

2.1. CHARAK SAMHITA
(Puvarddha: 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

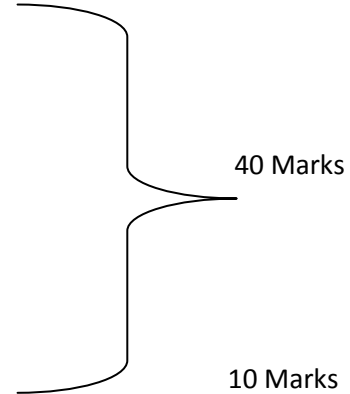
Memorizing and describing two Shloka weekly, discipline, Oral and written presentation and other activities.

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-vegetartian 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
- ii. Occupational Diseases
- iii. Prevention of Occupational diseases
- iv. ESI Act and factories Act.
- v. Offensive trades-Effects on health 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
- iii. Concept of causation
- iv. Epidemiological triad
- v. Natural history of disease
- vi. Risk factors
- vii. Concept of control
- viii. Concept of prevention
- ix. Modes of intervention
- x. Incidence and prevalence
- xi. Dynamics of Disease
- xii. Mode of transmission
- xiii. Susceptible host
- xiv. Host defences
- xv. Immunizing Agents
- xvi. Disease prevention and 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 |
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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	

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 Health 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	d. Kavala	g. Abhyangam
b. Anjana	e. Gandusha	
c. Dhumapana	f. Udvartanam	
 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
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 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
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 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
Swasthvritta 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

100 marks

Part A

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, Panchabhautikatwa, 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 (Rasopalabधि), 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, (Dvididha-Trividha, Panchavidha) guna and karma of vipaka, Grades of Vipaka (taratamya), Vipakopalabधि hetu (Knowledge/Understanding of Vipaka). Differences between Rasa and vipaka.
- 6. Virya:** Etymological derivation, definition and Nature of Virya, number of Virya. (Dwividha & Ashtavidha), Panchabhauthikatva, Virya karmani, (Effects of Virya) General principles in determination of Virya along with exceptions, Arguments for importance of Virya along with exceptions.
- 7. Prabhava:** Etymology and definition, Effects of Prabhava, Samanyapratyarabdha, Vichitrapratyarabdha. Arguments for predominance of prabhava.
- 8.** Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength (balabalnirupana).
- 9. Karma:** Nirukti lakshana swaropa 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:-
- 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, Swalpatriphala, Madhuratriphala, Mahavisha, Upavisha, Knowledge of Agraushada varga with example.
 - Jangama Gana (animal Origin)- Ksheerashtaka, Mutrashitaka, Pitta Panchaka.
 - 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 of dravya, their purification, Brief knowledge of , adulterants, Artificial/synthetic drugs, concept of Substitution (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	Ardraka-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	Bijapoor	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	Meshashrunji
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, Anthelmentic, 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. Niryasa (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 Chunekar 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 Chunekar

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 Vanaspatiya	Dr. Gyanendra Pandey
37	Vanoaushadi Darshika	Thakur Balwani Singh
38	Vanoaushadi Nidarshika	Dr. Ram sushil Singh
39	Vedic Vanaspatiyan	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, Adh 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 Koshthi, Angarakoshthi 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 Agraphata, 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, mrididara 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, Dhatura 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 Bhesaja.
2. **Fundamental principles of Bhaishajya Kalpna.**
3. **Aushada nirmana Shala** according to directions mentioned in Aushadha evum prsadhana Adhinyama(Drug and Cosmetics act 1940 and Rules 1945).
4. **Introduction and general knowledge of useful instrument s** – Disintegrator, Pulveriser, Micropulveriser, Bail 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, Rasona kalka, Punarnavasthaka kwatha, Rasna saptaka kwatha, Dhanyaka hima, sarivadi hima, Panchakola phanta, Mustadi pramathya, khaarjuradi mantha, shadanga paniya, Ajamoda arka, Yavanyarka, /chinchu panaka, Chandan panaka, Banapshha sharkara, 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 Satya, Ardraka Satva, Phala Vari, Chandrodya Varthi, Arka lavana, Narikela lavana, Narikela lavana. Triphala masi, Arjuna ksheerapaka, Rasona 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, Bhakta, Odan, Yush, Kulattha Yusha, Krishara, Mansa rasa, Vesavar, Khad Yusha Kamblika, Raga, shadav, Dadhi and Takra Varga-Takra, Udasvita, Katvar, Mathita, chhachika.
4. **Bahya Kalpana(Formulations used for External Applications)-** Lepa- Types of Lepas, Its methods of preparation and mode of application, 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 BHAIJAYA 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, Rasona kalka.
 3. Kwatha-Punarnavasthaka kwatha, Rasna saphthaka 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 vigyaniam	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, Ganath 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 Parisha.
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 Lakshna. 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. Parisha 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 Parisha-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 VIDHIVAIIDYAK

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. Contaminationn of air, water, soil etc. (Visha mishrita-Vayu, Jala, Desha, kaala and their management) their contemporarysignificance. Samuhika Vishaprayoga-Effects of chemical and Nuclear warfare.
5. Signs and symptoms of poisons of plant kingdom and their managemeny. Visha and Upavisha . Arka . snuhi,Langali,gunja, Ahiphena, Karaveera, ginja Ahihena, Dhattura, 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 Sadhyasadhyata (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. Asphyxiznts-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 VIDHIVAIIDYAK
(FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)**

1. 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.
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, Charuvidha 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	
