

DETAILED SYLLABUS FOR THE POST OF PHARMACIST GRADE II (HOMOEOPATHY) - IN HOMOEOPATHY

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Module-1 (Anatomy). Marks-10

a. Preliminary aspects.

General Anatomical terms—sub division of Anatomy—parts of the body—cell structure—basic tissues.

b. Skeletal system.

Classification of bones—bones of appendicular skeleton—classification of the bones of axial skeleton.

c. Joints.

Classification of joints with examples—various types of movements of joints.

d. Muscular system.

Classification—names of chief muscles of human body and their location (Deltoid, Biceps, Triceps, Glutei muscles, Hamstring muscles, Calf muscles, Pectoralis major and minor, Trapezius, Rectus abdominis).

e. Respiratory system.

Nose—pharynx (parts)—larynx (name of the cartilage and cavity)—trachea—lungs (external features only)—broncho pulmonary segment.

f. Cardiovascular system.

Heart (external features, chambers)—aorta (branches only).

g. Lymphatic system.

Spleen (external features only).

h. Digestive system.

Digestive tract (parts)—external features of stomach, liver, pancreas.

i. Urinary system.

Kidney (external features and structure)—location and parts of ureter, urinary bladder, urethra.

j. Reproductive system.

Uterus (external features and subdivisions)—ovary (external features)—fallopian tube (parts)—testis in detail.

k. Nervous system.

Neuron—gross anatomy of cerebral cortex, cerebellum, spinal cord—names of the ventricles of brain—CSF—names and functions of cranial nerves.

l. Special senses.

Parts of tongue, nose, eye, ear.

m. Skin.

Different layers of skin.

Module-2 (Physiology). Marks-10

a. Preliminary aspects.

Functions of cell.

b. Blood.

Composition of blood—functions of blood—types of blood cells—RBC (normal values, properties, functions)—WBC (normal values, properties, functions)—Hb (normal value and function)—ESR (normal values, its importance)—PCV (normal value)—platelets (normal values, functions)—clotting factors (names only)—functions of plasma proteins—blood groups and Rh factor.

c. Respiratory system.

Normal respiratory rate—respiratory movements—pulmonary function test—regulation of respiration—basal metabolic rate—artificial respiration.

d. Cardiovascular system.

Conducting system of heart—cardiac cycle—normal ECG—normal heart sounds—blood pressure (definition, procedure of measuring, normal

values, hypotension, hypertension)—definitions of pulse, apex beat, cardiac output, stroke volume—bradycardia—tachycardia.

e. Lymphatic system.

Lymph and its functions—functions of spleen.

f. Digestive system.

Digestion and absorption—functions of saliva—functions of liver—functions of pancreas—functions of stomach—functions of small intestine and large intestine—constipation and diarrhoea.

g. Urinary system.

Functions of kidney—micturition—composition of urine—GFR.

h. Reproductive system.

Menstrual cycle.

i. Skin.

Functions of skin—regulation of normal body temperature.

j. Nervous system.

Major functions of cerebral cortex, cerebellum and spinal cord.

k. Endocrine system.

Names of hormones and their functions of Pituitary gland, thyroid gland, parathyroid, adrenal gland, pancreas—important clinical conditions related to these hormones.

l. Special senses.

Functions and abnormal conditions.

Module-3 (Hygiene and Prevention of Diseases). Marks.11

a. Health.

Definition, concepts and dimensions of health—positive health—community health.

b. Personal hygiene.

Definition of hygiene—care of different parts of body—hygiene during pregnancy—menstrual hygiene.

c. Hospital hygiene.

Nosocomial infection—principles of infection control—standarded precaution—hospital waste management.

d. Environment and Health.

i. Water.

Safe water—sources of water—impurities in water—water pollution—purification of water—chlorination in detail—disinfection of well.

ii. Air.

Ventilation—discomfort due to its lack—air pollution.

iii. Refuse disposal.

Excreta disposal—various types of latrines.

iv. Sewage.

Definition—methods of treatment and sewage disposal.

v. Different types of housing.

vi. Different vectors and their control measures.

Types of mosquitoes—mosquito control measures—house fly—rodents—rodent control measures—fly control measures.

e. Nutrition.

Food (types and function)—macro and micro nutrients—carbohydrate—fat—protein—vitamines—minerals—water—balanced diet—food hygiene (of milk, meat, vegetables, fish)—malnutrition—protein energy malnutrition (types)—nutritional anaemia.

f. Principles of Epidemiology.

Infectious disease epidemiology—epidemiological triad, disease cycle, spectrum of disease, levels of prevention, dynamics of disease transmission.

g. Immunity.

Definition—types of immunity—immunization—hazards of immunization--vaccines--immunization agents—national immunization schedule—cold chain—measures of controlling infectious diseases.

h. Disinfection.

Definition—types of disinfectants.

i. Communicable diseases.

Causative organisms/factors and common symptoms of, chicken pox, measles, German measles, mumps, influenza, diphtheria, whooping cough, tuberculosis, meningitis, poliomyelitis, viral hepatitis, cholera, typhoid, ascariasis, hookworm infestation, dengue fever, malaria, filariasis, leprosy, tetanus, rabies, sexually transmitted diseases, Aids, amoebiasis, plague, covid/corona virus infection, leptospirosis, Ebola.

j. Food poisoning.

Major causative organisms—how to identify the condition.

k. Oral rehydration therapy.

Composition of ORS and the significance of its use.

l. Family planning and Contraceptive methods.

Definition—spacing methods—terminal methods—IUCDs—hormonal pills—abortion—MTP.

m. Mental health.

Definition—types of mental diseases.

n. Community health.

Definition—levels of health care—significance of primary health care—elements of PHC—principles of PHC.

Module-4 (First aid). Marks.08

a. Aims and objectives of First aid.

Definition—principles—objectives—qualities and responsibilities of First aider.

b. Vital signs.

How to note, evaluate and significance of recording.

c. ABC of basic life support.

CPR—mouth to mouth respiration—other artificial respiration techniques.

d. Haemorrhage.

Classification—causes—signs and symptoms—first aid management—specific management—complication.

e. Shock.

Definition—classification—signs and symptoms—first aid management—treatment.

f. Wounds.

Definition—classification—signs and symptoms—first aid—wound dressing.

g. Dressing and Bandages.

Types of dressing—rules of dressing—types of bandages—rules of bandaging.

h. Fracture.

Definition—classification—signs and symptoms—first aid—treatment—fractures of clavicle, humerus, femur.

i. Asphyxia.

Definition—causes—signs and symptoms—first aid—treatment—drowning—strangulation.

j. Poisoning.

Routes of poisoning—signs and symptoms of poisoning in general—first aid—treatment—universal antidote—types of poisons (acid, alkali, datura, metal poisons, cyanide poison, Organo phosphorus compounds)—insect bite—snake bite—dog bite—scorpion bite.

k. Burns.

Types of burns—effects—signs and symptoms—first aid—treatment—electric shock—chemical burns—lightning injuries.

l. Sterilization.

Various methods of sterilization—sterilization of hospital instruments.

m. Convulsions.

Causes—signs and symptoms—first aid.

n. Effects of temperature.

Sunstroke—frost bite.

Module-5 (Elements of Homoeopathic Philosophy). Marks.10

- a. Discovery of Homoeopathy.
- b. Cardinal principles of homoeopathy.
- c. Vital force / vital principle and its role in health, disease and cure.
- d. Symptomatology (complete, subjective, objective, characteristic and common symptoms).
- e. Causes of diseases (fundamental, exciting and maintaining causes. Causa occassionalis).
- f. Therapeutic law of nature (how homoeopathic cure takes place; why medicines are stronger than diseases).
- g. Classification of diseases (Hahnemannian classification).
- h. Primary action, secondary action (counter action, curative action), alternating action.
- i. Totality of symptoms (Hahnemannian definition)—outwardly reflected picture of internal essence of the disease / affections of the vital force—importance of the totality of symptoms (to select the homoeopathic remedy from among the probable medicines to effect cure).
- j. Drug proving.

Sources of information regarding the pathogenetic property of drug substances—homoeopathic drug proving—drug proving unit--selection of prover—dose and mode of administration of drugs for proving—single blind and double blind mode of approach--recording of the signs and symptoms during proving in Day book—multi centred drug proving—thoroughly proved/completely proved drug-- collection of symptoms and formulation of materia medica—disadvantage of proving in animals—disadvantages of proving in persons having diseases—certain advantages of proving in animals—diet and regimen and other precautions during drug proving.

k. Posology.

Definition of posology—definition of dose—types of doses (minimum, maximum, lethal/fatal, booster, fractional/divided, physiological)—difference in the concept of dose in homoeopathy and other systems.

l. Pharmaconomy (route of administration of medicines).

Oral—olfactory and inhalation—external application—injections—reasons for not using injections in homoeopathy.

m. Pharmacopallaxy (repetition of doses).

Rules of repetition of doses in homoeopathy—as long as the previous dose of medicine is acting, do not repeat.

n. Diet and regimen in acute and chronic diseases.

o. Miasms.

Meaning of the concept of miasms---types of miasms according to Hahnemannian teaching.

Module-6 (Sources of Homoeopathic drugs). Marks.10

- a. Vegetable kingdom (whole fresh or dry plants or plant parts with examples).
- b. Animal kingdom (whole fresh or dry animals or their parts/secretions with examples).
- c. Mineral kingdom agents as sources (metals, non-metals, metalloids, organic and inorganic compounds, organic and inorganic acids, mineral water with examples).
- d. Nosodes (meaning of the term—examples with source of human nosodes, nosodes of animal origin, plant nosodes—preparation of different types of nosodes).
- e. Sarcodes (meaning of the term—examples with source).
- f. Imponderabilia (meaning of the term—peculiarity of this source—natural and artificial types with examples).
- g. Synthetic sources (their actual role in the treatment—meaning of tautopathic mode of approach).

Module-7 (vehicles used in homoeopathy). Marks.06

- a. Properties of an ideal vehicle.
- b. Classification of vehicles (solid, liquid, semisolid).
- c. Solid vehicles (sugar of milk, globules, tablets, cones)—their source, preparation, preservation, uses—purification of sugar of milk—common impurities present in sac lac and their determination-- measurement of globules—peculiarity of cones compared to other solid vehicles—medication of solid vehicles.
- d. Liquid vehicles (Purified water, ethyl alcohol, glycerine, fatty oils, sugar syrup)—their sources, method of preparation, properties, preservation, uses—different types of ethyl alcohol—impurities present in ethyl alcohol and their determination—advantages and disadvantages of water and ethyl alcohol as vehicle.
- e. Semisolid vehicles (Vaseline/petroleum jelly/soft paraffin, spermaceti, wax, lanolin, prepared lard, isinglass)—their sources, preparation, uses.

Module-8 (Pharmacy and Pharmacopoeia). Marks.04

- a. Definition of homoeopathic pharmacy—its divisions.
- b. Definition of homoeopathic pharmacopoeia—two types of pharmacopoeia—pharmacopoeia of different countries—HPI (first homoeopathic pharmacopoeia committee of India, ten volumes with the years of publication and number of drugs/monographs in each).

Module-9 (Potentisation/Dynamization/Attenuation). Marks.08

- a. Definition of potentisation given by Dr. Hahnemann and Stuart Close.
- b. History of the development of homoeopathic attenuation.
- c. Scales of potentisation (decimal, centesimal, 50-millesimal)—persons who introduces these scales--symbols used to denote them—ratio in each scale.
- d. Procedures of potentisation (trituration and succussion)—role of each procedure—advantages and disadvantages of both.
- e. Precautions during trituration and succussion.

- f. Fluxion potency / jumping potency (conversion of 6X trituration into liquid potencies).
- g. Straight potency of Dr. Burt (conversion of 6X trituration into 7X liquid potency).
- h. 50-millesimal potency (its preparation and advantages).
- i. Korsakoff's dry contact potency, Jenichen's high potency, Lehrmann's high potency, Fink's high potency (named as fluxion method of potentisation by Skinner).

Module-10 (External applicants). Marks.07

- a. Role of external applicants in homoeopathy (not in real skin diseases/dermatological conditions, but in different types of injuries where the causation is not with the vital force).
- b. Different types of external applicants (their preparation and uses).
 - i.Ointment
 - ii.Liniment/embrocations
 - iii.Opodeldocs
 - iv.Cerates
 - v.Poultices/cataplasms
 - vi.Fomentations
 - vii.Medicated plaster
 - viii.Medicated oils

Module-11 (Prescription writing and abbreviations). Marks.03

- a. Parts of a prescription (superscription, inscription, subscription, signatura).
- b. Commonly used abbreviations and their meanings.

Module-12 (Mother tincture preparation). Marks.06

- a. Old method / Hahnemannian method of mother tincture preparation (Class-I to Class-IX) with examples.

- b. New method of mother tincture preparation (maceration and percolation)—differences between the two.
- c. Differences between old method and new method.

Module-13 (Standardisation of drugs). Marks.03

- a. Necessity of drug standardisation (in order to maintain quality and uniformity).
- b. Different methods of evaluation (organoleptic, microscopic, physical, chemical, biological).
- c. Physical evaluation techniques (TLC, HPLC, polarimeter, electrophoresis, capillary analysis, determination of moisture content, determination of specific gravity).
- d. Biological evaluation (in vitro and in vivo techniques).
- e. Official sampling.
- f. GMP (Good Manufacturing Practices)—requisites of GMP.

Module-14 (Legislation related to Pharmacy). Marks.04

- a. Different Acts and Rules related to different aspects of drug manufacturing, sale, labelling and packing, fixing prices, procurement and storage, levy and taxation.
- b. Drugs and Cosmetic Act of 1940 and Drugs and Cosmetic Rule of 1945.
- c. Drugs and Magic Remedies Act of 1954 and Drugs and Magic Remedies Rule of 1955.
- d. Medicinal and Toilet preparation Act of 1955.
- e. Dangerous Drugs Act of 1937 and Dangerous Drugs Rules of 1955.
- f. Drugs Price Control Order of 1970 and 1971.
- g. Poisons Act of 1919.
- h. Pharmacy Act of 1948.

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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