



**PONDICHERY UNIVERSITY**  
**ACADEMIC SECTION – II**

**REGULATIONS FOR BACHELOR OF**  
**AYURVEDIC MEDICINE AND SURGERY (BAMS)**

**1. ADMISSION TO THE MEDICAL COURSE – Eligibility Criteria:** No Candidates shall be allowed to be admitted to the Medical Curriculum of first year BAMS Course:

1. He/She shall complete the age of 17 years as on 1<sup>st</sup> October, of the year admission to the **Bachelor of Ayurvedic Medicine and Surgery (BAMS)** course.
2. He/She has passed qualifying examination as under :-

(a) The admission on the basis of qualifying examination under clause (1) based on merit, candidate for admission to Bachelor of Ayurvedic Medicine and Surgery (BAMS) course must have passed in the subjects of Physics, Chemistry, Biology & English individually and must have obtained a minimum marks taken together in Physics, Chemistry and Biology at the qualifying examination is as detailed below:

<b>50% - for General</b>
<b>45% - for OBC; OPH (OBC &amp; General)</b>
<b>40% - for SC/ST &amp; OPH</b>

(b) The higher secondary examination or the Indian School Certificate Examination which is equivalent to 10+2 Higher Secondary Examination after a period of 12 years study, the last two years of study comprising of Physics, Chemistry, Biology and Mathematics or any other elective subjects with English at a level not less than core course of English as prescribed by the National Council of Educational Research and Training after the introduction of the 10+2+3 years educational structure as recommended by the National Committee on education.

or

- (c) The intermediate examination in science of an Indian University/Board or other recognized examining body with Physics, Chemistry and Biology which shall include a practical test in these subjects and also English as a compulsory subject.

or

- (d) The first year of the three years degree course of a recognized university, with Physics, Chemistry and Biology including a practical test in three subjects provided the examination is a "University Examination" and candidate has passed 10+2 with English at a level not less than a core course.

or

- (e) B.Sc. examination of an Indian University, provided that he/she has passed the B.Sc. examination with not less than two of the following subjects Physics, Chemistry, Biology (Botany, Zoology) and further that he/she has passed the earlier qualifying examination with the following subjects – Physics, Chemistry, Biology and English.

or

- (f) Any other examination which, in scope and standard is found to be equivalent to the intermediate science examination of an Indian University/Board, taking Physics, Chemistry and Biology including practical test in each of these subjects and English.

## **2. Duration of the Course:**

Degree Course- 5 1/2 years

- (a) I Professional - 18 months.
- (b) II Professional - 18 months.
- (c) III Professional - 18 months.
- (d) Internship - 12 months

The period of internship will be of 12 months in case of total duration of Course of study is covered under 4½ years. In case of 12 months internship training, the six months of training be provided for clinical training under various departments. The State/ University desiring to continue 6 months internship may adopt Third Professional Course of 24 months so that total duration of course including internship will, be of 5 ½ years.

The first 18 months shall be occupied in the study of the non-clinical subjects. No student shall be permitted to appear in Third Professional examinations until he/she has passed in all the Second Professional subjects.

#### **5. DEGREE TO BE AWARDED:**

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

#### **6. MEDIUM OF INSTRUCTION:**

ENGLISH

#### **7. THE NUMBER OF STUDENTS TO BE ADMITTED:**

The admission should be made strictly in accordance with the student bed-ratio of 1:3 i.e. on the basis of 3 beds in the hospital attached with the college one student should be admitted every year. The minimum number of student to be admitted in an Ayurvedic College should be 50.

#### **8.1. FIRST PROFESSIONAL EXAMINATION:**

(To be held at the end of 1½ years)

(i) The first professional period shall start from 1st day of July and end .on 31st December next year. The examination shall ordinarily be completed by the end of December.' The' Supplementary examination of first Professional shall be held within two months of declaration of result. The subsequent first professional examination will be held every six months and failed candidates shall ordinarily be allowed 3 (three) chances for passing First Professional (1+3).

However, (1+3) a student failed in one or more subjects of First Professional examination may be allowed to keep term in Second Professional Course. Only those students, who passed in all subjects, shall be allowed to take of the Third Professional Examination.

(ii) The First Professional Examination shall be held in the following subjects: -

1. Padarth Vigyan
2. Astang Sangraha (Sutrasthan)
3. Sanskrit
4. Ayurved Ka Itihas
5. Rachna Sharir
6. Kriya Sharir

(iii). The candidates before presenting themselves for this examination shall obtain a certificate of completing the prescribed course of theory and practicals in the prescribed subjects of the First professional examination.

(iv) A candidate failed in one or more subjects in examination shall be eligible to appear in supplementary examination.

(v) Candidates who fail to pass the First Professional Examination in (1+3) opportunities shall not be allowed to continue their studies. However, in case of personal illness of a serious nature of a candidate and in unavoidable conditions/ circumstances, the Vice-Chancellor of University may permit one more opportunity for passing the first professional course.

## **8.2. SECOND PROFESSIONAL EXAMINATION:**

(To be held at the end of 3 years.)

(i) The Second Professional Course shall start in January following the First. Professional examination and the examination shall be held ordinarily in June/ July of year after completion of three years.

(ii) The Second Professional examination shall be held after 11/2 years of First Professional examination: and in the following subjects: -

- (1) Ras Sastra Avam Bhaishajya Kalpana
- (2) Dravyagun Vigyan
- (3) Agad Tantra, Vyavhar Ayurved Avam Vidhi Vaidyak
- (4) Rog Vigyan Avam Vikriti Vigyanam
- (5) Charak Samhita
- (6) Svasth Vritta

(iii) A candidate must pass at least one subject for being eligible to appear in supplementary examination.

(iv) The supplementary examination to Second Professional shall be held ordinarily in September and those who remain failed in one or more subjects in supplementary examination shall be eligible to appear in the subsequent Second Professional examination, which may be held every six month.

(v) Such candidates who pass First Professional examination in supplementary and register for the Second Professional afterwards, shall not be allowed summer vacation and will have to undergo instructions during this period.

### **8.3. THIRD PROFESSIONAL EXAMINATION:**

(To be held at the end of 4 1/2/5 years)

(i) The final Professional Examination shall be held after three academic years after the First Professional Examination and shall comprise of the following

#### **Subjects:-**

1. Prasuti Tantra, Striroga

2. KaumarBhritya
3. Kaya Chikitsa
4. Shalya Tantra
5. Shalakya Tantra
6. Charak Samhita

(ii) If a candidate remains failed in one or more subjects in Final Professional Examinations he/she shall be eligible to appear in those subjects in subsequent Third Professional examination, which may be held every sixth month.

### **9. COMPULSORY INTERNSHIP:**

(a) The compulsory rotating Internship shall be completed in the teaching hospital/ Ayurvedic hospital as available in respective States and dispensary and Primary Health Care Centres for the period of 6/12 months after passing the final examination.

(b) On full completion of the Internship as certified by the Principal on the recommendations of the authorities under whom the training was done, the candidate shall be eligible for the award of Ayurvedacharya (**Bachelor of Ayurvedic Medicine and Surgery**) Degree.

10. (a) The following factors may be taken into consideration in determining class work in the subject:-

#### **SUBJECT**

- (i) Regularity in Attendance
- (ii) Periodical tests
- (iii) Laboratory record, note book and clinical history sheets as required.

(b) A class schedule card shall be maintained for each student for the different examination. The Principal shall arrange to obtain the signature of the students, teachers at the end of each course of lectures and practical instruction and send the cards to each Head of the Departments for final completion before the commencement of each examination.

(c) The card shall contain a statement the student has attended not less than 3/4 of the

theory lectures and practical classes and not less than 85% of clinical in structions of which the course consists. This card shall be submitted to the examiners as required.

## 11.EXAMINATION:

(a) (i) A candidate obtaining 75% marks in the subject shall be awarded distinction in the subjects.

(ii) A candidate obtaining an aggregate of 75% in the following subjects shall be declared passed in final examination with honors:-

1. Padarthavigyan
2. Rachana Sharir/Kriya Sharir
3. Dravyaguna Vigyan/Rasashastra
4. Kayachikitsa/Rog Vigyan
5. Shalya Tantra/Shalakyia Tantra/Prasuti Tantra

(iii) Only that candidate shall be considered for honors or distinction who have passed the degree examination in the first attempt each part. As regards distinction in subjects, only those will be qualified for distinction that passed the respective professional examination in the first attempt.

(b) If a candidate has passed at least in one subject of the Professional examination and failed in one or more subjects, securing not less than 35% marks shall be. eligible to appear at the supplementary examination. The aggregate shall be calculated in theory and practical combined.

(c) The minimum pass marks shall be 50% in theory and practical separately in each subject.

## 12. NUMBER OF PAPERS AND MARKS FOR THEORY/PRACTICAL:

<b>Subject</b>	<b>No. of paper</b>	<b>Total marks inTotal Marks</b>
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		theory	in practical/oral
1. Ayurved Ka Itihas	One	100	-
2. Sanskrit	Two	200	50
3. Padarth Vigyan	Two	200	50
4. Astang Sangrah	One	100	50
5. Rachna Sharir	Two	200	200
6. Kriya Sharir	Two	200	100
7. Swastha Vritta	Two	200	100
8. Dravyagun Vigyan	Two	200	200
9. Ras Shastra Bhaishajha Kalpana	Two	200	100
10. Agad Tantra Vyavhar Ayurved Avam vidhi Vaidyak	One	100	100
11. Rog Vigyan Avam Vikriti Vigyan	Two	200	100
12. Charak Samhita	One	100	50
13. Prasuti Tantra Avam Strirog	Two	200	100
14. Kaumar Bharitya	One	100	100
15. Kaya Chikitsa	Four	400	200
16. Shalya Tantra	Two	200	100
17. Shalakya Tantra	Two	200	100
18. Charak Samhita	One	100	50

### 13.1 NUMBER OF LECTURES PRACTICAL AND DEMONSTRATIONS FOR VARIOUS SUBJECTS:

#### SUBJECTS OF FIRST PROFESSIONAL

Subject	Lectures	Practical and Demonstrations
1. Ayurved Ka Itihas	60	--
2. Sanskrit	150	--
3. Padarth Vigyan	150	30
4. Astang Sangrah	60	--
5. Rachna Sharir	210	210
6. Kriya Sharir	210	90

#### SUBJECTS OF SECOND PROFESSIONAL

7. Swastha Vritta	180	50
8. Dravyagun Vigyan	180	90
9. Ras Shastra Bhaishajya Kalpana	180	90
10. Agad Tantra Vyavhar Ayurved Avam	100	50



Vidhi Vaidyak		
11. Rog Vigyan Avam Vikriti Vigyan	180	90
12. Charak Samhita	100	--

**SUBJECTS OF THIRD PROFESSIONAL:-**

13. Prasuti Tantra Avam Strirog	150	In Hospital 3 Months
14. Kaumar Bharitya	90	1 Months
15. KayaChikitsa	400	12 Months
16. Shalya Tantra	210	6 Months
17. Shalaky Tantra	210	4 Months
18. Charak Samhita	100	-----

**NOTE:** The period of theory and practical shall not be less than 60 minutes (one hour) duration. The duration of the practical of clinical subjects and Rachna Sharir (Dissection) shall be of at least 120 minutes (Two hours).

13.2 The clinical training in the hospital attached with college to the students shall be as below:

**(i) KAYACHIKITSA (INDOOR AND OUTDOOR): 12 MONTHS**

- (a) General - 6 months
- (b) Panch Karma - 2 months
- (c) Manas Rog - 15 days
- (d) SankramakRog - 15 days
- (e) X-ray - 1 month
- (f) Atyayik - 2 months

**(ii) SHALYA TANTRA (INDOOR): 6 MONTHS**

- (a) General - 5 months (atleast one month in O.T.)

(b) Atyayik - 1 months

**(iii) SHALAKYA TANTRA (INDOOR & OUTDOOR) : 4 MONTHS**

(a) General - 3 months (atleast one month in O.T.)

(b) Atyayik -1 months

**(iv) PRASUIT TANTRA AVAM STRIROG : 3 MONTHS**

**(v) KAUMAR BHRITYA :1MONTH**

**14. QUALIFICATIONS AND EXPERIENCE FOR TEACHING STAFF:**

(Applicable for recruitments made after 1st July 1989)

**(i) ESSENTIAL:**

(a) A degree in Ayurved from a University established by law or a Statutory Board/ Faculty/Examining Body of Indian Medicine or its equivalent as recognised under Indian Medicine Central Council Act, 1970.

(b) A Post-graduate qualification in the subject/specialty concerned included in the Schedule to Indian Medicine Central Council Act, 1970.

(c) Adequate knowledge of Sanskrit.

**(ii) EXPERIENCE**

(a) FOR THE POST OF PROFESSOR: Total teaching experience of ten years in the Department is necessary out of which there should be five years teaching experience as Reader/Asstt. Professor or ten years experience as a Lecturer in the concerned subject wherever the posts of Reader/Asstt. Professors do not exist.

(b) FOR THE POST OF READER: Total teaching experience of five years in the subject is

necessary out of which there should be three years teaching experience as Lecturer in the subject concerned.

(c) FOR THE POST OF LECTURER: No teaching experience is required.

(d) FOR THE POST OF PRINCIPAL: The qualification and experience prescribed for the post of Professor should be considered essential for the post of Principal.

**(iii) DESIRABLE:**

Original published papers/books on the Subject.

**NOTE:** If the post-graduate qualification holders for the following subjects are not available, the post-graduate qualification obtained in the subject as noted against the subject shall be admissible: -

Name of Subject Discipline of Post-graduate

1. Swastha Vritta 1. Kaya Chikitsa 2. Basic Principle
2. AgadTantra 1. Kaya Chikitsa 2. DravyaGun
3. Padarth Vigyan/ Samhita/Itihasa Basic Principles
4. Rog Vigyan Kaya Chikitsa
5. Rachna Sharir/Kriya Sharir 1. Sharir 2. Basic Principles .
6. Shalakyas Shalakyas/Shalyas
7. Nischetna Avam Ksha-Kiran Shalyas and/Shalakyas

**15. APPOINTMENT OF EXAMINER IN AYURVEDA**

No person other than approved teacher with five years teaching experience in the concerned subject shall be considered eligible to the Examiner.

## 1.1 SANSKRIT

Theory- Two Papers– 100 Marks Each

Practical/ Viva voice – 50 Marks

Lectures - 150

**Paper I**

**100 Marks**

### **1. Vyakarana**

Sanjna, ach-sandhi, hal-sandhi,visarga sandhi, Ajanta pullinga, Ajanta streelinga, Ajanta napunsklinga, halanta pullinga, halanta streelinga, Halanta napunsalinga,avyaya prakaran, bhvadi-dashganah, nyanta-sannanta, yannanta-yanluganta-atmnepada-parasmaipada-bhavakam

Karma-karti,lakatha prakriya, kridanta prakarana(kriya prakriya), Purvakridantam, unadaya,uttar-kridanta), vibhaktyartha prakaran, samasa prakaran (keival samas, avyayi-bhavah, tatpurush, bahuvrihi, dvanda,samasanta), tadvita prakarnani,streepatyaya prakaranam.

**TEXT BOOK-** laghu siddhanta kaumudi

### **2. Translation**

1. Translation from English / Hindi / regional language into Sanskrit

Or Essay in Sanskrit related to ayurveda

2 .Translation from Sanskrit to English, Hindi and Regional languages

(Any desired language)

### **Reference Books**

1. Anuvada Chandrika- Chakradhara Hansa Nautiyal
2. Sansrita Ayurveda Sudha- Dr B. L.gaur
3. Praudh Rachananuvada Kaumudi- Dr Kapil Dev Dwivedi
4. Concerned material from authorised texts of Ayurveda (for translation).

**3. Corrections of mistakes** - Matter may be selected from the Reference books.

**1. Vaidya Sadvrittam**

1. Vaidyakiya subhashitani (1-20 chapters)

By Bhaskar Govinda Ghanenkar

2. Ayurveda Hitopdesah

(Vaidya Ranjit Rai Desai)

3. Panchatantram- Aprikshitkarkam

Or

Verse from classics (brihatrayi) related to vaidya sadvritta

**2. Order of reading classics (grantha-adhyayan krama parichaya)**

Pathana karma / sampradana parichaya, padavibhaga, arthanvaya karma, anvayatha, bhavartha, dhvanitadi-prabhasana karma parichaya Samastapada sarthak-vigraha, dhatu-dhatvartha, pratyaya-pratyartha, subanta-tivanta-adi according to padavidhi (anvayatha smarthanane) nirupanam.

**Material for practice**

SushrutSamhita-SharirSthan-chapter-4 (garbhavyakarana sharirm).

## **1.2. PADARTH VIGYAN**

**Theory- Two Papers– 100 Marks Each**

**Practical/ Viva voice – 50 Marks**

**Lectures - 150**

**Practicals and Demonstration - 30**

**Paper I**

**100 Marks**

### **1.1 Ayurveda Nirupana**

Definition and lakshana of ayu, composition of ayu; definition and lakshana of Ayurveda; definition and types of siddhanta; introduction of basic principles of Ayurveda and their significance.

### **1.2 Ayurveda darshana nirupana**

Philosophical background of fundamentals of ayurveda, meaning of the word "darsan" and its omnipresence; evolution of darsana, their Numbers and classification; general introductions of schools of Indian Philosophy with an emphasis on nyaya, vaisheshik and sankhya Darsana. Ayurveda as unique and independent school of thought (philosophical individuality of ayurveda), definition of padartha, lakshana of padartha. Division and number of padarthas; bhava and abhava padartha; charak's opinion regarding these; introduction & description of karana-padarthas mentioned by charak.

## **2. Dravya Vigyaniam**

Definition, lakshana and number of dravya, panchabhutas; origin of panchamahabhuta, parasparanupravesha (mutual conglomeration), types of panchikaran; lakshana and types of prithvi, lakshana and types of tejas; lakshan and types of jala ,lakshana and types of vayu, lakshan of akasha and its aupadhika types; kala nirupana, etymological derivation, definition and lakshana of the word 'kala'; aupadhik types of kala, significance of kala in ayurveda; dig-nirupanam, significance of dig and aupadhik types, lakshana of atma, description of purusha mentioned in ayurveda- Ativahika purusha/ sukshma sharir/ rashi purusha/ chikitsiya purusha/ karma purusha/ saddhatvatmak purusha, initiation of atma towards perception of knowledge (atmanahjnana pravritti), mano nirupanam; lakshana,synonyms of manas,

mana as substratum of diseases (manasah vyadhyashryatram); guna (qualities), Vishaya (subject), karma (functions), ubhayaindriyatva and seat of mana; contribution of panchamahabhuta and triguna in physical constitution (dehaprakriti) and mental faculty; disapproval of dravyatva of tamas, practical study/application of dravya in ayurveda.

### **3. Guna Vigyaniam**

Etymological derivation, definition and number of gunas, vaisesika guna (sartha)- shabda, sparsha, rupa, rasa, gandha; adhyatma gunah- budhi, Sukha, dukha, ichha, dwesa, prayatna; paradi guna, gurvadi guna- their introduction and clinical application.

### **4. Karma Vigyaniam**

Definition, lakshana and types of karma, types of karma mentioned in nyaya, Description of karma in ayurveda, practical study/ application of karma in Ayurveda.

### **5. Samanya Vigyaniam**

Definition, lakshan, types of samanya, practical study/ application of samanya in reference to dravya, guna and karma.

### **6. Vishesha Vigyaniam**

Definition, lakshana and types of vishesha, detailed description of the verse "pravrittirubhayasyata", practical study of vishesha for clinical application in Ayurveda.

### **7. Samavaya Viyaniam**

Definition and lakshana of samavaya, practical study of samavaya for clinical application in ayurveda.

### **8. Abhava Vigyaniam**

Definition and lakshana of abhav padartha, classification of abhav- description of pragbhava, pradhvansabhava, atyantabhava, anyuanyabhav; clinical significance of abhava in ayurveda.

**Praman/ Pariksha Vigyaniam (Epistemology)**

**1. Pariksha nirupana (means of getting knowledge)**

Definition , significance and necessity of pariksha. Two types of anubhav-prama and aprama. Lakshan and types of prama and prameya. Lakshna, causes and types of smriti(memory). Significance and importance of praman. Enumeration of pramana according to different school of philosophy. Four types of methods of examination according to ayurveda (chaturvidha pariksha vidhi). Pramana in ayurveda. Incorporation of different pramans into three pramans. Use of word pariksha in reference to pramana in classics of ayurveda. Practical application of methods of examination ( pariksha vidhi) in treatment (chikitsa).

**2. Aptopdesha pariksha/ pramana nirupana (Authoritative instruction/ spiritual testimony)**

Definition of aptopdesha, lakshana of apta, lakshana of sabda, and its types, sabdavritti - abhidha, lakshana, vyanjana, tatparyakhya; shaktigraha hetu, vyakya Characteristic ; vakyartha jnanahetu- akanksha, yogyata, sannidhi.

**3. Pratyaksha pariksha/ pramana nirupana (direct observation or perception)**

definition and lakshana of pratyaksha. Types of origin of pratyaksha jnana. Types of pratyaksha- nirvikalp- savikalpaka with description; description of laukika and alaukika types and their further classification. Sannikarsa Characteristic, six types of sannikarsa, characteristics of sense organs(indriyanam Characteristic lakshanam). Classification of Indriya and enumeration. Description of panchapanchaka, establishment of origin of Indriya by panchamahabhuta (bhautikatwa of Indriya) and similarity in sources (tulyayonitva) of Indriya. Dominance of antahkaran. Hindrances indirect perception (pratyaksha anuplabdhikaran), detailed description of direct perception (pratyaksha) by various instruments/ equipments; necessity of other pramans in addition to



pratyaksha. Practical study/ application of pratyaksha in physiological, diagnostic, therapeutics and research grounds.

#### **4. Anumana pariksha/pramana nirupanam (inference)**

Definition and lakshan of anumana. Introduction of anumiti, paramarsha, vyapti, hetu, sadhya, paksha, dristanta etc. Types of anumana mentioned by Charak Samhita & nyaya darsana. Characteristic and types of vyapti, Characteristic and types of hetu, description of ahetu and hetwabhasa. Characteristic and significance of tarka. Practical study/ application of anumana pramana in physiological, diagnostic, therapeutics and research grounds.

#### **5. Yukti pariksha/ pramana (epistemology of reasoning)**

Definition and lakshana of yukti pariksha, discussion on yukti pramana. Importance & characteristic of yukti pariksha in ayurveda. Practical study and utility of yukti pariksha in therapeutics and research.

#### **6. Upamana pramana nirupanam(analogy)**

Definition and lakshana of upamana. Application of upamana in therapeutics and research

#### **7. Karya- Karan siddhanta nirupanam (cause and effect theory)**

Definition and lakshana of karya and karana. Types of karan. Significance of karya and karan in ayurveda. Different opinions regarding manifestation of karya from karan- satkaryavada, asatkaryavada, parinam vada, arambhavad, paramanuvada, vivartavada, kshanabhangurvada, pilupaka, pitharpaka, anekantavada, swabhavoparamvada.

#### **8. Srishti-nirupanam**

Srishti-laya nirupanam (evolution and devastation of universe), Description of tatvotpatti, Tatva-nirupanam, classification of tatva. Evolution of universe (life) according to charak, sushruta (srishti-vikaskrama); Ashtaprakriti, Shodashvikara and their description. Similarity and dissimilarity between kshetra-kshetragya, vyakta-avyakta, prakriti-purush. Triguna nirupanam, Description of theories of rebirth and salvation (punarjanma & moksha)

#### **9. Shastrartha Bodhaka**

Shastra Lakshana, tantra guna, tantra dosha, detailed description of tantrayukti, Brief description of tachhilya and arthashrya.

## Practical

50 Marks

Allotted Assignment Marks – 10

Spotting – 10

Viva voice – 30

1. Panchabhautika nirupanam of karya dravya and their introduction.
2. Examination of bhautika / samanya guna and introduction.
3. Examination of physical constitution composed by panchamahabhuta (panchabhautika deha prakriti) and mental temperament composed by triguna (Trigunatmka manas prakriti).
4. Exposition or display of process of indriyarth sannikarsha in establishment of dravya and roga (dravya and rogavinishchaya).
5. Importance / significance of pariksha / pramana in examination of dravya, rog and rogi. (disease and patient).
6. Allotment of practical work according to syllabus.

## Reference Books

- |    |  |                           |
|----|--|---------------------------|
| 1. | Padharth Vigyan                                    | Acharya Ramraksha Pathak  |
| 2. | Ayurvediya Padarth Vigyan                          | Vaidya Ranjit Rai         |
| 3. | Ayurved Darshan                                    | Acharya Rajkumar Jain     |
| 4. | Padarth Vigyan                                     | Kashikar                  |
| 5. | Padarth Vigyan                                     | Balwant Shastri           |
| 6. | Sankhya Tantra Kaumadi                             | Gajanan Shastri           |
| 7. | Psycho Pathology in Indian Medicine                | Dr. S.P. Gupta            |
| 8. | Charak Evum Sushrut ke Darshnik Vishay ka Adhyayan | Prof. Jyotirmitra Acharya |

9. Ayurvediya Padarth Vigyan Dr. Ayodhya Prasad Achal
10. Padarth Vigyan Dr. Vidyadhar Shukla
11. Padarth Vigyan Dr. Ravidutta Tripathi
12. OA Ayurvediya Padarth Vigyan Vaidya Ramkrishna  
Sharma Dhandha
13. Ayurvediya Padarth Vigyan Parichaya Vaidya Banwari Lal Gaur
14. Ayurvediya Padarth Darshan Pandit Shivhare
15. Useful Parts of Charak , Sushrut and  
Vagbhata

### 1.3 AYURVED KA ITIHAS (History of Ayurveda)

**Theory- One Paper - 100 Marks**

**Lectures**

**- 60**

1. Etymological derivation (vyutpatti), syntactical derivation (niruktti) and definition of the word itihasa, necessity of knowledge of history, its significance and utility. means and method of gaining knowledge viz. historical person (vyakti), subject (vishaya), time period, (kala), happening (ghatna) and their impact on ayurveda.
2. Decent of Ayurveda, chronology of ayurveda according to different schools, introduction of eight branches of ayurveda and concerned renowned texts. Introduction of the authors of these texts.
3. Eternity of ayurveda (shashvatvam and anaditavam).
4. Status of ayurveda in Vedic period, progression of ayurveda upto tantra kala. Knowledge about available topics of ayurveda in puranas and tantras etc.
5. Introduction of authors of classical texts during Samhita kala and their contribution especially Atreya, Dhanwantri, Kashyapa, Agnivesha, Sushruta, Bhela, Harita, Charaka, Dridhbala, Vagbhatta, Nagarjuna, Jivaka – introduction and contribution.
6. Chronological development of charaka samhita, sushruta samhita and kashyapa samhita.
7. Introduction and establishment of time period of commentators of classical samhitas – bhattar harishchandra, Jejjata, Chakrapani, Dalhana, Nishchalakara, vijayarakshita, Gayadas, Arundatta, Hemadri, Gangadhara, Yonginderanath sen, Haranchandra Chakravorty.
8. Introduction and time period of authors of compendium (granthasamgraha kala) – Acharya Bhavmishra, Sharangdhara, Vrinda, madhavkara, Shodhala, Govind Das (Author of bhaisjya ratnawali), Vasavraja etc.
9. Origin of ras shastra and its development, introduction and time period of promoters of ras shastra.

10. Vrikshayurveda vijnana (Ayurveda for plant kingdom), pashu chikitsa vijnana (ayurveda for animal kingdom), promoters of ashva, gaja chikitsa Vijnana; shalihotra, palkapya, varahmir, nakula, ashvaghosh.
11. Introduction of authors of modern era –Gan Nath sen, Yamimi bhushan, Yadavji tikramji acharya, Ghanekar, Damodar Sharma Gaur, Priyavrat Sharma, Swami Laksmiram, Dr. P. M. Mehta, Daji Shastri Pade etc.
12. Globalisation of ayurveda – Sumera, Babilonia, Asiria, Misra (Egypt), China, Persia, Arabia, Kamobja, Sri Lanka, Nepal, Thailand, Mauritius, Myanmar (Burma) etc. – expansion of ayurveda in above mentioned civilisations.
13. Impact of ayurveda on Hippocrates (Father of Allopathy), Invitation to Indian physicians by yavans and translation of ayurvedic text into Arabian language, visit to Greece by Indian scholars, relation between Greece and india in ancient period (made by Alexandar), expansion of ashvavaidyaka in Greece.
14. Developmental actions for ayurveda in post-independence period, development in educational trends, establishment of different committee, their recommendations, central council of Indian medicine, central council for research and ayurveda and siddha, foundation of department of AYUSH, its introduction and activities, drug and cosmetic act, Ayurvedic pharmacopoeia Committee formation and activities of organisations and institutions like Rashtriya Ayurveda Vidyapeeta etc. Activities in field of research in ayurveda according to different subjects. Initiation for writing down a text, different councils of vaidya and their activities.

*Publications of Ayurveda journals and magazines, WHO, status of Ayurveda on international grounds in present era.*

### **Reference Books**

- |  |                              |
|--|------------------------------|
| 1. Upodaghata of Kashyapa Samhita<br>Paragraph of acceptance of Indian<br>medicine | - Rajguru Hem Raj Sharma     |
| 2. Upodaghata of Rasa Yogasagar  | - Vaidya Hariprapanna Sharma |
| 3. Ayurveda Ka Itihas  | - Kaviraj Suram Chand        |
| 4. Ayurveda Sutra  | - Rajvaidya Ram Prasad       |

Sharma

5. History of Indian Medicine (1-3 part) - Dr. Girindra Nath Mukhopadhyaya
6. A Short history of Aryan Medical Science - Bhagwat Singh
7. History of Indian Medicine - J. Jolly
8. Hindu Medicine - Zimer
9. Classical Doctrine of Indian Medicine - Filiyosa
10. Indian Medicine in the classical age - Acharya Priya Vrita Sharma
11. Indian Medicine (Osteology) - Dr. Harnley
12. Ancient Indian Medicine - Dr. P. Kutumbia
13. Madhav Nidan and its Chief Commentaries (Chapters highlighting history) - Dr. G.J. Mullenbelt
14. Ayurveda Ka Brihata Itihasa - Vaidya Atridev Vidyalkankara
15. Ayurveda Ka Vaigyanika Itihasa - Acharya Priyavrata Sharma
16. Ayurveda Ka Pramanika Itihasa - Prof. Bhagwat Ram Gupt
17. History of Medicine in India - Acharya Priyavrata Sharma
18. Vedo Mein Ayurveda - Vaidya Ram Gopal Shastri
19. Vedo Mein Ayurveda - Dr. Kapil Dev Dwivedi
20. Science and Philosophy of Indian Medicine - Dr. K.N. Udupa

21. History of Indian Medicine form Premoryana to Kushana Period - Dr. Jyotiramitra
22. An Appraisal of Ayurvedic Material in Budhist literature - Dr. Jyotiramitra
23. Mahayana Granthon Main Nihita Ayurvediya Samagri - Dr. Ravindra Nath Tripathi
24. Jain Ayurveda Sahitya Ka Itihasa - Dr. Rajendra Prakash Bhatnagar
25. Ayurveda- Prabhashaka Jainacharya - Acharya Raj Kumar Jain
26. Charaka Chintana - Acharya Priyavrata Sharma
27. Vagbhatta Vivechana - Acharya Priyavrata Sharma
28. Atharvaveda and Ayurveda - Dr. Karambelkara
29. Ayurvedic Medicine Past and Present - Pt. Shiv Sharma
30. Ancient Scientist - Dr. O.P. Jaggi
31. Lumanaries of Indian Medicine - Dr. Shrikanthamurti
32. Ayurveda Ke Itihasa Ka Parichaya - Dr. Ravidutta Tripathi
33. Ayurveda Ke Pranacharya - Ratnakara Shastri
34. Ayurveda Itihasa Parichaya - Prof. Banwari Lal Gaur

## 1.4. ASHTANGA HRIDAYAM (SUTRASTHAN)

**Theory- One Paper – 100 Marks**

**Practical/ Viva voice – 50 Marks**

**Lectures - 60**

For the convenience of learning allotted marks for Sutrasthan of Ashtanga Hridaya has been divided into following two groups:

**Thorough Study 75 Marks**  
**Introductory Study 25 Marks**

- **Chapters specified for thorough study**

First chapter to Fourteenth chapter (1-14) 45 Marks

Sixteenth chapter to twenty-fourth chapter (16-24) 20 Marks

Twenty-seventh (27) and Thirtieth (30) chapters 10 Marks

- **Chapters specified for Introductory study**

Fifteenth, Twenty-fifth, Twenty-sixth, Twenty-eighth and Twenty-ninth chapters. 05 Marks

Ashtanga Samgraha Chap. No 12, 13, 22, 23. 20 Marks

- **Fifty marks assigned for practical exam are distributed as follows**

1) For chart framing / Compilation 10 marks

2) Recitation & writing of minimum ten shlokas among memorized shlokas (The shlokas should be memorized alongwith Padavibhaga, Anvaya, Bhavartha and practical applicability.) 10 marks

3) Viva-voce 15 marks

4) Internal assessment 15 marks

### **Topics for chart**

Ayurvedavatarana according to Ashtanga Hridaya, Ashtanga of Ayurveda, agni, prakriti, koshtha, tridosh, rasa-guna-viryavipaka and prabhava of dravyas, ritucharya,



dinacharya,vega-udirana and vidharana, chatuspada of chikitsa, sadhyasadhyata, different classification of dravyas- toya, kshira, ikshu,etc.shooka, shimbi, mamsa, shaka, phala etc. Dosha samshodhana kala, vriddhi- kshaya lakshanas of dosha, dhatu and malas, dosha prakopa according to ritu, viruddhahara, traya upastambha.

### **Parameters for internal Assessment (15 Marks)**

- Memorizing and describing two shlokas weekly, discipline, oral and written presentation and other activities.

Other activities include following instructions

1. Memorizing two shlokas weekly 5 Marks  
(The shlokas should be memorized as discussed above in a span of one year and six months)
2. Passage writing 5 Marks
3. Speech on any one topic related to Ashtanga hridaya 5 marks

### **Reference Books**

Ashtanga Hridayam : Hindi Commentary by Lalchanda Vaidya  
: English Commentary by K.R. Srikantamurty

## **1.5 RACHANA SHARIR**

**Theory- Two Papers– 100 Marks Each**

**Practical/ Viva voice – 200 Marks**

**Lectures (1 hour) - 210**

**Practicals /Demonstration (1 ½ hour) - 210**

**Paper I**

**100 Marks**

**Part A**

**50 Marks**

1. Detailed description of principles of 'Sharir' and their co-relation with modern medical science.

### **2. Shariropkrama**

Description of Sharir and Sharir, knowledge and importance of Sharir and Sharir, 'Shadangatva' of sharir, Anga pratyanga vibhaga, Preservation and Dissection Method of dead body, Divisions of Sharir.

### **3. Knowledge of terminologies used in Sharir**

Detail knowledge of terms, position, and Planes e.g. Urdhava (Superior), Adhah (Inferior), Nikatastha (Proximal) and Doorastha (Distal), Agrima (Anterior or Ventral), Abhi pristha or Paschima (Posterior), Madhyanuga (Median), Parshava (Lateral). Abhimadhyana (Medial) and Uttana (Superficial) and Gambhira (Deep) section, Anuprastha (Vertical) and Agra paschedasa (Horizontal), Tiryaka (Oblique) sections, Mamsa peshi (Muscles), Sira, Dhamani, Tantrika, Snayu(Ligaments), Kurcha, Kandra (Tendon), Jala(Plexuses), Asthi Sanghat (Complex Joints), Seemanta (Sutures off Skull), Rajju(Cords) and Sevani.

### **4. Abhinivriti Sharir**

Vyakta and Avyakta, kshetra and kshetraja

Constitution of 'Purusha' according to dhatu bheda, Panchabhoutikatva and sukshamatva of body, karma purusha, Trigunatamakativama, Tridoshmayatvama, Doshadhatumalamulakatva of Sharir.

### **5. Garbha Sharir (Embryology)**

Definition of 'garbha' (embryo), 'Garbhottpadakbhava', Sukshma garbha sharir, micro anatomical description of 'dhatu and avayavas' 'Shukra' Artava, Antahpushpa, Garbhadhana (fertilization) and Kosha vibhajana (Cell

division), along with role of Tridosh and Panch mahabhut in fetal development, 'Bija'-(sperm and ovum), Bijabhaga, Bijabhagavayava and Genetics in Ayurveda. Anuvamshika Siddhanta (principles of Hereditary), Linga bheda (Sex Determination), Masanumasika Garbha Viridhi Krama (month wise development of Fetus), Garbhavidhikara bhava, (factors effecting development and growth of embryo), Deha prakriti, Satwa prakriti' etc., Garbha poshana, Apra nirmana (formation of placenta), Nabhinadi nirmana (formation of umbilical cord), Ulva, Jarayu, Akritikara bhava, Matrapartantrata of garbha, Bhuta vyapara, formation of Stanya, Angapratyanga nirmana, Development of various systems. Developmental Anomalies and their causes (Ayurveda and Modern Views).

## 6. Pramana Sharir:

Anthropometric -Values of body parts-  
Anguli, anjali, pramana and Sankhya Sharir.

### Part B

50 Marks

## 7. Asthi Sharir (Osteology)

Number of bones (Charaka, Sushruta and Modern Concept), Asthi swaroopa and Asthi rachana (Structure and texture of bone), Detailed description of each bone - Ossification of bones, applied anatomy of each bone.

## 8. Sandhi Sharir (Arthrology)

- (a) Definition of Sandhi (joints), Types, structure of each Asthi sandhi (joint), various, Specific description of 'Hanu' (temporomandibular) and Shakha sandhis (joints of extremities) vertebral joints, Definition of Asthi Sanghat, number and their applied value. Sevani (Sutural Joints) Snayu (Ligaments), movements of Joints and Clinical importance of the Sandhis (joints).

## 9. Sira, Dhamini, Srotas Sharir (Angiology)

- (a) Sira-Dhamini  
Importance of Raktavaha Sansthan (cardiovascular system), Hridaya (Heart), Sira, Dhamini, Srotasa. Definition of Sira, Dhamini, their course, branches Description of Arteries and capillary, Accessory veins and Principal veins.
- (b) Srotas Sharir: 1. Definition, types, their mool and Srotodusti.

## **10. Lasika Samsthan (Lymphatic system)**

Introduction and study of Lasika pranali (Lymphatic channels), Lasika granthi (Lymphatic glands), Rasa kulya (thoracic duct), Payasvini (lacteals) and Courses of lasika vahinis (Lymphatic Ducts).

## **11. Peshi Sharir (Myology)**

Introduction and detail Structure, shape, size and types and their Importance of Peshi (muscles) - their attachments and origin, insertion, actions nerve supply and its clinical application.

**Paper II**

**Total Marks: 100**

**Part A**

**50 Marks**

### **1. Koshtha**

Defining the terms like – Koshtha, Ashaya and Koshthanga, their names and location, koshthanga of Uraha Pradesh (thoracic cavity organs), Udara Pradesh Koshthanga (organs of abdominal cavity), Description of digestive organs and accessory digestive organs. Organs of Shwasa Prashwasa (Respiratory system), Organs of Mutravaha Sansthan (Urinary system), Description of male and female prajananang (reproductive organs) and their details.

### **2. Granthi Sharir**

Description of the structure of Bahya Srotas (Exocrine), and Nisrotasa granthi, details study of granthi Sharir.

### **3. Kala Sharir**

Definition of Kala, structural pattern and details study of each Kalas, study of Vishista Kalas like, Hridayavarana (Pericardium), Puppasavarana Kala (Plura), Mastiskavarana kala (Meninges), Udaravarana Kala (Peritoneum).

### **4. Twak Sharir (Dermatology)**

Definition of Twak (Skin), its swaroop (structure), types and prayojana.

**Part B**

**50 Marks**

**5. Uttamangiya Tantrika Sansthan Sharir (Nervous System)**

Introduction, Definition, classification and importance of Mastishka (Brain)- 1. Brihatamastishka (Cerebrum), 2. Laghumastishka (Cerebellum), 3. Madhyamastishka (Mid brain), 4. Usnishaka (Pons), 5. Sushumna Shirsha (medulla oblongata), Sushumana Khanda (Spinal cord) Sheershanya tantrika (Cranial Nerves) and Sushmaniya Tantrika (spinal Nerves), Parisarniya Tantrika (Peripheral nervous system). Description of Swatantra Nadi Samsthan (Autonomic nervous system), Anukampiya and Paranukampiya (Sympathetic and parasympathetic nervous system and nerve plexuses).

**6. Tantra Sharir (Neuro Anatomy)**

Satchakra Ida, Pingala, Saraswati etc.

**7. Marma Sharir**

Description of the term Marma, their numbers, locations, different types and their terminological values. Importance of trimarmas Charaks & sushruta concept.

**8. Anga Rekhankana Sharir - (Surface, Radiological and Imaging Anatomy)**

Anga Rekhankana (Surface marking), Vikirana Rachana Sharir (Radiological Anatomy).

**9. Indriya Sharir: (Sensory organs)**

Derivation of the word Indriya, its number, Description of Panch Gyanendriya, Panch Karmendriya and Ubhayendriya (Mana). Description of the Eye, Ear, Nose, tongue, Skin and Indriya Adhistan.

**Practical**

**Pratyakshika Vishaya (Practical topics)**

1. Shava Samskarana and Mruta Shodhana (Dead Body Preservation and Dissection).
2. Shavachchedana - Dissection of whole body.
3. Sampurna Asthi Pradarshana - Demonstration of all bones, Practical demonstration of Komala Avayava (Macro and Microscopic structures of organs) and Koshtanga (Abdominal organs).
4. Practical knowledge of Anga Rekhankana, surface anatomy, Sharir Vikirana Radiographic.

**Distribution of Practical Marks**

**200 Marks**

1. Knowledge of the dissected organs.	25 marks
2. Knowledge of the delicate organs.	25 marks
3. Knowledge of bones.	25 marks
4. Knowledge of Marmas.	25 marks
5. Surface Anatomy, Diagrams and Practical records.	25 marks
6. Daily dissection of Log Book	25 marks
7. Spotting	25 marks
8. Oral (Viva-voce)	25 marks

**Reference Books**

- |   |                                  |
|---|----------------------------------|
| 1. Brihat Sharirma  | : Vaidyaratna P.S. Variyar       |
| 2. Abhinava Sharirma  | : Acharya Damodar Sharma<br>Gaur |
| 3. Manava Sharir (Revised Edition)                                | : Prof. Dinkar Govind Thatte     |
| 4. Manava Bhruna Vigyana  | : Prof. Dinkar Govind Thatte     |
| 5. Manava Anga Rekhankan Vikrian Evam<br>Chayankan Sharir Vikiran | : Prof. Dinkar Govind Thatte     |
| 6. Sharir Rachana Vigyanana (English)                             | : Vaidya P.G. Athwale            |

7. Mannual of Practical Anatomy : Cunnighum Practical  
Manual Vol-1, Vol-2, Vol-3
8. Chapters of Charaka, Sushruta and :  
Vagbhatta Sharir Sthan
9. Clinical Anatomy in Ayurveda : Prof. D.G. Thatte and Prof  
Suresh Chandra
10. Sharir Rachna Vigyan (English) : Prof. D.G. Thatte
11. Ayurvedic Human Anatomy : Prof.-Dr. Giridhar M. Kanthi
12. by Regional Anatomy : B. D. Chaurasia

## **1.6. KRIYA SHARIR**

**Theory- Two Papers– 100 Marks Each**

**Practical/ Viva voice – 100 Marks**

**Lectures (1 hour) - 210**

**Practicals and Demonstration (1 ½ hour) - 90**

**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, Rasa-Virya-Vipaka etc. Description of Basics of Srotasas.
2. Definitions and Synonyms of term 'Sharir', Definitions and Synonyms of term 'Kriya', Srishti Utpatti and its adaptation in generation of Shareera, Factors responsible for Srishti Utpatti, Difference and similarities between Prakriti and Purusha, Study of components of Purusha and in context to numerical variations (Purushabheda), Role of Shatdhatupurusha in Kriya Sharir and Chikitsa
3. Dosha – General introduction of dosha, Classification of Doshas into 'Sharir dosha and Manasa dosha', 'Prakrit dosha and Vaikrit dosha, Criteria for 'dosha', Doshagati, Criteria for differentiation of types of dosha (doshabheda).
  - a. Vata dosha – Vyutpatti (derivation), Utpatti, Nirukti (etymology) of term 'Vata', General locations, general properties and general functions of Vata, Five types of Vata with their specific locations, specific properties, and specific functions (Prana, Udana, Samana, Vyana, Apana)
  - b. Pitta dosha – Vyutpatti, Utpatti, Nirukti of term 'Pitta', General locations, general properties and general functions of Pitta, Five types of Pitta with their specific locations, specific properties, and specific functions (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka); Similarities and differences between Agni and Pitta
  - c. Kapha dosha- Vyutpatti, Utpatti, Nirukti of term 'kapha', General locations, general properties and general functions of kapha, Five types of kapha with their specific locations, specific properties, and specific functions (Bodhaka, Avalambaka, Kledaka, Tarpaka, Shleshaka)



- d. Etiological factors responsible for Vriddhi-Kshaya of each dosha and manifestations of Vriddhi-Kshaya of each dosha
  - e. Kriyakala of dosha in view point of Charaka, Sushruta and Vagbhata and its clinical importance.
4. a. Deha-Prakriti – Vyutpatti, Utpatti, Nirukti, various definitions and synonyms for term 'Prakriti', intra-uterine factors responsible for genesis of Prakriti, extra-uterine factors influencing Deha-Prakriti, classification of Deha-Prakriti, characteristics of each kind of Deha-Prakriti, clinical significance of Deha-Prakriti, Anukatva
- b. Manasa-Prakriti – classification, characteristics clinical significance.

## 5. Modern Physiology

- a. Basic principles of biochemistry. Study of basic components of food. Biochemical structure, properties, classification of proteins, fats and carbohydrates. Metabolism of proteins, fats and carbohydrates. Vitamins – sources, daily requirement, functions, manifestations of hypo and hyper-vitaminosis. Biochemical study of enzymes.
- b. Definition and mechanisms of maintenance of Homeostasis. Cell Physiology. Membrane Physiology. Resting membrane potential and action potential.
- c. Physiology of Respiratory system: Functional anatomy of respiratory system. Definition of ventilation. Mechanism of respiration. Exchange and transportation of gases. Neural and chemical control of respiration. Spirometry and lung function tests. Artificial respiration.
- d. Physiology of Cardio-Vascular system: Functional anatomy of cardiovascular system. Properties of cardiac muscles. Cardiac cycle. Heart sounds. Regulation of cardiac output and venous return. Physiological basis of ECG. Heart-rate and its regulation. Arterial pulse. Systemic arterial blood pressure and its control. Regional circulations. Physiology of lymphatic circulation.
- e. Modern view of somato-types, biological personality and psychological traits of an individual.

## Part B

50 Marks

### 1. Shareera-Poshana

- a. 1. Ahara – definition and significance of ahara, classification of ahara-dravya, ahara-vidhi-vidhana, Ashta-ahara-vidhi-visheshayatana, ahara-parinamakara bhava

- b. Agni – Conceptual study of Agni, Vyutpatti, Nirukti, Synonyms of term 'Agni', classification of Agni, Location-properties and functions of Jatharagni, Bhutagni, and Dhatwagni role of Agni in Kriya Sharira and Chikitsa
- c. Ahara-paka-prakriya – physiology of related organs (Maha-srotas), avasthapaka, nishthapaka, Maha-srotas-pachana kriya, sara-kitta vibhajana, saranushoshana and genesis of Vatadi dosha during ahara-pachana
- d. Definition of term 'Koshtha', criteria of classification of Koshtha and characteristics of each kind of Koshtha

## 2. Modern physiology

- a. Functional anatomy of gastro-intestinal tract. Descriptive physiology of digestion and absorption in gastro-intestinal tract. Mechanism of secretion and composition of different digestive juices.

## Paper II

100 Marks

### Part A

50 Marks

#### 1. Dhatu

General introduction, definition and criteria of dhatu, Utpatti (during garbhavastha and janmottara kala), Vyutpatti, Nirukti of term 'dhatu'; different theories related to dhatuposhana, (dhatuposhana nyaya)

##### i) Rasa Dhatu

Vyutpatti, Nirukti, sthan, guna, karma, pramana of Rasa Dhatu. Physiology of Rasavaha Srotasa, Formation of Rasa Dhatu from Ahara Rasa. Circulation of Rasa (Rasa-Samvahana), Description of Ashtavidha Sara (8 types of Sara). Characteristics of Twakasara Purusha. Conceptualstudy of Mutual interdependence (ashraya-ashrayi bhava) between Rasa and Kapha. Manifestations of Kshaya and Vriddhi of Rasa.

##### ii) Raktadhatu

Vyutpatti, Nirukti, synonyms, sthan, guna, karma and pramana of Rakta dhatu; panchabhautikatva of Rakta Dhatu, physiology of Raktavaha Srotas, Formation of Raktadhatu, Ranjana of Rasa by Ranjaka Pitta, Features of Shuddha Rakta, Specific functions of Rakta, characteristics of Raktasara Purusha; manifestations of Kshaya and Vriddhi of Raktadhatu, Mutual interdependence between Rakta and Pitta.

### **iii) Mamsadhatu**

Vyutpatti, Nirukti, synonyms, sthan, guna, karma and pramana of mamsa dhatu, Physiology of Mamsavaha Srotasa, Formation of Mamsadhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsadhatu.

### **iv) Medo Dhatu**

Vyutpatti, Nirukti, sthan, guna, karma and pramana of medodhatu, physiology of Medovaha Srotas, formation of Medo dhatu, characteristics of Medosara Purusha and manifestations of Kshaya and Vriddhi of Meda.

### **v) Asthi Dhatu**

Vyutpatti, Nirukti, synonyms, sthan, guna, karma of Asthi dhatu; 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.

### **vi) Majja Dhatu**

Vyutpatti, Nirukti, types, sthan, guna, karma and pramana of Majja Dhatu, physiology of Majjavaha Srotas, formation of Majja dhatu, characteristics of Majja Sara Purusha, Rakta-Pitta-Majja relation, manifestations of Kshaya and Vriddhi of Majja dhatu.

### **vii) Shukra Dhatu**

Vyutpatti, Nirukti, sthan, guna, karma and pramana of Shukra dhatu, physiology of Shukravaha srotas and formation of Shukra dhatu; features of Shuddha and Dushita Shukra, characteristics of Shukrasara Purusha, manifestations of Kshaya and Vriddhi of Shukra dhatu.

## **2. Ojas**

Vyutpatti, Nirukti, synonyms, definition, utpatti sthan, guna, karma and pramana of Ojas, classification of Oja (Ojobheda), conceptual study of Vyadhikshamatva; Bala vrudhikara bhava, Balabheda, Relation between shleshma, bala and ojas; Etiological factors and manifestations of Oja kshaya, Visramsas and Vyapat; physiological and clinical significance of Oja Vayasthapana

## **3. Upadhatu**

- a. General introduction, Vyutpatti and Nirukti of the term 'Upadhatu'. Utpatti, Poshan, Samkha, Praman, Guna, Sthan and Karma of Upadhatu.
- b. Stanya –Nirukti, definition, utpatti guna karma, praman of Stanya; characteristics and assessment of shuddh and dushita Stanya, manifestations of Vriddhi and kshaya of Stanya
- c. Artava –Nirukti, definition, Utpatti, guna karma of Artava, characteristics of shuddha and dushita Artava, difference between Raja and Artava, physiology of Artavavaha srotas and Artavachakra
- d. Tvak – Utpatti, Nirukti, guna, Praman, karma and bheda. Layer wise diseases of Tvak.

#### 4. Modern physiology

- a. Haemopoetic system – composition, functions of blood and blood cells, Haemopoiesis- (stages and development of RBCs, WBCs and platelets); Introduction to bone marrow: composition and functions of bone marrow. Structure and functions of haemoglobin, mechanism of blood clotting, anticoagulants, study of platelets, physiological basis of blood groups, principles of blood transfusion, plasma proteins- synthesis and functions. Applied physiology: anaemia, jaundice. Basics of Immunity – Classification and Mechanisms. Hypersensitivity. Physiological basis of immunization.
- b. Muscle physiology – comparative study of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.
- c. Physiology of adipose tissue, lipo proteins like VLDL, LDL and HDL.
- d. Calcium metabolism: hormonal control of calcium metabolism. Functions of vitamin D, parathormone and calcitonin. Bone and teeth.
- e. Structure and functions of skin, sweat glands and sebaceous glands.
- f. Physiological study of male and female reproductive systems. Spermatogenesis and oogenesis. Hormonal regulation of menstrual cycle. Physiology of pregnancy and lactation.

#### Part B

50 Marks

1. **Mala** - Vyutpatti, Nirukti of term 'mala'; General introduction of Mala, Utpatti (during garbhavastha and janmottara kala),
2. **Aharamala** – Enumeration and formation of Aharamala
  - a. Mutra –Vyutpatti, Nirukti, praman, sthan, guna, karma, and physiology of Mutravaha srotas; formation of Mutra, manifestations of Vriddhi and Kshaya of Mutra
  - b. Purisha –Vyutpatti, Nirukti, praman, sthan, guna, karma, and physiology of Purishavaha srotas; formation of Purisha, manifestations of Vriddhi and Kshaya of Purisha
3. **Sweda** –Vyutpatti, Nirukti, praman, sthan, guna, karma, and physiology of Swedavaha srotas; formation of Sweda, manifestations of Vriddhi and Kshaya of Sweda
4. **Dhatu mala** – Utpatti, Nirukti, sthan, guna karma, samkhya, praman of each dhatu mala; etiological factors and clinical manifestations of each dhatu mala
5. **Panchajnyanendriya** – Physiological study of Panchajnyanendriya, and physiology of Shabda, Sparsha, Roopa, Rasa, Gandha. Process of Dnyana-grahana; Indriya-pancha-panchaka; Physiological study of Karmendriya.

**6. Manas** – Utpatti, Vyutpatti, Nirukti, synonyms, swaropa, sthan, guna, vishaya, karma of Manas, and physiology of Manovaha srotas; physiological and clinical significance of Manas

**7. Atma** –Nirukti, definition, sthan, guna, karma, and difference between Paramatma and Jeevatma; characteristics of existence of Atma

**8. Buddhi** – Sthan, prakara, karma of Buddhi; Physiology of dheer, dhriti and smriti

**7. Nidra** – Nidrotpatti, Nidrabhedha, physiological and clinical significance of Nidra; Swapnotpatti and Swapnabheda

## **8. Modern physiology**

- a. General introduction to nervous system – neurons, mechanism of propagation of nerve impulse, physiological study of CNS, PNS, ANS; physiological study of sensory and motor functions of nervous system. Functions of different parts of brain - Cerebral cortex, Hypothalamus, Limbic system, Midbrain, Pons, Medulla and Cerebellum. Physiology of special senses. Intelligence, Memory, Learning and Motivation. Physiology of sleep and dreams. Physiology of speech and articulation; EEG. Physiology of temperature regulation.
- b. Endocrine glands – General introduction to endocrine system, classification and characteristics of hormones, physiological study of all endocrine glands and their hormones.
- c. Urinary tract physiology – Functional anatomy of urinary tract. Functions of kidneys. Mechanism of formation of urine. Control of micturition. Renal function tests.

## **PRACTICAL**

### **A) Ayurvedic practical**

1. Assessment of Dosha (Vridhhi kshaya lakshana)
2. Assessment of Dhatu – a. Sharirbala  
b. Manasabala
3. Assessment of Mala –
  - a. Examination of Mala by Shabda, Sparsha, Roopa Rasa and Gandha
  - b. Mutra (taila bindu pareeksha)
  - c. Purisha (jale nimajjati pareeksha)
4. Assessment of Vaya
5. Anguli pariksha
6. Assessment of Ayu in Charaka-Samhita
7. Assessment of Agni

8. Assessment of Koshtha
9. Assessment of Prakriti
10. Assessment of Sara
11. Satmya Pariksha
12. Nadi pariksha
13. Stanya pariksha

## **B) Modern practical**

1. Use and care of compound microscope
2. Types, uses and care of balances
3. Collection of blood sample – prick, venepuncture method and bulbs, apparatus for collection
4. Preparation of blood film and staining
5. Hemoglobinometry
6. Microscopic examination of blood
  - a. RBC count
  - b. WBC count
  - c. Differential leucocyte count
7. Packed cell volume(PCV) demonstration
8. ESR demonstration
9. Bleeding time
10. Clotting time
11. Blood grouping and Rh typing
12. Examination of Cardio-Vascular system
  - a. Pulse examination
  - b. Arterial blood pressure measurement
  - c. Examination of heart sounds by stethoscope
  - d. ECG demonstration
13. Examination of Respiratory system
  - a. Respiratory rate
  - b. Air entry with the stethoscope
  - c. Spirometry
14. Examination of CNS – Reflexes
15. Urine examination – Collection of urine, physical examination, chemical examination and microscopic examination.

Test for normal constituents of urine

Following chemical examinations for abnormal constituents are expected

- a. albumin test
- b. sugar test
- c. acetone bodies

- d. bile salts and pigment
- e. occult blood
- 16. Stool examination – Collection of stool, physical examination, chemical examination and microscopic examination
- 17. Examination of semen
- 18. Measurement of body temperature
- 19. Study of instruments related to physiology practicals.

#### **Reference Books**

- |   |                             |
|---|-----------------------------|
| 1. Ayurvedya Kriya Sharira                          | - Vd. Ranjeet Roy           |
| 2. Abhinava Sharira Kriya Vigyana                   | - Acharya Priyavrata Sharma |
| 3. Dosha Dhatu Mala Vigyana                         | - Shankar Gangadhar Vaidya  |
| 4. Prakrita Dosha Vigyana                           | - Acharya Niranjana Dev     |
| 5. Tridosha Vigyana                                 | - Shri Upendranath Das      |
| 6. Sharira Tatva darshana                           | - Hirlekar Shastri          |
| 7. Prakrita Agni Vigyana                            | - Niranjana Dev             |
| 8. Deha Dhatvagni Vigyana                           | - Vd. Pt. Haridutt Shastri  |
| 9. Sharira Kriya Vigyana (Pt. 1-2)                  | - Acharya Purnchandra Jain  |
| 10. Sharira Kriya Vigyana                           | - Shri Moreshwar Dutt. Vd.  |
| 11. Dosha Dhatu Mala Vigyana                        | - Basant Kumar Shrimal      |
| 12. Abhinava Sharira Kriya Vigyana                  | - Dr. Shiv Kumar Gaur       |
| 13. Pragyogik Kriya Sharira                         | - Acharya P.C. Jain         |
| 14. Physiology                                      | - Gyton                     |
| 15. Kaya Chikitsa Parichaya                         | - Dr. C. Dwarkanath         |
| 16. Concept of Agni                                 | - Vd. Bhagwan Das           |
| 17. Physiology                                      | - Chatterjee                |
| 18. Purush Vichaya                                  | - Acharya V.J. Thakar       |
| 19. Useful parts of Charaka,<br>Sushurut, Vagbhata. |                             |





## 2.1. CHARAK SAMHITA

(Purvardha: Sutra - Nidana - Vimana - Sharir - Indriya Stana)

Theory- One Paper– 100 Marks

Practical/ Viva voice – 50 Marks

Lectures - 100

(Charaka Purvardha)Distribution of theory marks according to Sthan

Sl.No	Name of the Sthan	Marks to be allotted
1.	Sutra Sthan	40
2.	Nidana Sthan	15
3.	Vimana Sthan	20
4.	Sharir Sthan	15
5.	Indriya Sthan	10

**Distribution of marks for Practical Examination is as follows**

1. Table (Chart) preparation / Compilation
2. Presentation of any 10 Shlokas out of total memorized Shlokas (Written & Oral)
3. Analysis of Srotasas, Discussions about Dhatus and their vriddhi and kshaya (Phenomenon of their increase and decrease). Ten proforma/ case sheets should be filled from the IPD/OPD.
4. Assessment of Arishtas. (Five proforma/case sheets should be filled from the IPD/OPD.)
5. Viva Voice
6. Internal Assessment

40 M

10 M

**Parameters for internal Assessment**

Memorizing and describing two shlokas weekly, discipline, oral and written presentation and other activities.

**Other activities include following instructions**

1. Memorizing two shlokas weekly, (Monthly Ten shlokas in professional year of 1 year and 6 month. A log book of memorized shlokas, corrected and signed by

the class teacher is to be submitted at time of examination.

(The shlokas should be memorized as discussed above in a span of one year and six months)

2. Passage writing
3. Speech related to Charaka

### **TEXT BOOKS**

1. Charaka Samhita -Chakrapani Teeka (Sanskrit Commentary)
2. Charaka Samhita (Hindi Commentary):
  - Vaidya Jayadev Vidyalankar or Vd. Atridev Vidyalankar or
  - Prof. Gorakha nath Chaturvedi & Kashinath Shastri or
  - Dr. Brahmanand Tripathy or
  - Dr. Ravidutta Tripathy
3. Charaka Samhita (English Commentary):
  - Dr. Ram Karan Sharma & Vd. Bhagwan Dash or Acharya Priyavrata Sharma.

## 2.2 SWASTHAVRITTA

Theory- Two Papers– 100 Marks Each

Practical/ Viva voice – 100 Marks

Lectures - 180

Practicals and Demonstration – 50 hrs

Paper I

100 Marks

Part A

50 Marks

### Vaiyaktika Swasthavrittam

#### I. Vyaktigata Swasthyam (Personal Hygiene)

##### i) Introduction

1. Definition of Swastha & Swasthya
2. Arogyalingani (Signs of Health)
3. Definition of Swasthavritta
4. Swasthavritta prayojanamavum Mahatvam (Objectives&Importance of Swasthavritta)
5. WHO Definition of Health
6. Dimensions of health
  - a) Physical
  - b) Mental
  - c) Social
7. Concept of well being
  - a) Objective
  - b) Subjective
  - c) Standard of living
  - d) Quality of life

##### ii) Dinacharya

1. Definition of Dinacharya
2. Aims and importance of dinacharya.
3. Brahma Muhurta avum Utthishta
4. Usha Jalapana
5. Sarirachinta
6. Malatyaga
7. Mukha prakshalana
8. Dantadhavana
9. Preparation of Ayurvedic dental powder and paste
10. Jihvanirlekhana vidhi (Tongue cleaning)
11. Anjana
12. Pratimarsa Nasya
13. Gandusha
14. Kabaladharana
15. Dhoomapana
16. Abhyangam
17. Udvartanam
18. Utsadana
19. Vyayama
20. Chankramana - Benefits of Walking, Jogging, Swimming,

Gymnastics, Sports and games and its application in health and disease

21. Snanam
23. Vastradharanam

22. Anulepanam
24. Tambulasevanam

### iii) Ratricharya

1. Sandhyacharya
2. Ratribhojana vidhi
3. Sayanavidhi

### iv) Ritucharya

1. Importance of Ritucharya
2. Ritus as per different acharyas
3. Adana kala & Visargakala
4. Sanchaya, Prakopa-Prashama of Doshas and their Utpatti in Ritus
5. Doshashodhana in samanya ritu
6. Relation of Agni bala and ritu
7. Ahara-Vihara, Pathya- Apathya in different ritus
8. a) Ritusandhi b) Yamadamshttra c) Rituharitaki d) Rituviaryaya

### v) Sadvritta

1. Description of Sadvritta and Achara Rasayana - their role in Prevention of psycho-somatic disorders
2. Social aspect of Psychology according to Ayurveda
3. Concept of Mental Health according to Ayurveda and Modern medicine

### vi) Trayopastambhas (Three pillars of health)

#### 1. Ahara

1. Nirukti, Swarupa, Pramukhatvam
2. Ahara dravya Vargeekaranam
3. Aharavidhi Vidhana
4. Dwadasha Ashanapravicharana
5. Ashtaharavidhi viseshayatanani
6. Aharaparinamakara bhava
7. Pathyahara
8. Apathyahara
9. Samasana
10. Adhyasana
11. Vishamasana
12. Bhojanapachana avadhi
13. Aharadushparinama, tajjanya vyadhaya
14. Santarpanjanya vyadhi
15. Apatarpanjanya vyadhi
16. Viruddhahara and its effects
17. Proximate principles of Food
18. Nutritional requirements
19. Balance diet for (a) Workers -Sedentary /Moderate / Hard (b) Pregnant and lactating women (c) Children (d) Infants
20. Sources and deficiency diseases of Protein, Carbohydrate, Fat, Minerals and Vitamins
21. Shadrasabhojanasya mahatwam
22. Dietetic standards
23. National Nutritional programmes
24. Social aspects of nutrition
25. Food groups -Dhanya varga(Cereals and millets), Saka and Harita varga (Leafy and Non leafy vegetables), Kanda varga (roots and tubers), Phala varga(Fruits), Taila varga(Fats &Oils), Ikshu varga (Jaggery, sugar, honey), Jala varga & Madya varga (Beverages), Dugdha varga (Milk and Milk products), Masala and vyanjana dravyas (Spices & Condiments), Kritanna varga(Prepared Food), Mamsa varga (Meat types)
26. Food hygiene
27. Milk hygiene
28. Milk composition
29. Source of infection (for Milk)
30. Milk borne diseases
31. Clean and safe milk
32. Pasteurization of milk
33. Meat hygiene
34. Meat inspection
35. Slaughter house
36. Freshness of fish and egg
37. Fruits and Vegetable hygiene
38. Sanitation of eating places
39. Preservation of food
40. Food handlers
41. Food borne diseases
42. Balanced diet for
43. Food fortification
44. Food

toxicants 45. Properties of Vegetarian and Non-vegetarian diet  
Spices and condiments 47. Consumption of Alcohol and its effects.

46. Effects of

- A. II. Ayurvedic Diet in Life Style Disorders
  - a. Diabetes
  - b. Hypertension
  - c. Obesity
  - d. Coronary heart Disease.

## 2. Nidra

1. Nirukti and Utpatti
2. Types of Nidra (sleep)
3. Yogya nidra vidhi
4. Nidra – Swasthya sambandha
5. Duration of sleep according to age
6. Sleep in healthy and diseased persons
7. Properties of Yukta Nidra
8. Effects of Ratri Jagrana
9. Diwaswapna
10. Anidra
11. Atinidra
12. Ahara and Vihara causing disturbed sleep
13. Ahara and Vihara causing sound sleep

## 3. Brahmacharya

1. Brahmacharya vyakhya and Abrahmacharya vyakhya
2. Importance of Brahmacharya and Abrahmacharya
3. Vyavaya sambandhi niyamas
4. Effects of Ativyavaya
5. Veeryotpatti
6. Methods of Virya Raksha, Surataspraha (Libido) through Vajeekarana
7. Viryanasa phala
8. Menstrual Hygiene

## vii) Roganutpadaneeya:-

1. Concept of vega- Adharaneeya Vega and Dharaneeya Vega
2. Diseases due to vegadharana and their chikitsa
3. Upavasa
4. Rasayana for Swastha
5. Prajnaparadham
6. Sarira rakshanatmaka karyani
7. Sarira ahithakara karyani
8. Sareerasodhanam

**Sarvajanika- Samajika Swasthavrittam (Public Health)**

**I. Janapadodhwamsa**

1. Causes
2. Manifestations and control measures
3. Importance of Panchakarma and Rasayana
4. Vyadhikshamatva and the role of Rasayana

**II. Vayu (Air)**

1. Vayu guna, Vayu swasthya sambandha aspects
2. Composition
3. Air of occupied room
4. Discomfort and comfortable zone (Disinfection of air)
5. Air movement
6. Air pollution – health and social
7. Prevention and control of air
8. Ventilation and its types
9. Vayu shuddhi prakara
10. Mountain air & High altitude – Health problems.

**III. Jala (Water)**

1. Jala mahatva – biological importance of water
2. Safe and wholesome water (upayas)
3. Requirement and uses
4. Properties of water
5. Types of water
6. Water sources
7. Water pollution
8. Water related diseases
9. Purification of Water (Jalasuddhi)
10. Hardness of Water
11. Water examination.
12. Shad jala dosha
13. Water problems of India
14. Rain Water Harvesting and water recycling

**IV. Bhumi (Land & Housing)**

1. Types of soil
2. Soil & Health
6. Housing standards
7. Rural housing

- |                            |                             |
|----------------------------|-----------------------------|
| 3. Bhumi shodhana          | 8. Housing and health       |
| 4. Nivasayogya bhumi       | 9. Over crowding            |
| 5. Social goals of housing | 10. Pasu sala (Cattle shed) |

#### **V. Prakasa (Lighting)**

- |                                  |                                |
|----------------------------------|--------------------------------|
| 1. Requirements of good lighting | 3. Artificial Lighting         |
| 2. Natural Lighting              | 4. Biological effects lighting |

#### **VI. Dhvani pradushana (Noise) – Sources, Effects & control**

#### **VII. Vikirana (radiation) - Sources, Effects & control**

#### **VIII. Apadravya nirmulana (Disposal of solid waste)**

1. Different types of solid waste
2. Storage and collection of refuse
3. Methods of disposal of solid waste (Rural & Urban)
4. Bio- Medical waste management

#### **IX. Malanishkasana vyavastha (Excreta disposal)**

1. Unsewered area
2. Sewered area
3. Latrines for camps, fairs and festivals.

#### **X. Disaster Management**

#### **XI. Occupational Health**

- |   |                               |
|---|-------------------------------|
| 1. Occupational Hazards   | 2. Occupational Diseases      |
| 3. Prevention of Occupational Diseases                          | 4. ESI Act and factories Act. |
| 5. Offensive trades – Effects on health and precaution measures |                               |

#### **XII. School Health Services**

1. Health Problems of School Children
2. Aspects of School Health services
3. Duties of School Medical Officer
4. Maintenance of healthful environment.

#### **XIII. Epidemiology**

- |                               |                                      |
|-------------------------------|--------------------------------------|
| 1. Concept of Epidemiology    | 11. Dynamics of Disease transmission |
| 2. Concept of disease         | 12. Modes of transmission            |
| 3. Concept of causation       | 13. Susceptible host                 |
| 4. Epidemiological triad      | 14. Host defenses                    |
| 5. Natural history of disease | 15. Immunizing Agents                |

6. Risk factors
7. Concept of control
8. Concept of prevention
9. Modes of intervention
10. Incidence and prevalence

16. Disease prevention and control
17. Disinfection

## 18. Epidemiology of Communicable Diseases

- |                  |                    |                                      |
|------------------|--------------------|--------------------------------------|
| a) Measles       | b) Diphtheria      | c) Pertussis                         |
| d) Mumps         | e) Tuberculosis    | f) SARS                              |
| g) Influenza     | h) Pneumonia       | i) Cholera                           |
| j) Polio         | k) Viral Hepatitis | l) Typhoid                           |
| m) Leptospirosis | n) Dengue fever    | o) Chikungunya                       |
| p) Malaria       | q) Filariasis      | r) Leprosy                           |
| s) Rabies        | t) Tetanus         | u) Emerging and re-emerging diseases |

## 19. Kuprasangaja vyadhis (STD s)

- a) AIDS    b) Syphilis    c) Gonorrhoea    d) Chancroid

## 20. Ayurvedic paribhasha of sankramika rogas

## 21. Non - Communicable disease epidemiology

- a) Diabetes    b) Obesity    c) Hypertension    d) Coronary heart Disease  
e) Rheumatic Heart disease    f) Cancer

## XIV. Disposal of Dead body

- a) Burning    b) Burial    c) Electric cremation

## XV. Chikitsalaya Bhavana (Hospital Building)

## XVI. Meteorology (Ritu evam vatavarana jnana)

## Paper II

100 Marks

## Yoga & Nisargopachara

## Part A

50 marks

## Yoga

### I. Etymology

### II. Definitions

### III. Development of Yoga (From ancient time to present time)



#### **IV. Different Streams of Yoga**

a) Jnana Yoga b) Bhakti Yoga c) Raja Yoga d) Hathayoga – features & objectives.

#### **V. Eight Branches of Yoga**

**1. Yama**

**2. Niyama**

**3 Asana and its importance**

a) Suryanamaskara

b) Standing postures-

1. Ardhakatichakrasana
2. Padahasthasana
3. Ardhashakrasana
4. Trikonasana

c) Sitting Postures-

1. Padmasana
2. Vajrasana
3. Bhadrasana
4. Sasankasana
5. Ushtrasana
6. Paschimottanasana
7. Suptavajrasana
8. Gomukhasana
9. Ardhamatsyendrasana
10. Sidhasana

d) Supine postures-

1. Pavanamuktasana
2. Sarvangasana
3. Matsyasana
4. Halasana
5. Chakrasana
6. Savasana

e) Prone postures-

1. Bhujangasana
2. Salabhasana
3. Dhanurasana
4. Makarasana

f) concept of Mitahara & Pathyahara

**4. Pranayama**

a) Benefits of Pranayama

b) Nadi sudhi pranayama

c) Time of practice -Avara-Pravara-Madhyama lakshanam

d) Pathyapathyahara during pranayama

e) Yuktayukta lakshana

f) Nadi suddhi lakshanam

g) Kumbhakabheda

- i) Suryabhedana    ii) Ujjayi                    iii) Shitali    iv) Sitkati
- v) Bhastrika        vi) Bhramari    vii) Murcha    viii) Plavani
- h) Shad chakras, ida, pingala and sushumna
- i) Shadkarmani
- j) Bandhas and Mudras

**5. Pratyahara**

**6. Dharana**

**7. Dhyana**

**8. Samadhi**

**VI. Description of Yoga in Ayurveda**

- 1. Manodosha chikitsa
- 2. Sukha dukha nivrutti
- 3. Yoga and moksha
- 4. Mokshasyalakshana
- 5. Ashta Aiswarya
- 6. Satyabudhhi
- 7. Muktatma lakshana

**VII. Panchakosha theory**

- a) Annamayakosha
- b) Pranamayakosha
- c). Manomayakosha
- d). Vijnanamayakosha
- e). Anandamayakosha

**VIII. Integrated Approach of Yoga therapy**

**IX. Yoga package for LBA, Obesity, Asthma, Diabetes.**

**X. Effect of Yoga practice on physical and mental doshas.  
Nisargopachara**

**I. Prakritika Chikitsa (Natural Treatment)**

- 1. Definition & History
- 2. Aims and objectives
- 3. Relation of Ayurveda and naturopathy
- 4. Schools of Naturopathy – Western School
- 5. Schools of Naturopathy – Indian School (Pancha bhutopasana)
- 6. Importance in present era

**II. Jala Chikitsa**

- 1. Hot water treatment
- 6. Hip bath

- |                         |                     |
|-------------------------|---------------------|
| 2. Cold water treatment | 7. Abdomen wet pack |
| 3. Foot bath            | 8. Steam bath       |
| 4. Hand bath            | 9. Enema            |
| 5. Spinal bath          | 10. Whirlpool bath  |

### III. Mrittika Chikitsa (Mud Therapy)

1. Types of soil or mud
2. Doctrine of mud selection
3. Mud bath

### IV. Surya Kirana sevana (Sun bath-Haelio therapy & Chromotherapy)

### V. Mardana (Massage) - Different methods of Mardana

### VI. Diet - Types

- |             |                |                        |
|-------------|----------------|------------------------|
| 1) Soothing | 2) Eliminative | 3) Constructive diets. |
| a) Positive | b) Negative    |                        |

### VII. Upvasa Chikitsa (Fasting)

1. Importance
2. Types
3. Therapeutic effect

## Part B

50 Marks

### Community Health Care

#### I. Prathamika Swasthya Samrakshana ( Primary Health Care)

1. Definition
2. Principles
3. Elements
4. Structure – at Village level, Sub centre level, PHC level, CHC level, Hospitals, Health Insurance, Private agencies, AYUSH, Voluntary health agencies in India and N.G.Os.
5. Role of Ayurveda in Primary Health Care in India

#### II. Parivara Kalyana Karyakrama (Family Welfare Programmes)

1. Demography
2. Demographic Cycle
3. Life Expectancy
4. Family Planning
5. Methods of Family Planning.

### **III. Rasthriya Karyakrama (National Programmes)**

1. Tuberculosis(RNTCP)
2. Leprosy(NLEP)
3. AIDS(NACP)
4. Blindness(NPCB)
5. Polio(PPI)
6. Diabetes(NDCP)
7. Cancer(NCCP)
8. National Rural Health Mission(NRHM)
9. National Anti Malaria Programme
10. National Filaria Control Programme
11. UIP(Universal Immunisation Programme)
12. RCH(Reproductive and Child Health programme)
13. National water supply and sanitation programme
14. Minimum needs programme
15. All emerging National health programmes.

### **IV. Matru- Shishu Kalyana Karyakrama (Mother and Child Welfare Programme)**

1. Ante natal care
2. Post natal care
3. Neo natal care
4. Child health problems
5. Indicators of MCH care

### **V. Preventive Geriatrics.**

### **VI. International Health**

1. Vishwa Swasthya Sangathana (World Health Organization)
2. Objectives, Structure and function of WHO
3. Alma- Ata declaration
4. National Health Policy and Importance of Ayurveda in it.
5. United Nations agencies.
6. Health work of bilateral agencies

### **VII. Swasthya Prashasana (Health Systems in India)**

1. Central level
2. State level

3. District level

4. AYUSH

#### **VIII. Health statistics**

1. Definition of statistics/health statistics/vital statistics
2. Sources and uses of health statistics.
3. Data Collection, classification and Presentation
4. Mean
5. Median
6. Mode
7. Health survey
8. Mortality rates, Morbidity rates and Fertility rates

#### **PRACTICAL**

1. Vyktigata swasthya-  
a) Pratimarsa Nasya b) Anjana c) Dhumapana d) Kavala e) Gandusha  
f) Udvartanam g) Abhyangam
  2. Aharadravya parichaya
  3. Immunizing agents
  4. Disinfectants
  5. Family Planning appliances
  6. Yogic kriyas  
a) Vamana Dhauthi b) Jala Neti c) Sutraneti d) Kapalabhati
  7. Yogasanas- Demonstration of 24 Asanas explained in syllabus.
  8. Pranayama & Meditation  
a) Nadisudhi b) Ujjayi c) Suryabhedana d) Sitali  
e) Sitkari f) Bhastrika g) Bhramari
  9. Naturopathy Practical  
a) Baths b) Mud therapy c) Sunbath d) Fasting
  10. Observe the functioning of  
a) Water purification plant b) Sewage treatment plant  
c) Pasteurization unit d) Leprosy sanatorium  
e) Industrial unit
- Lecture – Cum – Demonstration at
- a) Rural Ayurvedic Dispensary b) Primary Health Centre
  - c) Maternity and Child Hospital

11. Health survey

12. There should be 5 case sheets of Pathyapathya, Yoga and Naturopathy together for Swastha persons and 5 cases sheets of Communicable diseases.

**Practical & Viva voice examination –**

<b>Mark distribution</b>	<b>100 Marks</b>
1. Personal Hygiene	20 Marks
2. Public and social health	20 Marks
3. Demonstration of Yoga	10 Marks
4. Naturopathy	10 Marks
5. Daily works	10 Marks
6. Viva – Voce	30 Marks

**REFERENCE BOOKS**

Relevant portions of Charaka, Sushruta, Vagbhata, Sharangadhara, Bhavaprakasha, Madhavanidana, Yogaratnakara & Bhela Samhita.

Swasthvritta Samucchya	- Pt. Rajeshwardutt Shastri
Swasthya Vigyan	- Dr. Bhaskar Govind Ghanekar
Swasthya Vigyan	- Dr. Mukund Swaroop Verma
Ayurvediya Hitopdesa	- Vd. Ranjeet Rai Desai
Yoga and Ayurveda	- Dr. Ramkumar Jain
Swasthvirtta Vigyan	- Dr. Ram Harsh Singh
Swasthvrittama	- Dr. Brahmanand Tripathi
Ayurvediya Swasthvritta	- Jahulkar
Hathayoga Pradeepika )	- Swatmaram Yogendra
Yogic Yoga Paddhati	- Bhartiya Prakratika Chikitsa Parishada
Yogic Chikitsa	- Shri Kedar Nath Gupta
Prakratik Chikitsa Vidhi	- Sharda Prasad
Prakritik Chikitsa Vigyan	- Verma

Jansanakhya Shiksha Siddhant Evam Updeysa	-	Dr. Nirmal Sahani
Health Administration in India	-	S.C. Seel
Swasthavrittama	-	Dr. Shiv Kumar Gaur
Health and Family Welfare	-	T.L. Devraj
Sachitra Yogasan Darshika	-	Dr- Indra Mohan Jha
Preventive & Social Medicine	-	J.K. Park
Yogadeepika	-	Shri Ayyangar
Swasthavritta	-	Vaidya Sakad
Positive Health	-	Dr. L.P. Gupta
Biogenic Secrets of Food in Ayurveda	-	Dr. L.P. Gupa
Yoga & Yogic Chikitsa	-	Ram Harsh Singh
Smritigranthon mein nihita	-	Dr. Smt. Nigam Sharma
Swasthaparaka Samagri		
The Foundations of Contemporary Yoga	-	R.H. Singh
Yoga Siddhant Evam Sadhana	-	Harikrishna Shastri Datar
Dr. Reddy's Comprehensive guide to Swathavritha		Dr. P.Sudhakar Reddy

## 2.3 DRAVYAGUN VIGYAN

Theory Two Papers– 100 Marks Each

Practical/Viva voice – 200 Marks

Lectures - 180

Practicals and Demonstration – 90

Paper I

100 Marks

Part A

50 Marks

- 1. DravyagunaShastra** Lakshana and fundamental principles of Dravyaguna Shastra, General Introduction of Sapta padartha – (Dravya, Rasa, Guna, Virya, Vipaka,- Prabhava and Karma.) Pancha padartha (Rasa, Guna, Virya, Vipaka,- Prabhava),
- 2. Dravya** Lakshana of Dravya, Panchabhautikatva, Aushadhatva, Dravya Pradhanye yuktyah (arguments for importance of dravya). Classification of Dravya ,according to Chetan-achetan (living – Non Living), karya-karan, Utpatti (Origin), Yoni (Mode of Origin), Rasa, Virya, Vipaka, Prayoga (Use), Dosha karma (Action on Dosha), method of Dravya classification according to Brhatrayi and according to Taxonomy.
- 3. Guna** Etymological derivation, definition and Classification of Guna. Detailed knowledge of Gurvadi and Paradi Gunas.
- 4. Rasa** Etymological Derivation, definition, Meaning of "Rasa" in various contexts, 6 Rasas( Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik origin of Rasa, Nirvrittivisheshakramh (manifestation in general and particular), Ritu prabhava(effect of season ),Rasanurasayo bheda(Difference between rasa and anurasa) Lakshana (characteristics),Guna and Karma of 6 Rasa., Kopana and shamana of Dosha and dushya by 6 rasa, Rasaskandha, Effects of excess usage of Rasa. Perception of Rasa.(Rasopalabधि), Presentational use of Rasa in diet and medicine (Rasa seven Kramah).
- 5. Vipaka** Etymological derivation and definition, difference between Avasthapaka and Vipaka, Types of Vipaka, (Dvidha-Trividha,Panchavidha) Guna and karma of Vipaka, Grades of Vipaka( taratamya), Vipakopalabधि hetu (Knowledge/Understanding of Vipaka). Differences between Rasa and Vipaka.
- 6. Virya** Etymological derivation, definition and Nature of Virya, Numbers of Virya. (Dvidha &Ashtavidha), Panchabhauthikatva, Virya karmani, (Effects of Virya)



General principles in determination of virya along with exceptions. Arguments for importance of virya along with exceptions

7. **Prabhava** Etymology and definition, Effects of Prabhava, Samanyapratyarabdha, Vichitrapratyarabdha, Arguments for Predominance of prabhava.
8. Interrelation of Rasa-Guna-Vipaka-Virya-prabhava with respect to their strength (balabal nirupana).
9. **Karma** Nirukti lakshana swaroopaa and bheda of karma (Etymological derivation, definition, nature and types of action). Karma according to ancient and modern views. Define with mode of action of the following karmas with examples –

- |                       |                         |                         |
|-----------------------|-------------------------|-------------------------|
| 1. Deepana            | 2. Pachana              | 3. Sanshodhana          |
| 4. Sanshamana         | 5. Anulomana            | 6. Sransana             |
| 7. Bhedana            | 8. Rechana              | 9. Chhedana             |
| 10. Lekhana           | 11. Grahi               | 12. Sthambhana          |
| 13. Madakari          | 14. Pramathi            | 15. Abhishyandhi        |
| 16. Vyavayi           | 17. Vikashi             | 18. Rasayana            |
| 19. Vajeeekarana      | 20. Jeevaneeya          | 21. Balya               |
| 22. Brimhana          | 23. Langhana            | 24. Medhya              |
| 25. Kesya             | 26. Chakshushya         | 27. Varnya              |
| 28. Dantya            | 29. Hridya              | 30. Sanjnasthapana      |
| 31. Vedanasthapana    | 32. Prajasthapana       | 33. Sonithasthapana     |
| 34. Raktaprasadana    | 35. Shukrala            | 36. Sukrajanana         |
| 37. Sukrarechaka      | 38. Sukrasthambhaka     | 39. Sukrasodhana        |
| 40. Stanyajanana      | 41. Stanyashodhana      | 42. Mutravirechaniya    |
| 43. Mutravirajaniya   | 44. Pureeshavirajaneeya | 45. Pureeshasangraheeya |
| 46. Swedasangraha     | 47. swedana             | 48. Swedopaga           |
| 49. snehana           | 50. Snehopaga           | 51. vama                |
| 52. Vamanopaga        | 53. Virechana           | 54. Virechanopaga       |
| 55. Sirovirechanopaga | 56. Asthapanopaga       | 57. Anuvasanopaga       |
| 58. Hikkaniygrhana    | 59. Trishnanigraha      | 60. Chhardinigraha      |
| 61. Dahaprashmana     | 62. Shitaprashmana      | 63. Angamardaprashmana  |
| 64. Jvarahara         | 65. Shramahara          | 66. Shothahara          |
| 67. Swashara          | 68. Kasahara            | 69. Shoolaprashmana     |
| 70. Truptighna        | 71. Kandugna            | 72. Kushtagna           |
| 73. Krumighna         | 74. Arshoghna           | 75. Vishaghna           |
| 76. Sandhaniya        | 77. Vranaropana         | 78. Ashmaribhedhana     |

**Part B****50 Marks**

10. Description of the following classes (Ganas) of Dravyas depending upon their similarity, morphology, properties, action, class, and effects: -
- a) Audbhida Ganas (Vegetable origin)
- Brihatpanchamoola, Laghupanchamoola, Vallipanchamoola, Kantakapanchamoola, Triahpanchamoola, Madhyamapanchamoola, Jeevaneeya panchamoola, Panchapallava, Panchavalakala, Triphala, Trikatu, Trimada, Chaturusana, Panchakola, Shadoosana, Chaturbeeja, Jeevaniya gana. Ashtavarga, Trijataka, Chaturajataka, Katuchaturjataka Panchatikta, Amlapanchaka, Chaturbhadra, Trikarshika, Swalpatriphala, Madhuratriphala, Mahavisha, Upavisha, Knowledge of Agryoushadha Varga with example.
- b) Jangama Ganas (Animal origin)- Ksheerashtaka, Mutrashtaka, Pitta panchaka.
- c) Parthiva Ganas (Mineral origin) - Lavana Panchaka, Kshara dvaya, Kshara Ashtaka.
11. Basis of nomenclature of dravya, Basis and Derivation of synonyms. Ecology- Classification of geographical area (desha) and soil (bhumi), collection of dravya, Nature and quality of drug to be collected (swarupa of sangrahya dravya), Method of collection (Sangrahana vidhi), -Vegetable and Animal drugs according to part used. Period of collection according to virya, preservation of collected dravyas, Storehouse (bheshajagara).
12. Various impurities of dravya, their purification, Brief knowledge of, adulterants, Artificial/synthetic drugs, concept of Substitution (abhavapratidinidhi dravya).
13. Brief knowledge of plant extracts, additives, excipients, preservative, food Colours.
14. Ideal drug (Prashasta bheshaja), Use of different part of medicinal plants (bheshaja prayoga, prayojyanga), Incompatibility (knowledge of viruddhatwa), principles of preparation of Aushadha yoga,
- Consideration of vaya, bala, linga, agni, dosa, dushya, vyadhi, koshta, deha prakriti, Abhyasa, satwa, desha kala and kalpana for deciding dosage of drugs (Matranishchiti).
- Anupana vyavastha, time of administration (bhaisajya sevana kala), routes of drug administration (bhaishajya prayoga marga) Prescription writing.
15. Brief information about 6 Nighantus (Dhanwantari Nighantu, Shodala Nighantu, Kaiyyadeva Nighantu, Madanapala Nighantu, Bhavaprakasha Nighantu, Raja Nighantu,)

## Part A

50 Marks

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 Charaka, Sushruta and Bhavaprakasha.

Habit and habitat/verities

External morphology

Useful parts

Important phytoconstituents

Rasa panchaka

Action on Dosha, Dhatu, Mala

Therapeutic indications-

Amaikaprayoga and Matra (Therapeutic administration and Dose)

Name of important formulations

Adverse effects and remedial measures

Shodhana (as required)

- |                       |                 |                    |
|-----------------------|-----------------|--------------------|
| 1. Ahiphena           | 2. Agnimantha   | 3. Agar            |
| 4. Amalaki            | 5. Apamarga     | 6. Aragvadha       |
| 7. Ardraka-sunti      | 8. Arjuna       | 9. Arka            |
| 10. Ashvagandha       | 11. Ashvagola   | 12. Asoka          |
| 13. Ativisha          | 14. Bakuchi     | 15. Baladvayam.    |
| 16. Bharangi          | 17. Bhallataka  | 18. Bibhitaka      |
| 19. Bijaka/Vijayasara | 20. Bilva       | 21. Brahmi         |
| 22. Briungaraj        | 23. Bruhati     | 24. Chandanadvaya, |
| 25. Citraka           | 26. Dadima      | 27. Danti,         |
| 28. Daruharidra       | 29. Dhanyaka    | 30. Dhataki        |
| 31. Draksha           | 32. Durva       | 33. Ela            |
| 34. Eranda            | 35. Gambhari    | 36. Gokshura       |
| 37. Guduchi           | 38. Guggulu     | 39. Haridra        |
| 40. Haritaki          | 41. Hingu       | 42. Jambu,         |
| 43. Jatamamsi         | 44. Jatiphal    | 45. Jeerakdvaya    |
| 46. Jyotishmati       | 47. Kalamegha   | 48. Kampilla       |
| 49. Kanchanara        | 50. Kantakari   | 51. Kapikacchu     |
| 52. Karkataksringi    | 53. Karpura     | 54. Katuki         |
| 55. Khadira           | 56. Kiratatikta | 57. Kumari         |

58.Kupilu	59.Kumkum kesara	60.Kushmanda
61. Lavang	62.Kutaja	63.Lodhra
64.Madanaphala	65.Manjishtha	66.Maricha
67.Markandika	68.Musali	69.Musta
70.Nagakeshara	71.Nimba	72.Nirgundi
73.Palasha	74.Palandu	75.Pashanabheda
76.Patala	77.Patola	78.Pippali-pippalimula
79.Purnarnava	80.Rasna	81.Rasona
82.Saireyaka	83.Sallaki	84.Saptaparna
85.Sarpagandha	86.Sariva	87.Shalparni
88.Shalmali	89.Shankhapushpi	90.Shatavari
91.Shathapushpa	92.Shigru	93.Shirish
94.Shyonaka	95.Thalisa patra	96.Tila
97.Tivrut	98.Tulasi	99.Tvak
100. Ushira	101. Vacha	102. Varuna
103. Vasa	104. Vata	105. Vatsanabha
106. Vidari	107. Vidanga	108. Yastimadhu
109. Yavani	110. Deodaru	

2. Brief knowledge of following drugs with respect to

Sanskrit Name  
 Botanical Name  
 Family  
 Habit (Samanya swaroopa)  
 Part used  
 Rasapanchaka  
 Indications

1. Agastya	2. Akarakarabha	3. Ajamoda
4. Amra	5.mragandhiharidra	5. Ankola
6. Aparajita	7. Ashvattha	8. Asthishrunkhala
9. Avartaki	10.Babbula	11.Badara
12.Bakula	13.Bhumyamalki	14.Bimbi
15.Bijapoor	16.Bola,	17.Chandrashura
18.Changeri,	19.Chavya	20.Chakramarda
21.Champaka	22.Chirbilva	23.Chopachini

- |                   |                     |                       |
|-------------------|---------------------|-----------------------|
| 24. Dattura       | 25. Darbha          | 26. Dhanvayasa,       |
| 27. Dronapushpi   | 28. Gandhaprasarini | 29. Garjara           |
| 30. Gojihva,      | 31. Gorakshamajja   | 32. Gunja             |
| 33. Hismra        | 34. Hrutpatri       | 35. Indravaruni       |
| 36. Ingudi        | 37. Irimeda         | 38. Isvari            |
| 39. Japa          | 40. Jati            | 41. Jayapala          |
| 42. Jeevanti      | 43. Kadali,         | 44. Kadamba           |
| 45. Kaidarya      | 46. Kamala          | 47. Kankola           |
| 48. Kakamachi     | 49. Karanja         | 50. Karira            |
| 51. Karpasa       | 52. Karvira         | 53. Karavella         |
| 54. Kasha         | 55. Kasni           | 56. Kataka            |
| 57. Kataphala     | 58. Kharjura        | 59. Kitmari           |
| 60. Koshataki     | 61. Kokilaksha      | 62. Kumuda            |
| 63. Kusha         | 64. Lajjalu         | 65. Langali           |
| 66. Latakaranja   | 67. Latakasthurii   | 68. Madayantika       |
| 69. Mahanimba     | 70. Mandukaparni    | 71. Mashaparni        |
| 72. Mayaphala     | 73. Methika         | 74. Meshashrunqi      |
| 75. Mudgaparni    | 76. Mulaka          | 77. Nagabala          |
| 78. Nala,         | 79. Narikala        | 80. Nili              |
| 81. Padmaka       | 82. Parushaka       | 83. Parasika yavani,  |
| 84. Parijata      | 85. Parishha        | 86. Parnabija         |
| 87. Parnayavani   | 88. Parpataka       | 89. Patalagarudi      |
| 90. Patha         | 91. Patranga        | 92. Pilu              |
| 93. Plaksha,      | 94. Priyala         | 95. Prishniparni      |
| 96. Priyangu,     | 97. Puga,           | 98. Putiha,           |
| 99. Putranjivaka, | 100. Pushkarmoola   | 101. Rajika/ Sarshapa |
| 102. Rohitaka,    | 103. Sala           | 104. Saptachakra      |
| 105. Sarala,      | 106. Sarja          | 107. Satapa           |
| 108. Shaliparni   | 109. Shati          | 110. Sharapunkha      |
| 111. Shinsapa     | 112. Snuhi          | 113. Sringataka       |
| 114. Surana,      | 115. Svarnakshiri   | 116. Tagara           |
| 117. Tailaparni   | 118. Talmuli        | 119. Taruni           |
| 120. Tavakshira   | 121. Tuvaraka       | 122. Upakunchika      |
| 123. Udumbara,    | 124. Vamsha,        | 125. Vata             |
| 126. Varahikanda  | 127. Vruddadaru     | 128. Vrukshamla       |

## Part B

50 Marks

3. Introduction, Guna, Karma and uses of following jantava dravya (drugs of animal origin).

- |                |              |                       |
|----------------|--------------|-----------------------|
| 1. Kasturi     | 2. Gorochana | 3. Gandhamarjaravirya |
| 4. Mrigasringa | 5. Bhunaga   | 6. Mukta              |
| 7. Pravala     | 8. Shankha   | 9. Shukti             |
| 10. Shambūka   | 11. Varatika | 12. Indragopa         |

4. Introduction, knowledge of guna-karma of following groups of Annapana varga:-

- |                  |                                   |                      |
|------------------|-----------------------------------|----------------------|
| 1. Jala Varga    | 2. Dugdha Varga                   | 3. Madhu Varga       |
| 4. Ikshu Varga   | 5. Taila Varga                    | 6. Madya Varga       |
| 7. Mutra Varga   | 8. Sūkadhanya Varga               | 9. Simbidhanya Varga |
| 10. Phala Varga  | 11. Shaka Varga                   | 12. Mansa Varga      |
| 13. Lavana Varga | 14. Kritannavarga(Processed food) |                      |

5. Introduction, Definition & scope of Pharmacology.

Principles of general Pharmacology.

### Brief Knowledge of following

Anaesthetics, CNS depressants, Sedatives, Hypnotics, Tranquilisers, Antipyretics, Analgesics, Antiepileptics, Antihypertensive, Antianginal, Antiplatelet, Hypolipidaemic, Haemopoetic, Coagulants, Bronchodilators, Aerosols/Inhalants, Expectorants, Digestants, Carminatives, Antacids, Antiulcer, Laxatives, Antidiarrhoeals, Antiemetic, Hepatoprotective, Diuretic, Antidiuretic, Lithotriptic, Antiinflammatory, Hormonal therapy, Antiobesity, Antidiabetic, Antithyroids, Oxytocic. Galactagogues, Contraceptives, Styptics, Antihistamins, Antimicrobial, Antibiotics, Antimalarial, Amoebicidal, Antifilarial, Anthelmintic, Antifungal, Vitamins, Minerals, Water imbalance and IV fluids, Vaccines, antivenom, antirabbies serum, Local anti septics, drugs in ophthalmic practice, Anti cancer drugs and immunomodulators etc.

6. Brief knowledge about WHO's "Essential Drug List"

7. Brief knowledge of Cultivation, Conservation of Medicinal plants and information about endangered species.

### PRACTICAL

1. Detailed knowledge of identification of following drugs: -

- (i) Kanda (stem) - Guduchi
  - (ii) Patra (leaves) - Swarnapatri, Vasa ,Kumari
  - (iii) Pushpa (flower and Parts of flower)- Lavanga, Nagapuspa,Japa
  - (iv) Phala (fruit) - Pippali, Madanaphala,Vidanga
  - (v) Beeja (seeds) – Eranda,Kapikacchu, Vidanga
  - (vi) Twaka (bark) –Kutaja,Arjuna,
  - (vii) Moola(Root)- Punarnava,Aswagandha
  - (viii) Niryasa (exudate) - Hingu, Guggulu,Mocharasa
  - (ix) Jangama dravya (animal origin) - Madhu.Ghrita
1. Collection of minimum 50 herbarium specimen from field visit.
  2. Compilation of a drug not less than 25 pages
  3. Concept based clinical study on single drugs (Minimum 5 from detailed and non-detailed list of drugs) in patients.

### **PRACTICAL MARKS DIVISION**

1.	Compilation/Essay	10 Marks
2.	Herbarium	10 Marks
3.	Single drug therapy	10 Marks
4	Pharmacognocny record in Laboratory	10 Marks
5.	Drug identification	80 Marks
6.	Oral/(Viva-Voce)	80 Marks

### **Reference Books**

1.	Abhinav Buti Darpan (Vol.1-2)	-	Vd. Roop Lal Vaishya
2.	Aushadna Vigyna Shastra	-	Acharya Pt. Vishvanatha Dwidevi
3.	Ayurvediya Aushadnkarma vigyana	-	Acharya V.J. Thakur
4.	Bedi Vanaspati Kosha	-	Prof. Ramesh Bedi
5.	Bhaishajyaguna Vigyana	-	Dr. Alakhnarayan Singh
6.	Bhav Prakash Nigantu (English)	-	Shreekanthamurti
7.	Bhav Prakash Nighantu	-	With Vd. Krishna Chandra Chunekar commentary
8.	Bhrinad dravyagunadarsha	-	Mahendra Kumar Shastri
9.	Classical Uses of Medicinal Plants	-	Acharya Priyavrata Sharma
10.	Controversial Medicinal Plants	-	Vd. G. Bapa Lal

- |     |  |   |   |
|-----|--|---|---|
| 11. | Dalhana Ka Dravyaguna Shastra Ke Kshetra Me Yogadana | - | Vd. Shiv Kumar Vyas                                 |
| 12. | Dravyaguna Kosha                                     | - | Acharya Priyavrata Sharma                           |
| 13. | Dravyaguna Sutram                                    | - | Acharya Priyavrata Sharma                           |
| 14. | Dravyaguna Vigyana                                   | - | Dr. Gyanendra Pandey                                |
| 15. | Dravyaguna Vigyana(Vol. 1-2)                         | - | Acharya Yadavji Tikram Ji                           |
| 16. | Dravyaguna Vijyana                                   | - | Dr. V.M. Gogate                                     |
| 17. | Dravyaguna Vigyana (Vol. 1-5)                        | - | Acharya Priyavrata Sharma                           |
| 18. | Dravyaguna Shastrum                                  | - | Vaidya G.A. Phadake                                 |
| 19. | Dravyaguna Vijyana                                   | - | Dr. A.P. Deshpande                                  |
| 20. | Dravyagunavijnana basic Principles                   | - | Prof.D.S.Lucas                                      |
| 21. | Forgotten Healers (Indian Medicinal Plants)          | - | Dr. Prakash Pranjape                                |
| 22. | Glossry of Vegetable Drugs in Bhritrtrayis           | - | Thakur Balwant Singh & Vd. Krishna Chandra Chunekar |
| 23. | Introduction to Dravyaguna                           | - | Acharya Priyavrata Sharma                           |
| 24. | Kriyatamka Aushadi Parichaya                         | - | Acharya Pt. Vishvanath Dwidevi                      |
| 25. | Materia Medica                                       | - | Acharya Ghosh                                       |
| 26. | Nighantu Adarsh (Vol. 1-2)                           | - | Vd. Bapa Lal  |
| 27. | Pharmacological basis of Medical Practice            | - | Goodman & Gillman                                   |
| 28. | Pharmacology and Pharmacotherapeutics                | - | Satoskar Bhandarkar & Ainapure                      |
| 29. | Prayogatamaka Dravyaguna Vigyana                     | - | Dr. Maya Ram Uniyal                                 |
| 30. | Priya nighantu                                       | - | Acharya Priyavrata Sharma                           |
| 31. | Raspanchaka/Dravyaguna Siddhanta                     | - | Prof. Shivcharan Dhyani                             |
| 32. | System of Plant Nomenclature in Ayurveda             | - | Dr. Gyanendra Panday                                |
| 33. | Text Book of Pharmaconogy                            | - | Trees & Valis                                       |
| 34. | Textbook of Dravyaguna                               | - | Dr.K.Nishteswar                                     |
| 35. | Unani Dravyaguna Vigyana                             | - | Hakim Daljeet Singh                                 |
| 36. | Useful parts of Charaka, Sushurut, and Vagbhata.     | - |   |
| 37. | Uttarakand Ki Vanaspatiya                            | - | Dr. Gyanendra Pandey                                |
| 38. | Vanoaushadi Darshika                                 | - | Thakur Balwant Singh                                |
| 39. | Vanoaushadi Nidarshika                               | - | Dr. Ram Sushil Singh                                |
| 40. | Vedic Vanaspatiyam                                   | - | Dr. Dinesh Chandra Sharma                           |



## **2.4 RASASHASTRA AND BHAI SHAJYAKALPANA**

**Theory Two Papers– 100 Marks Each**

**Practical/Viva voice – 200 Marks**

**Lectures - 180**

**Practicals and Demonstration – 90**

**Paper 1**

**100 Marks**

**Rasa-Shastra**

**Part A**

**50 Marks**

- 1. Definition and etymology** of Rasa, History of Rasashastra, Rasa shala, concept of Rasa Mandap, Importance of Rasaushadhi , Concept of Rasa-Rasayana, Concept of Rasa darshan.
- 2. Brief Description and Application of Technical terminologies (Paribhasha prakarana)** Avapa, Nirvapa, Dhalana, Bhavana, Jarana, Murchana, Shodhana, Marana, Amrutikaran,Lohitikarana,Mruta Loha, Satwa Patana, Shuddhavarta, Beejavarta, Druti, Rudra bhaga and Dhanvantari bhaga, Apunarbhava, Niruttha, Rekhapurna, Varitara.
- 3. Dravya varga** Amlavarga, Kshiratraya, Madhuratraya, Panchamrittika, Panchagavya, Panchamrita, Ksharashtaka, Dravakagana, Mitra panchaka, Rakta varga, Shweta varga, Lavanapanchaka.
- 4. Brief description of Yantras and their application** Ulūkhala Yantra, Khalwa Yantra, Kachchhapa Yantra, Urdhwa Patan, Addha Patan, Jaranarth Tula Yantra, Dola Yantra, Patana Yantra- Damaru yantra, Vidhyadhara yantra & Tiryak patana yantra, Patala Yantra, Palika Yantra, Puta Yantra, Valuka Yantra, Bhudhara Yantra, Sthali Yantra, Swedana Yantra, Electronic & Scientific weighing balance.

- 5. Brief description & application of Musha (Crucible)** Samanya Musha,, Gostanimusha, Vajramusha, Mahamusha, Yoga musha, Vrintak Musha, Malla/ pakwa musha. Different types of crucibles.
- 6. Brief description & applications of Koshti** Satwapatan Koshti, Chullika, Patala Kosthi, Gara Koshti, Angarakoshti and knowledge of various heating appliances viz. Gas stove, Hot plate and Heating mantle.
- 7. Definition and Types of Puta** Surya puta, Chandra puta, , Govara puta, Lawakaputa, Kukkutaputa, kapota puta, Varahaputa, Gajaputa, Mahaputa, Kumbhaputa, Balukaputa, Bhudharaputa, Laghu Puta, Baluka Puta.
- 8. Applications of** Electric muffle furnace and fuel (diesel) dependant furnace.
- 9. Knowledge of Parada** Synonyms, Occurrence, natural and artificial sources of Parada, Hingulottha parada, Types of Rasa, Naisargika, Yougika, Aupadhika (Kanchuka) etc. Parad Dosha and characteristics of Grahya-Agrahya Parada. Samanya and Vishsha Shodhana of Parad. Parada astasamskara, Paradagati and Rasabandha.
- 10. Murchhana and Jarana** of Parada, Preparation of Kajjali, Types of Rasaushadhi, Khalvi rasa e.g. Tribhuvana keerthi rasa, Sootshekhar rasa, Parpati kalpa, Rasa parpati, Tamra Parpati, Gagan Parpati, Kupipakva Rasa- Rasa karpura, Rasa sindhura, Sameerapannaga Rasa, Pottali kalpa - Hemagarbha pottali.

Occurrence, Synonyms, Minerological identification, Natural and artificial sources, Types-Grahya and Agrahyata, shodhana, marana and other processing techniques. Properties, dose, therapeutic uses of commonly used single and compound formulations of dravyas classified as under

1. **Maharasa** - Abhraka, Vaikrantha, Makshika, Vimala, Shilajatu, Sasyaka, Chapala and Rasaka.  
**Uparasa** - Gandhaka, Gairika, Kasisa, Kankshi, Haratala, Manahshila, Anjana and Kankustha  
**Sadharana Rasa** - Kampillaka, Gauri pashana, Navasadara, Mriddara shringa, Kaparda, Giri Sindura, Agnijara & Hingula.
2. **Dhatu**  
**Shuddha lauha**- Swarna(Gold), Rajata (Silver) Tamra (Copper), Loha (Iron) and Mandura  
**Putilauha** - Vanga (Tin), Naga (Lead), Yashada (Zinc).  
**Mishra lauha**- Kamsya (Bronze), Pittala (Brass) and Vartha Loha (Bell Metal).
3. **Ratna** - Manikya (Ruby), Mukta (Pearl), Pravala (Coral), Tarkshya (Emerald), Pushaparaga (Topaz), Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamone stone), Vaidurya (Cats eye)  
**Uparatna**- Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis Lazuli) Lal, Parojaka (Turquoise), Sphatikamani, Trinakanta (Amber), and Palanka, Putika, Rudhir, Kamch (Glass).
4. **Sudha varga** – Sudha (Lime), Kaparda (Cowries), Sukti (Oyster Shell) , Shankh (Conch Shell), Badarashma (Silicate of Lime), Mriga shringa (Stag horn), Khatika, Godanti (Gypsum) and Samudraphena (Cattle Fish bone), Kukkutand twaka (Hen’s Egg Shell).
5. **Siktha varga**- Siktha (Silika), Dugdhapashana (Talc), Nagapashana/ Jaharmohara (Serpentine), Vyomashma, Sange Yeshab (Jade), Kousheyashm (Asbestos) and Akika (Agate).

6. **Kshara varga** - Sarja kshara (Sodium bicarbonate), Yava kshara, Tankana kshara (Borax), Surya Kshar (Potassium Nitrate).
7. **Miscellaneous** - Bola, Krishna Bola, Beeja Bola, Damool Akhawan (Khoon Kharabha Rakta Bandhini), Abresheem, Gandhamarja Virya, Kasturi, Bhoonag, Mayurpiccha, Gandhabiroja, Shila rasa, Sarjarasa, Maducchishta.
8. **Visha and Upavisha**- Introduction, collection and storage, classification, synonyms, shodhana, antidote, uses, therapeutic and toxic doses and formulations of following Visha and Upavisha- Vatsanabha, Kuchala, Jayapala, Dhattura Beej, Bhang, Bhallataka, Gunja, Arka, Snuhi. Langali, Karaveera and Ahiphena, Chitrakmool.
9. **Aushadhi Yoga Gyanam**- Arogya vardhini gutika, Karpura rasa, Kasturi bhirava rasa, Kumara kalyana rasa, Garbhapala Rasa, Chandraprabha Gutika, Chandramrita Rasa, Pratapalankeshwara Rasa, Pravala Panchamrita Rasa, Anandbhairava Rasa, Yogendra Rasa, Rajmriganka, Ramabana Rasa, Laxmivilasa Rasa, Vasanta Kusumakara, Vatakulantaka rasa, Vasantamalati Ras, Brihat Vata Chintamani Rasa, Shankha vati, Shwaskuthara Rasa, Hinguleswara Rasa, Hemagarbhapottali, Hridyarnava Rasa , Swarnavanga, Makaradhwaja, Ayaskriti evam Loha Rasayana, Putapakwavishamjvrantaka Loha, Vatvidhvamsan Rasa, kamadugha Rasa, Laghusootshekhsar Rasa, Navayasa loha, Saptamrita loha.
10. Brief knowledge of Standardization of Rasaushadhi.
11. Concept of pharamcovigilance and its status in India, knowledge about

Pharamcovigilance of Ayurvedic drugs.

**Practical Rasashatra**

**100 Marks**

**Minimum Fifty practicals to be performed out of below mentioned Practicals**

No	Topic	Practical
1.	Rasa[ Parada]	Hingulotta Parada (Nishkasan)
		Shodhana of Parada
		Kajjali preparation
		Mugdha rasa
2.	Maharasa varga	Shodhana of Abhraka Dhanyabhraka nirmana
		Shodhana of Makshika
		Shodhana of Vimala
		Shodhana of Shilajatu
		Shodhana of Sasyaka./ Tuttha
3.	Uparasa varga	Shodhana of Gandhaka
		Shodhana of Gairika
		Shodhana of Kasisa
		Shodhana of Kankshi
		Shodhana of Haratala Rasa manikya nirman
		Shodana of Manashila
4.	Sadharana rasa varga	Shodhana of Hingula Sodhana of Navasadar
		Shodhana of Kapardika
5.	Sudha Varga	Shodhana of Shankha
		Shodhana of Shukti
		Shodhana of Pravala mula
		Shodhana of Godanti
6.	Dhatu varga	Shodhana of lauha
		Shodhana of Mandura
		Shodhana of Tamra
		Shodhana of Naga
		Shodhana of Vanga
		Shodhana of Yashada
7.	Kshara Varga	Shodhana of Tankana
8.	Parpati	Preparation of Rasaparpati, Bola Parpati,

		Preparation of Swetaparpati
9.	Visha varga	Shodhana of Vatsanabha, Bhallataka, Kupilu, Dhattura beeja, Jayapala, Gunja, Chitrakamoola.

### PRACTICAL FOR DEMONSTRATION

No.	Topic	Practical
1.	Bhasma	Abhraka bhasma
		Swarna makshika bhasma
		Tamra bhasma
		Vanga bhasma,
		Mandoora bhasma
		Kasisa bhasma
		Shankha bhasma
		Kapardika bhasma, Godanti Bhasma
		Kukkutanda Twak Bhasma
2	Pishti	Pravala pishti
		Jaharmohara / Akika pishti
		Trina kantha mani pishti
		Mukta pishti
3.	Druti	Gandhaka druti
4.	Formulations	Rasasindoora, Swarna Vanga.
		Saptamrutha lauha
		Navayas lauha
		Chandanadi Louha
		Sarvajwarhara Louha
		Agnitundi vati
		Tribhuvana kirti rasa
		Punarnava Mandoora
		Sootshekhara rasa
		Arogyavardhini vati
		Laghusutashekhara rasa
		Laghmalini Vasanta rasa
		Sameer pannaga rasa

**Bhaishajya Kalpana**

**Paper II**

**100 Marks**

**Part A**

**50 Marks**

1. **Derivation, history and chronological (kramika vikasa) development of Bhaishjyakalpana.** Concept of Aushadha and Bhesaja.
2. **Fundamental principles of Bhaishjyakalpana.**
3. **Aushada nirmana shala** according to directions mentioned in Aushadha evam Prasadhana Adhiniyama (Drug and Cosmetic act 1940 and Rules 1945).
4. **Introduction and general knowledge of useful instruments-** Disintegrator, Pulveriser, Micropulveriser, Ball mill, End Runner, Edge Runner, Sieve-Shaker, Polishing pan, Granulator, Mixer, Grinder, Tablet making machine, Strip packing machine, Pouch packing machine, Pill making machine, Pill cutter.
5. **Comparative study of "Mana"** (measurements) as per Ancient and metric system of measurements. Rules of taking fresh and dry drugs, Grahyatva and Agrahyatva of plant material. Collection, storage and preservation methods of different Aushadhi dravyas. Examination methods, Preservation and Saviryata avadhi (potency period) of different Aushadhi kalpanas. Concept of stability and shelf life in contemporary science.
6. **Aushadha Matra, Anupana and Aushadh sevan kala.**
7. **Kashaya yoni- Pancha vidha kashaya kalpana** Swarasa, Kalka, Kwatha, Hima, Phanta. Panch kashaya Yonayah, Churna, Ushnodaka, Tandulodaka, Laksha rasa kalpana, Mantha, Aushadha siddha paniya, Arka, panaka, pramathya, rasakriya, phanita, avaleha , prasha, Ghana, satva, gudapaka, sarkara, ksheerapaka, Syrups. Vatika, gutika, Chandrika, vataka, pinda, modaka, varti, Guggulu kalpana, Method of preparation of Tablets and Capsule. Masi kalpana, lavana kalpa, kshara kalpana and Kshara sutra.

## 8. Introduction, definition, preparation methods, doses and detailed description of uses and Anupana of following Yogas

Ardraka swarasa, Tulasi swarasa, Vasa putapaka swarasa, Nimba kalka, Rasona kalka, Punarnavasthaka kwatha, Rasna sapthaka kwatha, Dhanyaka hima, Sarivadi hima, Panchakola phanta, Mustadi Pramathya, Kharjuradi mantha, Shadanga paniya, Ajamoda arka, Yavanyarka, Chinchapa panaka, Candana panaka, Banapsha sharkara, Nimbu sarkara, Bhaskaralavan churna, Simhanad Guggulu, Yogaraj Guggulu, Lavangadivati, Lasunadi vati, Eladi vati, Sitopaladi Churna, Hingwashtaka Churna, Chitrakadi Gutika,, Sanjivani Vati, Triphala Guggulu, Kaishora Guggulu, Chyavanaprashavaleha, Vasavaleha, Vyaghri-Haritaki avaleha, Manibadra avalehya, Darvi rasakriya, Guduchi Ghana, Kutaja Ghana vati, Haridra khanda, Narikela khanda, Soubhagya shunthi paka, Amruta satva, Ardraka satva, Phala varti, Chandrodaya varthi, Arka lavana, Narikela lavana, Triphala masi, Arjuna ksheerapaka, Rasona ksheerapaka.

### PART B

1. **Sneha kalpana** Sneha yoni, Types of sneha, sneha murchana vidhi, sneha paka vidhi, snehapaka prakara and their use. Snehapaka kala, sneha siddhi lakshanas, dose, use of ghrita and taila, Preparation and uses of Jatyadi Ghrita- Bramhighrita- Narayana taila - Panchaguna taila.

2. **Sandhana Kalpana and its types** Madya, Sukta - Asava - Arishta - Varuni - Sura (Prasanna - Kadambari - Medaka - Jagala - Bukkasa) Maireya - Surasava - Shukta - Kanjika, Tushodaka, Shidhu - Souvira kalpana their methods of preparation, properties, doses, uses and mode of administration, Siddha Sandhana Lakshana. Preparation, doses and mode of administration of Arjunarishta - Ashokarishta- Takrarishta - Dashamularishta, Draksharishta, Kutajarishta Arvindasava - Kumaryasava- Chandanasava.

3. **Pathya Kalpana** Concept of Pathya Apathya. Manda, Peya, Vilepi, Yavagu, Anna, Bhakta, Odan, Yush, Kulattha Yusha, Krishara, Mansa rasa, Vesavar, Khad Yusha Kamblika, Raga, Shadav, Dadhi and Takra Varga - Takra, Udasvita, Katvar, Mathita, Chhachika.

### 4. Bahya kalpana (Formulations used for External Applications)-

**Lepa** -Types of Lepas, its methods of preparation and mode of application. Udvardan and Avachurnan

Method of preparation of Siktha Taila, Malahara - sarjaras Malahar, Gandhak Malahar, Upanaha, Atasi upanah, Shatadhouta and Sahastradhouta Ghrita.

5. **Netrakalpa (Ophthalmic preparations)** - Seka, Drava, Anjana -Pindi, Ashchyoutana - Vidalaka - Tarpana - Putapaka etc.



**6.Nasya kalpana** - Classification of Nasya, Method of preparation, properties and therapeutic uses of Navana, Avapidana, Dhmapana, Dhuma and Pratimarsha nasya.

**7.Mukha kalpana** - Method of preparation, properties and therapeutic uses of Gandoosha - Kavala - Manjana (tooth powder), Pratisaran, Tooth paste.

**8.Dhumapana kalpana**-Classification, Method of preparation, properties and therapeutic uses of Dhumapana. Dhoopan- Vrina, Yoni, Arsha and Karna dhoopan.

**9. Vasti kalpana**- Classification, Method of preparation of vasti yantra and vasti dravaya. Types of Vasti. Therapeutic properties and uses of Vasti kalpana.

**10.** Brief introduction of Ointments, Creams, Gels, Lotions, shampoos, soaps, Liniments.

**11.** Brief knowledge of Standardization of Ayurvedic formulations.

**12.** Brief introduction of Drugs and Cosmetics Act 1940 and Rules 1945.

**Practical- Bhaisajya kalpana**  
**Following practicals to be performed-**

**100 Marks**

**I. Formulations-** Method of preparation, therapeutic uses, dose and anupana of the following

1. Swarasa- Ardraka swarasa, Tulasi swarasa, Kumari Swarasa, Vasa putapaka swarasa
2. Kalka- Nimba kalka, Rasona kalka.
3. Kwatha- Punarnavasthaka kwatha, Rasna sapthaka kwatha, Kulittha kwath.
4. Hima- Dhanyaka hima, Sarivadi hima

5. Phanta- Panchakola phanta, Yastimadhu Phanta.
6. Pramathya- Mustadi pramathya
7. Mantha- Kharjuradi mantha
8. Aushadh siddha paniya- Shadanga paniya
9. Laksha rasa
10. Arka- Yavani arka, Gulab arka, Misreya arka
11. Panaka- Chinchha panaka, Candana panaka,
12. Sharkara- Banapsha sharkara, Nimbu sarkara.
13. Churna- Sitopaladi Churna, Hinguwashtaka Churna
14. Gutika- Chitrakadi Gutika,, Sanjivani Vati
15. Guggulu-Triphala Guggulu, Kaishora Guggulu.
16. Avaleha- Chyavanaprashavaleha, Vasavaleha, Vyaghri Haritaki avaleha, Manibadra avalehya.
17. Rasa kriya-Darvi rasakriya., Guduchi Ghana, Kutaja Ghana .
18. Khanda- Haridra khanda, Narikela khanda, Sowbhagya sunti paka
19. Satva- Amruta satva, Ardraka satva
20. Varti- Phala varti, Chandrodaya varthi
21. Lavana- Arka lavana, Narikela lavana
22. Masi- Triphala masi
23. Ksheerapaka- Arjuna ksheerapaka, Rasona ksheerapaka

24. Kshara- Apamarga kshara, Snuhi kshara, Ksharasutra.
25. Manda – Ashtaguna manda, Laja manda
26. Peya, Vilepi, yavagu, Krishra, Vesavara
27. Yusha - Mudga yusha, Saptamushtika yusa, Kulittha yusha
28. Takra varga – Takra, Udasvita, katvar, Mathita, Chhacchika, Dadhi
29. Aristha- kutajarishta, takrarishta
30. Asava - Kumaryasava, kanakasava
31. Sukta kalpana- Kanji
32. Udaka- Tandulodaka
33. Upanaha- atasi upanaha
34. Bahya kalpana- Sarjarasa malahara, Gandaka malahara, Sikta taila nirmana, Dashanga lepa, Doshagna lepa.
35. Mamsarasa, Laksharasa
36. Sneha Kalpana Sneha Moorchnana- Ghrita Murchana, Taila Moorchnana  
Ghrita kalpana- Jatyadi, Triphala, ksheerashatphala ghrita-  
Taila kalpana-Panchaguna taila, Arka taila, Ksheerabala taila, Anu taila
37. Taila patana- Bhallataka taila patana, Jayapala taila patana
38. Dhoopa- Dashanga dhoopa, Arshogna dhoopa
39. Modaka- Talisadi modaka, Abhayadi
40. Shodana- Guggulu, Hingu, Chitrak mool, Vriddha daru beeja

41. Kritrima Lavan nirman – Vida Lavan, Souvarchala lavan

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

**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 - Chandrabhusan Jha  
(Sachitra)
5. Ayurvediya Rasa Shastra - Badrinarayan Pandey
6. Rasa Bhaishajya Paribhasa - Sureshananda Thapaliyal
7. Ayurvediya Rasa Shastra - Prof. Siddhi Nandan Mishra
8. Ayurved Prakash - Vaidya Gujrat Mishra
9. Drugs and Cosmetic Act -
10. Paka Darpana - Dr. Indradev Tripathi
11. The Paka-darpana of king null - A - Dr. Madhulika  
critical study
12. Parada Vigyaniam - Vasudev M. Dwivedi
13. Pratyaksha Aushadh Nirmanam - Acharya Vishwanath  
Dwivdei
14. Bhaishjyakalpana Vigyanam - Dr. Ambikadatta Shastri
15. Rasa Tarangini - Sadanand Sharma
16. Rasa Darpan - Prof. Bhajan Das Swami
17. Rasa Bindu - Dr. Sanjay Sharma
18. Rasa Hridaya Tantra (Hindi) - Rameshwar Dayal Bajpai
19. Rasa Hridaya Tantra (English) - Prof. Harishankar Sharma
20. Rasa Bhaishajya Kalpana Vigyan - Vaidya Santosh Kumar  
Khandal
21. Rasa Mitra - Dr. Tryambak Nath Sharma
22. Rasa Ratna Samuchchaya - Dattattreya Ananta Kulkarni  
Krit Hindi Vyakhya.
23. Rasa Shastra Prayogiki - Srivastava, Yadav and Prof.  
Ramesh Saxena
24. Rasamritam - Vaidya Yadavji Tirkramji

- Acharya
25. Rasayan Sara - Vaidya Shyam  
Sunderacharya Vaishya
26. Rasendra Sampradaya - Vaidya Hajari Lal Sukul
27. Rasendra Sara Sangraha - Vaidya Gopal Krishna
28. Rasendra Sara Sangraha - Vaidya Satyarth Prakash
29. Vaidyak Paribhasha Pradeep - Dr. Indradev Tripathi
30. Sharangdhar Samhita - Dr. Avadh Bihari Agnihotri
31. Bharatiya Bhaishajya Kalpana - Vishwanath, Gananath  
Vigyana Dwivedi
32. Bhaishjya Kalpana Vigyan - Siddhi Nandan Mishra
33. Rasa Shastra (English) - Prof. Damodar Joshi
34. Rasa Ratna Samuchchaya - Prof. Damodar Joshi  
(English)
35. Rasendra Chintamani -
36. Useful parts of Charaka, Sushruta -  
and Vagbhata  
Ayurvedic formulary of India-Part I  
and II  
Pharmacopic standards for  
Ayurvedic formulation published by  
CCRAS, Publication of Govt. of  
India.

## 2.5 ROGA VIGYAN EVUM VIKRITI VIGYAN

Theory Two Papers– 100 Marks Each

Practical/Viva voice – 100 Marks

Lectures - 180

Practicals – 90

Paper I

100 Marks

Part A

50 Marks

### 1. Dosha Dooshyadi Vigyanam

1. Definition and importance of Roganidana
2. Samanya nidana and samanya lakshana of dosha prakopa and dosha kshaya.
3. Vikriti vijnana of pancha vidha dosha bheda.
4. Dosha dhatu ashraya ashrayee bhava.
5. Dhatu Kshaya Vriddhi Lakshana and Pradoshaja Vikara
6. Upadhatu pradoshaja vikara.
7. Mala kshaya vriddhi lakshana and pradoshaja vikara.
8. Indriya pradoshaja vikara.
9. Hetu , bheda and lakshana of agni dushti.
10. Definitions and samanya lakshana of Ama
11. Sama and nirama dosha, dushya lakshanas.
12. Dosha paka and dhatu paka lakshana.
13. Concept, classification, diagnosis and general complications of Avarana
14. Dosha gati.
15. Detailed study of srotomoola and srotodushti samanya and vishishta hetu and lakshana and viddha lakshana of all Srotas. Differences between sroto dushti and kha vaigunya.

### 2. Vyadhi Vigyanam

1. Definition, synonyms and classification of Vyadhi
2. Criteria for nomenclature of Diseases in Ayurveda (Vyadhinamakarana).
3. Bija, Bija bhaga and bija bhaga avayava dushti.
4. Basic knowledge of Hereditary, Congenital, Acquired, Multifactorial, Traumatic and Environmental disorders.
5. Introduction to ICD Classification of Diseases of WHO and DSM classification.
6. Samanyaja and Nanatmaja vikara. Nidanarthakara vyadhi ,Hetu sankara, lingasankara, Vyadhisankara ,Sharirika, Manasika and Agantuja vyadhi

7. Concept of Ashta mahagada and introduction to Ashta Nindita.
8. Importance and knowledge of Rogamarga.
9. Definition and classification of Vyadhikshamatva.
10. Concept of Satmya , Asatmya and Viruddha ahara.
11. Ojas – types of Ojo Dosa / vikriti- Ojas and Vyadhi kshamatva.

### 3. Basic Pathology

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

### Part B

50 Marks

### 4. Nidana Panchaka Vigyanam

1. Difference between roga and rogi pareeksha.
2. Importance of Nidana panchaka.
3. Hetu - definition, synonyms and classification.
4. Purva rupa – definition, synonyms, Samanya and Vishistha Purva rupa.
5. Rupa - definition, synonyms, Samanya and Pratyatma lakshana. Difference between vyadhi and lakshana.
6. Samprapti – definition, synonyms and types
7. Samprapti ghataka.
8. Shat kriyakala.
9. Relationship between nidana panchaka and shat kriyakala.
10. Upashaya – definition, types and its importance in diagnosis.
11. Upadrava

12. Arishta vijnana – definition, types and its importance.
13. Sadhyasadhyatwa – types, their parameters and importance.
14. General diagnostic principles of Anukta vyadhi (Cha Viman IV)

## 5. Pareeksha Vigyanam

1. Importance and knowledge of Aptopadeshadi, dharshanadi Trividha, Chaturvidha, and Shadvidha Pariksha.
2. Importance and Knowledge of Ashtasthan Pariksha.
3. Importance and Knowledge of Karanadi Dashavidha Parikshya Bhava.
4. Importance and Knowledge of Dashavidha pariksha.
5. Importance and methods of history taking, clinical examination and knowledge of Ancillary investigations.
6. Basic Knowledge of tools for avayavika pariksha - ECG, USG, and Radio imaging.
7. Basic Knowledge of Laboratory investigations pertaining to Metabolic and Endocrine disorders.

## Paper II

100 Marks

### Part A

50 Marks

Systematic study of Nidana Panchaka of following diseases (Including upadrava, arishta and sadhyasadhyata)

#### 1. Diseases of Rasavaha Srotas

- **Jwara** (Jwarabheda- Ama, Pachyamana and Nirama jwara, Agantuka jwara, Punaravartaka jwara, Vishama jwara, Dhatugata jwara, Charakokta Sannipata jwara.
- General mechanism of Fever. Introduction to the Aetiopathogenesis of Malaria, Typhoid, Dengue fever, influenza and Chikungunya.
- **Pandu, Amavata, Hridroga, Shotha**
- Introduction to Anaemia & its Classification, Rheumatic fever, Rheumatoid Arthritis, Angina, Ischaemic Heart Disease, Hypertension, Myocardial Infarction

#### 2. Diseases of Raktavaha Srotas

- Kamala - Raktapitta - Vatarakta - Shitapitta – Maha kushta – Visarpa – Shwitra and Introduction to Kshudra kushta
- Introduction to Hepatomegaly, Spleenomegaly, Leukaemia, Thalessemia, Sickle cell anaemia.
- Introduction to Urticaria, Psoriasis, Eczema, Pemphigus

#### 3. Diseases of Mamsavaha srotas



Introduction to granthi, arbudha and arshas.

#### 4. Diseases of Medovaha srotas

##### **Sthoulya - Karshya – Prameha**

- Introduction to Obesity and Diabetes Mellitus.

#### 5. Diseases of Asthi - Majjavaha srotas

- Sandhigatavata, Introduction to Asthi-majjaparipaka, Asthigata vidradhi
- Introduction to Osteo- Arthritis, Osteomyelitis, Osteoporosis.
- Vatavyadhi
- Akshepaka - Apatanaka - Ardita - Pakshaghata - Gridhrasi - Viswachi, Apabahuka, - Manyasthambha - Katigraha.
- Introduction to Parkinson's disease , Stroke, lumbago- sciatica syndrome, Bell's palsy, Ankylosing Spondylitis

#### 6. Diseases of Sukravaha srotas

- Introduction to Klaibya and Vandhyatva.
- Introduction to male and female infertility.

### **Part B**

**50 Marks**

#### 7. Diseases of Pranavaha srotas

- Kasa - Shwasa - Hikka - Urahkshata - Shosha - Rajayakshma.
- Introduction to the aetiopathogenesis of Pneumonia, Pleural effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.

#### 8. Diseases of Annavaha- Pureeshavaha Srotas

- Agnimandya - Ajirna - Aruchi- Chhardi - Visuchika , Amlapitta- Shoola - Parinama shoola - Annadrava shoola- Grahani -Gulma- Udara roga - Atisara - Pravahika
- Introduction to Anaha, Adhmana, Atopa, Alasaka, Vilambika
- Introduction to Peptic ulcer, Irritable Bowel Syndrome, Diarrhea, Dysentery, Constipation, Inflammatory Bowel Syndrome.

#### 9. Diseases of Udakavaha Srotas

- Introduction to Trishna, Daha.
- Introduction to water and electrolyte imbalance disorders

#### 10. Diseases of Mutravaha srotas

- Mutrakrichhra - Mutraghata.
- Introduction to Urinary Tract Infection, Urolithiasis, Nephropathies and Renal failure.

### 11. Diseases of Swedavaha srotas

- Introduction to Khalitya, Palitya and Cosmetology.

### 12. Diseases of Manovaha Srotas/ Sanjnavaha Srotas

- Introduction to Vishada, Udvega, Bhaya, Bhrama, Anidra, Mada, Murchha, Sanyasa, Apasmara, Unmada, Atatwabhinivesha
- Introduction to Depression, Anxiety neurosis, Phobia, Personality disorders.

### 13. Upasargjanya Vyadhis (Communicable diseases)

- Romantika – Masurika – Upadamsha – Phiranga.
- Introduction to Leprosy , Tuberculosis and AIDS.

### 14. Krimi Vigyanam

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

**PRACTICAL**

**100 Marks**

### **LABORATORY PRACTICALS**

#### 1. Fundamental Principles of Laboratory Tests

- Introduction to laboratory, Sterilization, glass wares, solutions reagents and safety procedures.

#### 2. Hematology

- Hb% estimation.
- Blood cells counting - WBC, RBC, platelets
- Hematocrit /Packed cell volume (PCV)
- Erythrocyte indices - MCV, MCH, MCHC
- Peripheral blood smear, staining technique and differential leucocyte count.
- Peripheral blood film examination in Anemia, Leukemia, Malaria, Filaria (Demonstration)
- ESR.
- Introduction to rapid diagnostics of hematology
- Screening test for bleeding disorders - bleeding time (BT), Clotting time (CT), Prothrombin time (PT)
- Blood grouping - ABO system, Rh typing (Rhesus system)

#### 3. Urine Examination

- Ayurveda anusara mutra pareeksha.
- Physical Examination - Volume, Reaction (P<sup>H</sup>) & Specific Gravity
- Chemical Examination for
  - Proteins, Glucose, Phosphate, Ketone, Bile salts, Bile pigment

- Microscopic Examination

#### 4. Stool Examination

- Ayurveda anusara pureesha pareeksha
- Physical examination - Sama-Nirama Pareeksha
- Microscopic examination of ova & cyst etc.
- Occult Blood Test

#### 5. Sputum Examination

- Ayurveda anusara sthivana pareeksha.
- Physical, Chemical and Microscopic Examination of the sputum.
- Sample collection and Demonstration of AFB.

#### 6. Semen examination

- Ayurvediya anusara Retas pareeksha.
- Semen examination & Demonstration of semen, sperms.

#### 7. Biochemical Examination – (Demonstration)

- Serum Glucose, Serum Bilirubin, Serum urea, Lipid profile, Serum Creatinine.

#### 8. Demonstration of different staining techniques in microbiology.

#### 9. Demonstration of Sero-immunological Investigations: Ra and Widal.

#### 10. Demonstration of Aspiration techniques.

#### 11. Laboratory record – maintenance of observation Diary and laboratory record book.

### BEDSIDE PRACTICALS (CLINICAL METHODS)

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

### DISTRIBUTION OF MARKS FOR PRACTICAL EXAMINATION

#### Total Marks

#### 100 Marks

- |                         |           |
|-------------------------|-----------|
| • Internal Assessment – | 10 marks  |
| • Viva voice –          | 20 marks  |
| • Record –              | 10 marks. |
| • Long case –           | 20 marks. |
| • Short case-           | 10 marks. |
| • Instruments –         | 10 marks. |

- Laboratory experiments –

20 marks.

### Reference Books

<b>Sl.No</b>	<b>Name of the Book</b>	<b>Name of the Author</b>
1	Madhav Nidan (Madhukosha commentary) Part 1 – 2	Pt. Yadunandan Upadhyay
2	Pt. Yadunandan Upadhyay	Kaviraj Gananath Sen
3	Kaviraj Gananath Sen	Yadav Ji Trikram Ji Acharya
4	Doshakaranatwa Mimamsa	Acharya P.V. Sharma
5	Nadi Darshan	Vd. Tara Shankar Mishra
6	Nadi Vigyanam	Vidyotini Hindi Tika
7	Nadi Vigyan	Shri Satya Dev Vashisht
8	Nadi Vigyan	Gangadhar Tika
9	Rogi Pariksha vidhi	Acharya Priyavrata Sharma
10	Ayurvediya Rog Vargikaran	Vd. Ramanath Dwivedi & Vd. Gurdip Singh
11	Ayurvediya Nidan Evam Chikitsa Ke Siddhanta	Prof. Ram Harsh Singh
12	Relevant portions of Charaka Samhita, Sushruta Samhita and Vagbhat	
13	Text Book of Pathology	William Boyds.
14	Text Book of Pathology	Harsh Mohan
15	Text Book of Pathology	Dey and Dey
16	Text Book of Parasitology	Ramnik Sood
17	Clinical Pathology and Bacteriology	S.P. Gupta
18	Clinical methods in Ayurveda	K. R . S. Murthy
19	Parameswarappa's Ayurvediya Vikriti Vigyan and Roga Vikriti Vigyan	Dr. P.S. Byadgi.

20	Oxford Handbook of Clinical Examination and Practical Skills	Oxford Handbooks
21	Advanced Clinical Evaluation System For Practical Assessment of Clinical Examination Skills	
22	Symptoms & Signs In Clinical Medicine	Chamberlains
23	Clinical Methods	Hutchison's
24	Bedside Clinics in Medicine Part- I & II	Kundu
25	Common Medical Symptoms	Mehta
26	Advances in Pathology & Lab Med-	Weimstean, Gralem, Anderson, Cortan, Wick, Zumwelt
27	Clinical laboratory medicine	Edited by Kenneth D Mc. Chately
28	General Pathology	Walter & Israel Churchill Living stone
29	A Comprehensive Dictionary of Pathology	Chris Newann
30	Practical Pathology	Dr. K. Uma Chaturvedi
31	Clinical examination	Douglas/Macleod's
32	Pathology Practical book for undergraduates	Harsh Mohan
33	Medical laboratory technology	R. Sood
34	Clinical Diagnosis and Management by Laboratory methods	Todd, Sanford and Davidson
35	Clinical Hematology In Medical Practice	Degruchy's
36	Robbins Basic Pathology	Kumar, Abbas, Fausto at al

## 2.6 AGADATANTRA, VYAVAHARAYURVED EVUM VIDHIVAIIDYAK

	<b>Theory One Paper – 100 Marks</b>	
	<b>Practical/Viva voice</b>	<b>-100 Marks</b>
	<b>Lectures</b>	<b>- 100</b>
	<b>Practicals / Demonstrations</b>	<b>– 50</b>
<b>Paper I</b>		<b>100 Marks</b>
<b>Part A</b>		<b>50 Marks</b>

### **AGADATANTRA– VISHA CHIKITSA (AYURVEDIC & CONTEMPORARY TOXICOLOGY)**

01. Derivation and definition of Agadatantra and Visha, Visha Utpatti, Visha Prabhava, Visha pranaharana Kriya, Visha Guna, Visha gati.
02. Origin and Classification of Visha:- Its sources, Differences between Visha, Madya and Oja guna, Visha Upadrava and Visha Mukta Lakshana.
03. Tests for detection of Visha, Visha Data lakshana, Visha peeta lakshana, Signs and symptoms of Visha afflicted organs and personal effects. (Poisoning with anjana, lepa paduka, abharana etc. - contact poisons).
04. Contamination of air, water, soil etc. (Visha mishrita – Vayu, Jala, Desha, Kala and their management), their contemporary significance. Samuhika vishaprayoga-Effects of chemical and Nuclear warfare
05. Signs and symptoms of poisons of plant kingdom and their management. Visha and Upavisha. Arka, Snuhi, Langali, Karaveera, Gunja, Ahiphena, Dhatura, Bhallataka, Vatsanabha, Kupeelu, Jayapala, Bhang, Tobacco, Parthenium historiferous, Chitraka Eranda, digitalis and cerebra odollum. (Signs and symptoms, Fatal Dose, Fatal period, Treatment, post mortem appearances and Medico legal importance).
06. Gara visha, Dooshi visha and, Viruddhahara– their concepts, classification, management and contemporary significance. Essentials of Food poisoning.
07. Study of chaturvimshatyupakrama of Caraka.
08. **Jangama Visha** (Animal poisoning and zoonotic diseases) – Detailed study of sarpa, keeta, lootha, vrischika, Mooshika, Alarka – Visha; Lakshana, Bheda, Chikitsa and their Sadhyasadyata. (contemporary and classical views),(Signs and symptoms, classification, management, prognosis and medico legal importance) Visha Sankata, Shanka Visha
- 09 **Acids and Alkalis** – Fatal Dose, Fatal period, signs and symptoms, cause of death, treatment, medico legal importance and postmortem appearance of – Sulphuric acid,

Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carbolic acid, Formic acid and alkalis in general, treatment and safety measures.

10 **Asphyxiants** – Carbon monoxide, Carbon dioxide, Hydrogen sulphide;

**Stimulants** – Antihistamines, Cocaine

**Hallucinogens** – LSD

**Sedatives and Hypnotics** – Barbiturates

**Petroleum** – Kerosene Poisoning

**Organo phosphorus compounds**

Aluminum phosphate, Zinc phosphide

11 Definition of Toxicology, classification of poisons, their actions and routes of administration, absorption, excretion, metabolism, diagnosis and general principles of treatment, duties of a medical practitioner in case of suspected poisoning.

12 Metallic and Nonmetallic poisoning

General characters, Signs and symptoms, Fatal dose, fatal period, Treatment, Medico Legal Importance and Postmortem Appearance of

1. Nonmetallic poisons – Phosphorous, iodine
2. Metallic poisoning – Arsenic, Mercury, Lead, Copper, Zinc, Tin and Radiation metals.

13 Madya Visha and Madatyaya; Alcohol poisoning (Ethanol and Methanol)

14 Laws related to poisons - Poisons act 1919, Dangerous Drug act 1930, Drugs and cosmetic act 1940, Narcotic drugs and Psychotropic substances Act 1985, Pharmacy Act 1948, Criminal poisoning.

**Part B**

**50 Marks**

**VYAVAHARAYURVED EVUM VIDHIVAIDYAK**

**(FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)**

- 01 Introduction, Definition and concise history of Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (vidhivaidyaka). Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.
- 02 Personal identity and its medico legal aspects, forensic odontology, forensic serology and DNA profiling.
- 03 Death and its Medico Legal Aspects.
- 04 Medico legal autopsy and exhumation.



- 05 Injuries and wounds and its medico legal aspects.
- 06 Dowry deaths, their medico legal importance and laws in relation to it.
- 07 Asphyxial deaths and its Medico Legal importance.
- 08 Death due to heat, cold and starvation.
- 09 Virginitv, Pregnancy, Delivery; Impotence & sterility, Artificial Insemination, Legitimacy, Abortion, Infanticide battered baby and their Medico Legal importance. Medical Termination of Pregnancy Act.
- 10 Sexual offences, Sexual perversions and their medico legal aspects.
- 11 Forensic psychiatry.
- 12 Ethics as in classics. Types of physicians and methods of identification , Pranabhisara and Rogabhisara Physicians, Qualities of physician, Responsibilities of Physicians, Chaturvidha Vaidyavrutti, Duties of physician to his patient, Vaidya sadvrittam, Apoojya Vaidya, Accepting fees, Relationship with females.
- 13 Laws in relation to medical practitioners: Indian Medicine Central Council Act, Code of Medical Ethics, General Principles, duties of a physician towards his patient, towards the profession at large, professional services of physicians to each other, duties of a physician in consultation, duties of a physician in cases of interference, duties of a physician to the public, Physician's responsibility in criminal matters, duties of a patient, professional negligence, civil negligence, criminal negligence, medico legal aspects of Acquired Immune Deficiency Syndrome, rights of an unborn child, transplantation of human organs Bill 1994, Pre Natal Diagnostic Testing Act, donation of cornea, malingering of feigned diseases, international code of medical ethics for doctors.

**PRACTICAL**

**50 Hours**

- |  |    |
|--|----|
| 1. Post Mortem examination                 | 10 |
| 2. Evidence in the court                   | 10 |
| 3. Demonstrations in the Toxicology museum | 10 |
| 4. Clinical postings                       | 20 |

**PRACTICAL**

**100 Marks**

- |   |    |
|---|----|
| 1. Daily activities (Presented as Clinical Record/ Herbarium) | 10 |
| 2. Post Mortem examination - Record                           | 10 |
| 3. Compilation Work   | 10 |
| 4. Identification (spotting) and clinical case presentation   | 40 |
| 5. Viva – voce  | 30 |

**Reference Books**

- 1 Topics related to Agada Tantra from Caraka Samhita, Sushruta Samhitha, Ashtanga Hridaya, Ashtanga Samgraha, kasyapasamhitha, yogarethnakara, Bhavaprakasha and Madhavanidana.
- 2 Vidhivaidyaka (Vyavaharayurveda 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 Agadatantra - Edited by Dr Huparikar
- 7 Agad tantra - Dr Shekher Namboodri
- 8 Agadatantra ki patyakram - Edited By Dr Huparikar
- 9 Vishachikitsa (Ayurveda Toxicology English Translation) - Vaidy Balakrishnan Nair, Kerala
- 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 Vyavaharayurveda - Dr.Ayodhya Prasad Achal
- 15 Relevant topics from Manu Smriti

### 3.1. CHARAK SAMHITA

(Uttarardha: Chikitsa – Kalpa - Siddhi Sthan)

Theory One Paper – 100 Marks

Practical/Viva voice – 50 Marks

Lectures - 100

The marks of theory examination are distributed as follows

SI.No	Name of the Sthan	Marks allotted
1.	Chikitsa sthan	60
2.	Kalpa sthan	15
3.	Siddhi sthan	25

The marks of practical examination are distributed as follows

1. Chart preparation / Compilation
  2. Case sheet writing regarding treatment
  3. Prescription writing by examining the patients in OPD & IPD in hospital.
  4. Oral presentation (Presentation of 10 Shlokas, orally and in writing related with samprapti and chikitsa sutra)
  5. Viva - Voice
  6. Internal Assessment
- 40 Marks
- 10 Marks

#### **Parameters for internal Assessment**

Memorizing and describing two shlokas weekly, discipline, oral and written presentation and other activities.

Other activities include following instructions:

- (1) Memorizing two shlokas weekly

(The shlokas should be memorized along with Padvibhaga, Anvaya, Bhavartha and practical applicability. log book of memorized shlokas, corrected and signed by the class teacher is to be submitted at time of examination.)

(2) Passage writing

(3) Speech related to Charaka

#### Mandatory Recommendations for implementation

1. A separate daily OPD for Samhita department (Basic principle) in the hospital should be established for the application of specific principles of treatments mentioned in Charaka Samhita.
2. At least 100 patients should be examined and treated for various diseases according to principles of treatment of Acharya Charaka for that specific disease.
3. Minimum ten beds for patients should be arranged in the IPD of the hospital.

#### **Text Books Recommended**

1. Charaka Samhita -Chakrapani Teeka (Sanskrit Commentary)

2. Charaka Samhita (Hindi Commentary)

Vd. Jayadev Vidyalankar or Vd. Atridev Vidyalankar or

Prof. Gorakh nath Chaturvedi & Kashinath Shastri or

Dr. Brahmanand Tripathy or

Dr. Ravidutta Tripathy

3. Charaka Samhita (English Commentary):

Dr. Ram Karan Sharma & Vd. Bhagwan Dash or Acharya Priyavrata Sharma.

### **3.2. KAYACHIKITSA**

**Theory Three Papers – 100 Marks Each**

**Practical/Viva voice – 150 Marks**

**Lectures - 300**

**Hospital Training - 9 Months**

**Note:** Common to all papers of Kayachikitsa – Wherever the phrase “Management of diseases” occurs in the syllabus, it invariably should include different classical preparations which should include relevant Vati, Gutika, Bhasmas/Pishti, Kuti Pakwa Rasayana, Ghrita, Taila, Avaleh ,Churnas, Kashayas and Lepas along with appropriate dose, time of administration, duration of treatment required, and relevant Pathyapathya and post therapeutic advices.

**Paper I 100 Marks**

**Part A 50 Marks**

1. Derivation of the terms 'Kaya', 'Chikitsa', and their definitions and synonyms. Definition of 'Kayachikitsa'. Definition of 'Bheshaja'. Types and detailed description of Bhesaja and Chikitsa. Knowledge about Chikitsa Chatushpada.
2. Importance of Kriyakala according to stages of Dosha and their management.
3. Chikitsa sutra and Management of vriddhi (increased) and kshaya (decreased) of Dosha, Dhatu, and Mala. Ojo Vyapat (kshaya, visramsas and vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states. Chikitsasutra and Management of 'Samanyaja and Nanatmaja' diseases. Rogaanutpattikara chikitsa, Roga Prashamana Chikitsa (doshapratyanika, vyadhipratyanika, ubhayapratyanika). Doshopakrama, Chikitsa sutra and Management of Sthanantara doshas (Ashayapakarsha, Anuloma/Pratiloma gati of doshas, Vimarga gamana of Doshas). Knowledge of Lina dosha & its management. Diagnosis, Chikitsa sutra and Management of Avarana and of dhatu pradoshaja diseases. Importance of Dosha, Dushya, Bala, Kala, Agni, Prakriti, Vaya, Sattva Satmya, Desha, Ahara and stage of diseases in treating diseases.
4. Detailed description of Dvidhopakrama (Santarpana and Apatarpana) and Shadavidhopakrama (Rookshna, Snehana, Swedana, Sthambhana, Langhana, and Brihmana). Detailed description of Shodhana, Shamana and Nidana Parivarjana. Knowledge of Oushadha matra, sevna kala and Anupana. Definition and Knowledge of Pathya-Apathya with examples of diseases of various systems.

**Part B**

**50 Marks**

5. Detailed description of Chikitsa Sutra and Management of Jwara and its types.
6. Relevant Ayurvedic management according to Samprapti ghataka 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), and Romantika (Measles).
7. 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.
8. Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine- Yoga, Naturopathy, Unani , Siddha Homeopathy , Acupuncture, Acupressure , Modern medicine, ,Physiotherapy and Rehabilitation.

## **PAPER II**

**100 Marks**

### **Part A**

**50 Marks**

1. Chikitsa sutra and Management of the diseases of Pranavaha Srotas such as - Kasa, Shwasa, Hikka, Rajayakshma, Urakshata, Parshwashoola, Bronchitis, Bronchiectasis, Emphysema and COPDs.
2. Chikitsa sutra and Management of the diseases of Udaka vaha Srotas such as- Shotha, Jalodara, Trishna and Acid - Base & Electrolyte Imbalance.
3. Chikitsa sutra and Management of the diseases of Annavaha Srotas such as - Agnimandya, Aruchi, Ajirna, Anaha, Atopa, Adhmana, Alasaka, Vilambika, Visuchika, Chardi, Grahani,Amlapitta, Gulma, Shoola, Bhasmaka and Acid peptic disorders .
4. Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as - Pandu, Amavata, Madatyaya, Hridroga, Hridashoola, Hypotension, Hypertension.
5. Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as - Raktapitta, Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plihadosha, Yakriddosha,Hepatitis,Cirrhosis of Liver, Leukaemia, Kushta kilasa, Visarpa, Sheetapitta,Udarada,Kotha and medically manageable Kshudra Rogas .

### **Part B**

**50 Marks**

6. Chikitsa sutra and Management of Mamsavaha Srotas and Medovaha Srotas such as-Gandamala , Mamsashosha, Arbuda, Apachi, Prameha, Sthuolya, karshya, Diabetes Mellitus and Dyslipidaemias.
7. Chikitsa sutra and Management of 'Asthi and Majjavaha Srotas such as Osteomyelitis (Asthimajja Vidradhi), Osteoporosis, (Asthisoushriya), Sandhigata Vata (Osteo Arthritis).
8. Chikitsa sutra and Management of diseases of Mutravaha Srotas such as - Mutrakrichchra, Mutraghata, Ashmari , Cystitis,Nephritis,Nephrotic Syndrome,Renal Failure.
9. Chikitsa sutra and Management of diseases of Purishavaha Srotas such as - Atisara, Pravahika, Arsha and Purishja Krimi.
10. Chikitsa sutra and Management of sexually transmitted diseases, such as - Phiranga (Syphilis), Puyameha (Gonorrhoea), Upadamsha (Chanchroid).

**PAPER III**

**100 Marks**

**Part A**

**50 Marks**

1. Principles of treatment and management of Vata Vyadhis such as - Pakshavadha, Ekangavata, Sarvangavata, Ardita, Ababhuka, Kati Graha, Manyastambha Gridhrasi, Vishwachi, Khalli, Khanja, Pangu, Padaharsha, Padadaha Vatakantaka,Kroshtukashirsha and Types of Udavarta. Parkinsonism (Kampavata), Gatavata (Dhatu gata and Ashayagata), Avarana vata.
2. Nidana and Chikitsa of Urusthambha, Gullian Barrie syndrome, Muscular Dystrophy, Myasthenia Gravis, Motor Neuron Diseases and Neuralgias.
3. Diseases of different Endocrine Glands -such as Thyroid, Parathyroid, Pitutary and Adrenal Glands and their Ayurvedic management.
4. 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.
5. Treatment of Motion sickness. General introduction, types and Management of diseases caused by Vyadhi Kshamatwa hinata (Immuno deficiency disorders and Auto Immune disorders).

**Part B**

**50 Marks**

6. Derivation of the term 'Manas', its sthan (place), Guna (qualities) and Karma (functions). Introduction and Definition of Kama, Krodha, Lobha, Moha, Mada, Matsarya, Shoka, Bhaya, Vishada, Dainya, Harsha and Prajnaparadha.
7. Nidana and Chikitsa of the following disorders - Unmada-Asmara-Atattvabhinivesha- Introduction and management of Anxiety disorders, Stress induced disorders, Depression, somatoform and Mood disorders, Psychosexual Disorders. Importance of Daivayapashraya, Sattwavajaya, Adravyabhuta Chikitsa. Medhya Rasayana in the management of Manasa Roga. Introduction to Bhuta Vidya with special reference to diagnosis and management of disorders in the field.
8. Management of Vardhakyajanita vikaras, Indriyapradoshaja vikaras, Vibhandha, Kandu, Alziemers Disease, Sleep disorders, General debility.
9. Etiopathogenesis and modern management of following diseases – Anthrax, Chicken pox, Chikun Guniya, Dengue Fever, Encephalitis, Influenza, Leptospirosis, Measles, Meningitis, Mumps, Plague, Pleurisy, Pneumonia, Small pox, Swineflu, Tetanus, Typhoid, Viral Fever, Yellow fever.
10. Nutritional deficiency disorders, Acid - Base & Electrolyte Imbalance and related clinical conditions.
11. Description and management of following Emergency Conditions- Acute Haemorrhages , Hypertensive Emergencies, Acute abdominal pain ( Renal colic, Biliary colic, Gastritis,Pancreatitis, Peritonitis and Appendicitis), Acute Abdomen, Anuria/ Oliguria, Congestive Heart Failure ,Myocardial Infarction/Angina, Shock, Syncope, Convulsions , Hyperpyrexia, Hyperglycaemia, Hypoglycaemia, Status Asthmaticus, Acute Respiratory distress Syndrome , Drowning and Electric shock.
12. Derivation, definition and synonyms of Rasayana, historical importance of Rasayana and its benefits. Indications of Rasayana therapy. Classification of Rasayana. Kutipravesika and Vatatapika Rasayana. Indications of Vatatapika Rasayana. Knowledge of Kayakalpa, Achara Rasayana. Procedures of Kutipravesika kalpa, Poorvakarma and specific schedules to be followed after Kutipravesha, benefits of kutipravesika Rasayana, duration of application, Rasayana yoga and directions for their use. Determination of dose of Rasayana according to age. Rules and regulation after Rasayana therapy. Indications of Rasayana therapy. Importance of Vitamins in Rasayana therapy. Vitamin deficiency diseases and their treatment.
13. Vajikarana - Derivation, definition, synonyms, necessity, benefits, historical importance and indications of Vajikarana. Appreciation of females. Criticism of childless men. Symptoms of good Shūkra (Semen). Vajikarna Dravya and Aushadhi.



14. Properties, doses, methods of administration, ingredients and methods of formation of Rasayana & Vajikarana formulation.
15. Classification and importance of Vajikarana Dravyas.

### **PRACTICAL**

	<b>Hospital Training</b>	-	<b>9 months</b>
1.	General patient training	-	5 months
2.	Department of Manas roga	-	15 days
3.	Department of Communicable diseases	-	15 days
4.	Department of X-Ray and Laboratory	-	1 month
5.	Emergency Services in Kayachikitsa	-	2 months

### **Distribution of Practical Marks**

**150 Marks**

- |                               |            |
|-------------------------------|------------|
| 1. Daily routine work         | - 15 marks |
| 2. Compilation/Project Report | - 20 marks |
| 3. Viva-voice                 | - 70 marks |
| 4. Patient examination        | - 45 marks |

### **Reference Books**

- |                          |  |
|--------------------------|--|
| 1. Bhaishajya Ratnawali  | - Kaviraj Ambikadutta Shastri                                |
| 2. Yogaratnakar          | - Pt. Brahma Shankar Mishra & Dr. Indradev Tripathi          |
| 3. Yogratnakar (English) | - Dr. Nirmal Saxsena   |
| 4. Chakradutta           | - Dr. Jagdishwar Prasad Tripathi                             |
| 5. Chakradutta (English) | - Acharya Priyavrat Sharma                                   |
| 6. Chikitsadarsh         | - Vd. Rajeshwar Dutta Shastri                                |
| 7. Chikitsa Pradeep      | - Vd. Bhaskar Viswasnath Gokhle                              |
| 8. Chikitsa Kalika       | - By Tissatacharya, Hindi and English translation by Acharya |

- Priyavrat Sharma
9. Kayachikitsa - Dr. Ganga Sahay Pandey
  10. Kayachikitsa - Acharya Ramraksh Pathak
  11. Kayachikitsa - Prof. Banwari Lal Gaur
  12. Kayachikitsa - Prof. Shiv Charan Dhyani
  13. Kayachikitsa - Vd. Tara Shankar Mishra
  14. Rasayogasagar - Vd. Hariprapanna Sharma
  15. Sidha Bheshaj Manimala - Ram Krishna Bhatt
  16. Sidhyoga - Vrinda Madhav
  17. Madhavchikitsa - Madhavkar
  18. Siddha Prayoga Latika - Vd. Gulraj Sharma Mishra
  19. Vishikhanupravesch vijnana - Vd. Gulraj Sharma Mishra
  20. Kaya chikitsa samanvaya - Dr. Anant Ram Sharma
  21. Siddha Vaidyakam - V.V. Natraj Sharstri
  22. Tamilo ka Siddha Sampradaya - Prof. Ram Niwas Sharma
  23. Sahasrayogam - Prof. Ram Niwas Sharma & Dr.  
(Keraliya Ayurveda Chikitsa) Surendra Sharma
  24. Vaidya Chintamani - Ballabhacharya
  25. Vaidya Jeevan - Lolimbaraja
  26. Chamatkar Chintamani - Lolimbaraja
  27. Pathya-Apathya-Vinirnaya - Vishwanath Kaviraj
  28. Ayurvediya Pathyapathya - Dr. Badri Prasad Shah  
Vijnana
  29. Yog Chandrika - Laxman Pandit, Dr. Asha  
Kumari, Prof. Premvati Tiwari
  30. Atyayik Vyadhi Nidana Chikitsa - Dr. Bramhadutt Sharma
  31. Atyayik Vyadhi Nidana evam - Dr. Anant Ram Sharma, Dr.  
Pratikara Krishna Chandra Verma & Dr.  
Sanjay Sharma
  32. Ayurvediya Panchkarma - Acharya Mukandi Lal Drivedi  
Chikitsa
  33. Ayurvediya Panchkarma Vijana - Dr. Haridas Shridhar Kasture
  34. Keraliya Panchakarma - Dr. T.L. Devraj
  35. Ayurvedic Remedies for - Dr. T.L. Devraj  
common disease
  36. Panchakarma Chikitsa Vijnana - Dr. R.A. Prasad &  
Dr. G.K. Gurjar
  37. Panchakarma Chikitsa - Prof. Divakar Ojha
  38. Holistic Principle of Ayurvedic - Prof. Ram Harsh Singh  
Medicine
  39. Kayachikitsa - Prof. Ram Harsh Singh
  40. Madak Dravyajanya roga evam - Dr. Priya Kumar Chobe

- unki chikitsa
41. Vasava Rajiyam - Vd. Goverdhan Sharma Changani
  42. Manas Roga Vijnana - Dr. Balkrishna Amar Ji Pathak
  43. Ayurvediya Manas Vijnana - Prof. Ram Harsh Singh
  44. Adhunik Manas Rog Vijnana - Dr. Rajendra Prasad Bhatnagar
  45. Psychiatry in Brithatrayi - Dr. Kamta Prasad Shukla
  46. Psychopathology in Indian Medicine - Dr. Satyapal Gupt
  47. Yoga against Spinal pain - Pt. Shiv Sharma
  48. Hathayoga Pradeepika -
  49. Hikmat Prakash -
  50. Prakritika Chikitsa - Sh. Vithal Das Modi
  51. Rasayan and Vajikarana - Vd. Mohan Lal Pathak
  52. Rasayan and Vajikarana - Vd. Upadhyaya (Jaipur)
  53. Science of Longivity by Ayurveda - Prof. Subhash Ranade
  54. Adhunik Chikitsa Shastra - Dharmdatta Vaidya
  55. Chikitsa Tatva Deepika - Acharya Mahaveer Prasad Pandey
  56. Useful parts of Charaka, Sushrut and Vagbhatta

### **3.3 SHALAKYA TANTRA**

**Theory Two Papers – 100 Marks Each**

**Practical/Viva voice – 100 Marks**

**Lectures - 210**

**Hospital Training –4 Months**

**Paper I**

**100 Marks**

#### **I. INTRODUCTION**

- Shalakyatantra nirukthi, Parichayam, Ithihasam
- Netra rachana shareeram (Mandala, Patala, Sandhi, Drushti Vichara) and Netra & chakshu Kriya shareera ancient and modern view. Netrapareeksha, Netrapareekshanopayogi Yantra Shastradi jnanam
- Netraroganam – Samanya Hethu (Nija and agantuja), Poorvaroopam, Samprapti, Roopa and chikitsa.
- Classification of netraroga as per Ayurvedic and Modern view point and its importance.

#### **II. NETRA SAMANYA AND VISHISHTA CHIKITSA - KRIYA KALPA**

- Seka, Aschyotana, Pindi, Vidalaka Tarpana, Putapaka, Anjana and importance of Panchkarma in shalaky chikitsa.
- Basic fundamentals of shalaky shalya chikitsa e.g. poorva-pradhana-pachhchatat karma, Ama-pachyaman-pakva vrana shotha, Vranitopasana, Pranashtashlya, & Vranbhandhana. Methods and concepts of sterilization, asepsis and antisepsis as per ancient and modern view point.
- Knowledge about the eight surgical procedures i.e. Lekhana, Chedana, Bhedana, Vyadhana etc. shalya karma;
- Parasurgical procedures - Agni, kshara and Raktamokshana with special reference to netra chikitsa.
- Essential diagnostic and therapeutic modern pharmacological agents required in shalaky chikitsa

#### **III. SANDHIGATA ROGAS**

Etiology, pathology, classification, clinical features and management of diseases of sandhigata rogas (junctional areas of the eye) as detailed in literature of Ayurveda.

Acute and chronic Dacryocystitis, Epiphora, Blepharitis, Lacrimal cyst – aetiology, pathology, signs & symptoms and management. Knowledge about Dacryocystectomy and dacryocystorhinostomy

#### IV. VARTMAGATHA ROGAS

- Etiology, pathology, classification, clinical features and management of diseases of Vartma (lids disorders) of the eye as detailed in literature of Ayurveda.

Hordeolum externum, Chalazion, Ptosis, Trachoma, Trichiasis, Entropion, Ectropion, Lagophthalmus, Blepharospasm and lid growths – Etiology, signs and symptoms and management.

#### V. SUKLAGATAROGAM

Etiology, pathology, classification, clinical features and management of diseases of shuklagata mandala (Sclera and Conjunctiva) of the eye as detailed in literature of Ayurveda.

- Conjunctival degenerative disorders like pterygium, Scleritis, Episcleritis Subconjunctival hemorrhage, Xerosis their etiology, signs & symptoms and management.

#### VI. KRISHNAGATA ROGAS

- Etiology, pathology, classification, clinical features and management of diseases of krishnagata mandala (cornea and iris) as detailed in literature of Ayurveda.
- Ulcerative and Non Ulcerative Keratitis, Corneal opacity, Staphyloma, Hypophyon Ulcer & Uveitis, their aetiology, pathology, symptoms and management.

#### VII. SARVAGATA ROGAS

- Etiology, pathology, classification, clinical features and management of sarvagata rogas (diseases affecting all parts of the eye) as detailed in literature of Ayurveda.
- Abhishyanda as a cause of all eye diseases.  
Conjunctivitis, Glaucoma, Dry eye Syndrome, Panophthalmitis, etiology, pathology, sign & symptoms and management.
- Aupasargika (contagious) Netra Roga:- Etiology, sign and symptoms, diagnosis and treatment.

#### VII. DRISHTIGATA ROGA

- Etiology, pathology, classification, clinical features and
- management of diseases of drishtigata rogas (vision / visual apparatus) as detailed in literature of Ayurveda along with exogenous diseases like sanimittaja and animittaja linga nasha.

Refractive errors, Strabismus, Cataract, Retinitis pigmentosa, Amblyopia, Central serous retinopathy, Eale's disease, Hypertensive & Diabetic Retinopathies, Age related Macular degeneration, Optic Neuritis and Optic atrophy, – Etiology, pathology, signs and symptoms and management.

Nayanabhighata- ocular trauma as per ancient and modern view point.

#### VIII. Miscellaneous Diseases

- Xerophthalmia and other malnutritional eye disorders.
- Introduction to Eye bank, Eye donation, Corneal Transplantation.
- Netraswasthyarakshanopaya- Preventive ophthalmology and community ophthalmology.

### **PAPER II**

**100 Marks**

#### SAMANYA CHIKITSA

- Instruments and technology used in the diagnosis and treatment of diseases of Shira, Ear, Nose & Oral cavity
- Study of therapeutic procedures like sveda, kavala, gandusa, dhuma, rakta mokshana, murdhni taila, nasya, pratisarana, karna purana, mukha lepa used in the treatment of Shira, Ear, Nose, Dental, Periodontal, Oral cavity and Throat diseases.

#### SHIRO ROGA

- Importance and Superiority of Shira.
- Generalised and Specific Etiology, pathology, classification, clinical features and management of diseases of shira and kapala ( intracranial and extracranial) as detailed in literature of Ayurveda.
- Headache, its differential diagnosis and treatment along with diseases of Scalp.

#### KARNA ROGA

- Anatomical and Physiological considerations of Karna (Ear) & Shravanendrya in Ancient and Modern Medical literature.Examination of Ear.

- Generalised and Specific Etiology, pathology, classification, clinical features and management of diseases of Karna as detailed in literature of Ayurveda.
- Karna sandhana(Auroplasty) fundamentals and method and Vaikritpaham.
- Otalgia, ASOM, CSOM, Deafness, Otomycosis, Tinnitus, Meniere's disease, Foreign body in ear and Sound pollution, Etiology, pathology, clinical features and management. Tympanoplasty.

#### NASA ROGA

- Anatomical and Physiological considerations of Nasa (Nose) & Ghranendriya in Ancient and Modern Medical literature. Examination of Nose.
- Generalised and specific Etiology, pathology, classification, clinical features and management of diseases of Nasa (Nose) as detailed in literature of Ayurveda.
- Nasa sandhana (Fundamentals and methods of Rhinoplasty).
- Rhinitis , Epistaxis, Nasal polyp, DNS, Nasal trauma, foreign body in the nose - Etiology, pathology, clinical features and management

#### MUKHA ROGA (DISEASES OF ORAL CAVITY)

- Mukha roga- ayatana- Anatomical sites of diseases of Oral cavity
- Anatomical and Physiological considerations of Mukh (Oral cavity) in Ancient and Modern Medical literature.Examination of Oral cavity.
- Mukh and Danta Swasthya ancient and modern concepts.
- Generalised etiology Pathology Clinical picture and Treatment of Mukharoga ( Diseases of oral cavity)

#### OSHTHA ROGA (DISEASES OF LIPS)

- Anatomical and Physiological considerations of Oshtha (Lips) in Ancient and Modern Medical literature.Examination of Lips.
- Etiology, pathology, classification, clinical features and management of diseases of Oshtha (Lips) as detailed in literature of Ayurveda.
- Oshtha sandhana- Labioplasty, Hare lip, Retention cyst, Cracked lips.

#### DANTA ROGA (DENTAL DISEASES)

- Anatomical and Physiological considerations of Danta (Tooth) in Ancient and Modern Medical literature. Examination of Teeth.
- Etiology, pathology, classification, clinical features and management of diseases of Danta (Teeth) as detailed in literature of Ayurveda.

- Danta utpatana- Tooth extraction using jalandhara bandha yoga as well as by using instruments. Danta poorana ancient and modern methods. Danta rakshana.
- Dental carries, dental tartar, causes and treatment.

#### DANTA MULA GATA ROGA (DISEASES OF PERIODONTIA)

- Anatomical and Physiological considerations of Dantamula (Periodontia) in Ancient and Modern Medical literature. Examination of Dantamula- Periodontum.
- Etiology, pathology, classification, clinical features and management of diseases of Dantamula (Periodontia) as detailed in literature of Ayurveda.
- Gingivitis, Apical abscess, Periodontitis (Pyorrhoea), Periodontal abscess and Mandibular sinus

#### JIHWA GATA ROGA (DISEASES OF TONGUE)

- Anatomical and Physiological considerations of Jihva (Tongue) in Ancient and Modern Medical literature. Examination of Tongue.
- Etiology, pathology, classification, clinical features and management of diseases of Jihwa (Tongue) as detailed in literature of Ayurveda.
- Glossitis, Tongue tie, Ranula, Benign and malignant tumors of tongue

#### TALU ROGA (DISEASES OF PALATE)

- Anatomical and Physiological considerations of Talu (Palate) in Ancient and Modern Medical literature. Examination of Palate.
- Etiology, pathology, classification, clinical features and management of diseases of Talu (Palate) as detailed in literature of Ayurveda.
- Palatitis, Cleft palate, Uvulitis and Tumors of the palate.

#### KANTHA AND GALA GATA ROGA (DISEASES OF PHARYNX & LARYNX)

- Anatomical and Physiological considerations of Kantha and Gala (Pharynx and Larynx) in Ancient and Modern Medical literature. Examination of pharynx and Larynx.
- Etiology, pathology, classification, clinical features and management of diseases of Kantha and Gala (Pharynx and Larynx) along with swara bheda - (altered voice quality) as detailed in literature of Ayurveda.
- Pharyngitis, Laryngitis, Tonsillitis, Carcinoma of larynx pharynx, Diphtheria, Adenoiditis, foreign body in the throat- etiology, pathology and treatment of these diseases.



SARVASARA MUKHA ROGA (generalised mucosal affections of the oral cavity)

Etiology, pathology, classification, clinical features and management of diseases of Generalised mucosa of the oral cavity as detailed in literature of Ayurveda.  
Stomatitis, HIV and Herpes infection of oral cavity

#### MISCELLANEOUS DISEASES

Anatomy and physiology of salivary, thyroid and para thyroid glands , their diseases and treatment.

Dysphagia, Cervical lymphadenopathy, Manyastambha (Sternocleidomastoiditis).

### **SHALAKYA PRACTICALS**

Identification, uses, demonstration of surgical instruments and method of sterilization.

Training of case taking, bedside clinics and case presentation.

Training in para- surgical procedures-

Kshara karma                      Agnikarma                      Raktamokshana

4) Training of ward procedures    Application of bandages, wound management,

IV, Retrobulbar, Peribulbar, Facial, IM, Subcutaneous and Intradermal injections.

5) Training of minor procedures

Incision and drainage      Excision                      Sutures

6) Observation of surgical procedures

Pterygium                      Cataract                      Cyst removal

#### **PRACTICAL TRAINING – 4 Months**

OPD & IPD- 1½ Months

OPERATION THEATRE- 1½ Months

KRIYAKALPA- 1 Month

#### **Reference Books**

1. Shalaky Tantra                      - Dr. Rama Nath Dwivedi
2. Shalaky Vigyan                      - Dr. Ravindra Chandra Choudhary
3. Abhinava Netra Chikitsa                      - Acharya Vishva Nath Dwivedi

4. Netra Chikitsa Vigyan - Dr. Ravindra Chandra Choudhary
5. Netra Roga Chikitsa - Dr. Munje
6. Netra Roga Vigyan - Dr. Hans Raj
7. Parson's Diseases of Eye -
8. Diseases of ENT by Log and Turner -
9. Shalakya Tantra - Shiv Nath Khanna
10. Useful portions of Charak, Sushrut, Vagbhatta etc.

### **3.4 SHALYA**

**Theory Two Papers – 100 Marks Each**

**Practical- one – 100 Marks**

**Theory Lectures - 210**

**Hospital Training - 6 Months**

**Paper I 100 Marks**

**Part A 50 Marks**

1. Introduction to Shalya Tantra - Historical background and progress made.
2. Definition of Shalya, Shalya Tantra and its importance.
3. Description of Yantras, Shastras, Anushastras – Definition, number, types, uses, Doshas, Gunas, Karmas. Relevant modern instruments.
4. Nirjantukarana – Sterilization – Methods, Types and O.T. fumigation
5. Sangyahaarana- Anaesthesia - Definition, Types, anaesthetic agents, indications, contraindications, procedures, complications and management.
6. Trividha Karma – Poorva Karma, Pradhana Karma and Paschat Karma.
7. Ashtavidha Shastra Karma - Operative procedures
8. Yogya Vidhi - Experimental Surgery.
9. Marma – Nirukti, types, description and importance.
10. Kshara and Kshara Karma – Nirukti, Pradhanyata, Guna, Dosha, Karma, Prakara, Nirmana Vidhi, Yogya, Ayogya, Vidhi and Upadrava Chikitsa. Knowledge of Kshara Varti, Taila and Pichu.
11. Kshara Sutra – Preparation, indications, contraindications and method of application, complications and their management.
12. Agnikarma - Mahatva, Upakrama, Vyadhis, Vidhi, Akrti bheda, Yogya, Ayogya and Upadrava Chikitsa.
13. Raktamokshana – Mahatva, Prakara-Siravyadha, Pracchanna, Shringa, Alabu, Jaloukavacharana (Jalouka parichaya) – Yogya, Ayogya, Vidhi and Upadrava Chikitsa.
14. Bandha Vidhi – Prayojana, Dravya, Yogya, Ayogya, Prakara, Abandya and Upadrava. Pichu, Plota, Kavalika, Vikeshika.
15. Sandhana Karma - Karna, Nasa, Oshtha Sandhana Vidhi. Principles and procedures of reconstructive and cosmetic surgery.
16. Pranasta Shalya and Nirharana Upayas.
17. Fluid, electrolyte and Acid Base Balance, Nutrition –
  - Introduction to physiology of fluids and electrolytes

- Dehydration and over hydration,
  - Specific electrolyte losses and symptomatology and management of Acidosis, Alkalosis and Acid balance.
  - Electrolyte changes in specific diseases like pyloric stenosis, intestinal obstruction and anuria.
  - Various replacement fluids in surgery, mode of administration and complications.
  - Nutrition – pre-operative, post-operative and intravenous alimentation.
18. Rakata Mahatwa, Raktasrava- Prakara and laksahana. Raktastambhana - Haemostasis.
19. Blood Transfusion –Blood groups, components, compatibility, indications, contraindications and complications with management.
20. Knowledge about Vranitagara and Rakshakarma.
21. Knowledge of antibiotics, analgesics, anti-inflammatory and emergency drugs in surgical practice.
22. Knowledge of diagnostic techniques – X-ray, Imaging techniques, Ultra Sonography, CAT Scan, MRI, Biopsy/ cytological study.

## Part B

50 Marks

23. Knowledge of Shat Kriya Kala in surgical practice.
24. Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa of the following disorders.
- a. Vranashotha - Inflammation
  - b. Vidhradi – Abscess
  - c. Pidika – Boils
  - d. Nadi Vrana - Sinus
  - e. Dagdha Vrana - Burns and scalds
  - f. Marmagata - Shock
  - g. Kotha – Gangrene
  - h. Granthi- Cyst.
  - i. Arbuda – Tumour.
25. **Vrana** – Nirukti and Prakara
- a. **Nija Vrana** – Nidana, Samprapthi, Vrana Vasthu, Prakara, Lakshana, Vrana Pariksha – Sthan, Akrti, Srava, Gandha, Vedana. Vrana Avastha- Dustavrana, Shuddha Vrana, Ruhyamana Vrana, Samyak Roodha Vrana, Vyadhi Janya Vrana, Vrana Sadhya-asadhyatha and Vrana Upadrava.
  - b. Vrana Chikitsa – Pathya-apathya and Shashti Upakramas.
  - c. Ulcer types and their management
  - d. Wound healing stages and management.
  - e. Agantuja Vrana i) Sadhyo vrana - Traumatic wounds – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.

ii) Management of bites and strings

25. **Twak Vikara** Nidina, Samprapti, Lakshana and Chikitsa of Pramehapidaka- Diabetic carbuncle, Chippa -Paronychia, Kadara – Corn, Vrana Granthi – Keloid .
26. **Manya Vikara** – Nidina, Samprapti, Lakshana and Chikitsa of Galaganda - Goitre, Gandamala, Apachi –Lymphadenitis, Pashanagardhabha – Parotitis .
27. **Sira Vikara** - Venous disorders – Superficial and Deep venous thrombosis, haemangioma, varicose veins, Venous Ulcers and their management.
28. **Dhamani Vikara** - Arterial disorders – Nidina, Samprapti, Lakshana and Chikitsa of Aneurysm, Burger’s disease, Raynaud’s disease.
29. **Snayu Vikara** - Diseases of tendons and ligaments – Tendinitis, tenosynovitis, ganglion and their management.
30. Principles of Amputation.
31. Surgical practice in AIDS - HIV and hepatitis patients.

**Paper II**

**100 Marks**

**Part A**

**50 Marks**

1. **Asthi Bhagna** - Fracture: 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, carpals, metacarpals, phalanges, femur, patella, tibia, fibula, tarsals, metatarsals, vertebrae, ribs, mandible, pelvis and skull bones.
2. **Sandimoksha** - Dislocation: Prakara, Samanyalakshana, Upadrava and Chikitsa. Dislocation of following joints with clinical features, diagnosis, complications and management of shoulder, elbow, wrist, hip, knee, ankle, mandible, vertebrae and Phalanges.
3. **Diseases of bone** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of - Congenital anomalies Osteomyelitis, cysts, tumours and tuberculosis.
4. **Cranio-cerebral injuries** – mechanism, pathology, investigations, complications and management. Cerebral concussion, contusion and laceration. Acute extradural haematoma, Acute intracerebral and chronic subdural haematoma.
5. Brain tumors and their management.
6. **Diseases of breast** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of - Sthan Vidradhi- Breast Abscess, Sthan Arbuda-Breast tumors and their management.
7. **Diseases of chest** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of - Pleural abscess, pleural effusion, tumors, pleurisy and their management.
8. **Diseases of esophagus** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of - Congenital Anomalies, Oesophagitis, ulcer, varices, tumors and their management.

9. **Gulma Roga** – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.
10. **Diseases of stomach and duodenum** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of - Congenital pyloric stenosis, peptic ulcer, tumors and their management.
11. **Diseases of small intestine** Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of - Mickel's Diverticulitis, Tuberculosis, obstruction, perforation and their management.
12. **Diseases of large intestine** Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of – Tuberculosis, obstruction, perforation, tumor, appendicitis, crohn's disease, ulcerative colitis and their management.
13. **Udara rogas** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of - Jalodara - Ascitis, Chidrodara – Perforation and Peritonitis, Badhagudodara – Obstruction and their management.
14. **Diseases of rectum and anal canal** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of - Congenital disorders, Arshas -Haemorrhoids, Rectal polyp, Parikartika - Fissure in ano, Bhagandara – Fistula-in-ano, Guda Vidradi - Anorectal abscess, Gudabhramsa - Rectal prolapse, Sanniruddaguda - Anal stricture, Incontinance. Gudarbuda - tumor and their management.
15. Abdominal Injuries and management

## **Part B**

**50 Marks**

16. **Diseases of liver** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Abscess, cysts, tumors, obstructive jaundice and Yakritdalyodar –Hepatomegaly .
17. **Diseases of gall bladder** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Cholecystitis, cholelithiasis, tumors.
18. **Diseases of pancreas** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Pancreatitis, pseudo pancreatic cyst, tumors .
19. **Diseases of Spleen** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Pleehodara – Spleenomegaly, splenic rupture.
20. **Diseases of Kidney** - Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Congenital anomalies, polycystic kidney, perinephric abscess, tumor, renal calculus, renal injury .
21. **Diseases of Ureter** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Calculus, obstruction.

22. **Diseases of Urinary bladder** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Congenital anomalies, Ashmari -Vesicle calculus, Cystitis, tumor and Injury.
23. **Mutragata & Mutrakrichra**- Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management. Retention of urine.
24. **Diseases of Prostate** - Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Prostatitis, Prostatic abscess, Benign prostatic hypertrophy, carcinoma of prostate.
25. **Diseases of Urethra** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Urethritis, Stricture and rupture.
26. **Diseases of Penis** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Niruddhaprakasha -Phimosis, Parivartika -Paraphimosis, Avapatika - Prepuceal ulcer, Arbuda- tumor, Lingarsha -Venereal warts.
27. **Diseases of Scrotum and Testis** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Mutravridhhi - Hydrocele, Vrushana shotha-epididimo-orchits, Vrushana granthi- epididimal cyst, Scrotal filaria, Shukrashmari -Seminal calculus, torsion of testis, ectopic testis, undescended testis and tumors .
28. **Vridhhi Roga** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management.
29. **AntraVridhhi** – Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and management of Hernia - Inguinal, femoral, epigastric, umbilical, incisional and rare forms of Hernias.

### **SHALYA – PRACTICALS (Clinical and Surgical training)**

1. Identification, uses, demonstration of surgical instruments and method of sterilization.
2. Training of case taking, bed side clinics and case presentation.
3. Demonstration and Practical training in Anesthesia.
4. **Training of following Parasurgical procedures**
  - a. Kshara Karma
  - b. Kshara Sutra
  - c. Agnikarma
  - d. Raktamokshana
5. **Training of following ward procedures**
  - a. Application of bandages and splints.
  - b. Catheterization
  - c. Wound management
  - d. Ryle's tube aspiration

e. Injections -Intramuscular / intravenous / subcutaneous / intradermal

**6. Training / Practice of following procedures**

- |                                     |                           |
|-------------------------------------|---------------------------|
| a. Incision and drainage of abscess | b. Excision               |
| c. Sutures                          | d. Circumcision           |
| e. Hydrocele                        | f. Hernial repair         |
| g. Haemorrhoidectomy                | h. Fistulectomy           |
| i. Fissurectomy                     | j. Exploratory Laparotomy |

8. Training of surgical emergencies and management.

**PRACTICAL TRAINING – 6 Months**

OPD / IPD - 4 Months

Operation theatre - 1 Month

Emergency casualty - 1 Month

**PRACTICAL MARKS DISTRIBUTION**

**100 Marks**

**Daily records 10 Marks**

**Instruments 20 Marks**

**Short case 10 Marks**

**Long case 20 Marks**

**Oral / viva voice 40 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 Vijyan (Part 1-2) - Dr. Surendra Kumar Sharma
8. Shalya Samanvaya (Part 1-2) - Vd. Anantaram Sharma
9. Shalya Pradeepika - Dr. Mukund Swaroop Verma
10. Sushruti -Dr. Ram Nath Dwivedi
11. Clinical Shalya Vigyan - Dr. Akhilanand Sharma
12. Bhagha Chikitsa - Dr. Prabhakar Janardhan Deshpande
13. Kshara sutra management in anorectal ailments - Dr. S.K. Sharma, Dr.K.R.Sharma and Dr. Kulwant Singh.
14. Anorectal diseases in Ayurveda - Dr.Sizoria & Dr.Praveen Kumar Chowdary.



15. Adhunikā Shalya Chikitsa Siddhanta – Dr. Katil Narshingham Udapa  
 16. Agnikarma Technology Inovation – Dr. P.D. Gupta  
 17. Shalya tantra Ke Sidhant – Dr. K.K. Takral  
 18. Recent advances in the mangement of Arshas / Haemorrhoids  
 -Dr. P. Hemantha Kumar
19. Arsha Evam Bhagander Men Sutravacharan – Vd. Kanak Prasad Vyas  
 20. Kshara Sutra – Dr. S.N. Pathak.  
 21. Surgical ethics of Ayurveda – Dr. S. Sankaran  
 22. Shalya Vigyan (Sachitra) - Anantram Sharma  
 23. Anushastra Karma – Dr. D.N. Pande  
 24. Concept of Vrana is Ayurveda – Dr. Lakshman Singh  
 25. Significance for Poorva Karma in Surgical Patient – Dr. Lakshman Singh  
 26. Sangyahan Prakash – Dr. D.N. Pande  
 27. Short practice of surgery - Bailey and love's  
 28. A concise text book of surgery – S. Das  
 29. A manual on clinical surgery – S. Das  
 30. A system of surgical diagnosis – Prof. Tribhuvan. N. Patel  
 31. A practical guide to operative surgery - S. Das  
 32. Drugs and equipment for anesthesia -Arun Pal  
 33. Manual of surgical instruments and procedures – M. M. Kapur  
 34. Ward procedures – Mansukh B. Patel and Yogesh P. Upadhyay  
 35. Primary Anesthesia – Maurice king  
 36. Synopsis of Anesthesia – Lee  
 37. Clinical Anatomy/ Surgical Anatomy – Snell  
 38. Surgical Instruments – V.G. Kale  
 39. Outline of Orthopedics – J.C. Adams  
 40. Outline of Fracture – J.C. Adam  
 41. Undergraduates' surgery – A.K. Nan  
 42. Text book of Surgery – Surgeons Association of India

### **3.5. PRASUTI TANTRA EVUM STRI ROGA**

**Theory Two Papers – 100 Marks Each**

**Practical- one – 100 Marks**

**Theory Lectures - 150**

**Hospital Training – 3 Months**

**Paper I Prasuti Tantra 100 Marks**

**Part A 50 Marks**

**Introduction and scope of Prasutitantra (obstetrics).**

## **Stri Sharir Vigyana**

Etymological origin of the word Stree, Vayobhedena stree sangnya. (Nomenclature of Stree according to age). Normal and abnormal conditions of Asthisandhi peshi Sahita stree shroni (Soft&Bony Pelvis) and its obstetrical importance, Shroni mapana (pelvic assesment) – Artavvaha and Stanyavaha strotamsi. Tryavarta yoni( Female internal and external genitalia).stree vishishta peshi marmani.

## **Rajo vigyana**

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

## **Garbha vignyana**

- A) Garbhasya paribhasha, Garbhadhanavidhi, Garbhavakranti, Garbha sambhava samagri( factors essential for conception) ,Garbhakara bhava, , Panchabhautika composition of garbha, Garbhalingotpatti, Garbhasya avayavotpatti, Masanumasika Vridhi of Garbha (Monthwise development of foetus), Garbha Varnotpatti (origin of complexion in foetus), Garbha poshana (Nutrition of garbha), garbhangasamstithi (attitude), garbhasthiti, asana, uday (lie, position, presentation),fetal skull, Garbha vikriti.
- B) Apari (Placenta) Garbha Nabhinadi(Umbilical cord), Garbhodaka (Amniotic fluid), Jarayu (Foetal membranes)- Formation, development, function, normalcies and their abnormalities.  
–Ulba (vernix caseosa).

## **Garbhinivigyan**

- a. Lakshana of Sadhyograhita garbha, lakshanas of vyakta garbha, , Garbhini nidana ( diagnosis of pregnancy) Pumsavana vidhi,
- b. Garbhini vyavastha: Garbhini Paricharya (Ante Natal care, examination investigation and management), Garbha upaghatakara bhava, Dauhrida.
- c. Garbha Vyapada: Garbhasrava and Garbhapata (abortions), Upavishtaka, Nagodara / Upashushaka, Leena garbha, Antarmrita garbha (Intrauterine Foetal death), Garbha shosha, Mithyagarbha (pseudocyesis),. Raktagulma. Hydatidiform mole. Ectopic pregnancy, I.U.G.R, Bahugarbhata, Rh-incompatibility – causes, clinical features, complications and treatment.

## **Garbhini Vyapad / Garbha Vyapad**

- A. Garbhini - Alpabala vyadhaya (Minor ailments of pregnancy) – Hrilasa (Nausea), Chardi (emesis), Aruchi, Atisara (Diarrhoea), Vibandha

(Constipation), arsha, Udavarta, Pada Sotha, Parikartika, Vaivarnya (Discoloration), Kikkisa etc.

**B. Garbhini - balavan vyadhaya (Major Diseases of Pregnancy)**

Pandu (Anaemia), Jwara, Shotha (oedema), pregnancy induced hypertension, toxemias of pregnancy, prasava poorva rakta srava (Antepartum haemorrhage) causes, clinical features, complications and treatment of all diseases, High risk pregnancies.

**Part B**

**50 Marks**

**Prasava Vigyana (Parturition)**

**Prakrit Prasava (Normal Labour):** Prasava Paribhasha, (definition of prasava) Prasava hetu, Prasavakal, Sutikagara;- nirmana, sangrahaniya dravyani, sutikagara, pravesavidhi, labour room, Garbhasan, Prasavavastha; prajayani/ upasthita prasava/ prajanishyamana/ asannaprasava avastha, Avi. Mechanism of labour, Prasavaparicharya - clinical features and management of normal labour, partogram, jatamatraparicharya,(care and resuscitation of newborn ).

**Prasava Vyapad (Disorders of Labour)**

Akalaprasava (Preterm labour), Kalatita prasava (post term labour), Vilambita prasava (prolonged labour)  
Induction and augmentation of labour  
Yoni samvarana, cervical dystocia, cephalo pelvic disproportion, fetal distress. Mudagarbha; - definition, etiopathology, clinical features, types, prognosis (Sadhyasadhyta), treatment Aushadhi, Mantra, shastra, Yantrachikitsa  
Garbha stithi parivartana (version), forceps delivery, Ventouse delivery. Muladharachhedan (Episiotomy) Udarapatanapurvaka garbha nirharana, cesarean section.

Aparasanga (Retention of placenta), prasavottara raktasrava (PPH). its causes, clinical features and treatment,  
Maternal distress, prasavajanya janananga abhighata, uterine inversion, amniotic fluid embolism etc.

**Sutika Vigyana** – Sutika Paribhasha, Sutika Kala, changes during Sutika avastha (Sharirika and Manasika), Sutika paricharya.

**Sutika Roga** – Number of sutika rogas, Causes, Clinical features, prognosis

and treatment of sutika jwara, Sotha and Makkala and other complications.

**Stanya Vigyana** –stana stanya pareeksha, Stanya sampat. Stanya dusti, Stanyakshaya, Stanyavidhi – their causes, clinical features and treatment.  
**Atyayika Chikitsa in prasuti** (Emergency care in obstetrics)

Pharmacotherapeutics of the drugs used in Obstetric emergencies, PNDT Act, MTP Act.

**Paper II**

**STRI ROGA**

**100 Marks**

**Part A**

**50 Marks**

Congenital malformations of female genital tract.

**Artava vyapad**

Artava Vriddhi, Kshaya, ashta artava dushti, Asrigdara, abnormal uterine bleeding, Anartava ( Amenorrhoea), Alpartava ( hypo and oligomenorrhoea).

**Yoni vyapadani** –sankhya, nidana, lakshana, upadrava evam chikitsa with all possible modern correlations.

**Shukra vigyana**

Description of shukra, shukra vriddhi, kshaya, shukra dusti their hetu, laxana, and its chikitsa. Normal semenogram.

**Vandhyatva** (Infertility – causes, types, investigations and management)

Yoni Kanda, Yoni Arsha, Granthi and arbudas of yoni ( Benign and malignant tumours of genital tract).

Pelvic infections including sexually transmitted infections and their management.

Rajonivrutti

**Part B**

**Stanaroga**

**50 Marks**

Stanagranthi, stanavidradhi (abscess), stanashopha (mastitis) their etiopathology, clinical features, diagnosis, prognosis, treatment and complications.

### **Sthanik chikitsa-**

- Snehana, svedana, uttarabasti, pichu, varti, lepana, dhoopana, dhavana, dahana, ksharakarma etc. Practical knowledge of all these procedures along with indications, complications and management.
- Importance of panchakarma in Stree roga.

### **Shastra karma**

Surgical procedures their indications, Contraindications, purvakarma (pre-operative ), Pradhanakarma( operative ), Paschatakarma ( post-operative), Complications and managements.

-Garbhashayamukha vistrutikarana (Cervical dilatation) & Garbhashaya lekhanam (curettage), Garbhashaya mukhadahana (cauterization of Cervix), Swasthane garbhashaya sthapana (repair of genital prolapse), Arshanirharana (excision of polyp), Granthi evam garbhashaya nirharanasya samanya gyana (Hysterectomy), Female surgical sterilization.

-Removal of different types of cysts, Marsupialisation, PAP smear, endometrial and cervical biopsy.

Stree roga sambandhita pramukha aushadhi . Prasuti stree roga chikitsa upayogi yantra shastra parichaya and vyadhivinischaya upaya (investigative and diagnostic aids ).

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

Parivar niyojana, reproductive and child health care. AIDS/HIV control programme and importance of current national programme.

### **Clinical Training**

1. History taking and examination of antenatal and gynecological cases.
2. Observation of 10 labour cases.
3. Practical knowledge of performing sthanika chikitsa
4. Observation of surgical procedures mentioned above.
5. Identification, uses, demonstration of surgical instruments and method of sterilization.

### **Distribution of Marks – Practical Exam**

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

**TOTAL**

**100 Marks**

**Reference Books**

1. Abhinava Prasuti Tantra	5. - Vd. Damodar Sharma Gaur
2. Prasuti Vigyana	6. - Acharya Ramanath Dwivedi
3. Prasuti Vigyana	7. - Dr. Mrinmayi Mukharjee
4. Prasuti Vigyana	8. - Dr. Alakh Narayan Singh
5. Prasuti Vigyana	9. - Manjari Dwivedi
6. Prasuti Vigyana	10. - Vaidya Nirmala Tai Rajwade
7. Prasuti tantra & Stri Roga	11. - Dr. Premvati Tiwari
8. Abhinava Prasuti Vigyana	12. - Ayodhya Prasad Achal
9. Striroga Vigyana	13. - Vd. Ramanath Dwivedi
10. Abhinava Striroga Vigyana	14. - Dr. Rajendra Bhatnagar
11. Abhinava Striroga Vigyana	15. - Ayodhya Prasad Achal
12. Stri Roga Chikitsa	16. - J.S. Chauhan
13. Janasankhya Siddhanta aur Upadeyata	17. - Dr. Nirmal Sahani
14. Theory of Population in Outline	18. - D.I. Vallentev
15. Text Book of Gynecology	19. - C.S. Dawn
16. Text Book of Obstetrics	20. - C.S. Dawn
17. Ayurvedic Concepts in Gynaecology	21. - Vaidya Nirmala Joshi
18. Useful parts of Charak, Sushruta,	22.

Vagbhatta & Sharangdhara.

### **3.6. KAUMARBHRITYA**

**Theory One Paper – 100 Marks**

**Practical– 100 Marks**

**Lectures - 90**

**Hospital Training – 1 Month**

**Paper I**

**100 Marks**

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

**Part A**

**50 Marks**

1. General introduction of Kaumarbhritya (Ayurvedic Pediatrics): Definition, importance, description and etymological interpretations of terminologies used in Kaumarbhritya.
2. Vayobheda (Classification of age): Garbha, Bala, Kumara; Kshirada, Kshirannada & Annada etc.
3. Importance of Kashyapa Samhita in Kaumarbhritya.
4. Navajata Shishu Paricharya (Neonatal Care): Care of the Samaya-purvajata Shishu (Preterm), Purnakalika Shishu (Full term), and Samaya-Paschatajata Shishu (Post term neonate), Nabhinala Chhedana (Cutting of umbilical cord), Complications of improper cutting of umbilical cord and its treatment, Rakshoghna Karma (Protective measures).
5. Prana Pratyagamanam (Neonatal Resuscitation): Methodology; complications and their management (Ayurvedic and modern view).
6. Navajata Shishu Parikshana (Examination of new born): Ayu Parikshana (including Lakshanadhyaya) Modern approach of Neonatal Examination including gestational age assessment
7. Kumaragara (Nursery, NICU and Pediatric Ward).
8. Navajat Shishu Poshana (Nutritional aspects including neonatal feeding): Specific feeding schedule as per Ayurvedic texts and modern concept; Stana Sampat (Characteristics of normal breast), Stanya Sampat (Properties of normal breast milk) Stanyotpatti and Prasruti (Physiology of lactation), Stanya Sangathana (Composition of breast milk), Stanya Parikshana (Examination of breast milk), Stanya-Piyusha (Colostrum); Stanya-Pana-Vidhi (Method for breast feeding),



Stanyakshaya-Stanyanasha (Inadequate production and absence of breast milk), Stanyabhava Pathya Vyavastha (Alternative feeding in the absence of breast milk), Various other feeding methods.

9. Stanyadosha (Vitiation of Breast milk), Stanya Shodhana (Purification of breast milk), Stanya Janana and Vardhanopakrama (Methods to enhance breast milk formation).
10. Dhatri (Wet nurse): Dhatri Guna and Dosha (Characteristics of wet nurse), Concept of human milk banking
11. Garbha Vridhi Vikasa Krama : Samanya Parichaya (General introduction to normal fetal growth from conception to full term maturity), Sharirika Vriddhi, Mansika evam Samajika Vikas (Physical, mental and social growth & development of child), Important mile stones during infancy and early childhood with special reference to gross & fine motor, language and personal – social development., Anthropometry-measurement and their interpretation.
12. Importance of Kreedabhumi (play ground) and Kreedanaka (toys), Kumaradhara (child care taker)
13. Poshana (Nutrition): Normal requirements of nutrients for newborn, infant and children, common food sources, Satmya and Asatmya Ahara (Compatible and incompatible diet)
14. Sanskaras: Jatakarma, Namakarana, Nishkramana, Upveshana, Annaprashana, Karnavedhana, Choodakarma, Upanayana and Vedarambha.
15. Dantotpatti evam Danta Raksha Vidhi (Dentition and dental care): Dantasampat (Characteristics of healthy teeth), Danta Nisheka evam Dantodbeda (Eruption of teeth), Dantodbhedjanya Vikara (Dentition disorders).
16. Vyadhikshamatva: General concepts of Bala (Immunity) and methods of Bala Vriddhi.
17. Lehana (Electuaries): Importance, uses and various types of Lehana.
18. 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, time to time.

**Part B**

**50 Marks**

**Samanya Chikitsa Siddhanta and Balaroga**

(General Principles of Treatment and Management of Pediatric Disorders)

1. Balaroga Samanya Chikitsa Siddhanta (General principles of treatment in children), Balaroga Parikshavidhi- Shadvidha, Ashtavidha, Dashavidha Pariksha evam Shishu Vedana Parigyana (Examination of diseased child and Diagnostic methods- Ayurvedic and modern).
2. Aushadhi Matra Nirdharana- According to Vaya, Bhar evam Aushadhi Kalpana (drug doses according to age, weight and drug preparations)
3. Specific therapeutic procedures in children: Panchkarma procedures specific to pediatric age group.
4. Prasava Kaleena Abhigata (Birth injuries): Shwasavrodha (Asphyxia), Upasheershaka (Caput Succidaneum and Cephalohaematoma), Shastraghatajanya: Facial Paralysis, Erb's Paralysis, Bhagna (fractures).
5. Sahajavyadhi - (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 equinovarus and valgus), Tracheoesophageal Fistula (TOF), Spina bifida, Meningocele, Meningomyelocoele, Pyloric Stenosis.
6. Anuvanshika Vyadhi (Hereditary diseases): Down syndrome, Turner Syndrome, Myopathy, Thalassemia, Sahaja Prameha (Juvenile Diabetes).
7. Prasavottara Vyadhi (Neonatal disorders): Navajata Kamala (Neonatal Jaundice), Navajata Netrabhishyanda (Neonatal conjunctivitis), Nabhiroga (Umbilical disorders), Mastishkaghata (Cerebral Palsy), Rakta Vishamayata (Neonatal Septicaemia), Rakta Vaishamyata (Rh-Incompatibility), Raktasravi Vikara (Haemorrhagic Disorders), Ulvaka Roga.
8. Dushta Stanyapanajanya Vyadhi (Disorders due to Vitiated Milk): Cow's Milk Allergy, Charmadala (Infantile atopic dermatitis), Kshiralasaka, Kukunaka (Conjunctivitis), Ahiputana (Napkin Rashes)
9. Kuposhanajanya Vyadhi (Nutritional disorders): Karshya, Phakka, Balashosha and Parigarbhika (Protein Energy Malnutrition), Vitamin and micronutrient deficiency disorders, Hypervitaminosis.
10. Aupasargika Vyadhi (Infectious Diseases): Karnamula Shotha (Mumps), Romantika (Measles), Rubella, Masurika (Chicken Pox), Rohini (Diphtheria), Kukkura-kasa (Whooping Cough), Dhanurvata (Tetanus), Krimiroga (Worm Infestations), Antrika Jwara (Typhoid), Mastisakavarnashotha (Meningitis), AIDS, Dengue, Malaria, Poliomyelitis, Rajayakshma (Tuberculosis), Jivwanujanya Yakrit shotha (Hepatitis)
11. Srotas Vikara:
  - a. Pranavaha Srotas: Pratishyaya (common cold), Kasa (Cough), Shwasa (Respiratory distress syndrome), Tamaka Shwasa (Bronchial Asthma), Utpullika, 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) ,Udarshoola (Infantile colic), Pravahika (Dysentery) , Gudabhransa (Rectal Prolapse)
  - c. Rasavaha Srotasa: Jwara (Fever), Pandu (Anemia), Mridbhakshanajanya Pandu ( Anemia associated with clay eating/ Pica).

- d. Raktavaha Srotas: Kamala (Jaundice), Raktapitta (Haemorrhagic disorders), Krimija Hridroga ( Infectious cardiac diseases including Rheumatic Heart Disease), Uchcha-Raktachapa (Hypertension), Yakridpleehodara (Hepatosplenomegaly).
  - e. Mamsa-Medovaha Srotas: Apachi (Lymphadenitis), Galaganda (Goitre), Gandamala (Cervical lymphadenopathy), Sthaulya (Obesity)
  - f. Mutravaha Srotasa: Mutraghata (Anuria), Mutrasanga (Retention of urine) Mutrakriccha (Dysurea), Vrikkashotha (Glomerulonephritis and Nephrotic syndrome)
12. Anya BalaVikara (Miscellaneous pediatric disorders)  
 Pangutwa (Locomotor disorders), Vamanatwa (Dwarfism), Jadatwa (Mental disorders), Apasmara (Epilepsy), Unamada, Akshepa (Convulsions), Nirudhaprakasha (Phimosis), Kushtha (Skin disorders), Madhya Karna Shotha (Otitis media), Karnasrava (Otorrhoea)
13. Behavioral disorders of children, their management and counseling: Breath holding spell, Shayyamutra (Bed wetting), Autism, ADHD (Attention Deficit and Hyperactive Disorders)
14. Atyayika Balaroga Prabandhana (Pediatric Emergency Management): Shock and Anaphylaxis, Fluid and Electrolyte Management, Drowning, Poisoning, Foreign body aspiration, Status epilepticus, hemorrhage, Acute Renal Failure, Febrile Convulsion, Status Asthmaticus
15. Balagraha: General description, types, clinical features and management
16. Various Ayurvedic & modern procedures and investigations in pediatric practice

## **PRACTICAL**

**100 Marks**

1. Clinical training of above mentioned disorders of children.
2. Navajata Shishu Paricharya (Care of the newborn)
3. Pranapratyagamana Vidhi (Resuscitation procedure of new born)
4. Vaccination
5. Panchakarma Vidhi (Panchakarma procedures)
6. Knowledge of various equipments such as phototherapy unit, overhead radiant warmer, special resuscitation equipments, Panchakarma and their application
7. Knowledge of IV fluids administration, blood sampling
8. Breast feeding technique

### **Practical Marks Division**

Clinical work (record of clinical cases)	- 20 Marks
Examination of Patient	- 40 Marks
Spotting	- 10 marks

Viva - voice

- 30 Marks

**Reference Books**

- 1 Kashyapa samhita - Complete Hindi translation by Satyapal Vidhyalankara  
- English translation by Prof. Premvati Tiwari
- 2 Essential Paediatrics - O.P. Ghai
- 3 Text Book of Paediatrics - Nelsan
- 4 Care of New Born - Meharban Singh
- 5 Clinical Methods in Paediatrics - Meharban Singh
- 6 Paediatric Emergencies - Meharban Singh
- 7 Diseases of New Born - Scheffers
- 8 Kaumarbhritya related references from Charaka samhita, Sushruta samhita Vagbhatta etc. -

### **3.7. PANCHAKARMA**

**Theory One Paper – 100 Marks**

**Practical one – 50 Marks**

**Lectures - 100**

**Hospital Training – 3 Months**

**Paper I**

**100 Marks**

**Part A**

**50 Marks**

#### **I. INTRODUCTION**

- 1) Introduction to Panchakarma, their importance and utility in the treatment.
- 2) Relation of Panchakarma with Shodhana therapy (purification therapy).
- 3) Threefold Karma
  - i) Poorva karma (pre operative procedure):- General knowledge, importance and utility of Poorva karma (Pachana, Deepana, Snehana, & Swedana)
  - ii) Pradhana karma (Operative procedure)
  - iii) Pashchat karma (Post operative procedure)
- 4) Usefulness of Shodhana (purification therapy) according to the seasons.
- 5) General precautions (pariharya vishaya) during Panchakarma.
- 6) Relevance of Panchakarma in present era.
- 7) Specifications of Panchakarma theatre and necessary equipments

#### **II. SNEHANA**

- 1) Etymology and definition of Sneha and Snehana (Oleation therapy)
- 2) Types of Sneha, Qualitative utility of Sarpi, Taila, Vasa and Majja
- 3) Different categories of Snehayonis (sources).
- 4) Need of Rukshana before snehana and Samyak rukshana lakshanas.
- 5) Types of Snehana – Bahya and Abhyantara (external and internal oleation therapy), Snehapaka.

6) Knowledge of Yamaka sneha, Trivrit sneha, Maha sneha, Panchaprasrutiki Sneha, Achcha sneha, Pravicharana, sneha, Sadya sneha, Avapidaka Sneha, Shodhana, Shamana and Brimhana Sneha, Hrasiyasi, Hrasva, Madhyama And Uttama Sneha

7) Indications and contraindications for Snehana.

8) Sneha Procedures:

Abhyantara Shodhananga Sneha Vidhi:

**Poorvakarma:** Roga and rogi pareeksha, including relevant diagnostic techniques, Koshta pareeksha and Agni nirnaya, preparation of the rogi & fixation of dose.

**Pradhana karma:** Administration of Sneha & Anupana, Observation- Jeeryamana/Jeerna/Ajeerna/Asnigdha Lakshanas, Samyak Yoga, Ayoga/Atiyoga Lakshanas, Vyapats & their management according to Ayurveda & Modern Systems of Medicines.

**Pashchat karma:** Pariharya vishaya & Planning of Shodhana. Shamana and Brimhana Snehana Vidhi, Chirakaleena Sneha Vyapats, and their management.

9) Diet and regimens during Snehana

10) Introduction to Bahirparimarjana Chikitsa.

11) Detailed knowledge about procedure and utility of following Bahyasnehanas

(External oleation therapy) – Abhyanga, Samvahana, Mardana, Unmardana, Utsadana, Padhaghata, Murdhni Taila, Pichu, Karna Poorana & Akshi Tarpana

11) Snehana Kamukata.

12) Digestion and Metabolism of Fat.

### III. SWEDANA

1) Etymology and definition of Sweda and Swedana (Sudation).

2) Swedana dravyas and their properties.

3) Methods to protect the vital organs (varjya anga) during Swedana Procedure. Ten Types of Niragni Sweda, Different types of Sagni Sweda

4) Knowledge of Shodhananga and Shamana Sweda.

5) Indication and contra- indications of swedana.

6) Detailed Knowledge about Utility of below mentioned Swedana procedures:- Patrapinda Sweda, Shashtika Shalipinda Sweda, Churna Pinda Sweda, Jambeera Pinda

Sweda, Dhanya Pinda Sweda, Kukkutanda Sweda, Anna Lepa, Valuka Sweda, Ishtika Sweda, Nadi Sweda, Bashpa Sweda, Ksheera bashpa sweda, Avagaha Sweda, arisheka Sweda (Pizichil, Dhanyamla Dhara, Kashaya Dhara, Ksheera Dhara) & Upanaha Sweda.

7) Features of Samyak Yoga (Proper Sudation), Atiyoga (Excessive Sudation), Heenayoga (Inadequate Sudation) and Vyapat of Swedana and their Management.

8) Diet and regimens during and after Swedana.

9) Swedana karmukata (Mode of action of Swedana Chikitsa).

10) Introduction to Bahirparimarjana Chikitsa: Study Lepa, Gandusha, kavala, ShiroLepa (Tala potichil), Talam, Udvardana, TakraDhara, kati, Janu, Basti, Greeva and Urobasti (Tarpana)

11) General Knowledge about current Sudation techniques (Sauna bath, Steam bath, Infrared therapy).

#### **IV. VAMANA**

1) Etymology, definition and Introduction of Vamanakarma

2) Importance and utility of Vamana Karma

3) Kosta nirnaya and Agni pareeksha in Vamana karma.

4) Indications and Contraindications for Vamana.

5) General properties of Vamaka Dravyas

6) Preservation and Knowledge of Vamaka and Vamanopaga dravyas.

7) Detailed study of Madana Phala, Kutaja, Yashti, Vacha and Nimba.

**Poorva karma:** Snehana & Swedana Diet & regimen prior to Vamana Karma Preparation of formulation for Vamana Karma Dose & Method of Administration.

**Poorva karma:** Snehana & Swedana Diet & regimen during vishrama kala prior to Virechana Karma

**Pradhana karma:** Administration of drugs and Observation, and Assistance of Vegas, Upavegas and Matra. Knowledge of Laingiki, Antiki and Maniki Shuddhi, Features of Samyak yoga (Proper Shuddhi), Atiyoga (Excessive Shuddhi), Ayoga (Inadequate Shuddhi) and their management.

**Pashchat karma:** Samsarjana (Peyadi, Tarpana and Rasa Samsarjana krama) Pariharya vishaya & Parihara Kala Vyapats & their management according to Ayurveda & Modern Systems of Medicines

8) Vamana Karmukata (Mode of action of Vamana).

## V. VIRECHANA KARMA

- 1) Etymology, definition, introduction, Importance, Utility & Classification of Virechana Karma.
- 2) Knowledge of Anulomana, Sramsana, Bhedana, Rechana, karma with examples.
- 3) General properties of Virechana Dravyas.
- 4) Detailed study of following Virechana drugs Trivrut, Eranda, Aragvadha, Katuki and Jaipala
- 5) Knowledge of Virechana kalpanas, their properties, dose, anupana and method of administration.
- 6) Knowledge of Koshta Nirnaya and Agni vivechana.
- 7) Indications & Contra-indications for Virechana
- 8) Significance of Vamana before Virechana.
- 9) Virechana Vidhi (Procedure for Virechana)

**Poorva karma:** Snehana & Swedana Diet & regimen prior to Virechan Karma.

**Pradhana karma:** Administration of drugs and Anupana, Observation, Assessment of Vegas, Upavegas and Matra. Knowledge of Laingiki, Antiki and Maniki Shuddhi, Features of Samyak yoga (Proper Shuddhi), Atiyoga (Excessive Shuddhi), Heenayoga (Inadequate Shuddhi) and their management.

**Pashchat karma :** Samsarjana(Peyadi,Tarpana and Rasa Samsarjana krama) Pariharya vishaya & Parihara ala Vyapats & their management according to Ayurveda & Modern Systems of Medicines.

- 10) Virechana Karmukata (Mode of action of Virechana).

## VI. BASTI

- 1) Etymology, definition, introduction, utility, and importance of Basti Karma.
- 2) Types of Basti based on Karma, Sankhyas, Adhisthan & Matra.
- 3) Knowledge of different Basti yantras, their significance and utility.
- 4) Indications & Contra-indications for Anuvasana Basti and Asthapanana Basti.
- 5) Knowledge of Anuvasanopayogi and Asthapanopayogi dravyas.
- 6) Administration of Basti:

**Poorvakarma (Pre-operative procedure):** Preparation of Basti dravyas Fixation of dose Preparation of Patient.



**Pradhana karma (Operative procedure):** Basti Pranidhana vidhi (Administration of Asthapana, Anuvasana and Matra Basti) Observation of Basti pratyagamana, Samyakyoga, Atiyoga, heenayoga lakshanas and their management.

**Paschat karma (post operative procedure):** Pariharya vishaya, Parihara Kala Diet and regimen after Basti.

7) Detailed knowledge of Basti Vyapats and their management.

8) Study of following Vishishta Bastis:

Piccha Basti, Ksheera Basti, Yapana Basti, Madhutailika Basti, Erandamooladi Nirooha Basti, Panchaprasrutika Basti, Kshara Basti, Vaitarana Basti, Krimighna Basti, Lekhana Basti, Sarvarogahara Nirooha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti and Kaphaghna Basti.

9) Knowledge of Uttara Basti, Importance of Uttara Basti, Uttara Basti Yantra, dravyas and their dosage in Uttara Basti.

10) Detailed knowledge of administration of Uttara Basti in to mutrashaya (Intra Vesical) and Garbhashaya (intra uterine).

11) Basti karmukata (Mode of action of Basti).

## **VII. NASYA**

1) Etymology, definition, introduction & Significance of Nasya karma.

2) Knowledge about dravyas (Medicines) used for Nasya karma,

3) Classification of Nasya in detail

4) Indications and contraindications of Nasya

5) Knowledge of dosage of Dravyas (Medicines) and time of administration in different type of Nasya.

6) Nasya Procedure

**Poorvakarma (Pre-operative procedure):** Prepartation of Patient.

**Pradhana Karma (Operative procedure):** Admnisitation of Nasya.

**Paschat Karma (post operative procedure):** Parithara Kala, Diet and regimen after Nasya.

7) Detailed Knowledge of features of Samyakyoga (Proper), Ayoga (Inadequate), Atiyoga (Excessive) of Nasya and their management.

8) Pathya-Apathya during Nasya karma

9) Administration of Navana, Marsha, Pratimarsha, Avapeedaka, Dhmapana and Dhooma Nasyas

10) Nasya Karmukata (Mode of action of Nasya Therapy)

### VIII. RAKTA MOKSHANA AND VYAYAMOPACHARA

1) Definition, Utility and Significance of Raktamokshana, Knowledge of different Techniques of Raktamokshana

2) Indications and contraindications for Raktamokshana

3) Rakta mokshana karmukata (Mode of Rakta mokshana)

4) Basic Knowledge of Physiotherapy

5) Knowledge of emergency management in complications such as Water & Electrolyte imbalance, hypo- volamic shock, Haematemesis, Epistaxis, Bleeding per rectum, acute abdomen etc.

#### Practical Marks Division

Practical Record	-10 Marks
Procedure	-15 Marks
Viva-voice	-25 Marks
<b>Total</b>	<b>- 50 Marks</b>

#### Referance books

1	Caraka Samhita with commentary of Ayurveda Dipika by Chakrapanidatta & Jalpakalpa taruby Gangadhara	Edn-1 Vol-I-V	Agnivesha
2	Sushrutha Samhita with the Nibhandha Samgraha commentary of Dalhana & Nyayachandrika panjika of Gayadasa on nidanasthan	Edn-VI Vol-I	Sushruta
3	Ashtanga Hrudaya with Sarvanga sundara & Ayurveda rasayana commentaries	Edn-VIII Vol-I	Vagbhata
4	Ayurvediya Panchakarma chikitsa	Edn-I Vol-I	Dr Mukundilal Dwivedi
5	Panchakarma Vijnana	Edn-I Vol-I	Dr Haridas Shreedhar Kasture
6	Illustrated Panchakarma	Edn-I Vol-I	Dr.G Srinivasa Acharya
7	Clinical Panchkarma (English)	Second Edition	Dr. P.Yadaiah

8	Prayogika panchkarma (Hindi)	2008 Second Edition	Dr. P. Yadaiah
9	Vivida Vyadhiyome Panchkarma (Hindi)	2007 First Edition	Dr. P. Yadaiah
10	The Panchkarma Treatment of Ayurveda with Kerala Specialties	2008 Revised Edition	Dr. T.L. Devaraj
11	Panchkarma Therapy	2005 Second Edition	Dr. R.H. Singh
12	Principles and practice of vasti	2006	Dr. Vasudevan Nampoothiri and Dr. L. Mahadevan
13	Clayton's Physiotherapy		
14	Teddy's Physiotherapy		
15	Harrison's Principle of Internal Medicine		
16	Guyton's Physiology		