMACOLOGY)**
 - Learning of pharmacognosy and pharmacology to identify drug from different sources, collect & preserve for preparation of homoeopathic medicines.
 - Phytochemistry and Phytoconstituents of drug substances and their action.
 - Toxicological Dose and Toxicological action of Homoeopathic drugs.
 - The scientific basis of mode of action of homoeopathic medicines through concept of Nanotechnology.

- **Hom-PG-FHP-05: DRUG PROVING**
 - Hahnemannian Proving and Homoeopathic Pathogenetic Trial (HPT)
- **Hom-PG-FHP-06: HOMOEOPATHIC PHARMACEUTICS**
 - Preparation of Potentised medicines, mother preparation with its preservation, Formulation and Dispensing of Homoeopathic medicine.
 - The safety rules to be observed during preparation of medicines in manufacturing unit.

VI. COURSE DESCRIPTION

TOPIC NAME: Hom-PG-FHP -01:

PHILOSOPHY AND DEVELOPMENT OF HOMOEOPATHIC PHARMACY

Topic Overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview about evolution of Pharmacy with emphasis on Homoeopathic Pharmacy and the contribution of pioneers in its development.
Learning Outcome	<p>Hom-PG-FHP-01 - 01:</p> <p>UNDERSTANDING THE BASIS OF DEVELOPMENT OF HOMOEOPATHIC PHARMACY KNOWLEDGE:</p> <p>i) Illustrate the history of Pharmacy with emphasis on Homoeopathic Pharmacy ii) Enumerate the contribution of pioneers in development of Pharmacy.</p> <p>SKILL:</p> <p>This includes specialized skills like understanding of homoeopathic principles and their implementation in preparing homoeopathic medicines.</p> <p>REFLECTION:</p> <p>Reflect on the evolution of homoeopathic pharmacy through the contribution of pioneers</p>
Topic overview	This Topic will provide students of M.D.Hom (Homoeopathic Pharmacy) with an overview on different schools of Medicine (Allopathy, Ayurveda, Homoeopathy, Siddha, Unani).

Learning Outcome	<p>Hom-PG-FHP-01 - 02:</p> <p>IDENTIFYING THE DIFFERENT SCHOOLS OF MEDICINE – WITH EMPHASIS ON INTRODUCTION, PRINCIPLES OF PHARMACEUTICS & THEIR INTER-RELATIONSHIP</p> <p>KNOWLEDGE:</p> <p>i) Describe the fundamental principles of pharmaceutics of different schools of medicines. ii) Appraise the interrelationship between different schools of medicines.</p> <p>SKILL:</p> <p>This includes the applicable skills to practice the concepts relating to pharmaceutics of different schools of medicine.</p> <p>REFLECTION:</p> <p>Develop a fair understanding of merits and demerits of different schools of medicine.</p>
Topic overview	<p>This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on theory of Homoeopathic Dynamisation along with its evolution during and after Hahnemannian era.</p>
Learning Outcome	<p>Hom-PG-FHP-01 - 03:</p> <p>UNDERSTAND THE CONCEPT OF POTENTISATION AND ITS DEVELOPMENT WITH DIFFERENCE BETWEEN HOMOEOPATHIC PHARMACY DURING AND AFTER HAHNEMANN’S TIME.</p> <p>KNOWLEDGE:</p> <p>i) Elaborate the concept of Dynamization as per Hahnemann ii) Analyse the evolution of Dynamisation during and after Hahnemannian era</p> <p>SKILL:</p> <p>Perform the methods of dynamization in pharmacy laboratory</p> <p>REFLECTION:</p> <p>Determine the competencies to perform dynamization as per Homoeopathic principles.</p>
<u>Learning Methods</u>	<p><u>REFLECTIVE LEARNING, & LIBRARY BASED LEARNING</u></p>
Assessment:	<p>Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment Structured Essay Questions (SEQ) / LAQ / SAQ</p>

Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation/Practice based learning

TOPIC NAME: HOM-PG-FHP -02:

HOMOEOPATHIC PHARMACOPOEIA

Topic Overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on official and unofficial Homoeopathic Pharmacopoeias with special emphasis on HPI.
Learning Outcome	<p>Hom-PG-FHP-02 - 01:</p> <p>FORMULATE PREPARATION OF HOMOEOPATHIC MEDICINES BY ABIDING BY THE GUIDELINES OF HOMOEOPATHIC PHARMACOPOEIAS</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none"> i) Document the evolution & development of Homoeopathic Pharmacopoeia ii) Classify Homoeopathic Pharmacopoeias iii) Describe official (GHP, HPUS, BHP, HPI- vol. 1 to 10) and unofficial pharmacopoeia (M. Bhattacharya's Pharmacopoeia, Encyclopaedia of Homoeopathic Pharmacopoeia- PN Varma & InduVaid) iv) Discuss Presentation patterns and comparison of different Pharmacopoeias. v) Summarise the salient features of Homoeopathic Pharmaceutical codex <p>SKILL:</p> <p>This includes understanding of guidelines and standards for the preparation and quality control of homoeopathic drugs besides practical skills relating to trituration and succussion.</p> <p>REFLECTION:</p> <p>Distinguish the contrasting features of different homoeopathic pharmacopoeias</p>
<u>Learning Methods</u>	<u>PROBLEM – BASED LEARNING, LAB – BASED LEARNING, DELIBERATE PRACTICE.</u>
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ / SAQ; Checklist, Rating Scales, Rubric

Prescribed texts:	Refer to list attached
Domains of Competencies:	Knowledge and Skill/Homoeopathic Orientation

TOPIC NAME: HOM-PG-FHP -03:

PHARMACONOMY

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on concept of Pharmaconomy to Identify administration of drugs through routes applicable to the disease.
Learning Outcome	<p>Hom-PG-FHP-03 - 01:</p> <p>UNDERSTAND THE VARIOUS ROUTES OF ADMINISTRATION IN GENERAL AND IN HOMOEOPATHY</p> <p>KNOWLEDGE: i) Determine the modes of administration of homoeopathic medicines, its merits and demerits</p> <p>SKILL: Demonstrate the administration of homoeopathic medicines in clinical practice</p> <p>REFLECTION: Interpret the effectiveness of various modes of administration</p>
Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Pharmacokinetics
Learning Outcome	<p>Hom-PG-FHP-03 - 02:</p> <p>UNDERSTAND THE PRINCIPLES OF PHARMACOKINETICS</p> <p>KNOWLEDGE: i) Define Pharmacokinetics ii) Illustrate the path of travel of drug in the body as per the principles of Pharmacokinetics. iii) Discuss the concept of Absorption, Distribution, Biotransformation, Excretion of drugs.</p> <p>SKILL: Construct a virtual map of drug action as per Pharmacokinetics.</p> <p>REFLECTION: Predict the effect of medicines in patients.</p>
Learning Methods	<u>CASE – BASED LEARNING, BEDSIDE LEARNING, DELIBERATE PRACTICE.</u>

Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment SAQ ; DOPS, Checklist
Prescribed texts:	Refer to list attached
Domains of Competencies:	Knowledge and Skill/Homoeopathic Orientation/ Patient care/Practice based learning

TOPIC NAME:HOM-PG-FHP-04:

KNOWLEDGE OF DRUG SUBSTANCE (PHARMACOGNOSY AND PHARMACOLOGY)

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on concept of Pharmacognostic and Pharmacological effects of homoeopathic drugs.
Learning Outcome	<p>Hom-PG-FHP-04 - 01:</p> <p>ENSURE LEARNING OF PHARMACOGNOSY AND PHARMACOLOGY TO IDENTIFY DRUG FROM DIFFERENT SOURCES, COLLECT & PRESERVE FOR PREPARATION OF HOMOEOPATHIC MEDICINES.</p> <p>KNOWLEDGE:</p> <p>i) Explore the salient features of Pharmacognosy ii) Summarise the basic principles of Pharmacology</p> <p>SKILL:</p> <p>Perform procedures for identification of drug substance for macroscopic and microscopic characteristics in departmental pharmacy laboratory (as listed in Appendix 3)</p> <p>REFLECTION:</p> <p>Relate the relevance of Pharmacognosy, and Pharmacology in clinical practice</p>
Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Phytochemistry and Phytoconstituents of drug substances
Learning Outcome	<p>Hom-PG-FHP-04 - 02:</p> <p>UNDERSTAND PHYTOCHEMISTRY AND PHYTOCONSTITUENTS OF DRUG SUBSTANCES AND THEIR ACTION</p> <p>KNOWLEDGE:</p> <p>i) Discuss the concept of Phytochemistry</p>

	<p>ii) Differentiate the significance of action of Phytoconstituents of five (5) polychrest drug substances (As listed in Appendix 1)</p> <p>SKILL: This includes knowledge of chemistry, biochemistry, botany and plant taxonomy with understanding of morphology and life cycle of plants, analytical technique such as chromatography (HPLC), spectrophotometry, etc. Practical understanding of pharmacology, pharmacokinetics and phytoconstituents, molecular biology techniques.</p> <p>REFLECTION: Analyse the phytochemical action of drugs</p>
Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Toxicological Dose and Toxicological action of Homoeopathic drugs
Learning Outcome	<p>Hom-PG-FHP-04 - 03:</p> <p>UNDERSTAND TOXICOLOGICAL DOSE AND TOXICOLOGICAL ACTION OF HOMOEOPATHIC DRUGS</p> <p>KNOWLEDGE:</p> <p>i) Critique the concept of Toxicological Dose ii) Illustrate the Toxicological action of drug substances of five (5) Homoeopathic drugs (as listed in Appendix 2)</p> <p>SKILL: This includes understanding of dose-response relationships and mechanisms of action to comprehend the toxicological action of homoeopathic drugs.</p> <p>REFLECTION: Review the toxicological action of drugs in clinical practice</p>
Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Homoeopathic Pharmacodynamics and Introduction to Nanotechnology in relation to Homoeopathic medicines
Learning Outcome	<p>Hom-PG-FHP-04 - 04:</p> <p>INTERPRET THE SCIENTIFIC BASIS OF MODE OF ACTION OF HOMOEOPATHIC MEDICINES THROUGH CONCEPT OF NANOTECHNOLOGY</p> <p>KNOWLEDGE:</p> <p>i) Generalise the features of Homoeopathic Pharmacodynamics ii) Discuss the concept of ED₅₀, LD₅₀, SAR (structure-activity relationship)</p>

	<p>iii)Relate the concept of Nanotechnology with homoeopathic pharmacy.</p> <p>SKILL: This includes the practical skills relating to applications of nano technology which involves manipulating and utilising materials at the nano scale level in order to comprehend how homoeopathic medicines may interact with the body at the nano scale and influence biological processes</p> <p>REFLECTION: Verify the dynamic action of drugs in clinical practice.</p>
<u>Learning Methods</u>	<u>PROBLEM – BASED LEARNING, LAB – BASED LEARNING, DELIBERATE PRACTICE.</u>
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ / SAQ ; DOPS, Checklist, Rating Scales.
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation/ Patient care/ Practice based learning

TOPIC NAME: HOM-PG-FHP -05:

DRUG PROVING

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Proving homoeopathic medicines on human beings and animals
Learning Outcome	<p>Hom-PG-FHP-05 - 01:</p> <p>UNDERSTANDHAHNEMANNIAN PROVING AND HOMOEOPATHIC PATHOGENETIC TRIAL (HPT)</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none">i) Explain the fundamental principles and methodology of drug provingii) Enumerate the advantage and disadvantage of Hahnemannian provingiii) Illustrate the procedure for conducting HPTiv) Summarise the new drug development protocol as per CCRHv) Explain re-proving of Homoeopathic drugsvi) Critique the Concept of Clinical and Toxicological proving (Animal proving) <p>SKILL:</p> <p>This includes skills to understand the concept of individualization, study and analysing the Materia medica and ability to navigate and utilize homoeopathic repertories.</p> <p>REFLECTION:</p> <p>Attain the sphere of action of drugs and learn to complete MM pura</p>
Learning methods	Case – based, Out -patient based, Library based
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ / SAQ; DOPS, Checklist, Rating Scales.
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation/ Patient care

TOPIC NAME:HOM-PG-FHP -06:

HOMOEOPATHIC PHARMACEUTICS

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on preparation of homoeopathic medicines
Learning outcome	<p>Hom-PG-FHP-06 - 01:</p> <p>UNDERSTANDPREPARATION OF POTENTISED MEDICINES, MOTHER PREPARATION WITH ITS PRESERVATION, FORMULATION AND DISPENSING OFHOMOEOPATHIC MEDICINE,</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none">i) Elaborate the fundamental principles, methods of Potentisation with different scalesii) Explain the steps for preparation of homoeopathic medicines as per Hahnemann and modern methodsiii)Discuss the principles and procedure of preservation of potentised medicines and mother preparationiv) Outline the procedure for the formulation and dispensing of homoeopathic medicines <p>SKILL:</p> <ul style="list-style-type: none">i) Perform the manufacturing procedures in the departmental pharmacy laboratory as listed in (Appendix 3)ii) Estimate Alcohol content in mother tincture, tincture trituration <p>REFLECTION:</p> <p>Develop the competencies to perform dynamization as per Homoeopathic principles in large scale</p>
Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Safety measures followed in Drug Industry
Learning outcome	<p>Hom-PG-FHP-06 - 02:</p> <p>UNDERSTAND THE SAFETY RULES TO BE OBSERVED DURING PREPARATION OF MEDICINES IN MANUFACTURING UNIT</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none">i) List the pre-requisites of ideal pharmacy laboratoryii) Discuss the safety rules followed in industrial set up <p>SKILL:</p> <p>This includes the skills relating to manufacturing processes, handling of hazardous materials and usage of personal protective equipment, besides practical skills concerning with good manufacturing practices (GMP).</p>

	REFLECTION: Adapt due care and diligence during preparation of medicines
Learning Methods	Lab – based, Self- regulated learning, Deliberate Practice
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ / SAQ ; Checklist, Rubric
Prescribed texts:	Refer to list attached
Domains of Competencies:	Knowledge and Skill/Homoeopathic Orientation/Practice based learning

Appendix 1:
List of Polychrest drugs

1. Aconite napellus
2. Belladonna
3. Cinchona officinalis
4. Gelsemium sempervirens
5. Thuja occidentalis

Appendix 2:
List of drugs for Toxicological action

1. Conium maculatum
2. Datura metel
3. Nux vomica
4. Rauwolfia serpentina
5. Lachesis

Appendix 3:
Practicals

M.D. (HOMOEOPATHY) HOMOEOPATHIC PHARMACY

Part-I:
PRACTICALS

1. Demonstration of Homoeopathic Pharmaceuticals Instruments and appliances and their uses, cleaning (**Appendix A**)
2. Estimation of size of Globules.
3. Medication of Globules.
4. Laboratory Methods: Sublimation, Crystallisation, Decantation, Filtration, Distillation
5. Preparation of dilute and dispensing alcohol from strong alcohol
6. Preparation of External application: Glycerol, Lotion, Liniment, Ointment
7. Purity test of Sugar of Milk, Water, and Alcohol
8. Succussion in Decimal scale from Mother Tincture to 3X potency (new method)

9. Succussion in Centesimal scale from Mother Tincture to 3C potency (new method)
10. Succussion in Decimal scale from Mother Tincture (prepared in old method) to 3X potency.
11. Succussion in Centesimal scale from Mother Tincture (prepared in old method) to 3C potency.
12. Preparation of one medicine each as per Trituration under class VII, VIII& IX.
13. Trituration of one drug as per HPI.
14. Preparation of Mother Tinctures according to old Hahnemannian method (class I to IV).
15. Preparation of Mother Solutions according to old Hahnemannian method (class Va, Vb, VIa, VIb)
16. Conversion of one trituration to liquid potency: 6X to 8X potency
17. Conversion of one trituration to liquid potency: 3C to 4C potency
18. Determination of specific gravity of different strengths of alcohol
19. Preparation of 0/1 of one drug from 3C trituration (LM scale)
20. Study of identification of drug substances
 - a) Macroscopic characteristics (any 15) -- **(Appendix B)**
 - b) Microscopic characteristics (any 5) -- **(Appendix C)**

HOMOEOPATHIC PHARMACEUTICAL INSTRUMENTS

Mortar and Pestle- Porcelain, Glass, Iron	Macerating Jar	Measuring cylinder	Simple Distillation apparatus	Moisture Balance
Spatula	Percolator	Volumetric flask	Chopping Board, Chopping Knife	Refractometer
Ointment slab and Ointment spatula	Tincture Press	Pipette- -volumetric and graduated	Colorimeter	Dropper
Chemical Balance	Wire Gauze	Burette	Stirrer/ Glass rod	Desiccator
Electronic balance	Hot air oven	Stop watch	Glass Funnels	Glass apparatus for filtration with vacuum
Evaporating dishes- Porcelain, glass	Sieves-10,22, 44,60, 85, 120	Water still	Thin layer chromatography apparatus	Electric triturator
Crucibles with tongs	Lactometer	Spectrophotometer	Watch glass	Spirit lamp
Water bath- metal/ electric	Pyknometer	Electric potentiometer	Petri dish	Polarimeter
Microscopes	pH meter	Hydrometer	Alcoholometer	Silica crucibles

LIST OF DRUGS FOR IDENTIFICATION FOR MACROSCOPIC STUDY

Allium cepa	Cannabis indica	Ficus religiosa	Tropaeolum majus
Andrographis paniculata	Cinchona officinalis	Holarrhena antidysenterica	Terminalia arjuna
Aegle folia	Catharanthus roseus	Helianthus annuus	Tinosporacordifolia
Azadirachta indica	Cassia sophera	Hydrocotyle asiatica	Tabacum
Apis mellifica	Coffea cruda	Opium	
Alstonia scholaris	Cascabela thevetia	Oleander	
Blatta orientalis	Eucalyptus globulus	Syzygium jambolanum	

LIST OF DRUGS FOR IDENTIFICATION FOR MICROSCOPIC STUDY

Cina	Calendula officinalis	Datura	Justicia adhatoda	Cactus grandiflorus
Chamomilla	Digitalis purpurea	Nux vomica	Ipecac	Rauwolfia serpentina

M.D. (Hom) Homoeopathic Pharmacy Part-I

Activities:

- MoU (Memorandum of Understanding) with College of Pharmacy (ONE INSTITUTE) under any recognized university.
- Journal club meetings in Part-I for the class.
- 15 days in Homoeopathic Hospital Pharmacy duties (in own collegiate teaching homoeopathic hospital).: **Record on posting in Hospital Pharmacy for dispensing to be maintained** in terms of total numbers of patients; date wise, Registration number of Patients, Dosage form – Liquid/solid, name of the vehicle used, medication process.

VII. ASSESSMENT

	Formative Assessment (Internal Assessment)	Summative Assessment (University Examination)
M.D.(Hom.) Part-I	1st Term Test: During sixth month of training	During eighteenth month of training
	2nd Term Test: During twelfth month of training	

VII (1). M.D. (Homoeopathy) Part-I Examination –

MAXIMUM MARKS FOR EACH SUBJECT AND MINIMUM MARKS REQUIRED TO PASS SHALL BE AS FOLLOWS:

Subjects	Theory		Practical or Clinical Examination, including Viva	
	Maximum Marks	Pass Marks	Maximum Marks	Pass Marks
i. Fundamentals of Homoeopathic Pharmacy	100	50	200* (160 + 40) (Summative Assessment 160 Marks) (Internal Assessment 40 Marks)	100* (80 + 20) (Summative Assessment 80 Marks) (Internal Assessment 20 Marks)
ii. Fundamentals of Clinical Medicine in Homoeopathic Pharmacy	100	50		
iii. Research Methodology and Biostatistics	100	50	-	-

*(*A common practical exam for paper I and II (100 marks practical + 100 marks viva) shall be conducted; twenty per cent. weightage shall be for internal assessment, which shall be calculated for practical or clinical including viva voce only. One internal assessment of 40 marks [20 marks (practical or clinical) + 20 marks (viva voce)] after each term of six months and average of two terms shall be considered. *Eighty per cent. weightage shall be for summative assessment).*

VII (2). ASSESSMENT BLUEPRINT – THEORY (Benchmarked by the module-wise distribution.)

VII (2A). DISTRIBUTION OF TOPICS FOR THEORY-BASED ASSESSMENT.

TYPES OF QUESTIONS WITH MARKS

Types of question	No. of questions to be asked	Marks per question	Total
Problem Based Question	01	20	20
Long Answer Question	04	10	40
Short Answer Question	08	05	40
Total			100

Part 1 – Paper 1.**Topic Numbers**

Hom-PG-FHP-01	Philosophy and Development of Homoeopathic Pharmacy
Hom-PG-FHP-02	Homoeopathic Pharmacopoeia
Hom-PG-FHP-03	Pharmaconomy
Hom-PG-FHP-04	Knowledge of Drug Substance (Pharmacognosy and Pharmacology)
Hom-PG-FHP-05	Drug Proving
Hom-PG-FHP-06	Homoeopathic Pharmaceutics

VII (2b). QUESTION PAPER LAYOUT

Q. No.	Type of Question	Content	Marks
1	Problem Based	Hom-PG-FHP-02/ Hom-PG-FHP-05/ Hom-PG-FHP-06	20
2	LAQ	Hom-PG-FHP-01/ Hom-PG-FHP-02	10
3	LAQ	Hom-PG-FHP-04	10
4	LAQ	Hom-PG-FHP-05	10
5	LAQ	Hom-PG-FHP-06	10
6	SAQ	Hom-PG-FHP-01	5
7	SAQ	Hom-PG-FHP-02	5
8	SAQ	Hom-PG-FHP-04	5
9	SAQ	Hom-PG-FHP-03	5
10	SAQ	Hom-PG-FHP-05	5
11	SAQ	Hom-PG-FHP-06	5
12	SAQ	Hom-PG-FHP-05	5
13	SAQ	Hom-PG-FHP-06	5
Total			100

VII (3). ASSESSMENT BLUEPRINT –PRACTICAL / VIVA:**VII (3a). PRACTICAL EXAMINATION.**

PRACTICAL		
1	Internal Assessment	20 Marks
2	Spotting	20 Marks
3	Experiment	50 Marks
4	Logbook	05 Marks
5	Micro Teaching	05 Marks
Total		100 Marks

VII (3b). VIVA VOCE.

VIVA		
1	Internal Assessment	20 Marks
1	Discussion of Synopsis	20 Marks
2	Viva	60 Marks
Total		100 Marks

VIII. LIST OF REFERENCE BOOKS (As per APA Format).

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- 28) Mandal & Mandal (2012). *Textbook of Homoeopathic Pharmacy*, New Central Book Agency, P. Ltd., Calcutta
- 29) Maute Christiane. *Homoeopathy for Plants. A practical guide for house, balcony, garden plants*.
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Part II: Paper -1& Paper - 2

V. TOPICS AND TOPIC OBJECTIVES.

Part II: HOMOEOPATHIC PHARMACY-PAPER 1: (HOM-PG-HP-PART II- PAPER-1)

Hom-PG-HP-07: Prescription Writing and Dispensing

Hom-PG-HP-08: Laboratory Methods

Hom-PG-HP-09: Drug Laws and Legislation Related to Homoeopathic Pharmacy

Hom-PG-HP-10:Standardisation

VI. TOPIC DESCRIPTION

Hom-PG-HP-07:

PRESCRIPTION WRITING AND DISPENSING

- Writing a legal prescription and avoiding errors during prescription writing.
- Methods and Precautions required for Dispensing of Homoeopathic medicines

Hom-PG-HP-08:

LABORATORY METHODS

- Standard laboratory techniques for standardising homoeopathic medicines.

Hom-PG-HP-09:

DRUG LAWS AND LEGISLATION RELATED TO HOMOEOPATHIC PHARMACY

- Legislation/ laws related to homoeopathic pharmacy.

Hom-PG-HP-10:

STANDARDISATION

- The goal of manufacturing good quality homoeopathic product
- The quality control tests to ascertain pure substances.

TOPIC NAME: HOM-PG-HP-07:

PRESCRIPTION WRITING AND DISPENSING

Topic Overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on ideal Prescription Writing and its medicolegal importance
Learning outcome:	Hom-PG-HP-07-01: WRITING A LEGAL PRESCRIPTION AND AVOIDING ERRORS DURING PRESCRIPTION WRITING KNOWLEDGE: i) State the parts of Prescription writing ii) Expand the abbreviations used in prescription writing iii) Explain the legal aspect of prescription writing in clinical setup SKILL: Practice the format of ideal prescription to avoid errors during clinical practice REFLECTION: Identify the possible mistakes made in prescription writing with regard to its medicolegal significance in clinical practice, and devise their solutions.
Topic Overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Dispensing of Homoeopathic medicines
Learning outcome:	Hom-PG-HP-07 – 02: IDENTIFY METHODS AND PRECAUTIONS REQUIRED FOR DISPENSING OF HOMOEOPATHIC MEDICINES KNOWLEDGE: i) Illustrate the methods of Dispensing ii) Explain the precautions to be taken during dispensing of homoeopathic medicines SKILL: Perform all the procedures for proper dispensing of homoeopathic medicines. REFLECTION: Reflect on the main features of dispensing homoeopathic medicines in clinical practice
Learning Methods	Case – based, Out – patient based, Ward rounds, Deliberate Practice.
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ / SAQ ; Checklist , Rating Scales, Rubric.
Prescribed texts:	Refer to list attached
Domains of Competencies:	Knowledge and Skill/Homoeopathic Orientation/ Practice based learning/ Professionalism/ Patient care

TOPIC NAME: HOM-PG-HP-08:

LABORATORY METHODS

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Lab methods specifically for understanding purity of homoeopathic medicines
Learning outcome:	Hom-PG-HP-08 – 01: UNDERSTANDING STANDARD LABORATORY TECHNIQUES FOR STANDARDISING HOMOEOPATHIC MEDICINES KNOWLEDGE: i) Describe the various heat process: Sublimation, Evaporation- factors affecting evaporation, types of equipment for evaporation method ii) Explain the drying procedures: Drying- definition, purpose of drying, theory of drying, moisture content and Desiccation SKILL: Perform laboratory methods in pharmacy laboratory. Estimate moisture content of one drug (Gravimetric method) in Pharmacy laboratory as listed in Appendix 7 REFLECTION: Recall the critical factors to ensure the purity and genuineness of drug substances
Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Lab methods specifically for understanding purity of homoeopathic medicines
Learning outcome:	Hom-PG-HP-08 – 02: UNDERSTANDING STANDARD LABORATORY TECHNIQUES FOR STANDARDISING HOMOEOPATHIC MEDICINES KNOWLEDGE: i) Illustrate the mixing, its mechanism/process, purpose and factors affecting it. ii) Define the terms ‘filtration’, ‘Filter Media’. iii) Discuss the factors affecting rate of filtration. SKILL: Perform laboratory methods in Pharmacy laboratory REFLECTION: Appraise the steps to ensure the purity and genuineness of drug substances

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Lab methods specifically for understanding purity of homoeopathic medicines
Learning outcome:	<p>Hom-PG-HP-08 – 03:</p> <p>UNDERSTANDING STANDARD LABORATORY TECHNIQUES FOR STANDARDISING HOMOEOPATHIC MEDICINES</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none"> i) Define the terms ‘distillation’, and ‘sterilisation’ ii) Illustrate the procedure of distillation and sterilisation iii) Discuss different types of distillation-- simple, fractional, steam iv) Explain the tests for sterility <p>SKILL:</p> <p>Perform laboratory methods in Pharmacy Laboratory</p> <p>REFLECTION:</p> <p>Reflect on the steps to ensure the purity of distilled water to prepare a pure medicine and understand sterilisation for use of safe medicines by killing microbes during manufacturing.</p>
Learning Methods	Lab – based, Deliberate practice.
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment SAQ ; Checklist, Rating Scales, Rubric.
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation/ Practice based learning

TOPIC NAME:HOM-PG-HP -09:

DRUG LAWS AND LEGISLATION RELATED TO HOMOEOPATHIC PHARMACY

Topic overview	This Topic will provide students of M.D. Hom(Homoeopathic Pharmacy) with an overview on different legal aspects of Homoeopathic Pharmacy as per The Drugs & Cosmetics Act, 1940
Learning Outcomes:	Hom-PG-HP-09 – 01: UNDERSTAND LEGISLATION/ LAWS RELATED TO HOMOEOPATHIC PHARMACYAS LISTED IN APPENDIX 4 KNOWLEDGE: i) Recognise the various by-laws as prescribed by Govt. of India for the practice of homoeopathic pharmacy. ii) Appraise the updates and amendments of Laws and Acts of homoeopathic pharmacy on a regular basis. SKILL: Implement drug laws and legislation into clinical practices and drug manufacturing REFLECTION: Ascertain the recency of legal and regulatory procedures to ensure ethical clinical practice and good manufacturing practices.
Learning Methods	Problem – based, Case – based, Brainstorming
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ / SAQ / SEQ
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation/ Professionalism/ Patient care/ Practice based learning

TOPIC NAME: HOM-PG-HP-10:

STANDARDISATION

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Standardisation of drugs, vehicles, finished products necessary for establishing the purity of a substance.
Learning Outcome	<p>Hom-PG-HP-10 – 01:</p> <p>UNDERSTANDING THE GOAL OF MANUFACTURING GOOD QUALITY HOMOEOPATHIC PRODUCT</p> <p>KNOWLEDGE:</p> <p>i) Define standardisation, evaluate its objective</p> <p>ii) Classify the different quality control evaluations, and tests for drug, vehicles and finished products</p> <p>SKILL:</p> <p>Practical demonstration and conduction of the tests in the Homoeopathic Pharmaceutical industry set up.</p> <p>REFLECTION:</p> <p>Ascertain the genuineness and purity of drug substances and finished product i.e. homoeopathic medicines & the use of genuine drug for identification, preparation and to avoid use of substitutes</p>
Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Pharmaceutical testing methods as listed in Appendix 7
Learning Outcome	<p>Hom-PG-HP-10 – 02:</p> <p>UNDERSTAND THE QUALITY CONTROL TESTS TO ASCERTAIN PURE SUBSTANCES</p> <p>KNOWLEDGE:</p> <p>i) Discuss the concept and mechanism of Analytical tests relating to Phytoconstituents- Carbohydrates, Proteins, Lipids, Alkaloids, Glycosides, Saponins, Tannins, Flavanoids</p> <p>ii) Describe procedures of Thin layer chromatography-TLC, Gas liquid chromatography- GLC, High performance liquid chromatography- HPLC, Lambert's Law (Beers Law), Spectrophotometer analysis of Homoeopathic drugs, Polarography, Fluorometry, Official sampling/ Quartering Technique</p> <p>SKILL:</p> <p>Practical demonstration and conduction of the tests in the Homoeopathic Industrial pharmaceutical set up as listed in Practical part in Appendix 7</p>

	<p>Reflection: Ascertain the genuineness and purity of drug substances and finished product i.e homoeopathic medicines</p>
Learning Methods	Problem – based, Library – based, Lab – based
Assessment	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ ; Checklist, Rating Scales, Rubric.
Prescribed texts:	Refer to list attached
Domains of Competencies:	Knowledge and Skill/Homoeopathic Orientation/ Practice based learning

PART II: HOMOEOPATHIC PHARMACY:HOM-PG-HP-PART II- PAPER-2:

Hom-PG-HP-11: Pharmacognosy

Hom-PG-HP-12: Pharmacopoeia Commission for Indian Medicine & Homoeopathy

Hom-PG-HP-13: Experimental Pharmacology

Hom-PG-HP-14: Pharmacovigilance

Hom-PG-HP-15: Homoeopathic Pharmaceutical Industrial Management

Hom-PG-HP-16: Hospital Pharmacy

Hom-PG-HP-17: Advancements/ Research in Homoeopathic Pharmacy

VII. Topic description:

Hom-PG-HP-11: PHARMACOGNOSY

- Pharmacognostic study of organised and unorganised drugs and animals for establishing their genuineness

Hom-PG-HP-12: PHARMACOPOEIA COMMISSION FOR INDIAN MEDICINE & HOMOEOPATHY

- Understand the functioning of Central Drug testing unit cum Appellate Laboratory along with their activities and standards of Homoeopathic drugs being made by them.

Hom-PG-HP-13: EXPERIMENTAL PHARMACOLOGY

- The Ethical requirements for drug studies on animals.
- The Pharmacological action of homoeopathic drugs.

Hom-PG-HP-14: PHARMACOVIGILANCE

- The concept of ADR and Pharmacovigilance.

Hom-PG-HP-15: HOMOEOPATHIC PHARMACEUTICAL INDUSTRIAL MANAGEMENT

- The Principles of management of pharmaceutical industry.

Hom-PG-HP-16: HOSPITAL PHARMACY

- The working of Hospital Pharmacy for good clinical practice.

Hom-PG-HP-17: ADVANCEMENTS/ RESEARCHES IN HOMOEOPATHIC PHARMACY

- Scope of research in Homoeopathic pharmacy with effectiveness of Homoeopathic medicines in different life forms.

TOPIC NAME:HOM-PG-HP-11:

PHARMACOGNOSY

Topic Overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Pharmacognostic evaluation of raw materials for attaining good quality finished products.
Learning outcome:	Hom-PG-HP -11 – 01: DISCUSS PHARMACOGNOSTIC STUDY OF ORGANISED AND UNORGANISED DRUGS AND ANIMALS FOR ESTABLISHING THEIR GENUINENESSAS LISTED IN APPENDIX 5 KNOWLEDGE: i) Explain Pharmacognostic study of organised and unorganised drugs as listed in Appendix 5 ii) Explain systematic evaluation of animal and animal products SKILL: Perform tests for identification, and evaluation of drugs (microscopic study of drugs- Stomatal index, Stomatal number, Palisade ratio) as listed in Appendix 7 REFLECTION: Ascertain collection of genuine and authentic drug substances and detect adulterants to ensure quality drug manufacturing and avoid use of substandard drugs or substitutes.
Learning Methods	Library -based, Reflective Learning.
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ ; Checklist, Rating Scales
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/ Practice based learning/ Homoeopathic Orientation

TOPIC NAME: HOM-PG-HP-12:

PHARMACOPOEIA COMMISSION FOR INDIAN MEDICINE & HOMOEOPATHY

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Pharmacopoeia Commission for Indian Medicine and Homoeopathy (PCIM & H)
Learning outcome:	<p>Hom-PG-HP -12 – 01:</p> <p>UNDERSTAND THE FUNCTIONING OF CENTRAL DRUG TESTING UNIT CUM APPELLATE LABORATORY ALONG WITH THEIR ACTIVITIES AND STANDARDS OF HOMOEOPATHIC DRUGS BEING MADE BY THEM</p> <p>KNOWLEDGE:</p> <p>i) Describe the development of PCIM &H</p> <p>ii) Explain the functions and various activities undertaken by PCIM & H</p> <p>SKILL:</p> <p>This includes the standard and guidelines set up homoeopathic pharmacopoeias followed by the Central Drug testing unit cum Appellate Laboratory. Also includes skills relating to techniques such as chemical analysis, microscopy, chromatography and spectroscopy to comprehend the laboratory activities related to testing the quality, purity and potency of homoeopathic medicines.</p> <p>REFLECTION:</p> <ul style="list-style-type: none">• Reflect on the bylaws and regulations prescribed by PCIM & H for manufacturing units
Learning Methods	Library – based, E – learning
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ /SAQ
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation

TOPIC NAME: HOM-PG-HP-13:

EXPERIMENTAL PHARMACOLOGY

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on standard guidelines to be followed during animal studies.
Learning outcome:	Hom-PG-HP -13 – 01: UNDERSTAND THE ETHICAL REQUIREMENTS FOR DRUG STUDIES ON ANIMALS KNOWLEDGE: i) Illustrate the ethical principles and essential requirements during animal proving SKILL: This includes the practical skills relating to animal ethics, animal welfare including 3 R's (Replacement, Reduction, Refinement) , ethical considerations involved in conducting research on animals. REFLECTION: Identify possible gaps to ensure the ethical application of homoeopathic medicines on lower animals and suggest suitable remediation.
Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Experimental Pharmacology
Learning outcome:	Hom-PG-HP -13 – 02: UNDERSTAND THE PHARMACOLOGICAL ACTION OF HOMOEOPATHIC DRUGS KNOWLEDGE: i) Define Experimental Pharmacology ii) Discuss the pharmacological action of drugs ii) Mention the factors modifying pharmacological action of drugs. SKILL: This includes clinical observation, individualised case analysis, research studies, clinical trials. REFLECTION: Appraise the sphere and mechanism of action of drugs
Learning Methods	Lab – based, E – learning.
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ / SAQ ; Checklist, Rating Scales, Rubric
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation

TOPIC NAME: HOM-PG-HP-14:**PHARMACOVIGILANCE**

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Pharmacovigilance system to manage the different adverse drug events for welfare of patients
Learning outcome:	Hom-PG-HP -14 – 01: UNDERSTAND THE CONCEPT OF ADR AND PHARMACOVIGILANCE KNOWLEDGE: i) Define Adverse Drug reaction ii) Explain the management of adverse drug reactions in homoeopathy iii) Describe the concept of Pharmacovigilance system in India SKILL: Observe, analyse and manage ADR in clinical practice REFLECTION: Distinguish the necessary precautions to be taken for avoiding ADR in clinical practice
Learning Methods	Problem – based, Case – based, Deliberate Practice
Assessment	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ ; DOPS, Checklist, Rating Scales
Prescribed texts	Refer to list attached
Domains of Competencies	Knowledge and Skill/Homoeopathic Orientation/ Patient care/ Practice based learning

TOPIC NAME: HOM-PG-HP-15:

HOMOEOPATHIC PHARMACEUTICAL INDUSTRIAL MANAGEMENT

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on management of Homoeopathic Pharmaceutical units for proper production and marketing.
Learning outcome:	<p>Hom-PG-HP -15 – 01:</p> <p>UNDERSTAND THE PRINCIPLES OF MANAGEMENT OF PHARMACEUTICAL INDUSTRY AS LISTED IN APPENDIX 6</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none">i) Explain the correlation of Administration Principles of Industrial Management in relation to Homoeopathic Pharmaceutical industryii) Enumerate different forms of business organizationiii) Describe the concepts of Managementiv) Explain Production Managementv) Explain Marketing Management, Distributionvi) Explain Marketing Organization: Manufacturer-to Wholesaler –to retailervii) Explain Marketing Communicationviii) Explain Media for communication- Advertising, Sale, Sales Promotion methodsix) Discuss the role of Medical Representativesx) Explain Drug Store management <p>SKILL:</p> <p>Apply the principles of management in pharmaceutical industrial set up.</p> <p>REFLECTION:</p> <p>Plan for the production and delivery of genuine homoeopathic drugs from industry to the market</p>
Learning Methods	Problem – based, Brainstorming, Self – regulated Learning, Deliberate Practice
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ / SAQ ;DOPS, Checklist, Rating Scales, Rubric.
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation/ Practice based Learning/ Communication skills

TOPIC NAME:HOM-PG-HP-16:

HOSPITAL PHARMACY

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Hospital Pharmacy for Procurement and management of medication as per the Homoeopathic perspective
Learning outcome:	Hom-PG-HP -16 – 01: UNDERSTAND THE WORKING OF HOSPITAL PHARMACY FOR GOOD CLINICAL PRACTICE KNOWLEDGE: i) Outline the structure and functions of a Hospital Pharmacy ii) Determine the procedures for procurement of medicines, stock maintenance, indent system, and distribution of medicines. SKILL: Practice the principles of management of Hospital pharmacy REFLECTION: List the steps to establish and effectively run the Hospital pharmacy for Good Clinical practice by understanding medication (MOM) aspect of NABH in Hospital Pharmacy.
Learning Methods	Reflective Learning, Deliberate practice.
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment
Prescribed texts:	Refer to list attached
Domains of Competencies :	Knowledge and Skill/Homoeopathic Orientation/ Patient care/ Practice based learning

TOPIC NAME: HOM-PG-HP-17:

ADVANCEMENTS/ RESEARCH IN HOMOEOPATHIC PHARMACY

Topic overview	This Topic will provide students of M.D. Hom (Homoeopathic Pharmacy) with an overview on Recent advances and research in relation to Homoeopathic Pharmacy
Learning outcome:	<p>Hom-PG-HP -17 – 01:</p> <p>IDENTIFY SCOPE OF RESEARCH IN HOMOEOPATHIC PHARMACY WITH EFFECTIVENESS OF HOMOEOPATHIC MEDICINES IN DIFFERENT LIFE FORMS</p> <p>KNOWLEDGE:</p> <p>i) Discuss the recent advancements in India and the world in the field of invention and production of new homoeopathic drugs.</p> <p>ii) Explore the modern equipment related to drug production/ manufacturing, packaging, sealing and labelling</p> <p>iii) Recognise the scope of homoeopathic medicines in Veterinary and Agriculture</p> <p>iv) Discuss published Homoeopathic research studies on animals and plants</p> <p>SKILL:</p> <p>Observe and practice the experimentation relating to above advancements at departmental pharmacy laboratory/ agricultural/ herbal garden in a School of Agriculture and School of Pharmacy and Homoeopathic Industrial Pharmaceutical set up/ Veterinary hospital</p> <p>REFLECTION:</p> <p>Develop new homoeopathic drugs to increase the efficacy of homoeopathy on plants and animals along with latest equipment available for manufacturing medicines.</p>
Learning Methods	Library – Based, E – learning.
Assessment:	Continuous/ Programmatic assessment/ Written assessment/ Practical Assessment LAQ/ SAQ ;SEQ
Prescribed texts:	Refer to list attached
Domains of Competencies	Knowledge and Skill/Homoeopathic Orientation/ Practice based learning

**DRUG LAWS AND LEGISLATION RELATED TO HOMOEOPATHIC
PHARMACY**

1. Drugs and Cosmetics Act, 1940(23 of 1940)
2. Legislation related to Homoeopathic pharmacy (Part VI-A, VII-A, IX-A) –as per Drugs and Cosmetics Rules, 1945
3. Good Manufacturing Practices – Schedule M-I
4. Schedule FF- regulation for ophthalmic preparations
5. The Pharmacy Act, 1948 (6 of 1948)
6. The NCH Act, 2020
7. Medicinal and Toilet Preparation (Excise Duty) Act, 1955 (16 of 1955)
8. Drugs and Magic Remedies (Objectional Advertisements) Act, 1954 (21 of 1954)- Spurious drugs, Misbranded Cosmetics
9. The Prevention of illicit traffic in The Narcotic Drugs and Psychotropic Substances Act, 1988 (46 of 1988)
10. Dangerous Drug Act, 1930
11. The Poison Act, 1919 (12 of 1919)
12. The Drugs (Control) Act, 1950 (25 of 1950)
13. Patent or Proprietary Medicine and procedure to obtain license
14. Inside and Outside bond laboratory- Merits and Demerits
15. Pharmaceutical ethics- related to homoeopathy. General Introduction to code

**PHARMACOGNOSTIC STUDY OF ORGANISED AND UNORGANISED DRUGS,
ANIMAL AND ANIMAL PRODUCTS:**

Organised drugs: Bark: Cinchona, Cascara, Cinnamon

- 1) Leaves: Senna, Digitalis, Vasaka
- 2) Flowers: Saffron
- 3) Fruits: Capsicum, Coriander
- 4) Seed: Nux vomica, Nut meg, Strophanthus
- 5) Root and Rhizome: Ipecac, Colchicum, Ginger
- 6) Entire organism: Belladonna, Stramonium, Hyoscyamus

Unorganized Drugs: Aloes, Opium

- 1) Indigenous Drugs: Amla, Brahmi, Giloy, Kalmegh
- 2) Systematic study of products of animal origin: Cantharides, Bees-wax, Cochineal, Cod-liver oil

HOMOEOPATHIC PHARMACEUTICAL INDUSTRIAL MANAGEMENT

- 1) Administration- Principles of Industrial Management in relation to Homoeopathic Pharmaceutical industry
- 2) Introduction to forms of business organization
- 3) Introduction to concepts of Management: Managerial work, functions of management, managerial planning, long term and short-term plans, Decision making process, Management control systems
- 4) Production Management: Goals & Organization, Plant Location, Factory Building Layout, Policies, Purchasing of raw material, inventory control
- 5) Marketing Management: Distribution, Physician – Consumer profile
- 6) Marketing Organization: Manufacturer-to Wholesaler –to retailer
- 7) Marketing Communication
- 8) Media for communication- Advertising, Sale, Role of medical representatives, Sales Promotion methods
- 9) Drug store Management: factors influencing starting and running of a drug store, different types and forms of drug stores, Location of drug store, store building, construction, furniture, internal planning, layout, financial requirements, purchase and sales record, sales promotion and advertisement, qualification of person running store, authority & issuing licenses, accounting and correspondence, ledgers, cash book, balance sheet, Profit and Loss account

M.D. (HOMOEOPATHY) HOMOEOPATHIC PHARMACY: PART II**PRACTICALS****Homoeopathic Pharmacy Practical- Part II**

Sl.no	Experiments
1	Estimation of Moisture content of one drug (Gravimetric method)
2	Preparation of one mother tincture by Maceration (as per HPI)
3	Preparation of one mother tincture by Percolation (as per HPI)
4	TLC (Thin layer Chromatography) of two mother tinctures
5	Technique of section cutting, staining and mounting of sections (Preparation of 2 temporary slides)
6	Microscopic study of any 3 drugs (Determination of Stomatal index, Stomatal number, Palisade ratio)
7	Qualitative analysis of any 3 homoeopathic drugs
8	Phytochemical analysis of 3 mother tinctures- Demonstration
9	Determination of alcohol content of one mother tincture
10.	Demonstration in homoeopathic manufacturing unit a) Hardness of tablets, friability of tablets, disintegration rate of tablets b) Refractive Index & Optical Rotation of one substance.

ACTIVITIES- HOMOEOPATHIC PHARMACY FOR PART –II

- **Internship Training program** in any one GMP certified, and Government approved Homoeopathic Pharmaceutical industry for duration of 1(one) month at the industry. Maintain a record file. (**Appendix D**)
- **Duration of training:** 1 month
- **Period of Posting:** After passing Part 1 examination
- **Certificate:** to be provided by the head of the concerned manufacturing unit after completion of Internship

FIELD VISITS:

- a) Educational visits to School of Pharmacy, Veterinary Hospital and School of Agricultural Sciences. Maintain a record file of each visit. (**Appendix E**)

Maintenance of record files – Appendix D

I. Format for maintaining record on Industrial training program in Homoeopathic manufacturing unit (GMP Compliant)

- Cover page
- Certificate
- Acknowledgement
- Dates and Duration of training
- Names and number of trainee PG students
- Name and Designation of Teaching faculty
- Detail of the Trainer/s at the Factory
- Name & location of the Homoeopathic Manufacturing Factory
- History about the Manufacturing unit
- Different sections of the manufacturing unit with its working process
 - Globule preparation section
 - Trituration section
 - Washing area
 - Tablet section(Demonstration of Hardness of tablets, friability of tablets, disintegration rate of tablets)
 - Mother tincture section
 - Dilution section
 - Cosmetics section
 - Storage, packaging and labeling
 - Quality control lab
- Activities of R&D Department
- How the training helped in correlation with topics studied in Theory
- Conclusion
- Group photo

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

Maintenance of record files – Appendix E

II. Format for maintaining a record on each educational visit to School of Pharmacy, Veterinary Hospital and School of Agricultural Sciences.

- Cover page
- Certificate
- Acknowledgement
- Date of visit
- Number of visiting PG students
- Name and Designation of Teaching faculty
- Detail of the instructor/s at the School of Pharmacy, Veterinary Hospital and School of Agricultural Sciences.
- Name & location and brief about the visiting institute/ Hospital
- Different sections/ laboratory/ departments/ Hospital visited and demonstration of Laboratory tests in College of Pharmacy

- Activities being undertaken in School of Pharmacy, Veterinary Hospital and School of Agricultural Sciences
- Treatment being given to the animals at the Hospital
- Herbal Garden visit in School of Agriculture science with identification of plants
- Research activities being undertaken at the school / hospital
- How the visit helped in correlation with topics studied in Theory
- Conclusion
- Group photo

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

VII. Assessment

	Formative Assessment (Internal Assessment)	Summative Assessment (University Examination)
M.D.(Hom.) Part-II	1st Term Test: During twenty fourth month of training	During thirty sixth month of training
	2nd Term Test: During thirtieth month of training	

VII (1). M.D. (Homoeopathy) Part-II examination –Maximum marks for each subject and minimum marks required to pass shall be as follows:

Subjects	Theory		Practical or clinical exams including Viva-Voce and dissertation	
	Maximum Marks	Pass Marks	Maximum Marks	Pass Marks
Homoeopathic Pharmacy Paper 1	100	50	200* (160 + 40) (Summative Assessment 160 Marks) (Internal Assessment 40 Marks)	100* (80 + 20) (Summative Assessment 80 Marks) (Internal Assessment 20 Marks)
Homoeopathic Pharmacy Paper 2	100	50		

*(*A common practical exam for paper I and II (100 marks practical + 100 marks viva) shall be conducted; twenty per cent. weightage shall be for internal assessment, which shall be calculated for practical or clinical including viva voce only. One internal assessment of 40 marks [20 marks (practical or clinical) + 20 marks (viva voce)] after each term of six months and average of two terms shall be considered. *eighty per cent. weightage shall be for summative assessment).*

VII (2). Assessment Blueprint – Theory (*Benchmarked by the module-wise distribution.*)

VII (2a). DISTRIBUTION OF TOPICS FOR THEORY-BASED ASSESSMENT.

TYPES OF QUESTIONS WITH MARKS

Types of question	No. of questions to be asked	Marks per question	Total
Problem Based Question	01	20	20
Long Answer Question	04	10	40
Short Answer Question	08	05	40
Total			100

Part 2 – Paper 1. Topic Numbers

Hom-PG-HP-07 Prescription Writing and Dispensing

Hom-PG-HP-08 Laboratory Methods

Hom-PG-HP-09 Drug Laws and Legislation Related to Homoeopathic Pharmacy

Hom-PG-HP-10 Standardisation

Part 2 – Paper 2. Topic Numbers

Hom-PG-HP-11 Pharmacognosy

Hom-PG-HP-12 Pharmacopoeia Commission for Indian Medicine & Homoeopathy

Hom-PG-HP-13 Experimental Pharmacology

Hom-PG-HP-14 Pharmacovigilance

Hom-PG-HP-15 Homoeopathic Pharmaceutical Industrial Management

Hom-PG-HP-16 Hospital Pharmacy

Hom-PG-HP-17 Advancements/ Research in Homoeopathic Pharmacy

VII (2b). QUESTION PAPER LAYOUT

Part-II, Paper 1

Q. No.	Type of Question	Content	Marks
1	Problem Based	Hom-PG-HP-10	20
2	LAQ	Hom-PG-HP-07	10
3	LAQ	Hom-PG-HP-09	10
4	LAQ	Hom-PG-HP-10	10
5	LAQ	Hom-PG-HP-09	10
6	SAQ	Hom-PG-HP-07	5
7	SAQ	Hom-PG-HP-08	5
8	SAQ	Hom-PG-HP-09	5
9	SAQ	Hom-PG-HP-07	5
10	SAQ	Hom-PG-HP-08	5
11	SAQ	Hom-PG-HP-09	5
12	SAQ	Hom-PG-HP-08	5
13	SAQ	Hom-PG-HP-09	5

Part-II, Paper 2

Q. No.	Type of Question	Content	Marks
1	Problem Based	Hom-PG-HP-14/ Hom-PG-HP-15	20
2	LAQ	Hom-PG-HP-11/Hom-PG-HP-13	10
3	LAQ	Hom-PG-HP-12/ Hom-PG-HP-14	10
4	LAQ	Hom-PG-HP-15	10
5	LAQ	Hom-PG-HP-17	10
6	SAQ	Hom-PG-HP-12	5
7	SAQ	Hom-PG-HP-13	5
8	SAQ	Hom-PG-HP-15	5
9	SAQ	Hom-PG-HP-16	5
10	SAQ	Hom-PG-HP-17	5
11	SAQ	Hom-PG-HP-15	5
12	SAQ	Hom-PG-HP-17	5
13	SAQ	Hom-PG-HP-13	5

VII (3). ASSESSMENT BLUEPRINT –PRACTICAL / VIVA.**VII (3a). PRACTICAL EXAMINATION.**

PRACTICAL		
1	Internal Assessment	20 Marks
2	One Major Experiment	50 Marks
3	One Minor Experiment	20 Marks
4	Logbook	05 Marks
5	Micro Teaching	05 Marks
Total		100 Marks

VII (3b). VIVA VOCE.

VIVA		
1	Internal Assessment	20 Marks
1	Discussion of Dissertation	20 Marks
2	Viva	60 Marks
Total		100 Marks

VIII. LIST OF REFERENCE BOOKS (AS PER APA FORMAT).

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- 5) Burande MD. *Principles and Practice of Drug Store Administration*, 6th edition. NiraliPrakashan
- 6) CCRH, *Standardisation of Drugs*. Vol 1 -4.
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- 8) Connors K A. *Text book of Pharmaceutical Analysis*.
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- 11) Dunham C. (2019). *Homoeopathy The Science of Therapeutics*. B. Jain Publishers (P) Ltd, New Delhi. 14th Impression
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- 20) Karnick, C.K. (1994). *Pharmacopoeia standards of Herbal Plants*, vol. I, II. Sri Satguru Publications.
- 21) Kent, J. T. (2002). *Lectures on Homoeopathic Philosophy*. Indian Book & Periodical Publishers, New Delhi. Reprint edition
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- 23) Kulkarni, S.K. (2005). *Handbook of Experimental Pharmacology*. 3rd ed. Vallabh Prakashan, Delhi
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- 26) MacLeod G. *The treatment of Cattle by Homoeopathy*

- 27) Malik, V. (2022) *Law relating to Drugs and Cosmetics Act*. 27th ed. Eastern book co., Lucknow.
- 28) Mandal & Mandal (2012). *Textbook of Homoeopathic Pharmacy*, New Central Book Agency, P. Ltd., Calcutta
- 29) Maute Christiane. *Homoeopathy for Plants. A practical guide for house, balcony, garden plants*.
- 30) Muzumdar KP. (2021). *Pharmaceutical Science in Homoeopathy and Pharmacodynamics*. B. Jain Publishers P.Ltd.
- 31) Nayak, C. *Homoeopathic Drug Proving*.
- 32) Ortega PS. (1980). *Notes on The Miasm on Hahnemann's Chronic Diseases*. English Translation by Harris Coulter. National Homoeopathic Pharmacy.
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Part I Paper 2

FUNDAMENTALS OF CLINICAL MEDICINE IN HOMOEOPATHIC PHARMACY (HOM-PG-FCM-HP)

I. TITLE OF THE SPECIALITY COURSE, AND ITS ABBREVIATION.

M.D. (Homoeopathy) Homoeopathic Pharmacy.

FUNDAMENTALS OF CLINICAL MEDICINE IN HOMOEOPATHIC PHARMACY (HOM-PG-FCM-HP)

II. BRIEF DESCRIPTION OF SPECIALITY AND ITS RELEVANCE IN HOMOEOPATHY POST-GRADUATE COURSE.

The course is a clinical counterpart for the Homoeopathic study and is expected to deliver the basic clinical approach to symptomatology of the patient and process of coming to final diagnosis. student of pharmacy needs to master these processes for not only to give meaning to the symptomatology of the prover but also understand the different toxicological and clinical sources of remedies. It gives better insight about the cause, genesis, evolution of the symptoms and its correlation with examination and investigation which are basic requirement to understand the symptomatology of the prover and action of the remedies. This also will guide the learner to differentiate between proving symptoms and developing any clinical entity at the same time will allow him to take appropriate action to deal with it. The study also can guide to develop new drugs from different traditional sources and their clinical use.

V. TOPICS AND TOPIC OBJECTIVES.

Part 1 Paper 2:

FUNDAMENTALS OF CLINICAL MEDICINE IN HOMOEOPATHIC PHARMACY(HOM-PG-FCM-HP)

- Hom-PG-FCM-HP -01: Introduction to the Practice of Evidence-based Medicine.
- Hom-PG-FCM-HP -02: Developing a Basic Clinical Approach. All the following content must be delivered through clinical cases or presentation along with different aspects of Homoeopathic Pharmacy
- Hom-PG-FCM-HP-03: Studying the Cardinal manifestations of disease through their Pathophysiology with Hahnemannian classification of symptoms and Miasmatical classification through clinical cases and bedside and its application to homoeopathic pharmacy
- Hom-PG-FCM-HP-04: Basic Concepts of Nutrition, Nutritional Diseases and miasmatical assessment
- Hom-PG-FCM-HP-05: Interpretations of Laboratory and Radiological Investigations

COURSE CONTENT

- **Hom-PG-FCM-HP -01:**

INTRODUCTION TO THE PRACTICE OF EVIDENCE-BASED MEDICINE.

- a. Concept of evidence-based practice and its importance in relation to Homoeopathic Pharmacy
- b. Importance of developing an ethical base while adhering to the above in relation to Homoeopathic Pharmacy

- **Hom-PG-FCM-HP -02:** Developing a Basic Clinical Approach. All the following content must be delivered through clinical cases or presentation along with different aspects of Homoeopathic Pharmacy

- a. Correlative study of Normal structure and function to reveal Structural and Functional integrity in Health and understanding the clinical and Hahnemannian concept of health through clinical cases.
- b. Role of Control Systems (Psycho-Neuro-Endocrine axis and the Reticulo-endothelial System) in the maintenance of Health and initiating the process of breakdown and onset of illness
- c. Different components which influence health at individual, family and community level leading to insight into preventive and community medicine through Hahnemannian philosophy of holistic health.
- d. Concept of predisposition and disposition and its influence on development of diseases and application to HP
- e. Bio-psycho-social and environmental model of Aetiology and correlating with the Hahnemannian concept of causation and evolution of disease and Homoeopathic Pharmacy
- f. Development of a Symptom as an indication of deviation of functional competence followed by changes in structural integrity – the pathogenesis of symptom formation and the Hahnemannian concept of disease and its expression and application to Homoeopathic Pharmacy
- g. Clinico-pathological correlations and the concept of a syndrome and its ability in understanding miasmatical evolution.
- h. Bed side- General and Systematic examination and understanding their basis.
- i. Role of physical examination and clinical investigation in the study of disease.
- j. Understanding the process of clinical diagnosis
- k. Importance of differential diagnosis-probable diagnosis and final diagnosis

FOLLOWING STUDY SHALL HELP IN BUILDING UP THE CLINICAL ASPECTS OF HOMOEOPATHIC PHARMACY

- a. Predisposition
- b. Causation and modifying factors
- c. Pathogenesis, Pathology, Clinico-pathological correlations with pathological end result

- d. Case taking, examination, investigation and approach to clinical diagnosis, differential diagnosis
 - e. Management-General and Homoeopathic:
 - i. General Management
 - ii. Standard management:
 - a) Pharmacological effects of homoeopathic medicines, identification of ADR and its effective management, selection of suitable potency, dosage, repetition through the knowledge of Posology.
 - b) Determining most suitable routes of drug administration as per the case.
 - c) Study and practice ideal methods of Dispensing
 - d) To understand the fundamentals of prescription writing and its implementation in clinical practice.
 - f. Prognosis
- **Hom-PG-FCM-HP-03:** Studying the Cardinal manifestations of disease through their Pathophysiology with Hahnemannian classification of symptoms and Miasmatical classification through clinical cases and bedside and its application to homoeopathic pharmacy
 - a. Pain
 - i. Pain:Pathophysiology
 - ii. Chest Pain
 - iii. Abdominal pain
 - iv. Headache
 - v. Back and Neck pain
 - b. Fever-types
 - c. Alteration in Nervous system functions
 - i. Faintness, syncope, dizziness, vertigo
 - ii. Weakness, myalgias, imbalance
 - iii. Numbness, tingling and sensory loss
 - iv. Acute confusional states
 - v. Aphasias
 - vi. Memory loss and dementia
 - vii. Sleep disorder
 - d. Alteration in Respiratory and Circulation
 - i. **Dyspnoea (prototype shown in table below)**
 - ii. Cough and haemoptysis
 - iii. Cyanosis
 - iv. Oedema
 - v. Shock
 - e. Alteration in Gastrointestinal functions
 - i. Dysphagia
 - ii. Nausea, vomiting, indigestion
 - iii. Diarrhoea and Constipation

- iv. Weight loss
- v. Gastrointestinal bleeding
- vi. Jaundice
- vii. Abdominal swelling and ascites
- f. Alteration in Urinary functions and electrolytes
 - i. Incontinence and lower urinary symptoms
 - ii. Urinary abnormalities
- g. Alteration in Reproductive and Sexual functions
 - i. Erectile dysfunction
 - ii. Disturbances of Menstruation
 - iii. Leucorrhoea
 - iv. Hirsutism
 - v. Infertility
- h. Alteration in Skin functions
 - i. Itching
 - ii. Eruptions
 - iii. Disorders of pigmentation
- i. Haematological alterations
 - i. Anaemia
 - ii. Bleeding
 - iii. Enlargement of Lymph nodes and spleen

- **Hom-PG-FCM-HP-04:**

BASIC CONCEPTS OF NUTRITION, NUTRITIONAL DISEASES AND MIASMATIC ASSESSMENT

- a. Nutritional and Dietary assessment
- b. Malnutrition
- c. Vitamin and Mineral deficiency
- d. **Obesity (shown in table below)**
- e. Eating disorders

- **Hom-PG-FCM-HP-05:**

INTERPRETATIONS OF LABORATORY AND RADIOLOGICAL INVESTIGATIONS:

- a. Haematology - All basic tests
- b. Serology
- c. Biochemistry
- d. Microbiology
- e. Special tests – Hormonal Assays – Thyroid function tests, LH, FSH, Prolactin, TORCH, Triple marker, IgG/ IgM, HLA B27, Beta HCG, Anti-thyroid antibodies, Anti-cardiolipin antibodies.

- f. Basis Concepts of Radio Imaging like X-rays, CT, MRI
- g. USG
- h. ECG (Basic applications)

Some Topic and content templets are displayed here for guidelines as an example. Rest the institute shall prepare themselves for their implementation and documentation

VI. COURSE DESCRIPTION

TOPIC NAME:HOM-PG-FCM-HP -01:

INTRODUCTION TO THE PRACTICE OF EVIDENCE BASED MEDICINE

- Importance of developing an ethical base while adhering to the above in relation to Homoeopathic Pharmacy

Table-1

Topic Overview:	This Topic will provide students of M.D.Hom (Homoeopathic Pharmacy)with an overview of the significance of displaying ethical based clinical practice in Homoeopathic Pharmacy
Learning Outcomes:	<p>COMPETENCY HOM-PG-FCM-HP -01 -1-01:</p> <p>IDENTIFIES ETHICAL BASED CLINICAL PRACTICES IN HP</p> <p>KNOWLEDGE</p> <ul style="list-style-type: none"> ▪ Discuss Code of Pharmaceutical Ethics. ▪ Study the “National Commission forHomoeopathy (Professional Conduct, Etiquette and Code of Ethics for Practitioners of Homoeopathy) Regulations, 2022”. ▪ Discuss Guidelines of Good Clinical Practices for Clinical Trials in Homoeopathy. ▪ Describe the laws to be followed by Homoeopathic manufacturing units as per Drugs and Cosmetics Rules, 1945 ▪ Explain GMP procedure followed by homoeopathic manufacturing units to deliver quality finished products. ▪ Conduct / Plan standardisation tests to ensure preparation of quality homoeopathic medicines as per Homoeopathic Pharmacopoeia ▪ Report ADR/ medication errors during case taking in a patient ▪ Discuss concept of Pharmacovigilance

	<p>SKILL</p> <ul style="list-style-type: none"> ▪ Demonstrate standardisation tests to ensure genuineness of homoeopathic medicine ▪ Demonstrate Cases reporting ADR / medication errors related to concept of Pharmacovigilance in hospital duties ▪ Identification and demonstrate use of organopathic drugs related to diseases. <p>REFLECTION</p> <ul style="list-style-type: none"> ▪ Appreciates the process involved in ensuring ethical based clinical practice in HP
Learning Methods	Case- based, Bed- side, Out – patient based.
Assessment:	<p>Continuous / Programmatic assessment (including Problem Based Learning assessment).</p> <p>LAQ ; Checklist, Rating Scales, Rubric</p>
Prescribed Texts:	Refer to list attached
Domains of Competencies:	<p>Knowledge & Scholarship / Patient Care / Homoeopathic Orientation</p> <p>/ Practice Based Learning</p>

TOPIC NAME: HOM-PG-FCM-HP -03:

Studying the Cardinal manifestations of disease through their Patho-physiology with Hahnemannian classification of symptoms and Miasmatical classification through clinical cases and bedside and its application to homoeopathic pharmacy

BELOW IS MENTIONED A PROTOTYPE THAT WILL BE APPLIED TO ALL THE SYMPTOMS LISTED IN THE COURSE

Table-2

Topic Overview:	This Topic will provide students of MD Hom (Homoeopathic Pharmacy) about overview of dyspnoea, its understanding in clinical practice and its homoeopathic perspective
Learning Outcomes:	<p>COMPETENCY HOM-PG-FCM-HP -03-2-01:</p> <p>EXPLORING DYSPNOEA AS A SYMPTOM AND ITS HOLISTIC UNDERSTANDING IN LIGHT OF HOMOEOPATHIC PERSPECTIVE AND CLINICAL MEDICINE</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none"> • Discuss etiopathogenesis of dyspnoea and its understanding from clinical medicine. • Discuss etiopathogenesis of dyspnoea and its understanding from homoeopathic perspective • Discuss the other clinical features associated with dyspnoea • Explain pathogenesis of dyspnoea. • Plan investigation for confirmation of diagnosis • Formulate provisional clinical diagnosis and differential diagnosis • Explain Clinical differentiation of symptoms for assessment of nosological diagnosis • Classify dyspnoea from Hahnemannian classification of disease • Apply clinical insight in classifying miasm (Psoric, Syphilitic and Sycotic) • Correlate Hahnemann’s concept and modern medicine for the understanding of dyspnoea • Classify the symptoms with analysis and evaluation • Ascertain prognosis from clinical medicine and homoeopathic perspective • Plan Diet and regimen as per the nosological diagnosis and Hahnemann’s directions. • Plan the line of management (Medicinal and/or auxiliary management) • Plan Strategy for homoeopathic management • Perform Clinical examination of chest and other relevant systems. • Discuss Knowledge of Posology, Prescription writing, Pharmaconomy in relation to dyspnoea • Acquire knowledge of pharmacological action of the selected medicine for dyspnoea through the study of active drug constituents on human body

	<p>SKILL:</p> <ul style="list-style-type: none"> • Demonstrate Homoeopathic Case taking skills including anamnesis • Demonstrate the clinical differentiation of symptoms for assessment of nosological diagnosis • Interpret suggested investigation for confirmation of diagnosis • Demonstrate clinical examination of chest and other relevant systems. • Formulate provisional clinical diagnosis and differential diagnosis • Describe Homoeopathic approach in terms of anamnesis, susceptibility and miasmatic analysis • Discuss analysis and evaluation of Symptoms • Discuss formation of Totality • Decide the line of management (Medicinal and/or auxiliary management) • Discuss strategy for homoeopathic management • Practice the ideal prescription writing method and Dispensing technique of medicines • Select potency as per the principles of Posology • Select effective route of administration of indicated SIMILIMUM • Discuss proper repetition of doses as per the progress of the case. • Ascertain ADR as per the case <p>REFLECTION:</p> <ul style="list-style-type: none"> • Integrated approach in understanding dyspnoea • Identify social, economic, environmental, biological and emotional determinants of dyspnoea • Applying the concept of Homoeopathic Pharmacy pertaining to potency selection, dose, repetition, route of administration of medicines to dyspnoea patient • Identify the action of drug constituents of a SIMILIMUM medicine on respiratory system • To avoid ADR and to take necessary measures in case of any adverse drug event
Learning Methods	Case – based, Bedside, Deliberate practice
Assessment:	Continuous / Programmatic assessment (including Problem Based Learning assessment). Checklist, Rating Scales, Rubric. SAQ
Prescribed Texts:	Refer to list attached
Domains of Competencies :	Knowledge & Scholarship / Patient Care / Homoeopathic Orientation

TOPIC NAME: HOM-PG-FCM-HP -04:

BASIC CONCEPTS OF NUTRITION, NUTRITIONAL DISEASES AND MIASMATIC ASSESSMENT

Table-3

Topic Overview:	This Topic will provide students of MD Hom (Homoeopathic Pharmacy) about overview of Obesity, its understanding in clinical practise and its homoeopathic perspective.
Learning Outcomes:	<p>COMPETENCY HOM-PG-FCM-HP -04-3-01:</p> <p>Exploring Obesity as a nutritional disorder, Identifying signs and symptoms of Obesity and its holistic understanding in light of homoeopathic perspective and clinical medicine</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none">• Discuss knowledge of body fat distribution in males and females.• Discuss knowledge of Anthropometric measurement in relation to Obesity• Discuss etiopathogenesis of Obesity and its understanding from clinical medicine.• Discuss etiopathogenesis of Obesity and its understanding from homoeopathic perspective• Discuss the clinical features associated with Obesity• Plan investigation for confirmation of diagnosis• Describe complications associated with Obesity• Discuss knowledge of general survey of disease (Hahnemannian classification of disease)• Discuss knowledge of miasm (Psoric, Syphilitic and Sycotic)• Describe Homeopathic evaluation of common and characteristic symptoms• Correlate Hahnemann's concept and modern medicine for the understanding of Obesity• Ascertain prognosis from clinical medicine and homoeopathic perspective• Describe knowledge of Diet and Regimen as per the nosological diagnosis and Hahnemann's directions.• Describe knowledge of Posology, Prescription writing, Pharmaconomy• Discuss knowledge of pharmacological action of the selected medicine through the study of active drug constituents on human body

	<p>SKILL:</p> <ul style="list-style-type: none"> • Demonstrate Homoeopathic Case taking including anamnesis • Demonstrate Clinical differentiation of symptoms for assessment of nosological diagnosis • Demonstrate Anthropometric assessments in relation to Obesity • Demonstrate suggested investigation for confirmation of diagnosis • Perform Clinical examination of relevant systems. • Formulate provisional clinical diagnosis and differential diagnosis • Demonstrate Homoeopathic skills in terms of anamnesis, susceptibility and miasmatic analysis • Demonstrate skills for Analysis and Evaluation of Symptoms • Construct Totality of symptoms • Decide the line of management (Medicinal and/or auxiliary management) • Plan Strategy for homoeopathic management • Practice the ideal prescription writing method and Dispensing technique of medicines • Select potency as per the principles of Posology • Select effective route of administration of indicated SIMILIMUM • Demonstrate Proper repetition of doses as per the progress of the case. • Ascertain ADR <p>REFLECTION:</p> <ul style="list-style-type: none"> • Integrated approach in understanding Obesity • Applying the concept of Homoeopathic Pharmacy pertaining to potency selection, dose, repetition, route of administration of medicines to Obese patient • Identify the action of active drug constituents of a SIMILIMUM medicine on different systems of the body
Learning Methods	Case – based, bedside, Out – patient based, Deliberate practice
Assessment:	Continuous / Programmatic assessment (including Problem Based Learning assessment). Application Based Questions
Prescribed Texts:	Refer to list attached
Domains of Competencies:	Knowledge & Scholarship / Patient Care / Homoeopathic Orientation

TOPIC NAME: HOM-PG-FCM-HP -05:

INTERPRETATIONS OF LABORATORY AND RADIOLOGICAL INVESTIGATIONS

BELOW IS MENTIONED A PROTOTYPE THAT WILL BE APPLIED TO ALL THE INVESTIGATION LISTED IN THE COURSE

Table-4

Topic Overview:	This Topic will provide students of MD Hom (Homoeopathic Pharmacy) about overview of Liver Function test, its understanding in clinical practice and its homoeopathic perspective.
Learning Outcomes:	<p>COMPETENCY HOM-PG-FCM-HP -05-4-01:</p> <p>INTERPRETATION OF LIVER FUNCTION TEST CONSIDERING HOMOEOPATHIC PERSPECTIVE AND CLINICAL MEDICINE.</p> <p>KNOWLEDGE:</p> <ul style="list-style-type: none">• Explain knowledge of liver functions• Discuss etiopathogenesis of liver disorders• Interpret investigation for liver diseases• Classify the liver function in to functional and structural representation• Classify the liver function as representation of different Miasm (Psoric, Syphilitic and Sycotic)• Explain susceptibility in relation to Liver function test• Correlate Hahnemann's concept and modern medicine for the understanding of liver function test• Justify prognosis from clinical and homoeopathic medicine basing on liver functions test.• Plan the line of management based on Liver Function test• Discuss knowledge of Diet and regimen as per the nosological diagnosis.• Discuss knowledge of selection of potency, repetition of doses through Homoeopathic Pharmacy <p>SKILL:</p> <ul style="list-style-type: none">• Perform clinical and homoeopathic history based on laboratory findings.• Corelation of clinical history with laboratory finding.• Utilisation of laboratory findings in selection of medicine, potency, repetition of doses. <p>REFLECTION:</p> <ul style="list-style-type: none">• Relate use of laboratory test in judicious management of clinical

	<p>cases</p> <ul style="list-style-type: none"> • Relating utility of laboratory finding in potency selection, repetition of doses through knowledge of homoeopathic pharmacy
Learning Methods	Case – Based, out – patient based, Bedside, reflective learning.
Assessment:	Continuous / Programmatic assessment (including Problem Based Learning assessment). SAQ ; Checklist, Rating Scales, Rubric.
Prescribed Texts:	Refer to list attached
Domains of Competencies:	Knowledge & Scholarship / Patient Care / Homoeopathic Orientation

VII. ASSESSMENT

	Formative Assessment (Internal Assessment)	Summative Assessment (University Examination)
M.D.(Hom.) Part-I	1st Term Test: During sixth month of training 2nd Term Test: During twelfth month of training	During eighteenth month of training

VII (1). M.D. (HOMOEOPATHY) PART-I EXAMINATION :

MAXIMUM MARKS FOR EACH SUBJECT AND MINIMUM MARKS REQUIRED TO PASS SHALL BE AS FOLLOWS:

Subjects	Theory		Practical or Clinical Examination, including Viva	
	Maximum Marks	Pass Marks	Maximum Marks	Pass Marks
i. Fundamentals of Homoeopathic Pharmacy	100	50	200* (160 + 40) (Summative Assessment 160 Marks) (Internal Assessment 40 Marks)	100* (80 + 20) (Summative Assessment 80 Marks) (Internal Assessment 20 Marks)
ii. Fundamentals of Clinical Medicine in Homoeopathic Pharmacy	100	50		
iii. Research Methodology and Biostatistics	100	50	-	-

*(*A common practical exam for paper I and II (100 marks practical + 100 marks viva) shall be conducted; twenty per cent. weightage shall be for internal assessment, which shall be calculated for practical or clinical including viva voce only. One internal assessment of 40 marks [20 marks (practical or clinical) + 20 marks (viva voce)] after each term of six months and average of two terms shall be considered. *eighty per cent. weightage shall be for summative assessment).*

VII (2). ASSESSMENT BLUEPRINT – THEORY (benchmarked by the module-wise distribution.)

VII (2A). DISTRIBUTION OF TOPICS FOR THEORY-BASED ASSESSMENT.

TYPES OF QUESTIONS WITH MARKS

Types of question	No. of questions to be asked	Marks per question	Total
Problem Based Question	01	20	20
Long Answer Question	04	10	40
Short Answer Question	08	05	40
Total			100

PART 1 – PAPER 2. TOPIC NUMBERS

- **Hom-PG-FCM-HP-01:** Introduction to the Practice of Evidence-based Medicine.
- **Hom-PG-FCM-HP-02:** Developing a Basic Clinical Approach. All the following content must be delivered through clinical cases or presentation along with different aspects of Homoeopathic Pharmacy
- **Hom-PG-FCM-HP-03:** Studying the Cardinal manifestations of disease through their Patho-physiology with Hahnemannian classification of symptoms and Miasmatic classification through clinical cases and bedside and its application to homoeopathic pharmacy
- **Hom-PG-FCM-HP-04:** Basic Concepts of Nutrition, Nutritional Diseases and miasmatic assessment
- **Hom-PG-FCM-HP-05:** Interpretations of Laboratory and Radiological Investigations

VII (2 B). QUESTION PAPER LAYOUT

Q. No.	Type of Question	Content	Marks
1	Problem Based	Problem/ Case Based Question with application to Homoeopathic Pharmacy Hom-PG-FCM-HP -01 or 03 or 04	20
2	LAQ	Hom-PG-FCM-HP -01	10
3	LAQ	Hom-PG-FCM-HP -03: a or c	10
4	LAQ	Hom-PG-FCM-HP -03: d	10
5	LAQ	Hom-PG-FCM-HP -03: e	10
6	SAQ	Hom-PG-FCM-HP -04	5
7	SAQ	Hom-PG-FCM-HP -03: b or i	5
8	SAQ	Hom-PG-FCM-HP -03: f	5
9	SAQ	Hom-PG-FCM-HP -03: g	5
10	SAQ	Hom-PG-FCM-HP -03: h	5
11	SAQ	Hom-PG-FCM-HP -05: a or b or c	5
12	SAQ	Hom-PG-FCM-HP -05: d or e	5
13	SAQ	Hom-PG-FCM-HP -05: f or g or h	5

VII (3). Assessment Blueprint –Practical / Viva:

VII (3a). Practical examination: A Common Practical/viva for Part I Paper 1 and 2.

VIII. List of Reference Books (As per APA Format).

VIII. LIST OF RECOMMENDED REFERENCE BOOKS FOR THE PRACTICE OF MEDICINE:

1. Bates, B., Bickley, Lynn, S. and Szilagyi, Peter, G. (2013) *Bates' Guide to Physical Examination and history taking*. Philadelphia u.a.: Wolters Kluwer, Lippincott Williams & Wilkins.
2. Beeson, P. B., McDermott, W., & Wyngaarden, J. B. (Eds.). (1979). *Cecil Textbook of Medicine* (Asian Edition ed.). Philadelphia: W. B. Saunders Company.
3. Boyd, W. (1979). *A Textbook of Pathology* (8th ed.). London: Lea & Febiger, Philadelphia.
4. Cecil, R.L. and Kennedy, F. (1943) *A text-book of medicine*. Philadelphia: Saunders
5. Datey, K.K. and Shah, S.J. (1979) *A.P.I. textbook of medicine*. Bombay: Association of Physicians of India
6. Davis, M.A. (1999) *Signs and symptoms in emergency medicine: Literature-based guide to emergent conditions*; Mark A. Davis. St. Louis, MO: Mosby
7. Fauci, A. S., Kasper, D. L., Longo, D. L., Braunwald, E., Hauser, S. L., Jameson, J. L., et al. (Eds.). (2008). *Harrison's Principles of Internal Medicine* (17th Edition ed.). New York: Mc Graw Hill Medical.
8. Frazier, H.S. and Mosteller, F. (1995) *Medicine worth paying for: Assessing Medical Innovations*. Cambridge, MA: Harvard University Press.
9. Glynn, M., & Drake, W. (Eds.). (2012). *Hutchison's Clinical Methods* (23rd ed.). China: Saunders Elsevier.
10. Golwalla, A. F., & Golwalla, S. A. (2000). *Golwalla Medicine for Students* (19th ed.). Mumbai: Dr. A. F. Golwalla Empress Court, Mumbai.
11. Gupta, L., Gupta, Abhitabh and Gupta, Abhishek (2005) *Differential diagnosis: Medicine, surgery, OB/GYN, Ophth, paed, dental*. New Delhi: Jaypee Bros.
12. Hurst, J. W. (Ed.). (1992). *Medicine for the Practicing Physician* (3rd ed.). USA: Butterworth Heineman, Stoneham.
13. Kamath, S. A. (Ed.). (2022). *API Textbook of Medicine* (12th ed.). New Delhi: Jaypee Brothers Medical Publishers (P) Ltd, New Delhi.
14. Kaul, V. K., & Bagga, A. (Eds.). (2019). *Ghai Essential Pediatrics* (10th ed.). New Delhi: CBS Publishers & Distributers Pvt Ltd, New Delhi.
15. Kinirons, M., & Ellis, H. (Eds.). (2005). *French's Index of Differential Diagnosis* (14th ed.). London: Hodder Arnold.
16. Kumar, P., & Clark, M. (Eds.). (2005). *Clinical Medicine* (6th ed.). Elsevier Saunders.
17. Malhotra, N., Malhotra, J., Saxena, R., & Malhotra Bora, N. (Eds.). (2019). *Jeffcoate's Principles of Gynaecology* (9th ed.). New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.
18. Mehta, P.J. and Palia, F.E. (1979) *Practical medicine for students and Practitioners*. Bombay: P.J. Mehta and F.E. Palia.
19. Ogilvie, C., & Evans, C. (2006). *Chamberlain's Symptoms and Signs in Clinical Practice* (12th ed.). New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.
20. Parthasarathy, A., Menon, P., & Nair, M. (Eds.). (2019). *IAP Textbook of Pediatrics* (7th ed.). New Delhi: Jaypee Brothers Medical Publishers (P) Ltd, New Delhi.
21. Penman, I. D., Ralston, S. H., Strachan, M. W., & Hobson, R. P. (Eds.). (2022). *Davidson's Principles and Practice of Medicine* (24th Edition ed.). Elsevier.

22. Rao, L. V., & Snyder, L. M. (2021). *Wallach's Interpretation of Diagnostic Tests* (South Asian Edition ed.). (S. Dubey, Ed.) New Delhi: Wolters Kluwer Pvt. Ltd. New Delhi.
23. Savill, T.D. and Warner, E.C. (1950) *Savill's System of Clinical Medicine*. edited by E.C. Warner. London: Edward Arnold & Co.
24. Swash, M. (2006) *Hutchison's clinical methods*. Orlando, Fl.: Saunders
25. Vakil, R.J. and Golwalla, A.F. (1974) *Clinical diagnosis: A textbook of physical signs and symptoms for medical students and practitioners*. Bombay: Asia Pub. House.
26. Wallach, J. (2007) *Interpretation of diagnostic tests*. Philadelphia: Wolters Kluwer.

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