Detailed Syllabus of

DIPLOMA IN AYURVEDIC PHARMACY (DAP)

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FIRST YEAR

DAP/Y110:  AYURVED SIDDHANT EVAM ITIHAAS
(Basic Principles and History of Ayurveda)

AIMS AND OBJECTIVES

The diploma students are coming fresh from 10th schooling. Therefore, they are required to be given basic understanding about what are Ayurveda and the fundamental and basic principles on which it stands. The students should know the history of Ayurveda and its development. The syllabus of this paper covers the above aspects.

- Definition of Ayurved.
- Ashtanga Ayurved – The eight specialized branches of Ayurveda, concept and definition.
- Dravyaguna Vigyaniyam, characteristics, number and classification of dravyas. The characteristics, qualities (gunnas) and origin of Panchamahabhutas and their mutual micro-merging (Paraspara anupravesh).
- Applied studies of dravyas from Ayurvedic perspective.
- Characteristics of Dik, Kala, Atma and Mana.
- Guna Vigyaniyam : characteristics and types of Gunas as gurvadi guna, adhyatmika guna, vaisheshika guna, saamanya guna.
- Karma vigyaniyam : characteristics and types of Karmas.
- Saamanya, Vishesha, Samvaya Vigyaniyam – characteristics and types.
- Pramaana vigyaniyam : characteristics, importance and number of Pramaana. The Pramaanas accepted by Ayurveda-Pratyaksha. Anumaana, Aptomdesha and Yukti Pramaanas.
- Effect and causative factor (Karya, Karana Bhava) : Description of Karya–Karana Bhava and various Vaadas. Features of cause (Kaarana) and types. Description of samavayi, asamavayi and nimitta karana in Ayurved. Satkaryavad, Asatkarya vada, Parmanu vada, Pilupaka, Pitharapaka etc.
- The advent of Ayurveda (Ayurvedavatarana) : The Atreya (Charaka Samhita) and the Dhanvantari (Sushruta Samhita) traditions of Ayurveda.
- Laghutrayi and Brihatatrayi Parichaya.
- Development of Ayrvediya Rasashastra & Bhaishajya Kalpana.
- Propagation of Ayurveda in foreign countries.
DAP/Y120: SHARIR RACHANA

1. Definition of Shaariram, its derivation, meaning, synonym and Interpretation.
2. Shadang Sharira: Six regions of Body, organs of abdomen, their names and description.
3. Asthi sharira: Number and types of bones according to Sushrut and Modern Science.
4. Sandhi sharira: Number and types of joints with examples according to Sushrut.
5. Koshtha & Ashaya sharira: Define Koshtha and enumerate the koshthangs and ashayas in the body.
6. Peshi sharira: Definition of Peshi and their importance in the body.
7. Shira, Dhamani & Srotas sharira: srotas, sira, dhamani are similar structures what is the difference between them.
8. Definition of srotas, its derivation and number, names and importance.
10. Garbha sharira – foetal anatomy-shukra & artava’s qualities qualifying them as pure & competent for conception.
12. Morphological and physiological changes in the embryo during nine months in the womb.
13. Indriya vigyan sharira: Sensory organs and their locations and nerves concerned with each.
14. Twak sharira: layers of skin, their names according to Sushrut and modern science.
15. Organs participating in the digestion process in the Alimentary canal.
16. The anatomical description of organs of urinary system.
17. Kala sharira: Definition and names of kala according to Sushruta.
18. Spinal cord, cranial nerves.
19. Describe in detail the vertebrae of vertebral column.
20. 12 pranas, 10 pranayatana, 3 pradhaanarmamani, 15 koshthagni.
21. Description of Hridayam according to Sushruta and its importance and functions in health.
22. Description of Yakrita, its importance and functions according to modern science.
## Theory

1. Definition of Dravyaguna Vigyan and its importance.
2. Definition of Dravya and its importance.
3. Definition, types and Panchbhautic composition of Rasa.
4. Definition, types and importance of Gunas, Vipaka, Veerya, Prabhav.
5. Introduction to Karmas (actions)
   - Deepan, Paachan, Graahi, stambhan, Bhedan, Rechan, Anuloman, Sramsana, Samshodhana, Rasayana, Vajikarana, Vyavai, Madakari, Vikasi.
   - Introduction to Mishrak Varga
6. Classification of Drugs according to Ayurvedic principles.
7. Study of following drugs including Classification, Latin name, Family, Vernacular name, Synonyms, Botanical description, Varities, Habitat, Chemical composition, Properties, Doshakarm, Actions. Uses, Parts used : Dosage, Formulations, Substitute and Adulteration.

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Practical

1. Preparation of Herbarium Sheets of 25 drugs.
3. Description and identification of at least 30 important drugs mentioned in the theory.

DAP/Y 140 : RASA SHAstra AND BHAISHJYA KALPANA-I

AIMS & OBJECTIVES

 Students taking up diploma course in Ayurvedic Pharmacy must have basic knowledge of Rasa Shastra and Bhaishhya Kalpana an ancient science of alchemy. They must know the classical methods and principles involved in the manufacturing of different Ayurvedic formulations and should also get the practical training of preparing these drugs. They must also know the basic concepts of manufacturing, storage, preservation and dispensing of Ayurvedic drugs.

The syllabus of diploma course includes these aspects of teaching and training.

SECTION – I RASA SHAstra

1. Definition of Rasa Shastra, importance in Ayurveda and brief history of Rasa Shastra, its relevance in vedic era, Ayurvedic literature and in Modern science.
4. Brief descriptions of Yantra, puta and Musha, Yantra – Dolayantra. Vidyadhar yantra, Taptakhalva yantra,
6. Classicification of drugs in Rasa Shastra.
7. Maharasas – their synonyms, indentification, types impurities shodhana, Marana, therapeutic doses and compound formulations, side effects and its antidote.
3. .Abhagrabha pottali 4. Hemagarbha pottali
5. Rasa Sindur 6. Mallasindur
7. Makardhwaj 8. Suvarnabang

Their composition, properties and uses.
SECTION - II: BHAISHJYA KALPANA

1. Definition of Bhaishaja – Bhaishjya kalapna and its brief history in vedas Ayurvedic samhitas and in samgrah period.
3. Maana Paribhasha according to Sharangdhar samhita.
6. Aushadh Yoga:
   1. Dashamool Kwath
   2. Pathyadi Kwath
   3. Vasavaleha
   4. Sitopaladi Churna
   5. Dashanasamskar Churna
   6. Triphala Guggulu
   7. Yograj Guggulu

   Their composition, properties and uses.

Practical

Preparation of at least 20 yogas (formulations) from Rasa Shastra and Bhaishjya Kalpana, including purification processes.

DAP/Y 150 : PRATHAMIY UPACHAR EVAM RUGNA PARICHARYA

Time: 3 Hours Theory  
Theory: 100 Marks

Swasthasyalakshnam, Swasthya swarupam, swasthsya rakshanartham. Upachar Dincharya, Ratricharya, Ritucharya, Rituwanusaren, Ahara swarupam, Nivas sthan vichar, Ahara vidhi vishesayatanani, paraspara viruddha dravya gunam Peyadravya vishesh, Anupan vichar, Niwas sthan, udyoga sthan, krida sthan, siksha sthan, Paniyajalasthan.

Aramgyna, Jalapan griha, Manovinod sthaladinam niyojana, Aaudogika sadvrita samanye sadurita.

Satmya satmya vichar, Shuchitvam, Vaidya guna, Chikitsalaya Bhesajya nirman Garadisu cha. Shuchitvavivek, asuchan, Bhutanma, Kitadinamacy pravesha.

Tatjanya vikriti vigyanaam, tannivarkopaya prati Rodhakapaya.

Sankramak Roga Gyanam, Tanpodwanshakarnam, Teshma viwarnopaya.

Vayu, Tala, Kala, Deshashaccha, Tesham Durtih Tannwarnopaya.

Vegan dharniyadharniya Vivek, Kitpatangadinam, Jiwanaitiham, Masak.

Makshika, Pipalikadi, Sansargatah, Roghvishesha, Tesham manavdeho raktagatam chatra gatam vaishamyam.

Sankramak Nirodhak Bhaavaha

Sankramak roga prasarasheha, prasangat Gatra sansparsati, Nihswarat, Sah Bhojanat, Ekasayyashat.

Gandhamalyadi, sam parkaccho psarga Rogah

Teshaaam vishistam vigyanam tanni Rodhak & Niwarnabhu tascha Bhavah
2. Concept of Rasa, Guna, Veerya, Vipak and Prabhava.
3. Collection Storage and Preservation of Drugs.
4. Various impurities of Drugs, methods of Purification of Drugs.
5. Ayurvedic concept of pharmacological actions of drugs like, Rasayan, Vajikarana, Medhya, Vyavayi, Vikasi, Pramathithi, Madkari, Anulomana, Chhedna.
6. Characteristic functions of Samanyapratyarabdha and Vichitra pratyarabdha.
7. Knowledge, properties, effect and uses of following drugs of Animal origin: Kasturi, Gorochan, Prawal, Mukta, Shankh, Shambook, Varatika, Shukti, Mrig shringa.
8. Mishrak Varga dravyas
   Chaturbeeea, Kantakpanchmoola, Panchkshiri vriksha, Panchpallava, Shadanga paneeya, Madhyampanchmoolaa. Upavisha
   1. Agnimanth  
   3. Ativisha  
   5. Amragandhi–haridra  
   7. Banfsa  
   9. Brahmi  
  11. Arka  
  13. Changeri  
  15. Dantee  
  17. Doorva  
  19. Erand  
  21. Gunja  
  23. Hrinsa  
  25. Kanchnar  
  27. Kapikachchu  
  29. Langali  
  31. Methika  
  33. Mustaka  
  35. Sleshmatak  
  37. Vansha
   2. Aristak  
   4. Aparajita  
   6. Astishrimkhala  
   8. Bhallatak  
  10 Bhanga  
  12. Chakramarda  
  14. Champak  
  16. Draksha  
  18. Dhatura  
  20. Gambhari  
  22. Hingu  
  24. Irmeda  
  26. Kirattikta  
  28. Karveera  
  30. Mandookparni  
  32. Mamajjak  
  34. Patha  
  36. Saptaparna  
  38. Trikantak
39. Varuna 40. Aralu
41. Bakul 42. Gojiwha
43. Manjistha 44. Sariva

Practical:
1. Preparation of Herbarium sheets of 50 drugs.
3. Description and identification of at least 30 important drugs mentioned in the theory.

DAP/Y220: RASA SHASTRA AND BHAISHJYA KALPANA–II

Section – I  Rasa Shastra  50 Marks
2. Introduction, identification, types, impurities, shodhana, marana, therapeutic dose, adverse effects and antidotes of Uparasas, Sadharan Rasa, Dhatu and Ratna.
3. Introduction, shodhana, therapeutic dose, antidotes, toxicity of visha-upavisha varga.
4. Preparation of several Ayurvedic formulations like Bhasma, Sindooras, Netrabindu, Varti & Rasa preparations.
5. Aushadha Yoga
   1. Anandbhairav rasa 2. Arogayavardhini rasa
   5. Tribhuvankirtirasa 6. Laxmivilas rasa
   7. Navajivan rasa 8. Shwaskuthar rasa
   9. Ichchhabhedi rasa 10. Chandraprabhavati

Section – II  Bhaishajya Kalpana  50 Marks
1. Preparatory methods of Sneha Kalpana and Sandhan Kalpana.
2. Definition and application of Bhojana, Bhavana, Samskara, Mardana.
4. Preparation of several Ayurvedic formulations : Asavas, Arishtha, Taila, Ghrita, etc.
5. Aushadha Yogas:
   1. Panchatikta Ghrita 2. Jatyadi Ghrita
   3. Triphala Ghrita 4. Pind tail
   5.. Satapaki Balitail 6. Panchagun tail
   7. Drakshasava 8. Kutajarishtha
   9. Bhringraj tail 10. Shadabindu tail
   11. Vishgarbha tail 12. Shakha vati

Their compositions, properties and uses.

Practical:
Preparation of at least 30 yoga (Formulations) of different kalpanas.
DAP/Y230:  AYURVED PARICHAY INCLUDING ROGA NIDAN EVAM CHIKITSA

AIMS AND OBJECTIVES

The main aim of the section on Ayurveda Parichaya is to introduce the subject of Ayurveda as a whole so that the students become familiar with the various important terminologies and subjects of Ayurveda.

Students taking up Diploma course in Ayurved Pharmacy must have basic knowledge of Roga Nidan and basic concepts of onset of disease. These students must have some knowledge of the effect of drugs in human body in specific physiological or pathological conditions that is during normal or disturbed Doshas, Dhatus, Srotasa and its related conditions.

• Definition of Ayurveda as science of life.
• Brief introduction of Ashtang Ayurveda, Ayurveda Utpatti and Vikas.
• Important literary works, especially texts – Brihattrayi & Laghutrayi.
• Panchakarma, Kriyakalpa, Agnikarma, Kshara Karma etc. Special therapeutic procedures – brief description.
• Aushadha, Ahara, Aushadha sevana kala, Anupana, Anupana & Sahapana, Pathya- Apathya.
• Clinical importance of Chikitsa Chatuspada, Tridosha, Dhatu, Mala, Siddhanta.
• Definition and importance of Roga Vignan and Vikruti Vignan.
• Signs and symptoms of the increase and decrease of Doshas, Dhatu and Malas.
• Kriyakala.
• The importance of srotasa in the production of diseases.
• The determination of the disorders of srotasa.
• The causes and signs and symptoms of the vitiation of srotasa.
• The causes of the diseases of the different srotasa.
• Definition, General discussion and types of Vyadh (disease).
• Astha mahagada (major disease) and astha nindita (condemned).
• General description and importance of Nidana - panchaka.
• Trividha Rogi pariksha vidhi (Darshana etc. three types of Methodology of investigating a patient).
• Signs, Symptoms and diseases of ojovyapata, ojoksha and ojochyuti.
• Vyadhikshamatva (Immunity).
• General description of Janapadodhvamasaka vyadhi (Epidemics) and Aupsargika Roga and Sansargaja Roga (Infectious and communicable diseases).

DAP/Y240:  AYURVEDIC PHARMACEUTICS INCLUDING HOSPITAL AND CLINICAL PHARMACY

1. Introduction of Different dosage forms.
2. Introduction to Pharmacopoeias with special reference to the Ayurvedic Pharmacopoeia of India.
4. Packaging of Pharmaceuticals.
5. Sterilization – Concept of Sterilization and its types.
6. Brief intoduction to processing of tablets, capsules, syrups, etc.
   Posology – Dose and dosage of drugs.
8. Brief introduction to semi-solid form like ointment etc.
9. Brief introduction to sterile Dosage form with special reference to precautions in their handling and storage.
10. Hospital pharmacy.
11. Drug distribution system in Hospital.

**Practical:**
1. Dispensing Pharmacy in OPD/IPD for two days in a week.
2. To prescribe and distribute drugs for at least 15 different diseases.
3. To identify and note the organoleptic characters and uses of at least 50 yogas seen in the OPD/IPD.

**Books Recommended:**
1. Remington’s Pharmaceutical sciences.
3. Coper and Gunn’s Dispensing for pharmaceutical students Carter.

**DAP/Y250: KRIYA SHARIRA**

1. Dosh, dhatu, mala mulam shariram.
2. Five types of vata, their names, locations and functions in health.
3. Five types of pitta, their names, locations and functions in health.
4. Five types of kapha their names, locations and functions in health.
5. Dehprakriti, types of dosha prakritis and characteristics of vata, pitta and kapha dominant person.
6. Rashi purusha and its components according to ayurveda.
7. Names of seven Dhatus, upadahtus and their nutrition from digested essence of the food.
8. Description of Agni and complete process of the digestion of Food. (Ahara paki kriya and avastha paka Kriya).
9. The nutrition of sevedhatus as explained by kshirdadhinyaya, kedarikulya nyayand khalekapota nyaya (Theories).
10. Definition, production types qualities and importance of Ojas and bala.
11. Description of Vyadhi Kshmatva.
12. Characteristics of presence of Atma in the body.
13. Concept of mind, it number, functions and role in health.
14. The description of blood according to Ayurved and modern science.
15. The process of recognition–Gnanotpatti–according to charak.
16. Endocrine glands, their name, location and functions in health.
DAP/Y260: SELECTED TOPICS IN PHARMACY

1. Pharmaceutical jurisprudence & toxicology.
2. Drugs & cosmetics Act and rules.
3. Quality assurance & GMP.
4. Good dispensing practices.
5. Drug’s store establishment and management of Pharmacy stores.