DETAILEDSYLLABUS FOR THE POST OF ASSOCIATE PROFESSOR (HOMOEOPATHIC PHARMACY) {GOVERNMENT HOMOEO MEDICAL COLLEGE}

(Cat.No. : 175/2023)

(Total Marks- 100)

Module-1: (Marks-5)

History of basic Principles of Homoeopathy, its development and integration with Homoeopathic Pharmacy.

1. Discovery of Homoeopathic Principles by Dr.Samuel Hahnemann in 1790—publication of this in 1796 in Hufeland's journal entitled 'An essay on a new principle for ascertaining the curative power of drugs'.
2. Proved in himself and others—published a treatise in 1805 'Fragmenta De Viribus Medicamentarum Positivus Sive in Sano Corpore Humano Observatis' containing proving results of 27 drugs.
3. Another essay published in 1805 'The Medicine of Experience' containing the details of testing /proving drugs in healthy human beings.
4. Publication of six volumes of 'Materia Medica Pura' later (1811-1821) containing altogether 61 medicines including 22 transferred from 'Fragmenta De Viribus'.

Module-2: (Marks-5)

Nomenclature of Plants and Animals, Non-valid names and anomalies in the nomenclature of some Homoeopathic Medicines.

1. Scientific names of Plants and Animals based on International Rules of Botanical and Zoological Nomenclature and different types of Non-valid names (Synonym, Typonym, Metonym, Homonym, Hyponym) and their meaning.
2. Anomalies in the nomenclature of certain Homoeopathic Medicines with examples

Module-3: (Marks-5)

Phytoconstituents/Plant constituents of different types-their features, identification tests, pharmacological properties and examples.

1. Alkaloids.
2. Glycosides.
3. Saponins.
4. Tannins.
5. Anthraquinone derivatives.
6. Plant exudates.

Module-4: (Marks-8)

Sources of Homoeopathic Drugs-their classification and examples for each.

1. Major three Kingdom (Plant, Animal and Mineral)-details of each with respect to their use for the preparation of Homoeopathic Medicines with examples.
2. Unique sources of drugs (Nosodes, Sarcodes, Imponderabilia and Synthetic sources)-definition, different types/classification, collection and preparation of drugs from these sources.

Module-5: (Marks-5)

Collection and preservation of drug materials from different sources/kingdom.

1. Procedures and special care to be taken while collecting plants and different parts of plants, animals and different parts and secretions of animals, different chemicals and chemical compounds, Nosodes, Sarcodes and Imponderabilia sources.
2. Methods, containers and special care for their preservation, especially those undergo early denaturation/decomposition.

Module-6: (Marks-5)

Vehicles-definition, classification with examples, method of preparation and preservation.

1. Solid vehicles (Sugar of milk, Tablets, Globules, cones)-raw materials used for their preparation, detailed aspects of their large scale manufacture, preservation and uses.
2. Liquid vehicles (Distilled/deionised water, Ethyl alcohol, Glycerine, Fixed oils) raw materials used for their preparation, detailed

aspects of their large scale manufacture, preservation and uses, with special emphasis on Ethyl alcohol of different strength.

3. Semisolid vehicles (Vaseline, Waxes, Spermaceti, Isinglass, Prepared lard and Lanolin)-their sources and uses.

Module-7: (Marks-8)

Homoeopathic Drug proving (procedure to understand the pathogenetic property and thus the curative property of drugs).

1. Homoeopathic Drug proving-Hahnemannian directions as well as Modern Human Pathogenetic Trials (its Protocol and Methodology).
2. Sources of information regarding pathogenetic property of drugs other than classical drug proving (Medical history of other branches of medicine, Poisoning cases—accidental, suicidal, homicidal, Idiosyncrasies/hypersensitive reactions/allergic manifestations, Clinical evidences/observations).
3. Reasons why Homoeopathic Drug proving is conducted in Human beings—reasons why it is conducted in Healthy people.
4. Advantages of testing Drugs in animals (we can test drug substances of unknown pharmacological action and mother substances and lower homoeopathic potencies of toxic substances-we can artificially create disease situations and test efficacy of drug substances in question).

Module-8: (Marks-8)

Homoeopathic Drug Dynamisation/Potentisation/Attenuation.

1. History of development of drug dynamization/potentisation.
2. Different Scales of potentisation (Decimal, Centesimal, 50-millesimal/L.M scale/Q potencies)--persons who proposed different scales, ratio in each scale, symbols used to denote each scale, advantages and disadvantages of each scale.
3. Different Procedures of drug dynamization/potentisation (Trituration and Succussion)—advantages and disadvantages of each procedure.
4. Conversion of triturations into liquid potencies (fluxion potency or jumping potency)—its purpose and procedure.

5. Procedures of dynamization/potentisation other than proposed by Dr.Samuel Hahnemann (Korsakoff's dry contact potencies and single vial method; Jenichen's method; Lehrman's method; Fincke's method/Skinner's method).

Module-9: (Marks-5)

Posology (study of different aspects of dosage forms)

1. Different types of doses (minimum, maximum, lethal, physiological, booster, divided/fractional)—their meaning.
2. Difference between Homoeopathic Posology and Posology of other systems of medicine.

Module-10: (Marks-5)

Homoeopathic Pharmacopoeias.

1. History of development of Homoeopathic Pharmacopoeia of different countries (Germany, Britain, America, France , India).
2. Special emphasis on Unofficial and Official Homoeopathic Pharmacopoeias of India (Unofficial Pharmacopoeia—published by Dr. Bhattacharya & Company; Official Pharmacopoeia/H.P.I—published by Ministry of Health and Family Welfare, Govt. of India).
3. H.P.I—history/ground work of publication of Ten Volumes ; number of Monographs/ description of drugs in each Volume.

Module-11: (Marks-8)

Preparation of Mother substances (mother tinctures, mother solutions, mother powders).

1. Hahnemannian method of preparation/ Old method of preparation (Nine Classes/Class I--Class IX)—type of drug materials, ratio, type of vehicles used, drug strength and examples of drugs come under each Class.
2. New method of preparation of Mother Tinctures (Maceration and Percolation)—type of drug substances come under and details of each procedure.
3. Special emphasis on Percolation (instrument used; arrangement of the instrument for mother tincture preparation with the help of labelled diagram).
4. Differences between the Old method and New method of preparation.

5. Differences between Maceration and Percolation.

Module-12: (Marks-5)

Special procedures proposed by Dr. Samuel Hahnemann for the preparation of certain drugs.

1. Details of preparation of some of the important drugs of this category (Calcarea carbonica, Causticum, Hepar sulphuris, Kali carbonicum, Mercurius solubilis, Silicea)-preceded by their Chemical symbol, Synonyms and feature/properties.

Module-13: (Marks-8)

Drug Laws and Legislation/Acts and Rules related to Homoeopathic Pharmacy (the purpose of each in detail, especially Drugs and Cosmetic Act of 1940).

1. Drugs and Cosmetic Act of 1940; Drugs and Cosmetic Rule of 1945 (Part VI-A of Drugs and Cosmetic Act is related to the Sale of Drugs—Section-A to Section-H; VII-A is about Manufacture of Drugs—Section-A to Section-I; IX-A is about Labelling and Packing—Section-106A and 106B).
2. Drugs and Magic Remedies Act of 1954 and Drugs and Magic Remedies Rule of 1955 (Objectionable Advertisement Act).
3. Medicinal and Toilet preparation Act of 1955 (Excise Duties Act).
4. Dangerous Drug Acts of 1930 and Dangerous Drugs Rules of 1957.
5. Drugs Price Control Order of 1970 and 1971.
6. Pharmacy Act of 1948.
7. Poisons Act of 1919.

Module-14: (Marks-5)

Method of Sampling of drug substances for analysis (the purpose of sampling; the procedure of sampling according to the size of component parts and total weight of drug substance).

1. Method of sampling when the component parts of drug substances are less than 1c.m in any dimension and the total weight of the substance is less than 100kg.

2. Method of sampling when the component parts of drug substances are less than 1c.m in any dimension and the total weight of the substance is more than 100kg.
3. Method of sampling when the component parts of drug substances are more than 1c.m in any dimension and the total weight of the substance is less than 100kg.
4. Method of sampling when the component parts of drug substances are more than 1c.m in any dimension and the total weight of the substance is more than 100kg.
5. Method of sampling when the total weight of the drug substance is very less (less than 10 kg).

Module-15: (Marks-5)

Pharmacovigilance and Adverse Drug Reactions (ADR).

1. Pharmacovigilance (science with activities that relate to the detection, assessment, understanding and prevention of adverse effects or any other drug- related problems)—its significance.
2. Adverse Drug Reaction (ADR)—definition, causes, classification with examples and management.

Module-16: (Marks-10)

Drug Standardisation for Quality control.

1. Methods of evaluation (Organoleptic--using sense organs; Physical evaluation, Chemical evaluation, Microscopic evaluation, Biological evaluation).
2. Organoleptic evaluation—details with examples.
3. Physical evaluation—various instruments and techniques (Refractometer, Polarimeter, Thin Layer Chromatography (TLC), Paper Chromatography, High Performance Liquid Chromatography (HPLC), Electrophoresis, Determination of Moisture content (Gravimetric method, Volumetric method/Toluene distillation method, Titrimetric method/Karl Fischer method).
4. Chemical evaluation (Colour reaction test, Molish and Brafoed’s test, determination of Acid value, Iodine value, Ash value, Sulphated ash value, Acid insoluble ash, Water soluble ash, Saponification value.
5. Biological evaluation (In Vivo and In Vitro studies)—pros and cons of analysis using these two methods with examples.

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.

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