

SCHEME AND SYLLABUS OF EXAMINATION FOR THE PURPOSE OF FILLING UP OF THE POST OF PHARMACIST (AYURVEDA AND HOMEOPATHY) UNDER SIKKIM STATE AYUSH SERVICE.

The subject wise allotment of maximum marks shall be as under:

Syllabus:-		
General English	PAPER I	30 marks
General Knowledge		30 marks
Main Paper (Main Syllabus)	PAPER II	120 marks
TOTAL		180 marks
Viva voce/ interview		20 marks
Grand Total		200 marks

Paper I & Paper II will be objective type MCQ/ OMR and conventional mode.

# PAPER - I: GENERAL ENGLISH

The question will be designed to test the candidate's understanding and command of the English language.

English: Candidate will be required to answer questions designed to test their understanding of English. The pattern of questions would be broadly as follows:-

- 1. Comprehensive of given passage
- 2. Precise writing
- 3. Usages and vocabulary
- 4. Essay writing
- 5. Report writing

#### GENERAL KNOWLEDGE:

- Current events of local, national and international importance.
- ii. National level Scheme & projects undertaken by government of India or State Government.

#### **VIVA-VOCE:**

The test is intended to judge the mental caliber of candidate. In broad terms this is an assessment of not only his intellectual qualities but also social traits and an interest in current affairs, mental alertness and critical powers of assimilation, care and logical exposition, balance of judgment, variety and depth of interest.

Director Gereral Health Services

Department of Health Care, Human Services & Family Welfare

# 29

# PAPER II: MAIN PAPER (MCQ/ CONVENTIONAL MODE): -

# Syllabus for written examination for Pharmacist (Homeopathy): -

Instruction in Homoeopathic Pharmacy should be so planned as to present general working knowledge of an industry and dispensing various preparation. Major emphasis should be laid on evolution and relationship of Homoeopathic Pharmacy to Organon and MateriaMedica, the concept of drug Proving and Dynamisation.

The curriculum of Homoeopathic Pharmacy should be divided under following headings:-

Elementary history of Botany, Zoology and Chemistry with rules of their nomenclature and their respective terminologies.

- (B) Advantages and disadvantages of Commercial names and Botanical names.
- (C) Anomalies in the nomenclature of Homoeopathic Drugs.
- (2) Schools of Medicine: their discovery, principles pharmacology and MateriaMedica, scope and limitations.
  - (3) History of the art and science of Pharmaceutics.
  - (4) Literature on Homoeopathic Pharmaceutics.
  - (5) Sources of Homoeopathic Pharmacy.
  - (6) Homoeopathic Pharmacy: its speciality and originality
  - (7) knowledge of Pharmacy.
- (8) Sources of knowledge about curative powers of the technique of Drug proving in Homoeopathy.
  - (9) Aspects of Pharmacy.
  - (10) Relation of Pharmaceutics with other sciences.
- (11) Inter-relationship of different schools of Pharmacy with emphasis on relationship of Allopathic and Homoeopathic Pharmacy.
  - (12) Propemes of Drugs.
  - (13) (a) Routes of Administration of drugs in general.
  - (b) Routes of Administration of Homoeopathic remedies.
  - a. Action of Drugs.
  - b. Uses of Drugs.

Definitions of:-

ering Ortho) M. (a) Foods, Poisons, cosmetics.

General W. Department W. Department W. Department W. Department

(c) Pharmacy. Pharmacology and Pharmacopoeia, Pharmacodynamics and other related terms used in relation to the subject. Homoeopathic Pharmacopoeia,

Homoeopathic Pharmacy in relation to:-

- (a) Organon of Medicine Aphorism 264 to 285.
- (b) Materia Medica.
- (c) National Economy.

Pharmacy and Pharmacopoeia; its Sources and relation with other sciences. Classification of Homoeopathic Medicines according to their.

- (a) Botanical and
- (b) Zoological natural orders.

#### Posology

Homoeopathic Posology: Its logic, advantages and dis-advantages.

Potentisation: Its logic, scientificity and evolution and scales.

**Vehicles** 

Scales for preparation of drugs.

Pharmacological Action of Polychrest medicines (50 medicine list attached)

Abbreviations used in prescription writing.

Legal part: legislation in respect of Homoeopathic Pharmacy, Drugs and Cosmetic Act, Poison Act, Pharmacy Act.

#### PHARMALOGICAL ACTION

- 1. Aconite nap
- 2. Adonis vernalis
- 3. Allium cepa
- 4. Argentum nit
- 5. Arsenic alb
- 6. Belladonna
- 7. Cactus G
- 8. Cantharis
- 9. Cannabis ind
- 10. Cannabis sat
- 11. Cinchonna of
- 12. Coftea crud
- 13. Crataegus
- 14. Crotalushor

Dr. Pempa Tshering Bhutia M.3: (Office) Director General C., H.S. & F.W1@er@itmeoine Government of Sikkim

- 17. Hydrastis can
- 18. Hyoscynamus n
- 19. Kali bich
- 20. Lachesis

- 21. Lithium carb
- 22. Mercuriuscor
- 23. &nbsb;Naja t
- 24. Nitric acid
- 25. Nux vomica
- 26. Passifioraincamata
- 27. &nbsb;Stannum met
- 28. Stramonium
- 29. Stramonium
- 30. Tabacum

# LIST OF DRUGS FOR IDENTIFICATION

- I. VEGETABLE KINGDOM
- 1. Aegle folia
- 2. Anacardiumorientale
- 3. Andrographispenniculata
- 4. Calendula offic
- 5. Cassia sophera
- 6. Cinchonna off
- 7. Cocculusindicus
- 8. Coneeacruda
- 9. Colocynth cittrallus
- 10. Crocus sativa
- 11. Croton tig
- 12. Cynodon
- 13. Ficusreligiosa
- 14. Holerrhenaantidysentrica

Dr. Pempa Tshering Hivelsocotyle
M.S. (Ortho)
Director Generalistisiaadhatoda
H.C., H.S. & F.W. Department
Government of Sikkim
17. Lobelia inflata

- 18. Nux vomica
- 19. Ocimum
- 20. Opium
- 21. Rauwolfia serpentine
- 22. Rheum

- 23. &nbsb;Saracaindica
- 24. Senna (cassia acutifolia)
- 25. Stramonium met
- 26. Vinca minor
- II. CHEMICALS
- 1. Acetic acid
- 2. Alumina
- 3. Argentum metallicum
- 4. Argentum nitricum
- 5. Arsenic alb
- 6. Calcarea Carb
- 7. Carbo veg (charcoal)
- 8. Graphitis
- 9. Magnesium
- 10. Mercury (the metal)
- 11. Natrummur
- 12. Sulphur
- III. ANIMAL KINGDOM
- 1. Apis malefic
- 2. Blattaorientalis
- 3. Formica ruba
- 4. Sepia
- 5. Tarentulacubensis

Dr. Pempa Tshering Bhatia (A)S. (Ortho) Director (Department

H.C., H.S. & T.W. Departmen Government of Sikkim

Director General Health Services, Department of Health Care, Human Services & Family Welfare.

# Syllabus for written examination for Pharmacist (Ayurveda):-

- 1. Ayurveda ParichayaEvamSwasthvritta
- 2. Sharira
- 3. AushadhaNirmankeSiddhant
- 4. ChikitsakaSamanyaParichaya
- 5. DravyaGunaEvam Rasa Shastra
- 6. BhaishajyaKalpana
- 7. Pharmacy Management
- 8. ChikitsakeSamanyaSiddhanta

# Ayurveda ParichayaEvamSwathvritta

#### Ayurveda parichya

- Definition of Ayu and its synonyms, types of Ayu (Hitayu, Ahitayu, Sukhay and Dukhaya).
   Definition of Ayurveda and its prayojana. Trisutra Ayurveda, Ashtangas of Ayurveda
- Ayurved-avtarana, General description about Atreya- Dhanwantariparampara, general description about brihatrayi (charaksamhita, sushrutasamhita and AstangaHridya) and laghutrayi (Madhavnidaan, Sarandharsamhita and Bhavprakasha).
- Definition of padartha, shadapadartha viz., Samanya, vishesha, guna, dravaya, karma and samvaya. Importance of saamnya-visheshsiddhant.
- Concept of Prakriti, Purusha in origin of srishti, Nava dravya including Panchmahabhuta- (aakash, vayu, agni, jala and prathvi), Aatma, Mana, Kaal And Disha, their definition, qualities and significance in Ayuveda.
- General idea of Dosha (vaat, pitta and kapha ), Dhatu (rasa, rakta, maansa, meda, asthi, majja and shukra), and Mala (sweda, mala and mutra), Upadhatu and dhatu mala.
- Knowledge of TrividhaUpastambha (aahar, nidra&brahmcharya),Trividhabala (sahaja, yuktikrita&kaalja), Trividhaaayatana (Asatmendriyaarthasamyoga), Trividharoga (nija, aagantuja&manas), Trividharogamaarga (kostha, shakha and Madhya maarga), Trividhabhishag (Chadamchara, siddhasaadhita and jeevitasara) and Trividhaaushadha (daivypashrya, yuktivyapashrya and satvavjaya and subtypes of Yuktivyapashrya (Antaparimaarjana, Bahiparimaarjana and shastrapranidhaan).

#### Swasthvritta

- Definition of Swastha as mentioned in CharakaSamhita and Sushrutasamhita. Definition of health as per W.H.O.
- Definition of Ahara and its types (Ashita, peet, lehya and khadita).

  Aharparinamakarabhava.Aharavidhivisheshayatana. Importance of Matrashan- Matra of Laghu and Dr. Penna Isherina Bhutiafects of Hinamatra and Atimatra. Knowledge of Samashana, Adhyashana, Vishamshan Detector Department and its importance.Concept of balanced diet.Nidra (sleep), its type and importance in C. H.S. & F.W. Department of Sikini according to different ritus.
  - Dincharya and its importance in swasthvritta. Abhyanga and its contraindication, Vyayama and its contra indication, Dehamardan, Udvartan, Snana and its properties & contraindications.
  - Concept of Desha, its types (jaangala, saadharan and anupa). Concept of kaal its division on the bases of swantsara, ayan( likeUttarayan&Dakshinayan), ritu (shishira, vasant, greeshma, varsha, sharad&hemant). Concept of Ritu-sandhi and its importance in disease.
  - · Concept of Dharniya and Adharniyavega and their significance in health. Concept of AcharaRasayana.

• National programme like pulse-Polio, Malaria, Tuberculosis, Leprosy etc). Role of para-medical staff in Disaster management.

#### Sharira

#### RachnaSharira

- Definition of Sharira and Shaarira. GarbhaSharira- Garbhotpatti, Panchmahabhuta, their Gunas, their role in dehotpatti. Shadangasharira.
- Definition of koshta and kosthanga. General anatomy of Digestive system.
- Cardio- vascular system and its general anatomy like Hridya (heart). Knowledge of Shira (veins), Dhamani (artery) and Srotas etc. study of blood and its components. General anatomy of respiratory system i.e. lungs and trachea.
- General anatomy of Urinary system and its component like kidney, ureter and urinary bladder, study about urine and its components etc. Anatomy of male and female reproductive organs testicle and penis, uterus, vagina and ovary.
- · General idea of central nervous system. Knowledge of sense organs like eye, ear, nose skin and tongue.
- Dashvidhapranayatana and Marma, their importance.

### KriyaSharira

- Definition of Dosha and their types, location in the body, their normal functions. Factors behind vitiation of Doshas.Doshaprakopakaal and its importance in shodhana of Doshas according to Ritu.Combination of dosha like sansarga- sannipata.
- · Definition of Dhatus, their types and Upadhatu. Dhatutpattikrama.Concept of Oja, its importance.
- · Definition of Mala, their types, karma and importance. Knowledge of Dhatu Mala.
- Dosha-dushyasamurcchana and its importance in disease. Gati of dosha like kshaya, vriddhi and saamya; their characterstics and fuctions in abnormal stage.kshaya-vriddhilakshan of dhatus. Srotas, factors behind their vitiation, features of their vitiation.
- Basic study of cell and tissue. Blood and its components, Physiology of blood circulation, Respiration, excretion etc. Definition of indriya, indriyaartha, indriyaadhishthana, gyanendriya, karmendriya.
- General physiology of digestion- Grahani and its importance, concept of agni and its types. Koshtha and its types.
- · Concept of Prakriti and its type. Characteristic features of different type of shariraprakrati.

### AushadhaNirmanKeSiddhant

#### 1. DravyaGuna

- DravyaLaxana, Panchabhoutikanishpatti, Aoushadhatwadravyapradhanyata.
- Definition of DravyaGunavignana and its importance.
- Brief Knowledge of Basic Concepts Of Dravya, Guna, Karma Rasa, ,Veerya, Vipaka, Prabhava&Paribhashas like Triphala, Trikatu, Laghupanchamula, Brihatpanchmula, Dashamula, Trinapanchamula, Valleepanchamula, Trijataka, Chaturjataka, Trikantaka, Panchapallava, Panchakola Shadushana, chaturushana, jeevaneeyagana, Panchagavya, knowledge of Agrya-aushadha with exampleoand ChikitsopyogiAahaarVarga.

Director General
H.C., H.S. & F.W. Department
Governing Principle Control Cont

 Definition, Scope, Classification and Systematic study of Crude drugs. Identification, Collection, Storage and general knowledge about cultivation of some common herbs like Guggulu, Shatavari, Ashwagandha, Ghritakumari, Haritaki, Vibhitak, Amala etc.

34)

# 3. Pharmacology-

(35)

• Introduction, Definition & scope of Pharmacology and Principles of general Pharmacology, Brief Knowledge of following - CNS depressants, Sedatives, Antipyretics, Analgesics Antiepileptic, Antihypertensive, Anticoagulant, Haemopoetic, Bronchodialators, Expectorants, Digestants, Antacids, Laxatives, Diuretic, Antidiabetic, steroids, Contraceptives, Antibiotics.

· Route of Drug Administration, AoushadhaSuvankala, Anupana- its importance, Posology.

# 4. Regulation of Drugs-

- · An overview of Drugs & Cosmetic Act, 1940 and Drugs & Magic Remedies Act, 1945.
- New developments in the field of Drug Regulation (Ayurveda).

#### Rasa Shastra

- Definition of Rasashastra. Brief knowledge of Rasa, Maharasa, Uparasa, Saadharan rasa, Dhatu, Upadhatu etc.
- Paribhasha& its importance ,Shodhana, Marana, Bhavana, Avapa, Nirvapa, DhanvantariBhaga, Rudrabhagaetc
- Brief description of yantras and their uses like Dolayantra, DamaruYantra, KhalwaYantra, TrividhaPatanaYantraVidyadharaYantra etc.
- Brief description of putas and their uses like Gajaputa, Mahaputa, Laghuputa, Varahaputa, Kukkutaputa etc.
- Brief description of musha like SamanyaMusha, pakwamusha, vajramushaetc and chullikas (Angarakoshthi). Modern devices of heating like Electric stove, Heating Mantle, Gas stove etc their Types & Uses.

### BhaishajyaKalpana

- Definition & Fundamental principles of BhaishajyaKalpana like Paribhasha, Mana, Panchavidhakashayakalpana, Anukta and visheshoktadravyagrahana, DravyasthritaRsas, guna, veerya, vipaka, prabhava etc.
- · Knowledge of Ancient Equipments like KhalwaYantra, Arkayantra, PatanaYantra etc.
- Guidelines and method of collection, storage, preservation of Aushadhidravya. Rules for taking Shushka- Ardra and drava medicines. Grahyatava-agrahyatwa, Nava Puranadravyagrahananiyama.

# ChikitsakaSamanyaParichaya

#### Nidan and kaya chikitsa

- Definition of Nidaan, brief knowledge about PanchNidaan, definition of Vyadhi, classification of vyadhi (diseases), Saadhyata- Asaadhyata of Vyadhi.
- Definition of Chikitsa. Chikitsachatuspada. Types of chikitsa. Classification of chikitsa, samshodhan Dr. Peranatsanahamanchikitsa.

M.S. (Ortho)
Direction of patient, Astavidhapariksha, Monitoring of BP, Temp, Pulse rate and respiratory rate.
H.S. & F.W. Department
Overhood of rasayan and vajikarna.

#### Shalya&Shaalakya-

- Definition of Shalyatantra, general knowledge of astavidhashalya karma and its use.
- · Brief knowledge of Para-surgical procedures like Raktamokshana, Agni karma and Kshaar karma.
- Definition of Shalakyatantra and general idea about disease related to Shalakyatantra like Akshiroga, karnaroga, naasaroga, shiroroga and mukharoga.

# StreeRoga- PrasutiTantra and kaumarbhritya



- · General introduction to Prasutitantra and StreeRoga, idea of Raja sraava (Menstrual cycle),. Diseases related to the subject like, Raktapradara, Swetapradar, younivyapad etc.
- · General idea of Garbhini and Garbhinicharya. Sutikakaal and sutikaparicharya.
- · Definition of Kaumarbhritya, Idea of Vaya(age). Drug doses in Children. Idea of vaccination mmunization schedule
- Programmes of govt related to Mother and child health, use of contraceptives in family planning.

# Agadtantra&Vyavhaar Ayurveda

• Definition of AgadaTantra (Toxicology) &Visha. VishaBheda (classification of poisons) Sthavara and JangamaVisha.VishaGuna.

Visha data kelakshana, different methods of detecting visha in food etc described in Ayuveda.
 VishaPrabhava(sign and symptoms of Visha), VishaGati.

· Laws related to Poisons, Poisons act-1919, Dangerous-drug act-1930.

• Introduction and definition of Vyavahara Ayurveda, Code of medical ethics.

Dr. Pempa shering Bhutia

Director Centerbik Health Services

Department of Health Care, Human Services & Family Welfare