

2010

Kerala University of Health Sciences

**B.A.M.S COURSE
REGULATIONS/SYLLABUS**

BAMS DEGREE - COURSE AND CURRICULUM

2011 -2012

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1. AIMS AND OBJECTS

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

2. ADMISSION QUALIFICATION

12th Standard with Science with at least 50% marks in aggregate in the subjects of Physics, Chemistry and Biology.

Wherever provision and facilities for teaching Sanskrit as optional subject are not available at 12th standard (Biology Science group), the students with 12th standard (Biology Science Group) be admitted and Sanskrit be taught in main course.

3. MINIMUM AGE FOR ADMISSION:

17 years as on 1st October in the year of admission for B.A.M.S.Course.

4. DURATION OF COURSE:

Degree Course 5-1/2 years.

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|---------------------|---|--------------|
| a) I Professional | - | 18 months |
| b) II Professional | - | 18 months |
| c) III Professional | - | 24/18 months |
| d) Internship | - | 6/12 months. |

The period of internship will be of 12 months in case of total duration of course of study is covered under 4-1/2 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 5-1/2 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 examination until he/she has passed in all the Second Professional subjects.

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:**

- i) The Second Professional Course shall start in April following the First Professional examination and the examination shall be completed ordinarily in September of year after completion of three years.
- ii) The Second Professional examination shall be held after 1-1/2 years of First Professional examination in the following subjects:-
 1. Rasa Shastra avam Bhaishajya Kalpana
 2. Dravyaguna Vigyan
 3. Agada Tantra, Vyavhar Ayurved avam Vidhi Vaidyak
 4. Roga Vigyan avam Vikriti Vigyanam
 5. Charaka Samhita (Purvardha)
 6. Swastha Vritta
- (iii) A candidate must pass atleast 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**

- 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. Kaumar Bhritya
 3. Kaya Chikitsa
 4. Shalaya Tantra
 5. Shalakya Tantra
 6. Charak Samhita
 - **7. Panchkarma
- ii) If a candidate remain 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**

Nine (09) months of such clinical training and three (03) months of Pharmacy/PHS/Rural Dispensaries or Hospital, shall be carried out.

Programme and time distribution will be as follows:-

1. In the beginning first three days of orientation Workshop to orient the internees to get acquainted with the details and rules of Internship training programme.
2. Distribution of Intern work-book interns.
3. Provisional Registration with concerned Board/Council before starting the internship.
4. Daily working hours not less than eight hours.
5. Nine months for clinical training, three months in a Pharmacy and three months in PHS/Rural Dispensary/Hospital/PHS as detailed below.
 - A. Posting in college concerned teaching hospital or any other approved Ayurved hospital for nine months as follows:-
 1. Kayachikitsa 2 months
 2. Shalya 2 months
 3. Shalakya 1 month
 4. Prasuti & Striroga 2 months
 5. Kaumbarbhritya 1 month
 6. Panchkarma 1 month
 - B. Three months training should be mainly in respect of National Health Programme in one or more following institutions:-
 - (a) Primary Health Centre
 - (b) Community Health Centre/District Hospital
 - (c) Any recognized Hospital of Modern Medicine by Director/Health Services/University concerned for identification of casualty and trauma cases.
 - (d) Any recognized Ayurved hospital or Dispensary by Director of Ayurveda/University concerned.

In cases where posting in a hospital of modern medicine is not feasible and also in PHC them entire three months posting may be Ayurvedic Dispensary/hospital.

Detail Guideline for training programme.

1. **Kayachikitsa** **2 months**
 - a) All routine work such as case taking, investigations, diagnosis and management of common diseases by Ayurvedic Medicine.
 - b) Routine clinical pathological work i.e. Hemoglobin estimation, haemogram, urine analysis, microscopic examination of blood parasites, sputum examination, stool examination, mutra evam mala pariksha by Ayurvedic method. etc. Interpretation of laboratory data and clinical findings and arriving at a diagnosis. Training in routine ward procedures.
 - c) Supervision of patients in respect of their diet and habits and verify medicine schedule.
2. **Panchkarma – 1 month**
 - i) Panchkarma Procedures and techniques regarding poorva karma, pradhan karma and paschat Karma.

3. Shalva

2 months

Intern should be trained to acquaint with

- i. Diagnosis and management of common Surgical disorders according to Ayurvedic Principles.
- ii. Management of certain Surgical emergencies such as Fractures and Dislocations, Acute Abdomen etc.
- iii. Practical implementation of aseptic and antiseptics techniques, sterilization etc.
- iv. Intern should be involved in pre-operative and post-operative managements.
- v. Practical use of anesthetic techniques and use of anesthetic drugs.
- vi. Radiological procedures, clinical interpretation of X-ray, IVP, Barium meal, sonography etc.
- vii. Surgical procedures and routine ward techniques such as:-
 - i. Suturing of fresh cut
 - ii. Dressing of wounds, burns, ulcers etc.
 - iii. Incision of abscesses.
 - iv. Excision of cysts.
 - v. Venesection etc.
 - vi. Application of Ksharsutra in fistula-in-ano

4. Shalakya

1 month

Intern should be trained to acquaint with

- a) Diagnosis and management of common surgical disorders according to Ayurvedic Principles.
- b) Intern should be involved in Pre-operative and Post-operative managements.
- c) Surgical procedures in Ear, Nose, Throat, Dental problems, ophthalmic problems.
- d) OPD examinations of Eye, Ear, Nose, Throat Disorders, Refractive Error examination, ophthalmic equipments for diagnosis, ophthalmic diseases, various tests for deafness etc.
- e) Procedures like Anjana Karma, Nasya, Raktamokshan, 'Karnapuran, Shirodhara, Put pak, Kawal, Gandush etc. at OPD level.

5. Prasuti & Striroga

2 months

Intern should be trained to acquaint with

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

6. Kaumarbhritya

1 month

Intern should be trained to acquaint with

- a) Antenatal and Post-natal problems and their remedies, antenatal and Post-natal care also by Ayurvedic Principles and medicine.
- b) Antenatal and Post-natal emergencies.
- c) Care of new born child alongwith immunization programme.
- d) Important pediatric problems and their Ayurvedic managements.

B. PHC/Community Health Centre/District Hospital

Intern should get acquainted with-

- i. Routine of the PHC and maintenance of their record.
- ii. They should be acquainted with the routine working of the medical/non-medical staff of PHC and be always in contact with the staff in this period.
- iii. They should be familiar with work of maintaining the register e.g. daily patient register, family planning register, surgical register and take active part in different Government health schemes/programme.
- iv. They should participate actively in different National Health Programmes of Government of the State/District.

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

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

D. Rural Ayurvedic dispensary/Hospital

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

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

Assessment

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

- 10 a) The following facts may be taken into consideration in determining class work in the 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 instructions and send the cards to each Head of the Department for final completion before the commencement of each examination. Those who have not acquired a minimum of 35% of aggregate marks in internal assessment will not be eligible to appear the University Examination.
- c) The card shall contain a statement that the student has attended not less than 80% of theory lectures and practical classes and not less than 80% of clinical instructions of which the course consists. This card shall be submitted to the examiners as required.

II. **EXAMINATION:**

- a) i) A candidate obtained 75% marks in the subject shall be awarded distinction in the subject.
- ii) A candidate obtaining an aggregate of 75% in the following subjects shall be declared passed in final examination with honours:-
1. Padarthavigyan
 2. Rachana Sharir/Kriya Sharir
 3. Dravyaguna Vigyan/Rasashastra
 4. Kayachikitsa/Rog Vigyan
 5. Shalaya Tantra/Shalakya Tantra/Prasuti Tantra
- iii) Only those candidates shall be considered for honours or distinction who have passed the degree examination in the first attempt each part. As regards for distinction in subjects, only those will be qualified for distinction who passed the respective professional examination in the first attempt.
- (b) The minimum pass marks shall be 50% in theory and practical separately in each subject.

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

Subject	No. of Papers	Total Marks in theory	Total Marks in practical/ oral.
1	2	3	4
1. Ayurved ka Itihas	One	100	-
2. Sanskrit	Two	200	50
3. Padarth Vigyan	Two	200	50
* 4. Ashtang Hridayam	One	100	50
5. Rachana Sharir	Two	200	200
6. Kriya Sharir	Two	200	100
7. Swastha Vritta	Two	200	100

8. Dravyaguna Vigyan	Two	200	200
9.Rasa Shastra Bhaishajya Kalpana	Two	200	100
10.Agad Tantra Vyavhar Ayurved evam Vidhi Vaidyak	One	100	100
11.Rog Vigyan evam Vikriti Vigyan	Two	200	100
12.Charak Samhita	One	100	50
13.Prasutitantra evam Striroga	Two	200	100
14. Kaumarbhritya	One	100	100
**15. Kayachikitsa	Three	300	150
16. Shalyatantra	Two	200	100
17. Shalakyatantra	Two	200	100
18. Charak Samhita	One	100	50
**19.Panchkarma	One	100	50

**13.1 NUMBER OF LECTURES PRACTICALS AND DEMONSTRATIONS
FOR VARIOUS SUBJECTS.**

SUBJECT	Lectures	Practicals & Demonstration
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SUBJECTS OF FIRST PROFESSIONAL

1. Ayurved ka Itihas	60	--
2. Sanskrit	150	--
3. Padarth Vigyan	150	30
* 4. Ashtang Hridayam	60	--
5. Rachana Sharir	210	210
6. Kriya Sharir	210	90

SUBJECTS OF SECOND PROFESSIONAL

7. Swastha Vritta,	180	50
8. Dravyaguna Vigyan	180	90
9. Rasashastra avam Bhaishajya Kalpana	180	90
10.Agad Tantra, Vyavhar Ayurved avam Vidhi		

Vaidyak	100	50
11.Rog Vigyan Avam Vikriti Vigyan	180	90
12.Charak Samhita	100	-

SUBJECTS OF THIRD PROFESSIONAL

13. Prasuti Tantra Avam Striroga	150	In hospital 3 months
14.Kaumar Bhritya	90	1 month
**15. Kayachikitsa	300	9 Months
16. Shalya Tantra	210	6 months
17. Shalakya Tantra	210	4 months
18. Charka Samhita	100	--
**19. Panchkarma	100	3 Months

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 Rachana 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 & Outdoor):** 9 Months
 - a) General 6 months
 - b) X-ray 1 month
 - c) Atyayik 2 months
- ii) **Panchakarma (Indoor & Outdoor):** 3 Months
- iii) **Shalya Tantra (Indoor & Outdoor):** 6 Months
 - a) General 5 months (atleast one month in OT)
 - b) Atyayik 1 month
- iv) **Shalakya Tantra (Indoor & Outdoor):** 4 Months
 - a) General 3 months (atleast one month in OT)
 - b) Atyayik 1 month
- v) **Prasuti Tantra Avam Striroga (Indoor & Outdoor):** 3 Months
- vi) **Kaumar Bhritya (Indoor & Outdoor):** 1 Month

14. **Qualifications & Experince 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 recognized 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 subject 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.

ii) **DESIRABLE:**

a) 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:-

Subject	Discipline of Post-graduate
1. Swastha Vritta	1. Kayachikitsa 2. Basic Principles
2. Agad Tantra	1. Dravyaguna 2. Kayachikitsa
3. Padarth Vigyan/Samhita/Itihas	1. Basic Principle
4. Rog Vigyan	1. Kaya Chikitsa
5. Rachana Sharir/Kriya Sharir	1. Sharir 2. Basic Principle
6. Shalakya	1. Shalakya/Shalya
7. Nischetna Avam Kshar-kiran	Shalya and/Shalakya
**8. Panchkarma	Kayachikitsa

15. **Appointment of Examiner in Ayurved:**

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

SYLLABUS

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, lakartha prakriya, kridanta prakarana (kritya prakriya), Purvakridantam, unadaya, uttar-kridanta), vibhaktyartha prakaran, samasa prakaran (keival samas, avyayi-bhavah, tatpurush, bahuvrihi, dvanda, samasanta), tadvita prakarnani, streepratyaya 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.

Paper II

100 Marks

1. Vaidya Sadvrittam

1. Vaidyakiya subhashitani (1-20 chapters)
By Bhaskar Govinda Ghanenkar
2. Ayurveda Hitopadeshah
(Vaidya Ranjit Rai Desai)
3. Panchatantram- Aprikshitkarkam

Or

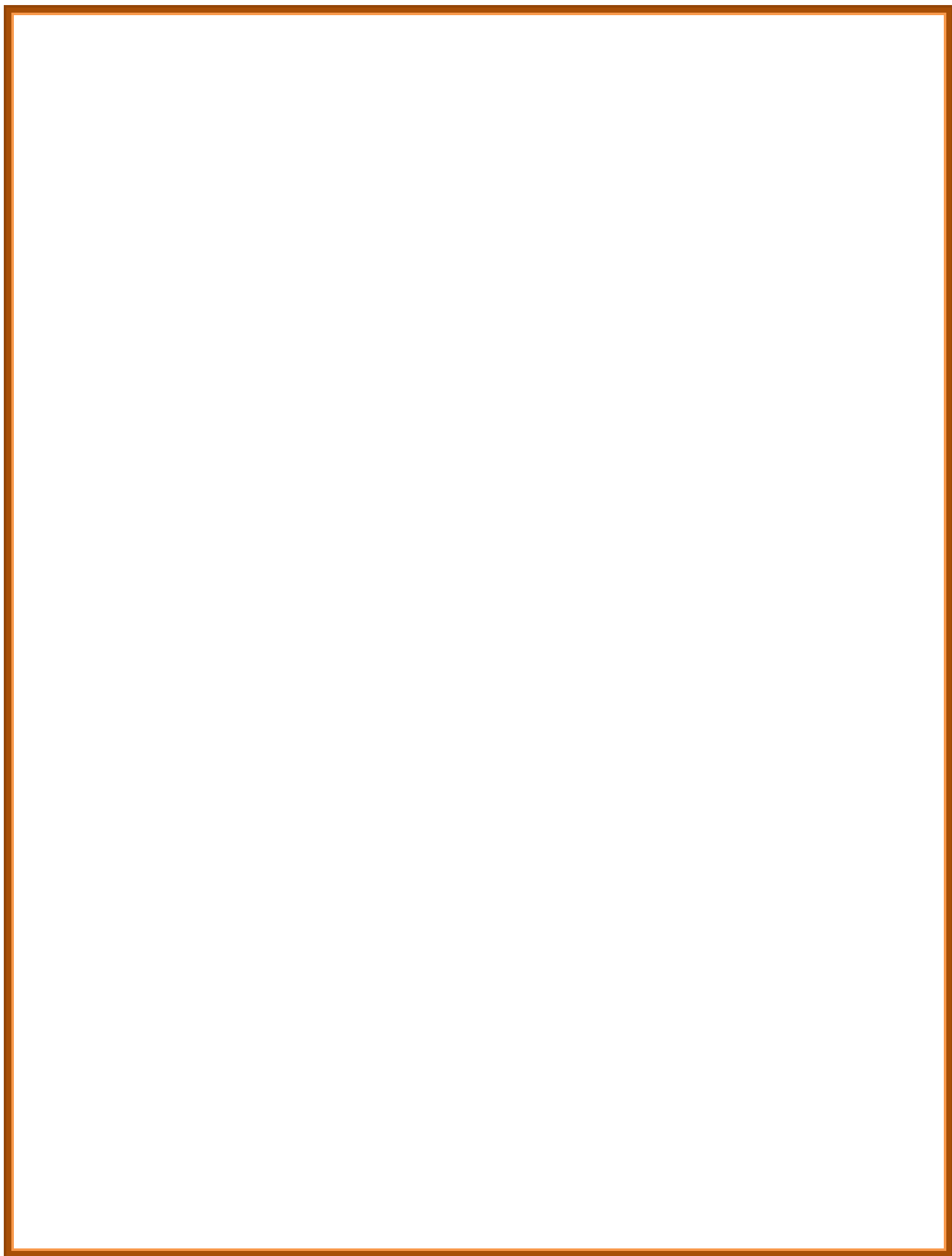
Verse from classics (brihatrayi) related to vaidya sadvritta

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

Pathana karma / sampradana parichaya, padavibhaga, arthanvaya karma, anvayartha, bhavartha, dhvanitadi-prabhasana karma parichaya Samastapada sarthak-vigraha, dhatu-dhatvartha, pratyaya-pratyartha, subanta-tivanta-adi according to padavidhi (anvayartha 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 substratam 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 Vigyaniyam

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 Vigyaniyam

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 Vigyaniyam

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

6. Vishesha Vigyaniyam

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

7. Samavaya Viyaniyam

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

8. Abhava Vigyaniyam

Definition and lakshana of abhav padartha, classification of abhav- description of pragbhava, pradhwansabhava, 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, योग्याता, सान्निधि.

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

definition and lakshana of pratyaksha. Types of origin of pratyaksha jnana. Types of pratyaksha- nirvikalpaka- 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 (panchbhautika 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

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| 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. Gupt |
| 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. | 0A Ayurvediya Padarth Vigyan | Vaidya Ramkrishna SharmaDhandha |
| 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 itihās, 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

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|--|----------------------------------|
| 1. Upodaghata of Kashyapa Samhita Paragraph of acceptance of Indian 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 NathMukhopadhyaya |
| 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. Mulenbelt
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 from Premoryana to Kushana Period - Dr. Jyotirmitra
22. An Appraisal of Ayurvedic Material in Buddhist literature - Dr. Jyotirmitra
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

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|-----|-------------------------------------|-----------------------------|
| 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

cal /viva voice -50 Marks

Lectures - 60

For the convenience of learning allotted marks for sutrasthan of Ashtanga Hridaya has been divided in to following two groups:

**Thorough
study**

86 Marks

**Introductory
study**

14 Marks

• **Chapters specified for thorough study**

Chapter First to Tenth and Fourteenth (1-10&14)

44 Marks

Chapter eleventh to thirteenth (11-13)

15 Marks

Chapter sixteen to Twenty (16-20)

20 Marks

Twenty –seventh (27) and Thirtieth (30)
chapters

7 Marks

• **Chapters specified for introductory study**

Chapter Fifteenth (15)

04 Marks

Chapter Twenty Two to Twenty Six & Twenty Eight
&

10 Marks

Twenty ninth (22-26 & 28 & 29)

• **Fifth marks assigned for practical exam are distributed as follows**

1. For chart framing
/compilation
2. Recitation & writing of minimum ten shlokas among

10 Marks

Memorized shlokas (The Shlokas should be memorized along with padavibhaga, Anvaya ,Bhavabrtha and practical applicability .)

1. Viva-voce
15 Marks
2. Internal assessment

15 Marks

Topics for chart

Ayurvedavatarna according to Ashtanga Hridaya ,Ashtanha of Ayurveda ,Agni , Prakriti, Koshtha ,tridosh rasa-guna-virya Vipaka and prabhava of dravyas ,ritucharya, dinacharya vega-udirana and vidharana ,chatuspada of chikitsa sandhyasadhyata ,differebt classification of dravyas-toya ,Kshira,ikshu,etc.Shooka shimbi ,mamsa ,Shaka , Phala etc.Dosha Samshodhana kala, vridhhi-kshaya lakshanas of dosha dhatu and malas,dosha 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 activites.

Other activities include following instructions

1. Memorizing two shlokas Weekly
Marks

5

(At least 40 Sholkas should be memorized as discussed above in a span of one year and six month)

2. Passage Writing

5

Marks

3. Speech on any one topic related to Ashtanga hridaya

5 Marks

Reference Books

Ashtabga Hridayam : Hindi Commentary by Lalchanda Vaidya
: English Commentary by K.R. Srikantanmurty

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. Shariopkrama

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, Tridoshamayativama, 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 Virdhi Krama (month wise development of Fetus), Garbhavridhikara 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, Dhamani, 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, Hridyavarana (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) Sheersanya 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 Adhasthan.

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 SharmaGaur |
| 3. Manava Sharir (Revised Edition) | : Prof. Dinkar Govind Thatte |
| 4. Manava Bhruna Vigyana | : Prof. Dinkar Govind Thatte |
| 5. Manava Anga Rekhankan Vikrian EvamChayankan Sharir Vikiran | : Prof. Dinkar Govind Thatte |
| 6. Sharir Rachana Vigyanana (English) | : Vaidya P.G. Athwale |
| 7. Mannual of Practical Anatomy | : Cunnighum Practical Mannual Vol-1, Vol-2, Vol-3 |
| 8. Chapters of Charaka, Sushruta andVagbhatta Sharir Sthan | : |
| 9. Clinical Anatomy in Ayurveda | : Prof. D.G. Thatte and ProfSuresh 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 Marks

50

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. Conceptual study 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 manifestatioins of Oja kshaya, Visramsa and Vyapat; physiological and clinical significance of OjaVayasthapana

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, swaroota, 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 Swapnabhedha

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

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|-----|--|----------------------------|
| 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 ShrimaI |
| 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,
Sushrut, Vagbhata. | |

TEACHING MODULE

ASHTANGAHRIDAYA

SUGGESTIONS ON SYLLABUS & CURRICULUM

1. Number of lecture hours mentioned in CCIM syllabus is 60.
2. Number of papers and marks for theory and practical may be followed as per CCIM directions
3. The total syllabus (Ashtangahridaya Sootrasthaana 30 chapters) can be divided into the following categories for convenience of learning:
 - a. Chapters for detailed study or thorough study - 80 marks- 50 hrs
 - b. Chapters for introductory study – 20 marks- 10 hrs
4. List of chapters under the above categories
 - a. Detailed study – 9 Chapters 1, 4, 8, 9, 10, 11, 12, 13 & 14
 - b. Introductory study –
 - i. 21 Chapters in Ashtangahridaya – 2,3,5,6,7 & 15 – 30
 - ii. Ahstangasangraha – 12, 13, 22, 23
5. Introductory study of the chapters can be limited to certain portions selected from each chapter as specified below.
6. Topics for introductory study from each chapter

Chapter No	Chapter Name	Topics for introductory study
ASHTANGAHRIDAYA		
2	Dinacharya	Abhyanga, Vyayama, udvartana, sadvritam, dasavidhapapa karma
3	Ritucharya	Name of shadritus, their division into uttarayana& dakshianaya, concept of ritusandhi, precautions in ritusandhi
5	Dravadravyavijnaneeya	General Qualities of Jala, ksheera, ghrita, madhu and taila
6	Annaswaroopavijnaneeyam	Qualities of Manda, peya, vilepee and odana, names of eight types of lavana, names of maamsavarga with examples, ingredients of triphala, trikatu, trijaata, chaturjaata, panchakola and panchapanchamoola
7	Annaraksha adhyaaya	Definition and examples of viruddha aahaara,

		trayopasthambha
15	Sodhanaadi gana sangraha	One among three Vaataghna ganas, one among pittaghna ganas, one among kaphaghna ganas, jeevaneeya gana
16	Snehavihi	Snehanadravya guna, snehadravys, classification of snehana into achapaana, vichaarana, effect snehana
17	Swedavidhi	Types of sweda – agneya & anagneya, further types of agneyasweda – taapa, upanaaha, ooshma, drava. effect of snehasweda
18	Vamanavirechanavidhi	Application of vamana & virechana according to dosha predominance (vamana for kapha and virechana for pitta), peyaadikrama (samsarjana) and its importance, effect of s'odhana
19	Vastividhi	Importance of vasti, types of vasti
20	Nasyavidhi	Importance, classification and effect of nasya
21	Dhoomapaanavidhi	Precise procedure of dhoomapaana, effect of dhoomapaana
22	Gandooshaadi vidhi	Definition of gandoosha, kabala and moordhataila and effects
23	Aschyotana anjana	Precise description (definition) of aschyotana and anjana
24	Tarpana putapaakavidhi	Precise description /definition of tarpana and putapaaka
25	Yantravidhi	Definition of the term yantra and its uses (Ref: sloka 1-3)
26	Sastravidhi	Definition and use of sastra
27	Siravyadhaavidhi	Basic knowledge of siravyadha
28	Salyaharana vidhi	General features of antah`salya (ref: solka 1,2)
29	Sastrakarma vidhi	knowledge of three stages of vrana a- aama, pachyamaana, pakwa
30	Kshaara agikarmavidhi	KShaaraguna, agnikarma and types

ASHTAANGASANGRAHA		
12	Vividhaushadhavijnaneeya	Classification of treatment into – 1. Daivavyapasraya, yuktivyapaasraya, satwaavajaya 2. Hetuvipareeta, vyaadhivipareeta, tadarthakaari
13	Agryasangrahaneeeya	Verses 145 – 158 (bhishak chikitsangaanaam to sarvasanyaasa sukhaanaam)
22	Rogabhedeeya	Seven types of diseases – detailed knowledge
23	Bheshajavacharaneeya	Vyaadhibheshajaprabhaava tatwa, aushadhakaala

7. Oral and Practical

- a. 50 marks allotted for this purpose can be distributed as follows:
 - i. Chart framing and compilation – 10 marks
 - ii. Recitation and writing of minimum 10 slokas from chapters intended for detailed study. The sloka should be memorized along with padavibhaga, anwaya, bhaavartha and practical applicability – 10 marks
 - iii. Viva voce – 15 marks
 - iv. Internal assessment – 15 marks

8. Topics for chart

- a. Ayurveda avatarana according to AH
- b. Ashtanga of Ayurveda
- c. Description of Agni
- d. Description of Prakriti
- e. Tridosha
- f. Rasa
- g. Guna - classification
- h. Veerya – definition and classification
- i. Vipaaka
- j. Prabhaava
- k. Ritucharya
- l. Dinacharya
- m. Vegavidhaarana – complications
- n. Chatushpada
- o. Saadhyaassaadhyata
- p. Different classification of dravadravya
- q. Classification of dravya in annaswaroopa

- r. Doshasqamsodhana kaala
 - s. Vriddhikshayalakshana of dosha, dhatu and mala
 - t. Doshaprakopa according to ritu
 - u. Viruddhaahaara
 - v. Trayopasthabha
 - w. Rasaskandha
 - x. Rasa relation with bhoota
 - y. Rasa – dosha relation
 - z. Chaya – prakopa- prasama
 - aa. Gurvadi guna and their karma
9. **Parameters for internal assessment: (15 marks)**
- a. Performance in Term exam – 5 marks (average marks in term exam adjusted to 5)
 - b. Memorizing and describing studied slokas monthly in the class (assessed through chanting and writing) – 5 marks
 - c. Oral and written presentation on a specified topic – 5 marks

SUGGESTIONS ON QUESTION PAPER PATTERN

Two parts of 50 marks each part A & B with the following pattern in each:

- I. Five one word answer questions (mark 1 X 5 = 5)

Example: Chief location (viseshasthaana) of vata according to AH (ans: pakwaasaya)

- II. Five questions for short note (3 marks X 5 = 15)

Example: Write short note on Peyadi krama

- III. Four questions for brief description (5 marks X 4 = 20)

Example: Ama and its treatment

- IV. One essay type question – 10 marks (the question should contain 4-5 specific points with specified marks)

Eg: Explain doshas their nirukti, location, panchabhautikatwa and classification (marks 3+1+2+1+3 = 10)

HOUR DESTRIUTION

Total Hours - 130

Hours for detailed study – 100

Hours for non-detailed study - 30

Chapter No	Name of Chapter	Hours allotted	Trimester	Session
Detailed study				
1	Ayushkameeyam	15 hrs	First trimester	First session 10 months
4	Roganulpadaneeyam	9		
8	Maataraasiteeyam	9	Second trimester	
9	Dravyaadvijnaneeyam	12		
10	Rasabhedeeyam	8	Third trimester	
11	Doshaadvijnaaneeyam	13		
12	Doshbhedeeyam	12	First <i>dimester</i>	Second session 4 months
13	Doshopakramaneeyam	12		
14	Dwividhopakramaneeya	10	Second <i>dimester</i>	
Non- detailed study				
2 – 15		8 hrs	Second <i>dimester</i>	
16 - 20		8 hrs		
21-30		7 hrs		
AS 4 chapters		7 hrs		

Sl No	<u>AYURVEDA ITIHASAM</u>	No of hours	Max marks
	THEORY 100 MARKS LECTURE HRS 50		
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.	3 hrs	10 marks
2	Descent of Ayurveda	2 hrs	
3	Chronology of ayurveda according to different schools		
4	Introduction of eight branches of ayurveda and concerned renowned texts. Introduction of the authors of these texts.	1 hr	
5	Eternity of ayurveda (shashvatvam and anaditavam).	1 hr	
6	Status of ayurveda in Vedic period ,	3 hrs	10 marks
7	Progression of ayurveda upto tantra kala .	1 hr	
8	Knowledge about available topics of ayurveda in puranas and tantras etc.	1 hr	
9	Introduction of authors of classical texts during Samhita kala and their contribution especially Atreya	1 hr	20 marks
10	Dhanwantri	1 hr	
11	Kashyapa	1 hr	
12	Agnivesha	1 hr	
13	Sushruta	1 hr	
14	Charaka	1 hr	

15	<i>Bhela, Harita etc.</i>	1 hr		
16	<i>Dridhbala</i>			
17	<i>Vagbhatta</i>	1 hr		
18	<i>Nagarjuna</i>	1 hr		
19	<i>Jivaka</i>	1 hr		
20	Chronological development of textbooks <i>Charaka samhita</i>	3 hrs	10 marks	
21	<i>Sushruta samhita</i>			
22	<i>Kashyapa samhita.</i>			
23	Introduction and establishment of time period of commentators of classical samhitas <i>Bhattar harishchandra, Jejjata,</i>	3 hrs	10 marks	
24	<i>Chakrapani,</i>			
25	<i>Dalhana,</i>			
26	<i>Nishchalakara, vijayarakshita, Gayadas,</i>			
27	<i>Arundatta, Hemadri,</i>			
28	<i>Gangadhara, Yonginderanath sen, Haranchandra Chakravorty.</i>			
29	Introduction and time period of authors of compendium (granthasamgraha kala) – Acharya Bhavmishra	3 hrs		
30	<i>Sharangdhara</i>			
31	<i>Vrinda, madhavkara</i>			
32	<i>Shodhala, Govind Das (Author of bhaisjya ratnawali), Vasavraja etc.</i>			
33	Origin of ras shastra and its development, introduction and time period of promoters of ras shastra.	2hr	10	

34	Vrikshayurveda vijnana (Ayurveda for plant kingdom),	1hr	marks
35	Pashu chikitsa vijnana (ayurveda for animal kingdom), promoters of ashva, gaja chikitsa Vijnana;	1hr	
36	Shalihotra, palkapya, varahmir, nakula, ashvaghosh.		
37	Introduction of authors of modern era – Gan Nath sen, Yamimi bhushan, Yadavji tikramji acharya, Awareness in keralaleeya ayurveda chikitsa	2hr	
38	Ghanekar, Damodar Sharma Gaur, Priyavrat Sharma,		
39	Swami Laksmiram, Dr. P. M. Mehta, Daji Shastri Pade etc.		
40	Globlaisation of ayurveda – expansion of ayurveda in the following civilisations. Sumera, Babilonia, Asiria, Misra (Eyp),	1 hr	5 marks
41	China, Persia, Arabia, Kamobja,	1 hr	
42	Sri Lanka, Nepal, Thailand, Mauritius, Myanmar (Burma) etc.	1 hr	
43	Impact of ayurveda on Hippocrates (Father of Allopathy),	1 hr	5 marks
44	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.	1 hr	
45	Developmental actions for ayurveda in post-independence period development in educational trends,	2hr	10 marks
46	establishment of different committee, their recommendations,	1 hr	
47	Organizations: central council of Indian medicine, central council for research and ayurveda and siddha, foundation of department of AYUSH, its introduction and activities,	1hr	
48	Drug and cosmetic act, Ayurvedic pharmacopoeia Committee formation and activities of organisations and institutions like Rashtriya Ayurveda Vidyapeeta etc.	1hr	10 marks

49	Activities in field of research in ayurveda according to different subjects. Initiation for writing down a text, different councils of vaidya and their activities.	1hr	
50	Publications of Ayurveda journals and magazines,	1hr	
51	WHO, status of Ayurveda on international grounds in present era.	1hr	
Total No. of hours		50	
Total marks			100

RACHANASAREERAM

SL NO	HEADINGS	TIME ALLOTTED
1	INTRODUCTION CLASSES	7 HRS
2	EMBRYOLOGY	20 HRS
3	CARDIOVASCULAR SYSTEM	16 HRS
4	DIGESTIVE SYSTEM	25 HRS
5	RESPIRATORY SYSTEM	12HRS
6	ENDOCRINE GLANDS	7 HRS
7	URINARY SYSTEM	8 HRS
8	NERVOUS SYSTEM	40 HRS
9	REPRODUCTIVE SYSTEM	10 HRS
10	SPECIAL SENSE ORGANS	8 HRS
11	LYMPHATIC SYSTEM	5 HRS
12	KALAA SHAREERAM	10 HRS
13	SANDHI SHAREERAM	10 HRS
14	MARMA SHAREERAM	15 HRS
15	TWAK SHAREERAM	3 HRS
16	TANTRA SHAREERAM	1 HRS
17	PRAMANA SHAREERAM	1 HRS
18	ABINIVRITTI SHAREERAM	12 HRS
19	ANUVAMSHIKA SIDDANTHAM	
20	PRESERVATION OF DEAD BODY	
21	IMAGING TECHNOLOGIES	

FIRST THREE MONTHS [45 HRS]

SL.NO	TOPICS TO BE DEALT	TIME ALOTTED
1	INTRODUCTORY CLASS	7 HRS
2	MODERN EMBRYOLOGY	12 HRS
3	CARDIOVASCULAR SYSTEM	11 HRS
4	DIGESTIVE SYSTEM	15 HRS

SECOND THREE MONTHS [45 HRS]

SL.NO	TOPICS TO BE DEALT	TIME ALOTTED
1	CARDIOVASCULAR SYSTEM	6 HRS
2	DIGESTIVE SYSTEM	12 HRS
3	AYURVEDIC EMBRYOLOGY	8 HRS
4	NERVOUS SYSTEM	10 HRS
5	LYMPHATIC SYSTEM	5 HRS
6	RESPIRATORY SYSTEM	4 HRS

THIRD FOUR MONTHS [60 HRS]

SL.NO	TOPICS TO BE DEALT	TIME ALLOTTED
1	NERVOUS SYSTEM	23 HRS
2	KALAA SHAREERAM	2 HRS
3	TWAK SHAREERAM	3 HRS
4	RESPIRATORY SYSTEM	10 HRS
5	GENITO-URINARY SYSTEM	12HRS
6	SANDHI SHAREERAM	10 HRS

LAST FOUR MONTHS [72 HRS]

SL.NO	TOPICS TO BE DEALT	TIME ALOTTED
1	NERVOUS SYSTEM	10 HRS
2	MARMA SHAREERAM	15 HRS
3	ENDOCRINE GLANDS	7 HRS
4	TANTRA SHAREERAM	1 HRS
5	GENITO-URINARY SYSTEM	6 HRS
6	PRAMANA SHAREERAM	1 HRS
7	SPECIAL SENSORY ORGANS	8 HRS
8	ABINIVRITTI SHAREERAM	12 HRS
9	ANUVAMSHIKA SIDDANTHA	
10	PRESERVATION OF HUMAN BODY	
11	IMAGING TECHNIQUES	
12	REVISION AND CLASS TESTS	12 HRS

1. INTRODUCTION CLASS (7 HRS)

2. MODERN EMBRYOLOGY (20 HRS)

Spermatogenesis and oogenesis – 2 hrs
Endometrial changes during menstruation –1 hrs
Formation of germ layers – 4 hrs
Formation of placenta and umbilical cord -1 hr
Fate of germ layers -1 hr
Fetal circulation – 1hr
Elementary genetics – 2 hrs
Ayurvedic embryology – 8hrs

3. CARDIOVASCULAR SYSTEM (16 HRS)

Mediastinum and pericardium – 2 hrs
Gross anatomy and surface anatomy of heart -7 hrs
Arterial system – 4 hrs
Venous system – 4 hrs

4. DIGESTIVE SYSTEM (25 HRS)

Divisions of abdomen and anterior abdominal wall -2 hrs
Oral cavity – 3 hrs
Pharynx – 2hrs
Oesophagus and stomach – 2 hrs
Small intestine – 2 hrs
Large intestine – 1hrs
Rectum and anal canal – 3hrs
Ischiorectal fossa and perineum – 3 hrs

Peritoneum – 2hrs

Liver and extra hepatic biliary apparatus – 3 hrs

Pancreas – 2 hrs

Salivary glands – 2 hrs

5. RESPIRATORY SYSTEM (12 HRS)

Nasal cavity and paranasal sinuses – 4hrs

Nasopharynx and larynx – 3 hrs

Trachea – 1 hr

Pleura – 2 hr

Lungs -3hrs

Diaphragm and respiratory muscles – 1hr

6. ENDOCRINE GLANDS (7 HRS)

Pituitary and pineal gland – 2hrs

Thyroid gland – 2 hrs

Parathyroid and thymus – 1 hr

Suprarenal gland and endocrine part of pancreas -2 hrs

7. URINARY SYSTEM (8 HRS)

Kidney – 3hrs

Ureter – 1 hr

Bladder – 2hrs

Urethra – 2 hrs

8. NERVOUS SYSTEM (40 HRS)

Introduction to CNS and classification of NS – 4 hrs

(neuron,neuroglia,myelination,synapses,neuro transmitters)

Development – 1hr

Meninges and cranial venous sinuses – 4hrs

Spinal cord

External structure – 1hr

Internal structure including tracts and nucleus- 3 hrs

Medulla – 2 hr

Pons – 1hr

Midbrain – 1hr

Cerebellum – 1hr

Cerebrum

Gross structure – 4hrs

Internal structure –internal capsule -1hr

Other nerve fibres -1hr

Basal nuclei – 2hrs

Limbic system – 2hrs

Blood supply of brain – 1hr

Diencephalon – 2hrs

Ventricles of brain – 2hrs

Cranial nerves -2hrs

5th, 7th 10th cranial nerves – 2 hrs

Spinal nerves – 1h

Plexus – 3hrs

ANS- 2hrs

9. REPRODUCTIVE SYSTEM (10 HRS)

MALE :

Scrotum with testis – 1hr

Spermatic cord	}	1hr
Epididymus		
Vasdeference		
Ejaculatory duct	}	2hrs
Seminal vesicles		
Prostrate gland		
Bulbo -urethral gland		
Penis	- 1 hr	

FEMALE:

Ovary - 1 hr

Uterus - 2hrs

Uterine tube and vagina - 1 hr

External genitalia - 1hr

10. SPECIAL SENSES (8HRS)

Ear and eye-6 hrs

Optic and olfactory pathways – 2 hrs

Tongue ,nose- dealt in respective system

11. LYMPHATIC SYSTEM (5 HRS)

Structure of lymph gland

Spleen

Cisterna chili, thoracic duct

12. KALAA SAREERAM (10 HRS)

Ayurvedam- 2hrs

Pleura	}	8 hrs
Pericardium		
Peritoneum		allotted in respective systems
Meninges		

13. SANDHI SHAREERAM (10 HRS)

Classification of sandhi - 2 hrs

Structure of synovial joint – 1 hr

Major joints - 7 hrs

14. MARMA SHAREERAM (15 HRS)

15. TWAK SHAREERAM (3 HRS)

16. TANTRA SHAREERAM (1 HRS)

17. PRAMANA SHAREERAM (3 HRS)

18. ABINIVRITTI SHAREERAM

19. ANUVAMSHIKA SIDDANTHA

20. PRESERVATION OF DEAD BODY

21. IMAGING TECHNOLOGIES

12 HRS

PRACTICAL RECORD		BONES
1	ATLAS-I CERVICAL VERTEBRAE (superior aspect)	CHUDA VALAYA
2	AXIS-II CERVICAL VERTEBRAE(superior aspect)	DANTA CHUDA
3	TYPICAL THORACIC VERTEBRAE(lateral aspect)	VAKSHA KASHERUKA
4	STERNUM(anterior aspect)	VAKSHASTHI
5	TYPICAL RIB(posterior aspect)	PARSHUKASTHI
6	SCAPULA(dorsal aspect)	AMSAPHALAKA
7	CLAVICLE(superior aspect)	AKSHAKASTHI
8	HUMERUS(anterior aspect)	PRAGANDASTHI
9	RADIUS&ULNA(anterior aspect)	ANTAH PRAKOSTHA& BAHI: PRAKOSTHASTHI
10	HIP BONE(lateral aspect)	SHRONI PHALAKA
11	FEMUR(anterior aspect)	URO ASTHI
12	TIBIA&FIBULA(anterior aspect)	JANKHASTHI& ANUJANKHASTHI
13	FRONTAL BONE(inferior aspect)	PURAH KAPALASTHI
14	PARIETAL BONE(internal aspect)	PARSVAKAPALASTHI
15	OCCIPITAL BONE(internal aspect)	PASCHA KAPALASTHI
16	TEMPORAL BONE(medial aspect)	SHANKHASTHI
17	SPHENOID BONE(superior aspect)	JATHOOKASTHI
18	ETHMOID BONE(anterior aspect)	JARJARASTHI
19	MAXILLA(medial aspect)	URDHVA HANVASTHI
20	MANDIBLE(lateral aspect)	ADHAH HANVASTHI
ORGANS		
1	LUNGS(medial surface)	PHUPPHUSA
2	HEART (anterior surface)	HRIDAYA
3	FOETAL CIRCULATION	GARBHA RAKTHA CHANKRAMANAM
4	LIVER(posterior aspect)	YAKRUT
5	KIDNEY(coronal section)	VRIKKA
6	UTERUS&ASSOCIATED STRUCTURES(posterior aspect)	GARBHASHAYAM

7	BRAIN(medial aspect)	MASTHISHKAM
8	BASE OF BRAIN(inferior aspect)	MASTHISHKAM
9	EYE BALL (sagittal section)	NETRAM
10	EAR(external,middle&internal)	KARNAM

WORKING HOURS SCHEDULES FOR PRACTICAL

SCHEDULE OF RACHANA SHAREERA PRACTICAL FOR 1ST THREE MONTHS (Total 36 Hrs)

Osteology – upper limb, lower limb & cranial bones(Frontal,Parietal,Occipital,Temporal,Sphenoid,Ethmoid,),norma and sutures in detail.

SCHEDULE OF RACHANA SHAREERA PRACTICAL FOR 2ND THREE MONTHS (Total 36 Hrs)

1. Vertebral column, ribs, sternum & facial bones (Mandible,Maxilla in detail)

2. Dissection

SCHEDULE OF RACHANA SHAREERA PRACTICAL FOR 3RD THREE MONTHS (Total 48 Hrs)

1. Dissection

2. Histology

SCHEDULE OF RACHANA SHAREERA PRACTICAL FOR SENIOR BATCH (4 MONTHS-120 Hrs)

1. Dissection

MICRO ANATOMY (HISTOLOGICAL SLIDES)

1	SIMPLE SQUAMOUS EPITHELIUM
2	ELASTIC CARTILAGE
3	COMPACT BONE
4	STRIATED MUSCLE
5	SPINAL CORD
6	CEREBELLUM
7	ARTERY
8	VEIN
9	LYMPH GLAND
10	SPLEEN
11	THYROID GLAND
12	LUNG
13	OESOPHAGUS
14	STOMACH
15	DUODENUM
16	COLON
17	LIVER
18	KIDNEY
19	TESTIS
20	OVARY

Model of Dissection Log Book

NAME OF THE AYURVEDA COLLEGE

(Emblem)

DISSECTION LOG BOOK

20 - 20

NAME OF THE AYURVEDA COLLEGE

(Emblem)

DISSECTION LOG BOOK

20 - 20

Name :

Roll No :

**Certified that this is the bonafied Log
Book offirst professional BAMS,
with Reg.Noand that he/she has
satisfactorily completed the dissection work during
the year 20 - 20 .**

Signature of lecturer

Signature of student

Date

Reader

Professor

External Examiners

Internal examiners

INDEX

SL No.	Name of the Dissection	Page no.	Date of Dissection
1.	The scalp		
2.	The face		
3.	The pectoral region and axilla		
4.	The neck		
5.	The anterior compartment of arm, forearm and cubital fossa		
6.	The wrist and palm		
7.	The anterior abdominal wall		
8.	The front of thigh and knee		
9.	The front of leg and dorsum of foot		
10.	The dissection of the back – Scapular region		
11.	The shoulder		
12.	The lumbar region		
13.	The gluteal region		
14.	The posterior & medial sides of thigh & popliteal fossa		
15.	The back of leg and sole		
16.	The posterior compartment of the arm and forearm		
17.	The dorsum of the hand and		

	wrist		
18.	Removal of the Brain		
19.	Removal of the lungs and heart		
20.	Removal of the abdominal organs		

Figures that should be included in the Log Book

3. The pectoral region and axilla

i) Brachial plexus

ii) Axillary artery and branches

4. The neck

i) Anterior compartment of Neck

ii) Posterior compartment of Neck

5. The anterior compartment of arm,

forearm and cubital fossa

i) Boundaries and contents of cubital fossa

7. The anterior abdominal wall

i) Formation of rectal sheath

8. The front of thigh and knee

i) Femoral triangle

ii) Femoral sheath

10. The dissection of the back – Scapular region

i) Sacral plexus

14. The posterior and medial sides of thigh

and popliteal fossa

i) Popliteal fossa (Boundaries and contents)

18. Removal of the Brain

i) Circle of Willis

20. Removal of the abdominal organs

i) Abdominal aorta and its branches

Model description of index

6. The wrist and palm

Incisions

1. Horizontal incision about 1 cm proximal to the distal crease of front of wrist.

2. Horizontal incision along the distal palmar crease.

3. Vertical incision connecting 1 & 2 through the middle and extending to the middle finger to its tip.

4. Oblique incision starting from middle of '3' in palm and extending to the tip of thumb.

Reflected the skin and identified the Palmaris brevis muscle in the hypothenar eminence, which is superficial.

Removed the subcutaneous fat and identified

1. Palmar aponeurosis
2. Flexor retinaculum
3. Palmaris longus tendon
4. Ulnar nerve and its branches
5. Ulnar artery
6. Radial artery with its superficial palmar branch
7. Median nerve

Detached the palmar aponeurosis from its attachment from flexor retinaculum and reflected it to its distal attachment.

1. Superficial palmar arch and its digital branches
2. digital branches of ulnar nerve
3. digital branches of median nerve
4. Lumbrical muscles

5. Tendons of flexor retinaculum superficialis and flexor digitorum profundus

6. Deep palmar arch

Note

1. Flexor retinaculum
2. Palmar aponeurosis
3. Intrinsic muscles of hand
4. Superficial palmar arch
5. Deep palmar arch
6. Radial artery
7. Ulnar artery
8. Ulnar nerve

The book should be limited in 150 pages of A4 size

KRIYA SAREERA

CLASS PERIOD FOR FIRST PROFESSIONAL BAMS DEGREE JUNIOR-10 MONTHS

I. Schedule of kriya shareera syllabus for first 3 months (Total-40 hours)

1. Basics of physiology-consist of cell physiology, biophysics, homeostasis, membrane physiology, resting membrane potential and action potential -5 hours
2. Basic principles of biochemistry-consist of basic components. Biochemical structures (non-detail), vitamins and enzyme -5 hours
3. Haemopoetic system, immunity and lymphatic system -19 hours
4. Definition and synonymn of shareera, kriya, purusha, role of shad dhatu - purusha in kriya shareera and chikitsa and loka purusha samya (non detail) -4 hours
5. Fundamental principles like panchamahabhuta, tridosha, triguna -5 hours
6. Samanya-vishesha-rasa-guna-virya-vipaka-non detail- -2 hours

II. Schedule of kriya shareera syllabus for second 3 months (Total-50 hours)

1. Physiology of digestive tract with ayurvedic portion consist of ahara, agni, paka kriya and kostha (with metabolism of food stuffs-detail) -25 hours
2. General introduction to vata, pitta, kapha and its classification (Dosha bheda) -2 hours
3. Etiology foe dosha vridhhi kshaya non detail -2 hour

- | | |
|---|-----------|
| 4. Muscle physiology | -4 hours |
| 5. Physiology of cardio vascular system | -17 hours |

III. Schedule of kriya shareera syllabus for third 4 months (Total-60 hours)

- | | |
|---|-----------|
| 1.Dhathus all aspect (detailed) | -18 hours |
| 2. Ojas, bala, relation between sleshma, bala and ojas, and vyadhi kshamat | -5 hours |
| 3. Upadhatu | -2hours |
| 4. Srothas | -3 hours |
| 5. Prakruti (shareera) (including kaya bheda + sara) | -10 hours |
| 6. Manasa prakruti (non detail) | -2 hours |
| 7. Modern view of somato –types .Biological and physiological personality traits (non detail) | -2 hours |
| 8. Physiology of Respiratory system | -10 hours |
| 9. Physiology of Excretory system (urinary and skin) | -8 hours |

Class period for IST professional BAMS Degree seniors-4 months (60 hours)

- | | |
|---|-----------|
| 1. Physiology of Central Nervous System | -18 hours |
| 2. Endocrinology | -16 hours |

- | | |
|--|-----------|
| 3. Special senses (Ayurvedic part- Pancha jnanendriya) | -10 hours |
| 4. Reproductive system+Astanga hrdayam-Ayurvedic part | -12 hours |
| 5. Manas-Atma-Bhuddhi-Nidra | -4 hours |

KRIYA SHAREERA

PRACTICAL SCHEDULE

MODERN PROTOCOL- Total 75 hors

No	Name of experiment	No.of hours
1	Use and care of the compound microscope	2 hour
2	Types , uses and care of balances	
3	Collection of blood sample	2 ,, ,,
4	Microscopic Examination of Blood	
5	Packed cell volume or heamatocrit	
6	Erythrocyte sedimentation rate	2 ,, ,,
7	Haemoglobinometry	2 ,, ,,
8	Osmotic fragility	1 ,, ,,
9	Enumeration of erythrocytes	4 ,, ,,
10	Total leucocyte count	4 ,, ,,
11	Pheriperal blood smear (Demonstration)	2 ,, ,,
12	Differential leucocyte count	4 ,, ,,
13	Bleeding time	1 ,, ,,
14	Clotting time	1 ,, ,,
15	Blood grouping & RH typing	1 ,, ,,
16	Blood indices demonstration	1 ,, ,,
17	Blood Bio-chemistry (Demonstration)	4 ,, ,,
18	Urine Examination	1 ,, ,,
19	Chemical Examination of urine	1 ,, ,,
20	Test for albumin	2 ,, ,,
	Test for sugar	
21	Test for acetone bodies	2 ,, ,,
22	Test for bile pigments	

23	Test for bile salts	
24	Test for occult blood	
25	Microscopic examination of urine	2 ११ ११
26	Examination of heart sounds	2 ११ ११
27	Lung volume and capacities(Spirometry)	2 ११ ११
28	Arterial blood pressure examination	5 ११ ११
29	Electrocardiogram	2 ११ ११
30	General examination	2 ११ ११
31	Examination of Cardio vascular system	2 ११ ११
32	Examination of Respiratory system	2 ११ ११
33	Examination of Higher functions and Sensory system	4 ११ ११
34	Examination of Cranial nerves	4 ११ ११
35	Examination of Motor system	3 ११ ११
36	Examination of Reflexes	4 ११ ११
37	Stool examination (non-detail)	1 ११ ११
38	Examination of semen (non-detail)	1 ११ ११
39	Measurement of body temperature	1 ११ ११
40	Normal values	1 ११ ११

AYURVEDIC PROTOCOL- SEPARATE RECORD (minor) Total 15 hors

	Name of experiment	No.of hours
1	Assessment of prakruti-10 cases(Different)	2
2	Assessment of Sara -10 cases(Different)	2
3	Assessment of Dosha (vridhikshaya lakshanas) (non-detailed)	1
4	Assessment of Dhatu (shareerabala & manasa bala) (non-detailed)	1
5	Assessment of Mala (non-detailed)	1
6	Assessment of Vaya (non-detailed)	1
7	Anguli pariksha (non-detailed)	1
8	Assessment of Ayu in Charaka samhita (non-detailed)	1
9	Assessment of Agni (non-detailed)	1
10	Assessment of koshta (non-detailed)	1
11	Satmya pariksha (non-detailed)	1
12	Nadi pariksha (non-detailed)	1
13	Sthanya pariksha (non-detailed)	1

**SCHEME OF SYLLABUS FOR FIRST PROFESSIONAL BAMS
KERALA UNIVERSITY OF HEALTH & ALIED SCIENCE
SANSKRIT**

Total Hours 175

Sl No.	Subject/Portions		Duration	Remarks
	Detailed	Non-Detailed	Hours	
1.	संस्कृत भाषा परिचयः		25hrs	Introduction to Language Naama Roopam Kriya Roopam Translation Composition
2.	लघुसिद्धान्तकौमुदि- संज्ञा प्रकरणम्		5 hrs	Sutras, Padaschedam, Meaning, Examples
3.	अच् सन्धि प्रकरणम्		15 hrs	"
4.	हल् सन्धि प्रकरणम्		10 hrs	"
5.	विसर्ग सन्धि प्रकरणम्		3 hrs	"
6.	कारक प्रकरणम्		5 hrs	"
7.	समासः -केवल समासः		2 hrs	Sutras, Vigraham, Meaning, Examples
8.	अव्ययीभावसमासः		3 hrs	"
9.	तत्पुरुषसमासः		10 hrs	"
10.	बहुव्रीहिसमासः		5 hrs	"
11.	द्वन्द्वसमासः		2 hrs	"
12.		स्त्री प्रत्ययम्	4 hrs	First 10 Sutras Meaning, Examples
13.		तद्धितः	5 hrs	लट्, लिट्, लोट्, लङ्, लृट् स्थाणि
14.	आयुर्वेदीय हितोपदेशः :- • आयुर्वेद पदार्थः		1 hrs	
15.	• अष्टाध्यायुर्वेदः		1 hrs	
16.	• संभाषविधिः		2 hrs	
17.	• वयसोऽवस्थात्रयोविभागः		1 hrs	
18.	• प्रज्ञापराधः		3 hrs	
19.		त्रिविधोषधं षड्साश्रित चिकित्साः अष्टाहारविधिः चिकित्सायाः पादचतुष्टयम्	3hrs	
20.	वैदिकीयसुभाषितम् Chapters- 1,2,3,4,5,6,7,8, 11,12,13,14,17,18,20	Chapters:- 9,10,15,16,19	50 hrs	Explain the meaning of the Slokas and their significant in Ayurveda Sastra
21.	Pancha Tantra 4th Chapter		20 hrs	

Note: 80% questions will be from the detailed syllabus and 20% will be from the Non-detailed syllabus.

2.1. CHARAK SAMHITA
(Purvardha: Sutra-Nidana-Vimana-Sharir-Indriya Sthana)

Theory-One-paper-100 Marks
Practical/Viva Voce- 50 Marks
Lectures -100

Charaka Purvardha Distribution of theory marks according to Sthana

1. Sutra Sthana	40 Marks
2. Nidhana Sthana	15 Marks
3. Vimana Sthana	20 Marks
4. Sharir Sthana	15 Marks
5. Indriya Sthana	10 Marks

PRACTICAL

Parameter for internal assessment

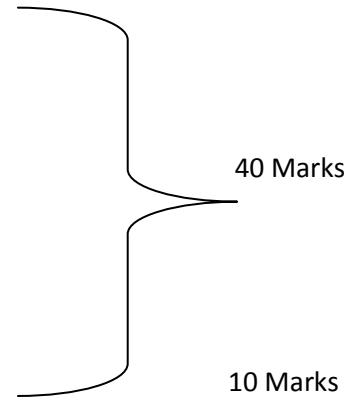
Memorizing and describing two Shloka weekly, discipline, Oral and written presentation and other activities.

Other Activities include the following:

1. Memorizing two Shloka weekly, (Monthly Ten Sloka in professional year of 1 year and 6 months. A log book of memorized Shloka, corrected and signed by the class teacher is to be submitted at the time of examination.
(The Shloka should be memorized as discussed above in span of one year and six months)
2. Passage writing
3. Speech related to Charak

Distribution Marks

1. Table (Chart)Preparation/ Compilation
2. Presentation of any 10 Shlokas out of total memorized Shlokas (written& Oral)
3. Analysis of Srotas, Discussion about Dhatu and their Vriddhi and Kshaya (Phenomenon of their increase and decrease). Ten Proforma/ case sheets should be filled from IPD/OPD.)
4. Assessment of Arishta. (Five proforma/case sheets should be filled from IPD/OPD.
5. Viva Voce
6. Internal Assessment



Total

50 Marks

REFERENCE BOOKS

1. Charak Samhita-Chakrapani Tika (Sanskrit Commentary)
2. Charak Samhita (Hindi Commentary)

- Vaidya Jayadev Vidyalankar or Vd. Atridev Vidyalankar or Professor. Gorakha Nath Chaturvedi & Kashinath Shastri or Dr. Brahmanand Tripathy or Dr. Ravi Dutta Tripathy.
3. Charak 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 Voce - 100 Marks

Lectures - 180

Practicals and Demonstration - 50 Hrs.

Paper I -

100 Marks

Part A-

50 Marks

Vaiyuktika Swasthavrittam (Personal Hygiene)

1. Introduction

- i. Definition of Swastha & Swasthya
- ii. Arogyalingani(signs of Health)
- iii. Definition of Swasthavritta
- iv. Swasthavritta Prayojanam
- v. WHO Definition of Health
- vi. Dimensions of Health -
a) Physical b) Mental c) Social.
- vii. Concept of well being
a) Objective b) Subjective c) Standard of living d) Quality of life.

2. Dinacharya

- i. Definition of Dinacharya
- ii. Aims and importance of dinacharya
- iii. Bhrahma Muhurta Evum Uthishta
- iv. Ushana Jalapana
- v. Sarirachinta
- vi. Malaytaga
- vii. Mukha Prakshalana
- viii. Dantadhavana
- ix. Preparation of Ayurvedic power and paste
- x. Jihvanirikhana Vidhi (Tongue cleaning)
- xi. Anjana
- xii. Pratimarsa Nasya
- xiii. Gandusha
- xiv. Kavaladharana
- xv. Dhoomapana
- xvi. Abhyangam
- xvii. Udvaetanam
- xviii. Utsadana
- xix. Vyayama
- xx. Chankramana-Benefits of Walking, Jogging, swimming, gymnastics, Sports and games along with its application in health and disease
- xxi. Snanam
- xxii. Anulepanam

- xxiii. Vastradharanam
xxiv. Tambulasevanam

3. Ratricharya

1. Sandhyacharya 2. Ratribhojana Vidhi 3. Shayanavidhi

4. Ritucharya

1. Importance of Ritucharya
2. Ritu as per different Acharyas
3. Adana kaal & Visarga kaal
4. Sanchaya, Prakopa-Prashamana of Dosha and their Utpatti in Ritu
5. Doshashodhana in samanya ritu
6. Relation of Agni bala and ritu
7. Ahara-Vihara, Pathya – Apathya
8. a. Ritusandhi
b. Yamadamshttra different ritu
c. Rituharitaki
d. Rituviaryaya

5. 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.

6. Trayopastambha (Three pillars of health)

- i. Ahara Nirukti, swarupa, Pramukhatvam, ahara dravya Vargikaranam, Aharavidhi Vidhana, Dwasasha Ashanapravicharana, Ashtahavidhi viseshayatanani, aharaparinamakara bhava, pathyahara, Apathyahara, Samasana, Adhyasana, vishamasana, Bhojanapachana avadhi. Virudhahara and its effects, proximate principles of food, Nutritional requirements, Balance diet for:-
(1).workers-sedentary/Moderate/Hard (2) Pregnant and lactating women. (3) Children (4) infants, sources and deficiency diseases of Protein, Carbohydrate, Fat, minerals and vitamins, shadrasabhojanasya mahatwam, Dietetic standards, national Nutritional programmes, social aspects of nutrition, food groups-Dhanya varga (roots and tubers), Phala Varga (Fruits), Taila varga (Fats& Oils), Ikshu varga (jiggery, sugar, honey), jala varga& Madhya varga (Beverages), Dugdha varga (milk and milk products), Masala and vyanjana dravyas (spices & Condiments), Kritanna varga (prepared food), Mamsa varga (meat types), food hygiene, Milk hygiene, Milk composition, source of infection (for milk), Milk borne diseases, Clean and safe milk, pasteurization of milk, Meat hygiene, Meat inspection, slaughter house, freshness of fish and egg, fruits and vegetable diseases, Balanced diet, food fortification, food toxicants, properties of vegetarian and Non-vegetarian diet, effects of spices and condiments , consumption of Alcohol and its effects and ayurvedic diet in life style disorders-diabets, hypertension, obesity and coronary heart disease.
- ii) Nidra-Nirukti and Utpatti, Types of Nidra (sleep), Yoga nidra vidhi, Nidra-swasthya sambandha, Duration of sleep according to age, sleep in healthy and diseases persons. Properties of Yukta Nidra, effects of Ratri jagarana, diwaswapna, anidra, Atinidra, Ahara and Vihara causing disturbed sleep, ahara and vihara causing sound sleep.
- iii) Brahmacharya-Brahmacharya vyakhya and Abrahmacharya Vyakhya, Importance of Brahmacharya and Abrahmacharya. Vyavaya Sambandhi Niyama. Effects of Ativyavaya.

Veeryotpatti, Methods of Virya Raksha, Suretaspraha (Libido) through Vajikarana, Viryanasa phala and Menstrual Hygiene.

7. Roganutpadaniya

Concept of Vega- Adharaniya Vega and Dharaneeya Vega, Diseases due to vegadharana and their chikitsa, Upavasa, Rasayana for swastha, Prajnaparadham, sharir raskhanatmaka kayani and sharir ahithakara karyani, Sharir Sodhanam.

Part B

50 Marks

Sarvajanika-Samajika Swasthavrittam (Public Health)

1. Janapadodhwamsa

- i. Causes
- ii. Manifestations and control measures
- iii. Importance of Panchakarma and Rassayana
- iv. Vyadhikshamatva and the role of Rassayana

2. Vayu (Air)

- i. Vayu guna, Vayu swasthya Sambandha
- ii. Composition
- iii. Air of occupied room
- iv. Discomfort and comfortable zone (disinfection of air)
- v. Air movement
- vi. Air Pollution-health and social aspects
- vii. Prevention and control of air pollution
- viii. Ventilation and its types
- ix. Vayu shuddhi prakara
- x. Mountain air & High altitude- Health problems

3. Jala (Water)

- i. Jala Mahatva- Biological Importance of water
- ii. Safe and wholesome water
- iii. Requirement and uses
- iv. Properties of water
- v. Types of water
- vi. Water sources
- vii. Water pollution
- viii. Water related diseases
- ix. Purification of water (Jalasuddhi upayas)
- x. Hardness of water
- xi. Water examination
- xii. Shad Jala dosha
- xiii. Water problems in India
- xiv. Rain water Harvesting and water recycling

4. Bhumi (Land & Housing)

- i. Types of soil
- ii. Soil & Health
- iii. Bhumi Shodhana

- iv. Nivasayogyabhumi
- v. Social goals of housing
- vi. Housing standards
- vii. Rural Housing
- viii. Housing and health
- ix. Over crowding
- x. Pasu sala (Cattle shed)

5. Prakasha (Lighting)

- i. Requirements of good lighting
- ii. Natural lighting
- iii. Artificial lighting
- iv. Biological effects of lighting

6. Dhvani Pradushana (Noise)- sources, effects & control

7. Vikirana (radiation)- sources, effects & control

8. Apadravya nirmulana (Disposal of solid waste)

- i. Different types of solid waste
- ii. Storage and collection of refuse
- iii. Methods of disposal of solid waste (Rural & Urban)
- iv. Bio-Medical waste management

9. Malanishkasana Vyavastha (Excrete disposal)

- i. Unsewered area
- ii. Sewered area
- iii. Latrines for camps, fairs and festivals.

10. Disaster Management

11. Occupational Health

- | | |
|--|---------------------------------------|
| i. Occupational hazards | iv. ESI Act and factories Act. |
| ii. Occupational Diseases | v. Offensive trades-Effects on health |
| iii. Prevention of Occupational diseases | and precaution measures |

12. School Health Services

- i. Health problems of school children
- ii. Aspects of School Health Services
- iii. Duties of School Medical Officer
- iv. Maintenance of healthy environment.

13. Epidemiology

- | | |
|---|-----------------------------|
| i. Concept of Epidemiology transmission | |
| ii. Concept of disease | x. Incidence and prevalence |
| iii. Concept of causation | xi. Dynamics of Disease |
| iv. Epidemiological triad | xii. Mode of transmission |
| v. Natural history of disease | xiii. Susceptible host |
| vi. Risk factors | xiv. Host defences |
| vii. Concept of control | xv. Immunizing Agents |
| viii. Concept of prevention | xvi. Disease prevention and |
| ix. Modes of intervention | control |

- xvii. Disinfection
xviii. Epidemiology of Communicable diseases
- | | | |
|-----------------|--------------------|--------------------------------------|
| a. Measles | h. Pneumonia | o. Chickugunya |
| b. Diphtheria | i. Cholera | p. Malaria |
| c. Pertusis | j. Polio | q. Filariasis |
| d. Mumps | K. Viral Hepatitis | r. Leprosy |
| e. Tuberculosis | l. Typhoid | s. Rabies |
| f. SARS | m. Leptospirosis | t. Tetanus |
| g. Influenza | n. Dengue fever | u. Emerging and Re Emerging diseases |
- xix. Kuprasangaja vyadhi (STDs)
- | | |
|---------------|---------------|
| a. AiDS | b. syphills |
| c. Gonorrhoea | d. Chanchroid |
- xx. Ayurvedic paribhasha of sankramika roga
- xxi. Non – communicable disease epidemiology
- | | | |
|---------------------------|----------------------------|-----------------|
| a. Diabetes | b. Obesity | c. Hypertension |
| d. coronary Heart Disease | e. Rheumatic Heart disease | f. Cancer |

14. Disposal of Dead body

- | | | |
|------------|-----------|-----------------------|
| a. Burning | b. Burial | c. Electric cremation |
|------------|-----------|-----------------------|

15. Chikitsalaya Bhavana (Hospital Building)

16. Meteorology (Ritu evum vatavarana Jnana)

YOGA & NISARGOPACHARA

Paper II

100 Marks

Part A

50 Marks

Yoga

1. **Etymology**
2. **Definitions**
3. **Development of Yoga (From ancient time to present time)**
4. **Different Streams of Yoga**

a. Jnana Yoga	b. Bhakti Yoga	c. Raja Yoga	d. Hathayoga-features & objectives
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5. **Eight Branches of Yoga**

i. Yama	ii. Niyama	iii. Asana and its importance
a) Suryanamaskara		
b) Standing postures		
i. Ardhakatichakrasana	ii. Padahasthasana	
iii. Trikonasan		
c) Sitting Postures		
i. Padmasana	vi. Paschimottanasana	
ii. Vajrasana	vii. Suptavajrasana	
iii. Bhadrasana	viii. Gomukhasana	
iv. Sasankasana	ix. Ardhamatsyendrasana	
v. Ushtrasana	x. Sidhasana	

- ## 6. Description of Yoga in Ayurveda

7. Panchakosha theory

- ## 8. Integrated Approach of Yoga therapy

9. **Yoga package for LBA, obesity, Asthma, diabetes mellitus.**

10. Effect of Yoga practice on physical and mental dosha.

1. Proakritika chikitsa (nature cure)

- Definition & History
- Aims and objectives
- Relation of Ayurveda and Naturopathy
- Schools of Naturopathy-Western School
- Schools of Naturopathy- Indian School (Panchabhutopasana)
- Importance in present era

2. Jala Chikitsa

- Hot water treatment
- Cold water treatment
- Footbath
- Hand bath
- Spinal Bath
- Hip bath
- Abdomen wet pack
- Steam bath
- Enema
- Whirlpool bath

3. Mrittika Chikitsa (Mud Therapy)

- a. Types of soil or mud
- b. Doctrine of mud selection
- c. Mud bath

4. Surya Kirana Sevana (Sun bath-Haelio therapy & Chromotherapy)

5. Mardana (Massage)- different methods of Mardana

6. Diet- Types

- a. Soothing b. Elininative c. Constructive diets. D. Positive e. Negative

7. Upvasa Chikitsa (Fasting)

- a. Importance b. Types c. Therapeutic effect

PART B

50 marks

COMMUNITY HEALTH CARE

1. Prathamika Swashya Samarakshana (Primary Health care)

- a. Definition
- b. Principle
- c. Elements
- d. Structure-at Village level, sub level PHC level. CHC level, Hospitals, Health Insurance, Private agencies, AYUSH, voluntary health agencies in India and N.G.Os
- e. Role of Ayurveda in Primary Health Care in India.

2. Privara Kalyana Karyakrama (Family Welfare Programmes)

- a. Demography
- b. Demographic Cycle
- c. Life Expectancy
- d. Family Planning
- e. Methods of Family Planning

3. Rashtriya Karyakrama (National Programmes)

- a. Tuberculosis(RNTCP)
- b. Leprosy (NLEP)
- c. AIDS (NACP)
- d. Blindness (N(NACP)
- e. Polio (PPI)
- f. Diabetes (NDCP)
- g. Cancer (NCCP)
- h. National rural Healh Mission (NRHM)
- i. National Anti Malaria Programme
- j. National Filariasis control Programme
- k. UIP (Universal Immunisation Programme
- l. RCH (Reproductive and Child Health Programme)
- m. National Water supply and sanitation programme
- n. Minimum needs programme
- o. All emerging National Health programmes.

4. Matru-shishu Kalyana Karyakrama (Mother and Child Welfare Programme)

- a. Ante Natal care
- b. Post Natal Care
- c. Child Health Problems
- d. Indicators of MCH care.

5. **Preventives Geriatrics.**
6. **International Health**
 - a) Vishwa swasthya Sangathana (world Health Organization)
 - b) Objectives. Structure and function of who WHO
 - c) Alma-Ata Declaration
 - d) National Health Policy and importance of Ayurveda in it.
 - e) United Nations agencies
 - f) Health work of Bilateral agencies
7. **Swasthya Prashasana (Health Systems in India)**
 - a. Central level
 - b. State level
 - c. District level
 - d. Ayush
8. **Health Statistics**
 - a. Definition of statistics/Health statistics/Vital Statistics
 - b. Sources and uses of health statistics
 - c. Data collection, Classification and Presentation
 - d. Mean
 - e. Median
 - f. Mode
 - g. Health Survey
 - h. Mortality rates, Morbidity rates and Fertility rates

PRACTICAL

Content of Practical

1. Vyaktigata Swasthya
 - a. Pratimarsa Nasya
 - b. Anjana
 - c. Dhumapana
 - d. Kavala
 - e. Gandusha
 - f. Udvartanam
 - g. Abhyangam
2. Aharadravya Parichaya
3. Immunizing agent
4. Disinfectants
5. Family Planning appliances
6. Yogic Kriya
 - a. Vamana Dhauti
 - b. Jala Neti
 - c. Sutraneti
 - d. Kapalabhati
7. Yogasana-Demonstration of 24 Asana 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

- i. Rural Ayurvedic Dispensary ii. Primary Health centre iii. 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 case sheets of communicable diseases.

Distribution of Marks

1. Personal Hygiene	20 marks
2. Public and social health	20 marks
3. Demonstration of Yoga	10 marks
4. Naturopathy	10 marks
5. Daily work	10 marks
6. Viva- voce	30 marks

Total

100 Marks

Reference Books

Relevant Portions of Charak, sushrut, Vaghata, sharangadhara, Bhavaprakasha, Madhava Nidana, 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
Swathvritta Vigyan	Dr. Ram Harsh Singh
Swasthvrittam	Dr. Brahmanand Tripathi
Ayurvediya Swasthvritta	Jahulkar
Hathayoga pradipika	Swatmaram Yogendra
Yogic Yoga Paddhati	Bhartiya Prakratika Chikitsa parishad
Yogic Chikitsa	shri Kedar Nath Guptha
Prakritik chikitsa vidhi	sharda Prasad
Prakritik chikitsa vigyan	Verma
Jasanakhya Shiksha siddhant	Dr. Nirmal Sahani Updeysa
Health Administration in India	S.C.Seel
Swasthavrittam	Dr. Shivkumar Gaur
Health and Family Welfare	T.L.Devaraj
Sachitra Yogasan Darshika	Dr. Indra Mohan Jha
Preventive & Social Medicine	J.K. Park
Yoga Deepika	Shri Ayyangar
Swasthavritta	Vaidya Sakad
Positive health	Dr. L.P. Gupta
Bilgenic Secrets of food in Ayurveda	Dr. L.P.gupta
Yoga & Yogic chikitsa	Ram Harsh singh
Smritigrahthon mein nihita	Dr. Smt. Nigma Sharma
Swasthaparaka Samagri	
The foundations of Contemporary Yoga	R.H.Singh
Yoga Siddhant Evum Sadhana	Harikrishna shastri Datar
Dr. Reddy's Comprehensive guide	

2.3 DRAVYAGUNA VIGYAN

Theory two papers- 100 marks each
Practical/Viva voce- 200 marks
Lectures - 180
Practical and Demonstration - 90

Paper 1
Part A

100 marks
50 Marks

1. **Dravyaguna shastra:** 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, Panchabhautikata, Aushadhatva, Dravya Pradhanye Yuktah (arguments for importance of dravya). Classification of Dravya, according to Chetan-Achetan (living-Non living), Karya-Karana, Utpatti (Origin), Yoni (mode of Origin), Rasa, Virya, Vipaka, Prayoga (use), Dosha Karma (Action on dosha), method of Dravya classification according to Brihatrayee and according to Taxonomy.
3. **Guna:** Etymological derivation, definition and classification of Guna. Detailed knowledge of Gurvadi and Paradi Guna.
4. **Rasa:** Etymological Derivation, definition, meaning of "Rasa" in various contexts. Six Rasa (Madhura, amla, Lavana, Katu, /Tikta and Kashaya), Panchabhautik origin of Rasa, Nirvritivisheshakrama (manifestation in general and particular), Ritu prabhava (effect of season). Rasanurasayo bheda (difference between rasa and anurasa) Lakshana (characteristics), Guna and karma of six Rasa, kopana and Shamana of Dosha and dushty by six rasa, Rasaskandha, Effects of excess usage of Rasa. Perception of Rasa (Rasopalabdhi), Presentational use of Rasa in diet and medicine (Rasa sevan 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), Vipakopalabdhi hetu (Knowledge/Understanding of Vipaka). Differences between Rasa and vipaka.
6. **Virya:** Etymological derivation, definition and Nature of Virya, number of Virya. (Dwividha & Ashtavidha), Panchabhautikata, 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-Virya-Vipaka-Prabhava with respect to their strength (balabalanirupana).
9. **Karma:** Nirukti lakshana swaroopa 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 karma with examples-

SL	NAME	SL	NAME	SL	NAME
1	Deepana	2	Pachana	3	Samshodhana
4	Samshamana	5	Anulomana	6	Sransana

7	Bhedana	8	Rechana	9	Chhedana
10	Lekhana	11	Grahi	12	Sthambhana
13	Madakari	14	Pramathi	15	Abhishyandhi
16	Vyavayi	17	Vikashi	18	Rasayana
19	Vajeekarana	20	Jeevaneeya	21	Balya
22	Brimhana	23	Langhana	24	Medhya
25	Keshya	26	Chakshushya	27	Varnya
28	Dantya	29	Hridya	30	Sanjnasthapana
31	Vedanasthapana	32	Prakasthapana	33	Shonithasthapana
34	Raktaprasadana	35	Shukrala	36	Shukrajanana
37	Sukrarechaka	38	Sukrasthambhaka	39	Shukrashodhana
40	Stanyajanana	41	Stanyashodhana	42	Mutravirechaniya
43	Mutravirajaniya	44	Purishavirakaniya	45	Purishasangrahaniya
46	Swedasangrahaka	47	Swedana	48	Swedopaga
49	Snehana	50	Snehopaga	51	Vamana
52	Vamanopaga	53	Virechana	54	Virechanopaga
55	sirovirechanopaga	56	Asthapanopaga	57	Anuvasanopaga
58	Hikkanigrahana	59	Trishnanigrahana	60	Chhardinigrahana
61	Dahaprashamana	62	Shitaprashamana	63	Angamardaprashamana
64	Jvarahara	65	Shramahara	66	Shothahara
67	Shwasahara	68	Kasahara	69	Shoolaprashamana
70	Truptighna	71	Kandughna	72	Kushtaghna
73	Krumighna	74	Arshoghna	75	Vishaghna
76	Sandhaniya	77	Vranaropana	78	Ashmaribedhana

Part B

50 Marks

10. Description of the following classes (Gana) of Dravya depending upon their similarity, morphology, properties, action, class, and effects:-
 - a. Audbhida Gana (Vegetable origin)
Brihatpanchamoola, Laghupanchamoola, Vallipanchamoola, Kantakapanchamoola, Trinapanchamoola, Madhyamapanchamoola, Jeevaneeya panchamoola, Panchapallava, Panchavalakala, Triphala, Trikatu, Trimada, chaturusana, Panchakola, shadusana, Chaturbeeja, Jeevaniya gana, Ashtavarga, Trikataka, Chaturajataka, Katuchaturjataka Panchatikta, Amlapanchaka, chaturbhadra, Trikarshika, Swalpatrtriphala, Madhuratriphala, Mahavisha, Upavisha, Knowledge of Agraushada varga with example.
 - b. Jangama Gana (animal Origin)- Ksheerashtaka, Mutrashitaka, Pitta Panchaka.
 - c. Parthiva Gana (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 sangrahy 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 (bhashajagara).
12. Various impurities pof dravya, their purification, Brief knowledge of , adulterants, Artificial/synthetic drugs, concept of Substituion (adhavapratinidhi dravya).

13. Brief knowledge of plant extracts, additives, excipients, preservative, food colours.
14. Ideal drug (Prashasta bhashaja), use of different parts of medicinal plants (bhashaja prayoga, prayojyanga), incapability (knowledge of virudhatwa), principles of preparation of aushadha Yoga, consideration of Vaya, bala, linga, agni, dosha, dushya, vyadhi, koshta, deha prakriti, Abhyasa, satwa, desha kaal and kalpana for deciding dosaga of drugs (Matranishchitti).
Anupana vyavastha, time of administration (Bhashaja sevana kaal), routes of drug administration (Bhashaja prayoga marga) Prescription writing.
15. Brief information about 6 Nighantu (Dhawantari Nighantu, Shodala Nighantu, Kaiyyadeva Nighantu, Madanapala Nighantu, Bhavaprasasha Nighantu, Raja Nighantu).

Paper 11
Part A

100 Marks
50 Marks

- A. Detailed knowledge of following drugs with respect to synonym of drug. Main synonyms, Regional Name, Botanical Name, Family, Classification of Dravya (Gana) as described in Charak, sushrut and Bhavaprakasha i.e. Habit and habitat/varieties, External morphology, useful parts, important phytoconstituents, Rasa panchaka, action on dosha, dhatu, Mala, Therapeutic indications, Amayikaprayoga and Matra (therapeutic administration and Dose), name of important formulations, adverse effects, remedial measures and shodhana (as required)

SL. No.	NAME	SL NO.	NAME	SLNO.	NAME
1	Ahiphena	2	Agnimantha	3	Agaru
4	Amalaki	5	Apamarga	6	Aragvadha
7	Ardra-Sunti	8	Arjuna	9	Arka
10	Ashvagandha	11	Ashvagola	12	Ashoka
13	Ativisha	14	Bakuchi	15	Baladvayam
16	Bharangi	17	Bhakkataja	18	Bidhitaka
19	Bijaka/vijayasara	20	Bilva	21	Brahmi
22	Bhungaraj	23	Bruhati	24	Chandanadvaya
25	Chitraka	26	Dadima	27	Danti
28	Daruharidra	29	Dhanyaka	30	Dhataki
31	Drasha	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	Jatiphala	45	Jeerakadvaya
46	Jyotishmati	47	Kalamegha	48	Kampillaka
49	Kanchanara	50	Kantakari	51	Kapikachu
52	Karkatakshringi	53	Karpura	54	Katuki
55	Khadira	56	Kiratatikta	57	Kumari
58	Kupilu	59	Kumkum Kesera	60	Kushmanda
61	Lavanga	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	Punamava	80	Rasna	81	Rasona
82	Saireyaka	83	Shallaki	84	Saptapama
85	Sarpagandha	86	Sariva	87	Shalapami
88	Shakmali	89	Shankhapushpi	90	Shatavari
91	Shathapushpa	92	Shigru	93	Shirisha
94	Shyonaka	95	Thalisa patra	96	Tila
97	Trivrut	98	Thulasi	99	Tvak
100	Ushira	101	Vacha	102	Varuna
103	Vasa	104	Vata	105	Vatsanabha
106	Vidari	107	Vidanga	108	Yastimadhu
109	Yavani	110	Devadaru		

B. Brief knowlwdge of following drugs with respect to Sanskrit Name, Botanical Name, Family, Habit (Samanya Swarupa) parts used, Rasapanchaka and indications.

SL NO.	NAME	SL NO.	NAME	SL NO	NAME
1	Agastya	2	Akarakarabha	3	Ajamoda
4	Amra	5	Amragandhiharidra	6	Ankola
7	Aparajita	8	Ashvatha	9	Asthishrunkhala
10	Avartaki	11	Babbula	12	Badra
13	Bakula	14	Bhumyamalki	15	Bimbi
16	Bijapoorra	17	Bola	18	Chandrashura
19	Chageri	20	Chavya	21	Chakramarda
22	Champaka	23	Chirbilva	24	Chopachini
25	Dattura	26	Darbha	27	Dhanvayasa
28	Dronapushpi	29	Gandhaprasarini	30	Garjara
31	Gojihva	32	Gorashaganja	33	Gunja
34	Hinstra	35	Hrutpatri	36	Indravaruni
37	Ingudi	38	Irimeda	39	Isvari
40	Japa	41	JJati	42	Jayapala
43	Jeevanti	44	Kaddali	45	Kadamba
46	Kaidrya	47	Kamala	48	Kankola
49	Kakamachi	50	Karanja	51	Karira
52	Karpasa	53	Karavira	54	Karavellaka
55	Kasha	56	Kansni	57	Kataka
58	Katphala	59	Jgarjura	60	Kitmari
61	Koshataki	62	Kokilaksha	63	Kumuda
64	Kusha	65	Lajjalu	66	Langali
67	Latakanranja	68	Latakasturi	69	Madayantika
70	Mahanimba	71	Mandukapami	72	Mashapami
73	Mayaphala	74	Methika	75	Meshashrungi
76	Mudgapami	77	Mulaka	78	Nagabala
79	Nala	80	Narikela	81	Nili
82	Padmaka	83	Parushaka	84	Parasika
85	Parijata	86	Parisha	87	Pamabija
88	Pamayavani	89	Parpataka	90	Patalagarudi
91	Patha	92	Patranga	93	Pilu
94	Plaksha	95	Priyala	96	Prishniparmi

97	Priyangu	98	Puga	99	Putiha
100	Putranjivaka	101	Pushkaramoola	102	Rajika / Sarshapa
103	Rohitaka	104	Shala	105	Saptachakra
106	Sarala	107	Sarja	108	Shatachakra
109	Shalipami	110	Shati	111	Shatahwa
112	Shinsapa	113	Snuhi	114	Sharapunkha
115	Surana	116	Svarnakshiri	117	Sringataka
118	Tailapami	119	Talmuli	120	Taruni
121	Tavakshira	122	Tuvaraka	123	Upakunchika
124	Udumbara	125	Vamsha	126	Vata
127	Varahikanda	128	Vruddadaru	129	Vrukshamla

Part B

50 Marks

C. Introduction, Guna, Karma and uses of following jangama dravya(drugs of animal origin).

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

D. 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	Sukadhanya Varga	9	Simbidhanya Varga
10	Phala Varga	11	Shaka Varga	12	Mamsa Varga
13	Lavana Varga	14	Kritannavarga (Processed food)		

- E. Introduction, Definition & scope of Pharmacology and Principles of general pharmacology. Brief knowledge of following-Anaesthetics, CNS depressants, Sedatives, Hypnotics, Tranquillisers, Antipyretics, Analgesics, Antiepileptics, Antihypertensive, Antianginal, Antiplatelet, Hypolipidaemic, Hemopoetic, Coagulants, Bronchodilators, Aerosols/Inhalants. Expectorants, Digestants, Carminatives, Antacids, Antiulcer, Laxatives, Antidiarrhoeals, Antiemetic, Hepatoprotective, Diuretic, Antidiabetic, Antithyroid. 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.
- F. Brief knowledge about WHO's "Essential Drug List"
- G. Brief knowledge of Cultivation, Conservation of Medicinal plants and information about endangered species.

PRACTICAL

Content of Practical

- Detailed knowledge of identification of following drugs:-
 - Kanda (stem)-Guduchi
 - Patra (leaves)- Swarnapatri, Vasa, kumari
 - Pushpa (flower and parts of flower)- Lavanga, nagapuspa, Japa

- d. Phala (fruit)- Pippali, Madanaphala, Vidanga
 - e. Beeja (seeds)- Eranda, kapikacchu, vidanga
 - f. Twak (bark)- Kutaja, Arjuna.
 - g. Moola (root)- Punarnava, Aswagandha
 - h. Nirryasa (exudates)- Hingu, Guggulu, Mocharasa
 - i. Jangama dravya(animal origin)- Madhu, Ghrita
2. Collection of minimum 50 herbarium specimen from field visit.
 3. Compilation of drug not less than 25 pages
 4. Concept based clinical study on single drugs (Minimum 5 from detailed and non-detailed list of drugs) in patients.

Distribution of Marks

1. Ccompilation /Essay	10 Marks
2. Herbarium	10 Marks
3. Single drug therapy	10 Marks
4. Pharmacognosy record in Laboratory	10 Marks
5. Drug identification	80 Marks
6. Oral/(Viva-Voce)	80 Marks
TOTAL MARKS	200 Marks

Reference Books

SL NO	BOOK'S NAME	AUTHOUR 'S NAME
1	ABHINAV Buti Darpan (Vol 1-2	Vd. Roop Lal Vaishya
2	Oushada Vigyana shhastra	Achara Pt. Vishvanatha Dwidevi
3	Ayurvediya Oushadkarma Vigyana	Acjarya V.J.Thakur
4	Bedi Vanaspati Kosha	Prof. Ramesh Bedi
5	Bhaishajyaguna vigyana	Dr. Alakhnarayan singh
6	Bhav Praksash Nigantu (English)	Dr. K.R. Shreekanthamurthy
7	Bhav Prakash Nigantu	With Vd. Krishna Chandra Chuneekar commentary
8	Bhrihad dravyagunadarshana	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	DravyagunaVigyana (Vol 1-2)	Acharya Yadavji Tikram Ji
16	Dravyaguna Vigyana	Dr. V.M.Gogate
17	Dravyaguna Vigyana (Vol 1-5)	Acharya Priyavrata Sharma
18	Dravyaguna Shastram	Vaidya G.A.Phadake
19	Dravyaguna Vigyana	Dr. A.P. Deshpande
20	Dravyafuna Vigyana basic principles	Prof. D.S.Lucas
21	Forgotten Healers (Indian Medicinal plants	Dr. Prakash Parankape
22	Glossory of Vegetable Drugs in Brihatrayee	Thakur Balwant Singh & Vd. Krishna Chandra Chuneekar

23	Introduction to Dravyaguna	Acharya Priyavrata Sharma
24	Kriyatamaka 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 Sidhanta	Prof. Shivcharan Dhyan
32	System of Plant Nomenclature in Ayurveda	Dr. Gyanendra Panday
33	Text book of Pharmacognosy	Trees & Valis
34	Text book of Dravyaguna	Dr. K. Nishteswar
35	Unani Dravyaguna vigyana	Hakkim Daljeet Singh
36	Uttarakand Ki Vanaspathiya	Dr. Gyanendra Pandey
37	Vanoashadi Darshika	Thakur Balwani Singh
38	Vanoashadi Nidarshika	Dr. Ram sushil Singh
39	Vedic Vanaspathian	Dr. Dinesh Chandra Sharma
40	Dravyaguna vigyana (Vol1-II)	Prof. D.S.Lucas.
41	Useful parts of Charak, Sushrut, and Vagbhata	

2.4 RASA SHASTRA AND BHAISHAJYA KALPANA

Theory two papers- 100 Marks each

Practical /Viva Voce - 100 Marks

Lectures - 180

Practical and Demonstration- 90 Marks

PAPER I

RASA-SHASTRA

100 MARKS

PART A

50 MARKS

1. Definition etymology of Rasa, History of Rasa shastra, 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. Chalana, Bhavana, Jarana, Murchana, shodhana, Marana, Amrutikaran, Lothitakarana, Mruta Loha, Satwa patina, Shuddhavarta, Beejavarta, Druti, Rudra bhaga and Dhanvantari bhaga, apunarbhava, Nirutha, Rekhapurna, Varitara.
3. Dravya Varga: Amalavarga, Kshiratraya, Madhuratraya, Panchamrittika, Panchagavya, Panchamrita, Ksharashtaka, Dravakagana, Mitra Panchaka, Rakta Varga, Shweta Varga, Lavanapanchaka.
4. Brief description of Yantras and their application Ulukhala Yantra, Khalwa Yantra, Kanchchapa Yantra, Urdhwa Patan, Adhva patan, Jarnath Tula yantra, Dola Yantra, Patana Yantra-Damaru

Yantra, Vidhyadhara Yantra & Tiryak patina Yantra, Patala Yantra, Palika 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: Chullika, Patala Kosthi, Gara Koshtthi, Angarakoshtthi 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, Kumbhaputa, Balukaputa, Bhudharaputa, laghu Puta, Baluka Puta.
8. Applications of Electric muffle furnace and fuel (diesel) dependent furnace.
9. Knowledge of parade: Synonyms, Occurrence, natural and artificial sources of Parada, Hingulottha Parada, Types of Rasa, naisargika, Yougika, Aupadhika(kanchuka) etc. Parada dosha and characteristics of Grahya-Parada. Samanya and Vishesh Shodhana of Parada. Parada astasamskara, Paradagati and Rasabandha.
10. Murchhana and Jarana of parade, Preparation Kajjali, Types of Rasaushadhi, Khalvi rasa e.g. Tribhuvana Keethi rasa, Sootshekhar rasa, parpati Kalpa, Rasa parpati, Tamra Parpati, Gangan Parpati, Kupipakva Rasa-Rasa Karpura, Rasa sindhura, Sameerapannaga Rasa, Pottali kalpa-Hemagarbha pottali.

Part B

50 Marks

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

1. **Maharasa**-Abhraka, Vaikrantha, Makshiika, Vimala, shilajatu, Sasyaka, Chapala and Rasaka.
Uparasa-Gandhaka, Gairika, Kasisa, Kankshi, Haratala, Manahshila, Anjana and Kankushtha
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), Pushparaga (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), Parojaka (Turquoise), Sphatikamani, Trinakanta (Amber) and palanka, Putika Rudhir, Kamch (glass).
4. **Sudhavarga**- 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 twak (Hen's Egg shell)
5. **Siktha Varga**- siktha (Silica), 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 kshara (Potassium Nitrate)
7. **Miscellaneous** – Bola, Krishna Bola, Beeja Bola, Damool Ashawan(Khoon Kharabha Rakta Bandhini), Abresham, 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, Akra, snushi, Langali, Karaveera Ahiphena and chitrakmool.
9. **Aushadhi Yoga Gyanam** - Arogya Vardhini Gutika, Karpura Rasa, Kasturi Bhairava Rasa, Kumara Kalyana Rasa, Garbhapala Rasa, Chandraprabha Gutika, Chandramrita Rasa, Pratapalankeshwara Rasa, Pravala panchamrita Rasa, Anandbhairava Rasa, Yogendra Rasa. Rajmriganka, Ramabana Rasa, Laxmi Vilas Rasa, Vasanta Kusumakara, Varakulantaka Rasa. Vasantamalati Rasa, Brihat Vata chintamani Rasa, Shankha Vati, Shwaskuthara Rasa, Hinguleswara Rasa. Hemagarbhapottalli, Hridyarnava Rasa. Swarnavanga, makaradhwaja, Ayaskriti evum Loha Rasayana, Putapakwavaisham Jwarantaka Loha, Vatvidhvamsan Rasa, kamadudha Rasa, Laghsutshekhar 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 RASASHASTRA

50 MARKS

Minimum Fifty practical's to be performed

- | | |
|--------------------------------|--|
| 1. Rasa [parade] | Hingulotta parade (Nishkasan)
Shodhana of Parada
Kajjali Preparation
Mugdha rasa |
| 2. Maharasa Varga | Shodhana of Abhraka
Dhanyabraka nirmana
Shodhana of Maishika
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
Shodhana of Manashila |
| 4. Sadharana rasa varga | Shodhana of Hingula
Shodhana of Navasadar
Shodhana of Kapardika |
| 5. Sudha Varga | Shodhana of Shankha
Shodhana of Shukti
Shodhana of Pravala Mula |

6. Dhatu Varga	Shodhana of Godanti 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, Chitakamoola

PRACTICAL FOR DEMONSTRATION

1. Bhasma	Abhraka Bhasma Swarnika makshika bhasma Tamra bhasma Vanga bhasma Madhura 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	Ganthaka druti
4. Formulations	Rasasindura, Swarna Vanga. Saptamrutha Lauha Navayas Louha Chandanadi Louha Sarvajwarhara Louha Agnitundi Vati Tribhuvana Kirti Rasa Punamava Mandura Sootshekhara Rasa Arogyavardhini Vati Laghusutashekhara Rasa Laghmalini Vasanta Rasa Sameer Pannaga Rasa

BHAISHAJYA KALPANA

PAPER II
PART A

100 MARKS
50 MARKS

1. **Derivation, History and Chronological (Krimika vikasa) development of** Bhaishjyakalpna, concept of aushadha and Bheshaja.
2. **Fundamental principles of Bhaishajya Kalpna.**
3. **Aushada nirmana Shala** according to directions mentioned in Aushadha evum prasadhana Adhinyama(Drug and Cosmetics act 1940 and Rules 1945).
4. **Introduction and general knowledge of useful instrument s** – 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 dravhas, Examination methods, preservation and Saviryata avadhi (potency period) of different Aushadhi kalpna, concept of stability and shelf life in contemporary science .
6. **Aushadha Matra, Anupama and Aushad Seven Kaala.**
7. **Kashaya Yoni-Pancha vidya kashaya kalpna:** - Swarasa, Kalka, Kwatha, Hima, Phanta, Panch Kashyaya Yonayah, Churna, Ushnodaka, Tandulodaka, Laksha rasa Kalpna, Mantha, aushadha sidha paniya, Arka, Panaka, Pramathya, Rasakriya, Phanita, Avaleha, Prasha, Ghana, Satva, Gudapaka, Sarkara, ksheerapaka, Syrups. Vatika, gutika, chandrika, Vataka, Pinda, Modaka, Varti, Guggulu kalpna, Method of preparation of tablets and capsule, Masi kalpna, Lavana kalpna, kshara kalpna and kshar sutra.
8. **Introduction, Definition, Preparation methods, doses and detailed description of uses and Anupana of following yoga:-**
Ardraka Swarasa, Tulasi Swarasa, Vasa Putapaka swarasa, Nimba kalka, Rasana kalka, Punarnavasthaka kwatha, Rasna saptaka kwatha, Dhanyaka hima, sarivadi hima, Panchakola phanta, Mustadi pramathya, khaarjuradi mantha, shadanga paniya, Ajamoda arka, Yavanyarka, /chinchha panaka, Chandan panaka, Banapshha sarkara, Nimbu sarkara, Bhaskaralavan churna, Simhanad Guggulu, Yogaraj Guggulu, lavangadivati, Lasunadi vati, Eladi vati, sitopaladi Churna, Hingwashtaka Churna, Chitrakadi gutika, Sanjivani Vati, Trihala Guggulu, kaishora Guggulu, Chyavanaprashavaleha, Vasavaleha, Vyaghri-Haritaki avaleha. Manibadra avaleha, Darvi Rasakriya, guduchi Ghana, Kutaja Ghana Vati, Haridra Khanda, Narikela Khanda, Soubhagya shunthi paka, Amruta Satva, Ardraka Satva, Phala Vari, Chandrodya Varthi, Arka lavana, Narikela lavana, Narikela lavana. Triphala masi, Arjuna ksheerapaka, Rasana Ksheerapaka.

PART B

1. **Sneha Kalpna:** sneha yoni, types of sneha, sneha murchana vidhi, sneha paka vidhi, snehapaka prakara and their use. Snehapaka kaala, sneha sidhi lakshana, dose, use of ghrita and taila, preparation and uses of Jatyadi Ghrita-Bramhighrita-Narayana /taila-panchaguna taila.
2. **Sandhana Kalpna 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-Takrarishta-Dashamularishta, Draksharishta, Kutajarishta, Arvindasava, Kumaryasava, Chandanasava.

3. **Pathya Kalpana:** concept of Pathya Apathya, manda, peya, vilepi, Yanvagu, Anna, Bhakhta, Odan, Yush, Kulattha Yusha, Krishara, Mansa rasa, Vesavar, Khad Yusha Kamlka, 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, Udvartan and Avachurnan Method of preparation of siktha Taila, Malahara-Sarjara Malahar, Gandhak Malahar, Upanaha, Atasi upanah, shatadhouta and Sahastradhouta Grita.
5. **Netrakalpa (Ophthalmic preparations)-** Seka, Drava, Anjana-Pindi, Ashchyotana-vidalaka-Tarpana-Putapaka etc.
6. **Nasya Kalpana-**Classification of Nasya, Method of preparation, Properties and therapeutic uses of Navana, Avapidana, Dhmapana, 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, Dhupan-Vrana, yoni, Arsha and Karna dhupan.
9. **Basti Kalpana-** Classification, Method of preparation of Basti yantra and Basti dravya, Types of basti, Therapeutic properties and uses of basti kalpana.
10. **Brief introduction of Ointments, Creams, Gels, Lotions, shampoos, soaps, Liniments.**
11. Brief knowledge of Standardization of Ayurvedic formulations.
12. Brief introduction of Drug and cosmetics Act 1940 and Rules 1945.

PRACTICAL BHAISAJYA KALPANA

50 MARKS

Following practicals to be performed

1. **Formulations** – Method of preparation, therapeutic uses, doses and anupana of the following:-
 1. Swarasa-Ardraka swarasa, Tulasi Swarasa, kumara swarasa, Vasa putapaka swarasa
 2. Kalka-Nimba kalka, Rasana kalka.
 3. Kwatha-Punarnavasthaka kwatha, Rasna sapthaka kwatha, Kulattha kwath.
 4. Hima-dhanyaka hima, Sarivadi hima
 5. Phanta-Panchakola phanta, Yastimadhu Phanta.
 6. Pramathya-Mustadi pramathya
 7. Mantha-Kharjuradi mantha
 8. Aushadh sidha paniya-shadanga paniya
 9. Laksha Rasa
 10. Arka-Yavani arka, gulab arka, Misreya arka
 11. Panaka-chincha panaka, chandran 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, Manibandra avaleha.
17. Rasa kriya-Darvi Rasakriya, Guduchi Ghana, Kutaja Ghana.
18. Khada-Haridra khanda, Narikela khanda, Sowbhagya shuti paka
19. Satva-Amruta satva, Ardraka satva
20. Varti-Phala Varti, Chandrodaya Varthi
21. Lavana-Akra 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 yusha, Kulattha yusha
28. Takra varga –Takra, Udasvita, Katvar, Mathita, Chhacchika, Dadhi
29. Arishta-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 Murchhana-Ghrita Murchana, Taila Moorchhana, Ghrita kalpana Jatyadi, Triphala. Ksheerashatphala ghrita-Taila kalpana- Panchaguna taila, Arka taila, ksheerabala taila, Anu taila
37. Taila patina-Bhallataka taila patina, Jayapala taila patina
38. Dhupa-Dashanga dhupa, Arshogna dhupa
39. Modaka-Talisadi modake, Abhayadi
40. Shodana-Giggi;ji, Hindu, Chitrak mool. Vriddha daru beeja
41. Kritrima Lavan nirman-Vida Lavan, Souvarchala lavan.

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

Distribution of Marks

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

Total

100 Marks

REFERENCE BOOKS

SL NO	BOOK'S NAME	AUTHOR'S NAME
1	Adyatan Rasa Shastra	R.K.Goyal
2	Abhinav Rasa Shastra	Vaidya somadev Sharma
3	Asava Arishta vigyanam	Dr. Pakshdhar Jha
4	Ayurvedya Rasa Shastra (Sachitra)	Chandrabhushan Ja

5	Ayurvediya Rasa Shastra	Badrinarayan Pandey
6	Rasa Bhaishajya paribhasa	Sureshananda Thapaliyal
7	Ayurvediya Rasa Shastra	Prof. Sidhi Nandan Mishra
8	Ayurved Prakash	Vaidya Gujrat Mishra
9	Drugs and Cosmentic Act	
10	Paka DARpana	Dr. Indradev Tripathi
11	The Paka-Darpana of King Nala	Dr. Madhulika critical study
12	Parada vigyaniyam	Vasudev M. Dwivedi
13	Pratyaksha Aushadh Nirmanam	Archana VishwanathDwivedi
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 Santhosh Kumar Khandal
21	Rasa Mitra	Dr. Tryambak nath Sharma
22	Rasa Ratna Samuchchaya	Dattatreya 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 Paribhasa Pradeep (Hindi)	Dr. Indradev Tripathi
30	Sharangdhar Samhita	Dr. Avdh Bihari Agnihotri
31	Bharatiya Bhaishajya Kalpana Vigyana	Viswanath, Gananath Dwivedi
32	Bhaishajya kalpana Vijnanam	Dr. K. Ramachandra Reddy
33	Rasa shastra (English)	Pro.Damodar Joshi
34	Rasa Ratna Samuchchaya (English)	Prof. Damodar Joshi
35	Ransendra chintamani	Publication of Govt. India
36	Useful parts of Charaka, sushruta and Vaghata	
37	Ayurvedic formulary of India	Part I and II
38	Pharmacopic standards for Ayurvedic formulation published by CCRAS	
39	Bhaishjya Kalpana vigyan	Sidhi Nandan Mishra
40	Textbook of Rasashasra	Dr. K. Ramachandra Reddy
41	Ashadhayoga Vigyanam	Dr. Ramachandra Reddy
42	Vaidyaka Paribhasa Pradipa	(English Translation) Dr. K. Ramachandra Reddy Dr. P.Suresh

2.5 ROGA VIJYAN EVUM VIKRITI VIGYAN

Theory Two Papers – 100 Marks

Practical/viva Voce- 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 Nidhana and Samanya Lakshana of Dosha Prakopa and Dosha Kshaya .
3. Dosha Dhatu Ashraya Ashrayee Bhava
4. Dhatu Kshaya Vridhi Lakshana and Pradoshaja Vikara
5. Upadhatu Pradoshaja vikra
6. Mala Kshaya Vridhi Lakshana and pradoshaja Vikara
7. Indriya Pradoshaja vikara
8. Hetu, Bheda and Lakshana of Agni Dushti
9. Definitions and Samanya Lakshana of Ama
10. Sama and nirama dosha, dushya Lakshana.
11. Dosha Paka and Dhatu paka Lakshana.
12. Concept, Classification, diagnosis and general complications of Avarana
13. Dosha gati
14. Detailed study of Srotomoola and Srotodushti Samanya and Vishishta Hetu Lakshana and Viddha Lakshana of all Srotas. Difference between Sroto Dushti and Kha Vaigunya

II. 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 Dushsti
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. Nidannarthakara 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 Oja Dosha/Vikriti-Oja and Vyadhi kshamatva

III. 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

IV. Nidana Panchaka Vigyanam

1. Difference between Roga and Rogi Parishat.
2. Importance of Nidan 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 Kriyakaala
9. Relationship between Nidhana Panchaka and shat Kriyakaala.
10. Upashaya- definition, types and its importance.
11. Upadrava
12. Arishta Vigyan- Definition, Types and its importance
13. Sadhyasadyata-Types, their parameters and importance.
14. General diagnostic principles of Anukta Vyadhi (Cha-Viman IV)

V. Parishat Vigyanam

1. Importance and knowledge of Aptopadeshadi, Darshanadi Trividha, Chaturvidha and Shadvidha Pariksha.
2. Importance and knowledge of Ashtasthana Pariksha.
3. Importance and knowledge of KaranadiDashavidha 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 Parishat-ECG, USG and Radio imaging.
7. Basic knowledge of Laboratory investigations pertaining to Metabolic and Endocrine disorders

Paper II

100 Mark

Part A

50 Marks

Systematic study of Nidana panchaka of following diseases (including Upadrava Arishta and Sadhyasadyata)

1. Diseases of Rasavaha Srotas

- a. Jwara (Jwarabheda-Ama, Pachyamana and NiramaJwara, Agantuka jwara, Punaravartaka jwara, Vishama Jwara, Dhatugata Jwara, charakokta sannipata jwara.
- b. General Mechanism of Fever, introduction to the Aetiopathogenesis of Malaria, Typhoid, Dengue fever, influenza and Chikungunya.
- c. Pandu, amavata, Hridroga, shotha
- d. Introduction to Anaemia & its classification. Rhumatic fever, Rheumatoid Arthritis, Angina, Ischaemic heart diseases, hypertension, Myocardial infraction

II. Diseases of Raktavaha Srotas

- a. Karmala –Raktapitta-Vatarakta-Shitapitta-Maha Kushta-Visarpa-Shwitra and introduction to Kshudra Kushta
- b. Introduction to Hepatomegaly, spleenomegaly, Leukaemia, Thalessemia, Sickle cell Anaemia.
- c. Introduction to Urticaria, Psoriasis, Eczema, Pemphigus

III. Diseases of Mamsavaha Srotas

- a. Introduction to Granthi, Arbuda and Arsha.

IV. Diseases of Medovaha Srotas

Sthoulya - Karshya- Prameha

- a. Introduction to Obesity and Diabetes Mellitus.

V. Diseases of Asthi-Majjavaha Srotas

- a. Sandhigatavata, Introduction to Asthi-Majjaparupaka, Asthigata Vidradhi
- b. Introduction to Osteo-Arthritis, osteomyelitis, Osteoporosis
- c. Vatavyadhi
- d. Akshepaka-Apatanaka-Ardita-Pakshaghata-Gridhrasi-Viswachi, Avabahuka-Manyasthambha- Katigraha.
- e. Introduction to parkinson's disease, Stroke, Lumbago-Sciatica syndrome, Bell's Paisy, Ankylosing Spondylitis.

VI. Diseases of Sukravaha Srotas

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

PART B

50 Marks

VII. Diseases of Pranavaha Srotas

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

VIII. Diseases of Annavaha-Pureeshavaha Srotas

- a. Agnimandya-Ajirna-Aruchi-Chhardi-Vosicjolka, Amlapitta-Shoola-Parinama Shoola-annadrava shoola-Grahani-Gulma-Udara Roga-Atisara-pravahika

- b. Introduction to anaha, Adhmana, Atopa, Alasaka, Vilambika
- c. Introduction to Peptic, Ulcer, Irritable Bowel Syndrome, diarrhoea, Dysentery, Constipation, Inflammatory, Bowel syndrome.

IX. Diseases of Udakavaha Srotas

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

X. Diseases of Mutravaha Srotas

- a. Mutrakricchha-Mutraghata
- b. Introduction to Urinary Tract Infection, Urolithiasia, Nephropathies and Renal Failure.

XI. Diseases of Swedavaha Srotas

- a. Introduction to Khalitya, Palitya and cosmetology.

XII. Diseases of Manovaha Srota/ Sanjnavaha Srotas.

- a. Introduction to Vishada, Udvega, Bhaya, Bharna, Anidra, Mada, Murcha, Sanyasa, Apasmara, Unmada, Atatwabhinivesha
- b. Introduction to Depression, Anxiety neurosis, Phobia, Personality disorders.

XIII. Upasargajanya Vyadhi (Communicable diseases)

- a. Roamantika-Masurika – (upadamsha-Phiranga.
- b. Introduction to Leprosy, Tuberculosis and AIDS.

XIV. Krimi Vigyanam

- a. Definition, classification of Krimi and features of Krimiroga.
- b. Snayuka, sleepada.
- c. Introduction of Filariasis and classification of common Parasites.

PRACTICAL

Content of Laboratory Practical

1. Fundamental Principles of Laboratory Tests

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

2. Haematology

- a. Hb % estimation
- b. Blood cells counting-WBC, RBC, Platelets
- c. Hematocrit/Packed cell volume (PCV)
- d. Erythrocyte indices-MCV, MCH, MCHC
- e. Peripheral blood smear, staining technique and differential leucocyte count.
- f. Peripheral Blood film examination in Anemia, Leukemia, Malaria, filarial (Demonstration)
- g. ESR
- h. Introduction to rapid diagnostics of hematology.
- i. Screening test for bleeding disorders - bleeding time (BT) , clotting time (CT) Prothrombin time (PT)

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

3. Urine Examination

- a. Ayurveda anusara mutra Pariksha
- b. Physical Examination – volume, Reaction(PH) & specific Gravity
- c. Chemical Examination for – Proteins, Glucose, Phosphate, Ketone, Bile salts, Bile pigment.
- d. Microscopic Examination.

4. Stool Examination

- a. Ayurveda Anusare purisha pariksha
- b. Physical examination- Sama-Nirma Pariksha
- c. Microscopic examination of ova& cyst etc.
- d. Occult Blood Test.

5. Sputum Examination

- a. Ayurveda anusara Sthivana pariksha
- b. Physical, chemical and Microscopic Examination of the sputum
- c. Sample collection and Demonstration of AFB.

6. Semen examination

- a. Ayurvediya anusara Retas pariksh.
- b. Semen examination & Demonstration of semen, sperms.

7. Biochemical Examination- (Demonstration)

Serum Glucose, Serum Billirubin, 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.

Beside Practical (Clinical Methods)

1. Introduction and demonstration of clinical methods (General and Systemic examination).
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 Pariksha.
6. Demonstration of ECG, USG and Radio imaging techniques.

Distribution of Marks

1. Daily Record	10 Marks
2. Identification of Instruments	10 Marks
3. Laboratory Experiments	20 Marks
4. Short case	10 Marks
5. Long case	20 Marks
6. Viva voce	30 Marks
Total	100 Marks

Reference Books

SL NO	BOOK'S NAME	AUTHOR'S NAME
1.	Madhav Nidan (Madhukosha commentary) part 1-2	Pt. Yadyandanan Upadhyay
2.	Doshakaranatwa Mimamsa	Acharya P.V. Sharma
3.	Nadi Darshan	Vd. Tara Shankar Mishra
4.	Nadi Vigyanam	Vidyotini Hindi Tika
5	Nadi vigyan	Sri Satya Dev Vashisht
6	Nadi Vigyan	Gangadhar Tika
7	Rogi Pariksha Vidhi	Acharya Priyavrata Sharma
8	Ayurvediya Roga Vargikaran	Vd. Gurdip Singh
9	Ayurvediya Nidan Evum chikitsa Ke sidhanta	Prof. Ram Harsh Singh
10	Relevant portions of Charak Sanhita, sushrut Samhita and Vagbhata	
11	Text Book of Pathology	Willian Boyds
12	Text Book of Pathology	Harsh Mohan
13	Text Book of Pathology	Dey and Dey
14	Text Book of Parpasitology	Ramnik Sood
15	Clinical pathology and Bacteriology	S.P. Gupta
16	Clinical methods in Ayurveda	K.R.S.Murthy
17	Parameswarappa's Ayurvediya Vikriti Vigyan and Roga Vikrit vigyan	Dr. P.S.Byadgi
18	Oxford Handbook of Clinical Examination and Practical Skills.	Oxford Handbooks
19	Advanced Clinical Evaluation system for Practical Assessment of Clinical Examination Skills	
20	Symptoms & Signs in Clinical Medicine	Chamberlains
21	Clinical Methods	Hutchison's
22	Beside clinics in Medicine part 1 & 2	Kundu
23	Common Medical Symptoms	Mehta
24	Advances in Pathology & Lab	Weimstean, Gralem, Anderson, Cortan, Wick, Zumwelt
25	Clinical Laboratory medicine	Edited by Kenneth D Ms. Chately
26	General Pathology	Walter & Israel Churchill Living stone
27	A comprehensive Dictionary of Pathology	Chris Newann
28	Practical Pathology	Dr.K. Uma Chaturvedi
29	Clinical Examination	Douglas/Macleod's
30	Pathology Practical book for undergraduates	Harsh Mohan
31	Medical Laboratory Technology	R Sood
32	Clinical Diagnosis and Management by Laboratory methods	Todd, Sanford and Davidson
33	Clinical Hematology in Medical Practice	Degruchy's
34	Robbins Basic Pathology	Kumar, Abbas, Fausto at al

2.6 AGADATANTRA VYAVAHARAYURVED EVUM VIDHIVADYAK

Theory one paper - 100 Marks
Practical/ viva Voce - 100 Marks
Lectures - 100
Practical/Demonstrations - 50

Paper I
Part A

100 Marks
50 Marks

AGADATANTRA-VISHA CHIKITSA **(AYURVE DIC & CONTEMPORARY TOXICOLOGY)**

1. Derivation and definition of Agadatantra and Visha, visha Utpatti, Visha Prabhava, visha Pranaharana Kriya, visha Guna, Visha Gati.
2. Origin and classification of Visha:- Its sources, difference between Visha, madya and Oja guna, Visha Upadrava and Visha Mukta Lakshana.
3. Tests for detection of visha, Visha Dasta lakshana, visha Peeta Lakshana, signs and symptoms of visha afflicted organs and personal effects. (Poisoning with Anjana, Lepa paduka, Abharana etc- contact poisons).
4. Contamination of air, water, soil etc. (Visha mishrita-Vayu, Jala, Desha, kaala and their management) their contemporary significance. Samuhika Vishaprayoga-Effects of chemical and Nuclear warfare.
5. Signs and symptoms of poisons of plant kingdom and their management. Visha and Upavisha. Arka, snuhi, Langali, gunja, Ahiphena, Karaveera, ginja Ahihena, Dhatura, Bhallataka, Vatsababha, Kupeelu, Jayapala, Bang, tobacco, parthenium Historiferous, chitraka Eranda, Digitalis and Cerebra Odollum. (signs and symptoms, Fatal dose, Fatal Periods, Treatment, Post Mortem appearances and Medico Legal importance).
6. Gara visha, Dooshi visha and viruddhahara-their concepts, classification, management and contemporary significance. Essentials of food poisoning.
7. Study of Chaturvimshatyupakrama of Charak.
8. 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.
9. Acids and Alkalis-Fatal Dose, Fatal Period, signs and symptoms, cause of death, treatment, medico legal importance and post-mortem 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-Anthistamines, Cocaine Hallucinogens-LSD, Sedatives and Hypnotics- Barbiturates, Petroleum- Kerosene Poisoning, Organo Phosphorus compounds- aluminium 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 :-

- a. Nonmetallic Poisons-Phosphorous Iodine
- b. 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

VYAVAHAR AYURVED EVUM VIDHIVADYAK (FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)

1. Introduction, Definition and concise history of Forensic medicine (vyavahara Ayurveda) And Medical jurisprudence (vidhivadyaka) Introduction to Indian Penal code, Indian Evidence Act and Criminal Procedure Code.
2. Personal identity and its Medico legal aspects. Forensic Odontology, Forensic Serology and DNA profiling.
3. Death and its Medico Legal Aspects
4. Medico legal autopsy and exhumation.
5. Injuries and wounds and its medico legal aspects
6. Dowry deaths, their Medico Legal Importance and laws in relation to it.
7. Asphyxial deaths and its Medico Legal importance.
8. Death due to heat, cold and starvation.
9. Virginity, Pregnancy, Delivery; Importance & 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 Rohabhisara Physicians, Qualities of Physician, Responsibilities of Physicians, Charuvridha Vaidyavrutti, duties of Physician to his patient, Vaidya Sadvritam, Apujya 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. "clinical establishment Act".

PRACTICAL

Practical Training Period

50 Hours

- | | |
|----------------------------|----------|
| 1. Post Mortem examination | 10 Hours |
| 2. Evidence in the court | 10 Hours |

3. Demonstrations in the Toxicology museum	10 Hours
4. Clinical Postings	20 Hours

Distribution of Practical marks

1. Daily activities (Presented as clinical Record/Herbarium)	10 Marks
2. Post Mortem examination-Record	10 Marks
3. Compilation work	10 Marks
4. Identification (Spotting and clinical case presentation)	40 Marks
5. Viva-Voce	30 Marks
Total	100 Marks

REFERENCE BOOKS

SL NO.	BOOK'S NAME	AUTHOR'S NAME
1	Topics related to Aganda Tantra from Charak Samhita, Sushrut Samhita, Astanga Hridaya, Ashtanga Samgraha. Kasyapa Samhitha, Yogaratnakara, Bhavaprakasha and Madhava Nidana	
2	Vidhivaidyaka (Vyavaha Ayurveda Vijnan)	Dr. Charuchandra Pathak
3	Medical Jurisprudence and Toxicology	Modi
4	Basavarajeeyam	Edited by Vd. Govardhan
5	Agada Tantra	Sh. Ramanath Dwivedi
6	Text book of Aganda Tantra	Edited by Dr. Huparikar
7	Agad Tantra	Dr. Shekher Namboodri
8	Agadatantra Ki Patyakram	Edited by Dr Huparikar
9	Vishachikitsa (Ayurveda Toxicology English Translation)	Vaidya 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)	Pro.Kangle
13	Kautilya Arthashastra (Hindi)	Dr. Raghunath singh
14	Vyavahar Ayurveda	Dr. Ayodhya Prasad Achal
15	Visha Chikitsa	Dr. Balakrishna Nair.
16	Relevant topics from Manu Smriti	

THIRD PROFESSIONAL B A M S - SYLLABUS

(2010 Admission)

CONTENTS

Page No.

1. Subjects in Term I and II
2. Total Hours as per C C I M
3. Total Hour Distribution
4. Time table
5. Term Exam – Time table and Portions
6. Examiners
7. Syllabus and Hour distribution
8. Oral & Practical
9. Appendix

TERM DIVISION

	FIRST TERM	SECOND TERM
Class	10 months	5 months
Study leave	1 month	1 month
Examination	1 month	1 month (Starting at the course out day)
Total	12 months	6 months+1 month exam

TERMS AND SUBJECTS

TERM	SUBJECTS
TERM - I	CHARAK SAMHITA
	PRASUTI TANTRA EVUM STRI ROGA
	KAUMARBHRITYA
	PANCHAKARMA
TERM - II	KAYACHICHIKITSA
	SHALYATANTRA
	SHALAKYA TANTRA

DISTRIBUTION OF HOURS

SUBJECTS	C C I M
CHARAK SAMHITA	100
PRASUTI TANTRA EVUM STRI ROGA	150
KAUMARBHRITYA	90
PANCHAKARMA	100
KAYACHICHIKITSA	300
SHALYA	210
SHALAKYA TANTRA	210
Total	1160

DISTRIBUTION OF HOURS**FIRST TERM SUBJECTS**

SUBJECTS	Weekly	Monthly	Total	C C I M
CHARAK SAMHITA	3 (SAT)	11	110	100
PRASUTI TANTRA EVUM STRI ROGA	4	16	160	150
KAUMARBHRITYA	3 (SAT)	11	110	90
PANCHAKRMA	3	12	120	100

SECOND TERM SUBJECTS

SUBJECTS	Weekly (I term)	Weekly (II term)	TOTAL	C C I M
KAYACHICHIKITSA	3	12(2 SAT)	350	300
SHALYA	3	5	220	210
SHALAKYA TANTRA	3	5	220	210

TIME TABLE - FIRST TERM -Junior prof

DAYS	9 - 10	10 - 11	11- 12	12- 1	2 - 3	3 - 4
MON	CT	CT	Panchakarma	Salyam	Salakyam	Prasuti
TUES	CT	CT	Kaumaram	Carakam	Salyam	Salakyam
WED	CT	CT	Prasuti	Kaumaram	Panchakarma	Carakam
THUR	CT	CT	Kayachikitsa	Prasuti	Kayachikitsa	Panchakarma
FRID	CT	CT	Salakyam	Kayachikit sa	Prasuti	Salyam
SATU	CT	CT	Carakam	Kaumaram		

TIME TABLE – SECOND TERM –SeniorProf

DAYS	9 -10	10 - 11	11- 12	12- 1	2 - 3	3 - 4
MON	CT	CT	Kayachikitsa	SALAKYAM	Kayachikitsa	SALYAM
TUES	CT	CT	Kayachikitsa	SALYAM	SALAKYAM	Kayachikitsa
WED	CT	CT	Kayachikitsa	Kayachikitsa	SALYAM	SALAKYAM
THUR	CT	CT	SALYAM	SALAKYAM	Kayachikitsa	Kayachikitsa
FRID	CT	CT	SALAKYAM	Kayachikitsa	Kayachikitsa	SALYAM
SATU	CT	CT	Kayachikitsa	Kayachikitsa		

TERM EXAMINATION

SUBJECTS	4TH month	8TH month	10TH month	15TH month	17th month
CHARAK SAMHITA	1 ST internal	2 nd internal	MODEL		
PRASUTI TANTRA EVUM STRI ROGA	1 ST internal	2 nd internal	MODEL		
KAUMARBHRITYA	1 ST internal	2 nd internal	MODEL		
PANCHAKRMA	1 ST internal	2 nd internal	MODEL		
KAYACHICHIKITSA	1 ST internal	2 nd internal		3rd internal	MODEL
SHALYA	1 ST internal	2 nd internal		3rd internal	MODEL
SHALAKYA TANTRA	1 ST internal	2 nd internal		3rd internal	MODEL

CHARAK SAMHITA

(Uttarardha: Chikitsa – Kalpa - Siddhi Sthan)

Theory One Paper – 100 Marks , Practical/Viva voice – 50 Marks

Lectures – 100

The marks of theory examination & number of lecture hours are distributed as follows

Sl. No	Name of the Sthan	Lectures (Proposed)
First term	Chikitsa sthan Total chapters– 30 Detailed Study– 20 Chapters 1,2,3,4,5,6,7,8,9,10,15,16, 17,18,19,20, Non Detailed – 10 Chapters 11,12,13,14,	48
Second term	Chikitsa sthan Detailed Study 21,27,28,29 Non Detailed-22, 23, 24, 25, 26, 30 Kalpa sthan Total chapters– 12Detailed study– Concepts, Synonyms, Botanical identification, Importance, General Indications, Collection & Processing, Specialities of all Drugs in 12 Chapters Non Detailed study– General Awareness on different yogas in all chapters	48
Third term	Siddhi sthan Total chapters– 12	4

The marks of practical examination are distributed as follows

1. Chart preparation / Compilation - 05 marks
 2. Case sheet writing regarding treatment - 05 marks
 3. Prescription writing by examining the patients in OPD & IPD in hospital. – 05 marks
 4. Oral presentation (Presentation of 10 Shlokas, orally and in writing related with samprapti and chikitsa sutra) - 5 marks
 5. Viva - Voice - 20 marks
 6. Internal Assessment 10 Marks
- 40 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 Vidyalkar or Vd. Atridev Vidyalkar 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.

PANCHAKARMA

Theory One Paper – 100 Mar

Practical one – 50 Marks

Lectures - 100

Hospital Training – 3 Months

Protocol for Clinical Training

General Learning Objective

1. To learn the panchakarma and allied treatment procedures.
2. To know the preparation of medicines for procedures.
3. To know about the drugs and instruments used in treatment procedures.

Specific Learning Objective

The reason for selection of the procedure

- The preparation of the patient
- Method of procedure.
- The pathya vihara / ahara of the procedure
- The assessment of ayoga, atiyoga and samyak yoga
- The management of complications
- Identification of drugs, Quantity, method of preparation in procedures
- Identification of instruments, characteristic features
- Model S L O (see annexure

Teaching Learning Method

First week of clinical posting

- Teach the procedures in dummy
 - Abhyangam, Pizhichil, Dhanyamla dhara, Pinda sweda, Sirovasthi, Talapothichil and Takra dhara
- Vamana , Vasthi and Nasya will be taught with the help of CD

Next week onwards

- Teach the procedures in theatre and ward under supervision of teachers/PGs
- Conduct
- case presentation by each student(2 or 3 students each week)
- Conduct group discussion on one day each week

Evaluation

- Mock practical examination on the last day of posting
- Assignments and rough records to be submitted on the last week
- Assignments-eg: assess samyak sweda lakshana in 5 patients
 - Assess samyak virikta lakshana in 5 patients
 - Advice peyadikrama in a patient who underwent vama
 - Advice pathya ahara and vihara to a patient before and after sneha pana

First term

I. INTRODUCTION (5hours)

- 1) Introduction to Panchakarma, their importance and utility in the treatment - 30 mts
- 2) Relation of Panchakarma with Shodhana therapy (purification therapy)
- 30 mts
- 3) Three-fold Karma - 1 hour
 - 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
- 1 hour
- 5) General precautions (pariharya vishaya) during Panchakarma
- 6) Relevance of Panchakarma in present era
- 1 hour
- 7) Specifications of Panchakarma theatre and necessary equipments
- 1 hour

II. SNEHANA (15hours)

- 1) Etymology and definition of Sneha and Snehana (Oleation therapy) 15mts
- 2) Types of Sneha, Qualitative utility of Sarpi, Taila, Vasa and Majja
- 30mts
- 3) Different categories of Snehayonis (sources).15mts
- 4) Need of Rukshana before snehana and Samyak rukshana lakshanas
- 1 hour

5) Types of Snehana – Bahya and Abhyantara (external and internal oleation therapy), Snehapaka
– 1 hour

6) Knowledge of

a. Yamaka sneha, Trivrit sneha, Maha sneha, Panchaprasrutiki Sneha, Achcha sneha, Pravicharana, sneha, Sadya sneha, Avapidaka Sneha, Shodhana, Shamana and Brimhana Sneha

– 2 hour

b. Hrasiyasi, Hrasva, Madhyama And Uttama Sneha

– 2 hour

7) Indications and contraindications for Snehana

– 1 hours

8) Sneha Procedures: 3 hours

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

– 1 hour

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.

– 4 hours

9) Diet and regimens during Snehana

– 1 hour

10) Introduction to Bahirparimarjana Chikitsa

– 1 hour

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

– 1 hour

11) Snehana Kamukata – 30mts

12) Digestion and Metabolism of Fat

– 30mts

III. SWEDANA (19hours)

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

2) Swedana dravyas and their properties

- 1 hour

- 3) Methods to protect the vital organs (varjya anga) during Swedana Procedure.Ten Types of Niragni Sweda, Different types of Sagni Sweda - 1 hour
- 4) Knowledge of Shodhananga and Shamana Sweda - 30mts
- 5) Indication and contra- indications of swedana - 30mts
- 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 - 6 hours
- 7) Features of Samyak Yoga (Proper Sudation), Atiyoga (Excessive Sudation), Heenayoga (Inadequate Sudation) and Vyapat of Swedana and their Management - 2 hour
- 8) Diet and regimens during and after Swedana - 1 hour
- 9) Swedana karmukata (Mode of action of Swedana Chikitsa) - 1 hour
- 10) Introduction to Bahirparimarjana Chikitsa: Study Lepa, Gandusha, kavala, ShiroLepa (Tala potichil), Talam, Udvartana, TakraDhara,kati,Janu, Basti, Greeva and Urobasti (Tarpana) - 5 hours
- 11) General Knowledge about current Sudation techniques (Sauna bath, Steam bath, Infrared therapy) - 1 hour

SECOND TERM

IV. VAMANA (13hours)

- 1) Etymology, definition and Inroduction of Vamanakarma - 30mts
- 2) Importance and utility of Vamana Karma - 30mts
- 3) Kosta nirnaya and Agni pareeksha in Vamana karma - 1 hour
- 4) Indications and Contraindications for Vamana - 1 hour
- 5) General properties of Vamaka Dravyas - 1 hour
- 6) Preservation and Knowledge of Vamaka and Vamanopaga dravyas - 1 hour
- 7) a. Detailed study of Madana Phala, Kutaja, Yashti, Vacha and Nimba

Poorva karma:

- b. Snehana & Swedana, diet & regimen prior to Vamana Karma hour
- c. Preparation of formulation for Vamana Karma

d. Dose & Method of administration

Pradhana karma:

e. Administration of drugs and Observation, and Assistance of Vegas, Upavegas and Matra

Knowledge of Laingiki, Antiki and Maniki Shuddhi

f. Features of Samyak yoga (Proper Shuddhi), Atiyoga (Excessive Shuddhi), Ayoga (Inadequate Shuddhi) and their management

Pashchat karma:

g. Samsarjana(Peyadi,Tarpana and Rasa Samsarjana krama) Pariharya vishaya & Parihara Kala

h. Vyapats & their management according to Ayurveda & Modern Systems of Medicines

- Total 6 Hrs

8) Vamana Karmukata (Mode of action of Vamana) - 2 hour

V. VIRECHANA KARMA (19hours)

1) Etymology, definition, introduction, Importance, Utility & Classification of Virechana Karma - 1 hour

2) Knowledge of Anulomana, Sramsana, Bhedana, Rechana, karma with examples - 1 hour

3) General properties of Virechana Dravyas - 1 hour

4) Detailed study of following Virechana drugs Trivrut, Eranda, Aragvadha, Katuki and Jaipala - 1 hour

5) a. Knowledge of Virechana kalpanas, their properties,

b. dose, anupana and method of administration - 2 hours

6) Knowledge of Koshta Nirnaya and Agni vivechana - 1 hour

7) Indications & Contra-indications for Virechana - 1 hour

8) Significance of Vamana before Virechana - 1 hour

9) Virechana Vidhi (Procedure for Virechana) - 9 hours

Poorva karma:

a. Snehana & Swedana

b. Diet & regimen prior to Virechan Karma

Pradhana karma:

c. Administration of drugs and Anupana,

d. Observation, Assessment of Vegas, Upavegas and Matra.

e. Knowledge of Laingiki, Antiki and Maniki Shuddhi,

- f. Features of Samyak yoga (Proper Shuddhi)
- g. Atiyoga (Excessive Shuddhi), Heenayoga (Inadequate Shuddhi) and their management.

Pashchat karma :

- h. Samsarjana(Peyadi,Tarpana and Rasa Samsarjana krama)
- i. Pariharya vishaya & Pariharakala
- j. Vyapats & their management according to Ayurveda & Modern Systems of Medicines.

10) Virechana Karmukata (Mode of action of Virechana) - 1 hour

VI. BASTI (25hours)

- 1) Etymology, definition, introduction, utility, and importance of Basti Karma - 1 hour
- 2) Types of Basti based on Karma, Sankhyas, Adhithan & Matra - 1 hour
- 3) Knowledge of different Basti yantras, their significance and utility - 1 hour
- 4) a.Indications & b. Contra-indications for Anuvasana Basti and Asthapana Basti - 2 hours
- 5) Knowledge of Anuvasanopayogi and Asthapanopayogi dravyas - 1 hour
- 6) Adimistration of Basti: - 6 hours

Poorvakarma (Pre-operative procedure):

- a.Preparation of Basti dravyas
- b.Fixation of dose & Preparation of Patient

Pradhana karma (Operative procedure):

- c. Basti Pranidhana vidhi (Administration of Asthapana, Anuvasana and Matra Basti)
- d. Observation of Basti pratyagamana,
- e. Samyakyoga, Atiyoga, heenayoga lakshanas and their management.
- f. Paschat karma (post operative procedure): Pariharya vishaya, Parihara Kala Diet and regimen after Basti
- 7) Detailed knowledge of Basti Vyapats and their management - 4 hours
- 8) Study of following Vishishta Bastis: - 5 hours

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 - 2hours

10) Detailed knowledge of administration of Uttara Basti in to mutrashaya (IntraVesical) and Garbhashaya (intra uterine) - 1 hours

11) Basti karmukata (Mode of action of Basti) - 1 hour

Last term-Model exam –Total syllabus

NASYA (14hours)

1) Etymology, definition, introduction & Significance of Nasya karma - 1 hour

2) Knowledge about dravyas (Medicines) used for Nasya karma - 1 hour

3) Classification of Nasya in detail - 1 hour

4) Indications and contraindications of Nasya - 1 hour

5) a. Knowledge of dosage of Dravyas (Medicines) and b. time of administration in different type of Nasya - 2 hours

6) Nasya Procedure - 2 hours

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

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

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

7) a. Detailed Knowledge of features of Samyakyoga (Proper),

b. Ayoga (Inadequate), Atiyoga (Excessive) of Nasya and their management.

- 2 hours

8) Pathya-Apathya during Nasya karma - 1 hour

9) Administration of Navana, Marsha, Pratimarsha, Avapeedaka, Dhmapana and Dhooma Nasyas - 2 hours

10) Nasya Karmukata (Mode of action of Nasya Therapy) - 1 hour

VIII. RAKTA MOKSHANA AND VYAYAMOPACHARA (10hours)

1) a. Definition

b. Utility and Significance of Raktamokshana - 1 hour each

c. Knowledge of different techniques of Raktamokshana - 2hours

2) Indications and contraindications for Raktamokshana - 1 hour

- 3) Rakta mokshana karmukata (Mode of Rakta mokshana) - 1 hour
- 4) Basic Knowledge of Physiotherapy - 2 hour
- 5) Knowledge of emergency management in complications such as Water & Electrolyte imbalance, hypo- volamic shock, Haematemesis, Epistaxis, Bleeding per rectum, acute abdomen etc. - 3 hours

Examination Scheme

THEORY -WEIGHTAGE OF Marks

INTRODUCTION	- 5 MARKS,SNEHANA	- 10
SWEDANA	- 15,VAMANA	- 10
VIRECHANA	- 10 ,VASTI	- 20
NASYA	- 10 ,RAKTAMOKSHA	- 10
PHYSIOTHERAPY	- 5	
EMERGENCY MEDICINE	- 5	PRACTICAL / CLINICAL

C C I M

Practical Record – 10 Marks Practical – 15 marks ,Viva-voice– 25 Total – 50 marks

Recommendations 1) Practical RecordRecord (10 procedures) - 3 Marks

Compilation 3 Marks,Worksheet - 4 Marks, Total – 10 marks

II) Practical

Identification (Instruments / Drugs) – 5 marks

Procedure – 10 marks, Total – 15 marks

III) Viva-voice – 25 marks

PRASUTI TANTRA EVUM STRI ROGA

Theory Two Papers – 100 Marks Each

Practical- one – 100

Theory Lectures - 150 **Hospital Training – 3 Months**

MARKS AND HOURS DISTRIBUTION OF THE TOTAL SYLLABUS**Prasutitantra & Streeroga**

No	Topic 1 ST INTERNAL 4 MONTHS	Hours
1	. Introduction and scope of Prasuti Tantra (obstetrics). Stri Sharir Vigyan Etymological origin of the word Stri, Vayobhedena Stri sangnya. (Nomenclature of Stri according to age). Normal and abnormal conditions of Asthisandhi peshi Sahita Stri Shroni (Soft & Bony Pelvis) and its obstetrical importance, Shroni mapana (pelvic assessment) – Artavvaha and Stanyavaha strotamsi. Tryavarta yoni (Female internal and external genitalia). Stri Vishishta, Peshi Marmani.	3HRS
2	Rajo Vigyan Description of Raja, Artava and concept of Shukra in Stri. Prathama Rajo Darshana (Menarche), Rituchakra - Rajakaal- Ritukaal – Rituvyatitakaal- Menstrual cycle and their regulation by endocrine glands – Rajasvala Charya. Ritumati Lakshana, Ritumatcharya, Importance of Ritukaal in Garbha dharana.	3HRS
3	. Garbha Vigyan i) 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), Garbhastithi, Asana, Uday (lie, position, presentation), fetal skull, Garbha Vikriti.	7HRS
4	ii) Apra (Placenta) Garbha Nabhinadi (Umbilical cord), Garbhodaka (Amniotic fluid), Jarayu (Foetal membranes)- Formation, Development, Function, Normalcies and their abnormalities. Ulba (vernix caseosa).	2HRS
5	Garbhinivigyan i) Lakshana of Sadhyograhita Garbha, Lakshana of Vyakta Garbha, Garbhini Nidana (Diagnosis of Pregnancy), Pumsavana vidhi,	4
6	ii). Garbhini vyavastha: Garbhini Paricharya (Ante Natal care, examination investigation and management), Garbha Upaghatakara Bhava, Dauhrida	4
7	iii. Garbha Vyapada: Garbhasrava and Garbhapata (abortions), Upavishtaka, Nagodara / Upashushka, Leena garbha, Antarmrita garbha (Intrauterine Foetal death), Garbha shosha, Mithyagarbha (Pseudocyesis), Raktagulma, Hydatid form mole. Ectopic pregnancy I.U.G.R, Bahugarbhata, Rh-incompatibility – causes, clinical features, complications and treatment.	16
8	Part B Prasava Vigyan (Parturition)	12

	Prakrit Prasava (Normal Labour): Prasava Paribhasha, (Definition of Prasava) Prasavahetu, Prasavakaala, 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).	
9	. Paper II STRI ROGA Part A Congenital malformations of female genital tract.	2
10	Artava vyapad Artava Vriddhi, Kshaya, Ashta Artava Dushti, Asrigdara, Abnormal Uterine Bleeding, Anartava (Amenorrhoea), Alpartava (hypo and Oligomenorrhoea).	9
11	Shukra vigyana Description of Shukra, Shukra Vriddhi, Kshaya, Shukra Dusti their Hetu, Lakshana and its Chikitsa, Normal Semenogram.	2
	TOTAL	64
11	SECOND INTERNAL	
1	Garbhini Vyapad / Garbha Vyapad i) Garbhini - Alpabala vyadhaya (Minor ailments of Pregnancy) – Hrillasa (Nausea), Chhardi (emesis), Aruchi, Atisara (Diarrhoea), Vibandha (Constipation), Arsha, Udavarta, Pada Shotha, Parikartika, Vaivarnya (Discoloration), Kikkisa etc.	4
	ii) 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	6
	Prasava Vyapad (Disorders of Labour) Akaala Prasava (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, Ceasarean 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.	15

	Yoni vyapadani –Sankhya, Nidana, Lakshana, Upadrava evam Chikitsa with all possible modern correlations	20
	Vandhyatva (Infertility – Causes, Types, Investigations and Management) Yoni Kanda, Yoni Arsha, Granthi and Arbuda of Yoni (Benign and Malignant tumours of Genital Tract) Pelvic Infections including Sexually Transmitted Infections and their Management, Rajonivrutti	8
	Sutika Vigyan – Sutika Paribhasha, Sutika Kaal, Changes during Sutika avastha (Sharirika and Manasika), Sutika paricharya.	5
	Sutika Roga – Number of Sutika Roga, Causes, Clinical features, Prognosis and treatment of Sutika Jwara, Shotha and Makkala and other complications.	6
	TOTAL	64
11	THIRD SESSION -	
	Stanya Vigyan – Stana Stanya Pariksha, Stanya Sampat. Stanya Dusti, Stanyakshaya, Stanyavidhi – their causes, clinical features and treatment.	2
	Stanaroga Stanagranthi, Stanavidradhi (Abscess), Stanashopha (Mastitis) their Etiopathology, Clinical features, Diagnosis, Prognosis, Treatment and Complications.	3
	Atyayika Chikitsa in Prasuti (Emergency care in Obstetrics) Pharmacotherapeutics of the drugs used in Obstetric emergencies, PNDT Act, MTP Act.	3
	Sthanik Chikitsai) Snehana, Svedana, Uttarabasti, Pichu, Varti, Lepana, Dhupana, Dhavana, Dahana, Ksharakarma etc. Practical knowledge of all these procedures along with indications, complications and management.	4
	ii) Importance of Panchakarma in Stri Roga.	1
	Shastra Karma i) Surgical procedures their Indications, Contraindications, Purvakarma (PreOperative), Pradhanakarma (Operative), Paschatakarma (Post-operative), Complications and Management. ii) Garbhashayamukha Vistrutikarana (Cervical Dilatation) & Garbhashaya Lekhana IHR (Curettage), Garbhashaya Mukhadahana (Cauterization of Cervix), SwasthaneGarbhashaya Sthapana (Repair of Genital Prolapse), Arshanirharana (Excision of Polyp), Granthi evum Garbhashaya Nirharanasya Samanya Gyana (Hysterectomy), Female Surgical Sterilization. iii) Removal of different type of Cysts, Marsupilisation, PAP smear, Endometrial and Cervical Biopsy. Stri roga Sambandhita Pramukha Aushadhi. Prasuti & Stri Roga Chikitsa Upayogi Yantra Shastra Parichaya and Vyadhivinishchaya Upaya (Investigative and Diagnostic Aids). Basic knowledge of Laproscopy, Hysteroscopy, Hysterosalpingography, USG, X-	9

	RAY, Colposcopy. Garbhanirodhaka Upaya. Parivar Niyojana, Reproductive and Child Health Care. AIDS/HIV control programme and importance of current National Program	
	Total	22

PRACTICAL

Content of Practical

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

1. Case Record 10 Marks
 2. Case Taking (2 Cases) 30 Marks
 3. Identification of drugs and models 20 Marks
 4. Viva - voce 40 Marks
- Total marks-100 marks

KAUMARBHRITYA

Theory One Paper – 100 Marks

Practical – 100 Marks

Lectures – 90

Hospital Training – 1 Month

1. The total subject will be divided in three terms as follows
 - a . first term 36 hours
 - b . second term 36 hours
 - c . third term 18 hours

TOTAL 90 hours
2. for the first term following topics of the CCIM syllabus will be adopted
 - a . total part A of the CCIM syllabus
 - b . 4,7, and 8 of the B part of the CCIM syllabus
3. for the second term following topics of the CCIM syllabus will be adopted
 - a . point 1 to 11C of the B part of the CCIM syllabus except points 4,7,&8
4. for the third term following topics of the CCIM syllabus will be adopted

a . from the 11 (d) point of the CCIM syllabus to point 16 of the CCIM syllabus

MARKS AND HOURS DISTRIBUTION OF THE TOTAL SYLLABUS

N o	Topic FIRST TERM-4MONTHS	Hours
1	General introduction of Kaumarabhritya (ayurvedic paediatrics): Definition, importance, description and etymological interpretationsof terminologies used in Kaumarabhritya.	1
2	Vayobheda (classification of age): Garbha, baala, kaumara; Ksheerada,ksheerannaada & annaada, etc.Importance of Kasyapasamhita in Kaumarabhritya	1
3	Navajaata Sisu paricharya (neonatal care): Care of the samayapurvajaatasisu (preterm), purnakaalikasisu (full term), And samayapaschaatajaatasisu (post term neonate), naabhinaala chhedana(cutting of umbilical cord), complication of improper cutting of umbilical cord and its treatment.	3
4	Praana Pratyaagamanam (neonatal resuscitation): Methodology; complications and their management (ayurvedic and modern view)	2
5	Navajaata sisu pareekshana (examination of new born): Ayu pareekshana (including lakshanaadhyaya)modern approach of neonatal examination including gestational age assessment.	2
6	Kumaaragaara (nursery, NICU and paediatric ward) Dhaatri (wet nurse): Dhaatriguna and dosha (characteristics of wetnurse), concept of human milk banking	1
7	Navajaatasisuposhana (nutritional aspects including neonatalfeeding):Specific feeding schedule as per ayurvedic texts and modernconcept;stanasampat (characteristics of normal breast), stanya sampat(propertiesof normal breast milk), stanyotpatti and prasruti (physiology of lactation), stanya sanghattana (composition of breast milk),stanyapareekshana (examination of breast milk), stanya-piyusha(colostrum); stanyapaanavidhi (method for breast feeding), stanyakshaya- Stanyanaasa (inadequate production and absence of breastmilk), stanyabhaave pathya vyavastha (alternative feeding in theabsence ofbreast milk), various other feeding methods.	3
8	Stanyadosha (vitiation of breast milk): Stanyadosha (vitation of breastmilk), stanyashodhana (purification of breast milk), stanyajanana andvardhanopakrama (methods to enhance breast milk formation).	2
9	Garbhavidhivikaasakrama: Saamaanyaparichaya (general introductionto normal fetal growth from conception to full term maturity),saareerika vriddhi, maanasika evam saamaajikavikaas (physical,mentaland social	3

	growth & development; Anthropometry-measurement and their interpretation.	
10	Importance of kreedabhumis (play ground) and Kreedanaka (toys), kumaaradhara (child caretaker)	1
11	Poshana (nutrition): Normal requirements of nutrients for newborn, infant and children, common food sources, saatmya and aasaatmya aahaara (compatible and incompatible diet)	1
12	Samskaaraas: Jaatakarma, nishkraamana, upaveshana, annapraasana, karnavedhana, choodaakarma, upanayana and vedaarambha.	1
13	Dantotpatti evam danta raksha vidhi (dentition and dental care): Dantasampat (characteristics of healthy teeth), danta nishka evam dantotbeda (eruption of teeth), dantobhedajanyavikaara (dentition disorders).	1
14	Vyaadhikshamatva: General concepts of bala (immunity) and methods of balavridhhi.	1
15	Lehana (electuaries)- importance, uses and various types of Lehana	1
16	Knowledge of National programmes related to child healthcare: Reproductive and child health (RCH) programme, community child health programmes, nutritional programmes, national immunization programme and other programmes incorporated by Govt. of India, time to time.	1
17	Prasava Kaaleena abhighaata (birth injuries): Shwaasaavarodha (asphyxia), upasheershaka (caput succidaneum and cephalohaematoma), Sasthraaghaatajanya: Facial paralysis, Erb's paralysis, Bhagna (fractures).	3
18	Prasavottara vyaadhi (neonatal disorders): Navajaata Kaamala (Neonatal Jaundice), Navajaata netraabhishyanda (neonatal conjunctivitis), naabhiroga (umbilical disorders), mastishkaaghaata (cerebral palsy), rakta vishamayata (neonatal septicaemia), rakta vaishamayata (Rh incompatibility), raktasraavi vikaara (Haemorrhagic disorders), ulvakaroga.	5
18	Dushta stanyapaanajanya vyaadhi (disorders due to vitiated milk): cow's milk allergy, charmadala (infantile atopic dermatitis), ksheeraalasaka, kukunaka (conjunctivitis), ahiputana (napkin rashes).	3
	TOTAL	36 hours

SECOND TERM EXAMINATION TOPICS

NO	TOPIC	MARKS
1	Baalaroga saamaanya chikitsa siddhaanta (general principles of treatment in children), Baalaroga pareekshaavidhi-shadvidha, ashtavidha, dashavidha pareeksha evam sisu vedana parigyana (examination of diseased child and diagnostic methods-ayurvedic And modern).	3
2	Aushadhi maatra nirdharana - According to vaya, bhaara evam Aushadhi kalpana (drug doses according to age, weight and drug preparations)	1
3	Specific therapeutic procedures in children: Panchakarma Procedures specific to paediatric age group.	3
4	5 Sahajavyaadhi _ (congenital disorders): Sahaja hridaya vikaara (congenital cardiac disorders) jalasheerashaka (hydrocephalus), khandaoushtha (cleft lip), Khanda-talu (cleft palate), sanniruddha guda(anal stricture/imperforated anus), pada-vikriti (talipes equinovarusandvalgus), tracheoesophageal fistula (TOF), spina bifida,meningeocoele,meningeomyelocoele, pyloric stenosis.	5
5	Anuvanshika vyaadhi (Hereditary diseases): Down syndrome, turner syndrome, myopathy, thalassemia, sahaja prameha (juvenile diabetes).	4
6	Kuposhanajanya vyaadhi (nutritional disorders). Kaarshya, phakka, baalashosha and parigarbhika (protein energy malnutrition), vitamin and micronutrient deficiency disorders, hypervitaminosis.	4
7	Aupasargika vyaadhi (infectious diseases): Karnamulasotha (mumps),romaantika (measles), rubella, masurika (chicken pox), rohini(diphtheria), kukkura-kaasa (whooping cough), dhanurvaata (tetanus),krimiroga (worm infestations), dengue, malaria, poliomyelitis, rajayakshma (tuberculosis), jeevaanujanya yakrit shotha (hepatitis).	9
8	Praanavaha srotas: pratishyaaya (common cold), kaasa (cough), Swaasa (respiratory distress syndrome), tamaka swaasa (bronchial asthma), utphullika, swasanaka jwara (pneumonia/pneumonitis, bronchiolitis), gala sotha (pharyngitis, laryngitis), taalukantaka (tonsillitis).	2
9	Annavaha srotas: Ajirna (indigestion), atisaara (diarrhoea), chhardi (vomiting), vibandha (constipation), mukhapaaka (stomatitis), gudapaaka (proctitis), parikartika (anal fissure), udarasoola (infantile colic), pravaahika (dysentry), gudabhramsa (rectal prolapse).	3
10	Rasavaha srotas: Jwara (fever), paandu (anaemia), mridbhakshanajanya paandu (anaemia associated with clay eating	2

	/pica)	
	TOTAL	36

PORTIONS FOR THE THIRD INTERNAL EXAMS

NO	TOPIC	HOURS
1	Raktavaha srotas: Kaamala (jaundice), raktapitta (haemorrhagic disorders), krimija hridroga (infectious cardiac diseases including rheumatic heart diseases), uchcharaktachapa (hypertension), yakridpleehodara (hepatosplenomegaly).	2
2	Maamsa-medovaha srotas: Apachi (lymphadenitis), galaganda (goitre), gandamaala (cervical lymphadenopathy), sthauya (obesity).	1
3	Mutravaha srotas: Mutraaghaata (anuria), mutrasanga (retention of urine), mutrakriccha (dysuria), vrikkasotha (glomerulonephritis and nephrotic syndrome).	2
4	Anyabaalavikaara (miscellaneous paediatric disorders: Pangutwa (locomotor disorders), vaamanatwa (dwarfism), jadatwa (mental disorders), Apasmaara (epilepsy), kushtha (skin disorders), madhyakarnasotha (otitis media), karnasraava (otorrhoea).	5
5	Behavioral disorders of children, their management and counselling: Breath holding spell, sayyaamutra (bed wetting), autism, ADHD (Attention Deficit and Hyperactive Disorders).	2
6	Aatyayika Baalaroga prabhandhana (paediatric emergency management): Shock and anaphylaxis, fluid and electrolyte management, drowning, poisoning, foreign body aspiration, hemorrhage, acute renal failure, febrile convulsion, status asthmaticus.	2
7	Baalagraha: General description, types, clinical features and Management	2
8	Various ayurvedic & modern procedures and investigations in paediatric practice.	2
	TOTAL	18

KAYACHIKITSATS

As Per CCIM

Theory Three Papers - 100 Marks Each

Practical/Viva voice - 150 Marks

Lectures - 300

Hospital Training - 9 Months

Proposed Lecture Hour Distribution

Paper - 1 - 70 Hours Part A - 25 Hours Part B - 45 Hours

Paper - 2 - 150 Hours Part A - 100 Hours Part B - 50 Hours

Paper - 3 - 80 Hours Part A -40 Hours Part B - 40 Hours

Note: Common to all papers of Kayachikitsa – Wherever the phrase “Management of diseases” is mentioned 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.

SYLLABUS DIVISION FOR TERM EXAM - KUHS

Kayachikitsa Papers 1-3 (300 lectures)

1st term exam

Paper 1

1. Derivation of the terms ‘Kaya’, ‘Chikitsa’ and their definitions and synonyms. Definition of ‘Kayachikitsa, Definition of ‘Bheshaja’. Types and detailed description of Bheshaja and Chikitsa, Knowledge about Chikitsa Chatushpada.

(3 hours)

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

(2 hours)

3. Chikitsa sutra and Management of vriddhi (increased) and kshaya (decreased) of Dosha, Dhatu and Mala, Ojo Vyapat (Kshaya, Visramsa and Vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states, Chikitsa Sutra and Management of ‘Samanyaja and Nanatmaja’ diseases, Roga- Anutpattikara Chikitsa, Roga Prashamana Chikitsa (Doshapratyanika, Vyadhipratyanika, Ubhayapratyanika), Doshopakrama, Chikitsa sutra and Management of Sthanartara Dosha (Ashayapakarsha, Anuloma/Pratiloma gati of Dosha, Vimarga gamana of Dosha), Knowledge of Lina Dosha &

its management, Diagnosis, Chikitsa Sutra and Management of Avarana and of Dhatu Pradoshaja diseases, Importance of Dosha, Dushya , Bala, Kaala, Agni, Prakriti, Vaya, Sattva Satmya, Desha, Ahara and stage of diseases in treating them.

(10 hours)

4. Detailed description of Dvividhopakrama (Santarpana and Apatarpana) and Shadavidhopakrama (Rookshana, Snehana, Swedana, Sthambhana, Langhana and Brihana). Detailed description of Shodhana, Shamana and Nidana Parivarjana. Knowledge of Aushadha matra, Sevan kaala and Anupana, Definition and Knowledge of Pathya-Apathya with examples of diseases of various systems.

(5 hours)

5. Detailed description of Chikitsa Sutra and Management of Jwara and its types.

(15 hours)

Paper II

1. Chikitsa sutra and Management of the diseases of Pranavaha Srotas such as - Kasa,, Shwasa, Hikka, Rajayakshma, Urakshata, Parshwashoola, Bronchitis, Bronchiectasis,, Emphysema and COPDs.

(15 hours)

2nd term exam-

Paper I

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).

(8 hours)

- 7 Knowledge of National Health programmes and the relevant Ayurvedic management of the following diseases enlisted by World Health Organisation- Malaria, Filaria, Kala Azar, Leprosy, Tuberculosis, AIDS.

(5 hours)

8 . Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine- Yoga, Naturopathy, Unani, Siddha Homeopathy, Accupuncture, Accupressure, Modern medicine, Physiotherapy and Rehabilitation. **(5 hours)**

Paper II

2. Chikitsa sutra and Management of the diseases of Udaka vaha Srotas such as- Shotha, Jalodara, Trishna, Acid - Base & Electrolyte Imbalance. **(13 hours)**
3. Chikitsa sutra and Management of the diseases of Annavaaha Srotas such as – Agnimandya, Aruchi, Ajirna, Anaha, Atopa, Adhmana, Alasaka, Vilambika, Visuchika, Chardi, Grahani, Amlapitta, Gulma, Shoola, Bhasmaka and Acid peptic disorders.
(20 hours)

THIRD TERM

4. Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as - Pandu, Amavata, Madatyaya, Hridroga, Hridshoola, Hypotension, Hypertension.
(12 hours)
5. Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as - Raktapitta, Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plihadosh, Yakrut, Hepatitis, Cirrhosis of Liver, Leukaemia, Kushta Kilasa, Visarpa, Sheetapitta, Udarada, Kotha and medically manageable Kshudra Roga.
(20 hours)
6. Chikitsa Sutra and Management of Mamsavaha Srotas and Medovaha Srotas such as-Gandamala, Mamsashosha, Arbuda, Apachi, Prameha, Sthoulya, Karshya, Diabetes Mellitus and Dyslipidaemia.
(6 hours)

Paper III

1. Principles of treatment and management of Vata Vyadhi such as - Pakshavadha, Ekangavata, Sarvangavata, Ardita, Avbahuka, Kati Graha, Manyastambha, Gridhrasi, Vishwachi, Khalli, Khanja, Pangu, Padaharsha, Padadaha, Vatakantaka, Kroshtukashirsha and Types of Udavarta. Parkinsonism (Kampavata), Gatavata (Dhatu gata and Ashayagata), Avarana Vata.
(20 hours)
2. Nidana and Chikitsa of Urusthambha, Guillain Barrie syndrome, Muscular Dystrophy, Myasthenia Gravis, Motor Neurone Diseases and Neuralgia
(8 hours)

Paper III

6. Derivation of the term 'Manas', its sthana (place), Guna (qualities) and Karma (functions). Introduction and Definition of Kama, Krodha, Lobha, Moha, Mada, Matsarya, Shoka, Bhaya, Vishada, Dainya, Harsha and Pragyaparadha.

(6 hours)

7. Nidana and Chikitsa of the following disorders – Unmada-Apasmara-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.

(15 hours)

Paper II

7. Chikitsa Sutra and Management of 'Asthi and Majjavaha Srotas such as Osteomyelitis (Asthimajja Vidradhi), Osteoporosis (Asthisousharya), Sandhigata Vata (Osteo Arthritis).

(4 hours)

8. Chikitsa Sutra and Management of diseases of Mutravaha Srotas such as -Mutrakricha, Mutraghata, Ashmari, Cystitis, Nephritis, Nephrotic Syndrome, Renal Failure.

(10 hours)

9. Chikitsa Sutra and Management of diseases of Purishavaha Srotas such as – Atisara, Pravahika, Arsha and Purishaj Krimi.

(13 hours)

Paper III

3. Diseases of different Endocrine Gland -such as Thyroid, Parathyroid, Pituitary and Adrenal Glands and their Ayurvedic management.

(6 hours)

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.

(3 hours)

8. Management of Vardhakyajanita vikara, Indriyapradoshaja vikara, Vibandha, Kandu, Alziemers Disease, Sleep disorders, General debility.

(6 hours)

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 hours)

11 Description and Management of following Emergency Conditions- Acute

Haemorrhage, Hypertensive Emergencies, Acute abdominal pain (Renal colic, Biliary colic,
Gastritis, Pancreatitis, Peritonitis and Appendicitis), Acute Abdomen, Anuria / Oliguria,
Congestive Heart Failure, Myocardial Infarction/Angina, Shock, Syncope, Convulsions,
Hyperpyrexia, Hyperglycaemia, Hypoglycaemia, Status Asthmaticus, Acute Respiratory
distress Syndrome, Drowning and Electric shock. (10 hours)

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. (14 hours)

Fourth term- last

13. Vajikarana - Derivation, definition, synonyms, necessity, benefits, Historical importance and
indications of Vajikarana. Appreciation of females, Criticism of childless men, Symptoms of
good Shûkra (Semen), Vajikaran Dravya and Aushadhi.
14. Properties, doses, methods of administration, ingredients and methods of formation of
Rasayana & Vajikarana formulation.
15. Classification and importance of Vajikarana Dravya. (5 hours)

Paper II

10. Chikitsa Sutra and Management of Sexually Transmitted Diseases, such as – Phiranga (Syphilis),
Puyameha (Gonorrhoea), Upadamsha (Chancroid). (5 hours)

Paper III

5. Treatment of Motion Sickness. General introduction, types and Management of
diseases caused by Vyadhi Kshamatwa Hinata (Immuno deficiency disorders and auto
Immune Disorders). (3 hours)
10. Nutritional deficiency disorders, Acid - Base & Electrolyte Imbalance and related
clinical conditions. (5 hours)

PRACTICALS (As Per CCIM)

Sl No	Hospital Training	9 months
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**

- Daily routine work (CCIM) 15

Proposed 3 separate Clinical Records marks

Kayachikitsa – 30 Cases

Manoroga – 10 Cases

Rasayana & Vajikarana – 10 cases

(Total Marks 9+3+3)

Minimum 8 and maximum 14 marks
- Compilation / Project Report (CCIM) 20

Proposed Assignments Compilation of 25 pages on Selected marks

Diseases– 10 marks (Minimum 6 and Maximum 09 Marks)

Assignments – Monitoring 10 patients IPD treatment and submitting a project on it – 10 marks
- Viva-voice (CCIM)Marks - 70 mrk
- Patient examination (CCIM) 45

marks

Proposed Mark Distribution Case writing – 10

Accuracy of Diagnosis – 5

Formulation of line of treatment -10

Awareness on yoga and selection of drugs – 10

Selection of Karma (Procedure) / Rasayana – 10

SHALAKYA TANTRA

Theory Two Papers	- 100 Marks Each TOTAL-200
Practical/Viva voice	- 100 Marks
Lectures	- 210

MODULE I 4 MONTHS---1st term

PAPER I PART A

Introduction Shalakyatantra nirukthi, Parichayam, Ithihasam	3 hrs
Netra rachana shareeram (Mandala, Patala, Sandhi, Drushti Vichara)	2 hrs
Netra & chakshu Kriya shareera ancient and modern view.	6 hrs
Netrapareekshanopayogi Yantra Shastradi jnanam	2 hrs
Netraroganam – Samanya Hethu (Nija and agantuja), Poorvaroopam, Samprapti, Roopa and chikitsa	4 hrs
Classification of netraroga as per Ayurvedic and Modern view point and its importance	2 hrs

Sandhigatarogas

Etiology, pathology, classification and prognosis	1 hr
clinical features and management of sraavarogas	3 hrs
clinical features and management of parvani, alaji	1 hr
clinical features and management of upanaha, krimigrandhi	1 hr
Acute and chronic Dacryocystitis - aetiology, pathology, signs & symptoms and management.	2 hrs
Epiphora, Blepharitis, Lacrimal cyst - aetiology, pathology, signs & symptoms and management.	1 hr
Knowledge about Dacryocystectomy and dacryocystorhinostomy	1 hr

PAPER II PART A

Shiroroga

Importance and Superiority of Shira	1 hr
Generalised and Specific Etiology, pathology, classification, clinical features and management of sirasoolas, ardhavabhedaka, sooryavartha, sankhaka, ananthavata etc as detailed in literature of Ayurveda	5 hrs
Generalised and Specific Etiology, pathology, classification, clinical features and management of kapalarogas as detailed in literature of Ayurveda	6 hrs

Headache, its differential diagnosis and treatment differential diagnosis and treatment of diseases of Scalp 5 hrs

TOTAL 48 HOURS

I INTERNAL EXAMINATION

MODULE II 4 MONTHS -2nd term

PAPER I PART A

vartmarogas

Sankhya, Etiology, pathology and classification of vartmarogas	1 hr
clinical features and management of utsangini, anjananaamika, laganaHordeolum externum, Chalazion	2 hrs
clinical features and management of kumbheekavartma, sikatavartma andvartmasarkara	1 hr
clinical features and management of pothaki and trachoma	1 hr
clinical features and management of nimesha,krichronmeela and blepharospasm	1 hr
clinical features and management of vatahata, lagophthalmos and ptosis	1 hr
clinical features and management of all types of vartma arsas	1 hr
clinical features and management of vartmarbudam, alaji and lid growths	1 hr
pakshmoparodham,pakshmasatam,kukoonaka	1 hr
trichiasis,entropion and ectropion	1 hr
utklishtavartmas, klinnavartma and aklinnavartma	1 hr
lekhana and bhedana	1 hr

PAPER I PART B

suklagatarogas

Etiology, pathology and classification of suklagatarogas	1 hr
clinical features and management of arma and pterygium	2 hrs

sirotpatam,sirajala,siraharsha,sirapidaka	1 hr
scleritis and episcleritis	1 hr
arjuna,subconjunctival haemorrhage	1 hr
valasagradhita and sukthika	1 hr
xerosis	1 hr
krishnagatarogas	
Etiology, pathology and classification of krishnagatarogas	1 hr
clinical features and management of savranasukla and avranasukla	1 hr
kshatasukla	1 hr
Ulcerative and Non Ulcerative Keratitis - aetiology, pathology, symptoms and management.	2 hrs
sankhasukla, corneal opacity	1 hr
pakathyayasukla and hypopyon ulcer and uveitis	1 hr
ajakajatha and staphyloma	1 hr
sirasukla	1 hr
uveitis	1 hr
netrapareeksha	2 hrs
PAPER II	
Karna rogas	
Anatomical and Physiological considerations of Karna (Ear) & Shravanendrya in Ancient and Modern Medical literature	1 hr
Examination of Ear	1 hr
Generalised and Specific Etiology, pathology, classification Of karnarogas	1 hr
clinical features and management of karnasoola and otalgia	1 hr
badhirya,karnanada and karnaksweda	1 hr
tinnitus and deafness, sound pollution	1 hr

poothikarna,karnasrava,krimikarna,karnavidradhi and karnakandu	1 hr
ASOM, CSOM, otomycosis	1 hr
Tympanoplasty	1 hr
Karna sandhana(Auroplasty) fundamentals and method of Vaikritapaham	1 hr
Karnagoodhakam,pratinaham, foreign body in ear	1 hr
TOTAL 48 HOURS	

THIRD INTERNAL EXAMINATION

PAPER I

SarvakshirogaS

Etiology, pathology, classification of sarvakshirogas	1 hr
Abhishyanda as a cause of all eye diseases	1 hr
clinical features and management of abhishyandas and adhimanthas	3 hrs
vataparyaya, anyatovata,sushkakshipaka	1 hr
akshipakathyaya, sasopham, alpasopham	1 hr
amloshitham,sirotpatam, siraharsham	1 hr
etiology, pathology, classification and management of glaucoma	3 hrs
conjunctivitis	2 hrs
dry eye syndrome, panophthalmitis	1 hr
Aupasargika netraroga-etiology,signs and symptoms,diagnosis and treatment	

DRISHTIGATAROGAS

PAPER I PART B

Etiology, pathology, classification of drishtirogas	1 hr
clinical features and management of :	
timira, kacha and linganasa	3 hrs
doshandha, nakulandha, pittavidagdhadrishti, kaphavidagdhadrishti, ushnavidagdhadha, amlavidagdhadha	3 hrs

hraswa, gambheera, dhoomara	2 hrs
sanimittaja, animittaja lingana	2 hrs
timiraabhasa, pilla, pathya, apathya etc	2 hrs
cataract	2 hrs
retinal diseases	3 hrs
refractive errors, strabismus	4 hrs
xerophthalmia and other nutritional deficiency diseases	2 hrs
nayanabhighata (ocular trauma) ayurvedic and modern view	1 hr
preventive ophthalmology	1 hr
Introduction to Eye bank, Eye donation, Corneal Transplantation	1 hr
Kriyakalpa	3 hrs
Nasarogas	
Anatomical and Physiological considerations of Nasa (Nose) & Ghranendriya in Ancient and Modern Medical literature.	1 hr
Examination of Nose	1 hr
Generalised and specific Etiology, pathology and classification	1 hr
clinical features and management of Nasa sandhana (Fundamentals and methods of Rhinoplasty). Etiology, pathology, clinical features and management	
• Rhinitis , Epistaxis, Nasal polyp, DNS, Nasal trauma, • foreign body in the nose –	
Mukha roga	
Mukha roga- ayatana- Anatomical sites of diseases of Oral cavity	1 hr
Anatomical and Physiological considerations of Mukh (Oral cavity) in Ancient and Modern Medical literature.	1 hr
Mukh and Danta Swasthya ancient and modern concepts. Generalised etiology Pathology Clinical picture and Treatment of Mukharoga (Diseases of oral cavity)	1 hr
Oshtarogas	
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 Oshta (Lips) as detailed in literature of Ayurveda. Oshtha sandhana- Labioplasty, Hare lip, Retention cyst, Cracked lips.	3 hrs

DANTA ROGA (DENTAL DISEASES)

Anatomical and Physiological considerations of Danta (Tooth) in Ancient and Modern Medical literature. Examination of Teeth. 2 hrs Etiology, pathology, classification, clinical features and management of diseases of Danta (Teeth) as detailed in literature of Ayurveda.

4 hrs

Danta utpatana- Tooth extraction using jalandhara bandha yoga as well as by using instruments. Danta poorana ancient and modern methods. Danta rakshana.

1 hr

Dental carries, dental tartar, causes and treatment.

2 hrs

DANTA MULA GATA ROGA (DISEASES OF PERIODONTIA)

Anatomical and Physiological considerations of Dantamula (Periodontia) in Ancient and Modern Medical literature.

1 hr

Examination of Dantamula- Periodontum.

1 hr

Etiology, pathology, classification, clinical features and management of diseases of Dantamula (Periodontia) as detailed in literature of Ayurveda.

4 hrs

Gingivitis, Apical abscess, Periodontitis (Pyorrhoea), Periodontal abscess and Mandibular sinus

4 hrs

JIHWA GATA ROGA (DISEASES OF TONGUE)

Anatomical and Physiological considerations of Jihva (Tongue)

1 hr

in Ancient and Modern Medical literature. Examination of Tongue.

1 hr

Etiology, pathology, classification, clinical features and management of diseases of Jihwa (Tongue) as detailed in literature of Ayurveda.

2 hr

Glossitis, Tongue tie, Ranula, Benign and malignant tumors of tongue

1 hr

TALU ROGA (DISEASES OF PALATE)

Anatomical and Physiological considerations of Talu (Palate)

1 hr

in Ancient and Modern Medical literature.

Examination of Palate.

1 hr

Etiology, pathology, classification, clinical features and management of diseases of Talu (Palate) as detailed in literature of Ayurveda.

4 hrs

Palatitis, Cleft palate, Uvulitis and Tumors of the palate	2 hrs
KANDA 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.	1 hr
Examination of pharynx and Larynx.	1 hr
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.	6 hrs
Pharyngitis, Laryngitis, Tonsillitis, Carcinoma of larynx pharynx,	2 hrs
Diphtheria, Adenoiditis, foreign body in the throat- etiology, pathology and treatment of these diseases	2 hrs
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.	
	3 hrs
Stomatitis, HIV and Herpes infection of oral cavity	1 hrs
TOTAL - 84 HOURS	
Last term	
PAPER II PART B	
ENT Examination	3 hrs
Anatomy and physiology of salivary, thyroid and para thyroid glands , their diseases and treatment	2 hrs
Dysphagia, Cervical lymphadenopathy, Manyastambha (Sternocleidomastoiditis).	2 hrs
Instruments and technology used in the diagnosis and treatment of diseases of Shira, Ear, Nose & Oral cavity	3 hrs
Kriyakalpa- ENT	
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.	

NETRA SAMANYA VISHESHA CHIKITSA-KRIYAKALPAM

Seka ,Ashchyodana,Pindi,Vidalaka,Tarpana,Putapaka,Anjana and importance of Panchakarma in shalaky chikitsa

b)Basic fundamental of shalakya ,shalya chikitsa eg purva –pradhana-Paschat karma –Ama-pachyamana pakwa vrana shodha vranitopasana pranashtashalya and vranabandhana.methods and concepts of sterilisation asepsis and antisepsis as per ancient and modern view point

c)Knowledge of eight surgical procedures ie lekha,chedana,bhedana,vyadhana etc shalya karma

d)Parasurgical procedure –Agni,kshara and rekthamoksha with special reference to netra chikitsa

c)essential diagnostic and therapeutic modern pharmacological agents required in shalakhya chikitsa

TOTAL 14 HOURS

MODEL EXAMINATION SHALYA

Theory Two Papers – 100 Marks Each

Theory Lectures - 210

Practical- one – 100 Marks

Hospital Training - 6 Months

1st TERM

Paper I Part A

- 1.Introduction to shalyathantra – historical background and progress made
- 2.Definition of Shalya, Shalyathantra and it's importance
- 3.Description of Yantras, Definition, number, types, uses, doshas,gunas, karmas, relevant modern instruments Sastras , Anusastras – Definition, number, types, uses, doshas,gunas, karmas, relevant modern instruments.
- 4.Nirjanthukarana – sterilization- methods – types and O T fumigation
5. Sangyahantra – anaesthesia- definition, types, anaesthetic agents, Indications, contra indications, procedures, complications and management
6. Trividha karma – Poorva Karma, pradhana karma and paschat karma
7. Asta vidha sastra karma – Operative procedures Chedana ,chedya rogas, modern Bhedana , bhedyarogas, basic principles regarding incisionsLekhana Vedyam,eshyam aharanam Visravanam , Seevanam
8. Yogya vidhi – experimental surgery
9. Marma – Nirukthi, types, description and importance.
10. Kshara and ksharakarma - Nirukthi, pradhanya, guna, Dosha, Karma Prakara, nirmana

vidhi, Yogya ayogya vidhi, and upadrava chikitsa Knowledge of kshara varthi, taila and pichu.

11. Kshara sutra – Preperation, indications, contraindications and method

of application, complications and their management.

12. Agnikarma – mahatwa, upakrama, vyadhis, vidhi, akruthi, bheda, ogya, ayogya, and upadrava chikitsa

13. Rakthamokshana – mahatwa, prakara – siravyadha, prachana, sringalabu, jaloukavacharana (jalouka parichaya)- yogya, ayogya, vidhi, and upadarava chikitsa

4. Bandhana vidhi- prayojana, dravya, yogya, ayogya, prakara, abandhya and upadrava, pichu plotha kavalika, vikesika, 25hrs

Paper II

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, carpels, metacarpels, phalanges, femur, patella, tibia, fibula, tarsals, metatarsals, vertebrae, ribs, mandible, pelvis, and skull bones

2. Sandhi moksha - Dislocation: prakara, samanya lakshana, upadrava, and chikitsa. Dislocations 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 15 hrs

4. Cranio- cerebral injuries – mechanism, pathology, investigations, complications and management. Cerebral contusion, concussion and laceration. Acute extradural haematoma, acute intracerebral and chronic subdural haematoma

3hrs

5. Brain tumours and their management

3hr

6. Diseases of the breast - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of sthan vidradhi- breast abscess. Sthan arbuda – breast tumours and their management 3hrs

7. Diseases of Chest - Aetiopathogenesis, classification, clinical features diagnosis, complications and management of Plural abscess, plural effusion, tumours, pleurisy and their management

9. Gulma Roga – Nidana, prakara, lakshana, upadrava and chikitsa

3hr

Second term

Paper1

15. Sandhana karma _ karma, nasa, oshta sandhana vidhi, principles and procedures of reconstructive and cosmetic surgery 17 hrs
16. Pranashta salya and nirharana Upayas
7. 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. Raktha mahatwa, raktha srava- prakara and lakshana. Rakthasthambhana Haemostasis
19. Blood transfusion – Blood groups, components, compatibility, indications, contra indications and complications with management
- 20 Knowledge about vranithagara 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

Paper 11

8. Diseases of esophagus - Aetiopathogenesis, classification, clinical features diagnosis, complications and management of congenital anomalies, oesophagitis, ulcer, varices, tumours and their management
10. Diseases of stomach and duodenum - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Congenital pyloric stenosis, peptic ulcer, tumours 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, chron's diseases, ulcerative colitis and their management

13. Udara rogas - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of jalodara- Ascitis, Chidrodera- Perforation and Peritonitis, Badhagudodara – obstruction and management

14. Diseases of rectum and anal canal - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Congenital disorders, Arshas- Haemorrhoids , Rectal polyp, parikarthika- fissure in ano , Bhagandara – Fistula in ano , guda vidradi- anorectal abscess, guda bhramsa- Rectal prolapse, Sannirudhaguda- anal stricture , incontinence. Gudarbuda - tumor and their management 18hrs

15. Abdominal injuries and management

Part B

16. Diseases of liver - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Abscess, cycts, tumors, obstructive jaundice and yakruthodara – hepatomegaly 5hrs

17. Diseases of gall bladder - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Cholecystitis, cholelithiasis , tumors 4 hrs

18. Diseases of Pancreas - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of pancreatitis pseudo pancreatic cyst, tumors

Third term

23. Knowledge of Shat kriya kala in surgical practice 2 hr

24. Nirukthi, nidana, samprapthi, prakatra, lakshana, sadhya- asadhyatha, upadrava and chikitsa of the following disorders

- | | |
|---|-------|
| a. Vranasotha – inflammation | 2 hrs |
| b. Vidradhi – Abscess | 3hrs |
| c. Pidaka - Boils | 1hr |
| d. Nadi vrana _ sinus | 1hrs |
| e. Dagdha vrana – Burns and scalds | 2hrs |
| f. Marmaghatha – Shock | 2hrs |
| g. Kotha – Gangrene | 1hrs |
| h. Granthi – Cyst | 1hr |
| i. Arbuda _ Tumour | 3hrs |

25. vrana – Nirukthi and prakara

a. Nija vrana – Nidana, Samprapthi, vrana vasthu, prakara, lakshana, avastha- dushtavrana, sudhavrana, ruhyamana vrana, samyak roodha vrana	2 hrs
vyadhi janya vrana, sadhya- asadhyatha and vrana upadrava.	1hrs
b. Vrana chikitsa- Pathya – apathya and shashti upakramas	2 hrs
c. Ulcer types and their management	3hrs
d. wound healing stages and management	2hrs
e. Aganthu vrana i) Sadhyo vrana – Traumatic wounds – nidana, prakara, lakshana, upadrava and chikitsa	4hrs
ii) Management of bites and stings	2hrs
26. Twak vikara – Nidana ,samprapthi, lakshana and chikitsa of Prameha pidaka – diabetic carbuncle, chippa- paronychia, kadara- corn, vrana granthi- keloid	3 hrs
27. Manya vikara - – Nidana ,samprapthi, lakshana and chikitsa of Gala ganda – Goitre , gandamala , Apachi- Lymph adenitis , pashana gardhabha – parotitis	3hrs
28. Sira vikara – venous disorders- Superficial and Deep venous thrombosis, haemangioma. Varicose vein, venous ulcers and their management	3hrs
29. Dhamani vikara – Arterial disorders, – Nidana ,samprapthi, lakshana and chikitsa of Aneurysm, Burger's disease, Raynaud's disease	4 hrs
30. snayu vikara – Diseases of Tendons, and Ligaments – Tendinitis	3hrs
31. Principles of amputation	1hr
32. Surgical practice in AIDS- HIV and hepatitis patients	2hr

PAPER 11

19. Diseases of spleen - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of pleehodara spleenomegaly, splenic rupture	2hrs
20. Diseases of Kidney - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Congenital anomalies, polycytic kidney , perinephric abscess, tumor, renal calculus. Renal injury	4hrs
21 Diseases of Ureter- Aetiopathogenesis, classification, clinical features, diagnosis, complications	

and management of Calculus, obstruction	4 hrs
22. Diseases of Urinary bladder - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Congenital anomalies, Ashmari – Vesicle calculus, Cystitis, tumor and Injury	3hrs
23. Mutragata & Mutrakrichra- Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of retention of urine	2hrs
24. Diseases of Prostate- Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of prostatitis, prostatic abscess, Benign prostatic hypertrophy, carcinoma of prostate	3hrs
25. Diseases of Urethra - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of urethritis, stricture and rupture	3hrs
26. Diseases of Penis - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Nirudhaprakasa phimosis, parivarthika-paraphimosis, Avapatika – prepuceal ulcer, Arbuda- tumor, lingarsha- venereal warts.	4hrs
27. Diseases of Scrotum and Testis- Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Mutravrudhi- Hydrocele, Vrushana sotha- epididymo – orchitis, Vrushana granthi- epididymal cyst, scrotal filarial, Shukrasmani- seminal calculus, torsion of testis, ectopic testis, undescended testis and tumors	5hrs
28. Vrudhi roga - Aetiopathogenesis, classification, clinical features, diagnosis, complications and management	3 hrs
29. Aetiopathogenesis, classification, clinical features, diagnosis, complications and management of Hernia- Inguinal, femoral, epigastric, umbilical, incisional and rare forms of hernias	4 hrs

Term Examination

I Term 3 hrs/ week (60hrs)

Paper I	1- 14	35 hrs
Paper II	1 – 7,9	25 hrs

II Term 3 hrs/ week (60hrs)

Paper I	15 – 22	17 hrs
Paper II	8,10 – 18	43 hr

III Term 6 hrs/ week (90 hrs)

Paper I	23 - 32	53 hrs
Paper II	19 – 29	37 hrs

While setting question papers weightage may be given to topics which more teaching hours are allotted.

Suggestions

- Surgery posting in Modern Hospital will be completed in small batches of 5 – 8 students, without disturbing regular classes.

Practical Examination

- The entry of “Instruments” in practical examination pattern may be interpreted as “Instruments + X rays + Medicines(special)” for spot identification.
- Assignments need to be submitted at the time of model examination
- Four examiners are ideally suggested for practical/viva examination.

Clinical Training Protocol **Department of Salyatantra**

1) General Learning Objectives (G L O)

1. Demonstration and sterilization methods of surgical instruments
2. Training of surgical case taking
3. Training of surgical and Para surgical procedures including Anesthesia
4. Training of surgical emergencies and management

2) Specific Learning Objective

1. Description and sterilization methods of Yantras, Shastras and Anushastras.
2. Definition, Types, agents, indications, contraindications, procedures, complications and management of Anaesthesia.
3. Training of Kshara Karma, Kshara Sutra, Agnikarma and Raktamokshana
4. Training of application of bandages & splints, Catheterization, Wound management, Ryle's tube aspiration and Injections - Intramuscular/ intravenous / subcutaneous / intradermal
5. Training / Practice of Incision & drainage of abscess, Excision, Sutures, Circumcision, Hydrocele, Hernial repair, Haemorrhoidectomy, Fistulectomy, Fissurectomy and Exploratory Laparotomy

3) Teaching Learning Method

- Training of surgical and Parasurgical procedures including anesthesia will be done at modern Hospital.
- Separate schedule for Vruna, Bhanga, ARC, Bandage etc. will be prepared and taught in the college hospital.
- Methods include discussions and demonstrations at OPs, operation theatre and wards.

4) Evaluation Method

- Record: Rough record shall be submitted during posting. Final record shall be submitted immediately after the posting.
- Spot Diagnosis: Students shall diagnose the case at bed side and OP.
- Assignment: patient oriented small projects. (eg. Exam 5 ulcer cases and list out characteristics of the margin/floor)
- Group Discussion: H O D may arrange group discussion once or twice in a month.
- Presentations: Students shall present small cases.