

DRAFT SYLLABUS/CURRICULUM

for

2ND PROF BAMS

AS PER UG REGULATIONS OF CCIM (revised)

THE GAZETTE OF INDIA

EXTRAORDINARY

PART – III

SECTION – 4

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PREPARED BY :

DEPARTMENT OF AYURVEDA MEDICAL EDUCATION

K.L.E.UNIVERSITY'S

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2nd PROFESSIONAL B.A.M.S.
(Bachelor of Ayurvedic Medicine and Surgery)
"Ayurvedacharya"

Syllabus / Curriculum 2013-14



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Section I

Preamble:

Ayurveda is *upaveda of Atharva Veda*. It is the oldest system of medicine in the world. The word Ayurveda derived from two samskrit words, **AYUR** (life) and **VEDA** (science/knowledge) means the 'science of life'. It has complimented its therapeutic benefits to many chronic and unhealed ailments. Also it is a suitable system of medicine for life style disorders and to meet the changes in pathological conditions due to modern life style.

It is revealed that there were three World famous Universities teaching Ayurveda – all located in ancient India, namely 'Takshashila', 'Vikramshila' and 'Nalanda'. Students from all over the world studied in these universities and through them, the Principles of *Ayurveda* spread to other many countries. Other Systems of Medicine developed taking inspiration from Ayurveda that was learnt by foreign students from India and carried all over the World. Ayurveda therefore can be considered – in true sense – the 'Mother of all Medical branches'.

During the period 2000-1000 BC Ayurveda a unique system of medicine developed in India by the sages with use of their observations, natural resources and their experience. Under the **Guru Shishya Parampara** the regular teaching and training began with creation of *Samhitas*. Gradually it institutionalized at ancient University of 'Takshashila', 'Vikramshila' and 'Nalanda' during 7th century.

Recent years in India various courses were like *Ayurveda Vaidya Visharad (AVV)*, *Ayurved Bhishak (AB)*, etc, conducted by different establishments. To rejuvenate, regularize and to bring uniformity in teaching and training of Ayurveda in India, the 'Central Council of Indian Medicine' a regulatory body for Ayurvedic Education was established. Now Bachelor of Ayurvedic Medicine and Surgery, MD/MS in various discipline of Ayurveda started with the intention to encourage integrated teaching and de- emphasis compartmentalization of disciplines so as to achieve horizontal and vertical integration in different phases which helps to support National Health Services.

Looking in to the health services provided to the public, understanding the need of Practitioners of Ayurvedic system of medicine, as per the guidelines of apex body CCIM and suggestions provided by the faculty of various sections, stake holders and strategy of University this governance is framed.

Section II

Goal of the Course:

To Produce a Physician of first contact and capable of functioning independently in both urban and rural environment,

Section III

Aims:

To produce graduates of Ayurveda with profound scholarship having deep basis with scientific knowledge in accordance with Ayurvedic fundamentals with extensive practical training who would be able to become an efficient teacher, research worker and Kaya Chikitsak (Physician) and Shalayachikitsak (Surgeon) competent to serve and render health services

Objectives:

ATTITUDE AND SKILLS:

- With competent knowledge of Ayurveda science, relevant modern subjects, common investigations and their clinical interpretation, art of diagnosis of common ailments, selection and administration of suitable Pancha karma procedures, common single and compound drug formulations, Pathyaapathya, preventive measures, Rasayana, National Health Programme.
- Able to perform Para surgical procedures, conduct deliveries and resuscitate new born babies.

Departmental goals and objectives:

These are given in their respective chapters.

Section IV

Regulations Governing the 2nd BAMS course

1. Course of Study:

2ND Professional BAMS – It is of 1 year duration, consisting of two terms of 6 months each. The subjects of 2ND Professional BAMS are :

- 1) CHARAK SAMHITA (PURVARDHA),
- 2) AGAD TANTRA, VYAVHAR AYURVED EVUM VIDHI VAIDYAK.
- 3) DRAVYAGUNA VIGYAN
- 4) RASASHASTRA & BHAISHAJYA KALPANA,

There shall be university examination at the end of 2nd term of 2nd Professional BAMS in all these subjects.

2. Intake of the Student:

Total 75 students per batch,

3. Medium of instructions:

English with use of Ayurvedic technical terms,

4. Duration of the Course Study:

The duration of 2nd BAMS is of 12 months,

5. Attendance and Progress:

A minimum of 75% of the attendance in theory and practical separately in each subject calculated from the date of commencement of the 1st term of 2nd Professional to the last working day as notified by the University is eligible for examination at the end of academic year subject to the condition that his/her progress and conduct are counted to be satisfactory by the Principal.

A candidate lacking in the prescribed attendance and progress in any one subject in theory and practical/clinical in the first appearance should not be permitted to appear in that subject. Such candidate's result will be declared as Pass after passing all subjects of 2nd Proff BAMS.

6. Subjects taught, Number of lectures/practical and demonstrations for various subjects:

NO.	SUBJECT	Lectures (one hour each)	Practical & Demonstrations (two hours each)	Total Teaching & Training Hours	Grand Total
1	DRAVYAGUNA VIGYAN	200	200	400	1300
2	AGADATANTRA, VYAVAHARAYURVED EVUM VIDHIVAIDYAK	200	100	300	
3	RASASHASTRA AND BHAISHAJYAKALPANA	200	200	400	
4	CHARAK SAMHITA - Purvardha	200	-	200	

7. Scheme of Examinations:

a) Internal Assessment Examination-

- 20% of the theory marks of that subject will be the IA Theory Exam marks
- 10% of the Practical marks of that subject will be the IA Practical Exam marks
- If total Practical marks of the subject less than 100, the IA Practical Exam marks 10 only,
- Internal assessment will be carried out at end of module.
- A student must appear 80% of the module assessment exams per subject.
- Average of all attended assessment marks of the Theory & Practical will be converted in to 20%, & 10% respectively, which shall be added to the University exam marks as Internal Assessment Marks.
- A student must secure at least 35% of total marks fixed for internal assessment in a particular subject in order to be eligible to appear in University Examination.

b) University Examination:

Subjects Taught, number of Theory Papers, Practicals & Marks Division:

NO	SUBJECT	PAPER	Theory Marks	Practical/ Viva Marks	TOTAL	Grand Total
1	DRAVYAGUNA VIGYAN	Paper - 1	100	200	400	1050
		Paper - 2	100			
2	AGADATANTRA, VYAVAHARAYURVED EVUM VIDHIVAIDYAK	One	100	50	150	
3	RASASHASTRA AND BHAISHAJYAKALPANA	Paper - 1	100	200	400	
		Paper - 2	100			
4	CHARAK SAMHITA - Purvardha	One	100	-	100	

Marks division of Theory papers, Practical & Internal Assessment Examinations:

	SUBJECT	PAPER	THEORY MARKS			PRACTICAL MARKS				Grand Total
			University Examination	I A	Total	University Practical		I A	Total	
						Pract	VIVA			
1	DRAVYAGUNA VIGYAN	Paper - 1	80	40	200	120	60	20	200	1050
		Paper - 2	80							
2	AGADATANTRA, VYAVAHARAYURVED EVUM VIDHIVAIDYAK	One	80	20	100	30	10	10	50	
3	RASASHASTRA AND BHAISHAJYAKALPANA	Paper - 1	80	40	200	120	60	20	200	
		Paper - 2	80							
5	CHARAK SAMHITA - Purvardha (sutra Sthan)	One	80	20	100	-	-	-	-	

c) University Theory Question paper pattern:

No	Division	No of Questions	Marks Per Question	Total Marks	Grand Total
01	MCQ	20	1	20	80
02	Long Essay Questions	2	10	20	
03	Short Essay	5	5	25	
04	Short Answers	5	3	15	

- Question papers in English language only.

d) University Practical Examination:

- 5% of the total Practical marks of that subject will be the Practical records marks,
- If total Practical marks of the subject less than 100, the Practical records marks will be 5 only,
- Practical marks division mentioned in respective subject syllabus.

e) Criteria for Pass:

- Minimum marks to be secured in each theory paper & practical 40% separately
- Aggregate of theory 50% & practical 50% of marks separately considered as pass
- He/she will not be allowed to appear for 2nd Prof Examination unless he/she passes in all the subjects of the 1st Prof.

- A candidate failed in one or more than one subject in examination shall be eligible to appear in supplementary examination.
- In case a student fails to appear in regular examination for cognitive reasons he/she will appear in supplementary exam as regular student. In such cases his/her nonappearance in regular exam will not be treated as an attempt. Such students after passing examination will join the studies with regular students and appear for next Prof Exam after completion the required period of study.

f) Declaration of Class:

- Student who secures 50% of the marks in the aggregate of university Examination of BAMS will be declared as Second class, 60% as First Class and 75% as distinction.
- If failed in main University Examination and passed in consecutive examination will be declared as pass.
- Supplementary examination will be conducted within four to six months. The failed student will have to appear in the subsequent year.
- A candidate, who fails in 2nd Professional Examination, can go into 3rd Profession.
- Candidate's 3rd Professional Examination result will be declared only after passing in all the subjects of 2nd Profession.

g) Migration:

The student not allowed to take the migration to continue his/her study to another college after passing the 2nd professional Examination.

h) Hospital Posting:

Hospital postings of three hours duration for specified months is suggested for concerned departments, after introductory course in Clinical Methods for the whole class at the start of 2nd term of 2ND Professional BAMS

This posting is,

- a) exposure to laboratory, medicine and infectious diseases,
- b) exposure to Radio-diagnosis,
- c) exposure to Para surgical measures, dressings,
- d) exposure to Physiotherapy

2.1. DRAVYAGUNA VIGYAN

AIMS:

Providing the knowledge of Fundamental principles of Dravyaguna, Drug action as per Ayurveda and Conventional systems of Medicine, Inculcating the basic Knowledge about the medicinal plants used in Ayurveda Pharmaceutics, their application in clinical practice.

OBJECTIVES:

By the end of 2nd profession the students should be able to,

I. Knowledge:

1. Describe the Chronological Development of Dravyaguna as a separate branch of Science in Ayurveda
2. Comprehend the basic principles of Drug action like Rasa, Guna, Veerya, Vipaka, Prabhava
3. Understand the concepts of Pharmacodynamics and Pharmacokinetics with modern view
4. Describe types of Karmas and their Application in clinical practice
5. Construct idea regarding Identification, Gunakarmas and Application of Medicinal plants used in Ayurvedic pharmaceutics
6. Classify Aharadravya, Visha dravya and their Shoshanna, with their utility
7. Infer Anupana, Baishajya marga, Baishajya kala, matra
8. Knowledge of Collection, Storage and Preservation of raw materials of plant origin
9. Identify and differentiate Dravya of animal origin like Kasturi, Gorochana, Shaa, Kapardika etc
10. Appraise the literatures of Dravyaguna like Samhitas, Nighantu and Modern literature
11. Assess the importance of Basic botany, Pharmacogenomics, Pharmacovigilance, and Research in Dravyaguna vijnan

II. Skill

1. Demonstration and performing of simple botanical techniques of plant studies like identification, phytohistology, photochemistry.
2. Able to identify the Medicinal plants and ability to use them in specified conditions.
3. Understand and able to present the intricacies of Ayurvedic principles of drug action.
4. Ability to perform the simple laboratory techniques to identify the Plant parts like Histology, Phytochemistry.
5. Able identify the plants at their natural habitat based on key points of identification.
6. Able to perform simple experiments like pH, specific gravity etc to understand Basic principles of Dravyaguna.
7. Skill of Preparing Herbarium, Monograph and Demonstration of plants.
8. Ability to select specific dravyas as per the different clinical conditions.

III. Affective and communication values

1. Reproduce and show effective speech, affective listening and good communication with Classmates, teachers, and patients.
2. Act as a team member and well involved in group discussions, practicals, field visit and support the team spirit.

Theory Two Papers: 100 Marks Each

Practical/Viva voice: 200 Marks

Lectures:200 Hrs

Practicals and Demonstration: 200 Hrs

Paper 1 Basic Principles of Dravyaguna

Part- A	Marks -50	Hours- 50
Dravyagunashastra		1 hrs
Lakshana and fundamental principles of Dravyaguna Shastra and Importance of Dravyaguna - General Introduction of Sapta padartha – (Dravya,Rasa,Guna,Virya, Vipaka,- Prabhava and Karma.) Pancha padartha		
Dravya		3 hrs
Lakshana of Dravya, Panchabhautikawa, Aushadhatva, Dravya Pradhanye yuktyah (arguments for importance of dravya) Classification of Dravya ,according to Chetan-achetan (living–Non Living), karya-karan, Utpatti (Origin), Yoni (Mode of Origin), Rasa, Virya, Vipaka, Prayoga (Use), Dosha karma (Action on Dosha) Method of Dravya classification according to Brhatrayi- & according to Taxonomy - -		
Guna		4 hrs
Etymological derivation, definition and Classification of Guna - Detailed knowledge of Gurvadi 10 Gunas - Detailed knowledge of Paradi Gunas - -		
Rasa		7 hrs
Etymological Derivation, definition, Meaning of "Rasa" in various contexts, 6 Rasas(Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik origin of Rasa - Nirvritivisheshakramh (manifestation in general and particular), Ritu prabhava(effect of season) ,Rasanurasayo bheda(Difference between rasa and anurasa) - Lakshana (characteristics), Guna of 6 Rasa - Karma of 6 Rasa.- - Rasaskandha, Effects of excess usage of Rasa. - Rasopalabधि, assessment of Rasa by Taste threshold method - Uses of Rasa in diet and medicine (Rasa seven Kramah) -		

Vipaka**3 hrs**

Etymological derivation and definition, difference between Avasthapaka Nisthapaka and Vipaka, -
Types of Vipaka, (Dwividha-Trividha,Panchavidha) -
Guna and karma of Vipaka, Grades of Vipaka(taratamya) -
Vipakopalabdhi hetu (Knowledge/Understanding of Vipaka). Differences between Rasa and Vipaka.

Virya**3 hrs**

Etymological derivation, definition and Nature of Virya, Numbers of Virya. (Dwividha &Ashtavidha),
Panchabhauthikatva -
Virya karmani, (Effects of Virya) and utility -
General principles in determination of virya along with exceptions. Arguments for importance of
virya along with exceptions -

Prabhava**3 hrs**

Etymology and definition, Effects of Prabhava, -
Samanyapratyarabdha, Vichitrapratyarabdha, Arguments for Predominance of prabhava. -
Interrelation of Rasa-Guna-Vipaka-Virya-prabhava with respect to their strength (balabal nirupana).

Karma**26 hrs**

Nirukti lakshana swaropaa and bheda of karma (Etymological derivation, definition, nature and
types of action). -
Karma according to ancient and modern views. -

1. Define with mode of action of the following karmas with examples –

- Deepana, Pachana, Shoolaprashamana -
- Anulomana, Sransana, Bhedana -
- Rechan, Chhedana, Lekhana -
- Sanshamana, Sanshodhana, snehana -
- Grahi, Pramathi, Sthambhana -
- Madakari, Vyavayi, Vikashi -
- Rasayana, Balya, Brimhana, -
- Jeevaneeya, Medhya, Vajeekarana -
- Abhishyandhi, Langhana, vamaana -
- Kesya, Chakshushya, Dantya -
- Varnya, Hridya, Vedanasthapana -
- Prajasthapana, Sanjnasthapana, Sonithasthapana -
- Shukrala, Sukrajanana, Sukrasthambhaka -
- Sukrarechaka, Sukrasodhana, Stanyajanana -
- Stanyashodhana, Mutravirechaniya, Sandhaniya -
- Raktaprasadana, Vranaropana, Vishaghna -
- Pureeshavirajaneeya, Pureeshasangraheeya, Kushtagna -
- Swedasangrahaaka, swedana, Swedopaga -
- Mutravirajaniya, Vamanopaga, Snehopaga -
- Virechana, Virechanopaga, Virechanopaga -
- Asthapanopaga, Anuvasanopaga, Hikkaniygrhana -
- Trishnanigrahaana, Chhardinigrahaana, Dahaprashamana -
- Shitaprashamana, Angamardaprashamana, Truptighna -
- Jvarahara, Shramahara, Swashara -
- Shothahara, Kasahara, Kandugna -
- Krumighna, Arshoghna, Ashmaribhedhana -

1. Description of the following classes (Ganas) of Dravyas depending upon their similarity, morphology, properties, action, class, and effects 20 hrs

i. Audbhida Ganas (Vegetable origin)

- a) Brihatpanchamoola, Laghupanchamoola
- b) Vallipanchamoola, Kantakapanchamoola
- c) Triahpanchamoola, Madhyamapanchamoola
- d) Jeevaneeya panchamoola
- e) Panchapallava, Panchavalakala
- f) Triphala, Trikatu, Trimada
- g) Chaturusana, Panchakola,
- h) Chaturbeeja, Shadoosana
- i) Jeevaniya gana.
- j) Trijataka, Chaturajataka, Ashtavarga
- k) Katuchaturjataka, Chaturbhadra
- l) Panchatikta, Amlapanchaka,
- m) Trikarshika, Swalpatriphala, Madhuratriphala
- n) Mahavisha,
- o) Upavisha
- p) Knowledge of Agryoushadha Varga

ii. Jangama Ganas (Animal origin)

- a) Ksheerashtaka, Mutrashtaka,
- b) Pitta panchaka.

iii. Parthiva Ganas (Mineral origin)

- a) Lavana Panchaka,
- b) Kshara dvaya, Kshara Ashtaka.

2. Basis of –

4 hrs

Nomenclature of dravya, Derivation of synonyms.

Ecology Classification of geographical area (desha) and soil (bhumi)

Collection of dravya, Nature and quality of drug to be collected (swarupa of sangrahya dravya), Method of collection (Sangrahana vidhi), Vegetable and Animal drugs according to part used. Period of collection according to virya, preservation of collected dravyas, Storehouse (bheshajagara).

- 3. Various impurities** **3 hrs**
 Of dravya, their purification
 Brief knowledge of Adulterants, Artificial/synthetic drugs,
 Concept of Substitution (abhavapratidinidhi dravya).
- 4. Brief knowledge** **2 hrs**
 Of plant extracts, additives, excipients, preservative, food Colours.
- 5. Ideal drug** **15 hrs**
 (Prashasta bhesaja), Use of different part of medicinal plants (bhesaja prayoga, prayojyanga),
 Incompatibility (knowledge of viruddhatwa),
 principles of preparation of Aushadha yoga
 Consideration of vaya, bala, linga, agni, dosa, dushya, vyadhi, koshta, deha prakriti, Abhyasa,
 satwa, desha kala and kalpana for deciding dosage of drugs (Matranishchiti).
 Anupana vyavastha,
 time of administration (bhaisajya sevana kala –(Sushrukokta , Charakokta)
 routes of drug administration (bhaishajya prayoga marga)
 absorption, distribution, fate of the drug
 mechanism of drug action, excretion of drug
 Prescription writing.
 Agraneeya adyayokta dravyas
- 6. Brief study of 6 Nighantus** **6 hrs**
- i. Dhanwantari Nighantu,
 - ii. Shodala Nighantu
 - iii. Kaiyyadeva Nighantu,
 - iv. Madanapala Nighantu
 - v. Bhavaprakasha Nighantu,
 - vi. Raja Nighantu

Paper -2 Applied Aspects of Dravyaguna

Part - A

Marks - 50

Hours- 50

Introduction to -

2 Hours

Basic botany, related to Leaf, Flower, Stem, Bark, Fruit, Root
Knowledge regarding basic taxonomy of plants and its application

Detailed knowledge of following drugs -

27 hrs

With respect to, Basonym of drug, Main Synonyms and their meanings, Regional Name, Botanical Name, Family-, Classification of Dravya (Gana) as described in Charaka, Sushruta and Bhavaprakasha- -, Habit and habitat/verities External morphology of Useful parts-, Important phytoconstituents Rasa panchaka Action on Dosha, Dhatu, Mala, Amaikaprayoga and Matra (Therapeutic administration and Dose) , Name of important formulations Adverse effects and remedial measures Shodhana (as required) -

Ahiphena, Agnimantha, Agar, Amalaki

Ashvagandha, Ashvagola, Asoka, Ativisha

Bharangi, Bakuchi, Baladvayam., Bhallataka

Bibhitaka, Bijaka/Vijayasara, Bilva, Brahmi

Briungaraj, Bruhati, Citraka, Dadima

Danti, Daruharidra, Dhanyaka, Dhataki,

Draksha, Durva, Ela, Eranda,

Gambhari, Gokshura, Guduchi, Guggulu,

Haridra, Haritaki ,Hingu, Jambu,

Jatamamsi, Jatiphal, Jeerakdvaya, Jyotishmati,

Kalamegha, Kampilla, Kanchanara, Kantakari,

Karkataksringi Karpura Kapikacchu, Khadira,

Kutaja, Kumari Kushmanda, Kalamegha,

Lavang, Lodhra, Madanaphala, Manjishtha,

Maricha, Markandika, Musali, Musta,

Nagakeshara, Nimba, Palasha, Palandu,

Nirgundi, Patala, Patola, Pashanabheda,

Pippali, pippalimula, Purnarnava, Rasna,

Rasona, Saireyaka, Sallaki, Saptaparna,

Sarpagandha, Sariva, Shalparni, Shalmali,

Shankhapushpi, Shatavari, Shathapushpa, Shigru,
Shirish, Shyonaka, Thalisa patra, Tila, sunti
Tivrut, Tulasi, Tvak, Ushira, Ardraka
Vacha, Varuna, Vasa, Vata, Aragvadha,
Vatsanabha, Vidari, Vidanga, Arjuna,
Yavani, Deodaru, Yastimadh, Apamarga

3. Brief knowledge of following drugs -

21 hrs

With respect to, Sanskrit Name Botanical Name Family, Habit (Samanya swaroopa)—, Part used
Rasapanchaka Indications-

Agastya, Akarakarabha, Ajamoda, Amra, amragandhiharidra
Ankola, Aparajita Ashvattha Asthishrunkhala Avartaki
Babbula, Badara, Bakula, Bhumyamalki, Bimbi,
Bijapoor, Bola, Chandrashura, Changeri, Chavya
Chakramarda, Champaka, Chirbilva, Chopachini, Dattura
Darbha, Dhanvayasa, Dronapushpi, Gandhaprasarini, Garjara,
Gojihva, Gorakshamajja, Gunja, Hismra, Hrutpatri,
Indravaruni, Ingudi, Irimeda, Isvari, Japa
Jati, Jayapala, Jeevanti, Kadali, Kadamba,
Kaidarya, Kamala, Kankola, Kakamachi, Karanja,
Karpasa, Karvira, Karira, Kasha, Karavella,
Kataphala, Kasni, Kataka, Kharjura, Kitmari,
Koshataki, Kokilaksha, Kumuda, Kusha, Lajjalu,
Latakaranja, Latakasthuri, Langal, Madayantika,
Mahanimba, Mandukaparni, Mashaparni, Mayaphala, Methika,
Meshashrunji, Mudgaparni, Nagabala, Nala, Narikala,
Padmaka, Parushaka, Nili, Parijata Parisha
Parasika yavani, Parnayavani, Parpataka, Parnabija, Priyala,
Patha, Patranga, Pilu, Plaksha, Patalagarudi,
Prishniparni, Puga, Putiha, Putranjivaka, Pushkarmoola,
Rajjika/ Sarshapa, Rohitaka, Sala, Saptachakra, Sarala,
Shaliparni, Sarja, Satapa, Shati, Sharapunkha
Shinsapa, Snuhi, Sringataka, Surana, Svarnakshiri
Tailaparni, Talmuli, Tagara, Taruni, Tavakshira,
Tugaraka, Upakunchika, Udumbara, Vamsha, Vata
Varahikanda, Vruddadaru, Vrukshamla,

Part -B

Marks -50

Hours- 50

1. Introduction, Guna, Karma and uses of following jantava dravya (Drugs of animal Origin).-

4 hrs

Kasturi, Gorochana, Ghandamarjara virya, Mrigasringa, Bhunaga, Mukta, Pravala, Shaha, Shukti, Shambūka, Varatika, Indragopa

2. Introduction, knowledge of guna-karma of following groups of Annapana varga and their utility in practice-

8 hrs

Jala Varga, Dugdha Varga, Ikshu Varga, Taila Varga, Mutra Varga, Sūkadhanya Varga, Simbidhanya Varga, Mansa Varga , Phala Varga, Shaka Varga,

Kritannavarga(Processed food), Lavana Varga, Madhu Varga, Madya Varga

3. Introduction, Definition & scope of Pharmacology - Principles of general Pharmacology, Pharmacodynamics –, Pharmacokinetics

- 5 hrs

4. Brief Knowledge of definition, classification ,mode of action

– 28 hrs

Anaesthetics, CNS depressants, Sedatives, Hypnotics, Tranquilisers ,
Antipyretics, Analgesics, Antiepileptics, Antihypertensive, Antianginal, Antiplatelet ,
Hypolipidaemic, Haemopoetic, Coagulants, Bronchodialators, Aerosols/Inhalants, Expectorants,
Digestants, Carminatives, Antacids, Antiulcer, Laxatives, Antidiarrhoeals, Antiemetic,
Hepatoprotective, Diuretic, Antidiuretic, Lithotriptic, Anti-inflammatory,
Hormonal therapy, Antiobesity, Antidiabetic, Antithyroids, Oxytocics , Galactagogues,
Contraceptives, Styptics, Antihistamines, Antimicrobial, AntibioticsAntimalarial, Amoebicidal,
Antifilarial,Anthelmentic, Antifungal, Vitamins Minerals, Water imbalance and
IV fluids, Vaccines, antivenom, antirabbies serum, Local anti septics, drugs in ophthalmic practice

5. Brief knowledge of

5 hrs

WHO's "Essential Drug List"

Cultivation of medicinal plants - Pippali, Ashwagandha, Senna, Guggulu, Shatavari,

Conservation of Medicinal plants, need and implementation

endangered species Red listed ,Endangered, Threatened plants as per National medicinal plants board , Reverse pharmacology, Clinical pharmacology, Pharmacovigilance, Pharmacogenomics , Tissue Culture,

Practicals:

Marks: 200

Training Hours: 200

A.Organoleptic examination (Panchendriya Parixana) of following plant materials:

Moola(Root)

1. Punarnava,
2. Aswagandha

Kanda (stem)

3. Guduchi

Patra (leaves)

4. Swarnapatri,
5. Vasa ,
6. Kumari

Pushpa (flower and Parts of flower)

7. Lavanga,
8. Japa

Phala (fruit)

9. Pippali,
10. Madanaphala,
11. Vidanga

Beeja (seeds)

12. Eranda,
13. Kupilu,

Twaka (bark)

14. Kutaja,
15. Arjuna,

Niryasa (exudate)

16. Hingu,
17. Guggulu,

Jangama dravya (animal origin)

18. Madhu.
19. Ghrita

B. Phytochemical analysis:**Group 1:**

- a. Foreign Organic Matter,
- b. Total Ash,
- c. Acid insoluble ash,
- d. Water soluble ash,

Group 2:

Water & Alcohol extraction and TLC of Guduchi stem, Aswaganda root,
Fluorescence analysis of Kutaja

Group 3

- a. alkaloids, - Aswaganda root
- b. tannins – Haritaki fruit
- c. steroids, - Aswaganda root
- d. glycosides - Guduchi stem,

Group 4:

- a. specific gravity –tila taila, eranda taila
- b. refractive index—tila taila, eranda taila
- c. pH –nimbuka swarasa,

C. Study of Morphological features of 100 dry drugs

(Leaf -10; Roots-20; stem-10; bark -20; fruit-10; seed -10; flower – 10; exudates- 10;)

D. Visit- Medicinal plant Garden**E. Field Trip****F. Clinical study** – of any minimum 5 single drugs**G. Herbarium** -Collection of minimum 100 specimen**H. Compilation** -of single plant not less than 25 pages**Distribution of marks of Practical examination:**

No.	Practical proper			viva voce	Grand total
	Type of Practical	Marks	Total		
1	Spotters/ identification	30	120	80	200
2	Long practical (organoleptic examination)	50			
3	Short practical (Phytochemical analysis)	30			
4	Practical records	10			

Reference books:

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

2.2. AGADATANTRA, VYAVAHARAYURVED EVUM VIDHIVAIIDYAK

OBJECTIVES:

- Students should be made able to diagnose venomous conditions and to manage it, identify fatality of the condition and give good referrals.
- Students should be made able to understand the current significance of Agadatantra and make use of the Knowledge of Agadatantra in General Practice like Contact poisoning, Dushivisha & Garavisha etc.
- Should be able to make people aware of hazardous effects of excessive use of Fertilizers, Pesticides, Environmental effluents, etc.
- Should be able to differentiate Venomous and Non-venomous snakes and also to impart the knowledge to society.
- Able to maintain Good Patient Doctor Relation, follow Medical Ethics, Rules & Regulations, Drugs & Cosmetic Act etc in Clinical practice.
- Students should be made capable of doing all the duties of a doctor in case of criminal or accidental cases as per law.

KNOWLEDGE:

- Students should possess basic knowledge of role of Agadatantra in present day.
- Knowledge about various Indian venomous and non-venomous snakes and other creatures and their management.
- Good clinical knowledge about contact poisoning i.e. Paduka visha, Abharana visha etc.
- Knowledge of medical ethics and duties and responsibilities of a doctor for society and Law.
- Knowledge of different Agada preparations and their use in present day Ayurvedic general practice.
- Knowledge regarding household weapons and possible wounds caused by them, and differentiating accidental, suicidal and homicidal wounds.
- Brief knowledge of Autopsy, Court procedures, examination of the cases sent by law.

SKILL:

- Skills to identify and manage different types of poisoning due to different sources.
- Good examination skills in case of suspected accidental or suicidal or homicidal conditions.
- Skills for differential diagnosis of contact poisoning etc.
- Skills of identifying venomous & non-venomous creatures and to manage the venomous conditions.
- Skills to practice good Doctor Patient relationship.
- Skills to disseminate the knowledge of Agadatantra to Students & Society in large.
- Skills in preparation of Agadas.
- Skills to conduct oneself in discharging the duties as Doctor in appropriate situations like Court, Labs etc.

ATTITUDE & COMMUNICATION:

- To develop positive attitude for practicing Agadatantra and for the development of the same.
- Openness for learning and propagating the knowledge for the benefit of Society and the advancement of the Science.
- To have clarity of understanding, thought and be precise in communication.

Theory One Paper: 100 Marks

Practical/Viva voice: 50 Marks

Lectures: 200 Hours

Practical / Demonstrations:100 Hours

Part- A

Marks: 50

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

01. Derivation and definition of Agadatantra and Visha, VishaUtpatti, VishaPrabhava, VishapranaharanaKriya, VishaGuna, Vishagati. **03 hrs**
02. Origin and Classification of Visha:- Its sources, Differences between Visha, Madya and Ojaguna, VishaUpadrava and VishaMuktaLakshana. **03 hrs**
03. Tests for detection of Visha, Visha Data lakshana, Vishapeetalakshana, Signs and symptoms of Visha afflicted organs and personal effects. (Poisoning with anjana, lepadaduka, abharana etc. - contact poisons). **8 hrs**
04. Contamination of air, water, soil etc. (Vishamishrita – Vayu, Jala, Desha, Kala and their management), their contemporary significance. Samuhikavishaprayoga-Effects of chemical and nuclear warfare. Biological Warfare. **04 hrs**
05. Signs and symptoms of poisons of plant kingdom and their management. Visha and Upavisha. Arka, Snuhi, Langali, Karaveera, Gunja, Ahiphena, Dhattura, Bhallataka, Vatsanabha, Kupeelu, Jayapala, Bhang, Tobacco, Partheniumhistoriferous, Chitraka, Eranda, digitalis and cerebra odollum.Indravaruni, Dravanti, Swarnaksheeri&Kakamari (Signs and symptoms, Fatal Dose, Fatal period, Treatment, post mortem appearances and Medico legal importance). **18 hrs**
06. Garavisha, Dooshivisha and Viruddhahara– their concepts, classification, Management and contemporary significance.Essentials of Food poisoning. **06 hrs**
07. Study of chaturvimshatyupakrama of Caraka.
Ingredients, Method of Preparation, Indications of – Bilwadiagada, Dushivishariagada, Dashangaagada, Ajeyaghrita, AmruthaGhrita, Ajita agada, Sanjeevanaagada, Darpankushaagada, Sindhuwaradikashaya, Vrischikaagada, Panchashirishaagada, Lodrasevyadilepa. **12hrs**

08. **JangamaVisha** (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), VishaSankata, ShankaVisha.
- Types of Sarpadamsha (Snake Bite) **14hrs**
09. **Acids and Alkalis** – Fatal Dose, Fatal period, signs and symptoms, cause of death, treatment, medico legal importance and postmortem appearance of – Sulphuric acid, Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carbolic acid, Formic acid and alkalis in general, treatment and safety measures. **07 hrs**
10. **Asphyxiants** – Carbon monoxide, Carbon dioxide, Hydrogensulphide;
Stimulants–Antihistamines, Cocaine
Hallucinogens – LSD
- Mescaline, Dimethyl tryptamine
- Sedatives and Hypnotics** – Barbiturates
Petroleum – Kerosene Poisoning
Organo phosphorus compoundsAluminum phosphate, Zinc phosphide **06 hrs**
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. **06 hrs**
12. Metallic and Nonmetallic poisoning: General characters, Signs and symptoms, Fatal dose, fatal period, Treatment,Medico Legal Importance and PostmortemAppearance of
- Nonmetallic poisons – Phosphorous, iodine
 - Metallic poisoning – Arsenic, Mercury, Lead, Copper, Zinc, Tin and Radiation metals.
- 08 hrs**
13. MadyaVisha and Madatyaya; Alcohol poisoning (Ethanol and Methanol) **03 hrs**
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. **02 hrs**

Part- B

Hours: 100

Marks: 50

**VYAVAHARAYURVED EVUM VIDHIVAIDYAK
(FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)**

01. Introduction, Definition and concise history of Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (vidhivaidyaka). Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code. **07 hrs**
02. Personal identity and its medico legal aspects, forensic odontology, forensic serology and DNA profiling. **11 hrs**
03. Death and its Medico Legal Aspects. **11 hrs**
04. Medico legal autopsy and exhumation. **07 hrs**
05. Injuries and wounds and its medico legal aspects. **17 hrs**
06. Dowry deaths, their medico legal importance and laws in relation to it. **02 hrs**
07. Asphyxial deaths and its Medico Legal importance. **06 hrs**
08. Death due to heat, cold and starvation. **04 hrs**
09. Virginity, Pregnancy, Delivery; Impotence & sterility, Artificial Insemination, Legitimacy, Abortion, Infanticide battered baby and their Medico Legal importance. Medical Termination of Pregnancy Act. **14 hrs**
10. Sexual offences, Sexual perversions and their medico legal aspects. **04 hrs**
11. Forensic psychiatry. **05 hrs**
12. Ethics as in classics. Types of physicians and methods of identification Pranabhisara and Rogabhisara Physicians, Qualities of physician, Responsibilities of Physicians, ChaturvidhaVaidyavrutti, Duties of physician to his patient, Vaidyasadvritam, ApoojyaVaidya, Accepting fees, Relationship with females. **05 hrs**
14. 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. **07 hrs**

Practical:**Hours- 100****marks-50****Division of Practical hours:**

- | | |
|--|----|
| 1. Post Mortem examination | 10 |
| 2. Evidence in the court | 10 |
| 3. Demonstrations in the Toxicology museum | 60 |
| 4. Clinical postings | 20 |

Distribution of Practical examination marks:

No.	Practical proper			viva voce	Grand total
	Type of Practical	Marks	Total		
1	Spotters/ identification	10	30	20	50
2	clinical case	10			
3	Lab practical	5			
4	Practical records	5			

Reference Books:

- 1 Topics related to AgadaTantra from CarakaSamhita, SushrutaSamhitha, AshtangaHridaya, AshtangaSamgraha, kasyapasamhitha, yogarethnakara, Bhavaprakasha and Madhavanidana.
- 2 Vidhivaidyaka (VyavaharayurvedaVijnan) - Dr.CharuchandraPathak
- 3 Medical Jurisprudence and toxicology - Modi
- 4 Basavarajeeyam - Edited by Vd.Govardhan
- 5 AgadaTantra - Sh. RamanathDwivedi
- 6 Text book of Agadatantra - Edited by Dr Huparikar
- 7 Agadtantra - Dr ShekherNamboodri
- 8 Agadatantrakipatyakram - Edited By Dr Huparikar
- 9 Vishachikitsa - VaidyBalakrishnan Nair, Kerala
(Ayurveda Toxicology English Translation)
- 10 Medical ethics and Medical Laws in India - Dr. H.S. Mehta
- 11 Toxicology Ayurvedic Perspective - VPSV Ayurveda college Kottakkal
- 12 Kautilyarthashastra (English) - Prof. Kangle
- 13 Kautilyarthashastra (Hindi) - Dr.Raghunath Singh
- 14 Vyavaharayurveda - Dr.Ayodhya Prasad Achal
- 15 Relevant topics from Manu Smriti
- 16 Essentials of Forensic Medicine & Toxicology – Dr. Narayan Reddy
- 17 Review of Forensic Medicine & Toxicolog- Dr. Joseph A Prahlow& Dr. Anil Agarwal

2.3. RASASHASTRA AND BHAISHAJYAKALPANA

AIMS:

Developing scholarly student by providing competency in identifying, processing and preparing the Rasaushadhi and Bhaishaj Kalpa according to classical and standard operative methods.

OBJECTIVES:

By the end of the 2nd Profession the student should be able to,

Knowledge

- Theoretical and practical knowledge of various Rasa and Bhaishajya yogas in utilitarian and other aspects.
- Knowledge from the level of procurement to the finished product.

Skills

- To identify ingredients/contents with good practice
- Skills to carry out various methods of samskaras and kalpanas
- Develop skills to prepare Rasa and Bhaishajya yogas with competence
- Utilizing Rasaushadhis and Bhaishajya kalpanas in clinical practice

Affective and communication values

- Develop communication skills in particular to explain Rasashastra and Bhaishajya kalpana
- Reproduce and show effective speech, affective listening and good communication with colleagues, students, teachers, patients and their relatives.
- Act as a team member and well involved in group discussions, practicals, field visit and support the team spirit.

Theory Two Papers: 100 Marks Each

Practical/Viva voice: 200 Marks

Lectures:200 Hrs

Practicals and Demonstration: 200 Hrs

Paper-1 Rasashastra

PART-A	Marks - 50	Hours-50
01	Definition and etymology of Rasa, History of Rasashastra, Rasa shala, concept of Rasa Mandap, Importance of Rasaushadhi , Concept of Rasa-Rasayana, Concept of Rasa darshan.	03Hrs
02	Brief Description and Application of Technical terminologies (Paribhasha prakarana) Avapa, Nirvapa, Dhalana, Bhavana, Jarana, Murchana, Shodhana, Marana, Amrutikaran,Lohitikarana,Mruta Loha, Satwa Patana, Shuddhavarta, Beejavarta, Druti, Rudra bhaga and Dhanvantari bhaga, Apunarbhava, Niruttha, Rekhapurna, Varitara.	05 hrs
03	Dravya varga Amlavarga, Kshiratraya, Madhuratraya, Panchamrittika, Panchagavya, Panchamrita, Ksharashtaka, Dravakagana, Mitra panchaka, Rakta varga, Shweta varga, Lavanapanchaka.	03 hrs
04	Brief description of Yantras and their application Ulūkhala Yantra, Khalwa Yantra, Kachchhapa Yantra, Urdhwa Patan, Addha Patan, Jaranarth Tula Yantra, Dola Yantra, Patana Yantra- Damaru yantra, Vidhyadhara yantra & Tiryak patana yantra, Patala Yantra, Palika Yantra, Puta Yantra, Valuka Yantra, Bhudhara Yantra, Sthali Yantra, Swedana Yantra, Electronic & Scientific weighing balance.	10 hrs
05	Brief description & application of Musha (Crucible) Samanya Musha, Gostanimusha, Vajramusha, Mahamusha, Yoga musha, Vrintak Musha, Malla/ pakwa musha. Different types of crucibles.	05 hrs
06	Brief description & applications of Koshti Satwapatan Koshti, Chullika, Patala Koshti, Gara Koshti, Angarakoshti and knowledge of various heating appliances viz. Gas stove, Hot plate and Heating mantle.	03 hrs
07	Definition and Types of Puta Surya puta, Chandra puta, Govara puta, Lawakaputa, Kukkutaputa, kapota puta, Varahaputa, Gajaputa, Mahaputa, Kumbhaputa, Balukaputa, Bhudharaputa, Laghu Puta, Baluka Puta.	05 Hrs
08	Applications of Electric muffle furnace and fuel (diesel) dependant furnace.	01 hrs
09	Knowledge of Parada Synonyms, Occurrence, natural and artificial sources of Parada, Hingulottha parada, Types of Rasa, Naisargika, Yougika, Aupadhika (Kanchuka) etc. Parad Dosha and characteristics of Grahya-Agrahya Parada. Samanya and Vishsha Shodhana of Parad. Parada astasamskara, Paradagati and Rasabandha.	10 hrs
10	Murchhana and Jarana of Parada, Preparation of Kajjali, Types of Rasaushadhi, Khalvi rasa e.g. Tribhuvana keerthi rasa, Sootshekhar rasa, Parpati kalpa, Rasa parpati, Tamra Parpati, Gagan Parpati, Kupipakva Rasa- Rasa karpura, Rasa sindhura, Sameerapannaga Rasa, Pottali kalpa - Hemagarbha pottali.	05 hrs

PART-B**Marks - 50****Hours-50**

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

- 01 **Maharasa** - Abhraka, Vaikrantha, Makshika, Vimala, Shilajatu, Sasyaka, Chapala and Rasaka. 13 hrs
Uparasa - Gandhaka, Gairika, Kasisa, Kankshi, Haratala, Manahshila, Anjana and Kankustha
Sadharana Rasa - Kampillaka, Gauri pashana, Navasadara, Mriddara shringa, Kaparda, Giri Sindura, Agnijara & Hingula.
- 02 **Dhatu** 05 hrs
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).
- 03 **Ratna** - Manikya (Ruby), Mukta (Pearl), Pravala (Coral), Tarkshya (Emerald), Pushaparaga (Topaz), Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamome stone), Vaidurya (Cats eye) 05 hrs
Uparatna- Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis Lazuli) Lal, Parojaka (Turquoise), Sphatikamani, Trinakanta (Amber), and Palanka, Putika, Rudhir, Kamch (Glass).
- 04 **Sudha varga** – Sudha (Lime), Kaparda (Cowries), Sukti (Oyster Shell) , Shankh (Conch Shell), Badarashma (Silicate of Lime), Mriga shringa (Stag horn), Khatika, Godanti (Gypsum) and Samudraphena (Cattle Fish bone), Kukkutand twaka (Hen's Egg Shell). 02 hrs
- 05 **Sikatha varga-** Sikatha (Silika), Dugdhapashana (Talc), Nagapashana/ Jaharmohara (Serpentine), Vyomashma, Sange Yeshab (Jade), Kousheyashm (Asbestos) and Akika (Agate). 01 hrs
- 06 **Kshara varga** - Sarja kshara (Sodium bicarbonate), Yava kshara, Tankana kshara (Borax), Surya Kshar (Potassium Nitrate). 02 hrs
- 07 **Miscellaneous** - Bola, Krishna Bola, Beeja Bola, Damool Akhawan (Khoon Kharabha Rakta Bandhini), Abresheem, Gandhamarja Virya, Kasturi, Bhoonag, Mayurpiccha, Gandhabiroja, Shila rasa, Sarjarasa, Maducchishta. 03 hrs

- 08 **Visha and Upavisha-** Introduction, collection and storage, classification, 05 hrs
synonyms, shodhana, antidote, uses, therapeutic and toxic doses and formulations
of following Visha and Upavisha- Vatsanabha, Kuchala, Jayapala, Dhatura Beej,
Bhang, Bhallataka, Gunja, Arka, Snuhi. Langali, Karaveera and Ahiphena,
Chitrakmool.
- 09 **Aushadhi Yoga Gyanam-** Arogya vardhini gutika, Karpura rasa, Kasturi bhirava 05 hrs
rasa, Kumara kalyana rasa, Garbhapala Rasa, Chandraprabha Gutika, Chandramrita
Rasa, Pratapalankeshwara Rasa, Pravala Panchamrita Rasa, Anandbhairava Rasa,
Yogendra Rasa, Rajmriganka, Ramabana Rasa, Laxmivilasa Rasa, Vasanta
Kusumakara, Vatakulantaka rasa, Vasantamalati Ras, Brihat Vata Chintamani Rasa,
Shankha vati, Shwaskuthara Rasa, Hinguleswara Rasa, Hemagarbhapottali,
Hridyarnava Rasa , Swarnavanga, Makaradhwaja, Ayaskriti evam Loha Rasayana,
Putapakwavishamjvrantaka Loha, Vatvidhvamsan Rasa, kamadugha Rasa,
Laghusootshekhsar Rasa, Navayasa loha, Saptamrita loha.
- 10 Brief knowledge of Standardization of Rasaushadhi. 03 hrs
- 11 Concept of pharamcovigilance and its status in India, knowledge about 01 hrs
Pharamcovigilance of Ayurvedic drugs.
- 12 Basic identification of the Minerals and ores: 05 hrs
1. Colour, 2. Streak, 3. Lustre , 4. Transparency, 5. Form, 6. Habit, 7. Cleavage 8.
Fracture 9. Hardness 10. Density 11. Magnetism 12. Effervescence 13. Bierfringence
14. Fluorescence 15. Taste 16. Odour 17. Sparkle 18. Feel 19. Conductivity 20. Acid
Reaction 21. Tenacity

Paper-2 Bhaishajya kalpana

PART-A	Marks - 50	Hours-50
1	Bhaishajyakalpana: Derivation, History & chronological (kramikavikasa) development of Bhaishjyakalpana, Concept of Aushadha and Bhesajya. Fundamental principles of Bhaishjyakalpana: Paribhasha, AnuktaDravyaSangraha,Rasa,Guna,Veerya,Vipaka,Prabhava&Karma, AushadhaKalpana,Nirnaya,AushadhaNamakarana,Dhanwantaribhagaand Rudrabhaga, Aushadhasamskarana,Pratinidhidravya, Viruddhata.	04 hrs
2	Aushadanirmanashala: AushadanirmanashalaAccordingtodirectionsmentionedinaushadhaevamPrasadhanaAdhiniyama (Drug and Cosmetic act 1940 and Rules 1945).	01 hrs
3	Introduction & general knowledge of useful instruments: Disintegrator, Pulveriser, Micro pulveriser, 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	20 hrs
4	Comparative study of "Mana" (measurements) Ancient measurements— Metric system of measurements Rules of taking fresh and dry drugs, Grahyatva and Agrahyatwa of plant material Collection, storage & preservation methods of different Aushadhidravys, Examination methods, Preservation and Saviryataavadhi (potency period) of different Aushadhikalpanas, Concept of stability and shelf life in contemporary science.	Hours) 03 hrs
5	Aushadha AushadhaMatra, Anupana, Aushadhsevankala	02 hrs
6	Panchavidha Kashaya kalpana Kashaya yoni- Pancha vidha kashaya kalpana, Swarasa,Kalka, Churna Kwatha, Ushnodaka, Tandulodaka, Laksha rasa kalpana, pramathya, ksheerapaka, Hima, Mantha, Aushadha siddha paniya, panaka, Phanta, Arka, Rasakriya, phanita, avaleha, prasha, Ghana, satva, gudapaka, sarkara, Syrups, Vatika, gutika, Chandrika, vataka, pinda, modaka, varti Method of preparation of Tablets and Capsule, Guggulukalpana, Masi kalpana and Lavana kalpa, Kshara kalpana and Kshara sutra.	12 hrs
7	Applications of Electric muffle furnace and fuel (diesel) dependant furnace.	01 hrs
8	7. Introduction, definition, preparation methods, doses and detailed description of uses and Anupana of following Yogas Ardrakaswarasa, Tulasiswarasa, Vasa putapakaswarasa, Nimbakalka, RasonakalkaPunarnavasthakakwatha, Rasnasapthakakwatha, Arjunaksheerapaka, Rasonaksheerapaka, Dhanyakahima, Sarivadihima, Chinchapanaka, Candanapanaka, Panchakolaphanta, MustadiPramathya Kharjuradimantha, Shadangapaniya, Ajamodaarka, Yavanyarka, Banapshasharkara, Nimbusarkara, Bhaskaralavanchurna, SitopaladiChurna, HingwashtakaChurna, Arkalavana, Narikelalavana, SimhanadGuggulu, Yogaraj Guggulu, Lavangadivati, Lasunadivati, Eladivati, ChitrakadiGutika, SanjivaniVati, Triphala Guggulu, Kaishora Guggulu, Chyavanaprashavaleha, Vasavaleha, Vyaghri-Haritakiavaleha, Manibadraavalehya, Darvirasakriya, Guduchi Ghana, Kutaja Ghana vati, Haridrakhanda, Narikelakhanda, Soubhagyashunthipaka, Amrutasatva, Ardrakasatva,Triphalamasi, Phalavarti, Chandrodavarti.	19 hrs

PART-A	Marks - 50	Hours-50
9	<p>Snehakalpna: Introduction, Sneha yoni, Types of Sneha, Use of ghrita and taila, Snehamurchanavidhi, Snehapakavidhi, Important factors in the preparation of Snehakalpa, Snehapakaprakara and their use, Snehapakakala, Sneha siddhi lakshanas, dose, Preparation and Uses of JatyadiGhrita, Preparation and Uses of Bramhighrita, Preparation and Uses of Narayanataila, Preparation and Uses of Panchagunataila.</p>	8 hrs
10	<p>Sandhana kalpana: Introduction and classification of sandhanakalpna, Methods of preparation, Siddha SandhanaLakshana properties, doses, uses and mode of administration Madya, Shukta,</p> <p>Method of preparation, properties, doses, uses and mode of administration of the following</p> <p>Asava – Arishta, Sura (Prasanna - Kadambari - Medaka - Jagala _ Bakkasa) Maireya, Surasava, Shukta – Kanjika, Tushodaka, Sidhu, SouviraVaruni, and Sandaki, Arjunarishta, Ashokarishta, Takrarista, Dashamūlarishta, Draksharishta, Kutajarishta, Kumaryasava, Chandanasava, Arvindasava.</p>	11 hrs
11	<p>Pathya kalpan: Concept of Pathya, Apathya and Preparation and therapeutic use of Manda, Peya, Vilepi, Yavagu Anna, Bhakta, Odana. Preparation and therapeutic use of Yush, KulatthaYusha, Krishara, Mansa rasa, Vesavar. Preparation and therapeutic use of KhadYusha, Kamblika, Raga, Shadava. Preparation and therapeutic use of Dadhi and DadhiKurchhikaandtakrakurchhika. Preparation and therapeutic use of TakraVarga- Takra, Udasvita, Katvar, Mathita, Chachhika. Neutraceuticals.</p>	06 hrs
12	<p>4 Bahya kalpana (formulation used for external applications): Introduction to Lepa, Types of Lepas, its methods of preparation and mode of application of Udvartan and Avachurnan, Method of preparation an utility of Siktha Taila, Shatadhouta and Sahastradhouta Ghrita, Method of preparation an utility of Malahara, sarjaras Malahar, Gandhak Malahar, Upanaha, Atasi upanaha.</p>	04 hrs
13	<p>Netra kalpana (ophthalmic preparations): Introduction to netrakalpna, Method of preparation and uses of Seka, Drava, Anjana Method of preparation and uses of Pindi, Ashchyoutana, Vidalaka, Tarpana, Putapaka.</p>	02 hrs
14	<p>Nasya kalpana: Introduction to nasyakalpna, Classification of Nasya, Method of preparation, properties and uses of Navana, Avapidana, Dhmapana, Dhuma and Pratimarsha nasya.</p>	03 hrs
15	<p>Mukha kalpana: Introduction to Mukhakalpna, Method of preparation, properties and therapeutic uses of Gandoosha, Kavala, Manjana (tooth powder), Pratisaran, Tooth paste.</p>	02 hrs

- 16 **Dhumapana kalpana:** Introduction to dhumapanakalpana, Classification, Method of preparation, properties and therapeutic uses of Dhumapana, Dhoopan, Vrina, Yoni, Arsha and Karnadhoopan 02 hrs
- 17 **Basti kalpana:** Introduction and Classification of Bastikalpana. Method of preparation of Bastiyantra and Bastidravaya Types of Basti, Therapeutic properties and uses of Basti kalpana. 03 hrs
- 18 **Brief introduction of** Ointments, Creams, Gels, Lotions, Shampoos, Soaps, Liniments 03 hrs
- 19 **Brief knowledge of** Standardization of Raw materials, finished goods, Good manufacturing practice rule- 03 hrs
- 20 **Brief introductions of** Drugs and Cosmetics Act 1940 and Rules 1945 03 hrs

Practical:

I. Aim, Principle, Method, organoleptic observation and precautions of the following practicals,

1.	a) Parada Samanya Shodhana	b) Gandhaka Shodhana
2.	a) Kajjali preparation	b) Mugdharasa
3.	a) Abhraka Shodhana	b) Dhanyabhraka nirmana
4.	a) Shodhana of Kaseesa	b) Shodhana of Sasyaka
5.	a) Satwapatana of Kaseesa	b) Satwapatana of Sasyaka
6.	a) Gandhaka druti	b) Godandti Shodhana
7.	a) Shodhana of Haratala	b) Shodhana of Manahashila
8.	a) Shodhana of Hingula	b) Shodhana of Tamra
9.	a) Akika pishti	b) Gairika shodhana
10.	a) Tamra shodhana	b) Jasada shodhana
11.	a) Naga Jarana	b) Vanga Jarana
12.	a) Rasaparpati	b) Sudha parpati
13.	a) Kapardi shodhana	b) Shankha shodhana
14.	a) Vatsanabha shodhana	b) Dhattura shodhana

II. Aim, Principle, Method of preparation , organoleptic observation and precautions, of the following Formulations,

1.	Ardrakaswarasa/ Tulasi swarasa
2.	Ardrakasatwa
3.	Vasa puta pakwa swarasa
4.	Nimba kalka/ Rasona kalka
5.	Punarnavasthaka kwatha

6.	Arjuna Ksheerapaka
7.	Dhanyakahima,
8.	Mustadi Pramathya
9.	Shadanganiya
10.	Kharjuradimantha
11.	Misreya arka
12.	Chincha panaka
13.	Nimbu Sharkara
14.	Hingwashtaka Churna
15.	Sitopaladichurna
16.	Guggulu shodhana
17.	TriphalaGuggulu,
18.	Vasavaleha
19.	Triphalamasi
20.	Kutaja Ghana
21.	Gandaka malahara
22.	Apamargakshara
23.	Atasi upanaha
24.	Chandrodayavarti
25.	Tandulodaka
26.	Arkalavana
27.	Kutaja Ghanavati
28.	Lajamanda
29.	Sanjivani Vati
30.	Peya, Vilepi, Yavagu,
31.	KulatthaYusha
32.	Takra ,Udasvita, Katvar,
33.	Dadhi Mathita, Chacchika,
34.	Abhayadimodaka
35.	Dashanga lepa
III.	Geological identification:
	of Minerals-Colour, streak, lustre, transparency, form, habit, Cleavage, fracture, density, magnetism, odour, feel and tenacity
IV.	Analytical practicals :
	Melting point, Density test, Hardness test, Solubility test, Friability test

V.	Bhasma Pareeksha:
	Rekhapurna, Waritara, Nischandra, Amla dadhi Pareeksha, Apunarbhava and Niruttikarana
VI.	Demonstrations
A.	
1.	a) Abhraka bhasma, b) Tamra bhasma,
2.	a) Shankha bhasma, b) Godanti Bhasma
3.	a) Akika pishti b) Rasakarpura,
4.	a) Rasasindoor, b) Shila sindura
5.	a) Navayas lauha b) Chandanadi Louha,
6.	a) Laghumalini Vasanta rasa b) Hemagarbha Pottali
B.	
7.	Jatyadighrita, kshirashatpalaghrita
8.	Kshirabalataila, Anutaila, arkataila
9.	Kumaryasava, Kanakasava.
10.	Arjunarista, Abhayarista
11.	Ksharasutra.
VII.	Field visits:
12.	minimum 2 G.M.P certified pharmacy
13.	Geology and oceanology Departments

Distribution of marks of Practical examination:

No.	Practical proper			viva voce	Grand total
	Type of Practical	Marks	Total		
1	Spotters	30	120	80	200
2	Long practical	50			
3	Short practical	30			
4	Practical records	10			

Reference Books:

1. Adyatan Rasa Shastra - R.K. Goyal
2. Abhinav Rasa Shastra - Vaidya Somadev Sharma
3. Asava Arishta Vigyanam - Dr. Pakshdhar Jha
4. Ayurvediya Rasa Shastra (Sachitra) - Chandrabhusan Jha
5. Ayurvediya Rasa Shastra - Badrinarayan Pandey
6. Rasa Bhaishajya Paribhasa - Sureshananda Thapaliyal
7. Ayurvediya Rasa Shastra - Prof. Siddhi Nandan Mishra
8. Ayurved Prakash - Vaidya Gujrat Mishra
9. Drugs and Cosmetic Act -
10. Paka Darpana - Dr. Indradev Tripathi
11. The Paka-darpana of king null - A critical study - Dr. Madhulika
12. Parada Vigyaniam - Vasudev M. Dwivedi
13. Pratyaksha Aushadh Nirmanam - Acharya Vishwanath Dwivedi
14. Bhaishjyakalpana Vigyanam - Dr. Ambikadatta Shastri
15. Rasa Tarangini - Sadanand Sharma
16. Rasa Darpan - Prof. Bhajan Das Swami
17. Rasa Bindu - Dr. Sanjay Sharma
18. Rasa Hridaya Tantra (Hindi) - Rameshwar Dayal Bajpai
19. Rasa Hridaya Tantra (English) - Prof. Harishankar Sharma
20. Rasa Bhaishajya Kalpana Vigyan - Vaidya Santosh Kumar Khandal
21. Rasa Mitra - Dr. Tryambak Nath Sharma
22. Rasa Ratna Samuchchaya - 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 - Dr. Indradev Tripathi
30. Sharangdhar Samhita - Dr. Avadh Bihari Agnihotri
31. Bharatiya Bhaishajya Kalpana Vigyana - Vishwanath, Gananath Dwivedi
32. Bhaishjya Kalpana Vigyan - Siddhi Nandan Mishra
33. Rasa Shastra (English) - Prof. Damodar Joshi
34. Rasa Ratna Samuchchaya (English) - Prof. Damodar Joshi
35. Rasendra Chintamani -
36. Useful parts of Charaka, Sushruta and Vagbhata -
37. Ayurvedic formulary of India-Part I and II
38. Pharmacopic standards for Ayurvedic formulation published by CCRAS, Publication of Govt. of India.

2.4. CHARAK SAMHITA - Purvardha

(Sutra Stana ;Nidana Stana ; Vimana Stana ;Sharira Stana ;Indriya Stana)

Goal:

The goal of teaching under graduate students **Caraka samhita** is to provide elaborate knowledge of Ayurved because this text is

- Sufficient for average intellectual person to adopt preventive and curative measures and
- Acts as example/ notes for the students having more intellect.

Aim :

The knowledge of secular wisdom of medicine, with the dimension of skill and theories has to be used in appropriate manner for benefit of the human beings through the study of Anatomical, physiology, dietetics, regimen, toxicology, pathology and prognostics present in this classical medical text.

Objectives:

A. Knowledge

At the end of the course the student shall be able to

- Realize theoretical concepts for practical use.
- Comprehend the causation theory in every aspect of life including normal & abnormal conditions in human body
- Understanding & implementation of basic principles of Ayurveda in day to day practice
- Comprehend and compact clarification is essentially incubated through the processing of the transcription of knowledge.

B. Skills:

- Develops skills for effective communication in meeting the needs of individual in scientific way.
- Demonstrate the knowledge of Pramana and Pareeksha for the practical application.

Distribution of theory marks according to Sthana

SI.No	Name of the Sthan	Marks to be allotted
I	Sutra Sthana	40
II	Nidana Sthana	15
III	Vimana Sthana	20
IV	Sharira Sthana	15
V	Indriya Sthana	10

Part A

I. Sutra Sthana

110 hrs

- a) Introduction
(history , naming as charaka samhita, redactors and ideology of writing it)
- b) Historical view and importance -
(comparision of matter of charaka with ancient texts, important points)
- c) Chatushka methodology –
(Names, ideology of framing chatushkas, matter and their application)
- d) How to understand and study –
(Key points to remember, method of study and importance of commentaries in understanding Charaka samhita)

1. Deerghanjeeviteeya Adhyaya

- a) Chaturvidha sootra- (Guru,shishya,pratisamskarta and ekiya sootra with examples)
- b) Ayurvedavataranika, Ayurveda paryaya and Trisootra Ayurveda
(decent of ayurveda, bharadwajas media, ayurveda shbda utpatti, synonyms and hetu,linga & oushada sootra)
- c) Shatpadartha Vada –
(Samanya, vishesha, guna, dravya, karma and samavaya their application and examples)
- d) Vyadhi hetu (Vyadhi Hetu, Paryaya, Shareerika & Manasika dosha , Their guna and Chikitsa)–
- e) Dravya Bheda
- f) Prashasta Dravyas

2. Apamarga Tanduleeya Adhyaya -

- a) Pancha karmeeya dravyas -
(vamana, virechana, basti, nsya dravya and utility of panchakarma)
- b) Paschat karma of pancha karma -
(definition, preparation and 28 types of shresta yavagoos)

3. Aragvadheeya Adhyaya -

- a) Bahiparimarjana chikitsa
Concept of pradeha, lepa, avachurnana and 32 types of sidda tama kushta hara pradeha

4. Shadvirechana shatashriteeya Adhyaya -

- a) Shad virechana shata and ashritani
(600 virechana yoga , 6 virechanashraya , kashaya yoni and pancha vidha kashaya kalpana)
- b) Kashaya and maha kashayas
(50 mahakashyaya and 500 kashaya, concept and examples)

5. Matra shiteeya Adhyaya -

- a) Matravat ahara , and its phala
(paribhasha, swabhavataha guru, laghu dravya, samyak matra, abhyasa yogya dravya and sevana vidhana of guru, laghu dravya)
- b) Anjana and dhoomrapana -
(definition, guna, bheda, dravya, kala maryada, samyak, ayoga & atiyoga and phala)
- c) Nasya and dinacharya – (labha, anu taila, preparation of anu taila, paschat karma, danta dhavana jihva nirlekhana, abhyanga, snana and vasta dharana)

6. Tasyashiteeya Adhyaya -

- a) Samvatsara vibhaga –
(visarga kala and adanaka vivechana,)
- b) Hemanta charya
(prashasta ahara, vihara, nishidda ahara, sthiti and tyajya ahara)
- c) Shishira charya
- d) (prashasta ahara, vihara, nishidda ahara, sthiti and tyajya ahara)
- e) Vasanta charya
(prashasta ahara, vihara, nishidda ahara, sthiti and tyajya ahara)

- f) Greeshma charya
(prashasta ahara, vihara, nishidda ahara, sthiti and tyajya ahara)
- g) Varsha charya
(prashasta ahara, vihara, nishidda ahara, sthiti and tyajya ahara)
- h) Sharad charya , rutu sandhi and satmya vivechana (prashasta ahara, vihara, nishidda ahara, sthiti, tyajya ahara and hamsodaka)

7. Na vegandharaneeya Adhyaya -

- a) Adharaneeya vega its roga laxana and chikitsa
(Mutra, purisha, shukra, vata, chardi, kshavathu, udgara, jrambha, kshuda, pipasa, bhashpa and nidra vega janya roga, laxana and chikitsa)
- b) Dharaneeya vega and vyayama
(aprashasta manasika, kayika and manasika karma, vyayama definition , labha and ativyayama dosha)
- c) Hitahita sevana and tyaga vidhi, prakruti, samshodhan
- d) Swastha vritta niyama and paschat karma.
(Rasayana & vajeekarana labha, agantu & manasa roga hetu & chikitsa and dadhi nishedha.)

8. Indriyopakramaneeya Adhyaya -

- a) Pancha panchaka, Specificity of mana, Jnanotpatti Prakriya
- b) Adhyatma Dravya Sangraha and Swastha Samrakshana Upaya
- c) Different Sad Vrittis

9. Khuddaka chatushpada Adhyaya -

- a) Chikitsa Chatushpada with four fold qualities and Arogya laxana
- b) Ajna , Pranabhisara, Raja Vaidya Laxana and Chaturvidha Vaidya Vrutti

10. Maha chatushpada Adhyaya -

- a) Doubts about Chatushpada and its answer
- b) Sadhya Asadhyata Vyadhi Laxanas

11. Tisreshaneeya Adhyaya -

- a) Trividha Eshanas
- b) Chaturvidha Pramanas
- c) Sapta trika varnana

12. Vata kalakaleeya Adhyaya -

- a) Vata guna , prakruta and vikruta karma of loka and shareera gata vata
- b) Prakruta karma of pitta and kapha in shareera

13. Snehadhyaya

- a) Sneha bheda , yoni, guna
- b) Snehapana kala, pravicharana sneha, accha peya sneha
- c) Sneha matra vivechana
- d) Different sneha yogyas and ayogyas
- e) Samyak , asamyak snigdha laxanas
- f) Sneha poorva and paschat pathya pathya
- g) Sneha vyapat , its hetus and chikitsa
- h) Samshamana sneha , sadhya sneha and vicharana yogya

14) Swedadhyaya -

- a) Sneha sweda labha, according to rutu, vyadhi and bala sweda bheda.
- b) Sweda bheda and sweda vidhi, samyaka and asamyak sweda laxanas.
- c) Panda, nadi, avagaha & upanaha sweda dravya
- d) 13 types of agni & their description
- e) Niragni sweda types and sweda paschat karma

15) Upakalpaneya Adhyaya

- a) Pancha karmopayogi dravya samgraha
- b) Aturalaya nirmana, samshodhana prakriya
- c) Vamana karma, Vamana vidhi, ayoga , atiyoga and upadrava
- d) Paschat karma, samsarjana karma.
- e) Virechana vidhi and samshodhana guna.

16) Chikitsa prabruteeya Adhyaya -

- a) Samyak , avirikta purusha laxana
- b) Samshodhana yogya, labha, samshodhana janya dhatu kshaya chikitsa
- c) Samshodhana ayoga and atiyoga chikitsa
- d) Swabhavoparamavada siddhanta, definition of chikitsa

17) **Keeyanta sheeraseeya Adhyaya** -

- a) Sira paribhasha, siro roga hetu, pancha vidha shiroroga nidana & laxana And Hridroga bheda, nidana and laxana.
- b) Vyadhi bhedha, dhatu , mala kshyaya laxana.
- c) Oja kshaya laxana, oja sthana and karya.
- d) Dhatu kshaya laxana, madhu meha nidana, samprapti & sapta pidakas and
- e) Vidradhi definition, bhedha and laxana.
- f) Dosha gati, prakruta and vikruta vata, pitta and kapha karya.

18) **Tri shotheeya Adhyaya** -

- a) Shotha bheda, agantu shotha hetu and chikitsa
- b) Nija shotha hetu, bheda, laxana, samprapti, sadhyasadhyata, upadrava.
- c) Description of Ekadoshaja shotha
- d) Asadhya , yapyo roga and vyadhi asankhyeyata and naming of all diseases is impossible.
- e) Vata, pitta, kapha samanya karma.

19) **Ashtodareeya Adhyaya** -

- a) Samanyaja vyadhis
- b) Nija and agantu vyadhi bheda and their relation.

20) **Maharogadhyaya** -

- a) Vyadhi bheda, nija and agantuja vyadhi hetu and relation
- b) Shareerika dosha sthana and their vikaras
- c) Nanatmaja vyadhi, vata, pitta & kapha roopa & their chikitsa sootra and vyadhi jnana mahatva

21) **Ashtouninditeeya Adhyaya** -

- a) Eight nindita purusha & reason, atisthoola dosha, hetu , swarooma and chikitsa.
- b) Atikrisha dosha, laxana and chikitsa
- c) Nidra (samanya) , its bheda, labha and mahatva
- d) Divashayana yoga, anidra and atinidra chikitsa

22) **Langhana brimhaneeya Adhyaya** -

- a) Six classification of chikitsa.
- b) Langhana bheda, indications , sama yoga and atiyoga.
- c) Sthambhana dravya, sthambhana yogya and samyak sthambhana laxana. Relation between langhana & rookshana, samyak brumhana & brumhana.
- d) Atiyoga laxanas and langhanadi upakrama ayoga laxanas.

23) **Santarpaneeya Adhyaya** -

- a) Santarpana janya vyadhi hetu, vyadhis , chikitsa and ahara vihara
- b) Apatarpana janya vyadhi, hetu, chikitsa and ahara vihara
- c) Mantha & saktu prakarana , sadya tarpana and abhyasa tarpana.

24) **Vidhi shoniteeya Adhyaya** -

- a) Shuddha rakta utpatti, karya, rakta dushti hetu and vyadhis.
- b) Diagnosis of raktaja vyadhi, chikitsa and paschat karma.
- c) Shudda rakta yukta purusha laxana, mada , moorcha bheda & laxana.
- d) Sanyasa samprapti, chikitsa , sanjna prabhodana dravya and mada , moorcha chikitsa.

25) **Yajja purusheeya Adhyaya** -

- a) Purushotpatti and rogotpatti vishayaka sambhasha.
- b) Purusha & vyadhi vrudhi hetu, ahara bheda.
- c) Agrya prakarana – DK & pathya and apathy laxana.
- d) Eighty four types of asavas.

26) **Atreya bhadrapyeeeya Adhyaya** -

- a) Rasa and ahara vinischaya and opinion of different rushis
- b) Pancha bhootatmaka dravya guna and karma.
- c) Rasa, veerya, vipaka and prabhava prakarana.
- d) Guna prakarana and parade gunas
- e) Definition of Viruddha ahara, types, vyadhis and chikitsa.

27) **Annapana vidhi Adhyaya** -

- a) Annapana karya, hita ahita vichara and ahara vargas.
- b) Explanation of individual ahara vargas.
- c) Anupana vivechana.
- d) Chara, avayava, matra, swabhava and samskara vivechana.
- e) Hitakara bhojana labha and mahatva of anna.

28) **Vividhasheetapeeteeya Adhyaya** -

- a) Bhojana karya and dhatu poshana siddhanta.
- b) Dhatu pradoshaja and malaja vikara and chikitsa sootra. Shakhagati & koshtagati of doshas and samanya chikitsa sootra of vyadhis.
- c) Pareekshaka , apareekshaka gunas and apathy tyaga phala.

29) **Dasha pranayataneeya Adhyaya** -

- a) Dasha pranayatana & chikitsaka bheda and their laxana.

30) **Arthe dashamahamooleeya Adhyaya** -

- a) Hrudaya sthana , oja mahatva, mana rakshana and ayurvedajna laxanas.
- b) Vakyashaha, vakyarthashaha, arthavayavashaha and eight questions to be asked in ayurveda.
- c) Ayu paryaya, sukhayu and hitayu laxanas.
- d) Ayurveda paryaya, why to study ayurveda, tantrartha laxana, eight sthanas and ten points of testing the scriptures.
- e) Chapters of different sthanas, tyajya , sevya chikitsaka , roga , arogya ashraya and shastra jnana mahatva.

II. Nidana Sthana

25 hrs

1. Jwara Nidana Adhyaya

- Nidana panchaka
- Eight types of Jwaras, their hetu, samprapti and laxana
- Jwara samanya poorvaroopo, jwara prabhava, chikitsa sootra.
- Ghrita pana in jeerna jwara.

2. Rakta pitta Nidana Adhyaya -

- Nidana, nirukti, poorvaroopo and upadrava.
- Marga and sadhyasadyata.

3. Gulma Nidana Adhyaya -

- Gulma bheda, individual gulma hetu, laxana and samprapti.
- Rakta gulma samprapti and laxana.
- Gulma poorvaroopo and chikitsa sootra.

4. Prameha Nidana Adhyaya -

- Relation of nidanadis in manifestation of prameha
- Pameha nidana, dosha, dooshya and samprapti.
- Prameha bheda, sadhyasadyata.
- Prameha poorvaroopo, upadrava and sankshipta chikitsa sootra.

5. Kushta Nidana Adhyaya -

- Karana dravya for kushtopatti, kushta bheda, nidana and poorvaroopo.
- Mahakushta laxanas, upadrava, sadhyasadyata.

6. Shosha Nidana Adhyaya -

- Hetu and their hetu, samprapti.
- Rajyakshma nirukti, poorvaroopo, ekadasha roopa and sadhyasadyata.

7. Unmada Nidana Adhyaya -

- Unmada bheda, pratyatma laxana, poorvaroopo, individual unmada laxana and doshja unmada chikitsa sootra.
- Agantu unmada, poorvaroopo, laxana, utility and chikitsa sootra.
- Relation between nija and agantu unmada.

8. Apasmara Nidana Adhyaya -

- Apasmara bheda, samprapti, pratyatma laxana and poorvaroopo.
- Laxana of individual apasmara and chikitsa sootra.
- Vyadhi jnana phala, rogotpatti karma, nidanarthakara roga.
- Vyadhi sankara, shuddha chikitsa.
- Relation between hetu, vyadhi, laxana and chikitsa. Sadhyasadyata bheda.

Part B

III. Vimana Sthana

25 hrs

1. Rasa vimana Adhyaya -

- Definition of vimana, rasa , dosha prakopa and shaman, prakruti sama samaveta siddhanta and vikruti vishama samaveta siddhanta.
- Three dravyas are prohibited for excess use.
- Ashta aharavidhi visheshayatana.
- Ahara vidhi vidhana.

2. Trividhakuksheeya Vimana Adhyaya -

- Kukshi vibhaga, matratvat ahara laxana, amotpadaka hetu.
- Ama pradoshaja vikara and ama dosha chikitsa.

3) Janapadodwamsa Vimana Adhyaya -

- Cause, vikruta vata, jala, desha, kala laxanas.
- Janapadodhwamsa mukhya karana and other etiology for it.
- Yuganusara ayu hrasa, kala , akala mrutyu.
- Apatarpana bheda, chikitsa ayogya and desha bheda with their laxanas.

4) Trividharoga Vishesh Vijnaneeya Adhyaya -

- Roga vishesha jnana upaya, aptopadesha gamya vishaya, pratyaksha gamya vishaya, anumanagamya vishaya.

5) Srotovimaneeya Adhyaya -

- Srotas nirukti , srotas bheda, their dushta laxana and moola.
- Srotodushti samanya hetu and laxana.
- Srotas varna and chikitsa sootra.

6) Roganika Vimana Adhyaya -

- Roga bheda, relation between shareerika and manasika guna.
- Anubhandhyanubandha, agni bheda, prakruti bheda.
- Prakrutigata roga, their hetu and chikitsa.
- Raja vaidya gunas

- 7) **Vyadhita roopeeya Vimanamadyaya** -
- a) Vyadhita purusha bheda, ajna and vijna chikitsaka, krimi bheda and sankhya.
 - b) Krimi akruti, bheda, nidana and varna.
 - c) Chikitsa sootra and their detail explanation.

- 8) **Rogabhishakjiteeya Vimanamadyaya** - 1
- a) Shastra pareeksha, acharya pareeksha, shastra jnana upaya.
 - b) Adhyaya , adhyapana and tadvidya sambhasha.
 - c) Sambhasha vidhi and their technical terms.
 - d) Dasha vidha pareeksha vishaya and dasa vidha atura pareeksha.
 - e) Samshodhana kala, rutu vivechana, bhashaja kala and upaya.
 - f) Pancha karmeeya dravya samgraha.

IV. Shareera Sthana 30 hrs

1. **Kathidhapurusheeya Shareera Adhyaya –**
- a) Man laxana, guna, vishaya, karma, jnanotpatti krama, indriya vivechana.
 - b) Pancha mahabhoota, buddi niroopana, purusha bheda.
 - c) Atma vivechana
 - d) Dukhs karana, prajnaparadha laxana, dukha vinasha and charama sanyasa Smriti karana, moksha, buddi – dhe-smriti bramsha.
2. **Atulyagotreeya Shareera Adhyaya -**
- a) Santanotpatti vishayaka vichara.
 - b) Cause for manifestation of rogas and its prashama upayas.
 - c) Nirogi laxanas and cause for it.
3. **Khuddika garbhavakranti Shareera Adhyaya-**
- a) Atmaja , satmyaja, rasaja, matraja, pitraja and satvaja bhavas of garbha.
 - b) Garbha samudayatva and atmajnana vishayaka matantara.
4. **Mahati garbhavakranti Shareera Adhyaya-**
- a) How garbha originates, garbha vikara, masanumasika garbha vikasana
 - b) Beeja prabhava for vikruti, shareera bheda , shodasha manasa vikruti.

5. **Purusha vichaya Shareera Adhyaya-**

- a) Loka purusha samya vivechana.
- b) Shuddha mana swarootpa, muktatma swarootpa and paryaya.

6. **Shareera vichaya Shareera Adhyaya-**

- a) Duties of physician, kala vipareeta karma and shareerastha dhatu guna.
- b) Shareera vrুদ্ধikara bhava, bala vrুদ্ধikar bhava and ahara parinamakara bhava.
- c) Shareera jnana mahatva & nine questions and answers about garbha.
- d) Kal and akala mrutyu vivechana. Paramayu hetu and laxana.

7. **Shareera sankhya Shareera Adhyaya-**

- a) Twak viveka, anga vibhaga, asthi sankhya and koshanga.
- b) Rasadi dhatu mana, shareera bhava and angavayava jnana mahatva.

8. **Jatisootreeya Shareera Adhyaya-**

- a) Garbhadana prakarana, rutukala, sahavasa vidhi , garbha and garbhini charya.
- b) Pumsavana karma, garbha sthapana dravya, garbhopa ghatakara bhava. Masanumasika garbhini paricharya.
- c) Sutikagara nirmana, prasava vyavastha, sadya prasoota balaka paricharya.Nala chedana, jata karma, raksha vidhana, namakarana and dhatri vyavastha Kumaragara nirmana, deerghayu balaka laxana.
- d) Ksheera janana dravya, dhatri pareeksha, dhoopana karma and mani dharana.Kumara chikitsa and kumaropayogi.

V. Indriya Sthana

10 hrs

1) **Varnaswareeya Indreeya Adhyaya –**

- a) Indriya sthana gata vishaya, arishta definition and pareeksha.
- b) Varnadhikara and swaradhikara.

2) **Pushpitaka Indreeya Adhyaya-**

- a) Pushpita arishta , gandha vishayaka and rasa vishayaka arishta.

3) **Parimarshaneeya Indreeya Adhyaya**

- a) Sparsha gamya bhava, shwasa, manya, danta, pakshma etc aristas.

4) Indriyaneeka Indreeya Adhyaya-

Anumana ganya indriya vishayaka arishta and panchendriya vishayaka rishta.

5) Purvaroopeeya Indreeya Adhyaya-

- a) Poorvaroopiya rishta of different vyadhis.
- b) Swapna vishayaka rishta and swapna prakara.

6) Katamani Indreeya Adhyaya-

- a) Vyadhi vishayaka rishtas and different diseases related vyadhi vishayaka rishtas.

7) Panna roopeeya indreeya Adhyaya-

- a) Pratichaya and chaya vishayaka rishta.
- b) Different between Chaya and prabha.
- c) Ahara, netra, linga and vrushana vishayaka rishta.

8) Avak shiraseeya Indreeya Adhyaya

- a) Shirogata pratichaya vishayaka rishta.
- b) Pkshma, kasha, nasa, danta and jihva vishayaka rishta.

9) Yasya shava nimitteeya Indreeya Adhyaya

- a) Netra, pittaja vyadhi, rajyakma, mahavyadhi etc related arishtas.

10) Sadyo maraneeya Indreeya Adhyaya-

- a) Sadhya maraneeya arishtas

11) Anujyoteeya Indreeya Adhyaya-

- a) Arishtas indicating death within one & six month and ayu jnana phala.

12) Gomayachoorniya Indreeya Adhyaya-

- a) Margagata, dootagata and aturagrihagata arishtas.
- b) Mumurshu laxana, shukra dhatu vishayaka rishta and chaya, pratichaya vishayaka rishtas.
- c) Arogya nirnaya, prashasta doota laxana and mangalika dravya

TOPICS FOR GROUP-DISCUSSION

Sl.No.	Topic	Hrs
1	Srotovimaneeya	1
2	Ashtou ninditiya	1
3	Dasha vidha Pareeksha -	1
4	Dasha vidha atura vishya—kaarana--karana	1
5	Yajjapurusheeya Adhyaya	1
6	Maatrasheetiya Adhyaya	1
7	Satmya	1
8	Raktapitta	1
9	Dharaneeya-Adharaneeya vega	1
10	Snehan	1
11	Swedan	1

Text Books:

1. Charaka Samhita –Part 1 (Ayurved deepika, Ayushi hindi commentary) Editor –Transiator Vd. Harishchandra Singh Kushawaha
2. Charaka Samhita–Part 1
 - Hindi commentary By Dr. Brahmanand Tripathy
3. Charaka Samhita (English Commentary):
 - Dr. Ram Karan Sharma & Vd. Bhagwan Dash
 - Or by Acharya Priyavrat Sharma.