

RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES

BANGALORE

SYLLABUS OF AYURVEDACHARYA (BAMS) COURSE

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PADARTHA VIGYAN EVUM AYURVEDA ITIHASA

**(Philosophy and History of Ayurveda)
Padartha Vigyanam**

**Theory- Two papers– 200 marks (100 each paper)
Total teaching hours: 100 hours**

PAPER-I

100 marks

PART A

50 marks

1. Ayurveda Nirupana

1. Lakshana of Ayu, composition of Ayu.
2. Lakshana of Ayurveda.
3. Lakshana and classification of Siddhanta.
4. Introduction to basic principles of Ayurveda and their significance.

2. Ayurveda Darshana Nirupana

1. Philosophical background of fundamentals of Ayurveda.

Etymological derivation of the word “Darshana”. Classification and general introduction to schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya and Yoga.

2. Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda).
3. Padartha: Lakshana, enumeration and classification, Bhava and Abhava padartha, Padartha according to Charaka (Karana-Padartha).

3. Dravya Vigyaniam

1. **Dravya:** Lakshana, classification and enumeration.
2. **Panchabhuta:** Various theories regarding the creation (theories of Taittiriyanopanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Susruta), Lakshana and qualities of each Bhoota.
3. **Kaala:** Etymological derivation, Lakshana and division / units, significance in Ayurveda.
4. **Dik:** Lakshana and division, significance in Ayurveda.
5. **Atma:** Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (*atmanah jnasya pravrittih*).
6. **Purusha:** as mentioned in Ayurveda - Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha.
7. **Manas:** Lakshana, synonyms, qualities, objects, functions, dual nature of mind (*ubhayaatmakatvam*), as a substratum of diseases, penta-elemental nature (*panchabhutatmakatvam*).
8. Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively.
9. Tamas as the tenth Dravya.
10. Practical study/application in Ayurveda

PART B

50 marks

4. Gunavigyaniam

1. Etymological derivation, classification and enumeration according to Nyaya-Vaisheshika and Charaka, Artha, Gurvadiguna, Paradiguna, Adhyatmaguna.
2. Lakshana and classification of all the 41 gunas.
3. Practical / clinical application in Ayurveda.

5. Karma Vigyaniam

1. Lakshana, classification in Nyaya.
2. Description according to Ayurveda.
3. Practical study/ application in Ayurveda.

6. Samanya Vigyaniam

- 6.1 Lakshana, classification.
- 6.2 Practical study/ application with reference to Dravya, Guna and Karma.

7. Vishesha Vigyaniam

1. Lakshana, classification.
2. Practical study/ application with reference to Dravya, Guna and Karma.
3. Significance of the statement “*Pravrittirubhayasya tu*”.

8. Samavaya Vigyaniam

- 8.1 Lakshana
- 8.2 Practical study /clinical application in Ayurveda.

9. Abhava Vigyaniam

- 9.1 Lakshana, classification
- 9.2 Clinical significances in Ayurveda.

PAPER-I

Padartha Vigyan and Ayurveda Itihas

100 marks

PART A

75 marks

Pariksha

1. Definition, significance, necessity and use of *Pariksha*.
2. Definition of *Prama*, *Prameya*, *Pramata*, *Pramana*.
3. Significance and importance of *Pramana*, Enumeration of *Pramana* according to different schools of philosophy.
4. Four types of methods for examination in *Ayurveda* (Chaturvidha-Parikshavidhi), *Pramana* in Ayurveda.
5. Subsudation of different *Pramanas* under three *Pramanas*.
6. Practical application of methods of examination (Parikshavidhi) in treatment (Chikitsa).

• Aptomdesha Pariksha/ Pramana

- Lakshana of Aptomdesha, Lakshana of Apta.
- Lakshana of Shabda, and its types.
- Shabdavritti-Abhidha, Lakshana, Vyanjana and Tatparyakhya. Shaktigrahahetu.
- Vaakya: Characteristics, Vaakyarthagyanahetu- Aakanksha, Yogyata, Sannidhi.

1. **Pratyaksha Pariksha/ Pramana**

1. Lakshana of Pratyaksha, types of Pratyaksha- Nirvikalpaka- Savikalpaka with description, description of Laukika and Alaukika types and their further classification.
2. Indriya-prapyakaritvam, six types of Sannikarsha.
3. Indriyanam lakshanam, classification and enumeration of Indriya. Description of Panchapanchaka, Penta-elemental nature of Indriya by Panchamahabhuta (*Panchabhautikatwa* of Indriya) and similarity in sources (*Tulyayonitva*) of Indriya.
4. Trayodasha Karana, dominance of Antahkaran.
5. Hindrances in direct perception (*pratyaksha-anupalabdihikaaran*), enhancement of direct perception (Pratyaksha) by various instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha.
6. Practical study/ application of Pratyaksha in physiological, diagnostic, therapeutics and research grounds.

1. **Anumanapariksha/Pramana**

1. Lakshana of Anumana. Introduction of Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta. Types of Anumana mentioned by Charaka and Nyayadarshana.
2. Characteristic and types of Vyapti.
3. Lakshana and types of Hetu, description of Ahetu and Hetwabhasa.
4. Characteristic and significance of Tarka.
5. Practical study/ application of Anumanapramana in physiological, diagnostic, therapeutics and research.

Yuktipariksha/ Pramana

1. Lakshana and discussion.
2. Importance in Ayurveda.
3. Practical study and utility in therapeutics and research.

6. **Upamana Pramana**

1. Lakshana.

2. Application in therapeutics and research.

1. **Karya- Karana Siddhanta (Cause and Effect Theory)**

1. Lakshana of Karya and Karana. Types of Karana.
2. Significance of Karya and Karana in Ayurveda.
3. Different opinions regarding the manifestation of Karya from Karana: Satkaryavada, Asatkaryavada, Parinamavada, Arambhavada, Paramanuvada, Vivartavada, Kshanabhangurvada, Swabhavavada, Pilupaka, Pitharpaka, Anekantavada, Swabhavoparamavada.

PART B- Ayurveda Itihasa

25 marks

1. Etymological derivation (Vyutpatti), syntactical derivation (Nirukti) and definition of the word Itihasa, necessity of knowledge of history, its significance and utility, means and method of history, historical person (Vyakti), subject (Vishaya), time period (Kaal), happening (Ghatana) and their impact on Ayurveda.

2. Introduction to the authors of classical texts during Samhitakaal and their contribution: Atreya, Dhanwantara, Kashyapa, Agnivesha, Sushruta, Bhela, Harita, Charaka,

Dridhabala, Vagbhata, Nagarjuna, Jivaka.

1. Introduction to the commentators of classical Samhitas – Bhattarharicchandra, Jejjata, Chakrapani, Dalhana, Nishchalakara, Vijayarakshita, Gayadas, Arunadutta, Hemadri, Gangadhara, Yogindranath Sen, Haranachandra, Indu.
- 2.
3. Introduction to the authors of compendiums (Granthasamgrahakaala) – Bhavmishra, Sharngadhara, Vrinda, Madhavakara, Shodhala, Govinda Das (Author of Bhaishajyaratnawali), Basavraja.
4. Introduction to the authors of Modern era –Gana Nath Sen, Yamini Bhushan Rai, Shankar Dajishastri Pade, Swami Lakshmiram, Yadavji Tikramji, Dr. P. M. Mehta, Ghanekar, Damodar Sharma Gaur, Priyavrat Sharma.
- 5.
6. Globalization of Ayurveda – Expansion of Ayurveda in Misra (Egypt), Sri Lanka, Nepal other nations.
- 7.
8. Developmental activities in Ayurveda in the post-independence period, development in educational trends.
9. Establishment of different committees, their recommendations.
10. Introduction to and activities of the following Organizations :- Department of AYUSH, Central Council of Indian Medicine, Central Council for Research in Ayurvedic Sciences, Ayurvedic Pharmacopeia commission, National Medicinal Plants Board, Traditional Knowledge Digital Library (TKDL)
11. Introduction to the following National Institutions :
12. National Institute of Ayurved, Jaipur.
13. IPGT&RA, Gujrat Ayurved University, Jamnagar.
14. Faculty of Ayurved, BHU, Varanasi.
15. Rashtriya Ayurveda Vidyapeetha, New Delhi.
16. Drug and Cosmetic Act.
17. Introduction to national & international popular journals of Ayurveda.
18. Introduction to activities of WHO in the promotion of Ayurved.

Reference Books:-

A). Padartha Vigyan:-

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| 1. Padarthavigyan | Acharya Ramraksha Pathak |
| 2. Ayurvediya Padartha Vigyana | Vaidya Ranjit Rai Desai |
| 3. Ayurved Darshana | Acharya Rajkumar Jain |
| 4. Padartha Vigyana | Kashikar |
| 5. Padartha Vigyana | Balwant Shastri |
| 6. Sankhyatantwa Kaumadi | GajananS hastri |
| 7. Psycho Pathology in Indian Medicine | Dr. S.P. Gupta |
| 8. Charak Evum Sushrut ke Darshanik Vishay ka Adhyayan | Prof. Jyotirmitra Acharya |
| 9. Ayurvediya Padartha Vigyana | Dr. Ayodhya Prasad Achal |
| 10. Padartha Vigyana | Dr. Vidyadhar Shukla |
| 11. Padartha Vigyana | Dr. Ravidutta Tripathi |
| 12. Ayurvediya Padartha Vigyana | Vaidya Ramkrishna Sharma Dhand |
| 13. Ayurvediya Padartha Vigyan Parichaya | Vaidya Banwarilal Gaur |
| 14. Ayurvediya Padartha Darshan | Pandit Shivhare |

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- | | |
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| 15. Scientific Exposition of Ayurveda | Dr. Sudhir Kumar |
| 16. Relevant portions of Charakasamhita, Sushrutasamhita. | |

B) History of Ayurveda:-

- | | |
|---|-------------------------------|
| 1. Upodghata of Kashyapasamhita
Paragraph of acceptance of Indian medicine | Rajguru Hem Raj Sharma |
| 2. Upodghata of Rasa Yogasagar | Vaidy Hariprapanna Sharma |
| 3. Ayurveda Ka Itihas | KaviraSuram Chand |
| 4. Ayurveda Sutra | Rajvaidya Ram Prasad Sharma |
| 5. History of Indian Medicine (1-3 part) | Dr. GirindrNath Mukhopadhyaya |
| 6. A Short history of Aryan Medical Science | Bhagwat Singh |
| 7. History of Indian Medicine | J. Jolly |
| 8. Hindu Medicine | Zimer |
| 9. Classical Doctrine of Indian Medicine | Filiyosa |
-

10. Indian Medicine in the classical age	AcharyaPriyavrata Sharma
11. Indian Medicine (Osteology)	Dr. Harnley
12. Ancient Indian Medicine	Dr. P. Kutumbia
13. Madhava Nidan and its Chief Commentaries (Chapters highlighting history)	Dr. G.J. Mullenbelt
14. Ayurveda Ka BrihatItihasa	Vaidya Atridev Vidyalankara
15. Ayurveda Ka VaigyanikaItihasa	Acharya Priyavrata Sharma
16. Ayurveda Ka PramanikaItihasa	Prof. Bhagwat Ram Gupta
17. History of Medicine in India	Acharya Priyavrata Sharma
18. Vedomein Ayurveda	Vaidya Ram GopalS hastri
19. Vedomein Ayurveda	Dr. Kapil Dev Dwivedi
20. Science and Philosophy of Indian Medicine	Dr. K.N. Udupa
21. History of Indian Medicine from Pre-Mauryan to Kushana Period	Dr. Jyotirmitra
22. An Appraisal of Ayurvedic Material in Buddhist literature	Dr. Jyotirmitra
23. Mahayana Granthon mein nihita Ayurvediya Samagri	Dr. RavindraNathTripathi
24. Jain Ayurveda Sahitya Ka Itihasa	Dr. Rajendra Prakash Bhatnagar
25. Ayurveda- Prabhashaka Jainacharya	Acharya Raj Kumar Jain
26. CharakaChintana	Acharya Priyavrata Sharma
27. Vagbhata Vivechana	Acharya Priyavrata Sharma
28. Atharvaveda and Ayurveda	Dr. Karambelkara
29. Ayurvedic Medicine Past and Present	Pt. Shiv Sharma
30. Ancient Scientist	Dr. O.P. Jaggi
31. Luminaries of Indian Medicine	Dr. K.R. Shrikanta Murthy
32. Ayurveda Ke Itihasa Ka Parichaya	Dr. RaviduttaTripathi
33. Ayurveda Ke Pranacharya	Ratnakara Shastri
34. Ayurveda Itihasa Parichaya	Prof. Banwari Lal Gaur

1.2 SANSKRUTAM

THEORY – ONE PAPER – 100 MARKS

TEACHING HOUR – 200 Hours

PART A

50 marks

SAMSKRUTA VYAKARANA ADYAYANAM

1. Sangna prakaranam
2. Vibhaktyartha
3. Sandhi prakaranam (sandhi vicchedah , sandhi karanam)
4. Shadlinga prakaranam (shabdha roopanyevah)
5. Dhatu prakaranam (dhatu roopanyeva) (bhvadiganeeya dhatunam pancha latt, lott, langlatt, vidhi linga lakareshu roopani)
6. Vachya prayogah (kartari karmani bhava vachya prayogah)
7. Samaasa prakaranam
8. Pratyayah (nich, ktha, kthavathu, shat, shaanach, thumun, thavyath, thuch, kthwa, lyup, lyut, aneeyar, mathup, ini, than, ithach, ann, ing, ik, thwa, tha, shan, imm, nich, thah, thra, daa, tharap, thamap, thaap, gnaap)
9. Anuvaada .

From English/hindi /Regional language to Sanskrit

From Sanskrit to English/hindi/Regional language

Identification and correction of grammatical errors in the given sentences

The sentences for translation should be selected from the under mentioned reference books.

Laghu siddanta kaumudhi –Acharya Varadaraja (

(commentary by Sri Dhananand shastri)

Brihat trayee (Charak samhita,Sushrut samhita,astanga hrudaya)

Anuvada chandrika –Chakradhara ,hansa,Nautiyal.

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4. sanskruta ayurveda sudha –Dr banwari lal gaur
 5. rachananuvada kaumudi-Dr Kapildev dwivedi
 6. Bhasha sopanam-published by Rashtreeya samskruta samsthana,New delhi

PART –B

50MARKS

BHASHADHYAYANAM.

- 1.)Ayurvedrsha grantha adhyayana karma;-Stepwise method of study of ayurveda Arsha Granthas(susrutha samhitha shareera sthana, chapter -4)
- 2.)Vaidyakiya subhashitha sahityam(adhyaya:1-10)
- 3.)panchatantram-aparikshitakarakam(kshapanaka kathathaha murkhapanditha kathaparyantham pancha kathaha)

REFERENCE BOOKS –

- 1)Sushruta samhita,shareera sthana,chapter-4
- 2)Prabhashanam work book,su.sam.chap-4 published by AYUEVEDA ACADEMY BANGLORE
Email-ayuacdemy @gmail.com.
- 3)vaidyakeeya subhashita sahityam-Dr.Bhaskar govinda ghanekar.
- 4)Panchatantra-(Apareekshitakarakam)-pt.Vishnu sharma

1.3 KRIYA SHAREERA **(PHYSIOLOGY)**

Two Papers-200 Marks (100 marks each)
Practicals-100 marks
Teaching hours-325 hours
Theory-175 hrs
Practicals-150 hrs

100 marks

PAPER- I

PART A

50 marks

1. Conceptual study of fundamental principles of Ayurvediya Kriya Sharir e.g - Panchamahabhuta, Tridosha, Triguna, Loka-Purusha Samya, Samanya-Vishesha. Description of basics of Srotas.
2. Definition and synonyms of the term Sharir, definition and synonyms of term Kriya, description of Sharir Dosha and Manasa Dosha. Mutual relationship between Triguna- Tridosha & Panchmahabhuta. Difference between Shaarir and Sharir. Description of the components of Purusha and classification of Purusha, role of Shatdhatupurusha in Kriya Sharira and Chikitsa.
3. Dosha- General description of Tridosha. Inter relationship between Ritu-Dosha-Rasa-Guna. Biological rhythms of Tridosha on the basis of day-night-age-season and food intake. Role of Dosha in the formation of Prakriti of an individual and in maintaining of health. Prakrita and Vaikrita Dosha.
4. Vata Dosha: Vyutpatti (derivation), Nirukti (etymology) of the term Vata, general locations, general properties and general functions of Vata, five types of Vata (Prana, Udana, Samana, Vyana, Apana) with their specific locations, specific properties, and specific functions.

Respiratory Physiology in Ayurveda, Physiology of speech in Ayurveda.

- Pitta Dosha: Vyutpatti, Nirukti of the term Pitta, general locations, general properties and general functions of Pitta, five types of Pitta (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka) with their specific locations, specific properties, and specific functions. Similarities and differences between Agni and Pitta.
- Kapha Dosha: Vyutpatti, Nirukti of the term Kapha, general locations, general properties and general functions of Kapha, five types of Kapha (Bodhaka, Avalambaka, Kledaka, Tarpaka, Śleshaka) with their specific locations, specific properties, and specific functions.

1. Etiological factors responsible for Dosha Vriddhi, Dosha Kshaya and their manifestations.
2. Concept of Kriyakala.

3. Prakriti:
4. Deha- Prakriti: Vyutpatti, Nirukti, various definitions and synonyms for the term 'Prakriti'. Intra-uterine and extra-uterine factors influencing Deha-Prakriti, classification and characteristic features of each kind of Deha-Prakriti.
5. Manasa- Prakriti: Introduction and types of Manasa- Prakriti.
6. Ahara: Definition, classification and significance of Ahara, Ahara-vidhi-vidhana, Ashta Aharavidhi Viseshayatana, Ahara Parinamkar Bhava.
7. Aharapaka (Process of digestion): Description of Annavaha Srotas and their Mula. Role of Grahani & Pittadhara Kala.
8. Description of Avasthapaka (Madhura, Amla and Katu). Description of Nishthapaka (Vipaka) and its classification. Separation of Sara and Kitta. Absorption of Sara. Genesis of Vata-Pitta-Kapha during Aharapaka process. Definition of the term Koshtha. Classification of Koshtha and the characteristics of each type of Koshtha.
9. Agni – Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.

PART- B

50 marks

Modern Physiology

1. Definition and mechanisms of maintenance of homeostasis. Cell physiology. Membrane physiology. Transportation of various substances across cell membrane.
2. Resting membrane potential and action potential.
3. Physiology of respiratory system: functional anatomy of respiratory system. Definition of ventilation, mechanism of respiration, exchange and transport of gases, neural and chemical control of respiration, artificial respiration, asphyxia, hypoxia. Introduction to Pulmonary Function Tests.
4. Physiology of Nervous System: General introduction to nervous system, neurons, mechanism of propagation of nerve impulse, physiology of CNS, PNS, ANS; physiology of sensory and motor nervous system, Functions of different parts of brain and physiology of special senses, intelligence, memory, learning and motivation. Physiology of sleep and dreams, EEG. Physiology of speech and articulation. Physiology of temperature regulation.
5. Functional anatomy of gastro-intestinal tract, mechanism of secretion and composition of different digestive juices. Functions of salivary glands, stomach, liver, pancreas, small intestine and large intestine in the process of digestion and absorption. Movements of the gut (deglutition, peristalsis, defecation) and their control. Enteric nervous system.
6. Acid-base balance, water and electrolyte balance. Study of basic components of food. Digestion and metabolism of proteins, fats and carbohydrates.

Vitamins & Minerals- sources, daily requirement, functions, manifestations of hypo and hypervitaminosis.

PAPER-II

100 marks

PART A

50 Marks

1. Dhatu:

Etymology, derivation, definition, general introduction of term Dhatu, different theories related to Dhatuposhana (Dhatuposhana Nyaya)

2. Rasa Dhatu:

Etymology, derivation, location, properties, functions and Praman of Rasa-dhatu. Physiology of Rasavaha Srotas, Formation of Rasa Dhatu from Aahara Rasa, circulation of Rasa (Rasa-Samvahana), role of Vyana Vayu and Samana Vayu in Rasa Samvahana. Description of functioning of Hridaya. Ashtavidha Sara (8 types of Sara), characteristics of Tvakasara Purusha, conceptual study of mutual interdependence (Aashraya-Aashrayi Bhaava) and its relation to Rasa and Kapha. Manifestations of kshaya and Vriddhi of Rasa.

3. Rakta Dhatu:

Etymology, derivation, synonyms, location, properties, functions and Praman of Rakta Dhatu. Panchabhautikatva of Rakta Dhatu, physiology of Raktavaha Srotas, formation of Raktadhatu, Ranjana of Rasa by Ranjaka Pitta, features of Shuddha Rakta, specific functions of Rakta, characteristics of Raktasara Purusha, manifestations of Kshaya and Vriddhi of Raktadhatu, mutual interdependence of Rakta and Pitta.

4. Mamsa Dhatu :

Etymology, derivation, synonyms, location, properties and functions of Mamsa Dhatu, physiology of Mamsavaha Srotasa, formation of Mamsa Dhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsa Dhatu .Concept of Peshi.

5. Meda Dhatu :

Etymology, derivation, location, properties, functions and Praman of Meda Dhatu, physiology of Medovaha Srotas, formation of Medo Dhatu, characteristics of Medasara Purusha and manifestations of Kshaya and Vriddhi of Meda.

6. Asthi Dhatu:

Etymology, derivation, synonyms, location, properties, functions of Asthi Dhatu. Number of Asthi. Physiology of Asthivaha Srotas and formation of Asthi Dhatu, characteristics of Asthisara Purusha, mutual interdependence of Vata and Asthi Dhatu, manifestations of Kshaya and Vriddhi of Asthi Dhatu.

7. Majja Dhatu :

Etymology, derivation, types, location, properties, functions and Praman of Majjaa Dhatu, physiology of Majjavaha Srotas, formation of Majja Dhatu, characteristics of Majja Sara Purusha, relation of Kapha, Pitta, Rakta and Majja, manifestations of Kshaya and Vriddhi of Majja Dhatu.

8. Shukra Dhatu:

Etymology, derivation, location, properties, functions and Praman of Shukra Dhatu, physiology of Shukraravaha Srotas and formation of Shukra Dhatu. Features of Shuddha Shukra, characteristics of Shukra-Sara Purusha, manifestations of Kshaya and Vriddhi of Shukra Dhatu.

9. Concept of **Ashraya-Ashrayi** bhava i.e. inter-relationship among Dosha, Dhatu Mala and Srotas.

10. **Ojas**: Etymological derivation, definition, formation, location, properties, Praman, classification and functions of Ojas. Description of Vyadhikshamatva. Bala Vriddhikara Bhava. Classification of Bala. Etiological factors and manifestations of Ojavisramsas, Vyapat and Kshaya.

11. **Upadhatu**: General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu.

12. **Stanya**: Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya.

13. **Artava**: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavavaha Srotas.

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14. Tvak: classification, thickness of each layer and functions.
14. **Mala:** Etymological derivation and definition of the term Mala. Aharamala: Enumeration and description of the process of formation of Aharamala.
15. Purisha: Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshhaya of Purisha.
16. Mutra: Etymological derivation, definition, formation, properties, quantity and functions of Mutra. Physiology of Mutravaha Srotas, physiology of urine formation in Ayurveda, manifestations of Vriddhi and Kshhaya of Mutra.
17. Sveda: Etymological derivation, definition, formation and functions of Sveda. Manifestations of Vriddhi and Kshhaya of Sveda. Discription of Svedvaha Srotas
18. Dhatumala: Brief description of each type of Dhatumala.
18. **Panchagyanendriya:** Physiological description of Panchagyaanendriya and physiology of perception of Shabda, Sparsha, Rupa, Rasa and Gandha. Physiological description of Karmendriya.
19. **Manas:** Etymological derivation, definition, synonyms, location, properties, functions and objects of Manas. Physiology of Manovaha Srotas.
20. **Atma:** Etymological derivation, definition, properties of Atma. Difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body.
21. **Nidra:** Nidrotpatti, types of Nidra, physiological and clinical significance of Nidra; Svapnotpatti and types of Svapna.

PART –B

50 marks

Modern Physiology

Haemopoetic system – composition, functions of blood and blood cells, Haemopoiesis (stages and development of RBCs, and WBCs and platelets), composition and functions of bone marrow, structure, types and functions of

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1. haemoglobin, mechanism of blood clotting, anticoagulants, physiological basis of blood groups, plasma proteins, introduction to anaemia and jaundice.
 2. Immunity, classification of immunity: Innate, acquired and artificial. Different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity. Hypersensitivity.
 3. Muscle physiology – comparison of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.
 4. Physiology of cardio-vascular system: Functional anatomy of cardiovascular system. Cardiac cycle. Heart sounds. Regulation of cardiac output and venous return. Physiological basis of ECG. Heart-rate and its
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regulation. Arterial pulse. Systemic arterial blood pressure and its control.

5. Adipose tissue, lipoproteins like VLDL, LDL and HDL triglycerides.
6. Functions of skin, sweat glands and sebaceous glands.
7. Physiology of male and female reproductive systems. Description of ovulation, spermatogenesis, oogenesis, menstrual cycle.
8. Physiology of Excretion – functional anatomy of urinary tract, functions of kidney. Mechanism of formation of urine, control of micturition. Formation of faeces and mechanism of defecation.
9. Endocrine glands – General introduction to endocrine system, classification and characteristics of hormones, physiology of all endocrine glands, their functions and their effects.

PRACTICAL

100 marks

Ayurvedic practical

Teaching hours 150

1. Assessment of Prakriti
2. Assessment of Dosha (Features of Vriddhi- Kshaya)
3. Assessment of Dhatu (Features of Vriddhi- Kshaya)
4. Assessment of Agni
5. Assessment of Koshtha
6. Assessment of Sara
7. Nadi pariksha

Modern physiology practical

1. Introduction to laboratory instruments- Simple & Compound Microscope, Scalp vein set, bulbs for blood collection, Sahli's Haemometer, Haemocytometer, pipettes, Urinometer, Albuminometer, Stethoscope, B.P. Apparatus, Harpenden's caliper, Clinical Hammer, Tuning Fork, Stop Watch, Thermometer, Centrifuge machine, ECG Machine
2. Collection of blood sample – prick, vene-puncture method, use of anticoagulants
3. Preparation of blood smear and staining
4. Estimation of Hemoglobin
5. Microscopic examination of blood
 - a. Total RBC count
 - b. Total WBC count
 - c. Differential leucocytes count
6. Packed cell volume (PCV) demonstration
 - ESR demonstration
 - Bleeding time, Clotting time

1. Blood grouping and Rh typing
2. Examination of Cardio-Vascular system
 - Pulse examination
 - Arterial blood pressure measurement
 - Examination of heart sounds
 - ECG demonstration

11. Examination of Respiratory system

- Respiratory rate
- Breath sounds
- Spirometry

12. Examination of Nervous System- Sensory & Motor.

13. Urine examination –Physical examination, chemical examination. Test for normal constituents of urine. Detection of specific gravity and reaction of urine.

Distribution of Practical marks

- | | | |
|---|--------------------------|------|
| ▪ | Laboratory Practical | - 20 |
| ▪ | Human Experiment | - 15 |
| ▪ | Spotting | - 15 |
| ▪ | Prakriti Saradi pariksha | - 20 |
| ▪ | Practical Record | - 10 |
| ▪ | Viva- voce | - 20 |

REFERENCE BOOKS:-

- Ayurvediya Kriyasharir - Ranjit Rai Desai
- Kayachikitsa Parichaya - C. Dwarkanath
- Prakrit Agni Vigyan - C. Dwarkanath
- Sharir Kriya Vigyan - Shiv Charan Dhyani
- Abhinava Sharir Kriya Vigyana - Acharya Priyavrata Sharma
- Dosha Dhatu Mala Vigyana - Shankar Gangadhar Vaidya
- Prakrita Dosha Vigyana - Acharya Niranjana Dev
- Tridosha Vigyana - Shri Upendranath Das
- Sharira Tatva Darshana - Hirlekar Shastri
- Prakrita Agni Vigyana - Niranjana Dev
- Deha Dhatvagni Vigyana - Vd. Pt. Haridatt Shastri
- Sharir Kriya Vigyana (Part 1-2) - Acharya Purnchandra Jain

- Sharir Kriya Vigyana - Shri Moreshwar Dutt. Vd.
- Sharira Kriya Vijnana (Part 1 and 2) – Nandini Dhargalkar
- Doshha Dhatu Mala Vigyana - Basant Kumar Shrimal
- Abhinava Sharir Kriya Vigyana - Dr. Shiv Kumar Gaur
- Pragyogik Kriya Sharir - Acharya P.C. Jain
- Kaya Chikitsa Parichaya - Dr. C. Dwarkanath
- Concept of Agni - Vd. Bhagwan Das
- Purush Vichaya - Acharya V.J. Thakar
- Kriya Sharir - Prof. Yogesh Chandra Mishra
- Sharir Kriya Vigyana - Prof. Jayaram Yadav & Dr. Sunil Verma.
- Basic Principles of Kriya-Sharir (A treatise on Ayurvedic Physiology) by Dr. Srikant Kumar Panda
- Sharir Kriya – Part I & Part II – Dr. Ranade, Dr. Deshpande & Dr. Chobhe
- Human Physiology in Ayurveda - Dr Kishor Patwardhan
- Sharirkriya Vignyan Practical Hand Book– Dr.Ranade, Dr.Chobhe, Dr. Deshpande
- Sharir Kriya Part 1 – Dr.R.R.Deshapande, Dr.Wavhal
- Sharir Kriya Part 2 – Dr. R.R.Deshapande, Dr.Wavhal
- Ayurveda Kriya Sharira- Yogesh Chandra Mishra
- Textbook of Physiology - Gyton & Hall
- A Textbook of Human Physiology – A.K.Jain
- Essentials of Medical Physiology - Sembulingam, K.
- Concise Medical Physiology - Chaudhari, Sujit K.
- Principals of Anatomy & Physiology - Tortora & Grabowski
- Textbook of Medical Physiology- Indu Khurana

1.4 RACHANA SHAREERA (ANATOMY)

**Theory- Two Papers-200 Marks–(100 marks each)
Practicals-100 marks
Teaching Hours-425 hours
Theory-225 hrs
Practicals-200 hrs**

PAPER-I

100 marks

PART-A

50 marks

1. Shariopkramaniya Shaarira

Sharira and shaarira vyakhya (definitions of sharira and shaarira), shadangatvam (six regions of the body), anga pratyanga vibhaga (sub divisions). Mrita sharir samshodhan. Shaarira shastra vibhaga, shaarira gyan prayojana . Constitution of purusha according to dhatubheda, panchabhautikatvam, trigunatmakatvam, tridoshamayatvam, karma purusha, and doshadhatumala-mulakatvam.

2. Paribhasha Shaarira

Kurcha, kandara, jala, asthisanghat, seemanta, seevani, rajju, snayu and lasika.

3. Garbha Shaarira

Garbha definitions, explanation of shukra, artava, garbhadhana. Role of tridosha and panchmahabhuta in the fetal development. Beeja, beejabhaga and beejabhagavayava, linga vinischaya, masanumasika garbha vridhikrama, garbhottpadakbhava, garbhavridhikara bhava, garbha poshana, apara nirmana , nabhinadi nirmana. Aanga pratyanga utpatti.

4. Pramana Shaarira: Anguli pramana.

5. Asthi Shaarira

Asthi vyakhya, number, types, asthi swarooapa, vasa, meda and majja.

6. Sandhi Shaarira

Sandhi vyakhya, numbers, types of asthi sandhi.

7. Sira, Dhamani, Srotas Shaarira

- Definition, types and number of sira and dhamani.
- Description of Hridaya.
- Sroto shaarira: Definition, types of srotas and srotomula.

8. Peshi Shaarira

-
1. Peshi vyakhya, structure, types, number and importance.
 2. Description of Peshi.
-

9. Koshtha Evam Ashaya Shaarira

3. Definition of koshtha and number of koshthanga.
4. Types and description of ashaya.

10. Kalaa Shaarira

Kalaa: definition and types.

11. Uttamangiya Shaarira

Shatchakra, ida, pingala and sushumna nadi - brief description.

12. Marma Shaarira

Marma: definition, number, location, classification, clinical importance with viddha lakshana. Explanation of trimarmas. Detail description of marmas.

13. Indriya Shaarira

Definition of indriya, indriya artha and indriya adhisthan, their number and importance. Description of gyanendria, karmendriya and ubhayendriya (manas).

PART-B

50 marks

1. Definition and branches of anatomy. Preservation methods of the cadaver.

2. Anatomical Terminologies

Anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves,.

3. Embryology

Definitions and branches of embryology. Embryo and fetus. Sperm and ovum, fertilization. Cleavage. Germ layers formation and their derivatives. Laws of heredity, Sex determination and differentiation, Month-wise development of embryo. Foetal circulation, placenta formation, Umbilical cord formation.

4. Osteology

Bone: Definition, ossification, structure and types. Description of bones with clinical anatomy.

5. Arthrology

Joints: Definition, structure types and movements. Description of joints of extremities, vertebral joints and temporomandibular joint with their clinical anatomy.

6. Cardiovascular system

1. Definition, types and structure of arteries and veins.
2. Description of heart and blood vessels with their course and branches.
3. Pericardium with applied aspect.

7. Lymphatic system

Definition, types and structure of lymph vessels, lymph glands with their clinical aspect.

8. Myology

a) Structure and types of muscles.

b) Description of muscles; their origin, insertion, actions, nerve supply and clinical anatomy.

PAPER-I

100 marks

PART A

50 marks

1. Respiratory System

1. Bronchial tree and lungs with their clinical aspects.
2. Respiratory tract: nasal cavity, pharynx, larynx, trachea, bronchial tree.
3. Pleura with its clinical aspects.
4. Diaphragm.

2. Digestive system

1. Organs of digestive tract (alimentary tract) with their clinical aspects.
2. Digestive glands: liver, spleen and pancreas.
3. Description of peritoneum with its clinical aspects.

3. Urinary System

Urinary tract: kidney, ureter, urinary bladder and urethra with their clinical aspects.

4. Reproductive system

- a. Male Reproductive system: reproductive organs, tract and glands (prostate and seminal vesicles) with their clinical aspects.
- b. Female reproductive system: reproductive organs, tract and glands with their clinical aspects.

5. Endocrinology

Definition, classification & description of endocrine glands (pituitary, thyroid, parathyroid, thymus and suprarenal glands) with clinical aspects.

PART B

50 marks

6. Nervous System

Nervous system: definition, classification and its importance. Description of brain and spinal cord.

Description of peripheral nervous system: cranial and spinal nerves, nerve plexuses, and autonomic nervous system formation and circulation of cerebrospinal fluid and blood supply of brain and spinal cord.

7. Sensory organs

Description of structures of eye, ear, nose, tongue and skin with their clinical aspects.

8. Surface and radiological anatomy

a. Study of radio-imaging of limbs, abdomen, pelvis and vertebral column with its clinical application.

b. Surface anatomy of thoracic and abdominal viscera.

PRACTICALS

100 marks

Teaching hours: 200

1. P
ractical study of bones
2. Practical study of organs
3. Practical study of surface and radiological anatomy.

-
4. Shava vichhedana – detailed dissection of the whole body.
 5. Practical study of location of marma
 6. Demonstration of histology slides (10 slides)

Distribution of marks

1. Spotting - 20 marks
2. Dissected organs and histology slides - 20 Marks
3. Bones, joints, marma - 20 Marks
4. Surface & radiological anatomy - 10 Marks
5. Practical records - 10 Marks
6. Viva-Voce - 20 Marks

Total

100 Marks

Reference Books :-

S. No	Name of Book	Author
1	Brihat Shariram Vaidyaratna-	P.S. Varrier
2	Abhinava Shariram-	Acharya Damodar Sharma Gaur
3	Manava Sharir (Revised Edition)-	Prof. Dinkar Govind Thatte
4	Manava Bhruna Vigyana -	Prof. Dinkar Govind Thatte
5	Manava Anga Rekhankan Vikrian -	Prof. Dinkar Govind Thatte
6	Sharir Rachana Vigyan (English)-	Vaidya P.G. Athawale
7	Manual of Practical Anatomy Cunnigham Practical Manual Vol-1, Vol-2, Vol-3	
8	Clinical Anatomy in Ayurveda -	Prof. D.G. Thatte & Prof. Suresh Chandra
9	Sharir Rachna Vigyan (English)-	Prof. D.G. Thatte
10	Ayurvedic Human Anatomy -	Prof. Dr. Giridhar M. Kanthi
11	Regional Anatomy -	B. D. Chaurasia
12	Rachana Sharir Vigyana -	Dr. Mahendra Sing
13	levant chapters of Brihtrayee and Laghuthrayee	
14	Gray's Anatomy	
15	Text Book of Human Anatomy-	Inderbir Singh
16	Clinical Anatomy-	Richard S Snell
17	Fundamentals of Human Anatomoy-	Dr. Chakraborty
18	Human Osteology -	Poddar

1.5 MAULIKA SIDDHANTA EVUM ASHTANGA HRIDAYA
(Basic Principles and Ashtang Hridaya- An ancient text of Ayurveda)

Theory- One Paper– 100 marks
Teaching Hours -150 hours

Part A **60**
marks

Ashtang Hridaya Sutrasthana Adhyaya 1 to 15

Part B **40**
marks

1. Ashtang Hridaya Sutrasthana Adhyaya 16 to 30
2. Description of Ashta Prakriti
3. Shastra Lakshan (Tantra), Tantraguna, Tantradosha, Tachitalya, Arthasraya, Kalpana

Reference Books:

1. Astang Hridaya : Hindi commentary by Lalchanda Vaidya
2. Astang Hridaya : Hindi commentary by Vd. B.L. Gaur
3. Astang Hridaya : English commentary by Dr. T. Sreekumar
4. Astang Hridaya : English commentary by Dr. Vishwavasu Gaur
5. Astang Hridaya : Sanskrit commentary by Hemadri
6. Astang Hridaya : Sanskrit commentary by Arunadatta

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2.2. AGADTANTRA, VYAVAHAR-AYURVED EVUM VIDHIVAIIDYAK

(TOXICOLOGY, FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)

Theory One Paper – 100 Marks

Practical/Viva voce -50 Marks

Theory -200 hrs

Practical - 100 hrs

Part- A

50 Marks

- 1 Derivation, definition of Visha and Agadatantra. Scope of Agadatantra. Visha Utpatti, Visha Prabhava, Visha Pranaharana Kriya, Visha Guna, Visha Gati, Visha Vega **Visha Sankata, Shanka Visha.**
- 2 Definition of toxicology, **Definition of poison, suicidal and homicidal poisons, classification of poisons, their action and route of administration, absorption, excretion, metabolism, diagnosis and general principles of treatment, duties of a medical practitioner in case of suspected poisoning**
- 3 Origin and Classification of Visha:-Its sources, Difference between Visha, Madya and Oja guna, Visha Upadrava and Visha Mukta Lakshana.
- 4 Tests for detection of Visha, and Modern Toxicological Techniques of detection of poisons
Visha Data Lakshana, Visha Peeta Lakshana, Signs and symptoms of Visha afflicted organs and personal effects. (Poisoning with Anjana, Lepa paduka, Abharana etc.
- 5 Introduction to Environmental Toxicology- Samuhika Vishaprayoga- **effect of chemical and nuclear warfare.**
- 6 Vishopakrama described by Charak, General principles of **Management of poisoning.**
- 7 Manifestation of poisoning due to poisons of plant origin their fatal Dose, fatal period, management of poisoning, post mortem appearance and its medico legal importance.
Visha and Upavisha- Arka, Snuhi, Langali, Karaveera, Gunja, Ahiphena, Dhattura, Bhallataka, Vatsanabha, Kupeelu, Jayapala, Bhanga & Tobacco, Parthenium **hysteriphorus**, Chitraka, Eranda, Digitalis and Cerebra **Odallam.**
- 8 Garavisha, Dooshivisha, Viruddhahara. Food **adulteration** and poisoning–classification, diagnosis, management and contemporary significance.
- 9 Jangama Visha – Detailed study of Sarpa, Keeta, Loota, Vrischika, Mooshika, Alarka – Visha; Lakshana, Bheda, Chikitsa and their Sadhyasadhyata (contemporary and classical views),
- 10 **Introduction** to poisoning due to Acids, Alkalis, metals, Non-metals, Asphyxiants and others, their Fatal Dose, Fatal period, Manifestation, management, medico legal importance and postmortem appearance of poisoning due to
 - a) **Acid and Alkalis**– Sulphuric acid, Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carbolic acid, Formic acid, alkalis in general.
 - b) Asphyxiants – Carbon monoxide, Carbon dioxide, Hydrogen sulphide
 - c) Nonmetallic poisons – Phosphorous, Iodine
Metallic poisoning – Arsenic, Mercury, Lead, Copper, Zinc, Tin.
 - d) **Others** - Petroleum – Kerosene Organo phosphorus compounds -Aluminum phosphate, Organo Chlorinated Compounds, **Household poisons.**
- 11 Madya and Madatyaya. Alcohol poisoning (Ethanol and Methanol).
- 12 *Introduction to Narcotic drugs and Psychotropic substances Act 1985.*

- 1 Definition of Vyavahara Ayurveda (Forensic medicine) and Vidhivaidyaka (Medical jurisprudence), concise history of Vyavahara Ayurveda (Forensic medicine) and Vidhivaidyaka (Medical jurisprudence). Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.
- 2 Legal Procedures:- Inquest, Evidence, Witness, Courts and their powers.
- 3 Personal identity and its Medico legal aspects, forensic odontology, Introduction to Forensic Serology and DNA profiling.
- 4 Death and its Medico Legal Aspects, Medico Legal autopsy and *exhumation*
- 5 Injuries and thermal injuries, their medico Legal aspects, **general introduction of weapons.**
- 6 Dowry deaths (**Domestic Violence**), their Medico Legal importance and laws in relation to it.
- 7 Asphyxial deaths and its Medico Legal importance.
- 8 Medico Legal importance of Pregnancy, Delivery; Impotence & Sterility, Abortion, Infanticide, battered baby. Virginity, Artificial Insemination, Legitimacy.
- 9 Sexual offences, and their Medico Legal aspects. Sexual perversions.
- 10 **Introduction to** Forensic psychiatry.
11. Introduction to forensic laboratory
- 11 Ethics as in classical Texts. Types of Vaidya, Pranabhisara and Rogabhisara Vaidya, Qualities of Vaidya, Responsibilities of Vaidya, Chaturvidha Vaidyavrutti, Duties of Vaidya to his patient, Vaidya Sadvrittam, Apujya Vaidya, Code of conduct.
- 12 Laws in relation to Medical practitioners: Indian Medicine Central Council Act.
- 13 **Maintenance of medical record.**
- 14 Physician's responsibility in criminal matters, Professional negligence, Civil negligence, Criminal negligence, Medico Legal aspects of Acquired Immune Deficiency Syndrome, Rights of an unborn child, Medical Termination of Pregnancy Act Transplantation of human organs Bill 1994, Pre Natal Diagnostic Testing Act, Malingering of feigned diseases, International Code of Medical Ethics for Doctors. Clinical establishment Act. Consumer Protection Act 1986.

PRACTICAL

Practical Training

1. Post Mortem examination
2. Evidence in the court
3. Demonstrations in the Forensic & Toxicology museum
(Toxic & Anti toxic substances, medico legal specimens & Charts)
4. Clinical postings
5. Library Hours for compilation

Distribution of Practical Marks

- | | |
|--|----------|
| 1. Post Mortem examination and Court posting – Case Record | 10 Marks |
| 2. Practical/Clinical Record Book | 10 Marks |
| 3. Identification (spotting) | 10 Marks |
| 4. Viva – voce | 20 Marks |

Total

50 Marks

Reference Books

1. Topics related to Agada Tantra from Charak Samhita, Sushrut Samhita, Ashtanga Hridaya, Ashtanga Samgraha, Kasyapa Samhitha, Yogaratnakara, Bhavaprakasha and Madhava Nidana.
2. Vidhivaidyaka (Vyavahar Ayurveda Vijnan) Dr.Charuchandra Pathak

3. Medical Jurisprudence and Toxicology
4. Basavarajeeyam
5. Agada Tantra
6. Text book of Agada Tantra
7. Agadatantra ki Pathyapustaka

8. Agad Tantra
9. Vishachikitsa
(Ayurveda Toxicology English Translation)
10. Medical Ethics and Medical Laws in India
11. Toxicology Ayurvedic Perspective
12. Kautilya Arthashastra (English)
13. Kautilya Arthashastra (Hindi)
14. Vyavahar Ayurveda
15. Vyavahar Ayurveda Vigyanam
16. Textbook of Forensic Medicine and Toxicology
17. Forensic Medicine
18. Relevant Acts
19. Relevant topics from Manu Smriti

Modi
Edited by Vd.Govardhan
Sh. Ramanath Dwivedi
Edited by Dr Huparikar, Dr.Joglekar
Edited By Dr Huparikar,
Dr.Joglekar
Dr. Shekher Namboodri
Vaidya Balakrishnan Nair, Kerala

Dr. H.S. Mehta
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Prof. Kangle
Dr. Raghunath Singh
Dr.Ayodhya Prasad Achal
Dr.Indramohan Jha (Sachchan)
Dr. V.V.Pillay
Dr. B. Umadathan
Govt. of India

2.4 CHARAKASAMHITA -PURVARDHA

(Sutrasthana, Nidanasthana, Vimanasthana, Sharirasthana and Indriyasthana)

**Theory- One Paper– 100 Marks
Lectures – 200 Hours**

Part A

- | | |
|------------------|----------|
| 1. Sutrasthana | 40 Marks |
| 2. Indriyasthana | 10 Marks |

Part B

- | | |
|------------------|----------|
| 1. Nidanasthana | 15 Marks |
| 2. Vimanasthana | 20 Marks |
| 3. Sharirasthana | 15 Marks |

Reference Books

1. Charakasamhita –Ayurveda Dipika commentary by Chakrapani.
2. Charakasamhita (Hindi Commentary): Vaidya Jayadev Vidyalankar or Vd. Atridev Vidyalankar or Prof. Gorakha Nath Chaturvedi & Kashinath Shastri or Dr. Brahmanand Tripathy or Dr. Ravi Dutta Tripathy
3. Charakasamhita (English Commentary): Dr. Ram Karan Sharma & Vd. Bhagwan Dash or Acharya Priyavrata Sharma.
4. Charakasamhita-Ayurveda Dipika Commentary-Hindi Translation by Dr. B L Gaur, published by Rashtriya Ayurved Vidyapeeth.

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2.1 DRAVYAGUNA VIJNAN

(PHARMACOLOGY & MATERIA MEDICA)

Lectures: 200 Hrs.

Practicals: 200 Hrs.

Total Marks -400

Theory Two Papers– 100 Marks Each

Practical/Viva voce – 200 Marks

Paper I

100 Marks

Part A

50 Marks

- 1- Dravyaguna Shastra Paribhasa- Lakshana of Sapta Padartha of Dravyaguna Vijnana viz Dravya- Rasa-Guna- Virya- Vipaka- Prabhava and Karma.
- 2- Dravya:
Etymological derivation, definition, panchabhoutikatwa.
Classification of Dravya according to Samhitas and Nighantus.
Taxonomical classification.
- 3- Guna:
Etymological derivation, definition and Classification of Guna.
Detailed knowledge of Gurvadi Guna & Paradi gunas.
- 4- Rasa:
Etymological derivation, definition, Meaning of "Rasa" in various contexts. Shad Rasas (Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik constitution of Rasas, Nirvrittivisheshakrama (manifestation in general and particular), Ritu and shad rasa Rasanurasayoh bheda (Difference between rasa and anurasa), Lakshana (characteristics),Guna and Karma of shad Rasas, Kopana and Shamana of Dosha and dushya by Shad rasas. Effects of excess usage of Rasa. Rasopalabdhi, Rasaskandha.
- 5- Vipaka:
Etymological derivation and definition, difference between Avasthapaka and Vipaka, Types of Vipaka, (Dvididha-Trividha,Panchavidha) Guna and karma of Vipaka.
Grades of Vipaka (taratamya), Vipakopalabdhi hetu (Factors to determineVipaka).
- 6- Veerya:
Etymological derivation, definition and Swarupa of Virya, Number of Virya.
(Dwividha & Ashtavidha), Panchabhauthikatva
Virya karmani (Effects of Virya), General principles in determination of virya along with exceptions.

7- Prabhava:

Definition, Effects of Prabhava.

8- Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength (balabal nirupana). Samanapratyayarabdha and Vichitrapratyayarabdha dravyas.

9- Karma:

Lakshana, swarupa and bheda of karma (Definition, nature and types of action).

Explanation of the following Karmas with examples:

- | | | |
|------------------|----------------|-----------------|
| 1. Deepana | 2. Pachana | 3. Samshodhana |
| 4. Samshamana | 5. Anulomana | 6. Sransana |
| 7. Bhedana | 8. Rechana | 9. Chhedana |
| 10. Lekhana | 11. Grahi | 12. Sthambhana |
| 13. Madakari | 14. Pramathi | 15. Abhishyandi |
| 16. Vyavayi | 17. Vikashi | 18. Rasayana |
| 19. Vajeeekarana | 20. Jeevaneeya | 21. Balya |
| 22. Brimhana | 23. Langhana | 24. Medhya |

10. Brief information on Karmas of dashemani gana of Charak Samhita.

11- Mishraka Gana:

11a)- Audbhida Gana (Vegetable origin) Brihatpanchamoola, Laghupanchamoola, Vallipanchamoola, Kantakapanchamoola, Trinapanchamoola, Madhyamapanchamoola, Jeevaneeya panchamoola, Panchapallava, Panchavalakala, Triphala, Trikatu, Trimada, Chaturusana, Panchakola, Shadusana, Chaturbeeja, Jeevaniya gana, Ashtavarga, Trijataka, Chaturajataka, Katuchaturjataka Panchatikta, Amlapanchaka, Chaturbhadr, Trikarshika, Swalpatriphala, Madhuratriphala, Mahavisha, Upavisha, Agrya aushadh varga- Knowledge of Agrayaushadha Varga with example.

11 b)- Jangama Gana (Animal origin)- Ksheerashtaka, Mutrashtaka, Pitta panchaka.

11 c)- Parthiva Gana (Mineral origin) - Lavana Panchaka, Kshara dvaya, Kshara Ashtaka.

12-Basis of nomenclature:

Basis of nomenclature of dravya, Basis and Derivation of synonyms.

13. Bheeshaja Pariksha vidhi (as described in Charaka samhita vimana sthana 8), Dravya Sangrahana (collection of dravya)- Ecology- Classification of desha (geographical area) and bhumi (soil), swarupa of sangrahaniya dravya of (Nature and quality of drug to be collected). Sangrahana vidhi (Method of collection) -Vegetable and Animal origin drugs according to part used. Period of collection according to virya, samrakshana vidhi (preservation of collected dravyas), bheshajagara (Storehouse), study on different prayojyanga (useful plant parts).

Part B**50 Marks****(i)****20 Marks**

14 a) Concept of dravya shodhana (purification of dravya).

14 b) Brief knowledge of Apamishran (adulterants)

14 c) Concept of Abhava pratinidhi dravya (substitutes)

15- Prashasta bhesaja (ideal drug), plant extracts. Concept of viruddha Dravya (incompatibility of the dravya).

16- Introduction to Nighantu Vigyan - Dhanwantari Nighantu, Bhavaprakashanighantu, Rajanighantu.

17- Brief knowledge of cultivation, conservation of medicinal plants and information about endangered species.

(II)**30 Marks**

18. - Introduction, Definition & scope of Pharmacology and Principles of general Pharmacology. Brief Knowledge about pharmacology of the following - Anaesthetics, CNS depressants, Sedatives, Hypnotics, Tranquilisers, Antipyretics, Analgesics, Antiepileptics, Antihypertensive, Antianginal, Antiplatelet, Hypolipidaemic, Haemopoetic, Coagulants, Bronchodilators, Aerosols/ Inhalants, Expectorants, Digestants, Carminatives, Antacids, Antiulcer, Laxatives, Antidiarrhoeals, Antiemetic, Hepatoprotective, Diuretic, Antidiuretic, Lithotriptic, Antiinflammatory, Hormonal therapy, Antiobesity, Antidiabetic, Antithyroid, Oxytocic. Galactagogues, Contraceptives, Styptics, Antihistamines, Antimicrobial, Antibiotics, Antimalarial, Amoebicidal, Antifilarial, Anthelmentic, Antifungal, Vitamins, Minerals, Water imbalance and IV fluids, Vaccines, antivenom, antirabies serum, Local anti septics, drugs in ophthalmic practice, Anti cancer drugs and immunomodulators.

Part A

1-Detailed Knowledge of Following Dravya –

1- Detailed knowledge of following drugs with respect to Basonym of drug, Main Synonyms, Regional Name, Botanical Name, Family, Classification of Dravya (Gana) as described in Charak and Sushrut, External morphology, Useful parts, Important phytoconstituents, Rasa panchaka, Action on Dosha, Dhatu, Mala, Prayogarha vyadhi (therapeutic indications), Amayikaprayoga and Matra (Therapeutic administration and Dose), Vishishta yoga (names of important formulations), Vishakta Lakshan (adverse effects), Chikitsopachara (remedial measures) and Shodhana (as required)

[Alphabetical order and Botanical names to all the drugs are to be added]

- | | | |
|---------------------|-------------------------|---------------------|
| 1. Ahiphena | 2. Agaruru | 3. Agnimantha |
| 4. Prishniparni | 5. Amalaki | 6. Aragvadha |
| 7. Apamarga | 8. Ardraka-Sunti | 9. Arjuna |
| 10. Arkadvaya | 11. Ashvagandha | 12. Pushkarmoola |
| 13. Asoka | 14. Ativisha | 15. Bakuchi |
| 16. Baladvayam. | 17. Bhallataka | 18. Bharangi |
| 22. Bhrungaraj | 23. Bibhitaka | 24. Bijak/ Vijaysar |
| 25. Bilva | 26. Brahmi | 27. Bruhati |
| 28. Chandanadvaya, | 29. Chitraka | 30. Dadima |
| 31. Rohitaka | 32. Mandukaparni. | 33. Devadaruru |
| 34. Dhataki | 35. Durva | 36. Eladvayam |
| 37. Eranda | 38. Gambhari | 39. Gokshura |
| 40. Guduchi | 41. Guggulu | 42. Haridradvaya |
| 43. Haritaki | 44. Hingu | 45. Jambu |
| 46. Jatamansi | 47. Jatiphal | 48. Jeeradvaya |
| 49. Jyotishmati | 50. Kalamegha | 51. Kampillaka |
| 52. Kanchanara | 53. Kantakari | 54. Kapikacchu |
| 55. Karkatakshringi | 56. Karpura | 57. Katuki |
| 58. Khadira | 59. Kiratatiktika | 60. Kumari |
| 61. Kumkum Kesara | 62. Kupilu | 63. Kutaja |
| 64. Lavanga | 65. Lodhra | 66. Madanaphala |
| 67. Manjishtha | 68. Maricha | 69. Musta |
| 70. Nagakeshara | 71. Nimba | 72. Nirgundi |
| 73. Palasha | 74. Parpata | 75. Pashanabheda |
| 76. Patala | 77. Pippali-Pippalimula | 78. Punarnava |
| 79. Rasna | 80. Rasona | 81. Saireyaka |
| 82. Kushta | 83. Yavani | 84. Shallaki |
| 85. Sarivadvaya | 86. Sarpagandha | 87. Shalaparni |
| 88. Shalmali | 89. Shankhapushpi | 90. Shatavari |
| 91. Shigru | 92. Shirisha | 93. Shyonaka |
| 94. Yastimadhu | 95. Talisa Patra | 96. Tila |
| 97. Trivrut | 98. Tulasi | 99. Tvak |
| 100. Ushira | 101. Vacha | 102. Varahi |
| 103. Varuna | 104. Vasa | 105. Vatsanabha |
| 106. Vidari | 107. Vidanga | |

Part B-

II- Brief Knowledge of following dravyas with Respect to Sanskrit Name, Botanical Name, Family, Habit (Samanya Swarupa), Parts Used and Indications.

- | | | |
|----------------------|----------------------|------------------|
| 1 Agastya | 2 Ajamoda | 3. Amra |
| 4. Amragandhiharidra | 5. Ankola | 6. Aparajita |
| 7. Amlavetasa | 8. Avartaki | 9. Ashvattha |
| 11. Asthishrunkhala | 12 Avartani | 13 Babbula |
| 14 Badara | 15 Bakula | 16. Bhumyamalki |
| 17. Bijapoor | 18. Bola | 19. Chandrashura |
| 20. Changeri | 21. Chavya | 22. Chakramarda |
| 23. Champaka | 24. Chirbilva | 25. Chopachini |
| 26. Dattura | 27, Darbha | 28. Dhanyaka |
| 29. Dhanvayasa | 30 Draksha | 31 Dronapushpi |
| 32 Gandhaprasarini | 33. Garjara | 34. Gojihva, |
| 35. Gorakshaganja | 36. Gunja | 37. Hinstra |
| 38.. Hrutpatri | 39. Hribera | 40. Indraravuni |
| 41 Ingudi | 42 . Irimeda | 43. Isvari |
| 44 . Japa | 45. Jati | 46. Jayapala |
| 47. Jeevanti | 48. Kadali, | 49.. Kadamba |
| 50. Kaidarya | 51. Kamala | 52. Kankola |
| 53.. Kakamachi | 54. Karanja | 55. Karira |
| 56. Karpasa | 57. Karavira | 58. Karavellaka |
| 59. Kasha | 60. Kasni | 61. Kataka |
| 62. Katphala | 63. Kasamarda | 64. Kebuka |
| 65. Kharjura | 66. Kitmari | 66. Koshataki |
| 67. Kokilaksha | 68. Kulatha | 69. Kumuda |
| 70. Kusmanda | 71. Saral | 72. Lajjalu |
| 73. Langali | 74. Latakaranja | 75. Latakasturi |
| 76. Madayantika | 77. Markandika | 78. Mahanimba |
| 79. Mashaparni | 80. Mayaphala | 81. Masha |
| 82. Matulunga | 83. Methika | 84. Meshashrungi |
| 85. Mudgaparni | 86. Mulaka | 87. Murva |
| 88. Nagabala | 89. Nala | 90. Narikela |
| 91. Nili | 92. Palandu | 93. Padmaka |
| 94. Parushaka | 95. Parasika Yavani | 96. Parijata |
| 97. Parisha | 98. Parnabija | 99. Parnayavani |
| 100. Patalagarudi | 101. Patha | 102. Patola |
| 103. Patranga | 104. Pilu | 105. Plaksha |
| 106. Vatada | 107. Priyala | 108. Priyangu |
| 109. Puga | 110. Ishvaku | 111. Putiha |
| 112. Putranjivaka | 113. Rajika/Sarshapa | 114. Saptachakra |

115. Sarja	116. Shala	117. Shatahwa
118. Shati	119. Sharapunkha	120. Shinsapa
121. Snuhi	122. Sringataka	123. Surana
124. Svarnakshiri	125. Tagara .	126. Tailaparni
127. Taruni	128. Tavakshira	129. Tugaraka
130. Teja Patra	131. Udumbara	132. Vamsha
133. Vata	134. Vrudhadaru	135. Vrukshamla
136. Akarkarabh	137. Ashvagol	138. Atasi
139. Danti	140. Saptaparna	141. Talmuli
142. Ikshu	143. Kusha	

III .-Introduction, Guna, Karma and Uses of following Jantava Dravya
(Drugs of Animal Origin).

- | | | |
|------------|--------------|----------------|
| 1. Kasturi | 2. Gorochana | 3. Mrigasringa |
|------------|--------------|----------------|

IV- Introductory Knowledge of Following Annapana Varga:

- | | | |
|----------------|---------------------|----------------------|
| 1. Jala Varga | 2. Dugdha Varga | 3. Madhu Varga |
| 4. Taila Varga | 5. Sukadhanya Varga | 6. Shamidhanya Varga |
| 7. Phala Varga | 8. Shaka Varga | 9. Mamsa Varga |
| 10. Aharayogi | | |

PRACTICALS

1. A. Study of Macroscopic, Microscopic characters and Demonstration of organoleptic characteristics and grahya-agrahyatva of following plants and their useful parts.(specify)

- (i) Kanda (stem) - Guduchi or Ashtishrinkhala
- (ii) Patra (leaves) - Vasa or Kumari
- (iii) Pushpa (flower and Parts of flower)- Dhataki or Japa
- (iv) Phala (fruit) – Maricha or Madanaphala or Vidanga
- (v) Beeja (seeds) – Eranda or Kapikacchhu
- (vi) Twak (bark) – Kutaja or Arjuna or Ashwattha
- (vii) Moola(Root)- Punarnava or Chitraka
- (viii) Nirryasa (exudate) – Guggulu or Mocharasa
- (ix) Jangama dravya - Madhu or Ghrita.

- B.records of Herbarium sheets of 50 medicinal plants.
(colour printout of 50 medicinal plant photo's)

Compulsory study tour other state/s for field knowledge and procurement of plant Species.

2.compilation work

PRACTICAL MARKS DIVISION

1	Herbarium	20 Marks
2	Practical record	20 Marks
3	Drug identification- spotting –Raw/crude drugs	30 marks
4	Plant identification spotting –fresh	30 marks
5	Practical	40 marks
6.	Viva-Voce	60 Marks
Total		200 marks

Reference Books

- | | | |
|---|---|--|
| 1. Abhinav Buti Darpan (Vol.1-2) | - | Vd. Roop Lal Vaishya |
| 2. Aushadna Vigyna Shastra | - | Acharya Pt. Vishvanatha Dwidevi |
| 3. Ayurvediya Aushadnkarma vigyana | - | Acharya V.J. Thakur |
| 4. Bedi Vanaspati Kosha | - | Prof. Ramesh Bedi |
| 5. Bhaishajyaguna Vigyana | - | Dr. Alakhnarayan Singh |
| 6. Bhav Prakash Nigantu (English) | - | Shreekanthamurti |
| 7. Bhav Prakash Nighantu | - | With Vd. Krishna Chandra
Chunekar commentary |
| 8. Bhrinad dravyagunadarsha | - | Mahendra Kumar Shastri |
| 9. Classical Uses of Medicinal Plants | - | Acharya Priyavrata Sharma |
| 10. Controversial Medicinal Plants | - | Vd. G. Bapa Lal |
| 11. Dalhana Ka Dravyaguna Shastra Ke
Kshetra Me Yogadana | - | Vd. Shiv Kumar Vyas |
| 12. Dravyaguna Kosha | - | Acharya Priyavrata Sharma |
| 13. Dravyaguna Sutram | - | Acharya Priyavrata Sharma |
| 14. Dravyaguna Vigyana | - | Dr. Gyanendra Pandey |
| 15. Dravyaguna Vigyana(Vol. 1-2) | - | Acharya Yadavji Tikram Ji |
| 16. Dravyaguna Vijyana | - | Dr. V.M. Gogate |
| 17. Dravyaguna Vigyana (Vol. 1-5) | - | Acharya Priyavrata Sharma |
| 18. Dravyaguna Shastrum | - | Vaidya G.A. Phadake |
| 19. Dravyaguna Vijyana | - | Dr. A.P. Deshpande |
| 20. Dravyagunavijnana basic Principles | - | Prof.D.S.Lucas |
| 21. Forgotten Healers (Indian Medicinal
Plants) | - | Dr. Prakash Pranjape |
| 22. Glossry of Vegetable Drugs in
Bhrittrayis | - | Thakur Balwant Singh & Vd.
Krishna Chandra Chunekar |
| 23. Introduction to Dravyaguna | - | Acharya Pr |

- | | | |
|--|---|--------------------------------|
| 24. Kriyatamka Aushadi Parichaya | - | Acharya Pt. Vishvanath Dwidevi |
| 25. Materia Medica | - | Acharya Ghosh |
| 26. Nighantu Adarsh (Vol. 1-2) | - | Vd. Bapa Lal |
| 27. Pharmacological basis of Medical Practice | - | Goodman & Gillman |
| 28. Pharmacology and Pharmacotherapeutics | - | Satoskar Bhandarkar & Ainapure |
| 29. Prayogatamaka Dravyaguna Vigyana | - | Dr. Maya Ram Uniyal |
| 30. Priya nighantu | - | Acharya Priyavrata Sharma |
| 31. Raspanchaka/Dravyaguna Siddhanta | - | Prof. Shivcharan Dhyani |
| 32. System of Plant Nomenclature in Ayurveda | - | Dr. Gyanendra Panday |
| 33. Text Book of Pharmacognosy | - | Trees & Valis |
| 34. Textbook of Dravyaguna | - | Dr.K.Nishteswar |
| 35. Unani Dravyaguna Vigyana | - | Hakim Daljeet Singh |
| 36. Useful parts of Charaka, Sushurut, and Vagbhata. | - | |
| 37. Uttarakand Ki Vanaspatiya | - | Dr. Gyanendra Pandey |
| 38. Vanoaushadi Darshika | - | Thakur Balwant Singh |
| 39. Vanoaushadi Nidarshika | - | Dr. Ram Sushil Singh |
| 40. Vedic Vanaspatiyan | - | Dr. Dinesh Chandra Sharma |

 *

2.3. Rasashastra Evam Bhaishajyakalpana

(IATROCHEMISTRY AND AYURVEDIC PHARMACEUTICS)

Theory -Two Papers

Total Marks- 200

Teaching hours-200

Practical :-

Total Marks-200

Teaching hours-200

Paper 1

100 Marks

Part A Rasashastra

50 Marks

1. Definition and etymology of Rasa, History of Rasashastra, Importance of Rasaushadhi, Concept of Rasa-Rasayana, Concept of Raseshwar Darshana. Concept of Rasashala and Rasamandap
2. Brief Description and Application of Technical terminologies (Paribhasha): Avapa, Nirvapa, Dhalana, Bhavana, Jarana, Murchana, Shodhana, Marana, Amrutikarana, Lohitakarana, Mruta Loha, Satwa Patana, Druti, Apunarbhava, Niruttha, Rekhapurna, Varitara.
3. Dravya Varga: Amlavarga, Panchamrittika, Panchagavya, Panchamrita, Ksharashtaka, Dravakagana, Mitra panchaka, Rakta varga, Lavanapanchaka.
4. Brief description of Yantras and their application Ulukhala Yantra, Khalwa Yantra, Kachhapa Yantra, Damaru Yantra - Vidhyadhara Yantra- Urdhwapatan, Addhapatan & Tiryakpatana Yantra, Jaranartha Tulayantra, Dolayantra, Patalayantra, Palika Yantra, Baluka Yantra, Bhudhara Yantra, Sthali Yantra, Swedana Yantra
5. Brief description & application of Musha (Crucible): Samanya Musha, Gostani musha, Vajra Musha, Maha musha, Yoga musha, Vrintaka Musha, Malla / Pakwa musha. Different types of crucibles e.g. Silica crucible, platinum crucible. Mudra and Sandhi Bandhana.
6. Brief description & applications of Chullika, Satwapatana Koshthi, Patala Kosthi, Gara Koshthi, Angarakoshthi and knowledge of various heating appliances viz. Gas stove, Hot plate, Heating mantle, Induction Stove, Hot Air Oven.
7. Concept, definition and types of Puta: Suryaputa, Chandraputa, Gomayaputa, Lawakaputa, Kukkutaputa, Kapotaputa, Varahaputa, Gajaputa, Mahaputa, Kumbhaputa, Valukaputa, Bhudharaputa, Applications of Electric muffle furnace and fuel (diesel) dependent furnace. Brief introduction to thermocouple and pyrometer.
8. Knowledge of Parada: Synonyms, Occurrence, natural and artificial sources of Parada, Hingulottha parada, Types of Parada, Parada Dosha: Naisargika, Yougika, Aupadhika (Kanchuka). Grahya-Agrahya Parada, Parada gati, Parada bandha, Shodhana of Parada. Parada sanskara and brief description of Ashtasamskara.
9. Concept of Murchhana and Jarana of Parada, Preparation of Kajjali, Classification of Rasaushadhi: Khalvi rasa e.g. Tribhuvana Keerti Rasa, Parpati Rasa- Rasa Parpati, Kupipakva Rasa- Rasa sindur, Pottali rasa - Hemagarbha pottali. Rasa sevana vidhi and pathya and apathya.
10. Brief introduction of quality control , standardization and GMP of Rasaoushadhies.

Part B

50 Marks

Occurrence, Synonyms, Minerological identification, Sources, Types, Grahya and Agrahyata, Shodhana, Marana and other processing techniques. Properties, dose, anupan and therapeutic uses, pathya – apathya and ashuddha, apakwa and avidhee sevanjanya dosha and its management, important formulations of the following:

1. **Maharasa** –Abhraka (Biotite Mica), Vaikrantha, Makshika (Iron Pyrite), Shilajatu, Sasyaka (Peacock ore), Chapala and R

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- Uparasa** – Gandhaka (Sulfur), Gairika (Red Ochre), Kasisa (Green Vitriol), Kankshi (Alum), Haratala (Orpiment), Manahshila (Realgar), Anjana and Kankustha
- Sadharana Rasa** – Kampillaka, Gauri pashana (Arsenic oxide), Navasadara (Ammonium chloride), Kaparda (Cowry), Agnijara, Giri Sindura (Red oxide of Hg), Hingula (Red Cinnabar) and Mriddara shringa (Litharge)
2. **Dhatu** -Swarna (Gold), Rajata (Silver), Tamra (Copper), Loha (Iron), Vanga (Tin), Naga (Lead), Yashada (Zinc), Kamsya (Bronze), Pittala (Brass), Vartaloha. Dhatu - graha sambandha.
 3. **Ratna** - Manikya (Ruby), Mukta (Pearl), Pravala (Coral), Tarkshya (Emerald), Pushparaga (Topaz), Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamome stone), Vaidurya (Cats eye). Ratnapariksha, Ratnadosha, Ratna-graha sambandha.
- Uparatna-** Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis lazuli), Perojaka (Turquoise), Sphatikamani (Quartz), Trinakanta, Palanka, Putika, Rudhir.
4. **Sudha varga** – Sudha (Lime stone), Shukti (Oyster Shell) , Shankh (Conch Shell), Mriga shringa (Stag horn), Khatika, Godanti (Gypsum) and Samudraphena (Cattle Fish bone), Kukkutanda twak (Hen’s Egg Shell).
 5. **Sikata varga** - Sikata (Silica), Dugdhapashana (Talc), Nagapashana / Jaharmohara (Serpentine), Badarshama (silicate of lime), Vyomashma (Sangeyashab - Jade), Kousheyashma (Asbestos) and Akika (Agate).
 6. **Kshara varga** - Sarja kshara (Sodium bicarbonate), Yava kshara, Tankana kshara (Borax), Surya Kshara (Potassium Nitrate).
 7. **Miscellaneous** - Mandura, Bola, Dam-ul Akhawayan (Raktabandhini), Kasturi, Bhoonag, Mayurpiccha, Sarjarasa, Madhoochishta.
 8. **Visha and Upavisha**-Introduction, collection and storage, classification, synonyms, shodhana, antidote, therapeutic and toxic doses, anupan, therapeutic uses, and formulations of following Visha and Upavisha-Vatsanabha, Kuchala, Jayapala, Dhatura, Bhanga, Bhallataka, Gunja, Arka, Snuhi. Langali, Karaveera, Ahiphena and Chitrakmool.
 9. **Aushadhi Yoga Gyanam- ingredients, manufacturing process, and bhesajprayogvidhi.** Arogya Vardhini Gutika, Kasturibhairava Rasa, Kumara Kalyana Rasa, Garbhapala Rasa, Chandraprabha Vati, Chandramrita Rasa, Pratapalankeshwara Rasa, Pravalapanchamrita Rasa, Anandbhairava Rasa, Yogendra Rasa, Laxmivilas Rasa, Vasantakusumakara, Vasantamalati Rasa, Brihat Vata Chintamani Rasa, Shankha vati, Shwaskuthara Rasa, Hinguleswara Rasa, Hemagarbhapottali, Hridyarnava Rasa, Swarnavanga, Makaradhwaja, Putapakwavaisham Jwarantaka Loha, Vatvidhvamsan Rasa, Kamadugha Rasa, Laghusutshekhar Rasa, Navayasa Loha, Saptamrita Loha, Tamra Parpati, Panchamrita Parpati, Sveta Parpati.
 10. **Introduction to pharamcovigilance and its status in India, with reference to Ayurvedic drugs.**
 - A) Necessary to know – From part A and B : S. No. 1 to 9
 - B) Desired to know – From part B : S. No. 10

Practical Rasashastra

Minimum Twenty five practicals to be performed

1. **Rasa [Parada]**
Samanya Shodhana of Parada
Kajjali
Mugdha rasa
2. **Maharasa varga**
Shodhana of Abhraka
Dhanyabhraka nirmana
Shodhana of Makshika
Shodhana of Gomutra Shilajatu
Shodhana of Sasyaka.
Shodhana of Gandhaka
Shodhana of Gairika
Shodhana of Kasisa
Shodhana of Kankshi
Shodhana of Haratala
Rasa manikya nirman
Shodana of Neelanjan
3. **Uparasa varga**
Shodhana of Hingula
Shodhana of Gouripashana
Shodhana of Mrudharashruna
Sodhana of Navasadar
Shodhana of Kapardika
Shodhana of Shankha
Shodhana of Shukti
Shodhana of Pravala mula
Shodhana of Godanti
4. **Sadharana rasa varga**
Samanya Shodhana of Lauha
Shodhana of Mandura
Samanya Shodhana of Tamra
Shodhana of Naga
Shodhana of Vanga
Shodhana of Yashada
5. **Sudha Varga**
Shodhana of Tankana
6. **Dhatu varga**
Preparation of Rasaparpati, Bola
Parpati and Swetaparpati
7. **Kshara Varga**
Shodhana of Vatsanabha, Bhallataka,
Kupilu, Dhattura beeja, Jayapala, Gunja,
Chitrakamoola.
8. **Parpati**
9. **Visha varga**

PRACTICAL FOR DEMONSTRATION / GROUP PRACTICALS

1. Hingulad rasakrishti (Hingulottha Parada)
2. Bhasma: 4 (One from each group)
 - i. Abhraka bhasma, Swarna Makshika bhasma, Tamra bhasma
 - ii. Vanga bhasma, Naga bhasma, Yashada bhasma
 - iii. Mandura bhasma, Kasisa bhasma
 - iv. Shankha bhasma, Kapardika bhasma, Godanti bhasma
3. Pishti : 1 Pravala pishti, Jaharmohara / Akika pishti,
Trina kantha mani pishti, Mukta pishti
4. Druti : 1 Gandhaka druti
5. Formulations 4 (one from each group)
 - i. Rasasindura, Swarna vanga, Sameer pannaga rasa
 - ii. Saptamruta lauha, Punarnava mandura, Navayasa lauha
 - iii. Agnitundi vati, Tribhuvana kirti rasa, Sootshekhara rasa,
Laghusutashekhara Rasa

- iv. Arogyavardhini vati, Laghumalinivasanta rasa, Hinguleshwar rasa, Anandbhairav rasa, Rajaprabartini vati

Bhaishajyakalpana

Paper II
Part A

100 Marks
50 Marks

1. **History and Chronological (kramika vikasa) development** of Bhaishajyakalpana. Concept of Aushadha and Bhesaja.
2. **Fundamental principles of Bhaishajya Kalpana.**
3. **Study of Ancient and Contemporary systems of 'Maana' (Units of measurement), Shushka -ardra –drava- dravya grahan niyam** (Rules of measures of dry, fresh, liquid drugs); Grahyagrahyatva, Nava Puran dravya grahan niyam.
4. Guidelines and Methods of collection, storage, preservation of Aushadhi dravya. Concept of Saviryatavadhi (shelf life) and stability in ancient and contemporary science.
5. **Bheshajprayogavidhi : Aushadha Matra, Anupana and sahapan and Aushadh sevan kaala. (Posology)**
6. **Panchavidha kashaya kalpana and Other kalpana :** Kashaya Yoni, Swarasa(ardraka swarasa, tulasi swarasa, kumara swarasa, vasa putapaka swarasa), Kalka(nimbi kalka, rasona kalka), Kwatha(punarnavasta kwatha, dashamula kwatha, patoladi kwatha, bruhath manjistadi kwatha, rasnadi kwatha, vasa guduchyadi kwatha, vidaryadi kwatha, rasna saphthaka kwatha), Hima(danyaka hima, sarivadi hima) and Phanta(panchakola phanta, yastimadhu phanta), Pramathya(mustadi pramathya), Aushadha siddha paniya, Tandulodaka, Laksha rasa, Mantha(karjuradi mantha), Panaka(chinchapa panaka, chandana panaka), Arka(yavani arka, gulab arka, mishreya arka) , Churna(sitophaladi churna, ajamodadi churna, hingwastaka churna, avipattikara churna, eladi churna, karpuradi churna, jatiphaladi churna, talisadi churna, triphala churna, trikatu churna, drakshadi churna, navayasa churna, narasimha churna, narayana churna, pushyanuga churna, pancha sama churna, bala chaturbhadraka churna, lavana bhaskara churna, vaishwanara churna, sudarshana churna), Rasakriya(darvi rasakriya, guduchi rasakriya, kutaja rasakriya), Ghana, Phanita, Avaleha(agasthya hareetaki avalehya, kantakari avalehya, kutajavalehya, ashwagandha avalehya, chyavanaprasha avalehya, vasavalehya, vyaghri hareetaki avalehya, kushmanda avalehya, drakshavalehya), Prasha, Gudapaka(manibhadra guda, shatavari guda), Sharkara, Syrups, Ksheerapaka(arjuna ksheerapaka, lashuna ksheerapaka), Satva(amrutha satwa), Guggulu kalpana(triphala guggulu, yogaraja guggulu, kanchnara guggulu, kaishora guggulu, gokshuradi guggulu, tarodashanga guggulu, mahayoga raja guggulu, laksha guggulu, vyoshadi guggulu, vatari guggulu, simhanada guggulu), Vati(sanjeeveni vati, Chandra prabha vati, agni tundi vati, gandhaka vati, gorochanadi vat, dugdha vati, prabhakara vati, marichadi vati, lavangadi vati, lashunadi vati, shankha vati), Guti(eladi gutika, chitrakadi gutika, kanka gutika, dhanvantari gutika, pranadi gutika, bilwadi gutika), I

phala varti, chandrodaya varti), Preparation of Tablets, pills, capsule and Suppositories. Masi kalpana(triphala masi, mayura picha masi), Lavana kalpana (narikela lavana, arka lavana), Kshara kalpana(apamarga kshara, snehi kshara) and Kshara sutra.

7. **Introduction and general knowledge of useful instruments/ Equipments** - Disintegrator, Mixer, Grinder, End Runner, Edge Runner, Sieve-Shaker, Granulator, Tableting machine, Pill making machines, coating and polishing pan, capsule filling machine, sieves and mesh.
8. **Sneha kalpana** : Sneha yoni, Types of Sneha, Sneha murchana vidhi, Sneha paka vidhi, patra paka, types and their use. Sneha siddhi lakshana, dose, Preparation and uses of Triphala Ghrita, Bramhighrita, amrutha prasha grutha, kalyanaka grutha, changeri grutha, jeevanthyadi grutha, dadimadya grutha, pancha tikta guggulu grutha, panchgavya grutha, phala grutha , Narayana taila, Anutaila, ksheerabala taila, gandharwa hastyadi taila, chandana bala lakshadi taila, jathyadi taila, panda taila, bala taila, brihat saindhavadi taila, maha narayana taila, bringaraja taila, maha visha garbha taila, shat bindu taila, sahacharadi taila).
9. **Sandhana Kalpana and its types:** Madya Kalpana, Asava(aravindasava, kumaryasa, knakasava, chandanasava, punarnasava, pippalyadyasava, rodrasava, sarivadyasava, vasakasava), Arishta(dashamularista, abhayarista, amrutharista, ashokarista, ashwagantharista, balarista, kutajarista, khadirarista, vidangarista, saraswatharista), Sura (Prasanna - Kadambari - Medaka - Jagala - Bakkasa), Maireya, Surasava, Shukta, Kanjika, Sauviraka, Tushodaka, Sidhu kalpana their methods of preparation, siddhi lakshana, properties, uses, doses. Takrarishta, Draksharishta, Ashokarishta, Dashamoolarishta, Kumaryasava, Chandanasava.
10. **Kritanna and Aushadhisiddha anna Kalpana:** Definition of Kritanna, Concept of Pathya and Apathya, Yavagu -types of yavagu, Manda, Peya, Vilepi, Anna, Bhakta, Odan, Yush -types, Krishara, Mansa rasa, Vesavara, Khad Kamblika, Raga, Shadava, Dadhi and Takra Varga - Takra, Udasvita, Katvar, Mathita, Chhachika.

PART B

1. **Bahyopacharartha kalpana (External Applications)-Lepa** -Types of Lepa, methods of preparation and mode of application. Udvartan and Avachurnan, Method of preparation of Siktha Taila, Malahara - Sarjarasa Malahara, Gandhak Malahara, Upanaha, Atasi upanaha, Shatadhouta and Sahastradhouta Ghrita. Brief introduction of semi solid dosage forms- Ointments, Creams, Emulsions, Gels, Lotions

2-Principles and precautions for preparation of formulations for following:

2.1 Netraupacharartha kalpana (Ophthalmic preparations) – Seka, Drava, Pindi, Anjana - Ashchyotana - Tarpana - Putapaka and Vidalaka, Methods of preparation of eye drops, eye ointments.

2.2 Nasyopachararth Kalpana - Classification of Nasya, Navana, Avapidana, Pradhaman, Marsha and Pratimarsha nasya.

2.3 Dhumapanarth kalpana - Classification of dhumpaana, Method of preparation of dhumvarti and its therapeutic uses. Dhupan: Vranadhupan, arshodhupan.

2.4 Mukhaprayogarth kalpana - Gandoosha - Kavala - Pratisaran, Tooth paste, Tooth powders and Mouth wash.

2.5 Basti kalpana- Classification, Method of preparation of Niruha and Anuvasana, Basti Therapeutic properties and uses of Basti.

- 3 Brief knowledge of Standardization of Ayurvedic formulations- Kasthanushadhi.
- 4 Brief introduction of Drug and Cosmetics Act 1940 and Rules 1945.
- 5 Concept of, Aushadhi Nirmanshala, with respect to Good Manufacturing Practices (GMP) in accordance to Schedule T.

Practical Bhaishajya Kalpana

50 Marks

Following practicals to be performed- (Minimum one from each category)

Method of preparation, therapeutic uses, dose and anupana of the following

1. Swarasa- Ardraka swarasa, Tulasi swarasa, Kumari Swarasa, Vasa putapaka swarasa
2. Kalka- Nimba kalka, Rasona kalka.
3. Kwatha- Punarnavasthaka kwatha, Rasna Saptaka kwatha, Kulattha kwath.
4. Hima- Dhanyaka hima, Sarivadi hima .
5. Phanta- Panchakola phanta, Yastimadhu Phanta.
6. Pramathya- Mustadi pramathya
7. Mantha- Kharjuradi mantha
8. Aushadh siddha paniya- Shadanga paniya
9. Laksha Rasa.
10. Arka - Yavani arka, Gulab arka, Misreya arka
11. Panaka- Chinchana panaka, Chandan panaka,
12. Sharkara- Banapsha sharkara, Nimbu sarkara.
13. Churna- Sitopaladi Churna, Hinguwashtaka Churna
14. Gutika- Chitrakadi Gutika, Sanjivani Vati .
15. Guggulu-Triphala Guggulu, Kaishora Guggulu.
16. Avaleha-ashwagandhavalehya, kushmandavalehya, drakshavalehya, Vasavaleha, Vyaghri Haritaki avaleha.
17. Rasa kriya - Darvi Rasakriya, Guduchi Ghana, Kutaja Ghana.
18. Khanda- Haridra khanda, Narikela khanda, Sowbhagya shunti paka
19. Satva- Amruta satva,
20. Varti- Phala varti, Chandrodaya varthi
21. Lavana- Arka lavana, Narikela lavana
22. Masi- Triphala masi, Mayurpiccha Masi
23. Ksheerapaka- Arjuna ksheerapaka, Rasona ksheerapaka, Shunthi Ksheerapaka
24. Kshara- Apamarga kshara, Snuhi kshara, Ksharasutra. .
25. Manda, Peya, Vilepi, Yavagu, Krishra, Vesavara
26. Yusha - Mudga yusha, Saptamushtika yusha, Kulattha yusha
27. Arishta- Kutajarishta, Takrarishta, amruthrista .
28. Asava - Kumaryasava, Kanakasava
29. Sukta kalpana- Kanji
30. Udaka- Tandulodaka
31. Upanaha- Atasi Upanaha

32. Siktha Taila Nirmaan
33. Malahara- Sarjarasa malahara, Gandaka malahara, Cream, Emulsion. Sneha Kalpana Sneha Murchhana - Ghrita Murchana, Taila Moorchhana, Ghrita kalpana: Jatyadi ghrita, Triphala ghrita, ksheerashatphala ghrita- Taila kalpana-Panchaguna taila,Arka taila, Bala taila,Jatyadi taila
35. Taila patana- Bhallataka taila patana, Jayapala taila patana
36. Shodhana- Guggulu, Hingu.

II. Visit of minimum three GMP approved Ayurvedic manufacturing units.

Distribution of Practical Marks : Total 200 Marks

Rasashastra -100

- | | |
|----------------|----------|
| 1. Record Book | 10 Marks |
| 2. Experiment | 30 Marks |
| 3. Spotting | 20 Marks |
| 4. Viva-voce | 40 Marks |

Bhaishajyakalpana - 100

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|----------------|----------|
| 1. Record Book | 10 Marks |
| 2. Experiment | 30 Marks |
| 3. Spotting | 20 Marks |
| 4. Viva-voce | 40 Marks |

Reference Books

- | | |
|---|------------------------------|
| 1. Adyatan Rasa Shastra | R.K. Goyal |
| 2. Abhinav Rasa Shastra | Vaidya Somadev Sharma |
| 3. Asava Arishta Vigyanam | Dr. Pakshdhar Jha |
| 4. Ayurvediya Rasa Shastra (Sachitra) | Chandrabhusan Jha |
| 5. Ayurvediya Rasa Shastra | Badrinarayan Pandey |
| 6. Rasa Bhaishajya Paribhasa | Sureshananda Thapaliyal |
| 7. Ayurvediya Rasa Shastra | Prof. Siddhi Nandan Mishra |
| 8. Ayurved Prakash | Vaidya Gujrat Mishra |
| 9. Drugs and Cosmetic Act - 1940 | |
| 10. Paka Darpana | Dr. Indradev Tripathi |
| 11. The Paka-darpana of King Nala | Dr. Madhulika critical study |
| 12. Parada Vigyaniam | Vasudev M. Dwivedi |
| 13. Pratyaksha Aushadh Nirmanam | Acharya VishwanathDwivedi |
| 14. Bhaishjyakalpana Vigyanam | Dr. Agnihotri |
| 15. Rasa Tarangini | Sadanand Sharma |
| 16. Rasa Darpan | Prof. Bhajan Das Swami |
| 17. Rasa Bindu | Dr. Sanjay Sharma |
| 20. Rasa Bhaishajya Kalpana Vigyan Vaidya | Santosh Kumar Khandal |
| 21. Rasa Mitra | Dr. Tryambak Nath Sharma |
| 22. Rasa Ratna Samuchchaya (Hindi) | Dattatreya / |
| 23. Rasaratna samuchchaya- | Ambikadatta |

- | | |
|---|---------------------------------------|
| 24. Rasaratna samuchchaya - | Damodar Joshi |
| 25. Rasa Shastra Prayogiki Srivastava, | Yadav and Prof. Ramesh Saxena |
| 26. Rasamritam | Vaidya Yadavji Tirkramji Acharya |
| 25. Rasayan Sara | Vaidya Shyam Sunderacharya |
| | Vaishya |
| 26. Rasendra Sampradaya | Vaidya Hajari Lal Sukul |
| 27. Rasendra Sara Sangraha | Vaidya Gopal Krishna |
| 29. Vaidyak Paribhasha Pradeep (Hindi Translation) | Dr. Indradev Tripathi |
| 30. Sharangadhara Samhita | Dr. Radhakrishna Parashar |
| 31. Bharatiya Bhaishajya Kalpana Vigyana | Gananath Vishwanath Dwivedi |
| 32. Bhaishajya Kalpana Vijnanam | Dr. K Ramachandra Reddy |
| 33. Rasa Shastra (English) | Prof. Damodar Joshi |
| 34. Rasa Ratna Samuchchaya (English) | Prof. Damodar Joshi |
| 35. Rasendra Chintamani (Hindi) | Prof. Siddhinandan Mishra |
| 36. Ayurvedic formulary of India | |
| 38. Ayurvedic Pharmacopiea of India , CCRAS | |
| 39. Bhaishjya Kalpana Vigyan | Siddhi Nandan Mishra |
| 40. Textbook of Rasasashtra | Dr. K Ramachandra Reddy. |
| 41. Ashadhyoga Vigyanam | Dr. K. Ramachandra reddy |
| 42. Vaidyaka Paribhasha Pradipa (English Translation) | Dr. K. Ramachndra Reddy & |
| | Dr. P. Suresh |
| 43. Relevant parts of Brihatrayee | |
| 44. Text book of Bhaishjya Kalpana - | Dr Shobha G Hiremath |
| 45. Text Book of Rasa Shastra | Dr P H C Murthy |
| 46. Rasa Chandashu | Prof S S Savirkar (CCRAS Publication) |
| 47 .Bhaishjya Ratnawali | Prof S N Mishra |
| 48 Yoga Ratnakar | |

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**CENTRAL COUNCIL OF INDIAN MEDICINE
NEW DELHI
SYLLABUS OF AYURVEDACHARYA (BAMS) 3rd Year**

INDEX

3RD PROFESSIONAL

3.1. ROG-NIDAN	02-06
3.2. SWASTHAVRITTA	07-13
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3.1 ROGA NIDANA

Theory Two Papers – 100 Marks Each
Practical/Viva voce – 100 Marks

PAPER -1

100 Marks

Part A

50 Marks

I. Dosha Dushyadi Vigyana

1. Definition and importance of Roganidana.
2. Samanya Nidana and Samanya Lakshana of Dosha Vriddhi, Kshaya and Prakopa.
3. Dosha Dhatu Ashraya Ashrayi Bhava.
4. Dhatu Kshaya Vriddhi Lakshana
6. Mala Kshaya Vriddhi Lakshana
7. Hetu, Bheda and Lakshana of Agni Dushti.
8. Definitions and Samanya Lakshana of Ama.
9. Sama and nirama Dosha, Dushya Lakshana.
10. Dosha Paka and Dhatu Paka Lakshana.
11. Concept, classification, diagnosis and general complications of Avarana.
12. Doshagati and Rogmarga
13. Detailed study of Srotomoola and Srotodushti Samanya and Vishishta Hetu Lakshana of all Srotas. Differences between Sroto Dushti and Kha Vaigunya.

II. VyadhiVigyana

1. Definition, synonyms and classification of Vyadhi.
2. Criteria for nomenclature of Diseases in Ayurveda (Vyadhinamakarana).
3. Bija, Bija Bhaga and Bija Bhaga Avayava Dushti.
4. Basic knowledge of Hereditary, Congenital, Acquired, Multifactorial, Traumatic and Environmental disorders.
5. Introduction to ICD Classification of Diseases of WHO and DSM classification.
6. Samanyaja and Nanatmajavikara. NidanarthakaraVyadhi, Hetu Sankara, Lingasankara, Vyadhisankara, Vyadhi Awastha.
7. Dhatu, Updhatu, Mala and Indriya Pradoshaj Vikara.
8. Concept of AshtaMahagada .
9. Introduction to Ashta Nindita.
10. Definition and classification of Vyadhikshamatva.
11. Ojas – types of Ojo Dushti- Visrimsa- Vyapad & Kshaya & It's Diseases.

III. Basic Pathology

1. Introduction to pathology and its sub-divisions.
2. Introduction to Cell Injury and Cellular adaptations.
3. Definition and brief description of inflammation – Healing/repair.
4. Definition and brief description of edema – shock – hemorrhage, Thrombosis , embolism, Ischemia and Infarction.
5. Types of Immunity – different types of immune responses in the body – Basic knowledge of auto immune diseases, Acquired immune deficiency disease and hypersensitivity.
6. Nomenclature and classification of tumors - difference between benign and malignant tumors.
7. Introduction to Nutritional disorders – disorders of macro and micro nutrients.
8. Introduction to infections.
9. Introduction and classification of microorganisms such as virus- bacteria-fungus.

Part B**50 Marks****IV. Nidana PanchakaVigyana**

1. Difference between Roga and Rogi Pariksha.
2. Importance of Nidan Panchaka.
3. Hetu - Definition, Synonyms and Classification.
4. Purva Rupa – Definition, Synonyms, Samanya and Vishistha Purvarupa.
5. Rupa - Definition, Synonyms, Samanya and Pratyatma Lakshana. Difference between Vyadhi and Lakshana.
6. Upashaya / Anupashaya– Definition, Types and its importance in diagnosis.
7. Samprapti – Definition, Synonyms and Type and Samprapti Ghataka.
8. Shat Kriyakaala. Relationship between NidanaPanchaka and Shat Kriyakaala.
9. Upadrava and Udarka.
10. ArishtaVigyan – Definition, Types and its importance.
11. Sadhyasadhyatwa – Types, their parameters and importance.
12. General diagnostic principles of AnuktaVyadhi (Ch. Vi. 4).

V ParikshaVigyana

1. Importance and knowledge of Aptopadeshadi & Darshanadi Trividha, Chaturvidha, and Shadvidha Pariksha.
2. Importance and Knowledge of Ashtasthana Pariksha.
3. Importance and Knowledge of Karanadi Dashavidha Parikshya Bhava.
4. Importance and Knowledge of DashavidhaPariksha.
5. Basic knowledge of ECG,USG, X Ray,CT Scan,MRI.

Paper II**100 Marks****Part A****50 Marks**

Systematic study of Nidana Panchaka of following diseases (Including Upadrava, Arishta and Sadhyasadhyata).

I. Diseases of Rasavaha Srotas

1(a). Jwara (Jwarabheda- Ama, Pachyamana and Nirama Jwara, Agantukajwara, Punaravartaka Jwara, Vishama Jwara, Dhatugata Jwara, Charakokta Sannipata Jwara.

1(b). General mechanism of Fever, Introduction to the Aetiopathogenesis of Malaria, Typhoid, Dengue fever, influenza and Chikungunya.

2(a) Pandu, Amavata, Hridroga, Shotha.

2(b) Introduction to Anaemia & its Classification, Rheumatic fever, Rheumatoid Arthritis, Hypertension, Angina, Ischaemic Heart Disease, Myocardial Infarction and CCF.

II. Diseases of RaktavahaSrotas

1.Kamala - Raktapitta - Vatarakta – Kroshtuksheersha - Shitapitta – Maha Kushta – Visarpa – Shwitra and Introduction to Kshudra Kushta.

2. Introduction to Hepatomegaly, Splenomegaly, Leukaemia, Thalessemia, Sickle cell Anaemia.

3. Introduction to Urticaria,Psoriasis, Eczema, Pemphigus.

III. Diseases of Mamsavahasrotas

(a) Galganda

(b) Introduction to Thyroid disorders

IV. Diseases of Medovahasrotas

1. Sthoulya - Karshya – Prameha.

2. Introduction to Obesity and Diabetes Mellitus.

V. Diseases of Asthi - Majjavahasrotas

1. Vatavyadhi - Akshepaka - Apatanaka - Ardita - Pakshaghata – Gridhrasi –Vishwachi, Avabahuka, - Manyasthambha ,Katigraha,Pangutwa

2. Sandhigatavata, AsthiMajjagata vata.
3. Introduction to Osteo- Arthritis, Osteoporosis.
4. Introduction to Parkinson's disease, Stroke, Lumbago- Sciatica syndrome, Bell's Palsy, Cervical- Lumber & Ankylosing Spondylitis.

VI. Diseases of Shukravaha Srotas

1. Introduction to Klaibya and Vandhyatva.
2. Introduction to male and female infertility.

Part B

50 Marks

VII. Diseases of Pranavahasrotas

- 1(a). Kasa - Shwasa - Hikka – Urahkshata – Shosha – Rajayakshma.
- 1(b). Introduction to the aetiopathogenesis of Pneumonia, Pleural effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.

VIII. Diseases of Annavaaha- PureeshavahaSrotas

1. Agnimandya - Ajirna - Aruchi- Chhardi - Amlapitta- Shoola – Parinama Shoola – AnnadravaShoola- Atisara – Pravahika - Grahani –Gulma- Udara Roga.
2. Introduction to Anaha, Adhmana, Atopa,Visuchika Alasaka, Vilambika.
3. Introduction to Peptic Ulcer, Irritable Bowel Syndrome (IBS) Diarrhoea, Dysentery, Constipation, Inflammatory Bowel Diseases.

IX. Diseases of Udakavaha Srotas

- 1(a) Introduction to Trishna, Daha.
- 1(b) Introduction to water and electrolyte imbalance disorders.

X. Diseases of Mutravahasrotas

- 1(a) Mutrakrichha – Mutraghata.
- 1(b) Introduction to Urinary Tract Infection, Nephropathies.

XI. Diseases of Swedavahasrotas

- 1(a) Introduction to Khalitya, Palitya.

XII. Diseases of ManovahaSrotas

- 1(a) Apasmara, Unmada, Atatwabhinivesha-Vishada, Anidra, Mada, Murchha, Sanyasa.
- 1(b) Introduction to Epilepsy Depression, Anxiety neurosis.

XIII. UpasargajanyaVyadhi (Communicable diseases)

- 1(a) Romantika – Masurika – Upadamsha – Phiranga.
- 1(b) Introduction to Measels, Chickenpox, Leprosy, Tuberculosis and AIDS.

XIV. KrimiVigyana

- 1) Definition, classification of Krimi and features of Krimiroga,
- 2) Snayuka, Shleepada.
- 3) Introduction of Filariasis and classification of common parasites.

PRACTICAL

(100 Marks)

i Fundamental Principles of Laboratory Tests

Introduction to laboratory, Sterilization, glass wares, solutions reagents and safety procedures, Disposal of biomedical wastes.

ii Haematology

- 1 Haemoglobin estimation.
- 2 Blood cells counting - WBC, RBC, platelets.
- 3 Hematocrit /Packed cell volume (PCV).
- 4 Erythrocyte indices - MCV, MCH, MCHC.
- 5 Peripheral blood smear, staining technique and differential leucocyte count.
- 6 Peripheral blood film examination in Anemia, Leukemia, Malaria, Filaria (Demonstration).
- 7 ESR.

8 Screening test for bleeding disorders- bleeding time (BT). Clotting I,time (CT),Demonstration of Prothrombin time (PT).

9 Blood grouping - ABO system, Rh typing (Rhesus system).

iii Urine Examination

1. Ayurveda anusara mutrapariksha.
2. Physical Examination - Volume, Reaction (Ph) & Specific Gravity.
3. Chemical Examination for - Proteins, Glucose, Phosphate, Ketone, Bile salts, Bile pigment.
4. Dipstick examination
5. Demonstration of Microscopic Examination.

iv Stool Examination

- 1 Ayurveda anusara purishapariksha.
- 2 Physical examination, Sama-Nirama Pariksha.
- 3 Microscopic examination of ova & cyst (Demonstration)
- 4 Occult Blood Test.

v Demonstration of Sputum Examination

- 1 Ayurveda anusara sthivanapariksha.
- 2 Physical, Chemical and Microscopic Examination of the sputum.
- 3 Sample collection and Demonstration of AFB.

vi Demonstration of Semen examination

- 1 Ayurveda anusara Retaspariksha.
- 2 Semen examination.

vii. Biochemical Examination – (Demonstration)

Blood Glucose, Serum Bilirubin, Blood Urea, Lipid Profile, Serum Creatinine, Serum Uric acid etc.

viii.Demonstration of different staining techniques in microbiology.

ix. Demonstration of Sero-immunological Investigations: RA and Widal.

x. Laboratory record – maintenance of laboratory record book.

Bed side Practical (Clinical Methods)

1. Introduction and demonstration of clinical methods (General and Systemic Examination).
2. Practical demonstration of examination of Roga based on Pancha Nidana.
3. Demonstration of instruments used for clinical examination.
4. Practical records of clinical examination of at least 20 long cases in I.P.D including thurabalapramana pareeksha.
5. Practical records of clinical examination of at least 20 short Cases based on Ashta vidha pariksha inO.P.D.
6. Demonstration of ECG, USG and Radio imaging techniques.

Distribution of Marks for final Practical Examination

1. Daily Record -10 Marks
2. Identification of Instruments -10 Marks
3. Laboratory Experiments -20 Marks
4. Short Case -10 Marks
5. Long Case -20 Marks
6. Viva - Voce -30 Marks

Total 100 Marks

Reference Books

1. Madhava Nidana (Madhukosha Pt. Yadunandan Upadhyay Commentary) Part 1 – 2
2. Doshakaranatwa Mimamsa Acharya P.V. Sharma
3. Nadi Darshan Vd. Tara Shankar Mishra
4. Nadi Vigyana Vidyotini Hindi Tika

5. Nadi Vigyan Shri Satya Dev Vashisht
6. Nadi Vigyan Gangadhar Tika
7. Rogi Pariksha vidhi Acharya Priyavrata Sharma
8. Ayurvediya Roga Vargikaran Vd. Ramanath Dwivedi & Vd. Gurdeep Singh.
9. Ayurvediya Nidan Evum Chikitsa Ke Prof. Ram Harsh Singh Siddhanta.
10. Relevant portions of Charak Samhita, Sushrut Samhita and Vagbhata.
11. Text Book of Pathology William Boyds.
12. Text Book of Pathology Harsh Mohan.
13. Text Book of Pathology Dey and Dey.
14. Text Book of Parasitology Ramnik Sood.
15. Clinical Pathology and Bacteriology S.P. Gupta.
16. Clinical methods in Ayurveda K. R. S. Murthy.
17. Parameswarappa's Ayurvediya Vikriti Vigyan and Roga Vikriti Vigyan. Dr. P.S. Byadgi.
18. Oxford Handbook of Clinical Examination Oxford Handbooks and Practical Skills.
19. Advanced Clinical Evaluation System for Practical Assessment of Clinical Examination Skills.
20. Symptoms & Signs in Clinical Medicine Chamberlains.
21. Clinical Methods Hutchison's.
22. Bedside Clinics in Medicine Part- I & II Kundu.
23. Common Medical Symptoms Mehta.
24. Advances in Pathology & Lab Med- Weimstean, Gralem, Anderson, Cortan, Wick, Zumwelt.
25. Clinical Laboratory medicine Edited by Kenneth D Mc. Chately.
26. General Pathology Walter & Israel Churchill Living stone.
27. A Comprehensive Dictionary of Pathology Chris Newann.
28. Practical Pathology Dr. K. Uma Chaturvedi.
29. Clinical examination Douglas/Macleod's.
30. Pathology Practical book for Harsh Mohan Undergraduates.
31. Medical Laboratory Technology R. Sood.
32. Clinical Diagnosis and Management by Todd, Sanford and Davidson Laboratory methods
33. Clinical Hematology In Medical Practice Degruchy's.
34. Robbins Basic Pathology Kumar, Abbas, Fausto at al.

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3.2 SWASTHAVRITTA

**Theory- Two papers- 100 marks each
Practical Viva voce -100 marks**

Paper-I

PART A- (VAIYAKTIKA SWASTHAVRITTA)

50 marks

Introduction

Definition of swastha & swasthya and swasthavritta. Arogya lakshana, swasthavritta prayojnam, WHO definition of health. Dimensions of health-Physical,Mental,Social, Concept of well being- objective, subjective, standard of living, quality of life.

Dinacharya

1. Definition of Dinacharya,
- ii. Aims and importance of dinacharya.
- iii. Brahma Muhurta evam Utthana
- iv. Usha Jalapana
- v. Sharirachinta
- vi. Malatyaga
- vii. Mukha prakshalana
- viii. Dantadhavana and preparation of Ayurvedic tooth powder and paste
- x. Jihvanirlekhanavidhi
- xi. Anjana
- xii. Pratimarsha Nasya
- xiii. Gandusha and Kavala
- xiv. Tambulasevana
- xv. Dhoomapana
- xvi. Abhyanga
- xvii. Udvartana
- xviii. Utsadana
- xix. Vyayama
- xx. Chankramana
- xxi. Snana
- xxii. Anulepana
- xxiii. Vastradharana
- xxiv. Dandadharana,
- xxv. Padatradharana
- xxvi. Chatradharana
- xxvii. Ushnishadharana
- xxviii. Ratnabharanadharana
- xxix. Madhyahna charya
- xxx. Cosmetic effect of Dinacharya procedures

Rathricharya

1. Sandhya charya,
2. Rathri bhojana vidhi,
3. Shayanavidhi according to Bhavamishra.

Ritucharya:

1. Importance of ritucharya,
2. Ritu as per different acharyas

3. Adana kala & visarga kala
4. Sanchaya, Prakopa-Prashamana of Dosha and their Utpatti in Ritu
5. Doshashodhana in Ritu sandhi
6. Relation of Agni bala and Ritu
7. Pathya and Apathya - Ahara and Vihara in different ritus
8. a) Ritusandhi
b) Yamadamsthra
c) Rituharitaki
d) Ritu viparyaya

Sadvritta

Description of Sadvritta and Achara Rasayana – their role in Prevention of psycho-somatic disorders

Trayopastambha

i) Ahara Nirukti, Swarupa, Pramukhatva, Ahara dravya Vargikaranam, Aharavidhividhana, Dwadashashana pravicharana, Ashtaharividhivisheshayatanani, Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana, Aharadushparinama, tajjanya vyadhaya, Santarpanajanya evam Apatarpanjanya vyadhi, Viruddhahara and its effects, Shadrasabhojanasya mahatwam, Dietetic standards.

Proximate principles of Food, Nutritional requirements. Sources and deficiency diseases of Protein, Carbohydrate, Fat, Vitamins and Minerals.

Concept of balanced diet in Ayurveda, Nitya sevaneeya dravya, Balance diet for different sections of people in the society. Social aspects of nutrition.

Aharavarga - Dhanya varga (Cereals and millets), Shaka and Harita varga (Leafy and Non leafy vegetables), Kanda varga (roots and tubers), Phala varga (Fruits), Taila varga (Fats and Oils), Ikshu varga & Madhya varga (Beverages), Dugdha varga (Milk and Milk products), Masala and vyanjana dravyas (Spices & Condiments). Kritanna varga (Prepared Food), Mamsa varga (Meat types).

Food hygiene, Milk hygiene, Milk composition, Source of infection (for Milk), Milk borne diseases, Clean and Safe milk, Pasteurization of milk.

Meat hygiene, Meat inspection, Slaughter house, Freshness of fish and egg. Fruits and Vegetables hygiene

Sanitation of eating places, Preservation of food, Food handlers, Food borne diseases, Food fortification and adulteration, Food toxicants, Properties of Vegetarian and Non-vegetarian diet, Effects of spices and condiments,

Consumption of Alcohol and its effects on personal and social health.

Ayurvedic diet in life style disorders-Diabetes, Hypertension, Obesity and Coronary heart Disease.

Nirukti, paribhasha, prabheda and udaharana of Rasayana for Swastha.

ii) Nidra- Nirukti and Utpatti, Types, Nidra – Swasthya sambandha, Properties of Yukta Nidra, Effects of Ratri Jagarana, Diwaswapna, Anidra, Atinadra, Ahara and Vihara causing disturbed sleep, Ahara and Vihara Causing sound sleep.

Duration of sleep according to age, Sleep in healthy and diseased persons.

iii) Brahmacharya – Brahmacharya vyakhya and Abrahmacharya vyakhya, Importance of Bharmacharya and Abrahmacharya, Vyavaya sambandhi niyama, Effects of Ativyavaya. Methods of Virya Raksha, Surataspriha (Libido) through Vajikarana, Viryanasa phala.

Roganutpadaniya- Concept of Vega- Adharaniya Vega and Dharaneeya Vega, Diseases due to vegadharana and their chikitsa, Upavasa.

Menstrual hygiene.

Topic of the syllabus

Yoga shabda utpatti, definitions, Different schools of Yoga – Rajayoga, Hathayoga, Mantrayoga, Layayoga, Jnanayoga, Karmayoga, Bhaktiyoga.

Yoga prayojana

Ayurveda yoga sambandha, swasthya rakshane yogasya mahatvam, Panchakosha Theory

Yogabhyasa pratibhandhaka & siddhikara bhavas as per Hathayoga.

Astanga yoga – Yama, Niyama

Asana and its importance

Standing Postures

Ardhakatichakrasana, Padahastasana, Ardhashakrasana, trikonasana.

Sitting postures

Swasthika, Gomuka, Padmasana, Vajrasana, Bhadrasana, shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, ardhmatsyendrasana, Siddhasana.

Supine Postures

Pavanamuktasana, sarvangasana, Matsyasana, Halasana, Chakrasana, Shavasana.

Prone postures

Bhujangasana, Shalabhasana, Dhanurasana, Makarasana.

Suryanamaskara – technique and procedure.

Pranayama

Benefits, Nadishudhi Pranayama, time of practice, avara-pravara-madhyama lakshana, yukta-ayukta lakshana

Kumbhakabheda – suryabhedana, ujjayi, sheetali, Sitkari, Bhastrika, Bhramari Murcha, Plavini.

Mitahara and Pathyapathyani during Yogabhyasa.

Shatkarma

Dhauti, Basti, Neti, Trataka, Nauli, Kapalabhati

Nadishudhilakshana, Malashodhaka Pranayama.

Bandhas and Mudras

Shad chakras, Ida-pingala-sushumna nadis.

Pratyahara, Dharana, Dhyana, Samadhi

Yoga in Ayurveda. Moksha and Muktatma lakshana, upaya, Naishtiki chikitsa, Satyabudhi, Tatvasmriti, Ashta aishwarya, Ashta sidhis.

Nisargopachara (Prakritika chikitsa)

Definition and history, Aims and objectives

Theories as per Western school of Naturopathy

Indian school – Panchabhutopasana

Relation of Ayurveda and Naturopathy

Importance of Naturopathy in present era.

Jalachikitsa – Hot water treatment, Cold water treatment, foot and Hand bath, Spinal bath, hip bath, abdominal wet pack, Steam bath, enema and whirl pool bath.

Mrittika chikitsa (Mud therapy), Types of soil, doctrine of mud selection, mud bath.

Suryakirana sevana (sun bath - heliotherapy)

Mardana (Massage) – different methods and effects.

Diet types – Soothing, Eliminative, Constructive

Positive and negative diet

Acidic and alkaline diet

Upavasa chikitsa – Importance, types, therapeutic effects of fasting.

Visrama chikitsa upayoga

PAPER II – SAMAJIKA SWASTHAVRITTA

Janapadodhwamsa

Causes, Manifestation and control measures, importance of Panchakarma and Rasayana.

Vayu (Air)

Vayu guna according to sushruta samhita, Properties of Vayu as per different directions, Vayu shudhi prakara – Ayurvedic aspect. Composition of air.

Air of occupied room, Discomfort and comfortable zone, Air movement,

Air pollution – health and social aspects, Prevention and control of air pollution , ventilation and its types.

Mountain air & High altitude – Health problems

Jala (Ayurvedic and modern aspects)

Importance of water , safe and wholesome water, water requirements, properties, types and sources of water, impurities of water and health hazards, Methods of water purification.

Hardness of Water, Examination, Tests and analysis of water.

Rain water harvesting and water recycling

Bhumi tatha nivasa sthana;

Types of soil, soil & health, Land pollution, Bhumi shodhana, Nivasa yogya bhoomi, Social goals of housing, Housing standards, Mahanasa (Kitchen) standards, Rural housing, Housing and health overcrowding.

Prakasha

Requirement of good lighting, natural lighting, artificial lighting, biological effects of lighting.

Dhwani pradooshana - Noise, Sources, effects, & control

Vikirana-Radiation (sources, effects and control)

Apadravya Nirmulana (Disposal of solid waste):-

Different types of solid waste

Storage and collection of refuse

Methods of disposal of solid waste (Rural & urban)

Bio-medical waste management

Malanishkasana Vyavastha (Excreta Disposal)

Unsewered area, Sewered area

Latrines for camps, fairs and festivals

Disposal of dead body – Burial, Burning, Electric cremation etc.

Meteorology (Ritu evam Vatavarana jnanam)

Disaster management

Occupational Health

Occupational Hazards, Occupational Disease, Prevention of Occupational Diseases Health & precautionary measures, ESI, Indian factories Act, offensive Trades- Effects on health and precautionary measures .

School health services

Health problem of school children, aspects of school health service, duties of school medical officers, Maintenance of healthy environment

Epidemiology

Concept of Epidemiology, Dynamics of disease transmission, concept of diseases, concept of causation, Epidemiological triad, natural history of disease, concept of control, concept of prevention, Risks factor, modes of intervention, incidence and prevalence. Susceptible host, host defenses, Immunizing Agents, Disease prevention and control, disinfection – definition, types, Ayurvedic concept of Vyadhikshamatva and sankramaka rogas.

Epidemiology of communicable Diseases

Chicken Pox, Measles, Diphtheria, pertussis, mumps, tuberculosis, SARS, Influenza, Pneumonia, Cholera, polio, Viral Hepatitis , Typhoid, Leptospirosis, Dengue Fever, Chikungunia, Malaria, Filariasis , Leprosy, Rabies , Tetanus, Emerging and re-emerging diseases

Kuprasangaja vyadhi (STDs)

AIDS, Syphilis, Gonorrhoea, Chanchroid,

Non-communicable disease epidemiology

Diabetes, obesity, Hypertension, coronary Heart Diseases, Rheumatic Heart Disease, Cancer

Chikitsalaya Bhavana (Hospital Building)

Topic of the syllabus

Prathamika swasthya samrakshana(Primary Health Care)

Definition, principle, elements,levels of health care.

Structure at village, sub centre, PHC,CHC, Rural hospital levels.

Health insurance, Private agencies, Voluntary health agencies, NGOs and AYUSH sector.

Role of Ayurveda in Primary Health Care.

Parivara kalyana Yojana (Family welfare Programmes)– Demography, demographic cycle, life expectancy, family planning, methods of family planning.

Matru sishu kalyana Yojana – RCH programme.

Ante natal, intra natal, post natal, neo natal care. Child health problems and indicators of RCH care.

Preventive geriatrics

Viswa swasthya sanghatana

International health agencies.

Alma Ata declaration and National Health Policy.

Swasthya vishayaka samkhyaki Definition, Sources, uses

Data collection, Classification, Presentation, Vital statistics.

Swasthya prashasana – Health administration at Central including AYUSH, state, district, village levels.

National health programmes: Tuberculosis (RNTCP), Leprosy(NLEP), AIDS (NACP), Blindness (NPCB), Polio(PPI),Diabetes (NDCP), Cancer (NCCP) , Guinea worm, Hook Worm, Vector born disease control programme - Filaria, Malaria, NRHM, The upcoming national health programmes, National Nutritional Programmes - IDD, Vitamin A prophylaxis, Mid day meal, anemia control programmes.

RCH programme, Universal Immunization Programme.

Practical Session:

Demonstration of Dinacharya procedures such as anjana, nasya, kavala, gandoosha and dhoomapana at swasthavritta museum. After that a 15 day in house training programme for all students should be implemented to get a hands on experience on DINACHARYA procedures and at least one RITUSHODHANA. This is to be documented along with the journal.

Demonstration of abhyanga, udvartana and anulepana at the Panchakarmagara.

Parichaya of aharadravya, immunization agents, disinfectants and family planning devices
Educational Visits for observing the functioning of Milk Dairy, water purification unit, sewage disposal unit, MCH/Family welfare centre, Leprosy sanatorium and Industrial unit.
Visit to Primary Health Centre for knowledge of actual implementation of National health programmes including knowledge of rural health. Visit of Rural Ayurvedic dispensary.

Visit to a Yoga and Naturopathy Centre.

Practical demonstrations of Asanas mentioned in the syllabus, Pranayama (Suryabhedana, Ujjayi, Shitali, Sitkari, Bhastrika, Bhramari and Nadishuddhi) and Shad karmas (Jala dhauti, Jalaneti, Sutraneti, Trataka, Kapalabhati)

Naturopathy treatment modalities –practical demonstration in Naturopathy Centre.
Health survey in minimum 5 families each of rural and urban areas. Transportation facility should be provided by the college for field visits.

There should be 5 case sheets for Yoga Naturopathy & pathya apathya together and 5 case sheets for communicable diseases. Proformas for Case sheets/ practical records/ survey/Dinacharya projects etc should be prepared by the respective universities.

Practical and Viva Voce examination

Marks distribution

100 marks

1. Personal hygiene	20
2. Public and social health	20
3. Demonstration of Yoga	10
4. Naturopathy	10
5. Journal work	10
6. Viva voce	30

Reference Books:

Relevant portions of Charaka, Sushruta, Vagbhata, Sarngadhara, Bhavaprakasha, Yogaratnakara, Madhavanidana and Bhelasamhita.

Swasthavritta Samucchaya
Swasthya Vigyan
Swasthya Vigyan
Swasthavritta

- Pandit Rajeshwar dutt Shastri
- Dr. Bhaskar Govind Ghanekar
- Dr. Mukund swarup Varma
- Vaidya Sakad

Swasthavritta	- Dr. Ranade and Dr. Firke
Ayurveda Hitopadesh	- Vaidya Ranjit Rai Desai
Yoga and Ayurved	- Acharya Rajkumar Jain
Swasthavritta vigan	- Dr. Ramharsha Singh
Swasthavrittam	- Dr. Brahmanand Tripathi
Swasthavrittam	- Dr. Shivkumar Gaud
Ayurvediya Swasthavritta	- Vaidya Jalukar Shastri
Patanjala yogasutra	- Patanjali Maharshi
Hathayogapradipika	- Swatmaram Yogendra
Gheranda samhita	- Gherand Muni
Yoga Paddhati	- Bharatiya Prakritik Chikitsa Parishad
Yogik Chikitsa	- Shri. Kedar Nath Gupta
Sachitra Yogasan darshika	- Dr. Indramohan Jha
Yoga deepika	- Shri. B.K.S. Iyengar
Light on Yoga	- Shri. B.K.S. Iyengar
Light on Pranayama	- Shri. B.K.S. Iyengar
Yoga and yoga chikitsa	- Dr. Ramharsha Singh
Foundations of Contemporary Yoga	- Dr. Ramharsha Singh
Yoga Sidhant evam Sadhana	- Harikrishna Shastri datar
Prakritik chikitsa Vidhi	- Sharan Prasad
Prakritik chikitsa vigan	- Verma
Preventive and Social Medicine	- J. Park
Preventive and Social Medicine	- Baride and kulkarni
Janasankhya Shiksha Sidhanta	- Dr. Nirmal Sahani
Evam upadesya	
Health Administration in India	- S.C.Seel
Health and family welfare	- T.L.Devaraj
Positive Health	- L.P. Gupta
Biogenic Secrets of food in Ayurveda	- L.P.Gupta
Smriti granthon mein nihit	- Dr. Smt. Nigam Sharma
Swasthaprakara samagri	
Dr. Reddy's comprehensive guide to Swasthavritta	- Dr.P.sudhakar Reddy
Nutritive value of Indian foods	- ICMR
Yoga and Nisargopachar	- Vd. Prama Joshi
Prachin Vangmay mein prakritik chikitsa	- swami Anant Bharati, CCRYN
Swasthavritta	- Vd Yashwant Patil and Vd. Vhawal
Food and nutrition	- Swaminathan

3.3 PRASOOTI TANTRA AND STRI ROGA

THEORY : 200 marks
Practical : 100 marks

Paper-I
Part-I

INTRODUCTION TO SUBJECT MUST KNOW STRI SHARIRA VIGYANA:

Etymological origin of the word Stree, Normal and abnormal conditions of Asthisandhi peshi Sahita stree shroni; Aartavvaha and Stanyavaha srotamsi. Tryavarta yoni.stree vishishta peshi marmani. Anatomy of female internal and external genitalia, Soft & Bony Pelvis and its obstetrical importance.

DESIRABLE TO KNOW:

Vayobhed stree sangnya

RAJO VIGYANA:

Description of Raja , artava. Prathama Rajo darshana, Menarche, Rituchakra - Rajakala- Ritukala - Rituvyatitakala- Menstrual cycle and their regulation by endocrine glands - Rajasvala Charya. Ritumati Lakshana, Ritumaticharya, Importance of Ritukala in Garbha dharana.

GARBHA VIGNYANA:

- A)** Garbhasya paribhasha, Garbhadhanavidhi, Garbhaavakranti, Garbha sambhava samagri, , Garbhakara bhava, Panchabhautika composition of garbha, Masanumasika Vridhi of Garbha, Garbhaposhana, garbhashayasta garbhashthiti, fetal attitude lie,position, presentation.
- B)** Aparā, Garbha Nabhinad, Garbhodaka, Jarayu, Ulba. Placenta, Umbilical cord Amniotic fluid, Foetal membranes their formation, development, function,normalcies and their abnormalities.

GARBHINI VIGYAN

- Lakshana of Sadhyograhita garbha, lakshanas of vyakta garbha, diagnosis of pregnancy, Pumsavana vidhi.
- Garbhini vyavastha: Garbhini Paricharya, Ante Natal care, examination investigation and management, Garbha upaghatakara bhava , Dauhrida.
- Garbha Vyapada: Nidan,samprapti and chikitsa of Garbhasrava and Garbhapat Etiopathology Investigations and management of abortion, Upavishtaka, Nagodara / Upashushaka, Leenagarbha Garbha shosha, Bahugarbhata. Multiple pregnancy, Antarmrita garbha, Raktagulma.
- Gestational trophoblastic neoplasias. Ectopic pregnancy, I.U.G.R, Intrauterine Foetal death, Rh-incompatibility – causes, clinical features, complications and management.

DESIRABLE TO KNOW:

Garbhalingotpatti, Garbhasya avayavotpatti, Garbha Varnotpatti (origin of complexion in foetus) Garbha vikriti. Modern embryology.concept of Stree shukra.

GARBHINI VYAPAD:

A Hrillasa , Chardi , Aruchi, Atisara , Vibandha , arsha, Udavarta, Sotha, Parikartika, Vaivarnya, kandu, Kikkisa, Pandu and kamala. Makkal.

Common ailments of pregnancy and High risk Pregnancy , emesis gravidorum, Anaemia, pregnancy induced hypertension, toxemias of pregnancy. Antepartum haemorrhage causes, clinical features, complications and treatment. Jaundice. AIDS, Diabetes..

SECTION- B

MUST KNOW

PRASAVA VIGYANA (Parturition)

PRAKRUTA PRASAVA: Prasava Paribhasha, Prasavahetu, Prasavakaal, Sutikagaara;- nirmaana, sangrahaniya dravyani, sutikaagara pravesavidhi Garbhaasan, Prasavaavastha: prajayani/ upasthita prasava/ prajanishyamana/ asannaprasava avastha, Avi. and Prasavaparicharya management of normal labour, partogram, jaatamatraparicharya

NORMAL LABOUR definition of labour, Physiology and Mechanism of labour, clinical features, monitoring of labour and management. Episiotomy Care and resuscitation of newborn.

PRASAVA VYAPAD (DISORDERS OF LABOUR):

MUST KNOW

Garbhasanga, Vilambita prasava, prolonged labour.

Preterm labour, post term labour,

Induction and augmentation of labour,

Mudagarbha; - definition, etiopathology, clinical features, types, Sadhyasadhyata, treatment- Aushadha, Mantra, shastra, Yantrachikitsa. Obstructed labour Yoni samvarana, cervical dystocia, cephalo pelvic disproportion, Fetal distress Udarapatanapurvaka garbha nirharana, ceasarean section.

Aparasanga. Retention of placenta its causes, clinical features and management,

Post partum haemorrhage.

Genital tract injuries during labour.

DESIRABLE TO KNOW:

Uterine inversion, amniotic fluid embolism. Garbha stithi parivartana(version), forceps delivery, Ventouse delivery.

MUST KNOW

SUTIKA VIGYANA – Sutika Paribhasha, Sutika Kala, changes during Sutika avastha(Sharirika and Manasika), Sutika paricharya. Normal and abnormal Puerperium and its management.

SUTIKA ROGA – Number of sutika rogas, sutika jwara, Sotha and Makkala.

STANYA VIGYANA –Stanya dusti, Stanyakshaya, Stanyavridhi – their causes, clinical features and treatment.

DESIRABLE TO KNOW:

Stana stanya pareeksha, Stanya sampat. .

MUST KNOW
EMERGENCY CARE IN OBSTETRICS No. Of lect. 3

PAPER SECOND – STREE ROGA

Section - A

MUST KNOW

ARTAVA VYAPAD

Artava Vriddhi, Kshaya, ashta artava dushti, kastartava ,Anartava
Amenorrhoea, hypo- oligomenorrhoea and dysmenorrhea
Asrigdara, abnormal uterine bleeding,

YONI VYAPAD –Sankhya, nidana, lakshana, upadrava evam chikitsa with all possible modern correlations.

VANDHYATVA

Infertility – causes, types, investigations and management

DESIRABLE TO KNOW

Congenital malformations of female genital tract.

Shukra vigyana: Description of shukra, shukra vriddhi, kshaya, shukra dusti their hetu, laxana, and its chikitsa.

MUST KNOW

Yoni Kanda, Yoni Arsha, Granthi and arbudas of yoni.

Pelvic infections including STI, HIV, AIDS – causes, types, investigations and management including preventive aspect.

DESIRABLE TO KNOW

Benign, pre malignant and malignant conditions of genital tract.

MUST KNOW

RAJONIVRUTTI climacteric and menopause No. Of lect.2

PART – B

MUST KNOW

STANAROGA

Stanagranthi, stanavidradhi, stanashopha

Mastitis, breast abscess and galactoceles - their etiopathology, clinical features, diagnosis, prognosis, treatment and complications.

STHANIK CHIKITSA-

Snehana, svedana, uttarabasti, pichu, varti, lepana, dhoopana, dhavana, dahana, ksharakarma etc. Practical knowledge of these procedures with indications, complications and management.

SHAstra KARMA –

Surgical procedures their indications, Contraindications of cauterization of Cervix, Cervical dilatation and curettage, Female surgical sterilization.

Knowledge of indication and procedure of PAP smear, endometrial and cervical biopsy and interpretation of their reports.

Stree roga sambandhita pramukha aushadhi . Prasuti stree roga chikitsa upayogi yantra shastra parichaya, investigative and diagnostic aids.

Garbhanirodhaka upaya.

Parivar niyojana, reproductive and child health care, MCH, PNMT Act, MTP Act. AIDS/HIV control program and importance of current national programme

Commonly used Ayurvedic and allopathic drugs in prasuti tantra and stree roga. Pharmacotherapeutics allopathic of the drugs used in Obstetrics and gynecology.

Record keeping, ethical and Medico legal issues in stree roga and prasuti tantra.

DESIRABLE TO KNOW

Basic knowledge of laparoscopy, Hysteroscopy, Hysterosalpingography, USG, X-RAY, Colposcopy.

granthi evam garbhashaya nirharanasya saamanya gyana, Hysterectomy.

CLINICAL TRAINING

OBSTETRIC SKILLS

To perform independently

1. History taking and examination of antenatal and gynecological cases.
2. Diagnose pregnancy, assess period of gestation, to diagnose onset of labour.
3. To monitor labour progress, usage of CTG, able to plot partogram,
4. Observation of 10 labour cases
5. To diagnose abnormalities of labor and decide about the referral of patient.
6. Able to provide first aid for obstetric emergencies.
7. Recognition of post partum complications.
8. Counseling and supervising of breast-feeding.

To observe/Assist

1. Assist/observe D&C/ D&E
2. Resuscitation of newborn.
3. Caesarian section and repair operations

GYNECOLOGICAL SKILLS:

To perform independently

1. History taking and examination gynecological cases.
2. Taking vaginal wet smear, high vaginal swab, cervical punch biopsy and Pap smear.
3. Copper T insertion, removal and follow up.
4. Practical knowledge of performing sthanika chikitsa.
5. Observation and practical knowledge of performing minor gynecological procedures.
6. Observation of surgical procedures mentioned above.
7. Identification, uses, demonstration of surgical instruments and method of sterilization.

To observe

MTP, Family planning operations, Hysterectomies, Oophorectomy and repair operations D&E

Distribution of Marks – Practical Exam

- | | |
|---------------------------------|----------|
| 1. Case taking(2 Cases) | 30 Marks |
| 2. Instruments Drugs and Models | 20 Marks |
| 3. General Viva | 40 Marks |
| 4. Journal | 10 Marks |

TOTAL

100 Marks

3.4. Kaumarbhritya (Ayurvedic Pediatrics)

Theory One Paper – 100 Marks
Practical Viva Voce - 50 Marks

Paper I

100 Marks

Kaumarbhritya Parichaya Evum Balaka Paricharya
(Introduction to Ayurvedic Pediatrics and Child Care)

Part A

50 Marks

1. General introduction and scope of Kaumarbhritya (Ayurvedic Pediatrics), Definitions and terminologies used in Kaumarbhritya.
2. Importance of Kashyapa Samhita in Kaumarbhritya.
3. Vayobheda (Classification of age): Garbha, Bala, Kumara; Kshirada, Kshirannada & Annada etc.
4. Prana Pratyagamanam (Neonatal Resuscitation): Methodology; complications and their management (Ayurvedic and modern view). Assessment of gestational age.
5. Navajata Shishu Paricharya (Neonatal Care): Care of the Jatmatra (Newly born child) and the Sadyojata, Care of the Samaya-purvajata Shishu (Preterm), Purnakalika Shishu (Full term), and Samaya-Paschatjata Shishu (Post term neonate), Nabhinala Chhedana (Cutting of umbilical cord), Complications of improper cutting of umbilical cord and its treatment, Rakshoghna Karma (Protective measures- Ayurvedic and modern view).
6. Navajata Shishu Parikshana (Examination of newborn): Ayu-Parikshana, Modern approach to Neonatal Examination
7. Navajat Shishu Poshana (infant feeding): Specific feeding schedule as per Ayurvedic texts and modern concept; Stanya-Sampat (Properties of normal breast milk) Stanyotpatti (Physiology of lactation), Stanya Sangathana (Composition of breast milk), Stanya Parikshana (Examination of breast milk), Stanya-Piyusha (Colostrum); Stanya-Pana-Vidhi (Techniques of breast feeding), Stanyakshaya-Stanyanasha (Inadequate production and absence of breast milk), Dhatri (wet nurse)- , Stanyabhava dugdh Vyavastha (alternative feeding in the absence of breast milk), Various other milk feeding methods.
8. Stanyadosha (Vitiation of Breast milk), Stanya Shodhana (Purification of breast milk), Stanya Janana and Vardhanopakrama (Methods to enhance breast milk formation).
9. Garbha Vridhi Vikasa Krama: Samanya Parichaya (brief monthwise development of fetus), Milestones of development during infancy and childhood including concepts of various Samskaras. Anthropometry-measurement and their interpretation.
10. Poshana (Nutrition): Normal requirements of nutrients and common food sources .

11. Dantotpatti evum Danta Raksha Vidhi (Dentition and dental care): Danta-sampat (Characteristics of healthy teeth), Danta Nisheka evum Dantodbheda (Eruption of teeth), Dantodbhedjanya Vikara (Dentition disorders).
12. Vyadhikshamatva: General concepts of Bala (Immunity) and methods of Bala Vriddhi. Hita [suitable] and Ahita [not suitable] in relation to immunity
13. Prashan & Lehana: Indications, contra-indications, different drugs used in lehana
14. Knowledge of National Programs related to Child Health Care: Reproductive and Child Health (RCH) Program, Community Child Health Programs, Nutritional Programs, National Immunization Program and other programs incorporated by Govt of India from time to time

Part B

50 Marks

Samanya Chikitsa Siddhanta and Balaroga

(General Principles of Treatment and Management of Pediatric Disorders)

1. Bala Pariksha-vidhi Evam Shishu Vedana Parigyan (Examination of sick child and Diagnostic methods-Ayurvedic and modern). Samanya Chikitsa Siddhanta (General principles of treatment in children).
2. General Aushadhi Matra Nirdharana - for Ayurvedic and modern drugs preparations (drug doses according to age, weight and drug contents)
3. Specific therapeutic panchakarma procedures in children with special emphases on snehan, swedan and basti.
4. Prasava Kaleena Abhigata (Birth injuries): Shwasavrodha (Asphyxia neonatorum), Ulvaka, Upashirshaka (Caput Succidanum and Cephalohaematoma), Shastraghatajanya: Facial Paralysis, Erb's Paralysis, Bhagna (fractures).
5. Brief description of Sahajavyadhi - (Congenital disorders): Sahaja Hridaya Vikara (Congenital Cardiac Disorders) Jalashirshaka (Hydrocephalus), Khandaushttha (cleft lip), Khandu-Talu (cleft palate) Sanniruddha Guda (Anal stricture / imperforated anus), Pada-Vikriti (Talipes equinovarus and valgus), Spina bifida, Meningocele, Meningomyelocele.
6. Brief knowledge of genetic disorders): Down syndrome, Turner Syndrome, Myopathy, Thalassaemia, Sahaja Prameha (error of metabolism).
7. Prasavottara Vyadhi (Neonatal disorders): Navajata Kamala (Neonatal Jaundice), Navajata Netrabhishyanda (Neonatal conjunctivitis), Nabhiroga (Umbilical disorders), Cerebral Palsy, Neonatal Septicemia,
8. Dushta Stanyapanajanya Vyadhi (Disorders due to Vitiated Milk): Lactose intolerance, Charmadala (Infantile atopic dermatitis), Kshiralasaka, Kukunaka, Ahiputana (Napkin Rashes)
9. Kuposhanajanya Vyadhi (Nutritional disorders): Karshya, Phakka, Balashosha and Parigarbhika (Protein Energy Malnutrition), Vitamin and Micronutrient deficiency disorders, Hypervitaminosis.

10. Aupasargika Vyadhi (Infectious Diseases): Karnamula Shotha (Mumps), Romantika (Measles), Rubella, Masurika (Chicken Pox), Rohini (Diphtheria), Kukkura-Kasa (Whooping Cough), Dhanurvata (Tetanus), Krimiroga (Worm Infestations), Antrika Jwara (Typhoid), Mastisakavarnashotha (Meningitis), AIDS, Dengue, Malaria, Poliomyelitis, Rajayakshma (Tuberculosis), Jivwanujanya Yakrit Shotha (Hepatitis)

1. Srotas Vikara:

a. Pranavaha Srotas: Pratishyaya (common cold), Kasa (Cough), Shwasa (Respiratory distress syndrome), Tamaka Shwasa (Bronchial Asthma), Utphullika, Swasanaka Jwara (Pneumonia/Pneumonitis, Bronchiolitis), Gala shotha (Pharyngitis, Laryngitis), Talukantaka (Tonsillitis)

b. Annavaha Srotas: Ajirna (Indigestion), Atisara (Diarrhoea), Chhardi (Vomiting), Vibandha (Constipation), Mukhapaka (Stomatitis), Gudapaka (Proctitis), Parikartika (Anal fissure), Udarsula (Infantile Colic), Pravahika (Dysentery), Gudabhransa (Rectal Prolapse). Ama and its disorders like Ama vata jwara (Rheumatic fever).

c. Rasavaha Srotas: Jwara (Fever), Pandu (Anemia), Mridbhakshanajanya Pandu (Anemia associated with clay eating/ Pica).

d. Raktavaha Srotas: Kamala (Jaundice), Raktapitta (Haemorrhagic disorders), Yakritodara (Hepatomegaly).and Pleehodara (Splenomegaly)

e. Mamsa-Medovaha Srotas: Apachi (Lymphadenitis), Galaganda (Goitre), Gandamala (Cervical Lymphadenopathy).

f. Mutravaha Srotas: Shopha in Vrikka (Glomerulonephritis and Nephrotic syndrome)

2. Anya Bala Vikara (Miscellaneous Pediatric Disorders) Pangutwa (Locomotor disorders), Vamanatwa, (Dwarfism), Apasmara (Epilepsy), Akshepa (Convulsions), Nirudhaprakasha (Phimosis), Kushta (Skin disorders).

3. Behavioral Disorders of Children, their management and counseling: Breath holding spell, Shayyamuutra (Bed wetting), Pica, Unmada, Autism, ADHD (Attention Deficit and Hyperactive Disorders), Jadatwa.

4. Pran raksha vidhi (Life saving measures in children): Principles of management of Shock and Anaphylaxis, Drowning, Poisoning, Foreign body in respiratory tract, Status epilepticus, Hemorrhage, Acute Renal Failure, Febrile Convulsion, Status Asthmaticus, Fluid and Electrolyte Management.

5. Balagraha: General description, classification, clinical features and management.

6. Various Ayurvedic & modern procedures and investigations in pediatric practice –

PRACTICAL

Content of Practical / demonstration

1. Clinical training of above mentioned disorders of children.
2. Exposure to –
 - a) Navajata Shishu Paricharya (Care of the newborn)

- b) Pranapratyagamana Vidhi (Resuscitation procedure of new born)
 - c) Vaccination
 - d) Panchakarma Vidhi (Panchakarma procedures)
3. Knowledge of various equipments such as phototherapy unit, overhead radiant warmer, resuscitation equipments, Panchakarma equipments and their application
 4. Knowledge of IV fluid administration, blood sampling
 5. Breast feeding technique and techniques of other milk feed
 - 6.

Distribution of Marks

Clinical work: Pediatric and neonatal case records [10 case sheets of each]	10 Marks
Patient Examination	20 Marks
Spotting	05 Marks
Viva - voce	15 Marks

Total	50 Marks
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Reference Books

1. Kashyapa Samhita Complete Hindi translation by Satyapal Vidhyalankara English translation by Prof. Premvati Tiwari
2. Principles & practice of Pediatrics in Ayurveda: CHS Shastry
3. Child Health Care in Ayurveda: Abhimanyu Kumar
4. Ayurvedic Concepts of human Embryology: Abhimanyu Kumar
5. Kaumarbhritya by Prof. D.N. Mishra
6. Kaumarbhritya Ke Antargata Balgraho Ka Kramika Evam Vaigyanika Adhyana by Prof. Chanchal Sharma
7. Notes on Kaumarbhritya-by Dr. Dinesh K S
8. Pran - Pratyagamanam-by Dr. B.M. Singh
9. Ayurveda Dwara Matra Evam Shishu Paricharya by Dr. KS Patel,V.K.Kori & Rajgopal S
10. Kaumarbhritya related references from Charaka Samhita, Sushruta Samhita Vagbhata etc.
11. Clinical Methods in Paediatrics by Meharban Singh
12. Pediatrics Emergencies by Meharban Singh
13. Essential Pediatrics O.P. Ghai
14. Text Book of Pediatrics Nelson
15. Care of New Born by Meharban Singh

1.5. CHARAK SAMHITA- UTTARARDHA (Uttarardha: Chikitsa – Kalpa - Siddhi Sthana)

Theory- One Paper – 100 Marks
Practical - 50 Marks

The marks of theory examination are distributed as follows:

1. Chikitsa sthana 60 Marks
2. Kalpa sthana 15 Marks
3. Siddhi sthana 25 Marks

PRACTICALS: -

For practicals following activities are included

1. Memorizing and in writing two shloka weekly related to Samprapti and Chikitsa Sutra (Eight shloka per month.) and note book of memorized shloka, corrected and signed by the class teacher is to be submitted at time of examination.
2. Preparation of Charts /Compilation/Assignment.
3. Case taking from samhita siddhant OPD / IPD of the Hospital. Total 20 cases should prepared be recorded in case record Journal.

Distribution of marks: -

Total 50 Marks

1. Oral presentation (Presentation of 10 Shloka, orally and in writing related with Samprapti and Chikitsa Sutra) 10 Marks.
2. Viva voce on Prepared Charts / Compilation/Assignment. 10 Marks.
3. Case taking and prescription writing by examining the patients from OPD & IPD of Samhita siddhant of hospital and oral related to Case record Journal. 10 Marks.
4. General Viva - Voce. 20 Marks.

Reference Books

1. Charak Samhita -Chakrapani Tika (Sanskrit Commentary)
2. Charak Samhita (Hindi Commentary) Vd. Jayadev Vidyalankar or Vd. Atridev Vidyalankar or Prof. Gorakh Nath Chaturvedi & Kashinath Shastri or Dr. Brahmanand Tripathy or Dr. Ravidutta Tripathy
3. Charak Samhita (English Commentary): Dr. Ram Karan Sharma & Vd. Bhagwan Dash or Acharya Priyavrata Sharma.

**CENTRAL COUNCIL OF INDIAN MEDICINE
NEW DELHI
SYLLABUS OF AYURVEDACHARYA (BAMS) 4th Year**

INDEX

4TH PROFESSIONAL

4.1. KAYACHIKITSA	02-04
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4.5. RESEARCH METHODOLOGY AND MEDICAL STATISTICS	22-24



4.1 KAYACHIKITSA

Theory Two Papers – 100 Marks Each
Practical/Viva voce – 100 Marks
100 Marks

Paper I

Part - A

50 Marks

- 1 Derivation of the terms 'Kaya', 'Chikitsa' and their definitions and synonyms. Definition of 'Kayachikitsa, Definition of 'Bheshaja'. Types and detailed description of Bheshaja and Chikitsa, Knowledge about Chikitsa Chatushpada, Rogi Roga Pariksha Siddhantha with special reference to Nadi Pariksha.
- 2 Importance of Kriya Kaala according to stages of Dosha and their management.
- 3 Chikitsa sutra and Management of vriddhi (increased) and kshaya (decreased) of Dosha, Dhatu and Mala, Ojo Vyapat (Kshaya, Visramsas and Vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states, Roga-Anutpattikara Chikitsa, Roga Prashamana Chikitsa (Doshapratyanika, Vyadhipratyanika, Ubhayapratyanika), Doshopakrama, Chikitsa sutra and Management of Sthanantara Dosha (Ashayapakarsha, Anuloma/Pratiloma gati of Dosha, Vimarga gamana of Dosha), Knowledge of Lina Dosha & its management, Diagnosis, Chikitsa Sutra and Management of Avarana and of Dhatu Pradoshaja diseases, Importance of Dosha, Dushya, Bala, Kaala, Agni, Prakriti, Vaya, Sattva Satmya, Desha, Ahara and stage of diseases in treating them.

Chikitsa Sutra and Management of 'Samanyaja and Nanatmaja' diseases

- 4 Detailed description of Dvidividhopakrama (Santarpana and Apatarpana) and Shadavidhopakrama (Rookshana, Snehana, Swedana, Sthambhana, Langhana and Brihana). Detailed description of Shodhana, Shamana and Nidana Parivarjana. Knowledge of Aushadha matra, Sevan kaala and Anupana, Definition and Knowledge of Pathya-Apathya with examples of diseases of various systems
- 5 Derivation of the term 'Manas', its sthana (place), Guna (qualities) and Karma (functions). **Samanya Chikitsa Siddhanta of Manasa Roga.**
- 6 Nutritional deficiency disorders .
- 7 Management of Vardhakyajanita vikara, Indriyapradoshaja vikara, Alziemers Disease, Sleep disorders, General debility.
- 8 General introduction and principles of Management of diseases produced by Genetic, Environmental and Iatrogenic factors. Disorders due to drug and Food allergy and their management and other allergic conditions.

Part B

50 Marks

1. Detailed description of Chikitsa Sutra and Management of Jwara and its types.
1. Etiopathogenesis & relevant Ayurvedic and Modern management of following types of Fevers-Typhoid, Pneumonia, Pleurisy, Influenza, Mumps, Meningitis, Encephalitis, Tetanus, Yellow fever, Plague, Dengue Fever, Chikun Guniya, Leptospirosis, Viral Fever, Anthrax, Masurika (Small pox), Laghu Masurika (Chicken pox), Romantika (Measles), Swine Flu.
2. Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as - Pandu (Anemia), Amavata (Rheumatoid Arthritis), Madatyaya, Hridroga (Cardiovascular diseases), Hridshoola, Hypotension, Hypertension.
3. Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as - Raktapitta (Haemorrhagic Disorders), Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plihadoshas, Yakrut dosha, Hepati...

Leukaemia, Kushta, Shvitra, Visarpa, Sheetapitta, Udarada, Kotha and medically manageable Kshudra Roga.

4. Knowledge of National Health programmes and the relevant Ayurvedic management of the following diseases enlisted by World Health Organisation- Malaria, Filaria, Kala Azar, Leprosy, Tuberculosis, AIDS.
5. Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine- Yoga, Naturopathy, Unani, Siddha, Physiotherapy and Rehabilitation.
6. Diseases of different Endocrine Gland -such as Thyroid, Parathyroid, Pituitary, Pancreas and Adrenal Glands and their management.
7. General introduction, types and Management of diseases caused by Vyadhi Kshamatwa Hinata (Immuno deficiency disorders), Auto Immune Disorders.
8. Description and Management of following Emergency Conditions- Acute Haemorrhage, Hypertensive Emergencies, Acute abdominal pain (Renal colic, Biliary colic, Gastritis, Pancreatitis, Peritonitis and Appendicitis), Acute Abdomen, Anuria/ Oliguria, Congestive Heart Failure, Myocardial Infarction/Angina, Shock, Syncope, Convulsions, Hyperpyrexia, Hyperglycaemia, Hypoglycaemia, Status Asthmaticus, Acute Respiratory distress Syndrome, Drowning and Electric shock.

PAPER II

100 Marks

Part A

50 Marks

1. Chikitsa sutra and Management of the diseases of Pranavaha Srotas such as - Kasa, Shwasa, Hikka, Rajayakshma, Urakshata, Parshwashoola, Bronchitis, Bronchiectasis, Emphysema and COPDs.
2. Chikitsa sutra and Management of the diseases of Udaka vaha Srotas such as- Shotha, Jalodara, Trishna, Water & Electrolyte Imbalance.
3. Chikitsa sutra and Management of the diseases of Annavaha Srotas such as - Agnimandya, Aruchi, Ajirna, Anaha, Atopa, Adhmana, Alasaka, Vilambika, Visuchika, Chardi, Grahani, Amlapitta, Gulma, Shoola, Bhasmaka and Acid peptic disorders.
4. Principles of treatment and management of Vata Vyadhi such as - Pakshavadha, Ekangavata, Sarvangavata, Ardita, Avbahuka, Kati Graha, Manyastambha, Gridhrasi, Vishwachi, Khalli, Khanja, Pangu, Padaharsha, Padadaha, Vatakantaka, Kroshtukashirsha and Types of Udavarta. Kampavata (Parkinsonism), Gatavata (Dhatu gata and Ashayagata), Avarana Vata and other Vata Rogas.
5. Nidana and Chikitsa of Urusthambha, Gullian Barrie syndrome, Muscular Dystrophy, Myasthenia Gravis, Motor Neuron Diseases and Neuralgia.

Part B

50 Marks

1. Chikitsa Sutra and Management of Mamsavaha Srotas and Medovaha Srotas such as-Gandamala, Galaganda, Mamsashosha, Arbuda, Apachi, Prameha, Sthoulya, Karshya, Diabetes Mellitus and Dyslipidaemia.
2. Chikitsa Sutra and Management of 'Asthi and Majjavaha Srotas such as Asthimajja Vidradhi (Osteomyelitis), Asthisoushriya (Osteoporosis), Asthi kshaya(Osteopenia) Sandhigata Vata (Osteo Arthritis)
3. Chikitsa sutra and management of Shukravaha srotas such as Klaibya, shukralpata, shukradosha, kshina shukra and dhvajabhanga.
4. Chikitsa Sutra and Management of diseases of Mutravaha Srotas such as -Mutrakricha, Mutraghata, Ashmari, Cystitis, Nephritis, Nephrotic Syndrome, BPH, Renal Failure.
5. Chikitsa Sutra and Management of diseases of Purishavaha Srotas such as - Atisara, Pravahika, Arsha, Purishaj Krimi, IBS and Ulcerative Colitis.

6. Chikitsa Sutra and Management of Sexually Transmitted Diseases, such as – Phiranga (Syphilis), Puyameha (Gonorrhoea), Upadamsha (Chanchroid), lymphogranuloma inguinale.
7. Introduction, Definition and Management of Kama, Krodha, Lobha, Moha, Mada, Matsarya, Shoka, Bhaya, Vishada, Dainya, Harsha and Pragyaparadha.
8. Concept of Manas and Manovahasrotas, Nidana and Chikitsa of the following disorders - Unmada-Apasmara-Atattvabhinivesha-, Chittodvega(Anxiety disorders), Stress induced disorders, Vishada(Depression), Somatoform and Mood disorders, Psychosexual Disorders. Importance of Daivavyapashraya, Sattwavajaya, Adravyabhuta Chikitsa. Medhya Rasayana in the management of Manasa Roga. Introduction to Bhuta Vidya with special reference to diagnosis and management of disorders.
9. Derivation, definition and synonyms of Rasayana, importance of Rasayana and its benefits. Indications of Rasayana therapy. Classification of Rasayana. Kutipravesika and Vatatapika Rasayana. Indications of Vatatapika Rasayana. Knowledge of Kayakalpa (Rejuvenation therapy), Achara Rasayana. Procedures of Kutipravesika, Poorvakarma and specific schedules to be followed after Kutipravesha, benefits of Kutipravesika Rasayana, duration of application, Rasayana yoga and directions for their use. Determination of dose of Rasayana according to age. Rules and regulation after Rasayana therapy, Importance of Immunomodulators and antioxidants in Rasayana therapy.
10. Vajikarana - Derivation, definition, synonyms, necessity, benefits, importance of fertility, Symptoms of Shûkra (Semen), Vajikaran Dravya and Aushadhi. Management of Kliabya, Shukra Dosha and Dhvajabhanga, Properties, doses, methods of administration, ingredients and methods of formation of Rasayana & Vajikarana formulation. Classification and importance of Vajikarana Dravya

Distribution of practical Marks 100

- | | |
|------------------------------|------------|
| 1) Daily case record/Journal | - 20 marks |
| 2) Patient examination | |
| a) 1 Long case | - 20 marks |
| b) 1 short case | - 10 marks |
| 3) Viva –voice | |
| a) Paper I | - 25 marks |
| b) Paper II | - 25 marks |

Reference books:

1. Charak Samhita , Sushrut Samhita, Ashtanga Samgraha and Ashtanga Hridaya with their commentaries. Madhav Nidana with Madhukosha Commentary.
2. Ayurvediya Vyadhi Vigyana - Yadavji Trikamji
3. Roga Pariksha Vidhi - Priyavrat Sharma
4. Panchakarma Vigyan -Haridasa Sridhar Kasture
5. Cikitsadarsha -Pandit Rajesvardutta Shastri
6. Kayachikitsa I-IV -Ramaraksha Pathaka
7. Ayurved Nidan Chikitsa Siddhanta -Prof. R.H.Singh.
8. Kayachikitsa Vol. I-IV. -Prof. Ajay Kumar
9. Davidson’s Principles and Practice of Medicine.
10. API Text Book of Medicine.
11. Harrison’s Text Bok of Medicine.
12. Cecil Text Book of Medicine.
13. Panchkarma Illustrated by Dr. G.Srinivasacharya.
14. Other relevant publications on subjects concerned

4.2. PANCHAKARMA (BAMS)

Theory One Paper – 100 Marks
Practical Viva-voce – 50 Marks

Paper I

100 Marks

I. Introduction

- 1) Introduction to Panchakarma, Panchakarma and Shodhana and its importance or promotion of health, prevention and treatment of diseases.
- 2) Trividha Karma- Purva, Pradhana and Pashchata Karma in relation to Shodhana and their importance.
- 3) Indications of Shodhana, Shodhana according to Ritu; Āma and Shodhana
- 4) General precautions (Pariharya Vishaya) for Panchakarma
- 5) Specifications of Panchakarma theatre and necessary equipments

II. Snehana

- 1) Etymology and Definition of Sneha and Snehana
- 2) Snehayoni-Sthavara and Jangama: General knowledge of Ghrita, Taila, Vasa and Majja with their specific utility and actions
- 3) Achcha and Pravicharana of Sneha: Yamaka, Trivrit and Maha Sneha
- 4) Snehapaka
- 5) Indications and contraindications for Snehana

Two Types of Snehana: Bahya and Abhyantara Snehana

Bāhya Snehana

Methods, indications, contraindications of the following types of Bahyasnehana; Abhyanga, Mardana, Unmardana, Pādāghāta, Avagaha, Samvāhana, Udvartana, Utsādana, Karna Purana & Akshi Tarpana, Māstiskya, Lepa, Talam, Takra Dhārā, Gandusha and Kavala.
Murdhni Taila: Siro-Abhyanga, Shiro Seka/dhārā, Siro Pichu and Siro-Basti

Ābhyantara Snehana

Three Types of Ābhyantara Snehana: Shodhanārtha, Shamanārtha and Brimhanārtha Snehana, Shamanārtha and Brimhanārtha Snehana their method, dose and utility

Shodhanārtha Snehana

1. Importance of Pāchana in Shodhanārtha Snehana
2. Various dose schedules for Shodhanārtha Snehana; Hraseeyasi, Hrasva, Madhyama and Uttama Mātrā, Ārohana Mātrā
3. Methods of Shodhanārtha Snehana, Sadya Snehana
4. Consideration of Agni and Koshtha in Snehana
5. Anupāna of Sneha
6. Samyak Yoga, Ayoga and Atiyoga of Snehana, Sneha Vyāpat & their management according to Ayurveda & Modern Medicine
7. Diet and regimen during Snehana
8. Snehana Kārmukata (mode of action)

III. Svedana

- 1) Etymology and Definition of Sveda and Svedana
- 2) Classifications of Sveda/Svedana
- 3) Indications and contraindications of Svedana
- 4) Ten Types of Niragni Svedana
- 5) Knowledge of 13 types of Sagni Svedana
- 6) Detailed Knowledge about Utility of the following Svedana procedures:
Sankara/Pinda Sveda-Ruksha and Snigdha Sveda Patrapinda Sveda, Shashtika Shalipinda Sveda, Nadi Sveda, Bashpa Sveda Avagaha Sveda, Parisheka Sveda, Pizichil Upanaha Sveda Anna lepa Local Basti such as Kati Basti, Janu Basti and Greeva Basti General precautions during Sagni Svedana
- 7) Samyak Yoga, Ayoga and Atiyoga of Svedana
- 8) Vyapat of Svedana and their Management according to Ayurveda & Modern Medicine
- 9) Diet and management during and after Svedana
- 9) Svedana Karmukata (Mode of action)
- 11) General Knowledge about current Sudation techniques Sauna bath, Steam bath, Infrared therapy

IV. Vamana Karma

1. Etymology, definition and importance of Vamana Karma
2. Utility of Vamana Karma in health and disease
3. Indications and Contraindications for Vamana
4. General knowledge of Vamana and Vamanopaga drugs; properties, actions, preparations, doses and method of administration of Madanaphala
5. Purva Karma of Vamana: Pāchana, Abhyantara Snehana and diet
6. Assessment and Management of one gap day-Abhyanga & Svedana & diet, special Kapha increasing diet
7. Assessment and management on Morning of Vamana day
8. Vamana Dravya Sambhāra
9. Vamaka Yoga, Anupana, dose and method of administration
10. Administration of Vamanopaga Dravya such as milk, sugarcane juice, Yashtimadhu decoction
11. Method of Vamana Karma and management during Vamana Karma & observations
12. Symptoms of Samyak Yoga, Ayoga and Atiyoga of Vamana Karma
13. Types of Shuddhi-Hina, Madhya and Pravara and accordingly Samsarjana Krama
14. Post Vamana management
15. Vamana Vyapat and their management with Ayurveda and modern drugs
16. Pariharya Vishaya
17. Vamana Karmukata (Mode of action).

V. Virechana Karma

1. Etymology, definition and importance of Virechana Karma
2. Utility of Virechana Karma in health and disease
3. Indications and Contraindications for Virechana
4. Classification of Virechana Drugs
5. General knowledge of single and compound Virechana drugs; properties, actions, preparations, doses in relation to Koshtha and method of administration of Trivrita, Argvadha, Eranda Taila
6. Significance of Vamana before Virechana
7. Purva Karma of Virechana: Pachana, Abhyantara Snehana and diet
8. Management of 3 gap days-Abhyanga & Svedana & diet
9. Management on Morning of Virechana day

10. Preparation of Virechana Kalpa, Anupana, dose and method of its administration
11. Method of Virechana Karma and management during Virechana Karma & observations
12. Symptoms of Samyak Yoga, Ayoga and Atiyoga of Virechana Karma
13. Post Virechana management
14. Types of Shuddhi-Hina, Madhya and Pravara and accordingly Samsarjana Krama
15. Virechana Vyāpat and their management with Ayurveda and modern drugs
16. Pariharya Vishaya
17. Virechana Kārmukatā (Mode of action)

VI. Basti Karma

1. Etymology, definition and importance of Basti as Ardha-Chikitsa
2. Utility of Basti Karma in health and disease
3. Basti Yantra, Putaka, Netra, alternative Basti Yantra-enema can, enema syringe, modified plastic/rubber bag for Putaka, Netra Dosha
4. Classifications of Basti, relation of Virechana and Niruha Basti and vice versa, importance of Karma, Kāla and Yoga Basti schedules along with their utility.
5. Purva Karma of Basti
6. Diet before, during and after Basti
7. Niruha Basti, its etymology, synonyms, definition, classifications, sub-classifications & indications and contraindications. Dose of Niruha Basti according to age and accordingly calculation of Anuvasana Basti dose
8. Contents and method of preparation and administration of Niruha Basti and observations
9. Samyak Yoga, Ayoga and Atiyoga of Niruha. Pratyagmana Kāla and management of its complications
10. Anuvasana Basti, its etymology, definition, synonyms, classifications, contents, Dose and indications and contraindications
11. Method of preparation and administration of Anuvasana Basti
12. Symptoms of Samyak Yoga, Ayoga and Atiyoga of Anuvasana Basti. Pratyagmana Kāla
13. Post Basti management and Pariharya Vishaya and kala
14. Common basti Vyāpat and their management with Ayurveda and modern drugs
15. Basti Kārmukatā (Mode of action).
16. Knowledge of following types of Basti:
Madhutailika Basti, Erandmuladi Basti, Yapana Basti, Pichchha Basti, Kshira Basti, Kshara Basti, Vaitarana Basti, Matra Basti
17. Uttara Basti, its definition, indications and contraindications, Yantra, Purva Karma, drug preparation, dose, method of administration in male and females, observations, complications and their management

VII. Nasya

- 1) Etymology, definition, introduction & Significance of Nasya Karma.
- 2) Knowledge of general Dravya used for Nasya Karma,
- 3) Classifications and sub-classifications of Nasya with knowledge of each type
- 4) Indications and contraindications of Nasya
- 5) Time of administration of Nasya and Mātra.
- 6) Methods of Nasya:
Purva Karma: Preparation of Patient.
Pradhana Karma: Adminisitration and observations of Nasya.
Pashchat Karma; Pariharaya Vishaya and Kala, Diet and regimen before, during and after Nasya Karma
- 7) Symptoms of Samyak-yoga, Ayoga and Atiyoga of Nasya, Nasya Vyāpat and their management.

- 8) Detail knowledge of Navana-Marsha and Pratimarsha, Avapeedaka, Dhmapana and Dhuma Nasya
- 9) Nasya Karmukata (mode of action)

VIII

Raktamokshana

Definition, importance and classifications of Raktamokshana with general knowledge of each type

Jalaukavacharana: Indications and contraindications of Jalaukavacharana, various types of Jalauka. Method of Jalaukavacharana, management before, during and after Jalaukavacharana. Symptoms of Samyak, Ayoga and Atiyoga and Vyapat of Raktamokshana and their management with Ayurveda and Modern medicines. Knowledge of emergency management of complications such as water & electrolyte imbalance, shock, bleeding.

Practical Work:

Batch wise two hours daily duty in Panchakarma theatre

Observations of at least 5 Karma each of Snehana, Svedana, Vamana, Virechana, Basti and Nasya

Performance of at least 5 Karma each of Snehana, Svedana, Vamana, Virechana, Basti and Nasya under guidance of the teacher

Distribution of Marks

1. Practical Record of 25 procedures	05 Marks
2. Long Procedure	10 Marks
3. Long Procedure Viva	05 Marks
4. Short Procedure	08 Marks
5. Viva on Short Procedure	02 Marks
6. General Viva-voce	20 Marks
Total	50 Marks

Reference Books

1. Charak Samhita with Commentary of Ayurveda Dipika by Chakrapanidatta & Jalpakalpataru by Gangadhara
2. Sushrut Samhita with the Sushruta Nibhandha Samgraha Commentary of Dalhana & Nyayachandrika Panjika of Gayadasa on Nidana Sthana
3. Ashtanga Hridaya with Sarvanga Sundara & Ayurveda Rasayana Commentaries
4. Ashtanga
5. Ayurvediya Panchakarma Chikitsa Dr Mukundilal Dwivedi
6. Panchakarma Vigyan Dr Haridas Shreedhar Kasture
7. Illustrated Panchakarma Dr.G Srinivasa Acharya
8. Clinical Panchkarma (English) Dr. P.Yadaiah
9. Prayogika Panchkarma (Hindi) Dr. P. Yadaiah
10. Vivida Vyadhiyome Panchkarma (Hindi) Dr. P. Yadaiah
11. The Panchkarma Treatment of Ayurveda with Kerala Specialties Dr. T.L. Devaraj
12. Panchkarma Therapy Dr. R.H. Singh
13. Ayurveda-Principles and Panchakarma Practice Dr Mandip R. G. & Prof. Gurdip Singh
14. Principles and Practice of Basti Dr. Vasudevan & Dr. L. Mahadevan
15. Principles and Practice of Panchakarma Vaidya Vasant Patil
16. Harrison's Principle of Internal Medicine
17. Guyton's Physiology

4.3 SHALYA TANTRA

Theory Two Papers – 100 Marks Each
Practical - Viva voce – 100 Marks

PAPER –I

100 Marks

Part - A

50 Marks

Definition of Shalya, Shalya Tantra and its importance. Introduction to Shalya

Tantra: Historical background and progress made.

- **Target** - *Fluency in textual reading and comprehension.*
- Preferable targets - Know recent developments and controversies.

Description of Yantra, Shastra, Anushastra: Definition, number, types, uses, Dasha, Guna, Karma. Relevant modern instruments.

- Target - *Basic understanding of the concepts of Yantra and Shastra. Acquaintance with commonly used surgical instruments. Knowledge of textual descriptions.*
- Preferable targets - Knowledge about currently used surgical instruments, their specifications, procurement sources etc.

Nirjantukarana / Sterilization : Methods, types and its role in surgical practice.

- Target - *Basic surgical discipline of maintaining asepsis.*
- Preferable targets- Knowledge of recently developed chemicals, instruments for sterilization.

Sangyahan / Anaesthesia: Definition and Types.

i. **Local anaesthesia – Drugs, Techniques, Indications, Contraindications, Complications and their Management.**

ii. Regional and General anaesthesia- Drugs, Techniques, Indications, Contraindications, Complications and their Management.

- Target-*Basic knowledge of the drugs and instruments of anaesthesia. To observe the process of induction, monitoring and recovery.*
- Preferable targets- Assisting and handling anaesthesia.

Trividha Karma – Purva Karma, Pradhana Karma and Paschat Karma.

- Target- *Capability to identify conditions which can affect the outcome of surgery in pre, intra and post- operative period.*
- Preferable targets- Experience of handling incidents.

Ashtavidha Shastra Karma - Surgical procedures.

- Targets- *Appreciation and comprehension of concepts and indications of different procedures.*
- Preferable targets –Hands on experience of surgical procedures.

Yogyavidhi - Experimental Surgery.

- Target –*Appreciation and comprehension of concepts of Yogyavidhi. Idea of patient's safety in experimental training.*
- Preferable targets- Hands on training on mannequins.

Marma: Nirukti, types, description and importance.

- Target –*Clinical application of concepts of marma.*
- Preferable targets- Study of relevance of marma in the light of current anatomical and surgical knowledge.

Kshara and Kshara Karma:

i. **Nirukti, Pradhanyata, Guna, Dasha, Karma, Prakara, Yogya, Ayogya, Procedure, Upadrava and Chikitsa.**

ii. Kshara nirmana vidhi, knowledge of Kshara Varti, Taila and Pichu

iii. **Kshara Sutra – Preparation, Indications, Contraindicatio**

application, Complications and their Management.

- Target – *Capability to identify and practice the use of ksharas, kshara sutra in common clinical conditions.*
- Preferable targets – Broader knowledge of current trends and ongoing researches in kshara application.

Agnikarma: Mahatva, Upakarana, Vidhi, Akrti bheda, Yogya, Ayogya and Upadrava Chikitsa.

Contemporary techniques and tools of Agnikarma.

- Target - *Capability to appreciate the clinical indications and comprehend Agnikarma procedure.*
- Preferable targets - Hands on experience of use of cautery in surgical practice.

Raktamokshana: Mahatva, Prakara - Siravyadha, Pracchanna, Shringa, Alabu, Jaloukavacharana – Yogya, Ayogya, Procedure, Upadrava and Chikitsa.

- Target- *Capability to appreciate and comprehend clinical indications of Jaloukavacharana and other Raktamokshana procedures.*
- Preferable targets - Uses of bloodletting in current therapy.

Bandha Vidhi – Prayojana, Dravya, Indications, Contraindications, Prakara, Upadrava, Pichu, Plota, Kavalika and Vikeshika.

- Target- *Hands on experience of techniques of bandaging.*
- Preferable targets - New generation of bandaging and splintage tools.

Sandhana Karma: Karna, Nasa and Oshtha Sandhana Vidhi. Principles and procedures of reconstructive and cosmetic surgery.

- Target - *Understanding concepts of Sushruta regarding Sandhana.*
- Preferable targets -Basic concepts of reconstructive surgery.

Pranasta Shalya and Nirharana Upaya.

- Target – *Importance of concepts of Sushruta in the management of Shalya and concerns of patient safety. Identification and management of foreign bodies.*
- Preferable targets - Current concepts and diagnostic tools of dealing with foreign bodies.

Fluid, Electrolyte, Acid Base Balance and Nutrition:

- Introduction of physiology of fluids and electrolytes.**
- Dehydration and over hydration.**
- Specific electrolyte loss, Acidosis, Alkalosis, Symptomatology and Management.**
- Electrolyte changes in specific diseases like pyloric stenosis, intestinal obstruction and anuria.
- Various replacement fluids in surgery, mode of administration and complications.**
- Nutrition.

- Target – *Capability to identify and manage fluid and electrolyte imbalance. Ability to administer parenteral fluid.*
- Preferable targets - Advanced techniques of fluid and electrolyte assessment and management.

Rakta Mahatwa, Raktasrava / Haemorrhage: Prakara and Lakshana.

- Raktastambhana – Haemostasis.**
- Blood Transfusion –Blood groups, Compatibility, Indications, Contraindications and Complications with Management.**
- Component therapy.
 - Target-*Knowledge of achieving haemostasis in haemorrhage.*
 - Preferable targets - Detailed knowledge of blood bank techniques.

Antibiotics, analgesics, anti-inflammatory and emergency drugs in surgical practice.

- Target – *Working knowledge of commonly used drugs.*
- Preferable targets - Advanced pharmacological study of the above drugs.

Diagnostic techniques – X-ray, Imaging techniques, Ultrasonography, CAT Scan, MRI, Biopsy / Cytological study.

- Target- *Knowledge of proper indications for optimum investigational tools and their interpretation.*
- Preferable targets - Capability to work independently in the field of diagnostic techniques.

Part - B

50 Marks

Shat Kriyakala in surgical practice.

- Target- *Clinical utility of the concepts.*
- Preferable targets - Applied aspects of Kriyakalas in the light of current concepts of pathogenesis.

Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa of the following disorders.

- i. **Vranashotha - Inflammation**
- ii. **Vidhradi - Abscess**
- iii. **Pidika - Boils**
- iv. **Nadi Vrana - Sinus / Fistulae**
- v. **Vrana Granthi - Keloid / Hypertrophic scar**
- vi. **Marmagata - Shock**
- vii. **Kotha – Gangrene and Principles of Amputation.**
- viii. **Granthi - Cyst**
- ix. **Arbuda - Tumour**

- Target-*Clinical application of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Vrana – Nirukti and Prakara

- i. **Nija Vrana – Nidana, Samprapti, Vrana Vasthu, Prakara, Lakshana, Vrana Pariksha – Sthana, Akrti, Srava, Gandha, Vedana. Vrana Avastha- Dustavrana, Shuddha Vrana, Ruhyamana Vrana, Samyak Roodha Vrana, Vrana Sadhya-asadhyatha and Vrana Upadrava.**
- ii. **Vrana Chikitsa – Pathya-apathya and Shashti Upakrama, Vranitagara and Rakshakarma.**
- iii. **Agantuja Vrana :**
 - a. **Sadyo Vrana - Traumatic wounds – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.**
 - b. **Management of bites and stings.**
- iv. **Dagdha Vrana – Burns and scalds.**
- v. **Ulcer - Types and their management.**
- vi. **Wound healing stages and their management.**
- vii. **Pramehapidaka - Diabetic carbuncle and wounds.**

- Target - *Clinical application of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Twak Vikara - Nidana, Samprapti, Lakshana and Chikitsa of Chippa – Paronychia, Kadara – Corn and Kshudra rogas.

- Target - *Clinical application of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Manya Vikara – Nidana, Samprapti, Lakshana and Chikitsa of Galaganda – Goitre, Gandamala, Apachi –Lymphadenitis, Pashanagardhabha – disea

- Target - *Clinical application of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Sira Vikara - Venous disorders – Superficial and Deep venous thrombosis, Haemangioma, Varicose veins - Diagnosis and their Management.

- Target - *Clinical application of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Dhamani Vikara - Arterial disorders – Nidana, Samprapti, Lakshana and Chikitsa of Aneurysm, Buerger’s disease, Atherosclerosis, Raynaud’s disease.

- Target - *Clinical application of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Snayu Vikara - Diseases of tendons and ligaments – Tennis elbow, Ganglion and their Management.

- Target - *Clinical application of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Care of AIDS - HIV and hepatitis infected patients.

- Target - *Knowledge of safety precautions.*

PAPER - II

100 Marks

Part - A

50 Marks

Bhagna – Skeletal injuries: Prakara including pathological fracture, Samanya Lakshana, Upadrava and Chikitsa.

Description of fracture of following bones with Clinical features, Diagnosis, Complications and Management – scapula, clavicle, humerus, radius, ulna, femur, patella, tibia and pelvis bones.

Sandimoksha - Dislocation: Dislocation of following joints with Clinical features, Diagnosis, Complications and Management of shoulder, elbow and hip.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of bone: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Osteomyelitis, Cysts, Tumours and Tuberculosis.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Cranio-cerebral injuries: Mechanism, Pathology, Classification, Investigations, Complications and primary management.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Spine: Mechanism, Pathology, Classification, Investigations, Complications and primary management of Tuberculosis, Ankylosing Spondylitis and Disc prolapse.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of breast: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Sthana Vidradhi - Breast abscess and Sthana Arbuda - Breast tumours.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of chest: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Chest injury, Pleural effusion, Pleurisy and Tumours.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of di

Diseases of esophagus: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Oesophagitis, Varices, Ulcer and Tumours.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Gulma Roga - Nidana, Prakara, Lakshana, Upadrava and Chikitsa.

Shoola vyadhi - Nidana, Prakara, Lakshana, Upadrava and Chikitsa.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Udara Roga: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Jalodara - Ascites, Chidrodara – Perforation, Peritonitis and Badhagudodara.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of stomach and duodenum: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pyloric Stenosis, Peptic Ulcer and Tumours.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of small intestine: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Tuberculosis, Obstruction and Perforation.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of large intestine - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Tuberculosis, Obstruction, Perforation, Tumours,

Appendicitis, Crohn's disease and Ulcerative Colitis.

- Target - *Clinical utility of the concept.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Rectum and Anal Canal – Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital disorders, Arshas - Haemorrhoids, Parikartika - Fissure-in-ano, Bhagandara - Fistula-in-ano, Guda Vidradi - Anorectal abscesses, Gudabhramsa - Rectal prolapse, Sanniruddaguda - Anal stricture, Incontinence, Rectal Polyp and Tumours.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Abdominal injuries and their management.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Part – B

50 Marks

Diseases of Liver: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Yakrit Vidradi - Abscess, Neoplasia, Portal hypertension and Yakritdalyodar –Hepatomegaly.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Gallbladder: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Cholecystitis, Cholelithiasis, Obstructive jaundice and Tumours.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of di

Diseases of Pancreas: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pancreatitis, Cysts of Pancreas and Tumours.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Spleen – Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pleehodara – Splenomegaly and Splenic rupture.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Kidney and Ureters - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Polycystic kidney, Injuries, Perinephric abscess, Calculus and Neoplasms.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Urinary bladder – Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Injuries, Ashmari - Vesical Calculus, Cystitis and Neoplasms.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Mutraghata and Mutrakrichra - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. Retention of urine.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Prostate - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Prostatitis, Prostatic abscess, Benign Enlargement of Prostate and Carcinoma of Prostate.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Urethra – Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Urethritis, Stricture and Rupture.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Penis: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Niruddhaprakasha - Phimosis, Parivartika -Paraphimosis, Avapatika - Prepuceal ulcer, Arbuda-Tumours and Lingarsha - Penile Warts.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Diseases of Scrotum and Testis: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Epididymo-orchitis, Epididymal cyst, Scrotal filariasis, Shukrashmari - Seminal calculus, Torsion of testis, Ectopic testis, Undescended testis and Tumours .

Vridhhi Roga: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Mutravridhhi – Hydrocele.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

Antra Vridhhi – Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Hernia - Inguinal, Femoral, Epigastric, Umbilical, Incisional and rare forms of Hernia.

- Target - *Clinical utility of the concepts.*
- Preferable targets - Hands on experience of management of different conditions.

PRACTICALS

Content of Practicals:

1. Identification, uses, demonstration of surgical instruments and methods of sterilization.
2. Training of case taking, bed side clinicals and case presentation.
3. Demonstration and Practical training in Anaesthesia.
4. Training to develop skills in following Parasurgical and other procedures
 - i. Kshara Karma
 - ii. Agnikarma
 - iii. Kshara Sutra
 - iv. Raktamokshana
 - v. Application of bandages and splints
 - vi. Catheterization
 - vii. Wound management procedures like Parisheka and Patradana
 - viii. Ryle's tube aspiration
 - ix. Injections -Intramuscular / Intravenous / Subcutaneous / Intradermal
 - x. Incision and drainage of abscess
 - xi. Suture of open wounds
5. **Observation of following procedures**
 - i. Circumcision
 - ii. Hydrocele
 - iii. Hernial repair
 - iv. Vasectomy
 - v. Haemorrhoidectomy
 - vi. Fistulectomy
 - vii. Fissurectomy
 - viii. Appendectomy
 - ix. Cholecystectomy
6. **Training of Surgical Emergencies and Management.**

Clinical Training (Indoor and Outdoor)

- Shalya (Samanya)
- Shalya (Kshara and Anushastra Karma)
- Asthi and Sandhi Chikitsa (Orthopaedics and Trauma)
- Anaesthesia
- Radiology

09 Months

03 Months (atleast one month in OT)
03 Months (atleast one month in OT)
02 Months
15 days
15 days

Distribution of Marks

- | | |
|------------------|--------------------|
| 1) Daily records | - 10 Marks |
| 2) Instruments | - 20 Marks |
| 3) Short case | - 10 Marks |
| 4) Long case | - 20 Marks |
| 5) Viva – voce | - 40 Marks |
| Total | - 100 Marks |

Reference Books

1. Sushruta Samhita
2. Ashtanga Sangraha
3. Ashtanga Hridaya

4. Charaka Samhita
5. The Surgical instruments of the Hindus
6. Shalya Tantra Samuchchaya
7. Shalya Vigyan (Part 1-2)
8. Shalya Samanvaya (Part 1-2)
9. Shalya Pradeepika
10. Soushruti
11. Clinical Shalya Vigyan
12. Bhagna Chikitsa
13. Kshara sutra management in anorectal ailments
14. Anorectal diseases in Ayurveda
15. Adhunik Shalya Chikitsa Siddanta
16. Agnikarma Technology Innovation
17. Shalya Tantra Ke Siddhant
18. Recent advances in the management of Arshas / Haemorrhoids
19. Arsha Evum Bhagander Mein sutra Avacharan
20. Kshara Sutra
21. Surgical ethics of Ayurveda
22. Bailey and Love's Short Practice of Surgery
23. Clinical methods in surgery
24. Textbook of Operative Surgery
25. Shalya Vigyan (Sachitra)
26. Anushastra Karma
27. Concept of Vrana is Ayurveda
28. Significance for Poorva Karma in Surgical Patient
29. Sangyahan Prakash
30. A concise Text Book of Surgery
31. A manual on Clinical Surgery
32. A System of Surgical Diagnosis
33. A Practical Guide to Operative Surgery
34. Drugs and Equipment for Anaesthesia
35. Manual of Surgical Instruments
36. Ward Procedures
37. Recent trends in the management of Arshas / Haemorrhoids
38. Primary Anaesthesia
39. Synopsis of Anaesthesia
40. Clinical Anatomy/ Surgical Anatomy
41. Surgical Instruments of the Hindus
42. Outline of Orthopedics
43. Outline of Fracture
44. Recent trends in the management of Bhagandara / Fistula-in-ano
45. Principles and Practice of Agnikarma
46. Manipal Manual of Surgery

- Girindranath Mukhopadhyaya
- Pandit Ramadesh Sharma
- Dr. Surendra Kumar Sharma
- Vd. Anantaram Sharma
- Dr. Mukund Swaroop Verma
- Dr. Ram Nath Dwivedi
- Dr. Akhilanand Sharma
- Dr. Prabhakar Janardhan Deshpande
- Dr. S.K. Sharma, Dr. K.R.Sharma and Dr. Kulwant Singh.
- Dr. Sizoria and Dr. Praveen Kumar Chowdary.
- Dr. Katil Narshingham Udupa
- Dr. P.D. Gupta
- Dr. K.K.Takral
- Dr. P. Hemantha Kumar
- Vd. Kanak Prasad Vyas
- Dr. S.N.Pathak
- Dr. D.N. Pande
- Norman.S. Williams, Charles.V. Mann and R.C.G. Russell
- S. Das
- S. Das
- Anantram Sharma
- Dr. D.N. Pande
- Dr. Lakshman Singh
- Dr. Lakshman Singh
- Dr. D.N. Pande
- S. Das
- S. Das
- T.N. Patel
- S. Das
- Arun kumar
- M.M. Kapur
- Patel Mansukh. B
- Dr. P. Hemantha Kumar
- Maurice King
- Lee
- John E.Skandalakis
- Girindharnath Mukopadyay
- John Crawford Adams and David Hamblen. L
- John Crawford Adams
- Dr. P. Hemantha Kumar
- Dr. Anand Kumar and Dr. Kanchan Shekoker
- Dr. Rajgopal Shenoy

4.4 SHALAKYA TANTRA

Theory Two Papers – 100 Marks Each
Practical/Viva voce – 100 Marks

Netra Roga Vignyan

Paper I

100 Marks

I. Introduction

10 hrs

- Shalakyatantra nirukti, Parichayam, Ithihasam
- Netra rachana shariram (Mandala, Patala, Sandhi, Drushti Vichara) and Netra Kriya Sharira alongwith modern view.
- Netrapariksha, Netraparikshanopayogi Yantra Shastradi gyanam.
- Netrarognamam – Samanya Hetu (Nija and agantuja), Purvarupa, Samprapti, Rupa and Chikitsa.
- Classification of Netraroga and its importance.

II. Netra Samanya and Vishishta Chikitsa - Kriya Kalpa

15 hrs

- Seka, Aschyotana, Pindi, Vidalaka Tarpana, Putapaka, Anjana and importance of Panchkarma in Netra Chikitsa.
- Basic fundamentals of Netra Shastra Chikitsa e.g. Purva-Pradhana- Paschat karma, Ama-Pachyaman-Pakva Vrana shotha, Vranitopasana, Pranashtashalya, & Vranbhandhana. Methods and concepts of sterlization, asepsis and antisepsis as per ancient and modern point of view.
- Basic applied knowledge of Ashtavidha shastrakarma , agni, kshara, raktamokshana in Nerta rogas.
- Essential diagnostic and therapeutic modern pharmacological agents required in Netra Chikitsa

III. Sandhigata Roga

5 hrs

Number of sandhigata rogas, detailed etiology, pathology, clinical features and management of diseases of Pooyalasa and srava.

Study of krimi granthi, parvani and alaji.

Study of Acute and Chronic Dacryocystitis, Epiphora, Blepharitis - aetiology, pathology, signs & symptoms, differential diagnosis and their medical and surgical management.

IV. Vartmagata Roga

10 hrs

Number of vartmagata rogas, and detailed knowledge of etiology, pathology, clinical features and management of diseases of Vartma.

Study of Anjananamika, Utsangini, Lagana, Vatahata vartma, Pakshma kopa, Sikta vartma, Pothaki, Klinna vartma, Krichhronmeelana and Kukunaka.

Knowledge of Vartmarbuda, Utklishta vartma, Nimesh, Pakshmashata, Vartmarsha

Knowledge of Hordeolum, Ptosis, Trachoma, Trichiasis, Entropion, Ectropion - Etiology, signs and symptoms differential diagnosis and their medical and surgical management

V. Shuklagata Roga

8 hrs

Number of Shuklagata rogas,detailed knowledge of etiology, pathology, clinical features and management of Arma , Arjuna and shuktika

Knowledge of Sira pidika , Sira jala ,Pishtaka, Balasgrathita.

Study of Pterygium, Scleritis, Episcleritis, Sub-Conjunctival Hemorrhage.

VI. Krishnagata Roga**10 hrs**

Number of krishnagata rogas, detailed knowledge of Etiology, Pathology, Clinical features, differential diagnosis, complications and Management of savrana /kshata shukla, avrana shukra

Knowledge of Sira shukla, Akshipakatyaya and Ajakajat.

Knowledge of Corneal ulcer, Corneal Opacity, Uveitis, Acute Iridocyclitis, Staphyloma, their aetiology, pathology, symptoms, differential diagnosis, complications and management.

VII. Sarvagata Roga**16 hrs**

Number of Sarvagata rogas, detailed knowledge of etiology, pathology, clinical features, complications, differential diagnosis and Management of Sarvagata Roga of Abhishyanda Adhimantha & Hatadhimantha and Shushkakshipaka.

Knowledge of Amloshit, Vata paryaya, Anyato vata, Sashopha & Ashophakshipaka- Pilla roga, Sirotpata and Siraharsha.

Knowledge of Conjunctivitis, Glaucoma, Dry Eye Syndrome – etiology, pathology, clinical features, differential diagnosis, complications and their management.

VII. Drishtigata Roga**18 hrs**

Number of Drishtigata rogas detailed knowledge of - etiology, pathology, clinical features, differential diagnosis and management Timira, Kacha and Linga nasha.

Knowledge of Abhighataja, sanimittaja & Annimittaja Lingnasha Doshandhya/Kaphavidagdha drishti/Naktandhya, Ushna vidagdha, Pittavidagdha drishti, Dhumadarshi, Hriswajadya, Gambhirika, Nakulandhya, Nayanabhighata.

Knowledge of Refractive errors, Cataract – etiology, pathology, clinical features, differential diagnosis, complications and their management

Study of Eale's disease, Hypertensive & Diabetic Retinopathies, Age related Macular degeneration, Strabismus, Retinitis pigmentosa, night blindness, Amblyopia, Central serous retinopathy, Optic Neuritis and Optic atrophy

III. Miscellaneous Diseases**8 hrs**

Xerophthalmia and other malnutritional eye disorders.

Knowledge of ocular trauma and their management.

Introduction to Eye bank, Eye donation, Corneal Transplantation

Netraswasthyarakshanopaya- Preventive Ophthalmology and Community Ophthalmology

Shira - Karna- Nasa- Mukha rogas**PAPER II****100 Marks****I Samanya Chikitsa****10 hrs**

Basic instruments used in the diagnosis and treatment of diseases of Shira, Ear, Nose & Oral cavity.

Study of therapeutic procedures like Sveda, Kavala, Gandusa, Dhuma, Murdhni Taila, Nasya, Pratisarana, Karna Purana, karna prakshalana, nasa prakshalan Mukha Lepa, ashtavidha shastrakarma and anushastrakarma used in the treatment of Shira, Ear, Nose, Dental, Periodontal, Oral cavity and Throat diseases.

II Shiro Roga

12 hrs

Importance and Superiority of Shira.

Generalised and specific etiology, pathology, classification, clinical features, differential diagnosis, complications and management of diseases of Shira and Kapala as detailed in Ayurveda.

Detailed study of Vataja, Pittaja, Kaphaja shirashoola, Suryavarta, Ardhavabhedaka.

Knowledge of Raktaja Shirah shoola Krimija & Kshayaja shiraha shoola Kshyaja shiraha shoola & Ananta vata, Indralupta, Darunaka Khalitya, Palitya and other Kapalagata roga.

Detailed study of Headache, Migraine its differential diagnosis and treatment along with diseases of Scalp.

III Karna Roga

23 hrs

Detailed study of Rachana and kriyasharir of Karna (Ear) & Shraavanendriya as per Ayurvedic and modern view, Examination of Ear.

Detailed study of etiology, pathology, classification, clinical features and management of diseases of Karna – karna shool, krana nada, karna shweda, badhriya, karnastrava, karnapak, pootikarna, karnagoothaka, karnashotha, karnavidradhi, krimimkarna Knowledge of karna kandu, karna pratinaha, karnarsha, karnarbuda, karnapali rogas

Knowledge of Karna sandhana (Auroplasty), fundamentals, method and Vaikritpaham

Detailed study of Otagia, ASOM, CSOM, Deafness, wax – etiology, pathology, clinical features, differential diagnosis, complications and their medical and surgical management

Knowledge of Otomycosis, Otosclerosis, Tinnitus, Vertigo, Foreign body in ear and Noise pollution.

IV Nasa Roga

20 hrs

Detailed study of Rachana and kriyasharir of Nasa (Nose and paranasal sinuses) & Ghranendriya as per Ayurvedic and modern view, Examination of Nose.

Detailed study of Pratisyaya, Dushta pratishyaya, Nasanaha, Kshavathu, Nasagata raktapitta Nasarsha.

Knowledge of Putinasa, Bhranshathu, Peenasa, Apeenasa, Nasarbuda, Nasashotha, Dipta, Nasa Sandhana.

Detailed study of Rhinitis, Epistaxis, Nasal Polyp, DNS -. Etiology, pathology, clinical features differential diagnosis and medical and surgical management- Knowledge of Nasal trauma, foreign body in the nose, tumours of nose and para nasal sinuses

V Mukha Roga (Diseases of Oral Cavity)

30 hrs

Detailed study of Rachana and kriyasharir of Mukha saptanga – oshtha, dantamoola, danta, jivha, talu, gal, galadi (Oral cavity) as per Ayurvedic and modern view, Basic examination of saptanga .

Mukha and Danta Swasthya ancient and modern concepts

Detailed study of Etiology, Pathology, Clinical features, differential diagnosis and Treatment of Mukharoga (Diseases of oral cavity)

Oshtha Roga (Diseases of Lips)

Detailed study of Etiology, pathology, classification, clinical features and management of diseases of Oshtha (Lips) - Oshtha prakopa, khandoshtha

Knowledge of gandalaji, jalarbuda, kshataja oshthaprakopa

Knowledge of as per Ayurvedic and modern science

Danta Roga (Dental Diseases)

Detailed study of Etiology, pathology, classification, clinical features and management of diseases of Danta (Teeth) daalan, krimidanta, dantaharsha, danta shrkara, hanumoksha

Knowledge of karala, Bhanjanak , Kapalika,shav danta,danta bheda, danta chaal adhidanta.

Knowledge of Danta Utpatana, (Tooth extraction), Danta purana , Danta rakshana..

Knowledge of Dental Caries, Dental Tartar.

Dant Mula Gata Roga (Diseases of Periodontia)

Detailed study of Etiology, pathology, classification, clinical features and management of diseases of Dantamula (Periodontia) - Shitada,Dantaveshta, Upakush, danta nadi, danta vidradhi, adhimansa

Knowledge of dantapupputaka, Saushira, Mahasaushira ,danta vaidarbha , paridara, vardhana.

Detailed study of Etiology, pathology, classification, clinical features and management of diseases of Gingivitis, Apical abscess, Periodontitis (Pyorrhoea).

Jihva Gata Roga (Diseases of Tongue)

Detailed study of Etiology, pathology, classification, clinical features and management of diseases of jivha roga - jivha kantaka (vataja, pittaja and kaphaja)

Knowledge of Upajihva, Adhijihva, alasa.

Knowledge of Glossitis,Tongue Tie, Ranula, Benign and Malignant Tumors of tongue.

Talu Roga (Diseases of Palate)

Detailed study of Etiology, pathology, classification, clinical features and management of diseases of Talu (Palate) - Gala shundika, Talushosha, Talupaka

Knowledge of Talupupputa, Adhrusha, Kacchapa, Talvarbuda, Mamsasanghata, Knowledge of Cleft palate, palatitis, uvulitis and tumours of the palate.

Kantha and Gala gata Roga (Diseases of Pharynx & Larynx)

Detailed study of Etiology, pathology, classification, clinical features and management of diseases of - Tundikeri, Kantha shaluka, Gilayu, Galaganda swrabhedha , galavidradhi.

Knowledge of Rohini, Galashotha, Kantharbuda, Kanthavidradhi, galarbuda Galaugham, Vrindam, Ekavrindam, Valaya, balasa , Shataghni, Swaraghna.

Detailed study of Etiology, pathology, classification, clinical features and management of - Pharyngitis, Laryngitis, Tonsillitis, , Adenoiditis

Knowledge of foreign body in the throat, Carcinoma of Larynx, Pharynx, Diphtheria, diseases of salivary glands.

Sarvasara Mukha Roga (Generalised mucosal affections of the oral cavity)

Detailed study of Etiology, pathology, classification, clinical features and management of diseases of sarvasar, mukhapaka

Knowledge of urdhvaguda, putivaktrata, mukharbuda

Knowledge of Stomatitis.

VI Miscellaneous Diseases

National Programme for Prevention and Control of Deafness.

Prevention of malignancy of Oral cavity.

Dysphagia, Hoarseness of voice.

PRACTICAL

Content of Practical

Identification, Uses, Demonstration of surgical/non-surgical equipment/ instruments, materials used in shalakyā chikitsa. Method of sterilization. Training of case taking, bedside clinics and case presentation.

Training in para- surgical procedures-

- 1) Kshara karma
- 2) Agnikarma
- 3) Raktamokshana
- 4) Training of ward procedures. Application of bandages, wound management
- 5) Training of minor procedures (ashtavidha)
- 6) Observation of surgical procedures in Shalakyā

Clinical Training

04 Months (OPD, IPD OT and kriya kalpa)

Distribution of marks

- | | |
|---|----------|
| 1) Long Case | 30 Marks |
| 2) Short Case | 20 Marks |
| 3) Identification of instruments
quipments,medicines,etc | 20Marks |
| 4) Viva – voce | |
| 5) Daily Record (Case record) | 20 Marks |

10marks

Total

100 Marks

Reference Books:-

- | | |
|--|--------------------------------|
| 1. Shalakyā Tantra | Dr. Rama Nath Dwivedi |
| 2. Shalakyā Vigyan | Dr. Ravindra Chandra Choudhary |
| 3. Abhinava Netra Chikitsa | Acharya Vishva Nath Dwivedi |
| 4. Netra Chikitsa Vigyan | Dr. Ravindra Chandra Choudhary |
| 5. Netra Roga Chikitsa | Dr. Munje |
| 6. Netra Roga Vigyan | Dr. Hans Raj |
| 7. Parson's Diseases of Eye | |
| 8. Diseases of ENT Log and Turner | |
| 9. Shalakyā Tantra | Shiv Nath Khanna |
| 10. A text book of ophthalmology in Ayurveda | Dr. P.K. Shantha kumari |
- Useful portions of Charak, Sushrut, Vagbhata

4.5 Research methodology and Medical statistics

Total hours 50 (Part A-30 and Part B- 20)
Total Marks 50 (Part A-30 and Part B- 20)

Paper should be set up only from the 1-7 topics

SYLLABUS TOPICS	SUBJECT
1	Brief historical background of research and statistics in Ayurved and contemporary medical science a. Historical aspects of research concepts b. Evidences of researches in ayurvedic classics
2	Etymology, definitions and synonyms (Anveshana, Gaveshana, Prayeshana, Anusandhan and Shodha) of the word Research
3	Scope (Drug research), need, importance, utility for Research in Ayurved
4	Types of Research (familiarization of the terms) a. Pure and Applied b. Qualitative , Quantitative and Mixed c. Observational and interventional
5	Research process (Importance of each steps in brief) a. Selection of the topic b. Review of the literature c. Formulation of Hypothesis d. Aims and Objectives e. Materials and methods f. Observations and results g. Methods of communication of Research
6	Research tools – Role of the pramanas as research tools
7	The concept and importance of ethics in research
	Total

Desirable syllabus topics only for sensitization and not for examination

SYLLABUS TOPICS	SUBJECT	HOURS
1	Drug research a. Preclinical Research b. Identification c. Standardization d. Safety and efficacy Clinical Research a. Phases of clinical research (RCT)	7

Advanced Research -(nice to know) no question from this part (meant for student's self study)

Concepts of evidence based Medicine- 2 hour
 Question paper setting pattern –
 Objective 1×10=10
 Descriptive 4×3=12; 2×4=8

Part B- Bio- Statistics

Question Paper should be set up only from the 1-6 topics. Question paper should not contain mathematical calculations

SYLLABUS TOPICS	SUBJECT	HOURS	MARKS
1	Etymology, definitions and scope of the Biostatistics	1	2
2	Common statistical terms and notations a. Population b. Sample c. Data d. Variable e. Normal distribution	3	4
3	Collection, Classification of the data and Presentation of data a. Tabular b. Graphical c. Diagrammatical	4	4
4	Measures of location a. Average b. Percentile Measures of Central Tendency a. Arithmetic mean b. Median c. Mode	4	4
5	Variability and its measurement a. Range b. Standard deviation c. Standard error	4	4
6	Introduction to probability and test of significance	1	2
	Total	17	20

Desirable syllabus topics only for sensitization and not for examination

1) Parametric and non parametric tests – 2hours

Advanced statistics -(nice to know) no question from this part (meant for student's self study)

1) Statistical softwares – 1 hours

Question paper setting pattern –

Objective 1×8=8

Descriptive 4×2=8; 2×2=4

Reference books for Research methodology :

1. Dawson, Catherine, 2002, *Practical Research Methods*, New Delhi, UBS Publishers' Distributors
2. Kothari, C.R., 1985, *Research Methodology-Methods and Techniques*, New Delhi, Wiley Eastern Limited.
3. Kumar, Ranjit, 2005, *Research Methodology-A Step-by-Step Guide for Beginners*, (2nd.ed), Singapore, Pearson Education

4. Students guide to research methodology – Undergraduates. Alexandria Medical Students Association.
5. *Health research methodology. A guide for training in research methods.* 2nd edition. Manila, World Health Organization Regional Office for the Western Pacific, 2001.

Reference Books for statistics :

1. Health research methodology. A guide for training in research methods. 2nd edition. Manila, World Health Organization Regional Office for the Western Pacific, 2001.
2. Statistical methods in medical research. P.Armitage (Ed) Oxford Blackwell
3. Statistical methods . Snedecor GW and Cochran, WG
4. Altman, D. G. (1991). *Practical statistics for medical research.* London: Chapman Principles of Medical Statistics by A. Bradford Hill
5. Interpretation and Uses of Medical Statistics by Leslie E Daly, Geoffrey J Bourke, James MC Gilvray.
6. Research methodology methods and statistical techniques- Santosh Gupta. Greenhouse SW.
7. The growth and future of biostatistics: (A view from the 1980s). *Statistics in Medicine* 2003; 22:3323–3335.
8. Knapp GR & Miller MC. Clinical epidemiology and Biostatistics, NMS series Antonisamy B, Christopher S & Samuel PP. Biostatistics : Principles and practice
9. Sundara Rao PSS & Richard J. An introduction to Biostatistics, PHI
10. Senn S (1997). *Statistical Issues in Drug Development.* Chichester: John Wiley & Sons.
11. Methods in Bio-statistics for Medical Students- BK Mahajan
12. Vaidyakeeya Sankhiki Shastra- Dr.S.S.Savrikar

**RAJIV GANDHI UNIVERSITY OF HEALTH
SCIENCES, KARNATAKA.
4TH T BLOCK, JAYANAGAR, BANGALORE**



**REVISED ORDINANCE GOVERNING
B.A.M.S DEGREE
PROGRAMME**

Notification

AIMS AND OBJECTS:

Ayurveda education should aim at producing graduates of profound scholarship having deep basis of Ayurveda with scientific knowledge in accordance with Ayurvedic fundamentals with extensive practical training who would be able and efficient teachers, research workers and kaya Chikitsaka (Physicians) and Shalyachikitsaka (Surgeons) fully competent to serve in the medical and health services of the country.

Regulations Governing B.A.M.S. Degree Course
Eligibility for Admission, Duration, Attendance and Scheme of Examination

1. ELIGIBILITY

1.1 Qualifying Examination

A candidate seeking admission to first BAMS course:

Shall have passed two years Pre University examination conducted by Department of Pre-University Education, Karnataka State, with English as one of the subjects and Physics, Chemistry and Biology as optional subjects. The candidate shall have passed subjects of English, Physics, Chemistry and Biology individually also. Preference will be given to candidates knowing Sanskrit.**

OR

Shall have passed any other examination conducted by Boards/Councils/Intermediate Education established by State Governments/ Central Government and recognised as equivalent to two year Pre University examination by the Rajiv Gandhi University of Health Sciences/Association of Indian Universities (AIU), with English as one of the subjects and Physics, Chemistry and Biology as optional subjects and the candidate shall have passed subjects of English, Physics, Chemistry and Biology individually.

The candidates who have passed the B. Sc Part- I degree examination of any University or equivalent examination conducted by statutory Universities or Boards with Science subjects namely Physics, Chemistry, Biology or Botany & Zoology and secured not less than 50% of marks in the aggregate are eligible for admission to I BAMS Course, provided the candidate has passed the PUC examination with Physics, Chemistry, Biology, and English as one of the languages.

iv) Candidates who have passed B. Sc degree examination of any University in India or recognised as equivalent thereto with any three (3) Science subjects with not less than 50% of marks in the aggregate are eligible for admission to BAMS Course provided they have passed in the deficient Scien Zoology), and English as one of the languages at the Pre-University or B. Sc Part 1 level. However in the case of students belonging to SC / ST and Category -1, the minimum requirement in percentage of marks for admission to BAMS Course is relaxed by 10% marks.

1.2 Marks

The selection of students to medical colleges shall be based on merit provided that:

In case of admission on the basis of qualifying examination, a candidate for admission to BAMS course must have passed individually in the subjects of Physics, Chemistry, Biology and English and must have obtained a minimum of 50% marks taken together in Physics, Chemistry and Biology in the qualifying examination(2nd PUC). In respect of candidates belonging to Scheduled Castes, Scheduled Tribes or Other Backward Classes, the marks obtained in Physics, Chemistry and Biology taken together in qualifying examination be 40% instead of 50% as above.

In case of admission on the basis of competitive entrance examination, a candidate must

have passed individually in the subjects of Physics, Chemistry, Biology and English and must have obtained a minimum of 50% marks in Physics, Chemistry and Biology taken together at the qualifying examination (2nd PUC) and in addition must have come in the merit list prepared as a result of such competitive entrance examination by securing not less than 50% marks in Physics, Chemistry and Biology taken together in the competitive examination. In respect of candidates belonging to Scheduled Castes, Scheduled Tribes or Other Backward Classes the marks obtained in Physics, Chemistry and Biology taken together in qualifying examination and competitive entrance examination be 40% instead of 50% as stated above.

1.3 Age : The candidate should have completed 17 years on or before 31st day of December of the year of admission.

2. DURATION OF THE COURSE

Every student shall undergo a period of certified study extending over 4½ academic years from the date of commencement of his study for the subject comprising the B.A.M.S.curriculum to the date of completion of the examination followed by one year compulsory rotating Internship. The 4 ½ years course has been divided into four phases plus internship.

- I Professional – Twelve (12)months .
- II Professional - Twelve (12)months.
- III Professional - Twelve (12)months.
- IV Professional - Eighteen (18)months
- Compulsory Internship- Twelve (12) months.

3. DEGREE TO BE AWARDED:

The candidate shall be awarded degree AYURVEDACHARYA (Bachelor of Ayurvedic Medicine and Surgery) after completion of prescribed courses of study extending over the prescribed period and passing the final examination and satisfactorily completion of six months/one year compulsory internship after the final examination.

4.MEDIUM OF INSTRUCTION:

English or Kannada.

5. THE NUMBER OF STUDENTS TO BE ADMITTED:

The admission should be made strictly in accordance with the student bed-ratio of 1:3 i.e. on the basis of three beds in the hospital attached with the college one student should be admitted every year. The minimum number of student to be admitted in an Ayurvedic College should be 20

6.ATTENDANCE

Every candidate should have attendance not less than 75% of the total classes conducted in theory and practical separately in each academic year calculated from the date of commencement of the term to the last working day as notified by the University in each of the subjects prescribed to be eligible to appear for the university examination subject to the condition that his / her progress and conduct are counted to be satisfactory by the Principal.

The Principal should notify at the College the attendance details at the end of each term without fail under intimation to this University.

A candidate lacking in the prescribed attendance and progress in any subject(s) in theory or practical/clinical in the first appearance should not be permitted to appear for the examination in

that subject(s).

7. Internal Assessment

College level Internal assessment examinations are to be conducted without fail.50% passing marks in the college level internal assessment examinations will be considered as eligibility for final (annual) examinations & marks obtained in internal assessment examinations will not be considered in the university marks card,however once in 6 months college level examinations should be conducted.

8.1 FIRST PROFESSIONAL EXAMINATION

- I. The first professional examination shall be at the end of one academic year of first professional session.The first professional session will ordinarily start in july.
- II. The first professional examination shall be held in the following subjects :
 1. Padartha vijnana evam ayurveda ithihas.
 2. Sanskrita
 3. Kriya shareera (Physiology)
 4. Rachana shareera (anatomy)
 5. Mouluka sidhanta evam ashtanga hridaya (sutrasthana)

111. A student failed in not more than 2 subjects shall be held eligible to keep the terms for the second professional course. However he/she will not be allowed to appear for second professional examination unless he/she passes in all the subjects of the first professional.

8.2 SECOND PROFESSIONAL EXAMINATION :

- I. The second professional session shall start every year in the month of July following the completion of first professional examination.
The second professional examination shall be ordinarily held and completed by the end of month of JUNE/JULY every year after completion of one year of second professional session.
- II. The second professional examination shall be held in the following subjects:
 1. Dravyaguna vijnana (Pharmacology and material medica)
 2. Rasashastra- Bhaishajya kalpana (Pharmaceutical science)
 3. Agadatantra and vyavahara ayurveda evam vidhi vaidyaka (Toxicology and medical jurisprudence)
 4. Charaka- purvardha

111. A student failed in not more than two subjects shall be held eligible to keep the terms for the third professional examination, however he/she will not be allowed to appear for third professional examination unless he/she passes in all the subjects of second professional examination.

8.3 THIRD PROFESSIONAL EXAMINATION :-

- i. The third professional session shall start every year in the month of july following completion of second professional examination. The third professional examination shall be ordinarily held and completed by the end of the month of

JUNE/JULY every year after completion of one year of third professional session.

- ii. The third professional examination shall be held in the following subjects: -
 1. Roganidana vikriti vijnana (pathology and microbiology)
 2. Charak samhita- uttarardh
 3. Swasthavritta and yoga (preventive and social medicine and yoga)
 4. Prasuti and striroga (gynaecology and obstetrics)
 5. Balaroga (paediatrics)
- iii. A student failed in not more than two subjects shall be held eligible to keep the terms for the final professional examination, however he/she will not be allowed to appear for the final professional examination unless he/she passes in all the subjects of third professional examination.

8.4 FINAL PROFESSIONAL EXAMINATION :-

The final professional session will be of one and half year duration and shall start every year in the month of July following completion of third professional examination. The final professional examination shall be ordinarily held & completed by the end of month of DEC/JAN. Every year after completion of one and half year of final professional session.

ii) final professional examination shall comprise of the following subjects :-

1. Shalya tantra (general surgery)
2. Shalakya tantra (diseases of head and neck including ophthalmology , ENT and dentistry)
3. Kayachikitsa (internal medicine –including manas roga, rasayana & vajikarana)
4. Panchakarma
5. Research methodology & medical-statistics.

9.COMPULSORY INTERNSHIP

Duration of internship: 1 year

The student will join compulsory internship programme after passing the final professional examination. The internship programme will start after declaration of the result of final professional examination. The period of internship will be one year.

Internship programme and time distribution will be as follows :-

1. The interns will receive orientation regarding programme details of internship programme along with the rules & regulations, in an orientation workshop, which will be organised during first three days of the beginning of the internship programme. A work book will be given to each intern. The intern will enter date wise details of the activities undertaken by him /her during his/her training .
2. Every intern will provisionally register himself with concerned state board/council and obtain a certificate to this effect before joining the internship programme.
3. Daily working hours of intern will be not less eight hours.

4. Normally one year internship programme will be divided in to clinical training of six month in the ayurvedic hospital attached to the college and six month in PHC/CHC/Rural hospital/district hospital/civil hospital or any Govt. Hospital modern medicine but where there is no provision / permission of the state govt. for allowing the graduate of the ayurveda in the hospital / dispensary of modern medicine , the one year internship will be completed in the hospital of ayurved college.
- A. Clinical training of six/twelve months as a case may be in ayurvedic hospital attached to the college will be conducted as follows.

Departments	Distribution of six months	Distribution of twelve months
1.kayachikitsa	2 months	4months
2.shalya	1 month	2months
3.shalakya	1 month	2months
4.prasuti & stree roga	1 month	2months
5.koumarya bhritya	15 days	1month
6.panchakarma	15days	1month

- B. Six month training of interns will be carried out with the object to orient and acquaint the intern with national health programme. The intern will have to join in one of the following institutes for undertaking such training.
- Primary health center
 - Community health center/ distret hospital
 - Any hospital of modern medicine
 - Any ayurveda hospital or dispensary.

All the above centers (a,b,c and d) will have to be recognised by the concerned university and concerned govt. Designated authority for taking such a training.

Deatil guideline for training programme.

Guidelines for conducting the internship clinical training of 06/12 months in the ayurvedic hospital attached to the college.

The intern will undertake following activities in respective departments as shown below :-

- Kayachikitsa** duration :- 2 months / 4 months.
 - All routine works such as case taking , investigations , diagnosis and management of common diseases by ayurvedic medicines.
 - Routine clinical pathological work i.e. Haemoglobin estimation , complete hemogram , urine analysis ,microscopic examinations of blood parasites , sputum examinations stool examinations etc. Mutra evam mala pariksha by ayurvedic method interpretation of laboratory data and clinical findings and arriving at diagnosis.
 - Training in routine ward procedure and supervision of patients in respects of their diet, habits, and verification of medicine schedule.
- Panchakarma** – duration :- 15 days /1 month

- i) Panchakarma procedures and techniques regarding poorva karma , pradhana karma and paschat karma.

3. Shalya Duration :- 1 month / 2 months

Intern should be trained to acquaint with

- i) Diagnosis and management of common surgical disorders acco. To ayurvedic principles.
- ii) Management of certain surgical emergency such as fractures and dislocations acute abdomen etc.
- iii) Practical training aseptic and antiseptics techniques , sterilisation etc.
- iv) Intern should be involved in pre operative and post operative managements.
- v) Practical use of anaesthetic techniques and use of anaesthetics drugs.
- vi) Radiological procedure , clinical interpretation of x-ray , IVP, Barium meal , sonography , etc.
- vii) Surgical procedures and routine ward techniques such as
 - i) Suturing of fresh injuries
 - ii) Dressing of wounds ,burns,ulcers etc
 - iii) Incision of abscess
 - iv) Excision of cyst
 - v) Venesection etc.
 - vi) Application of ksharasutra in ano-rectal diseases.

4. Shalaky Duration 1 month/ 2 months :-

Intern should be trained to acquaint with

- a) Diagnosis and management of common surgical disorders acco. To ayurvedic principles.
- b) Intern should be involved in pre operative and post operative managements.
- c) Surgical procedures in ear, nose, throat , dental problems , ophthalmic problems.
- d) Examinations of eye ear, nose, throat and refractive errors etc with the supportive instruments in OPD.
- e) Procedure like anjana karma , nasya , rakta mokshana , karna poorana , shirodhara , putapaka ,kawal ,gandush etc at OPD level.

5. Prasuti and streeroga Duration 1 month/2 month

Intern should be trained to acquaint with

- a) Antenatal and post natal problems and their remedies, Antenatal and postnatal care.
- b) Mangement of normal and abnormal labours
- c) Minor and major obstetric surgical procedures etc

6. Bala roga Duration 15 days/1 month

Intern should be trained to acquaint with

Antenatal and post natal problems and their remedies, Antenatal and postnatal care, also by ayurvedic principles and medicines.

- a) Antenatal and postnatal emergencies.

- b) Care of new born child along with immunisation programme.
- c) Important paediatric problems and their ayurvedic management.

B. PHC/RURAL HOSPITAL/DISTRICT HOSPITAL/CIVIL HOSPITAL/ OR ANY GOVERNMENT HOSPITAL OF MODERN MEDICINE.

Guidelines for conducting six months internship training in primary health centre, community health centre/district hospital; Any hospital of modern medicine any ayurveda hospital or dispensary.

Intern should be trained to acquaint with

- i. Routine of the PHC and maintenance of records.
- ii. They should be acquainted with the routine working of the medical/ non-medical staff of PHC and be always in contact with the staff in this period.
- iii. They should be familiar with the work of maintaining the register e.g. daily patient register, family planning register, surgical register and take active participation in the different government health schemes/ programmes
- iv. They should participate actively in different national health programmes of the government of the state / district.

C. Casualty Section of any recognised hospital of modern medicine.

Identification of casualty and trauma cases and their first aid treatment. Also procedure for referring such cases to the identified hospitals.

D. Rural Ayurvedic dispensary/hospital

Diseases more prevalent in rural and remote areas and their management.

Teaching of health care methods to the rural population and also various immunization programmes.

10. Assessment

After completing the assignment in various sections, they have to obtain a certificate from the head of the section in respect of their devoted work in the section concerned and finally submitted to the principal/ head of the institute so that completion of successful internship can be granted.

11. Migration of Internship: Migration of internship will be only with the consent of both the college and university, in case of migration is between two different universities and colleges. In case migration is only college to college but university is not change, only the consent of both the colleges will be required. The migration will be accepted by the university on the production of the character certificate issued by the institute and application forwarded by the college and university with NOC as case may be

12. Examination:

- i. Theory examination shall have minimum 20% short answer questions having maximum mark upto 40% and minimum 4 questions for long explanatory answers having maximum marks upto 60%. These questions shall cover entire syllabus of the subject.
- ii. Candidate obtaining 75% marks in the subject shall be awarded distinction in the subject.

- iii. The minimum marks required for passing the examination shall be 50% in theory and practical separately in each subject.
- iv. The supplementary examination will be held within 6 months of regular examination and failed students shall be eligible to appear in its supplementary examination as the case may be.
- v. Minimum 75% attendance **of the student** in each subject separately in theory and practical shall be essential for appearing in the examination. **In this regard** a class attendance card shall be maintained for each student for different subjects. The principal shall arrange to obtain the signature of the students, teachers at the end of each course of lectures and practical instructions and send the cards to each head of the department for the final completion before the commencement of each examination.
- vi. In case student fails to appear in regular examination for cognitive reason, he or she will appear in supplementary examination as regular students. In such cases his/ her non appearance in regular examination will not be treated as an attempt. Such students after passing examination will join the studies with regular students and appear for next professional examination after completion the required period of the study
- vii. The following facts may be taken into consideration in determining classwork in the subject :-
 - i. Regularity in attendance
 - ii. Periodical tests
 - iii. Practical copy

MIGRATION

The students may **be allowed to** take the migration to continue his/her study to another college after passing the first year examination. Failed students transfer and mid-term migration will not be allowed. For migration, the students shall have to obtain the mutual consent of both colleges and universities and will be against the vacant seat after obtaining NOC from CCIM.

13.1 NUMBER OF PAPERS AND MARKS FOR THEORY/ PRACTICAL:

Name of the	Number of hours of	Details of maximum mark
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subject	teaching						
	Theory	Practical	Total	Number of papers	Theory	Practical	Total
1st professional							
1.padartha vigyana evam ayurveda ka Itihasa	100	-	100	Two	200	-	200
2.sanskrit	200	-	200	one	100	-	100
3.kriya shareera	175	150	325	Two	200	100	300
4.rachana shareera	225	200	425	Two	200	100	300
5.mouluka siddantha evam astanga hridaya(sutra stana)	150	-	150	one	100	-	100
2nd professional							
1. Dravyaguna vigyana	175	200	375	Two	200	200	400
2.agada tantra, vyavahara ayurveda evam vidhi vaidyaka	100	100	200	One	100	50	150
3.rasa shastra evam bhaishajya kalpana part-1	175	200	375	Two	200	200	400
4.charaka samhita (purvardh)	150	-	150	One	100	-	100

3rd professional							
1. Roga vigyana evam vikriti vigyana	150	100	250	Two(01-pathology 01-ayurveda)	200	100	300
2. Swastha vritta and yoga	150	100	250	Two	200	100	300
3. Prasoti tantra and stri roga	175	100	275	Two	200	100	300
4. Bala roga	100	100	200	One	100	50	150
5. Charaka samhita(uttar ardha)	150	-	150	One	100	-	100
Final professional							
1. Kaya chikitsa	300	200	500	Two	200	100	300
2. panchakarma	100	200	300	One	100	50	150
3. shalya tantra	200	150	350	Two	200	100	300
4. shalakya tantra	200	150	350	Two	200	100	300
5. research methodology & medical stastics	50	-	50	One	50	-	50

NOTE: the period of theory and practice shall not be less than 60 minutes(one hour). The duration of the practical of clinical subjects and Rachana Sharira (Dissection) shall be of atleast 120 minutes (2 hours).

13.2 clinical training of students will start from third year onwards.

13.3 The clinical training in the hospital attached with college to the students shall be as follows:-

- i. **kaya chikitsa**(indoor and outdoor): 18 months
 - a) kayachikitsa(samanya) 06 months
 - b) manasroga 03 months
 - c) rasayana & vajikarana 03 months
 - d) panchakarma 03 months
 - e) rog vigyana vikriti vigyana 03 months
- ii. **shalya** (indoor and outdoor) 09 months
 - a) shalya (samanya) 03 months(atleast one month in OT)
 - b) shalya (kshar & anushastra karma) 03 months (atleast one month in OT)
 - c) ksharasutra 02 months

	d) anaesthesia	15 days
	e) radiology	15 days
iii.	<u>shalakya tantra</u> (indoor and outdoor)	04 months(atleast one month in OT)
iv.	<u>prasuti tantra evum stree roga</u>	03 months(outdoor & indoor)
v.	<u>kaumara bhritya</u> (outdoor and indoor)	01 month
vi.	<u>Atyavika (casualty)</u>	02 months

14. **qualifications & experience for teaching staff for UG teachers:**

(applicable for direct recruitment but age will be relaxed in case of promotion)

i. **essential:**

- a) a degree in ayurveda from a university established by law or a statutory board / faculty / examining body of Indian medicine or its equivalent as recognised under Indian medicine central council act, 1970.
- b) A post graduate qualification in the subject / speciality concerned included in the schedule to Indian medicine central council act, 1970.

ii. **Experience:**

a) **for the post of professor:**

total teaching experience of ten years in concerned subject is necessary out of which there should be five years teaching experience as reader / associate professor in concerned subject.

b) **For the post of associate professor (reader):**

Teaching experience of five years in concerned subject.(reader will be treated as associate professor).

c) **For the post of asst. Professor (lecturer): (age not exceeding 40 years).**

No teaching experience is required. Lecturer will be treated as asst. Professor.

d) **Qualification for the post of head of the institution (principal/ dean/director):**

The qualification and experience prescribed for the post of professor shall be essential for these posts.

Note:- in absence of the candidate of post-graduate qualification in concern subject the candidate of the following subjects as mentioned against them shall be eligible for the post of lecturer/asst.professor:-

<u>Speciality required</u>	<u>Name of the allied subject</u>
1.swasta vritta	1.Kayachikitsa
2.agada tantra	2.Drvyaguna/Rasashastra
3.roga vignana	3.Kayachikitsa
4.rachana shareera	4.Shalya
5.Kriya shareera	5.Samhita Siddanta

6.Shalakya	6.Shalya
7.Panchakarma	7.Kayachikitsa
8.Balaroga	8.Prasuti and Striroga/Kayachikitsa
9.Kayachikitsa	9.Manasaroga
10.Shalya	10.Nischetana evam ksha-kirana

a.The above provision of allied subject will be allowed for five years.

b.The teacher(s)who had been considered eligible in the past on the basis of previous regulations shall not be considered ineligible on the basis of amendment.

15. Appointment of Examiner in Ayurveda:No person other than regular/Retired teacher with minimum eight years teaching experience in the concerned subject shall be considered eligible fo an examiner.