

SYLLABUS

ANATOMY - THEORY

Sl.No	Topics
1	GENERAL ANATOMY
	1.Modern concepts of cell and its components; cell division, types with their significance
	2.Basic tissues
	3. Genetics <ul style="list-style-type: none"> i. DNA &RNA ii. Chromosomes
Sl.No	Topics
	iii. Genes iv. Inheritances v. Genetic basis of diseases and Integration with homoeopathic concept to fmiasmatic influence
	4. Basics of General Anatomy- <ul style="list-style-type: none"> i. Definition and subdivisions of Anatomy ii. History of Anatomy iii. Anatomical terms of position &movement iv. Skin, superficial and deep fasciae v. Muscles vi. Bones vii. Joint viii. Blood vessels ix. Lymphaticsystem x. Nerves xi. Glands: types and classification
	5.Revision
2	DEVELOPMENTALANATOMY(EMBRYOLOGY)
	1. Introduction 2. Spermatogenesis 3. Oogenesis

	<ol style="list-style-type: none"> 4. Fertilization 5. Cleavage and implantation 6. Bilaminar germ disc formation 7. Gastrulation: Germ layers & Derivatives 8. Intraembryonic mesoderm derivatives: Somites 9. Ossification 10. Notochord 11. Folding of the embryonic: formation of primitive gut 12. Placenta 13. Revision
3	HISTOLOGY(General)
Sl.No	Topics
	1. Introduction
	2. Epithelial tissue
	3. Connective tissue
	4. Cartilage
	5. Bone
	6. Muscle
	7. Nervous tissue
	8. Skin
	9. Lymphoid organs
	10. Blood vessels
	11. Glands
	12. Revision
4	UPPER EXTREMITY
	1. Introduction
	2. Pectoral region and axilla
	3. Mammary Gland
	4. Brachial plexus
	5. Axillary artery
	6. Back and intermuscular spaces around scapula
	7. Shoulder Joint
	8. Musculo-cutaneous and axillary nerves

	9. Armand cubital fossa; brachial artery
	10. Fore arm: Muscles, nerves and blood vessels (Superficial and Deep Flexors and Extensors)
	11. Radial artery
	12. Ulnar artery
	Topics
	13. Median nerve
	14. Ulnar nerve
	15. Radial nerve
	16. Elbow joint and radio-ulnar articulations
	17. Wrist joint
	18. Flexor and extensor retinacula
	19. Palmar aponeurosis and spaces in palmar spaces
	20. Venous drainage of upper extremity
	21. Revision
	LOWER EXTREMITY
	1. Introduction
	2. Lumbar plexus and femoral nerve
	3. Front of thigh
	4. Femoral Triangle and Femoral artery
	5. Median compartment of thigh and obturator nerve
	6. Gluteal region
	7. Sacral plexus and sciatic nerve, tibial and common peroneal nerves
	8. Back of the thigh Popliteal fossa
	9. Hip joint
	10. Front of the leg and dorsum of the foot: Anterior tibial artery, deep peroneal nerve
	11. Back of the leg: Tibial nerve and posterior tibial artery
	12. Side of the leg: Superficial peroneal nerve
	Topics
	13. Retinacula around the ankle

	14. Sole of foot
	15. Knee Joint
	16. Ankle joint
	17. Arches of foot
	18. Venous drainage of lower extremity
	19. Revision
	THORAX
	1. Introduction
	2. Trachea
	3. Pleura
	4. Lungs
	5. Mediastinum
	6. Pericardium and Heart
	7. Blood supply of heart
	8. Superior mediastinum: Archa aorta
	9. Superior mediastinum: Superior Vena cava
	10. Inferior Vena Cava
	11. Posterior mediastinum: Azygous vein & Thoracic duct
	12. Posterior mediastinum: Oesophagus & Descending thoracic aorta
	13. Diaphragm
	14. Systemic embryology: Development of heart and lung
	15. Systemic histology: Trachea and lung
	Topics
	16. Revision
	ABDOMEN, PELVIS & PERINEUM
	1. Introduction
	2. Anterior Abdominal wall
	3. Peritoneum
	4. Stomach
	5. Liver
	6. Gallbladder and Extrahepatic biliary apparatus
	7. Spleen
	8. Duodenum

	9.Pancreas
	10.Jejunumandlleum,Superiormesentericartery
	11.Caecum &appendix
	12.Largeintestine
	13.Portalvelnoussystem
	14.Kidney
	15.Suprarenalglands
	16.Abdominalaorta
	17.Posteriorabdominalwall
	18.Urinarybladder
	19.Ureter
	20.Prostategland
	21.Ovary
	22.Uterus
	23.Fallopiantube
	Topics
	24.Scotumandtestis
	25.Vasdeferens
	26. Rectum
	27.Analcanal
	28. Walls of pelvis including pelvic diaphragm
	29. Perineum: superficial and deep perineal pouches
	30.Ischiorectal fossa
	31.Systemic embryology:Development of digestive system
	32.Systemic embryology:Development of urogenital organs
	33.Systemic histology:Digestivesystem
	34. Systemic histology: Urinary system & suprarenal gland
	35.Systemic histology:Malereproductivesystem
	36. Systemic histology: Female reproductivesystem
	37.Revision
	HEAD,NECK&FACE
	1.Introduction
	2.Scalp

	3.Face:muscles,nervesandbloodvessels
	4.Lachrymalapparatus
	5.Sideoftheneck: Posteriortriangle
	6.Frontoftheneck: Anteriortriangleanditssubdivisions
	Topics
	7.Deepcervicalfascia
	8.Backoftheneck:Suboccipitaltriangle
	9.Contentsofvertebralcanal
	10.Parotid gland
	11.Submandibulargland
	12.Musclesofmastication
	13.Temporamandibularjoint
	14.Thyroidgland
	15.Cranialcavity:Duramater,Duralvenoussinuses&Pituitary gland
	16.Contentsoftheorbit
	17.Extraocularmuscles
	18.Oralcavity
	19.Softpalateandpalatinetonsil
	20.Tongue
	21.Pharynx
	22.Larynx
	23.Noseandparanasalairsinuses
	24. Ear:EAC&middleear,inner ear
	25.Eustachiantube
	26.Eyeball
	27.Common&Internalcarotidartery
	28.Externalcarotidartery
	29.Vertebralartery
	30.InternalJugularvein
	31.Systemichistology:Thyroidgland,PituitaryglandandTongue
	Topics
	32.Systemicembryology:Pharyngealarches:derivatives
	33.Revision

	CENTRALNERVOUSSYSTEM:BRAIN
	1.Introduction
	2.Meninges&CSF
	3.Spinalcord
	4.Medullaoblongata
	5.Pons
	6.Cerebellum
	7.Fourthventricle
	8.Mid-brain
	9.Diencephalon:Thalamus&Hypothalamus
	10.ThirdVentricle
	11.LateralVentricle
	12.Cerebrum:externalfeatures
	13.Functionalareasofcerebralcortex
	14.Basalganglia
	15. White matter of cerebrum: Corpus callosum &Internalcapsule
	16.Blood supplyofbrain
	17.Cranialnerves
	18.Systemicembryology:DevelopmentofBrain
	19.Revision

PRACTICALS

Sl.No.	Topics
1.	GENERALHISTOLOGY
	1.Epithelialtissue: Simple&Stratified
	2.Connectivetissue:Loose/Areolar&Adipose
	3.Connectivetissue:Cartilages
	4.Connectivetissue:Compactbone(L.S, T.S)andSpongybone
	5.Muscltissue:Skeletal(L.S,T.S),SmoothandCardiac
	6.Nervoustissue:Peripheralnerve(T.S)&Nervefibre(L.S)
	7.Skin:Thick&Thin
	8.Lymphoidorgans:Lymphnode,Spleen,Thymus&Tonsil
	9.Bloodvessels:Largeartery,Mediumsizedartery&Large vein
	10.Glands:Serous,Mucous&Mixed
2.	UPPEREXTREMITY
	1.Introduction
	Osteology
	2.Clavicle
	3.Scapula
	4.Humerus
	5.Radius
	6.Ulna
	7.Articulatedhand
Sl.No.	Topics
	8.SurfaceMarkingsinupper extremity
	Dissection
	9.Pectoralregion
	10.Axilla
	11.Back&Shoulder
	12.Arm:Front &CubitalfossaandBackofthearm
	13.Front ofForearm&palmofohand
	14.BackofForearm&Dorsum ofHand
	15.Jointsofupperextremity
	16.Radiologyofupperextremity

3.	HEAD,NECK&FACE
	1.Introduction
	Osteology
	2.Skull
	3.Mandible
	4.Hyoidbone
	5.Cervicalvertebrae:Typical&Atypical
	6.SurfaceMarkingsinhead,neck& face.
	Dissection
	7. Scalp
	8.Face
	9.Posteriortriangleofneck
	10.Anteriortriangleofneck
	11.Backofneck
	12.Cranialcavity&Contentsofvertebralcanal
Sl.No.	Topics
	13.Deepdissectionofneck
	14.Orbit&Eyeball
	15.Ear
	16.Parotid region
	17.Temporal&infratemporalregion
	18.Sub mandibularregion
	19.Mouth,Tongue&Pharynx
	20.Nose&Larynx
	21.Tempero-Mandibularjoint&jointsofNeck
	22.RadiologicalanatomyofHead,NeckandFace
	SystemicHistology-
	23.Thyroidgland (includingparathyroid)
	24. Pituitarygland
	25.Revision
	TotalHours
4.	CENTRALNERVOUSSYSTEM
	1. Introduction

	Demonstration
	2.Partsofthebrain
	3.Spinalcord
	4.Ventricles(model)
	5.Radiologyof brain
	SystemicHistology
	6.Nervoustissue:Cerebrum&Cerebellum
	7.Revision
Sl.No.	Topics
5.	THORAX
	1. Introduction
	Osteology
	2.Sternum.Ribs:Typical&Atypical
	3.Thoracicvertebrae:Typical&Atypical
	SurfaceMarking
	Dissection
	4.AnteriorThoracicwall,Intercostalspace&contents
	5.Pleura&Lungs
	6. Contents of superior mediastinum &Pericardium
	7.Heart:External features
	8.InteriorofHeartwithvalvesofheart
	9.ContentsofposteriorMediastinum
	10.Radiological anatomy
	SystemicHistology
	11.Trachea &Lung
	12.Revision
6.	LOWERLIMB
	1.Introduction
	Osteology
	2.HipBone
	3.Femur&Patella
	4.Tibia
	5.Fibula
	6.ArticulatedFoot

	7. SurfaceMarking
	Dissection
	8.Front ofthigh
	9.Medialsideofthigh
	10.Gluteal region
	11.Backofthigh&Poplitealfossa
	12.Front ofLeg&DorsumofFoot
	13.Leg:Medial,Lateral &Backof Leg
	14.SoleofFoot
	15.Jointsofthelowerextremity
	16.Radiologylowerextremity
	17.Revision
7.	ABDOMEN & PELVIS
	1.Introduction
	2.Osteology
	3.LumbarVertebrae
	4.Sacrum andjoints
	5.ArticulatedPelvis:Male&female
	6.SurfaceMarking
	Dissection
	7.Anteriorabdominalwall
	8.Externalgenitalia ofMale
	9.Abdominalcavity:Position&Relationsofviscera,Peritoneum, Greater &Lessersac
Sl.No.	Topics
	10.Stomach&Spleen
	11.Smallintestine(Jejunum&Ileum)&Largeintestine
	12.Duodenum&Pancreas
	13.Liver,Gallbladder&bloodvesselsofDigestivesystem
	14.Kidney &Suprarenalgland
	15.PosteriorAbdominalwall&Diaphragm
	16.Wallsofthepelvis&Pelviccavity:position&relationsof viscera,Perineum
	17.Urinarybladder,Urethra&Prostate
	18.Ovary,Uterus,Fallopian tubes,Vagina

	19.Sigmoidcolon,Rectum&Analcanal
	20. Radiologicalanatomy
	SystemicHistology
	21.Digestivesystem:Basic structureofGIT
	22.Digestive system: Liver & Gall bladder,Pancreas
	23.Urinarysystem:Kidney,Ureter&Suprarenal gland
	24.MaleReproductivesystem:Testis&Prostate
	25.FemaleReproductivesystem:Ovary&Uterus

PHYSIOLOGY INCLUDING BIOCHEMISTRY

THEORY:-

1. GENERAL PHYSIOLOGY:

- Introductiontocellularphysiology
- Cell Junctions
- TransportthroughcellmembraneandrestingmembranepotentialBodyfluidscompartments
- Homeostasis

2. BIO-PHYSICAL SCIENCES

- FiltrationUltra-filtrationOsmosis
- DiffusionAdsorptionHydrotopry,Colloid
- DonnanEquilibriumTracerelementsDialysis
- AbsorptionAssimilationSurfacetension

3. SKIN&THEINTEGUMENTARYSYSTEM

- Skin&IntegumentarySystem
- LayersofSkin
- FunctionofSkin
- Sweat
- Bodytemperatureanditsregulation

4. BODYFLUID&IMMUNEMECHANISM

- Blood

- Plasma Proteins
- RedBlood Cells
- Erythropoiesis
- HaemoglobinandIron Metabolism
- ErythrocyteSedimentationRate
- PackedCellVolumeandBlood Indices
- HaemolysisandFragilityofRedBloodCells
- WhiteBloodCell
- Immunity
- Platelets
- Haemostasis
- CoagulationofBlood
- Bloodgroups
- BloodTransfusion
- Bloodvolume
- Reticulo-endothelialSystemandTissueMacrophageLymphaticSystemandLymph
- TissueFluidand Oedema

5. NERVEMUSCLEPHYSIOLOGY

- Physiologicalpropertiesofnervefibres
- Nervefibre-types,classification,function,Degenerationandregenerationofperipheralnerves
- Neuro-Muscularjunction
- PhysiologyofSkeletal muscle
- PhysiologyofCardiacmuscle
- PhysiologyofSmooth muscle
- EMG

1. CARDIO-VASCULARSYSTEM

- IntroductiontocardiovascularsystemPropertiesofcardiacmuscle
- Cardiac cycle
- GeneralprinciplesofcirculationHeartsounds
- Regulationofcardiovascularsystem

- Normal and abnormal Electrocardiogram (ECG)
- Cardiac output
- Heart rate
- Arterial blood pressure
- Radial pulse
- Regional circulation - Cerebral, Splanchnic, Capillary, Cutaneous & skeletal muscle circulation.
- Cardiovascular adjustments during exercise

2. RESPIRATORY SYSTEM AND ENVIRONMENTAL PHYSIOLOGY

- Physiological anatomy of respiratory tract
- Mechanism of respiration: Ventilation, diffusion of gases
- Transport of respiratory gases Regulation of respiration Pulmonary Function Test
- High altitude and space physiology Deep sea physiology
- Artificial respiration
- Effects of exercise on respiration

3. CENTRAL NERVOUS SYSTEM

- Introduction to nervous system Neuron
- Neuroglia
- Receptors
- Synapse
- Neurotransmitters
- Reflex
- Spinal cord
- Somato-sensory system and somato-motor system Physiology of pain
- Brainstem, Vestibular apparatus
- Cerebral cortex
- Thalamus
- Hypothalamus
- Internal capsule
- Basal ganglia
- Cerebellum - Posture and equilibrium

- Reticular formation
- Proprioceptors
- Higher intellectual function Electroencephalogram (EEG)
- Physiology of sleep
- Cerebro-spinal fluid (CSF) Autonomic Nervous System (ANS)

4. ENDOCRINOLOGY

- Introduction of endocrinology and importance of PNEI axis Hormones and hypothalamo-hypophyseal axis
- Pituitary gland
- Thyroid gland
- Parathyroid
- Endocrine functions of pancreas Adrenal cortex
- Adrenal medulla
- Endocrine functions of other organs

5. REPRODUCTIVE SYSTEM

- Male reproductive system - testis and its hormones; seminal vesicles, prostate gland, semen.
- Introduction of female reproductive system
- Menstrual cycle
- Ovulation
- Menopause
- Infertility
- Pregnancy and parturition Placenta
- Pregnancy tests
- Mammary glands and lactation Fertility
- Foetal circulation

6. SPECIAL SENSES

- Eye: Photochemistry of vision, Visual pathway, Pupillary reflexes, Colour vision, Errors of refraction
- Ear: Auditory pathway, Mechanism of hearing, Auditory defects Limbic system
- Sensation of taste: Taste receptors, Taste pathways
- Sensation of smell: Olfactory receptors, olfactory, pathways Sensation of touch

7. DIGESTIVE SYSTEM & NUTRITION

- Introduction to digestive system
- Composition and functions of digestive juices
- Physiological anatomy of Stomach, Pancreas Liver and Gallbladder, Small intestine, Large intestine
- Movements of gastro in test inaltract
- Gastro intestinal hormones
- Digestion and absorption of carbo hydrates ,proteins and lipids

8. RENALPHYSIOLOGY

- Physiological anatomy of kidneys and urinary tract
- Fluid & electro lyte with acid base balance need to be include
- Renal circulation
- Urineformation:Renalclearance,glomerularfiltration,tubularreabsorption,selective secretion,concentrationofurine, acidification of urine
- Renal functions tests
- Micturition

9. BIO-CHEMISTRYTHEORY

- Carbohydrates:(Chemistry, Metabolism, Glycolysis, TCA, HMP, Glycogensynthesisanddegradation, Bloodglucoseregulation)
- Lipids:(Chemistry, Metabolism, Intestinaluptake, Fattransport, Utilizationofstoredfat, Activationoffattyacids, Betaoxidation and synthesis of fatty acids)
- Proteins:(Chemistry, Metabolism, Digestionofprotein, Transamination, DeaminationFateofAmmonia, Ureacycle, End products of each amino acid and their entry into TCA cycle)
- Enzymes:(Definition, Classification, BiologicalImportance, Diagnosticuse, Inhibition)
- Vitamins:(Dailyrequirements, Dietarysource, Disordersandphysiological role)
- Minerals(Dailyrequirement, DietarySources, Disordersandphysiologicalrole)mineral metabolism
- Organ function tests

PRACTICAL&CLINICALPHYSIOLOGY:-

No	Practical	Demonstration/ Performance
Haematology		
1	Study of the Compound Microscope	Performance
2.	Collection of Blood Samples	Performance
3	Estimation of Haemoglobin Concentration	Performance
4	Determination of Haematocrit	Demonstration
5	Hemocytometry	Performance
6	Total RBC Count	Performance
7	Determination of RBCIndices	Demonstration
8	Total Leucocytes Count (TLC)	Performance
9	Preparation And Examination Of Blood Smear	Performance
10	Differential Leucocyte Count(DLC)	Performance
11	Absolute Eosinophil Count	Demonstration
12	Determination of Erythrocyte Sedimentation Rate	Demonstration
13	Determination of Blood Groups	Performance
14	Determination of Bleeding Time and Coagulation Time	Performance
Biochemistry		
1	Demonstration of Uses Of Instruments Or Equipment	Demonstration
2	Qualitative Analysis of Carbohydrates, Proteins And Lipids	Performance
3	Normal Characteristics of Urine	Performance
4	Abnormal Constituents of Urine	Performance
5	Quantitative Estimation of Glucose, Total Proteins, Uric Acid in Blood	Performance
6	Liver Function Tests	Demonstration
7	Kidney Function Tests	Demonstration
8	Lipid Profile	Demonstration
9	Inter pretation and Discussion of Results of Biochemical Tests	Demonstration

Clinical Physiology & OPD		
1	Case Taking & Approach to pt	Performance
2	General Concept of Examination	Performance
3	Examination of muscles, joints,	Performance
4	Cardio-Vascular System – Blood Pressure Recording, Radial Pulse, ECG, Clinical Examination	Performance
5	Respiratory System – Clinical Examination, Spirometry, Stethography	Performance
6	Nervous System – Clinical Examination	Performance
7	Special Senses – Clinical Examination	Performance
8	Reproductive System – Diagnosis of Pregnancy	Performance
9	Gastrointestinal System – Clinical Examination	Performance
10	OPD	Demonstration & Performance

HOMOEOPATHIC PHARMACY

COURSE CONTENT

A. THEORY

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

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

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

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

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

<ul style="list-style-type: none"> ▪ Pharmacovigilance. 	Pharmaco-vigilance in Homoeopathy Activities of Pharmacovigilance Centres Awareness on Medicinal Preparations against Homoeopathic Principles–Patents,Combinations
<ul style="list-style-type: none"> ▪ Pharmacological study of drugs 	listed in Appendix-A(Any15)
e)Quality Control:	
<ul style="list-style-type: none"> • Standardisation in Homoeopathy 	Different Methods of Standardisation Quality Control of Raw Materials–Various Evaluation techniques In Process Quality Control Quality Control of finished products–Various and hard parameters
<ul style="list-style-type: none"> • Industrial pharmacy. 	Good Manufacturing Practices (GMP)Schedule M1
<ul style="list-style-type: none"> • Homoeopathic pharmacopoeia laboratory (HPL) 	Functions and Activities of HPL relating to quality control of drugs. Pharmacopoeia Commission for Indian Medicines
f)Legislations pertaining to Homoeopathic Pharmacy:	
The Drugs and Cosmetics Act,1940(23 of 1940)	
Drugs and Cosmetics Rules,1945	
Medicinal and Toilet Preparations(Excise Duties)Act,1955(16 of 1955)	
Drugs and Magic Remedies(Objectionable Advertisements)Act,1954(21 of 1954)	
The Narcotic Drugs and Psychotropic Substances Act,1985(61 of 1985)	

Dangerous Drug Act, 1930

g) Recent Advances in Homoeopathic Pharmacy

Modern theories related with Homoeopathic Drug action

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

Scope of Research in Homoeopathic Pharmacy

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

h) Homoeopathic Pharmacy-Relationships

Relation of Homoeopathic Pharmacy with Anatomy

Relation of Homoeopathic Pharmacy with Physiology

Relation of Homoeopathic Pharmacy with Materia Medica

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

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

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

1. Laboratory Work–

Practical Class (Experiments)-Maintaining Record of Experiments Conducted

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

Practical Class (Demonstration)–Maintaining Records of Practical Demonstrated

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

Field Visits-

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

Activity

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

B.PRACTICALS

Table5:HomoeopathicPharmacyPracticals	
Sr No.	Particulars of Experiments
1	Estimation of size of globules

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

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

Demonstration

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

Activities

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

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

Demonstration

1. Homoeopathic pharmaceutical instruments and appliances with their cleaning (List provided in Appendix C)-06Hours
2. Estimation of moisture content using water bath-02Hours
3. Paper chromatography & TL Cof any mother tincture-04Hours
4. Laboratory methods–Sublimation, distillation, decantation, filtration, crystallization .-04Hours
5. Preparation of mother tincture–Maceration and Percolation-04Hours
6. Study & demonstration of Drug Substances (listed in Appendix B)-10 Hours
 - i) Macroscopic Characteristic (Any 15)
 - ii) Microscopic characteristic(Any05)
7. Study & demonstration of vehicles (Solid, Liquid& Semisolid–as available)-02 Hours
8. Microscopical study of Trituration (One drug up to 3X Potency)-02Hours
9. Medication of Globule(Large Scale)-1Hour

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

Seminar–Maintain Recordon Seminar Presentation on Topics of Homoeopathic Pharmacy asassigned-07Hours

ORGANON OF MEDICINE

Contents of Course

Course Contents-

1. Introduction:
 - 1.1. History of medicine
 - 1.2. History of Homoeopathy
Short history of Hahnemann's life his contributions, and situation leading to Discovery of Homoeopathy
 - 1.3. Brief history and contributions of Boenning hausen, Hering, Kent, R L Dutt, ML Sircar & B K Sarkar.
 - 1.4. History and Development of Homoeopathy in brief in India, U.S.A .and European countries
 - 1.5. Fundamental Principles of Homoeopathy.
 - 1.6. Basic concept: Individualistic ,Holistic & Dynamic
 - 1.6.1. Life ;Hahnemann's concept and modern concept.
 - 1.6.2. Health : Hahnemann's concept and modern concept.
 - 1.6.3. Disease: Hahnemann's concept and modern concept.
 - 1.6.4. Cure.
 - 1.7. Understanding Homoeopathy in vertical ,horizontal & spiral integration with pre, para & clinical subject.
2. Logic: Tounderst and Organon of medicine Page 112 of 162
homoeopathic philosophy, it is essential to be acquainted with the basics of LOGIC to grasp inductive and deductive reasoning. Preliminary lectures on inductive and deductive logic (with reference to philosophy book of Stuart Close Chapter 3 and 16).
3. §1to27 of Organon of medicine, §105 to 145
4. The physician—purpose of existence, qualities, duties and knowledge
5. Vital force-dynamization-homoeopathic cure-nature's law of cure & its Implications-drug provin