## VOLUME 1

**SYLLABUS OF AYURVEDACHARYA (BAMS) COURSE**

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</table>
1.1 **PADARThA VIGYAN EVUM AYURVEDA ITIHAS**
(Philosophy and History of Ayurveda)

Theory - Two papers - 200 marks (100 each paper)
Total teaching hours: 150 hours

**PAPER-I**
Padartha Vigyanam 100 marks

**PART A**
50 marks

1. **Ayurveda Nirupana**
   1.1 Lakshana of Ayu, composition of Ayu.
   1.2 Lakshana of Ayurveda.
   1.3 Lakshana and classification of Siddhanta.
   1.4 Introduction to basic principles of Ayurveda and their significance.

2. **Ayurveda Darshana Nirupana**
   2.1 Philosophical background of fundamentals of Ayurveda.
   2.2 Etymological derivation of the word "Darshana". Classification and general introduction to schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya and Yoga.
   2.3 Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda).
   2.4 Padartha: Lakshana, enumeration and classification, Bhava and Abhava padartha, Padartha according to Charaka (Karana-Padartha).

3. **Dravya Vigyaniyam**
   3.1 **Dravya**: Lakshana, classification and enumeration.
   3.2 **Panchabhuta**: Various theories regarding the creation (theories of Taittiriyanopanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Susruta), Lakshana and qualities of each Bhoota.
   3.3 **Kaala**: Etymological derivation, Lakshana and division / units, significance in Ayurveda.
   3.4 **Dik**: Lakshana and division, significance in Ayurveda.
   3.5 **Atma**: Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (*atmanah jnasya pravrittih*).
   3.6 **Purusha**: as mentioned in Ayurveda - Ativahikapurusha/ Sukshmarshirra/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha.
   3.7 **Manas**: Lakshana, synonyms, qualities, objects, functions, dual nature of mind (*ubhayaatmakatvam*), as a substratum of diseases, penta-elemental nature (*panchabhutatmakatvam*).
   3.8 Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively.
   3.9 Tamas as the tenth Dravya.
   3.10 Practical study/application in Ayurveda.
PART B 50 marks

4. **Gunaviganiyam**
   4.1 Etymological derivation, classification and enumeration according to Nyaya-Vaisheshika and Charaka, Artha, Gurvadiguna, Paradiguna, Adhyatmaguna.
   4.2 Lakshana and classification of all the 41 gunas.
   4.3 Practical / clinical application in Ayurveda.

5. **Karma Viganiyam**
   5.1 Lakshana, classification in Nyaya.
   5.2 Description according to Ayurveda.
   5.3 Practical study/ application in Ayurveda.

6. **Samanya Viganiyam**
   6.1 Lakshana, classification.
   6.2 Practical study/ application with reference to Dravya, Guna and Karma.

7. **Vishesha Viganiyam**
   7.1 Lakshana, classification.
   7.2 Practical study/ application with reference to Dravya, Guna and Karma.
   7.3 Significance of the statement "Pravrittirubhayasya tu".

8. **Samavaya Viganiyam**
   8.1 Lakshana
   8.2 Practical study/clinical application in Ayurveda.

9. **Abhava Viganiyam**
   9.1 Lakshana, classification
   9.2 Clinical significances in Ayurveda.

**PAPER II** Padartha Vigyan and Ayurveda Itihas 100 marks

**PART A - Pramana/ Pariksha- Viganiyam** 75 marks

1. **Pariksha**
   1.1. Definition, significance, necessity and use of Pariksha.
   1.2. Definition of Prama, Prameya, Pramata, Pramana.
   1.3. Significance and importance of Pramana, Enumeration of Pramana according to different schools of philosophy.
   1.4. Four types of methods for examination in Ayurveda (Chaturvidha-Parikshavidhi), Pramana in Ayurveda.
   1.5. Subsudation of different Pramanas under three Pramanas.
   1.6. Practical application of methods of examination (Parikshavidhi) in treatment (Chikitsa).

2. **Aptopdesha Pariksha/ Pramana**
   2.1. Lakshana of Aptopadesha, Lakshana of Apta.
   2.2. Lakshana of Shabda, and its types.
   2.4. Vaakya: Characteristics, Vaakyarthagyanahetu- Aakanksha, Yogyata, Sannidhi.
3. **Pratyaksha Pariksha/ Pramana**
   3.1. Lakshana of Pratyaksha, types of Pratyaksha- Nirvikalpaka- Savikalpaka with description, description of Laukika and Alaukika types and their further classification.
   3.2. Indriya-prapyaakarinivam, six types of Sannikarsha.
   3.3. 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.
   3.4. Trayodasha Karana, dominance of Antahkaran.
   3.5. Hindrances in direct perception (pratyaksha-anupalabdhiakaaran), enhancement of direct perception (Pratyaksha) by various instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha.
   3.6. Practical study/ application of Pratyaksha in physiological, diagnostic, therapeutics and research grounds.

4. **Anumanapariksha/Pramana**
   4.2. Characteristic and types of Vyapti.
   4.3. Lakshana and types of Hetu, description of Ahetu and Hetwabhasa.
   4.4. Characteristic and significance of Tarka.
   4.5. Practical study/ application of Anumanapramana in physiological, diagnostic, therapeutics and research.

5. **Yuktipariksha/ Pramana**
   5.1. Lakshana and discussion.
   5.2. Importance in Ayurveda.
   5.3. Practical study and utility in therapeutics and research.

6. **Upamana Pramana**
   6.1. Lakshana.
   6.2. Application in therapeutics and research.

7. **Karya- Karana Siddhanta (Cause and Effect Theory)**
   7.1. Lakshana of Karya and Karana. Types of Karana.
   7.2. Significance of Karya and Karana in Ayurveda.
   7.3. Different opinions regarding the manifestation of Karya from Karana: Satkaryavada, Asatkaryavada, Parinamavada, Arambhavada, Paramanuvada, Vivartavada, Kshanabhangurvada, Swabhavavada, Pilupaka, Pitharpaka, Anekantavada, Swabhavoparamavada.

PART B - Ayurved Itihas 25 marks

1. Etymological derivation (Vyutpatti), syntactical derivation (Niruktti) and definition of the word Itihas, 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, Dhanwantari, Kashyapa, Agnivesha, Sushruta, Bhela, Harita, Charaka,
Central Council of Indian Medicine

Dridhabala, Vagbhata, Nagarjuna, Jivaka.


4. Introduction to the authors of compendiums (Granthisamgrahakaala) – Bhavmishra, Sharngadhara, Vrinda, Madhavakara, Shodhala, Govinda Das (Author of Bhaishajyaratnawali), Basavraja.

5. Introduction to the authors of Modern era – Gana Nath Sen, Yamini Bhushan Rai, Shankar Dajjwastri Pade, Swami Lakshmiram, Yadavji Tikramji, Dr. P. M. Mehta, Ghanekar, Damodar Sharma Gaur, Priyavrat Sharma.


7. a) Developmental activities in Ayurveda in the post-independence period, development in educational trends.
   b) Establishment of different committees, their recommendations.
   c) 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)
   d) Introduction to the following National Institutions :
      - National Institute of Ayurved, Jaipur.
      - IPGT&RA, Gujrat Ayurved University, Jamnagar.
      - Faculty of Ayurved, BHU, Varanasi.
      - Rashtriya Ayurveda Vidyapeetha, New Delhi.
      - Drug and Cosmetic Act.

8. Introduction to national & international popular journals of Ayurveda.

9. Introduction to activities of WHO in the promotion of Ayurved.

Reference Books:-

A). Padartha Vigyan:-

1. Padarthavigyan Acharya Ramraksha Pathak
2. Ayurvediya Padartha Vigyan Padarthavigyan Acharya Ramraksha Pathak
3. Ayurved Darshana Acharya Rajkumar Jain
4. Padartha Vigyan Kashikar
5. Padartha Vigyan Balwant Shastri
6. Sankhyatantwa Kaumadi GajananS hastri
7. Psycho Pathology in Indian Medicine Dr. S.P. Gupta
8. Charak Evum Sushrut ke Darshan Prof. Jyotimirtra Acharya
    Darshank Vishay ka Adhyayan
9. Ayurvediya Padartha Vigyan Dr. Ayodhya Prasad Achal
10. Padartha Vigyan Dr. Vidyadhar Shukla
11. Padartha Vigyan Dr. Ravidutta Tripathi
12. Ayurvediya Padartha Vigyan Vaidya Ramkrishna Sharma Dhand
13. Ayurvediya Padartha Vigyan Vaidya Banwarilal Gaur
14. Ayurvediya Padartha Darshan Pandit Shivhare
### B) History of Ayurveda:-

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<td>Upodghata of Kashyapasamhita</td>
<td>Rajguru Hem Raj Sharma</td>
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<td>Upodghata of Rasa Yogasagar</td>
<td>Vaidy Hariprapanna Sharma</td>
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<td>Ayurveda Ka Itihas</td>
<td>Kavira Suram Chand</td>
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<td>Ayurveda Sutra</td>
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<td>5.</td>
<td>History of Indian Medicine (1-3 part)</td>
<td>Dr. Girindr Nath Mukhopadhyaya</td>
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<td>6.</td>
<td>A Short history of Aryan Medical Science</td>
<td>Bhagwat Singh</td>
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<td>History of Indian Medicine</td>
<td>J. Jolly</td>
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<td>Hindu Medicine</td>
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<td>Classical Doctrine of Indian Medicine</td>
<td>Filiyosa</td>
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<td>10.</td>
<td>Indian Medicine in the classical age</td>
<td>Acharya Priyavrata Sharma</td>
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<td>Indian Medicine (Osteology)</td>
<td>Dr. Harnley</td>
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<td>Ancient Indian Medicine</td>
<td>Dr. P. Kutumbia</td>
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<td>Madhava Nidan and its Chief Commentaries (Chapters highlighting history)</td>
<td>Dr. G.J. Mulenbelt</td>
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<td>Ayurveda Ka BrihatItihas</td>
<td>Vaidya Atridev Vidyalankara</td>
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<td>Ayurveda Ka VaigyanikaItihas</td>
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<td>Ayurveda Ka PramanikaItihas</td>
<td>Prof. Bhagwat Ram Gupta</td>
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<td>History of Medicine in India</td>
<td>Acharya Priyavrata Sharma</td>
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<td>Vedomein Ayurveda</td>
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<td>Vedomein Ayurveda</td>
<td>Dr. Kapil Dev Dwivedi</td>
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<td>20.</td>
<td>Science and Philosophy of Indian Medicine</td>
<td>Dr. K.N. Udupa</td>
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<td>History of Indian Medicine from Pre-Mauryan to Kushana Period</td>
<td>Dr. Jyotirmitra</td>
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<td>An Appraisal of Ayurvedic Material in Buddhist literature</td>
<td>Dr. Jyotirmitra</td>
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<td>Mahayana Granthon mein nihita Ayurvediya Samagri</td>
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<td>Jain Ayurveda Sahitya Ka Itihas</td>
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<td>Ayurveda- Prabhashaka Jainacharya</td>
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<td>CharakaChintana</td>
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<td>Atharvaveda and Ayurveda</td>
<td>Dr. Kambelkara</td>
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<td>29.</td>
<td>Ayurvedic Medicine Past and Present</td>
<td>Pt. Shiv Sharma</td>
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<td>Ancient Scientist</td>
<td>Dr. O.P. Jaggi</td>
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<td>Luminaries of Indian Medicine</td>
<td>Dr. K.R. Shrikanta Murthy</td>
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<td>Ayurveda Ke Itihas Ka Parichaya</td>
<td>Dr. Ravidutta Tripathi</td>
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<td>33.</td>
<td>Ayurveda Ke Pranacharya</td>
<td>Ratnakara Shastri</td>
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<td>34.</td>
<td>Ayurveda Itihasa Parichaya</td>
<td>Prof. Banwari Lal Gaur</td>
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1.2 संस्कृतम्

THEORY - ONE PAPER - 100 marks

TEACHING HOURS - 90 hours

50 marks

PART-A

संस्कृतव्याकरणाध्ययनम्

1. संज्ञाप्रकरणम्
2. विभक्त्याः:
3. सन्धिप्रकरणम् (सन्धिविच्छेदः, सन्धिकरणम्)
4. षड्लिंगप्रकरणम् (षब्दरूपाण्येव)
5. धातुप्रकरणम् (धातुरूपाण्येव)
(स्वादिगणी धातूनां प० च लट्टोलटडीटविविलिङ्करेषु रूपाणि)
6. वाच्यप्रयोगः: (कर्तिर कर्मणि भाववाच्यप्रयोगः)
7. समासप्रकरणम्
8. प्रत्यया:
(पिच, क, कवतु, शतु, शानच, तुमुन, तवयत, तृच, कवच, ल्यप, ल्युट, अनीयर, मतुप, इनि, तन, इतच, अण, इज, इक, ल्य, ता, षन, इम, निच, तः, त्र, दा, धा, तरप, तमप, टाप, डाप)
9. अनुवादः

A) From English / Hindi / regional language to Sanskrit
B) From Sanskrit to English / Hindi / regional language
C) Identification and correction of grammatical errors in the given sentences

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

1) Laghusiddhanta Kaumudi- Acharya Varadaraja (Commentary by Shri Dhananand Shastry)
2) Brihattrayee- (Charaka Samhita, Sushruta Samhita, Ashtanga Hridayam)
3) Anuvada Chandrika-Chakradhara Hansa Nautiyal
4) Sanskruta Ayurved Sudha- Dr. Banwari Lal Gaur
5) Rachananuvada Kaumudi- Dr. Kapildev Dwivedi
6) Bhasha Sopanam- Published by Rashtreeya Sanskruta Samsthanam, New Delhi
PART- B

भाषाध्ययनम्

1- आयुर्वेदार्थग्रन्थाध्ययनम्—Stepwise method of study of Ayurveda Arsha 25 marks
   ½ Granthas (Sushruta Samhita, Shareera Sthanam, Chapter-4)

2- वैद्यकीय-सुभाषितसाहित्यम् (अध्यायः 1–10) 15 marks
   ½

3- पौराणिक-अपरीक्षितकारकम् (कथाकथा: मूर्खपण्डितकथापर्यंतम्) 10 marks
   ½ पौराणिककथा:

REFERENCE BOOKS-

1.) Sushruta Samhita, Shareera Sthanam, Chapter-4
2.) Prabhashanam Work Book, Su.sam.chap.4
   Published by-AYURVEDA ACADEMY® BANGALORE;
   Email-ayuacademy@gmail.com
3.) Vaidyakeeya Subhashita Sahityam - Dr. Bhaskara Govinda Ghanekar
4.) Panchatantra-(Apareekshitakarakam) -Pt. Vishnu Sharma

***************
1.3 KRIYA SHARIR
(PHYSIOLOGY)

Theory-Two Papers-200 Marks (100 marks each)
Teaching hours-180 hours

PAPER - I 100 marks
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.


3. Dosha- General description of Tridosha. Inter relationship between Ritu-Dosha-Rasagauna. 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.

5. Pitta Dosha: Vyutpatti, Niruki 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.

6. 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.

7. Etiological factors responsible for Dosha Vriddhi, Dosha Kshaya and their manifestations.

8. Concept of Kriyakala.

9. Prakriti:
   a) 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.
b) Manasa- Prakriti: Introduction and types of Manasa- Prakriti.
13. Agni – Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.

PART- B

Modern Physiology
b) Resting membrane potential and action potential.
d) 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.
e) 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.

PAPER- II

PART- A

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 Rakasara 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 Srotas, 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.
11. **Upadhatu**: General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu.
   a) Stanya: Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya.
   b) Artava: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavaha Srotas.
   c) Tvak: classification, thickness of each layer and functions.

12. **Mala**: Etymological derivation and definition of the term Mala. Aharamala: Enumeration and description of the process of formation of Aharamala.
   a) Purisha: Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshaya of Purisha.
   b) 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 Kshaya of Mutra.
   c) Sveda: Etymological derivation, definition, formation and functions of Sveda. Manifestations of Vriddhi and Kshaya of Sveda. Description of Svedvaha Srotas
   d) Dhatumala: Brief description of each type of Dhatumala.


14. **Manas**: Etymological derivation, definition, synonyms, location, properties, functions and objects of Manas. Physiology of Manovaha Srotas.

15. **Atma**: Etymological derivation, definition, properties of Atma. Difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body.

16. **Nidra**: Nidrotpatti, types of Nidra, physiological and clinical significance of Nidra; Svapnotpatti and types of Svapna.

**PART – B**

**Modern Physiology**

1. 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 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.


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.


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

Teaching hours-180

**Ayurvedic practical**

1. Assessment of Prakriti
2. Assessment of Dosha (Features of Vridhhi- Kshaya )
3. Assessment of Dhatu (Features of Vridhhi- 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 leucocyte count
6. Packed cell volume (PCV) demonstration
7. ESR demonstration
8. Bleeding time, Clotting time
9. Blood grouping and Rh typing
10. Examination of Cardio-Vascular system
    a. Pulse examination
    b. Arterial blood pressure measurement
    c. Examination of heart sounds
    d. ECG demonstration
11. Examination of Respiratory system
   a. Respiratory rate
   b. Breath sounds
   c. Spirometry

12. Examination of Nervous System - Sensory & Motor.


**Distribution of Practical marks**

1. Laboratory Practical - 20
2. Human Experiment - 15
3. Spotting - 15
4. Prakriti Saradi pariksha - 20
5. Practical Record - 10
6. 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 Dosa 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
- Dosha 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 Vigyan 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 RACHNA SHARIR
(ANATOMY)

Theory- Two Papers-200 Marks—(100 marks each)
Teaching Hours-180 hours

PAPER-I

PART-A

100 marks

50 marks

1. Shariropkramaniya 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 shastra yajna . Constitution of purusha according to dhatubhed, panchabhautikatvatvam, trgunatmakatvam, 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 vriddhi-krama, garbhottpadakhava, garbhavridhikara bhava, garbha poshana, aparani nirmana, nabhniiri nirmana. Aanga pratyanga utpatti.


5. Asthi Shaarira
Asthi vyakhya, number, types, asthi swaroopa, vasa, meda and majja.

6. Sandhi Shaarira
Sandhi vyakhya, numbers, types of asthi sandhi.

7. Sira, Dhamani, Srotas Shaarira
   a) Definition, types and number of sira and dhamani.
   b) Description of Hridaya.
   c) Sroto shaarira: Definition, types of srotas and srotomula.

8. Peshi Shaarira
   a) Peshi vyakhya, structure, types, number and importance.
   b) Description of Peshi.

9. Koshtha Evam Ashaya Shaarira
   a) Definition of koshtha and number of koshthanga.
   b) 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

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
   a. Definition, types and structure of arteries and veins.
   b. Description of heart and blood vessels with their course and branches.
   c. 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 II

Part A

1. Respiratory System
a. Bronchial tree and lungs with their clinical aspects.
b. Respiratory tract: nasal cavity, pharynx, larynx, trachea, bronchial tree.
c. Pleura with its clinical aspects.
d. Diaphragm.

2. Digestive system
   a. Organs of digestive tract (alimentary tract) with their clinical aspects.
   b. Digestive glands: liver, spleen and pancreas.
   c. 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.

PRACTICAL 100 marks
Teaching hours: 180

Content of practical
1. Practical 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 :-

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<td>Brihat Shariram Vaidyaratna</td>
<td>P.S. Varrier</td>
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<td>2.</td>
<td>Abhinava Shariram</td>
<td>Acharya Damodar Sharma Gaur</td>
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<td>3.</td>
<td>Manava Sharir (Revised Edition)</td>
<td>Prof. Dinkar Govind Thatte</td>
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<td>4.</td>
<td>Manava Bhruna Vigyana</td>
<td>Prof. Dinkar Govind Thatte</td>
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<td>5.</td>
<td>Manava Anga Rekhankan Vikrian -</td>
<td>Prof. Dinkar Govind Thatte</td>
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<td>6.</td>
<td>Sharir Rachana Vigyan (English)</td>
<td>Vaidya P.G. Athawale</td>
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<td>8.</td>
<td>Clinical Anatomy in Ayurveda</td>
<td>Prof. D.G. Thatte &amp; Prof. Suresh Chandra</td>
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<td>9.</td>
<td>Sharir Rachna Vigyan (English)</td>
<td>Prof. D.G. Thatte</td>
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<td>10.</td>
<td>Ayurvedic Human Anatomy</td>
<td>Prof. Dr. Giridhar M. Kanthi</td>
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<td>11.</td>
<td>Regional Anatomy</td>
<td>B. D. Chaurasia</td>
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<td>12.</td>
<td>Rachana Sharir Vigyana</td>
<td>Dr. Mahendra Sing</td>
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<td>Laghuuthrayee</td>
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<td>14.</td>
<td>Gray's Anatomy</td>
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<td>15.</td>
<td>Text Book of Human Anatomy</td>
<td>Inderbir Singh</td>
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<td>16.</td>
<td>Clinical Anatomy</td>
<td>Richard S Snell</td>
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<td>17.</td>
<td>Fundamentals of Human Anatomoy</td>
<td>Dr. Chakraborthy</td>
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<tr>
<td>18.</td>
<td>Human Osteology</td>
<td>Poddar</td>
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</tbody>
</table>

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1.5 Maulik Siddhant avum Ashtang Hridaya
(Basic Principles and Ashtang Hridaya- An ancient text of Ayurveda)

Theory- One Paper- 100 marks
Teaching Hours -120 hours

Part A
Ashtang Hridaya Sutrasthana Adhyaya 1 to 15

Part B

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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VOLUME 2

SYLLABUS OF AYURVEDACHARYA (BAMS) COURSE

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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

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, panchbhoutikatwa.
   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, Nirvrittivishakram (manifestation in general and particular), Ritu and shad rasa Rasanurasayoh bheda (Difference between rasa and anurasas), 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, (Dvividha-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, swaroopa and bheda of karma (Definition, nature and types of action).  

Explanation of the following Karmas with examples:  

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

11- **Mishraka Gana:**  

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. Bheashaja 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

(I)  20 Marks

14 a) Concept of dravya shodhan (purification of dravya).
14 b) Brief knowledge of Apamishran (adulterants)
14 c) Concept of Abhava pratinidhi dravya (substitutes)

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

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

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

(II)  30 Marks


Paper II  100 Marks
Part A  70 marks

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]

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<td>Eranda</td>
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<td>Vidanga</td>
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<tr>
<td>Gambhari</td>
<td>Nirgundi</td>
<td>Vidari</td>
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<tr>
<td>Gokshura</td>
<td>Palasha</td>
<td>Yastimadhu</td>
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<tr>
<td>Guduchi</td>
<td>Parpata</td>
<td>Yavani</td>
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</table>

**Part B**

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

<table>
<thead>
<tr>
<th>Drug</th>
<th>Botanical Name</th>
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<tbody>
<tr>
<td>Agastya</td>
<td>Jati</td>
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<td>Ajamoda</td>
<td>Jayapala</td>
<td>Parasika Yavani</td>
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<td>Jeevanti</td>
<td>Parijata</td>
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<td>Kadali,</td>
<td>Parisha</td>
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<td>Amra</td>
<td>Kadamba</td>
<td>Parnabija</td>
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<td>Ankola</td>
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<td>Parpataka</td>
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<td>Kamala</td>
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<td>Bijapoora</td>
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<td>Putranjivaka</td>
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<td>Lajjalu</td>
<td>Sharapunkha</td>
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<td>Sringataka</td>
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<td>Isvari</td>
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<td>Japa</td>
<td>Padmaka</td>
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</table>

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

2. Records of Herbarium sheets of 50 medicinal plants Compulsory study tour other state/s for field knowledge and procurement of plant species.

**PRACTICAL MARKS DIVISION**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
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<tr>
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<td>Herbarium</td>
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<td>2</td>
<td>Practical record</td>
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<td>3</td>
<td>Drug identification- spotting – Raw/crude drugs</td>
<td>30</td>
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<tr>
<td>4</td>
<td>Plant identification spotting – fresh</td>
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<td>5</td>
<td>Practical</td>
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<td>Viva-Voce</td>
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<td><strong>Total</strong></td>
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<td><strong>200 marks</strong></td>
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**Reference Books**
1. Abhinav Buti Darpan (Vol.1-2) - Vd. Roop Lal Vaishya
2. Aushadna Vigyna Shastra - Acharya Pt. Vishvanatha Dwivedi
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. Dravyagunavnijnana basic Principles - Prof.D.S.Lucas
21. Forgotten Healers (Indian Medicinal Plants) - Dr. Prakash Pranjape
22. Glossry of Vegetable Drugs in Bhritrays - Thakur Balwant Singh & Vd. Krishna Chandra Chunekar
23. Introduction to Dravyaguna - Acharya Priyavrata Sharma
24. Kriyatamka Aushadi Parichaya - Acharya Pt. Vishvanath Dwivedi
25. Materia Medica - Acharya Ghosh
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
<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Author</th>
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<tr>
<td>36.</td>
<td>Useful parts of Charaka, Sushurut, and Vagbhata.</td>
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<td>37.</td>
<td>Uttarakand Ki Vanaspatiya</td>
<td>Dr. Gyanendra Pandey</td>
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<tr>
<td>38.</td>
<td>Vanoashadi Darshika</td>
<td>Thakur Balwant Singh</td>
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<td>39.</td>
<td>Vanoashadi Nidarshika</td>
<td>Dr. Ram Sushil Singh</td>
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<td>40.</td>
<td>Vedic Vanaspatiyan</td>
<td>Dr. Dinesh Chandra Sharma</td>
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*
2.2. AGADTANTRA, VYAVAHR-AYURVED EVUM VIDHIVAIKYAK
(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


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, Athphena, Bhittura, Bhallataka, Vatsanabha, Kupeelu, Jayapala, Bhanga & Tobacco, Parthenium hystiriphorus, 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.*

**Part –B**

50 Marks

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.


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.


10. Introduction to Forensic psychiatry.

11. Introduction to forensic laboratory.


15. 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

**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  Modi
4. Basavarajeeyam  Edited by Vd.Govardhan
5. Agada Tantra  Sh. Ramanath Dwivedi
6. Text book of Agada Tantra  Edited by Dr Huparikar, Dr.Joglekar
7. Agadatrantra ki Pathyapustaka  Edited By Dr Huparikar, Dr.Joglekar

8. Agad Tantra  Dr. Shekher Namboodri
9. Vishachikitsa  Vaidya Balakrishnan Nair, Kerala
   (Ayurveda Toxicology English Translation)
10. Medical Ethics and Medical Laws in India  Dr. H.S. Mehta
11. Toxicology Ayurvedic Perspective  VPSV Ayurveda college Kottakkal
12. Kautilya Arthashastra (English)  Prof. Kangle
13. Kautilya Arthashastra (Hindi)  Dr. Raghunath Singh
14. Vyavahar Ayurveda  Dr.Ayodhya Prasad Achal
15. Vyavahar Ayurveda Vigyanam  Dr.Indramohan Jha (Sachchan)
16. Textbook of Forensic Medicine and Toxicology  Dr. V.V.Pillay
17. Forensic Medicine  Dr. B. Umadathan
18. Relevant Acts  Govt. of India
19. Relevant topics from Manu Smriti

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*
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

RASASHASTRA

Paper 1

100 Marks Part A
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.


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.


10. Brief introduction of quality control, standardization and GMP of Rasaushadhis.

Part B

50 Marks

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

1. Maharasa – Abhraka (Biotite Mica), Vaikrantha, Makshika (Chalco-pyrite), Vimala (Iron Pyrite), Shilajatu, Sasyaka (Peacock ore), Chapala and Rasaka (Sphalerite).

2. Uparasa – Gandhaka (Sulfur), Gairika (Red Ochre), Kasisa (Green Vitriol), Kankshi (Alum), Haratala (Orpiment), Manahshila (Realgar), Anjana and Kankustha.

3. 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).

4. Dhatu – Swarna (Gold), Rajata (Silver), Tamra (Copper), Loha (Iron), Vanga (Tin), Naga (Lead), Yashada (Zinc), Kamsya (Bronze), Pittala (Brass), Vartaloha. Dhatu -grastra sambandha.

5. Ratna - Manikya (Ruby), Mukta (Pearl), Pravala (Coral), Tarkshya (Emerald), Pushparaga (Topaz), Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamone stone), Vaidurya (Cats eye). Ratnapariksha, Ratnadosha, Ratna-graha sambandha.

6. Uparatna- Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis lazuli), Perojaka (Turquoise), Sphatikamani (Quartz), Trinakanta, Palanka, Putika, Rudhir.

7. Sudha varga – Sudha (Lime stone ), Kaparda (Cowries), Shukti (Oyster Shell), Shankh (Conch Shell), Mriga shringa (Stag horn), Khatika, Godanti (Gypsum) and Samudraphena (Cattle Fish bone), Kukkutanda twak (Hen’s Egg Shell).
8. **Sikata varga** - Sikata (Silica), Dugdhapashana (Talc), Nagapashana / Jaharmohara (Serpentine), Badarshama (silicate of lime), Vyomashma (Sangeyashab - Jade), Kousheyashama (Asbestos) and Akika (Agate).

9. **Kshara varga** - Sarja kshara (Sodium bicarbonate), Yava kshara, Tankana kshara (Borax), Surya Kshara (Potassium Nitrate).

10. **Miscellaneous** - Mandura, Bola, Dam-ul Akhawayan (Raktabandhini), Kasturi, Bhoonag, Mayurpiccha, Sarjarasa, Madhoocchishta.


13. **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**

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<td>Mugdha rasa</td>
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<td>Shodhana of Abhraka</td>
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<td>2. <strong>Maharasa varga</strong></td>
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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, Sootshekha rasa,
   Laghusutashekha Rasa
   iv. Arogyavardhini vati, Laghumalinivasanta rasa, Hinguleshwar rasa,
   Anandbhairav rasa, Rajaprarvartini vati
BHAISHAJYAKALPANA

Paper II 100 Marks

Part A 50 Marks

1. **History and Chronological (kramika vikasa) development** of Bhaishajyakalpana. Concept of Aushadha and Bheshaja.

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); Grahyagrahayatva, Nava Puran dravya grahan niyam.

4. Guidelines and Methods of collection, storage, preservation of Aushadhi dravya. Concept of Saviryatavadh (shelf life) and stability in ancient and contemporary science.

5. **Bheshajpryogavidhi : Aushadha Matra, Anupana and sahapan and Aushadh sevan kaala. (Posology).**


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, Bramhghrita, Narayana taila, Anutaila.

9. **Sandhana Kalpana and its types:** Madya Kalpana, Asava, Arishta, Sura (Prasanna -Kadambari - Medaka - Jagala - Bakkasa), Maireya, Surasava, Shukta, Kanjika, Sauviraka, Tushodaka, Sidhu kalpana their methods of preparation, siddhi lakshana, properties, uses, doses. Takrarishta, Drakcharishta, 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**


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 dhumpaan, Method of preparation of dhumvarti and it’s therapeutic uses. Dhupan: Vranadhupan, arshodhupan.
   2.4 **Mukhoprayogarth 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- Kasthaushadhi.


5  Concept of, Aushadhi Nirmanshala, with respect to Good Manufacturing Practices (GMP) in accordance to Schedule T.

**Practical Bhaishajya Kalpana**

**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, Tulasivarasa, Kumari Swarasa, Vasa putapaka swarasa
2. Kalka- Nimba kalka, Rasona kalka.
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
10. Arka - Yavani arka, Gulab arka, Misreya arka
18. Khanda- Haridra khandha, Narikela khandha, 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 Ksheerpaka
24. Kshara- Apamarga kshara, Snuhi kshara, Ksharasutra. .
25. Manda, Peya, Vilepi, Yavagu, Krishna, Vesavara
26. Yusha - Mudga yusha, Saptamushtika yusha, Kulattha yusha
27. Aristha- Kutajarishta, Takrarishta .
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 Moorchna, 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

II. Visit of minimum three GMP approved Ayurvedic manufacturing units.
### Distribution of Practical Marks: Total 200 Marks

<table>
<thead>
<tr>
<th>Subject</th>
<th>Marks</th>
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<tr>
<td>Rasashastra</td>
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<td>1. Record Book - 10 Marks</td>
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<td>2. Experiment - 30 Marks</td>
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<td>3. Spotting - 20 Marks</td>
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<td>Bhaishajyakalpana</td>
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<td>1. Record Book - 10 Marks</td>
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<td>2. Experiment - 30 Marks</td>
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<td></td>
<td>3. Spotting - 20 Marks</td>
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<tr>
<td></td>
<td>4. Viva-voce - 40 Marks</td>
</tr>
</tbody>
</table>

### 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 Bhaishaja Paribhasa Sureshananda Thapaliyal
7. Ayurvediya Rasa Shastra Prof. Siddhi Nandan Mishra
8. Ayurvedy Prakash Vaidya Gujrat Mishra
9. Drugs and Cosmetic Act - 1940 Dr. Indradev Tripathi
10. Paka Darpana Dr. Madhulika critical study
11. The Paka-darpana of King Nala Vasudev M. Dwivedi
12. Parada Vigyanami  
13. Pratyaksha Aushadh Nirmanam Acharya Vishwanath Dwivedi
14. Bhaishjyakalpana Vigyanam Dr. Agnihotri
15. Rasa Tarangini Sadanand Sharma
16. Rasa Darpan  
17. Rasa Bindu Prof. Bhajan Das Swami
18. Rasa Bhaishajya Kalpana Vigyan Vaidya Dr. Sanjay Sharma
19. Rasa Mitra Santosh Kumar Khandal
20. Rasa Ratna Samuchchaya (Hindi) Dr. Tryambak Nath Sharma
21. Rasaratna samuchchaya-  
22. Rasaratna samuchchaya- Ambikadatta shastri
23. Rasaratna samuchchaya -  
24. Rasaratna samuchchaya - Damodar Joshi
25. Rasa Shastra Prayogiki Srivastava,  
26. Rasamritam  
25. Rasayan Sara  
26. Rasendra Sampradaya  
27. Rasendra Sara Sangraha  
29. Vaidyak Paribhasha Pradeep (Hindi Translation)  
30. Sharangadhara Samhita  
31. Bharatiya Bhaishajya Kalpana Vignana  
32. Bhaishajya Kalpana Vijnanam  
33. Rasa Shastra (English)  
34. Rasa Ratna Samuchchaya (English)  
35. Rasendra Chintamani (Hindi)  
36. Ayurvedic formulary of India  
38. Ayurvedic Pharmacopoeia of India, CCRAS  
39. Bhaishajya Kalpana Vigyan  
40. Textbook of Rasashasra  
41. Ashadhayoga Vigyanam  
42. Vaidyaka Paribhasha Pradipa (Engish Translation)  
43. Relevant parts of Brihatrayee  
44. Text book of Bhaishjya Kalpana -  
45. Text Book of Rasa Shastra  
46. Rasa Chandashu  
47. Bhaishjya Ratnawali  
48 Yoga Ratnakar  

Yadav and Prof. Ramesh Saxena  
Vaidya Yadavji Tirkramji Acharya  
Vaidya Shyam Sunderacharya  
Vaishya  
Vaidya Hajari Lal Sukul  
Vaidya Gopal Krishna  
Dr. Indradev Tripathi  
Dr. Radhakrishna Parashar  
Gananath Vishwanath Dwivedi  
Dr. K Ramachandra Reddy  
Prof. Damodar Joshi  
Prof. Damodar Joshi  
Prof. Siddhinandan Mishra  
Siddhi Nandan Mishra  
Dr. K Ramachandra Reddy.  
Dr. K. Ramachandra reddy  
Dr. K. Ramachandra Reddy &  
Dr. P. Suresh  
Dr Shobha G Hiremath  
Dr P H C Murthy  
Prof S S Savirkar (CCRAS Publication)  
Prof S N Mishra
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

2. Charakasamhita (Hindi Commentary): Vaidya Jayadev Vidyalanker or Vd. Atridev Vidyalanker or Prof. Gorakha Nath Chaturvedi & Kashinath Shastri or Dr. Brahmanand Tripathy or Dr. Ravi Dutta Tripathy

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VOLUME 3
SYLLABUS OF AYURVEDACHARYA (BAMS) 3rd Year

INDEX

| 3.1. ROG-NIDAN                      | 02-06   |
| 3.2. SWASTHAVRITTA                 | 07-14   |
| 3.3. PRASUTI TANTRA EVUM STRI ROGA | 15-19   |
| 3.4. KAUMARBHRITYA PARICHAYA       | 20-23   |
| 3.5. CHARAK SAMHITA (UTTARARDHA)   | 24      |
3.1 ROGA NIDANA

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

PAPER -1

Part A

I. Dosha Dushyadi Vigyana
1. Definition and importance of Roganidana.
3. Dosha Dhatu Ashraya Ashrayi Bhava.
5. Mala Kshaya Vriddhi Lakshana.
6. Hetu, Bheda and Lakshana of Agni Dushti.
7. Definitions and Samanya Lakshana of Ama.
8. Sama and nirama Dosha, Dushya Lakshana.
9. Dosha Paka and Dhatu Paka Lakshana.
10. Concept, classification, diagnosis and general complications of Avarana.
11. Doshagati and Rogmarga.

II. VyadhiVigyana
1. Definition, synonyms and classification of Vyadhi & Vyadhi Ghatak.
2. Criteria for nomenclature of Diseases in Ayurveda (Vyadhinamakarana).
3. Bija, Bija Bhaga and Bija Bhaga Avayava Dushti.
5. Introduction to ICD Classification of Diseases of WHO and DSM classification.
7. Dhatu, Updhatu, Mala and Indriya Pradoshay Vikara.
8. Concept of AshtaMahagada .
9. Introduction to Ashta Nindita.
10. Definition and classification of Vyadhikshamatva.

III. Basic Pathology
1. Introduction to pathology and its sub-divisions.
2. Introduction to Cell Injury and Cellular adaptations.
5. Types of Immunity – different types of immune responses in the body – Basic knowledge of auto immune diseases, Acquired immune deficiency disease and hypersensitivity.
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

IV. Nidana Panchaka Vigyana
1. Difference between Roga and Rogi Pariksha.
2. Importance of Nidan Panchaka.
3. Hetu - Definition, Synonyms and Classification.
6. Upashaya / Anupashaya– Definition, Types and its importance in diagnosis.
7. Samprapti – Definition, Synonyms and Type and Samprapti Ghataka.
10. ArishtaVigyan – Definition, Types and its importance.
11. Sadhyasadhyatwa – Types, their parameters and importance.
12. General diagnostic principles of AnuktaVyadhi (Ch. Vi. 4).

V. Pariksha Vigyana
1. Importance and knowledge of Aplotadeshadi & 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 Dashavidha Pariksha.
5. Basic knowledge of ECG, USG, X Ray, CT Scan, MRI.

Paper II

Part A

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, Dhatusarga 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 Raktavaha Srotas
2. Introduction to Hepatomegaly, Spleenomegaly, Leukaemia, Thalessemia, Sickle cell Anaemia.
3. Introduction to Urticaria, Psoriasis, Eczema, Pemphigus.

III. Diseases of Mamsavaha Srotas
(a) Galganda
(b) Introduction to Thyroid disorders

IV. Diseases of Medovaha Srotas
2. Introduction to Obesity and Diabetes Mellitus.
V. Diseases of Asthi – Majjavaha Srotas
3. Introduction to Osteo- Arthritis, Osteoporosis.

VI. Diseases of Shukravaha Srotas
1. Introduction to Klaibya and Andhyatva.
2. Introduction to male and female infertility.

Part B

VII. Diseases of Pranavaha Srotas
1(b). Introduction to the aetiopathogenesis of Pneumonia, Pleural effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.

VIII. Diseases of Annavaha- Pureeshavaha Srotas
2. Introduction to Anaha, Adhmana, Atopa, Visuchika Alasaaka, Vilambika.
3. Introduction to Peptic Ulcer, Irritable Bowel Syndrome (IBS) Diarrhoea, Dysentry, 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 Mutravaha Srotas
1(a) Mutrakrichha – Mutrakhata.
1(b) Introduction to Urinary Tract Infection, Nephropathies.

XI. Diseases of Swedavaha Srotas
1(a) Introduction to Khalitya, Palitya.

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

XIII. Upasargajanya Vyadhi (Communicable diseases)
1(a) Romantika – Masurika – Upadamsha – Phiranga.
1(b) Introduction to Measels, Chickenpox, Leprosy, Tuberculosis and AIDS.

XIV. Krimi Vigyana
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 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.


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 Atur-bala-pramana pareeksha.
5. Practical records of clinical examination of at least 20 short Cases based on Ashta vidha pariksha in O.P.D.
6. Demonstration of ECG, USG and Radio imaging techniques.
Distribution of Marks for final Practical Examination
1. Daily Record -10 Marks
2. Indentification 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
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
13. Text Book of Pathology- Dey and Dey.
15. Clinical Pathology and Bacteriology- S.P. Gupta.
17. Parameswarappa’s Ayurvediya Vikriti Vigyan and Roga Vikriti Vigyan-Dr. P.S. Byadgi.
28. Practical Pathology- Dr. K. Uma Chaturvedi.
29. Clinical examination- Douglas/Macleod’s.
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.
3.2 SWASTHAVRITTA

Theory- Two papers - 100 marks each
Practical / Viva voce - 100 marks
Lectures – 200 Hrs
Practicals and demonstration – 100 Hrs

Paper-I

PART A- VAIYAKTIKA SWASTHAVRITTA 50 marks

Introduction
Definition of swastha & swasthya and swasthavritta. Arogya lakshana, swasthavritta prayojanam, WHO definition of health.
Dimensions of health: Physical, Mental, Social.
Concept of wellbeing: objective, subjective, standard of living, quality of life.

Dinacharya
1. Definition of Dinacharya
2. Aims and importance of dinachary
3. Brahma Muhurta evam Utthana
4. Usha Jalapana
5. Sharirachinta
6. Malatyaga
7. Mukha prakshalan
8. Dantadhavanana and preparation of Ayurvedic tooth powder and paste
9. Jihvanirlekhanavidhi
10. Anjana
11. Pratimarsha Nasya
12. Gandusha and Kavala
13. Tambulasevana
14. Dhoomapana
15. Abhyanga
16. Udvartana
17. Utsadana
18. Vyayama
19. Chankramana
20. Snana
21. Anulepana
22. Vastra dharana
23. Danda dharana
24. Padatra dharana
25. Chatra dharana
26. Ushnisha dharana
27. Ratnabharana dharana
28. Madhyahna charya
29. Cosmetic effect of Dinacharya procedures

Rathricharya
1. Sandhya charya
2. Rathri bhojana vidhi
3. Shayanavidhi according to Bhavamishra
Ritu Charrya
1. Importance of ritucharya
2. Ritu presentation as per different acharyas
3. Adana kala & visarga kala
4. Sanchaya-Prakopa-Prashamana of Dosha according to ritu
5. Doshashodhana in Ritu Charya
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) Rituviparyaya

Sadritta
Description of Sadritta and Achara Rasayana their role in Prevention and control of diseases.

Trayopastambha

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, Balanced 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(Alcoholic 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 Food 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. Effects of pathya-apathya in life style disorders- Diabetes, Hypertension, Obesity and Coronary heart Disease.

ii) Nidra- Nirukti and Utpatti, Types , Nidra – Swasthya sambandha, Properties of Yukta Nidra, Effects of Ratri Jagarana, Diwaswapa, Anidra, Atinidra, 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 and Abrahmacharya, 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, sharir shodhan.

**Rasayana for Swastha-**Nirukto, paribhasha(definition ), classification and examples

**Ashta nindita purusha**

Menstrual hygiene

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**Part B (YOGA AND NISARGOPACHARA) 50 marks**

**YOGA**

**Introduction**

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

Yoga prayojana

Ayurveda yoga sambandha, swasthya rakshane yogasya mahatvam

Yogabhyasa pratibhandhaka & siddhikara bhavas as per Hathayoga. Mitahara and Pathyapathyani during Yogabhyasa.

**Panchakosha Theory**

**Astanga yoga**

Yama, Niyama

Asana and its importance

**Standing Postures**

Ardhakatichakrasana, Padahastasana, Ardhachakrasana, Trikonasana.

**Sitting postures**

Swasthika, Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana,

Ushtrasana, Pashchimottanasana, Suptavajrasana, ardhamatsyendrasana,

Siddhasana.

**Supine Postures**

Pavanamuktasana, Sarvangasana, Matsyasana, Halasana, Chakrasana,

Shavasana, Setubandhasana.

**Prone postures**

Bhujangasana, Shalbhasana, Dhanurasana, Makarasana.

Suryanamaskara – procedure and benefits.

**Pranayama**

Benefits of pranayama, time of practice, avara-pravara-madhya lakshana, yukta-

ayukta lakshana

Nadishudhi Pranayama .

Kumbhakabheda – suryabhedana, ujjayi, sheetali, Sitkari, Bhatrika, Bhramari

Murcha, Plavini.

Nadishudhilakshana

**Shatkarma**

Dhauti, Basti, Neti, Trataka, Nauli, Kapalabhati
Bandhas and Mudras

Shad chakras, Ida-pingala-sushumna nadi.

Pratyahara, Dharana, Dhyana, Samadhi

Description of Yoga in Ayurveda
Moksha and Mukatma lakshana and upaya, Naishthiki chikitsa, Satyabuddhi, Tatvasmriti, Ashta Aishwarya, Ashta siddhis.

NISARGOPACHARA (Prakritika chikitsa)

Definition, history, aims and objectives
Theories as per Western school of Naturopathy
Indian school – Panchabhotopasana
Relation of Ayurveda and Naturopathy
Importance of Naturopathy in present era.

Jalachikitsa(hydrotherapy) – Hot water treatment, Cold water treatment, foot and arm 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(Fasting therapy) – Importance, types, therapeutic effects of fasting.

Visrama chikitsa upayoga

PAPER II – SAMAJIKA SWASTHAVRITTA

Part A

Janapadodhwamsa
Causes, Manifestations 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- Thermal discomfort and comfort zone, indices of thermal comfort.
Air pollution – health and social aspects, Prevention and control of air pollution ,Global warming.
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,water pollution and health hazards, Methods of water purification.
Hardness of Water.
Examination,Tests and analysis of water.
Rain water harvesting and water recycling

**Bhumi and nivasa sthana (Land and housing)**
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 (lighting)**
Requirement of good lighting, natural lighting, artificial lighting, biological effects of lighting.

**Dhwani pradooshana (Noise pollution)** - 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)**
Methods for Unsewered area and Sewered area
Latrines for camps, fairs and festivals
**Disposal of dead body** – Burial, Burning, Electric cremation.

**Meteorology (Ritu evam Vatavarana jnanam)**
Definition of weather and climate, factors influencing weather and climate.

**Disaster management**
Definition, natural and man-made disasters, epidemiologic surveillance and disease control.

**Occupational Health**
Offensive Trades- Effects on health and precautionary measures.

**School health services**
Health problems 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, investigation of epidemic.
Disinfection – definition, types.
Ayurvedic concept of Vyadhi shamatva 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 vyadhí (STDs)
AIDS, Syphilis, Gonorrhoea, Chanchroid
**Non-communicable disease epidemiology**
Diabetes, Obesity, Hypertension, Coronary Heart Diseases, Rheumatic Heart Disease, Cancer

**Chikitsalaya Bhavana (Hospital Building)**

**Part B**

50 marks

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 – MCH programme**
Ante natal, intra natal, post natal, neo natal care. Child health problems and indicators of MCH care.

**Preventive geriatrics** - Problems of elderly, prevention and control measures.

**World Health Organisation** - Objectives, structure and functions.
**International health agencies** - United Nations agencies, Health work of bilateral agencies.

**Alma Ata declaration**

**National Health Policy**

**Health statistics** - Definition, Sources, uses Data collection, Classification, Presentation.
Health survey

**Swasthaya prashasana(Health Administration)** - 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, Vector born disease control programme, NRHM, all the upcoming national health programmes, RCH programme, Universal Immunization Programme.

**National Nutritional Programmes** - IDD, Vitamin A prophylaxis, Mid day meal, anemia control programmes.
PRACTICALS

Demonstration of Dinacharya procedures- anjana, nasya, kavala, gandoosha dhoomapana, abhyanga, udvarttana.

Parichaya of aharadravya, immunization agents, disinfectants and family planning devices

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

Preparing and delivering of a health educational talk on health related issues.
A short compilation on any topic on environmental health.

Educational Visits
Observe the functioning of the Milk Dairy, Water purification unit, Sewage treatment unit, MCH/Family welfare centre, Leprosy hospital 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 naturopathy centre to observe naturopathic treatment modalities.

Health survey- Minimum 5 families of rural and urban areas.
There should be 3 case sheets for Yoga Naturopathy & pathya apathy together and 3 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

<table>
<thead>
<tr>
<th>Marks distribution</th>
<th>100 marks</th>
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<tr>
<td>1. Vaiyaktika Swasthavritta</td>
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<td>2. Samajik swasthavritta</td>
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<td>3. Demonstration of Yoga</td>
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<td>4. Naturopathy</td>
<td>10</td>
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<td>5. Journal and compilation work</td>
<td>10</td>
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<td>6. Viva voce</td>
<td>30</td>
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</tbody>
</table>

Reference Books:

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

Swasthavritta Samucchaya- Pandit Rajeshwar dutt Shastri
Swasthya Vigyan- Dr. Bhaskar Govind Ghanekar
Swasthya Vigyan- Dr. Mukund swarup Varma
Swasthasvritta- Vaidya Sakad
Swasthavritta- Dr. Ranade and Dr. Firke
Ayurveda Hitopadesh- Vaidya Ranjit Rai Desai
Yoga and Ayurved- Acharya Rajkumar Jain
Swasthavritta vigyan- Dr. Ramharsha Singh
Swasthavrittam- Dr. Brahmanand Tripathi
<table>
<thead>
<tr>
<th>Title</th>
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<tr>
<td>Swasthavritam</td>
<td>Dr. Shivkumar Gaud</td>
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<td>Yoga and yoga chikitsa</td>
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<td>Foundations of Contemporary Yoga</td>
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<td>Yoga Sidhant evam Sadhana</td>
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<td>Janasankhya Shiksha Sidhanta</td>
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<td>Evam upadesya</td>
<td>S.C. Seel</td>
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<td>Health Administration in India</td>
<td>T.L. Devaraj</td>
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<td>Health and family welfare</td>
<td>L.P. Gupta</td>
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<td>Positive Health</td>
<td>L.P. Gupta</td>
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<td>Biogenic Secrets of food in Ayurveda</td>
<td>L.P. Gupta</td>
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<td>Smriti granthon mein nihit</td>
<td>Dr. Smt. Nigam Sharma</td>
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<td>Swasthaprakara samagri</td>
<td>Dr. P. sudhakar Reddy</td>
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<td>Dr. Reddy's comprehensive guide to Swasthavritta</td>
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<td>Nutritive value of Indian foods</td>
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<td>Yoga-A game for Women(hindi translation)-Madhu Pandey</td>
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3.3 PRASUTI TANTRA & STRIROGA

Marks 200 (100marks each paper)
Practical-100 marks
HOURS Theory-200 Hrs
Practical-100 Hrs

PAPER-1 PRASUTI TANTRA

PART-A

INTRODUCTION TO SUBJECT

STRI SHARIRAVIJNAN

Etymological origin of the word Stri. Artava vaha and Stanyavaha strotamsi. Tryavarta yoni Stri Vishishta, Peshi Marmni.

Anatomy of female reproductive system.(External and internal genital organs) Soft & Bony Pelvis and its obstetrical importance.

DESIRABLE (non detail)

Vayobhedena Stri sangnya

RAJO VIGYANA

Description of Raja, Artava and Pratham Rajo Darshana, Rajasvala Charya. Ritumati Lakshana, Ritumaticharya, Ritukala

Menarche, Menstrual cycle and their regulation by endocrine glands,

Ovulation – Importance in conception

DESIRABLE (non detail)

Concept of Stri Sukra

GARBHA VIGYANA

a) Garbhasya paribhasha, Garbhadhanaavidhi, Garbhavakranti, Garbha Sambhava samagri, Garbhakara bhava, Panchabhautikatwa of Garbha, Masanumasika Vridhi of Garbha, Garbha Poshana, Garbhasayasthe Garbhasthiti

Foetal attitude, lie, position, presentation

b) Apara, GarbhaNabhinadi, Jarayu, Ulba

Formation, Development, Function of Placenta, Umbilical cord, Amniotic fluid

Foetal membranes - Abnormalities of Placenta

DESIRABLE (non detail)
Garbhalingotpatti, Garbhasya Avayavotpatti, Garbha Varnotpatti, Garbha Vikriti

**GARBHINI VIGYANA**

a) Lakshana of Sadhyograhita Garbha, Lakshana of Vyakta Garbha, Pumsavana vidhi
   Diagnosis of Pregnancy

b) Garbhini vyavastha: Garbhini Paricharya, Garbha Upaghatakara Bhava, Dauhrida
   Ante Natal care-Examination, Investigation and Management

c) Garbha Vyapada: Nidana, Samprapthy and Chikitsa Garbhasrava and Garbhapata-
   Garbha shosha-Upavishtaka, Nagodara, Upashushka, Leena garbha,
   Antarmrita garbha, Raktagulma, Bahugarbaththa

d) Abortions, Rh-incompatability-
   Causes, clinical features, complications and management.

Gestational trophoblastic neoplasias, Ectopic pregnancy, IUGR, Intrauterine foetal death, multiple pregnancy

**GARBHINI VYAPAD**


b) Common ailments of Pregnancy-High Risk Pregnancy, Emesis gravid
   arum, Gestational Anemia, Gestational Hypertension, Gestational Diabetes,
   Toxemias of Pregnancy, Jaundice, AIDS,

   Ante Partum Hemorrhage causes, clinical features complications and Management

**PART B**

**PRASAVA VIGYANA**

a) Prasava Paribhasha, Prasavahetu, Prasavkaala, Sutikagaranirmana, Sangrahaniya
   Dravyani, Sutikagara praveshavidhi.

b) Prasavavastha; Prajayani/ Upasthita Prasava/ Asannaprasava lakshana, Aavi.
   Prasavaparicharya, Jatamatraparicharya

c) Normal Labour:- Definition of Labour, Physiology & Mechanism of Labour, Monitoring of
   Labour and management, Pictogram, Episiotomy, care and resuscitation of newborn.
PRASAVA VYAPAD
a) Garbhasanga, Yonisamvarana, Aparasanga, Mudagarbha-definition, Nidana, Types & Management
b) Induction and augmentation of labour, Cervical dystocia, Cephalopelvic disproportion, Prolonged labour, Preterm labour, Post term labour, foetal distress, Assisted Labour, Caesarian
c) Retention of Placenta, PPH - causes, clinical features and management, Genital tract Injuries during labour

DESIRABLE (non detail) Uterine Inversion, Amniotic Fluid Embolism, Garbhashthithi parivarthan (Version), Forceps Delivery, Ventouse Delivery.

SUTIKA VIGYANA
a) Sutika Paribhasha, Sutika Kaal, Sutika paricharya. Changes during sootika avastha(Sareerika&Manasika)
   Normal and abnormal Puerperium and its Management
b) Sutika Roga – Number of Sutika Roga, Sutika Jwara, Shotha and Makkala.
c) Stanyavijnan- Sthanayudshiti, Sthanyakshaya,Sthanyavridhi -their causes, clinical features and treatment
d) Emergency care in obstetrics
    DESIRABLE(non detail)Stana stanya –Pareeksha,Stanya sampat.

PART-2 STRI ROGA

PART-A

ARTAVA VYAPAD
a) Artava-kshaya vridhi, Ashtartavadushti lakshana chikitsa
   Asrigdara lakshana samprapti Chikitsa
b) Menstrual disorders-Amenorhoea, hypomenorrhoea, Oligomenorrhoea, Dysmenorrhoea, Abnormal uterine Bleeding

YONI VYAPAD
Sankhya, Nidana, Lakshana, Upadrava evam Chikitsa
Endometriosis, Fibroid uterus, Genital Prolapses, Retroverted Uterus, Pelvic infections, Cervical erosion, Pelvic Inflammatory Diseases

VANDHYATWA – Prakar,Nidana ,Chikitsa
Infertility – Causes, Types, Investigations and Management.

Yoni Kanda, Yoni Arsa, Granthi, Arbud,
Pelvic Infections including Sexually Transmitted Infections, HIV/AIDS, Preventive measures.
MENOPAUSE-changes during menopause ,menopause syndrome, management.

DESIRABLE (non detail)
Congenital malformations of female genital tract.
Sukra vijnan -kshaya ,vridhi,dushti hetu lakshana and chikitsa
Benign and Malignant tumours of Genital Tract

PART-B

STANA ROGA
a) Stanakeela- nidana lakshana chikitsa, Stanagranthi, Stanavidradhi, Stanashoph Mastitis, Breast abscess, Galactocele -Etiopathology, clinicalfeatures, diagnosis, prognosis and complications
b) Sthanik Chikitsa
Snehana, Swedana, Uttarabasti, Pichu, Varti, Lepana, Dhupana, Dhavana, Dahana, Ksharakarma -. Practical knowledge of all these procedures along 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 biopsy and interpretation of the reports
Stri roga Sambandhita Pramukha Aushadhyai, Prasuti & Stri Roga Chikitsa Upayogi Yantra Shastra Parichaya and Vyadhivinischaya Upaya (Investigative and Diagnostic Aids)
Garbhanirodhaka Upaya.
Parivar Niyojana, Reproductive and Child Health Care, AIDS/HIV control Programme, MCH, PNDT Act, MTP Act, and importance of current National Programme
Knowledge of important Commonly used Ayurvedic and Allopathic drugs used in Prasutitantra and Streeroga. Pharmacotherapuetics of allopathic drugs in obstetrics and Gynaecology
Record keeping,ethical and medicolegal issues in Streeroga and prasutitantra

DESIRABLE (non detail)
Laproscopy,hysteroscopy,hysterosalpingography,USG,X-RAY,Colposcopy, Cervical Biopsy. Granthi evum Granthi nirharan samanyajnan(Myomectomy, hysterectomy)
CLINICAL TRAINING-OBSTETRIC SKILLS

To perform independently

1. History taking and examination of antenatal and gynaecological cases
2. Diagnosis of Pregnancy, assessing of gestational period, to diagnose onset of labour
3. To monitor labour progress, able to plot Partogram
4. Observation of 10 labour
5. To diagnose abnormalities of labour and decide about the referral of the patient
6. Able to provide first aid for obstetric emergencies
7. Recognition of post partum complications
8. Counselling and promoting of breast feeding
9. Record 5 antenatal cases, 5 intrapatum, 5 post partum cases

To observe/assist-D&C, D&E, Caesarean section, Repair operations, Resuscitation of new born.

GYNAECOLOGICAL SKILLS - To perform independently

1. History taking and examination of gynaecological cases
2. Recording 10 gynaecological cases, 5 gynaecological procedures
3. Taking vaginal smear, high vaginal swab
4. Practical knowledge of sthanika chikitsa
5. Observation and practical knowledge of minor gynaecological procedures
6. Observation of Surgical procedures
7. Identification, uses., Demonstration of surgical instruments
8. Observation of Method of sterilization, MTP, Surgical procedures Hystrectomy, Oopherctomy

DISTRIBUTION OF PRACTICAL MARKS

1. Case taking-2cases –one Gynec, one obstetric- 30 marks
2. Instruments, Drugs, & Models- 20 marks
3. General Viva- 40 marks
4. Record -2-(one Prasuti, one streerog)- 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. Scientific contribution of Kashyapa Samhita in Kaumarbhritya.
3. Vayobheda (Classification of age): Garbha, Bala, Kumara; Kshirada, Kshirannada & Annada etc. and modern classification of childhood period.
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, Rakshoghana 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), Staya 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)- Stanyabhave 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.
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.
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.
5. Brief description of Sahajavyayadi (Congenital disorders): Sahaja Hridaya Vikara (Congenital Cardiac Disorders) Jalashirshaka (Hydrocephalus), Khandaoushtha (cleft lip), Khanda-Talu (cleft palate) Sanniruddha Guda (Anal stricture / imperforated anus), Pada Vikriti (Talipes equanovarus and valgus), Spina bifida, Meningocele, Meningomyelocele.
7. Prasavottara Vyadhi (Neonatal disorders): Navajata Kamala (Neonatal Jaundice), Navajata Netrabhishyanda (Neonatal conjunctivitis), Nabhiroga (Umbilical disorders), Navajatishishuraktavishayayata (Neonatal Septicemia)
8. Dushta Stanyapananjanya Vyadhi (Disorders due to Vitiated Milk): Lactose intolerance, Kshiralasaka, Kukunaka, Ahiputana (Napkin Rashes)
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, Rajayakshma (Tuberculosis), Jivanujanya Yakrit Shotha (Hepatitis)
1. Srotas Vikara:
   a) Pranavaha Srotas: Pratishyaya (common cold), Kasa (Cough), Shwasa (Respiratory distress syndrome), Tamaka Shwasa (Bronchial Asthma), Uthpuliika, 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), Udarshula (Infantile Colic), Pravahika (Dysentery), Gudabhransa (Rectal Prolapse). Ama and its disorders like Ama vata jwara (Rheumatic fever).
   c) Rasavaha Srotas: Jwara (Fever), Pandu (Anemia), Mriddhakshanajanya Pandu (Anemia associated with clay eating/Pica).
   d) Raktavaha Srotas: Kamala (Jaundice), Raktapitta (Haemorrhagic disorders), Yakritodara (Hepatomegaly).and Pieehodara (Spleenomegaly)
   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), Apasmara (Epilepsy), Akshepa (Convulsions), Nirudhaprakasha (Phimosis), Cerebral palsy.

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


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

**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) especially Snehan, Swedana, Basti.

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. Anthropometry measurements and their interpretation
6. Various Ayurvedic & modern Procedures and investigations in pediatric practice
Distribution of Marks
Clinical work: Pediatric and neonatal case records [1.0 case sheets of each] 10 Marks
Patient Examination 20 Marks
Spotting 05 Marks
Viva – voce 15 Marks
Total 50 Marks

Reference Books
1. Kashyapa Samhita Complete Hindi translation by Satyapal
   Vidhyalankara English translation by Prof. Premvati Tiwari
2. Principles & practice of Pediatrics in Ayurveda: Dr. CHS Shastry
3. Child Health Care in Ayurveda: Prof. Abhimanyu Kumar
4. Ayurvedic Concepts of human Embryology: Prof. Abhimanyu Kumar
5. Kaumarbhritya by Prof. D.N. Mishra
6. Kaumarbhriya Ke Antargata Balgraho Ka Kramika Evam Vaigyanika
   Adhyana by Prof. Chanchal Sharma
7. Notes on Kaumarbhritya-by Dr. Dinesh K S
8. Pran - Pratyagannannan by Dr. B.M. Singh
9. Ayurveda Dwara Matra Evam Shishu Paricharya by Dr. KS
   Patel,V.K.Kori & Raigopal
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 0,P. Ghai
15. Care of New Born by Meharban Singh
16. Panchakarma in Pediatrics Dr. Yogita Srivas
3.5. CHARAK SAMHITA- UTTARARDHA

(Uttarardha: Chikitsa – Kalpa - Siddhi Sthana)

Theory- One Paper – 100 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

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
# VOLUME 4

**SYLLABUS OF AYURVEDACHARYA (BAMS) 4th Year**

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4.1 KAYACHIKITSA

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

Paper I

Part - A

100 Marks

Part - A

50 Marks


2. Importance of Kriya Kaala according to stages of Dosha and their management.

3. Chikitsa sutra and Management of vriddh (increased) and kshaya (decreased) of Dosha, Dhatu and Mala, Ojo Vyapat (Khshaya, Visramsa and Vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states, Roga-Anutpattikara Chikitsa, Roga Prashamana Chikitsa (Doshapratyani, Vyadhpratyani, Ubhayapratynika), Doshapakrama, 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 ‘Samanya and Nanatmaja’ diseases.

4. Detailed description of Dvividhopakrama (Santarpana and Apatarpana) and Shadavidiopakrama (Rookshana, Snehana, Swedana, Shthambhana, Langhana and Brimhana). 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.


7. Management of Vardhakyajanita vikara, Indriyapradoshaja vikara, Alzhiemer’s 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. 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).

2. Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as – Pandu, Amavata, Madatyaya, Hridroga, Hridshoola, Hypotension, Hypertension, Anaemia, Rheumatoid arthritis.

3. Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as –Raktapitta, Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plihadosha, Yakrut dosha, Haemolytic disorders, Hepatitis, Cirrhosis of Liver, Leukaemia, Kushta, Shvitra, Visarpa, Sheetapitta, Udarda, Kotha and Kshudra Roga.
3. Knowledge of National Health Programmes and the relevant Ayurvedic Management of the following diseases enlisted by World Health Organisation-Malaria, Filariasis, Kala Azar, Leprosy, Tuberculosis, AIDS.
4. Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine- Yoga, Naturopathy, Unani, Siddha, Physiotherapy and Rehabilitation.
5. Diseases of different Endocrine Glands- such as Thyroid, Parathyroid, Pituitary, Pancreas and Adrenal glands and their management.
6. General introduction, types and Management of diseases caused by Vyadhi Kshamatwa Hinata (Immuno deficiency disorders), Auto Immune Disorders.

**PAPER II**

**Part A**

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 Udakavaha Srotas such as- Shotha, Jalodara, Trishna, Water & Electrolyte Imbalance.

**Part B**

1. Chikitsa Sutra and Management of Mamsavaha Srotas and Medovaha Srotas such as- Gandamala, Galaganda, Mamsasashosa, Arbuda, Apachi, Prameha, Sthaulya, Karshya, Diabetes Mellitus, Dyslipidaemia.
2. Chikitsa Sutra and Management of 'Asthi and Majjavaha Srotas such as Asthimajja Vidradhi, Asthisoushriyaa, Asthi kshaya, Sandhigata Vata, Osteo Arthritis, Osteomyelitis, Osteoporosis, Osteopenia.
3. Chikitsa sutra and management of Shukravaha srotas such as Klaibya, shukralpata, shukradosha, kshina shukra, dhwajabhanga.
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, Puyameha, Upadamsha, lymphogranuloma inguinale, Syphilis, Gonorrhoea.
10. Vajikarana- Derivation, definition, synonyms, necessity, benefits, importance of fertility, Symptoms of Shûkra (Semen), Vajikaran Dravya and Aushadhi. 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/ 20 cases - 20 marks
2) Patient examination
   a) Long case - 20 marks
   b) Short case - 10 marks
3) Viva -voice
   a) Paper I - 25 marks
   b) Paper II - 25 marks

**Reference books:**

2. Ayurvediya Vyadhi Vigyana - Yadavji Trikamji
3. Roga Pariksha Vidhi - Priyavrat Sharma
4. Panchakarma Vigyana - Haridasa Sridhar Kasture
5. Cikitsadarsha - Pandit Rajesvirdutta 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.
13. Panchkarma Illustrated by Dr. G.Srinivasacharya.
14. Other relevant publications on subjects concerned
4.2. PANCHAKARMA

Theory One Paper – 100 Marks  
Practical Viva-voce – 50 Marks  
Hours of teaching Theory – 100  
Clinical training: 3 months

I. Introduction

1. Introduction to Panchakarma, Panchakarma and Shodhana, its importance for promotion of health, prevention and treatment of diseases.  
2. Trividha Karma- Purva, Pradhana and Pashchat Karma in relation to Shodhana and their importance.  
3. Indications of Shodhana, Shodhana according to Ritu  
4. General Principles of doshagati from Koshta to Shaka and vice versa  
5. General precautions (Pariharya Vishaya) for Panchakarma  
6. Specifications of Panchakarma theatre and necessary equipments  
7. Importance of Koshta and Agni Parikshan

II. Snehana

1. Etymology and Definition of Sneha and Snehana  
2. Snehayoni- Sthavara and Jangama: Properties of Sneha dravyas, Snehopag Dravyas  
3. General knowledge of Ghrita, Taila, Vasa and Majja with their specific utility and actions ,Yamaka, Trivrit and Maha Sneha  
4. Metabolism of fat  
5. Achcha and Pravicharana of Sneha  
6. Snehapaka and its importance in Panchakarma  
7. Types of Snehana: i) Bahya and ii) Abhyantara Snehana

i) Bāhya Snehana :  
Methods, indications and contraindications of the following types of Bahyasnehana; Mardana, Unmardana, Pādāghāta, Samvāhana, Karna Purana & Akshi Tarpan, Lepa, Talam,  
Murdhni Taila: Siro-Abhyanga, Shiro Seka/dhārā, Siro Pichu and Siro-Basti

ii) Ābhyanatar Snehana  
Three Types of Ābhyanatar Snehana: Shodhanārtha, Shamanārtha and Brimhanārtha  
Snehana, Indications and contraindications for Snehana

Shodhanārtha Snehana  
- Importance and method of Deepan Pāchan and Rookshana in Shodhanārtha Snehana. Properties of Rookshana Dravya. Samyak Rookshana Lakshana  
- Consideration of Agni and Koshta in Snehana  
- Indication of Different Matra, Various dose schedules for Shodhanārtha Snehana; Hrasseyasi, Hrasva, Madhyama and Uttama Mātrā, Ārohana Mātrā  
- Methods of Shodhanārtha Snehana,  
- Anupāna of Sneha
f. Jeerna and Jeeryaman Lakshana  
g. Samyak Yoga, Ayoga and Atiyoga of Snehana, Sneha Vyāpat & their management according to Ayurveda & Modern Medicine  
h. Diet and regimen during Snehana  

**Sadyo Sneha:** Method of administration, dose fixation and utility  
**Shamanārtha Snehana,** Method of administration, dose fixation and utility  
**Bronhanarth Senvhana:** Method of administration, dose fixation and utility  
**Avapeedak Sneha:** Method of administration, dose fixation and utility  

8. Snehana Kārmukata (mode of action)  

9. **Special Procedures:**  
   - Takradhara, Udvartanam, Putpāka, Aschotana, Anjana, Gandusha, Kavala, Dhoompāna, Udvartana, Utsādana, Udgharshana, Talapothishil  

**III. Svedana**  
1. Etymology and Definition of Sveda and Svedana  
2. Classifications of Sveda/Svedana  
3. General Sveda dravya, Properties of Sveda dravyas, Svedapag dravyas ,  
4. Indications and contraindications of Svedana  
5. Ten Types of Niragni Svedana  
6. Knowledge of 13 types of Sagni Svedana and Chaturvidh Svedan  
7. Detailed Knowledge with their Utility of the following Svedana procedures:  
   - Sankara/Pinda Sveda-Ruksha and Snigdha Sveda  
   - Patrapinda Sveda, Jambir Pinda Sveda, Vāluka Sveda, Churna Pinda Sveda, Kukkutand Pinda Sveda, Shashtika Shalipinda Sveda, Nadi Sveda, Bashpa Sveda Ksheer dhooma ,Ksheer Seka, Kwath Seka, Avagaha Sveda, Dhanymila Dhara  
   - Parisheka Sveda, Pizichil, Upanaha Sveda, Annalepa  
8. Local Basti such as Kati Basti, Janu Basti, Greeva Basti and Urobasti  
9. General precautions during Sagni Svedana and Methods to protect vital during svedana  
10. Samyak Yoga, Ayoga and Atiyoga of Svedana  
11. Complications of Svedana and their Management according to Ayurveda & Modern Medicine  
12. Diet and management during and after Svedana  
13. Parihār Vishaya  
14. Svedana Kārmukata (Mode of action)  
15. General Knowledge about current Sudation techniques like Sauna bath, Steam bath  

**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. Knowledge of Koshta and Agni  
5. General knowledge of Vamana and Vamanopaga drugs; properties, actions, preparations, preservation with special reference to Madanphala, Kutaj, Nimba, Yashti, Vacha  
6. Purva Karma of Vamana: Deepan-Pāchana, Abhyantara Snehana and diet
7. Management of one gap day-Abhyanga & Svedana, diet, special Kapha increasing diet
8. Preparation of the patient on Morning of Vamana day
9. Vyamaka Yoga, Anupana, fixation of dose and method of administration
10. Administration of Vamanopaga Dravya such as milk, sugarcane juice, Yashtimadhu decoction
11. Lakshana indicating Doshagati during the process
12. Management during Vamana Karma & observations
13. Symptoms of Samyak Yoga, Ayoga and Atiyoga of Vamana Karma
14. Post Vamana management
15. Types of Shuddhi-Hina, Madhya and Pravara
16. Peyadi Samsarjana Krama and Tarpanad Kram with their specific indications
17. Complication of Vamana and their management with Ayurveda and modern drugs
18. Pariharya Vishaya

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. Knowledge of Koshta and Agni
5. Classification of Virechana Drugs, General properties of Virchana dravya
6. General knowledge of single and compound Virechan drugs; properties, actions, preparations, preservation with special reference to Trivrutta, Aragvadha, Eranda, Katuki, Jaipal
7. Purva Karma of Virechana: Deepan- 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. Complications of Virechana 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, Detailed study of traditional Basti Yantra and their Doshas
   Knowledge of alternative Basti Yantra-enema can, enema syringe, modified plastic/rubber bag for Putaka, modified plastic netra.
4. Classifications of Basti
5. Karma, Kāla and Yoga Basti schedules along with their utility.
6. **Niruha Basti:** Its etymology, synonyms, definition, classifications, sub-classifications & indications and contraindications.
   a. Dose fixation of Niruha Basti according to age
   b. Contents and Method of preparation of Niruha Basti dravya
   c. Diet
   d. Administration of Niruha Basti
   e. Pratyāgamanā Kāla, Post Niruha Basti management
   f. Samyak Yoga, Ayoga and Atiyoga of Niruha.
   g. Complication of Niruha Basti and its management according to Ayurved and Modern Medicines
   h. Pariharya Vishaya and kala
7. **Anuvasana Basti:** Its etymology, synonyms, definition, classifications, sub-classifications & indications and contraindications.
   a. Dose fixation of Anuvasan Basti according to age
   b. Contents and Method of preparation of Anuvasan Basti dravya
   c. Diet
   d. Administration of Anuvasan Basti
   e. Pratyāgamanā Kāla, Post Anuvasan Basti management
   f. Samyak Yoga, Ayoga and Atiyoga of Anuvasana.
   g. Complication of Anuvasan and its management according to Ayurved and Modern Medicines
   h. Pariharya Vishaya and kala
8. Basti Kārmukatā (Mode of action).
9. Knowledge of following types of Basti:
   Madhutailika Basti, Erandmuladi Basti, Yāpana Basti, Pichchha Basti, Kshira Basti,
   Kshara Basti, Vaitarana Basti, Panchaprasutik Basti, Lekhan Basti,Krumighna Basti,
   Tiktaht Basti,Ardhamātrika Basti
10. **Uttara Basti:** Its definition, indications and contraindications, Detailed study of traditional Basti Yantra and their Doshas Knowledge of alternative Basti Yantra
   a. Preparation of patient,
   b. Preparation of Trolley for Uttarbasti,
   c. drug preparation and Fixation of dose,
   d. method of administration in male and females,
   e. observations,
   f. complications and their management

**VII. Nasya**

1. Etymology, definition, Significance of Nasya Karma.
2. Classifications and sub-classifications
3. Knowledge of general Dravya used for Nasya Karma, Shirovirechan Gana, Shirovirechanopag dravyas
4. Indications and contraindications of Nasya
5. Time of administration of Nasya
6. Dose fixation of different types of Nasya
7. Diet and regimen before and after Nasya Karma
8. Administration of Marsha, Pratimarsha, Avapeedaka, Dhoomapana and Dhuma Nasya
9. Symptoms of Samyak-yoga of Nasya,
10. Complication of Nasya and their management
11. Parihār Vishaya
12. Nasya Karmukata (mode of action)

VIII. Raktamokshana

1. Definition, importance and Types of Raktamokshana
2. General Principles and rules of Raktamokshana
3. Classification of Raktamokshan
4. General Indication and Contra indication of Raktamokshan
5. Jalaukavacharana: Knowledge of different types of Jalauka (Leech), Indications and contraindications of Jalaukavacharana, various types of Jalauka. Method of Application, Samyak Lakshan, Complication of Jalaukavcharana and their management with Ayurveda and Modern medicines.
6. Pracchāna: Indications and contraindications of Pracchana. Method of Application, Samyak Lakshan, Complication of Pracchana and their management with Ayurveda and Modern medicines
7. Sirāvedha: Indications and contraindications of Siravedha. Method of Application, Samyak Lakshan, Complication of Siravedha and their management with Ayurveda and Modern medicines
8. Knowledge of emergency management of complications such as water & electrolyte imbalance, shock, bleeding per rectal, hematemesis, epistaxis

IX. Physiotherapy

1. Definition, Utility and Importance of Physiotherapy.
2. Basic Knowledge of Static exercise, Infrared, Short wave diathermy, Electromagnetic therapy, Wax bath therapy, Ultrasonic therapy.

PRACTICALS / CLINICAL TRAINING –
Total Duration of 3 Months posting
OPD (for 1-Month): observation of OPD patients, selection of the patients, observation of OPD base Panchakarma procedures
IPD (Panchkarma) and Panchakarma Unit – Observation of different procedures of Panchakarma, Assistance to the procedure under guidance of Panchakarma specialist
Under clinical posting, each student has to study and write 15-long Cases and 10 short cases in prescribed format
Long case Paper- minimum 1 Vaman, 1 Virechan, 1 Niruha & Anuvasan Basti, 1 Nasya, 1 Raktamokshan
Short case paper –Minimum one each of Pinda sweda, Shirodhara, Abhyanga, Netra Tarpan, Bahya Basti, Nadi Sweda etc.

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 Nibandha Samgraha Commentary of Dalhana & Nyayasandrika Panjika of Gayadasa on Nidana Sthana
3. Ashtanga Hridaya with Sarvanga Sundara & Ayurveda Rasayana Commentaries
4. Ashtanga Sangraha with Shashilekha Commentaries
5. Ayurvediya Panchakarma Chikitsa Dr Mukundilal Dwivedi
6. Panchakarma Vigyan Dr Haridas Shreedhar Kasture
7. Illustrated Panchakarma Dr.G Srinivasa Acharya
8. Clinical Panchakarma (English) Dr. P.Yadaiah
9. Prayogika Panchakarma (Hindi) Dr. P. Yadaiah
10. Vivida Vyadhiyome Panchakarma (Hindi) Dr. P. Yadaiah
11. The Panchakarma Treatment of Ayurveda with Kerala Specialties Dr. T.L. Devaraj
12. Panchakarma 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. Panchakarma Sangraha Dr. Manoj Shamkuwar
16. Essential of Panchakarma Therapy Dr.Pulak Kanti Kaur
17. Principles and Practice of Panchakarma Vaidya Vasant Patil
18. Harrison’s Principle of Internal Medicine
19. Guyton’s Physiology
4.3 SHALYA TANTRA

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

PAPER –I

Part – A

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, Dosha, 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.

Sangyaharan / 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.
**Yogya - Experimental Surgery.**
- 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, Dosha, Karma, Prakara, Yogya, Ayogya, Procedure, Upadrava and Chikitsa.**
  ii. Kshara nirmana vidhi, knowledge of Kshara Varti, Taila and Pichu.
  iii. **Kshara Sutra – Preparation, Indications, Contraindications and Method of application, Complications and their Management.**
- Target – Capability to identify and practice the use of kshara, kshara sutra in common clinical conditions.
- Preferable targets – Broader knowledge of current trends and ongoing researches in kshara application.

**Agnikarma: Mahatva, Upakarana, Vidhi, Akruti 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.

**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:
  i. Introduction of physiology of fluids and electrolytes.
  ii. Dehydration and over hydration.
  iii. Specific electrolyte loss, Acidosis, Alkalosis, Symptomatology and Management.
  iv. Electrolyte changes in specific diseases like pyloric stenosis, intestinal obstruction and anuria.
  v. Various replacement fluids in surgery, mode of administration and complications.
    • 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, Rakta sravā / Haemorrhage: Prakara and Lakshana.
  i. Raktastambhana – Haemostasis.
  iii. 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  
viii. Granthi - Cyst  
ix. Arbuda - Tumour  
  • Target-Clinical application of the concepts.  
  • Preferable targets - Hands on experience of management of different conditions.

Vrana – Niruki and Prakara  
ii. Vrana Chikitsa – Pathya-apathy and Shashti Upakrama, Vranitagara and Rakshakarma.  
iii. Agantuja Vrana:  
   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.  

Vrana – Niruki and Prakara  

Pramehapidaka - Diabetic carbuncle and wounds.  
  • Target - Clinical application of the concepts.  
  • Preferable targets - Hands on experience of management of different conditions.

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

  • 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.

  • 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**

**Part - A**

**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 different conditions.

**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 acute abdomen.

_Udara Roga:_ Aetiology, Pathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Jalodara - Ascites, Chidrodara – Perforation, Peritonitis and Badhagudodara-Intestinal obstruction.
  • Target - Clinical utility of the concepts.
  • Preferable targets - Hands on experience of management of different conditions.

_Diseases of stomach and duodenum:_ Aetiology, Pathogenesis, 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:_ Aetiology, Pathogenesis, 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_ - Aetiology, Pathogenesis, 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.

  • 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

  • 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 different conditions.

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, Niruddhapракasha-Phimosis, Parivartika -Paraphimosis, Avapatiка - Prepuceal ulcer, Arbuda- Tumours and Lingarshā -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, Shukrakarma - Seminal calculus, Torsion of testis, Ectopic testis, Undescended testis and Tumours.

**Vṛiddhi Roga**: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Mutra-vṛiddhi – Hydrocele.
- Target - Clinical utility of the concepts.
- Preferable targets - Hands on experience of management of different conditions.

**Antra Vṛiddhi** – 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.

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**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. Suturing 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) 09 Months
  
  - 03 Months (atleast one month in OT)

- Shalya (Kshara and Anushastra Karma) 03 Months (atleast one month in OT)

- Asthi and Sandhi Chikitsa (Orthopaedics and Trauma) 02 Months

- Anaesthesia 15 days

- Radiology 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 - Girindranath Mukhopadhyaya
6. Shalya Tantra Samuchchaya - Pandit Ramadesh Sharma
7. Shalya Vigyan (Part 1-2) - Dr. Surendra Kumar Sharma
8. Shalya Samanvaya (Part 1-2) - Vd. Anantaram Sharma
9. Shalya Pradeepika - Dr. Mukund Swaroop Verma
10. Soushruti - Dr. Ram Nath Dwivedi
11. Clinical Shalya Vigyan - Dr. Akhilanand Sharma
12. Bhagna Chikitsa - Dr. Prabhakar Janardhan Deshpande
13. Kshara sutra management in ano rectal ailments - Dr. S.K. Sharma, Dr. K.R.Sharma and Dr. Kulwant Singh
14. Anorectal diseases in Ayurveda - Dr. Sijoria and Dr. Praveen Kumar Chowdary
15. Adhunika Shalya Chikitsa Siddanta - Dr. Katil Narshingham Udupa
16. Agnikarma Technology Innovation - Dr. P.D. Gupta
17. Shalya Tantra Ke Siddhant - Dr. K.K.Takral
18. Recent advances in the management of Arshas / Haemorrhoids - Dr. P. Hemantha
19. Arsha Evum Bhagander Mein sutra Avacharan
   - Vd. Kanak Prasad Vyas
20. Kshara Sutra
   - Dr. S.N. Pathak
21. Surgical ethics of Ayurveda
   - Dr. D.N. Pande
22. Bailey and Love's Short Practice of Surgery
   - Norman S. Williams, Charles V. Mann and R.C.G. Russell
23. Clinical methods in surgery
   - S. Das
24. Textbook of Operative Surgery
   - S. Das
25. Shalya Vigyan (Sachitra)
   - Anantram Sharma
26. Anushastra Karma
   - Dr. D.N. Pande
27. Concept of Vrana is Ayurveda
   - Dr. Lakshman Singh
28. Significance for Poorva Karma in Surgical Patient
   - Dr. Lakshman Singh
29. Sangyaharan Prakash
   - Dr. D.N. Pande
30. A concise Text Book of Surgery
   - S. Das
31. A manual on Clinical Surgery
   - S. Das
32. A System of Surgical Diagnosis
   - T.N. Patel
33. A Practical Guide to Operative Surgery
   - S. Das
34. Drugs and Equipment for Anaesthesia
   - Arun Kumar
35. Manual of Surgical Instruments
   - M.M. Kapur
36. Ward Procedures
   - Patel Mansukh B
37. Recent trends in the management of Arshas / Haemorrhoids
   - Dr. P. Hemantha Kumar
38. Primary Anaesthesia
   - Maurice King
39. Synopsis of Anaesthesia
   - Lee
40. Clinical Anatomy/ Surgical Anatomy
   - John E. Skandalakis
41. Surgical Instruments of the Hindus
   - Girindharnath Mukopadyay
42. Outline of Orthopedics
   - John Crawford Adams and David Hamblen L
43. Outline of Fracture
   - John Crawford Adams
44. Recent trends in the management of Bhagandara / Fistula-in-ano
   - Dr. P. Hemantha Kumar
45. Principles and Practice of Agnikarma
   - Dr. Anand Kumar and Dr. Kanchan Shekoker
46. Manipal Manual of Surgery
   - Dr. Rajgopal Shenoy
4.4 SHALAKYA TANTRA

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

NETRA ROGA VIGYAN

Paper I
100 Marks

I. Introduction
a) Shalakyatantra nirukti, Parichayam, Ithihasam
b) Netra rachana shariram (Mandala, Patala, Sandhi, Drushti Vichara) and Netra Kriya Shrira alongwith modern anatomy of Eye.
c) Eye examination and knowledge of basic instruments/equipments required for examination of Eye.
d) Netraroganam – Samanya Hetu (Nija and agantuja), Purvarupa, Samprapti, Rupa and Chikitsa.
e) Classification of Netraroga and its importance.

II. Netra Samanya and Vishishta Chikitsa - Kriya Kalpa
a) Netra and Chakshu swasthya hitkara Dinacharya, Ritucharyam, Aahara evam Vihara.
b) Kriya-kalpa-Seka, Aschyotana, Pindi, Vidalaka, Tarpana, Putapaka, Anjana and importance of Panchkarma in Netra Chikitsa.
c) Basic fundamentals of Netra Shastra Chikitsa e.g. Purva – Pradhana - Paschat karma, Ama-Pachyaman-Pakva Vrana shotha, Vranitopasana, Pranashtashalya, & Vranbandhana. Methods and concepts of sterilization, asepsis and antisepsis as per ancient and modern point of view.
d) Basic applied knowledge of Ashtavidha shastrakarma, agni, kshara, raktamokshana in Nerta rogas.
e) Essential diagnostic and therapeutic modern pharmacological agents required in Netra Chikitsa

III. Sandhigata Roga(Diseases of junctional areas of eye)
a) Number of sandhigata rogas, detailed etiology, pathology, clinical features and management of Pooyalasa and Srava Rogas.
b) Brief Study of krimi granthi, Parvani and Aliji Rogas.
c) Study of Acute and Chronic Dacryocystitis, Epiphora, Blepharitis including their aetiology, pathology, signs & symptoms, differential diagnosis and medical & surgical management.

IV. Vartmagata Roga(Diseases of Lids)
a) Number of vartmagata rogas, and detailed knowledge of etiology, pathology, clinical features and management of Anjananamika, Utsangini, Lagana, Vatahata vartma, Paksha kopa, Sikta vartma, Pothaki, Klinna vartma, Krichhroneelana and Kukunaka diseases of Vartma.
b) Brief Knowledge of Vartmarbuda, Utklishta vartma, Nimesh, Pakshmashata, Vartmarsha
c) Knowledge of Hordeolum, Ptosis, Trachoma, Trichiasis, Entropion, Ectropion including their Etiology, signs and symptoms differential diagnosis and medical & surgical management.

V. Shuklagata Roga(Diseases of sclera and conjunctiva)
a) Number of Shuklagata rogas, detailed knowledge of etiology, pathology, clinical features
and management of Arma, Arjuna and Shuhtika
b) Brief Knowledge of Sira pidika, Sira jala, Pishtaka, Balasgrathita.
c) Study of Pterygium, Scleritis, Episcleritis, Sub-Conjunctival Hemorrhage including their Etiology, signs and symptoms, differential diagnosis and medical & surgical management.

VI. Krishnagata Roga (Diseases of cornea and uvea)
a) Number of krishnagata rogas, detailed knowledge of Etiology, Pathology, Clinical features, differential diagnosis, complications and Management of Savarana /kshata Shukla (Shukra), Avrana shukra (Shukla)
b) Brief knowledge of Sira shukla, Akshipakatyaya and Ajakajata.
c) Knowledge of Corneal ulcer, Corneal Opacity, Uveitis,Acute Iridocyclitis, Staphyloma,their aetiology, pathology, symptoms, differential diagnosis, complications and management.

VII. Sarvagata Roga (Diseases effecting all parts of eye)
a) Number of Sarvagata rogas, detailed knowledge of etiology, pathology, clinical features, complications, differential diagnosis and Management of Abhisyanda, Adhimantha, Hatadhimantha and Shushkakshipaka.
b) Brief Knowledge of Amloshit, Vata paryaya, Anyato vata, Sashopha & Ashophakshipaka- Pilla roga, Siropata and Siraharsha.
c) Knowledge of Conjunctivitis, Glaucoma, Dry Eye Syndrome including their etiology, pathology, clinical features, differential diagnosis, complications and their management.

VIII. Drishtigata Roga (vision disorders)
a) Number of Drishtigata rogas detailed knowledge of - etiology, pathology, clinical features, differential diagnosis and management of Timira, Kacha and Linga nasha.
b) Brief Knowledge of Abhighataja lingnasha, sanimittaja & Annimittaja Lingnasha Doshandhya/Kaphavidagda drishti, Naktandhya, Ushna vidagdha drishti, Pittavidagda drishti, Dhumadarshi, Hriswajadya, Gambhirika, Nakulandhya, Nayanabhighata.
c) Knowledge of Refractive errors, Cataract including their etiology, pathology, clinical features, differential diagnosis, complications and their management.
d) 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

IX. Miscellaneous Diseases
a) Xerophthalmia and other malnutritional eye disorders.
b) Knowledge of ocular trauma and their management.
c) Introduction to Eye bank, Eye donation, Corneal Transplantation
d) Preventive Ophthalmology and Community Ophthalmology
SHIRA - KARNA- NASA- MUKHA ROGAS

PAPER II

100 Marks

I Samanya Chikitsa

a) Study of therapeutic procedures like Sveda, Kavala, Gandusa, Dhuma, Murdhni Taila, Nasya, Pratisarana, Karna Purana,karna prakshalana, nasa prakshalana Mukha Lepa.
b) Ashtavidha shastrakarma and anuashastrakarma used in the treatment of Shira, Karna,Nasa evam Mukha Rogas.

II Shiro Roga

a) Importance and Superiority of Shira.
b) Number, general etiology, pathology and cardinal features of shiro rogas and kapalgata rogas along with their common line of management/treatment.
c) Detailed study of Vataja, Pittaja, Kaphaja shirashoola, Suryavarta, Ardhavabhedaka, Khatiya, Palitya.
d) Brief Knowledge of Raktaja shiraha shoola, Krimija shiraha shoola , Kshayaja shiraha shoola & Sannipataja shiraha shoola, Ananta vata, Indralupta, Darunaka.

III Karna Roga

a) Detailed study of Rachana and Kriyasharir of Karna (Ear) & Shravanendriya as per Ayurvedic and modern view, Examination of Ear along with instruments/equipments required in Ear examination.
b) Detailed study of etiology, pathology, classification, clinical features and management of diseases of Karna – karna shool, karna nada& shwed, Badhrya, karnastrava, karna pratinaha, pootikarna, karnagoothaka, karnavidradhi.
c) Brief Knowledge of karna kandu, karnapaka, karnarsha, karnarbuda,krimikaran &karpapali rogas , Karna sandhana(Auroplasty), fundamentals, method and Vaikrtpaham
d) Detailed study of Otalgia, ASOM, CSOM, Deafness, wax including their etiology, pathology,clinical features, differential diagnosis, complications and medical & surgical management

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

IV Nasa Roga

a) Detailed study of Rachana and Kriyasharir of Nasa (Nose and paranasal sinuses)& Ghranendriya as per Ayurvedic and modern view, Examination of Nose. along with instruments/equipments required in Nose examination.
b) Detailed study of Pratishyaya, Dushta pratishyaya, Nasanaha, Kshavathu, Nasagata raktapitta & Nasarsha.
c) Brief Knowledge of Putinasa, Bhuranshathu, Peenasa, Apeenasa, Nasaruba, Nasashotha, Dipta, Nasa Sandhana.
d) Detailed study of Rhinitis & Sinusitis Epistaxis, Nasal Polyp, DNS, Foreign body including their Etiology, pathology, clinical features differential diagnosis and medical & surgical management.
e) Brief Knowledge of Nasal trauma, Tumours of nose and Para nasal sinuses.
V Mukha Ro ga (Diseases of Oral Cavity)
a) Detailed study of Rachana and Kriyasharir of Mukha Rogaadhishthana-oshthha, dantamoola, danta, jivha, talu, gal, sarvasara (Oral cavity ) as per Ayurvedic and modern view along with their Basic examination including instruments/equipments required for the examination
b) Mukha and Danta Swasthya as per ancient and modern concepts including prevention of malignancy of oral cavity.
c) Number and general aetiology, pathology, cardinal features of Mukha rogas along with their common line of management/treatment.

Oshtha Ro ga (Diseases of Lips)
a) Detailed study of Etiology, pathology, classification, clinical features and management of - Oshtha prakopa, khandoshtha
b) Brief Knowledge of Gandalaji, Jalarbuda, Kshataja Oshthaparakopa
c) Knowledge of cleft lip.

Dant Mula Gata Ro ga (Diseases of Periodontia)
a) Detailed study of Etiology, pathology, classification, clinical features and management of - Shitada, Dantaveshta, Upakush, Danta Nadi, Danta Vidradhi, Adhimansa
b) Brief Knowledge of dantapupputaka, Saushira, Mahasaushira, Danta Vaidarbha, Paridara, Vardhana.
c) Detailed study of Etiology, pathology, classification, clinical features and management of Gingivitis, Apical abscess, Periodontitis (Pyorrhoea).

Danta Ro ga (Dental Diseases)
a) Detailed study of Etiology, pathology, classification, clinical features and management of Daalan, Krimidanta, Dantaharsha, Danta sharkara, Hanumoksha
b) Brief Knowledge of karala, Bhanjanak, Kapalika, Shyava Danta, Danta bheda,
c) Danta chaal, Adhidanta, Danta Utpatana including Jalandhar bandha method and Danta Purna.
d) Knowledge of Dental Caries, Dental Tartar & Tooth extraction.

Jihwa Gata Ro ga (Diseases of Tongue)
a) Detailed study of Etiology, pathology, classification, clinical features and management of - jivha kantaka (vataja, pitta ja and kaphaja)
b) Brief Knowledge of Upajihva, Adhijhva, Alasa.
c) Knowledge of Glossitis,Tongue Tie, Ranula, Benign and Malignant Tumors of tongue.

Talu Ro ga (Diseases of Palate)
a) Detailed study of Etiology, pathology, classification, clinical features and management of - Gala shundika, Talushosha, Talupaka
b) Brief Knowledge of Talupuppata, Adhrusha, Kacchapa, Talvarbuda, Mamsasanghata.
c) Knowledge of Cleft palate, palatitis, uvulitis and tumours of the palate.

Kantha and Gala gata Ro ga (Diseases of Pharynx & Larynx)
a) Detailed study of Etiology, pathology, classification, clinical features and management of - Tundikeri, Kantha shaluka, Gilayu, Galaganda,
Swrabhedha, Galavidradhi.
b) Brief Knowledge of Rohini, Galashotha, Kantharbuda, Kanthavidradhi, Galarbuda Galaugham, Vrindam, Ekavrindam, Valaya, balasa, Shataghni, Swaraghna.
c) Detailed study of Etiology, pathology, classification, clinical features and management of - Pharyngitis, Laryngitis, Tonsillitis & Adenoiditis
d) Brief Knowledge of foreign body in the throat, Carcinoma of Larynx & Pharynx, Dysphagia Diphtheria & diseases of salivary glands.

Sarvasara Mukha Roga (Generalised mucosal affections of the oral cavity)
a) Detailed study of Etiology, pathology, classification, clinical features and management of Sarvasar mukhapaka
b) Brief Knowledge of urdhvaguda, putivakrata, mukharbuda
c) Detailed Knowlege of Stomatitis.

VI Miscellaneous Diseases
National Programme for Prevention and Control of Deafness.

PRACTICAL

Content of Practical


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 Shalakya

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 10 Marks
4) Viva – voce 30 Marks
5) Daily Record (Case record) 10 Marks
Total 100 Marks

Reference Books:-
1. Shalakya Tantra Dr. Rama Nath Dwivedi
2. Shalakya Vigyan Dr. Ravindra Chandra Choudhary
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<th>Course</th>
<th>Author</th>
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<tr>
<td>3</td>
<td>Abhinava Netra Chikitsa</td>
<td>Acharya Vishva Nath Dwivedi</td>
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<td>4</td>
<td>Netra Chikitsa Vigyan</td>
<td>Dr. Ravindra Chandra Choudhary</td>
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<td>5</td>
<td>Netra Roga Chikitsa</td>
<td>Dr. Munje</td>
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<td>6</td>
<td>Netra Roga Vigyan</td>
<td>Dr. Hans Raj</td>
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<td>7</td>
<td>Parson’s Diseases of Eye</td>
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<td>8</td>
<td>Diseases of ENT Log and Turner</td>
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<td>9</td>
<td>Shalakya Tantra</td>
<td>Shiv Nath Khanna</td>
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<tr>
<td>10</td>
<td>Atext book of ophthalmology in Ayurveda</td>
<td>Dr. P.K. Shantha Kumara</td>
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<td>11</td>
<td>Shalakya Kriya Kalpa Vigyan</td>
<td>Prof. K. S. Dhiman</td>
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<td>Useful portions of Charak, Sushrut, Vagbhatta</td>
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4.5 Research methodology and Medical statistics

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

PART – A –Research Methodology

1. Brief historical background of research in Ayurved and contemporary medical science
   Evidences of researches in ayurvedic classics
2. Etymology, definitions and synonyms (Anveshana, Gaveshana, Prayeshana, Anusandhan and Shodha) of the word Research
3. Research in Ayurved - Scope, need, importance, utility
4. Types of Research (familiarization of the terms)
   a) Pure and Applied
   b) Qualitative , Quantitative and Mixed
   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
8. Concept of Evidenvce Based Medicine and Scientific Writing
9. Importance of IT in data mining and important research data portals concerned with Ayurved and contemporary medical science (DHARA , PubMed, Ayush Research Portal, Bioinformatics Center, Research Management Informatic System etc.)

PART – B Medical-Statistics

1. Definition, scope and importance of the Medical statistics
2. Common statistical terms and notations
   a. Population
   b. Sample
   c. Data
   d. Variable
   e. Normal distribution
3. Collection and Presentation of data
   a. Tabular
   b. Graphical
   c. Diagrammatical
4. Measures of location
   a. Average
   b. Percentile
   Measures of Central Tendency
   a. Arithmetic mean
   b. Median
c. Mode
5. Variability and its measurement
   a. Range
   b. Standard deviation
   c. Standard error
6. Introduction to probability and test of significance
7. Parametric and non parametric tests
8. Introduction to commonly used statistical soft-ware.

**Reference books for Research methodology:**

1. Dawson, Catherine, 2002, Practical Research Methods, New Delhi, UBS Publishers’ Distributors

**Reference Books for statistics:**

5. Interpretation and Uses of Medical Statistics by Leslie E Daly, Geoffrey J Bourke, James MC Gilvray.
6. Research in Ayurveda-M S Baghel
7. research methodology in ayurveda-V.J.Thakar,Gujarat Ayurved University
8. Ayurveda anusanidhan paddhati-P.V.Sharma
11. Knapp GR & Miller MC. Clinical epidemiology and Biostatistics, NMS series
    Antonisamy B, Christopher S & Samuel PP. Biostatistics : Principles and practice
15. Vaidyakeeya Sankhiki Shastra- Dr.S.S.Savrikar