

2.1. CHARAK SAMHITA

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

Theory- One Paper- 100 Marks

Practical/ Viva voice – 50 Marks

Lectures - 100

(Charaka Purvardha)Distribution of theory marks according to Sthan

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

Distribution of marks for Practical Examination is as follows

- | | | |
|--|---|----------|
| <ol style="list-style-type: none">1. Table (Chart) preparation / Compilation2. Presentation of any 10 Shlokas out of total memorized Shlokas(Written & Oral)3. Analysis of Srotasas, Discussions about Dhatus and their vridhhi and kshaya (Phenomenon of their increase and decrease). Ten proforma/ case sheets should be filled from the IPD/OPD.4. Assessment of Arishtas. (Five proforma/case sheets should be filled from the IPD/OPD.)5. Viva Voice | } | 40 Marks |
| <ol style="list-style-type: none">6. Internal Assessment | | 10 Marks |

Parameters for internal Assessment

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

Other activities include following instructions

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

corrected and signed by the class teacher is to be submitted at time of examination.

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

2. Passage writing

3. Speech related to Charaka

TEXT BOOKS

1. Charaka Samhita -Chakrapani Teeka (Sanskrit Commentary)

2. Charaka Samhita (Hindi Commentary):

- Vaidya Jayadev Vidyalankar or Vd. Atridev Vidyalankar or
- Prof. Gorakha nath Chaturvedi & Kashinath Shastri or
- Dr. Brahmanand Tripathy or
- Dr. Ravidutta Tripathy

3. Charaka Samhita (English Commentary):

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



2.2 SWASTHAVRITTA

Theory- Two Papers- 100 Marks Each

Practical/ Viva voice – 100 Marks

Lectures - 180

Practicals and Demonstration – 50 hrs

Paper I

100 Marks

Part A

50 Marks

Vaiyaktika Swasthavrittam

I. Vyaktigata Swasthyam (Personal Hygiene)

i) Introduction

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

ii) Dinacharya

- | | |
|---|--|
| 1. Definition of Dinacharya | 2. Aims and importance of dinacharya. |
| 3. Brahma Muhurta avum Utthishta | 4. Usha Jalapana |
| 5. Sarirachinta | 6. Malatyaga |
| 7. Mukha prakshalana | 8. Dantadhavana |
| 9. Preparation of Ayurvedic dental powder and paste | 10. Jihvanirlekha vidhi (Tongue cleaning) |
| 11. Anjana | 12. Pratimarsa Nasya |
| 13. Gandusha | 14. Kabbaladharana |
| 15. Dhoomapana | 16. Abhyangam |
| 17. Udvartanam | 18. Utsadana |
| 19. Vyayama | 20. Chankramana - Benefits of Walking, Jogging, Swimming, Gymnastics, Sports and games and its application in health and disease |
| 21. Snanam | 22. Anulepanam |
| 23. Vastradharanam | 24. Tambulasevanam |

iii) Ratricharya

1. Sandhyacharya 2. Ratribhojana vidhi 3. Sayanavidhi

iv) Ritucharya

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

v) Sadvritta

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

vi) Trayopastambhas (Three pillars of health)

1. Ahara

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

A. II. Ayurvedic Diet in Life Style Disorders

- a. Diabetes
- b. Hypertension
- c. Obesity
- d. Coronary heart Disease.

2. Nidra

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

3. Brahmacharya

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

vii) Roganutpadaneeya:-

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

Part B

50 Marks

Sarvajanika- Samajika Swasthavrittam (Public Health)

I. Janapadodhwamsa

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

II. Vayu (Air)

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

III. Jala (Water)

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

IV. Bhumi (Land & Housing)

1. Types of soil
2. Soil & Health
3. Bhumi shodhana
4. Nivasayogya bhumi
5. Social goals of housing
6. Housing standards
7. Rural housing
8. Housing and health
9. Over crowding
10. Pasu sala (Cattle shed)

V. Prakasa (Lighting)

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

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

VII. Vikirana (radiation) – Sources, Effects & control

VIII. Apadravya nirmulāna (Disposal of solid waste)

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

IX. Malanishkasana vyavastha (Excreta disposal)

1. Unsewered area

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

X. Disaster Management

XI. Occupational Health

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

XII. School Health Services

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

XIII. Epidemiology

- | | |
|---|------------------------------------|
| 1. Concept of Epidemiology transmission | 11. Dynamics of Disease |
| 2. Concept of disease | 12. Modes of transmission |
| 3. Concept of causation | 13. Susceptible host |
| 4. Epidemiological triad | 14. Host defenses |
| 5. Natural history of disease | 15. Immunizing Agents |
| 6. Risk factors | 16. Disease prevention and control |
| 7. Concept of control | 17. Disinfection |
| 8. Concept of prevention | |
| 9. Modes of intervention | |
| 10. Incidence and prevalence | |

18. Epidemiology of Communicable Diseases

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

19. Kuperasangaja vyadhis (STD s)

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

20. Ayurvedic paribhasha of sankramika rogas

21. Non - Communicable disease epidemiology

- | | | | |
|-------------|------------|-----------------|---------------------------|
| a) Diabetes | b) Obesity | c) Hypertension | d) Coronary heart Disease |
|-------------|------------|-----------------|---------------------------|

- e) Rheumatic Heart disease f) Cancer

XIV. Disposal of Dead body

- a) Burning b) Burial c) Electric cremation

XV. Chikitsalaya Bhavana (Hospital Building)

XVI. Meteorology (Ritu evam vatavarana jnana)

Paper II

100 Marks

Yoga & Nisargopachara

Part A

50 marks

Yoga

I. Etymology

II. Definitions

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

IV. Different Streams of Yoga

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

V. Eight Branches of Yoga

1. Yama

2. Niyama

3 Asana and its importance

- a) Suryanamaskara

- b) Standing postures-

- | | |
|-----------------------|-------------------|
| 1. Ardhakatchakrasana | 2. Padahasthasana |
| 3. Ardhashakrasana | 4. Trikonasana |

- c) Sitting Postures-

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

- d) Supine postures-

- | | | |
|--------------------|-----------------|---------------|
| 1. Pavanamuktasana | 2. Sarvangasana | 3. Matsyasana |
|--------------------|-----------------|---------------|

4. Halasana

5. Chakrasana

6. Savasana

e) Prone postures-

1. Bhujangasana

2. Salabhasana

3. Dhanurasana

4. Makarasana

f) concept of Mitahara & Pathyahara

4. Pranayama

a) Benefits of Pranayama

b) Nadi sudhi pranayama

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

d) Pathyapathyahara during pranayama

e) Yukta yukta lakshana

f) Nadi suddhi lakshanam

g) Kumbhakabhedha

i) Suryabhedana

ii) Ujjayi

iii) Shitali

iv) Sitkati

v) Bhastrika

vi) Bhramari

vii) Murcha

viii) Plavani

h) Shad chakras, ida, pingala and sushumna

i) Shadkarmani

j) Bandhas and Mudras

5. Pratyahara

6. Dharana

7. Dhyana

8. Samadhi

VI. Description of Yoga in Ayurveda

1. Manodosha chikitsa

2. Sukha dukha nivrutti

3. Yoga and moksha

7. Muktatma lakshana

4. Mokshasyalakshana

5. Ashta Aiswarya

6. Satyabudhi

VII. Panchakosha theory

a) Annamayakosha

b) Pranamayakosha

e). Anandamayakosha

c). Manomayakosha

d). Vijnanamayakosha

VIII. Integrated Approach of Yoga therapy

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

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

Nisargopachara

I. Prakritika Chikitsa (Natural Treatment)

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

II. Jala Chikitsa

- | | |
|-------------------------|---------------------|
| 1. Hot water treatment | 6. Hip bath |
| 2. Cold water treatment | 7. Abdomen wet pack |
| 3. Foot bath | 8. Steam bath |
| 4. Hand bath | 9. Enema |
| 5. Spinal bath | 10. Whirlpool bath |

III. Mrittika Chikitsa (Mud Therapy)

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

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

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

VI. Diet - Types

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

VII. Upvasa Chikitsa (Fasting)

1. Importance
2. Types
3. Therapeutic effect

Part B

50 Marks

Community Health Care

I. Prathamika Swasthya Samrakshana (Primary Health Care)

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

II. Parivara Kalyana Karyakrama (Family Welfare Programmes)

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

III. Rasthriya Karyakrama (National Programmes)

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

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

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

V. Preventive Geriatrics.

VI. International Health

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

VII. Swasthya Prashasana (Health Systems in India)

1. Central level
2. State level
3. District level
4. AYUSH

VIII. Health statistics

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

PRACTICAL

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

Practical & Viva voice examination –

Mark distribution

100 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 works	10 Marks
6. Viva – Voce	30 Marks

REFERENCE BOOKS

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

Swasthvritta Samucchya	-	Pt. Rajeshwardutt Shastri
Swasthya Vigyan	-	Dr. Bhaskar Govind Ghanekar
Swasthya Vigyan	-	Dr. Mukund Swaroop Verma
Ayurvediya Hitopdesa	-	Vd. Ranjeet Rai Desai
Yoga and Ayurveda	-	Dr. Ramkumar Jain
Swasthvritta Vigyan	-	Dr. Ram Harsh Singh
Swasthvrittama	-	Dr. Brahmanand Tripathi
Ayurvediya Swasthvritta	-	Jahulkar
Hathayoga Pradeepika)	-	Swatmaram Yogendra
Yogic Yoga Paddhati	-	Bhartiya Prakratika Chikitsa Parishada
Yogic Chikitsa	-	Shri Kedar Nath Gupta
Prakratik Chikitsa Vidhi	-	Sharda Prasad
Prakritik Chikitsa Vigyan	-	Verma
Jansanakhya Shiksha Siddhant Evam Updeysa	-	Dr. Nirmal Sahani
Health Administration in India	-	S.C. Seel
Swasthavrittama	-	Dr. Shiv Kumar Gaur
Health and Family Welfare	-	T.L. Devraj
Sachitra Yogasan Darshika	-	Dr- Indra Mohan Jha

Preventive & Social Medicine	- J.K. Park
Yogadeepika	- Shri Ayyangar
Swasthavritta	- Vaidya Sakad
Positive Health	- Dr. L.P. Gupta
Biogenic Secrets of Food in Ayurveda	- Dr. L.P. Gupa
Yoga & Yogic Chikitsa	- Ram Harsh Singh
Smritigranthon mein nihita	- Dr. Smt. Nigam Sharma
Swasthaparaka Samagri	
The Foundations of Contemporary Yoga	- R.H. Singh
Yoga Siddhant Evam Sadhana	- Harikrishna Shastri Datar
Dr. Reddy's Comprehensive guide to Swathavrittha	Dr. P.Sudhakar Reddy



2.3 DRAVYAGUN VIGYAN

Theory Two Papers– 100 Marks Each

Practical/Viva voice – 200 Marks

Lectures - 180

Practicals and Demonstration – 90

Paper I

100 Marks

Part A

50 Marks

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

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

10. Description of the following classes(Ganas) of Dravyas depending upon their similarity, morphology, properties, action, class, and effects: -

a) Audbhida Ganas(Vegetable origin)

Brihatpanchamoola, Laghupanchamoola, Vallipanchamoola, Kantakapanchamoola, Triahpanchamoola, Madhyamapanchamoola, Jeevaneeya panchamoola, Panchapallava, Panchavalakala, Triphala, Trikatu, Trimada, Chaturusana, Panchakola, Shadoosana, Chaturbeeja, Jeevaniya gana. Ashtavarga, Trijataka, Chaturajataka, Katuchaturjataka Panchatikta, Amlapanchaka, Chaturbhadra, Trikarshika, Swalpatriphala, Madhuratriphala, Mahavisha, Upavisha, Knowledge of Agryoushadha Varga with example.

b) Jangama Ganas (Animal origin)- Ksheerashtaka, Mutrashtaka, Pitta panchaka.

c) Parthiva Ganas (Mineral origin) - Lavana Panchaka, Kshara dvaya, Kshara Ashtaka.

11. Basis of nomenclature of dravya, Basis and Derivation of synonyms. Ecology- Classification of geographical area (desha) and soil (bhumi), collection of dravya, Nature and quality of drug to be collected (swarupa of sangrahya dravya), Method of collection (Sangrahana vidhi), -Vegetable and Animal drugs according to part used. Period of collection according to virya, preservation of collected dravyas, Storehouse (bheshajagara).

12. Various impurities of dravya, their purification, Brief knowledge of, adulterants, Artificial/synthetic drugs, concept of Substitution (abhavapratidinidhi dravya).

13. Brief knowledge of plant extracts, additives, excipients, preservative, food Colours.

14. Ideal drug (Prashasta bheshaja), Use of different part of medicinal plants (bheshaja prayoga, prayojyanga), Incompatibility (knowledge of viruddhatwa), principles of preparation of Aushadha yoga,

Consideration of vaya, bala, linga, agni, dosa, dushya, vyadhi, koshta, deha prakriti, Abhyasa, satwa, desha kala and kalpana for deciding dosage of drugs (Matranishchiti).

Anupana vyavastha, time of administration (bhaisajya sevana kala), routes of drug administration (bhaishajya prayoga marga) Prescription writing.

15. Brief information about 6 Nighantus (Dhanwantari Nighantu, Shodala Nighantu, Kaiyyadeva Nighantu, Madanapala Nighantu, Bhavaprakasha Nighantu, Raja Nighantu,)

Part A**50 Marks****1. Detailed knowledge of following drugs with respect to**

Basonym of drug, Main Synonyms, Regional Name, Botanical Name, Family, classification of Dravya (Gana) as described in Charaka, Sushruta and Bhavaprakasha.

Habit and habitat/verities

External morphology

Useful parts

Important phytoconstituents

Rasa panchaka

Action on Dosha, Dhatu, Mala

Therapeutic indications-

Amaikaprayoga and Matra (Therapeutic administration and Dose)

Name of important formulations

Adverse effects and remedial measures

Shodhana (as required)

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

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

2. Brief knowledge of following drugs with respect to

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

1. Agastya	2. Akarakarabha	3. Ajamoda
4. Amra	5. mragandhiharidra	5. Ankola
6. Aparajita	7. Ashvattha	8. Asthishrunkhala
9. Avartaki	10. Babbula	11. Badara
12. Bakula	13. Bhumyamalki	14. Bimbi
15. Bijapooru	16. Bola,	17. Chandrashura
18. Changeri,	19. Chavya	20. Chakramarda
21. Champaka	22. Chirbilva	23. Chopachini
24. Dattura	25. Darbha	26. Dhanvayasa,
27. Dronapushpi	28. Gandhaprasarini	29. Garjara

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

Part B

50 Marks

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

1. Kasturi
2. Gorochana
3. Gandhamarjaravirya

- | | | |
|----------------|--------------|---------------|
| 4. Mrigasringa | 5. Bhunaga | 6. Mukta |
| 7. Pravala | 8. Shankha | 9. Shukti |
| 10. Shambūka | 11. Varatika | 12. Indragopa |

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

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

5. Introduction, Definition & scope of Pharmacology.

Principles of general Pharmacology.

Brief Knowledge of following

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

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

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

PRACTICAL

1. Detailed knowledge of identification of following drugs: -

- (i) Kanda (stem) - Guduchi
- (ii) Patra (leaves) - Swarnapatri, Vasa, Kumari
- (iii) Pushpa (flower and Parts of flower) - Lavanga, Nagapuspa, Japa
- (iv) Phala (fruit) - Pippali, Madanaphala, Vidanga

- (v) Beeja (seeds) – Eranda, Kapikacchu, Vidanga
 - (vi) Twaka (bark) – Kutaja, Arjuna,
 - (vii) Moola (Root)– Punarnava, Aswagandha
 - (viii) Nirryasa (exudate) - Hingu, Guggulu, Mocharasa
 - (ix) Jangama dravya (animal origin) - Madhu, Ghrita
1. Collection of minimum 50 herbarium specimen from field visit.
 2. Compilation of a drug not less than 25 pages
 3. Concept based clinical study on single drugs (Minimum 5 from detailed and non-detailed list of drugs) in patients.

PRACTICAL MARKS DIVISION

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

Reference Books

1.	Abhinav Buti Darpan (Vol.1-2)	-	Vd. Roop Lal Vaishya
2.	Aushadna Vigyna Shastra	-	Acharya Pt. Vishvanatha Dwidevi
3.	Ayurvediya Aushadnkarma vigyana	-	Acharya V.J. Thakur
4.	Bedi Vanaspati Kosha	-	Prof. Ramesh Bedi
5.	Bhaishajyaguna Vigyana	-	Dr. Alakhnarayan Singh
6.	Bhav Prakash Nigantu (English)	-	Shreekanthamurti
7.	Bhav Prakash Nighantu	-	With Vd. Krishna Chandra Chunekar commentary
8.	Bhrinad dravyagunadarsha	-	Mahendra Kumar Shastri
9.	Classical Uses of Medicinal Plants	-	Acharya Priyavrata Sharma
10.	Controversial Medicinal Plants	-	Vd. G. Bapa Lal
11.	Dalhana Ka Dravyaguna Shastra Ke Kshetra Me Yogadana	-	Vd. Shiv Kumar Vyas
12.	Dravyaguna Kosha	-	Acharya Priyavrata Sharma
13.	Dravyaguna Sutram	-	Acharya Priyavrata Sharma
14.	Dravyaguna Vigyana	-	Dr. Gyanendra Pandey
15.	Dravyaguna Vigyana (Vol. 1-2)	-	Acharya Yadavji Tikram Ji
16.	Dravyaguna Vijyana	-	Dr. V.M. Gogate
17.	Dravyaguna Vigyana (Vol. 1-5)	-	Acharya Priyavrata Sharma

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

2.4 RASASHASTRA EVUM BHAISHAJYAKALPANA

Theory Two Papers– 100 Marks Each

Practical/Viva voice – 200 Marks

Lectures - 180

Practicals and Demonstration – 90

Paper 1

100 Marks

Rasa-Shastra

Part A

50 Marks

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

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

Part B

50 Marks

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

1. **Maharasa** - Abhraka, Vaikrantha, Makshika, Vimala, Shilajatu, Sasyaka, Chapala and Rasaka.
Uparasa - Gandhaka, Gairika, Kasisa, Kankshi, Haratala, Manahshila, Anjana and Kankustha
Sadharana Rasa - Kampillaka, Gauri pashana, Navasagara, Mriddara shringa, Kaparda, Giri Sindura, Agnijara & Hingula.
2. **Dhatu**
Shuddha lauha- Swarna(Gold), Rajata (Silver) Tamra (Copper), Loha (Iron) and Mandura
Putilauha - Vanga (Tin), Naga (Lead), Yashada (Zinc).

Mishra lauha- Kamsya (Bronze), Pittala (Brass) and Vartha Loha (Bell Metal).

- 3. Ratna** - Manikya (Ruby), Mukta (Pearl), Pravala (Coral), Tarkshya (Emerald), Pushaparaga (Topaz), Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamome stone), Vaidurya (Cats eye)

Uparatna- Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis Lazuli) Lal, Parojaka (Turquoise), Sphatikamani, Trinakanta (Amber), and Palanka, Putika, Rudhir, Kamch (Glass).

- 4. Sudha varga** – Sudha (Lime), Kaparda (Cowries), Sukti (Oyster Shell), Shankh (Conch Shell), Badarashma (Silicate of Lime), Mriga shringa (Stag horn), Khatika, Godanti (Gypsum) and Samudraphena (Cattle Fish bone), Kukkutand twaka (Hen's Egg Shell).

- 5. Siktha varga-** Siktha (Silika), Dugdhapashana (Talc), Nagapashana/Jaharmohara (Serpentine), Vyomashma, Sange Yeshab (Jade), Kousheyashm (Asbestos) and Akika (Agate).

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

- 7. Miscellinious** - Bola, Krishna Bola, Beeja Bola, Damool Akhawan (Khoon Kharabha Rakta Bandhini), Abresheem, Gandhamarja Virya, Kasturi, Bhoonag, Mayurpiccha, Gandhabiroja, Shila rasa, Sarjarasa, Maducchishta.

- 8. Visha and Upavisha-** Introduction, collection and storage, classification, synonyms, shodhana, antidote, uses, therapeutic and toxic doses and formulations of following Visha and Upavisha- Vatsanabha, Kuchala, Jayapala, Dhattura Beej, Bhang, Bhallataka, Gunja, Arka, Snuhi. Langali, Karaveera and Ahiphena, Chitrakmool.

- 9. Aushadhi Yoga Gyanam-** Arogya vardhini gutika, Karpura rasa, Kasturi bhirava rasa, Kumara kalyana rasa, Garbhapala Rasa, Chandraprabha Gutika, Chandramrita Rasa, Pratapalankeshwara Rasa, Pravala Panchamrita Rasa, Anandbhairava Rasa, Yogendra Rasa, Rajmriganka, Ramabana Rasa, Laxmivilasa Rasa, Vasanta Kusumakara, Vatakulantaka rasa, Vasantamalati Ras, Brihat Vata Chintamani Rasa, Shankha vati, Shwaskuthara Rasa, Hinguleswara Rasa, Hemagarbhapottali, Hridyarnava

Rasa , Swarnavanga, Makaradhwaja, Ayaskriti evam Loha Rasayana, Putapakwavishamjvrantaka Loha, Vatvidhvaṁsan Rasa, kamadugha Rasa, Laghusootshekhsar Rasa, Navayasa loha, Saptamrita loha.

10. Brief knowledge of Standardization of Rasaushadhi.

11. Concept of pharamcovigilance and its status in India, knowledge about Pharamcovigilance of Ayurvedic drugs.

Practical Rasashatra

100 Marks

Minimum Fifty practicals to be performed out of below mentioned Practical

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

		Shodhana of Naga
		Shodhana of Vanga
		Shodhana of Yashada
7.	Kshara Varga	Shodhana of Tankana
8.	Parpati	Preparation of Rasaparpati, Bola Parpati, Preparation of Swetaparpati
9.	Visha varga	Shodhana of Vatsanabha, Bhallataka, Kupilu, Dhattura beeja, Jayapala, Gunja, Chitrakamoola.

PRACTICAL FOR DEMONSTRATION

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

Bhaishajya Kalpana

Paper II

100 Marks

Part A

50 Marks

1. **Derivation, history and chronological (kramika vikasa) development** of Bhaishjyakalpana. Concept of Aushadha and Bhesaja.
2. **Fundamental principles of Bhaishjyakalpana.**
3. **Aushada nirmana shala** according to directions mentioned in Aushadha evam Prasadhana Adhiniyama (Drug and Cosmetic act 1940 and Rules 1945).
4. **Introduction and general knowledge of useful instruments-** Disintegrator, Pulveriser, Micropulveriser, Ball mill, End Runner, Edge Runner, Sieve-Shaker, Polishing pan, Granulator, Mixer, Grinder, Tablet making machine, Strip packing machine, Pouch packing machine, Pill making machine, Pill cutter.
5. **Comparative study of "Mana"** (measurements) as per Ancient and metric system of measurements. Rules of taking fresh and dry drugs, Grahyatva and Agrahyatva of plant material. Collection, storage and preservation methods of different Aushadhi dravyas. Examination methods, Preservation and Saviryata avadhi (potency period) of different Aushadhi kalpanas. Concept of stability and shelf life in contemporary science.
6. **Aushadha Matra, Anupana and Aushadh sevan kala.**
7. **Kashaya yoni- Pancha vidha kashaya kalpana** Swarasa, Kalka, Kwatha, Hima, Phanta. Panch kashaya Yonayah, Churna, Ushnodaka, Tandulodaka, Laksha rasa kalpana, Mantha, Aushadha siddha paniya, Arka, panaka, pramathya, rasakriya, phanita, avaleha , prasha, Ghana, satva, gudapaka, sarkara, ksheerapaka, Syrups. Vatika, gutika, Chandrika, vataka, pinda, modaka, varti, Guggulu kalpana, Method of preparation of Tablets and Capsule. Masi kalpana, lavana kalpa, kshara kalpana and Kshara sutra.
8. **Introduction, definition, preparation methods, doses and detailed description of uses and Anupana of following Yogas**
Ardraaka swarasa, Tulasi swarasa, Vasa putapaka swarasa, Nimba kalka, Rasona kalka, Punarnavasthaka kwatha, Rasna sapthaka kwatha, Dhanyaka hima, Sarivadi hima, Panchakola phanta, Mustadi Pramathya, Kharjuradi mantha, Shadanga paniya, Ajamoda arka, Yavanyarka, Chinchapa panaka, Candana panaka, Banapsha sharkara, Nimbu sarkara, Bhaskaralavan churna, Simhanad Guggulu, Yogaraj Guggulu, Lavangadivati, Lasunadi vati, Eladi vati, Sitopaladi Churna, Hingwashtaka Churna , Chitrakadi Gutika,, Sanjivani Vati, Triphala Guggulu, Kaishora

Guggulu, Chyavanaprashavaleha, Vasavaleha, Vyaghri-Haritaki avaleha, Manibadra avalehya, Darvi rasakriya, Guduchi Ghana, Kutaja Ghana vati, Haridra khanda, Narikela khanda, Soubhagya shunthi paka, Amruta satva, Ardraka satva, Phala varti, Chandrodaya varthi, Arka lavana, Narikela lavana, Triphala masi, Arjuna ksheerapaka, Rasona ksheerapaka.

PART B

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

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

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

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

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

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

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

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

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

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

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

10. Brief introduction of Ointments, Creams, Gels, Lotions, shampoos, soaps, Liniments.
11. Brief knowledge of Standardization of Ayurvedic formulations.
12. Brief introduction of Drugs and Cosmetics Act 1940 and Rules 1945.

Practical- Bhaisajya kalpana

100 Marks

Following practicals to be performed-

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

1. Swarasa- Ardraka swarasa, Tulasi swarasa, Kumari Swarasa, Vasa putapaka swarasa
2. Kalka- Nimba kalka, Rasona kalka.
3. Kwatha- Punarnavasthaka kwatha, Rasna sapthaka kwatha, Kulittha kwath.
4. Hima- Dhanyaka hima, Sarivadi hima
5. Phanta- Panchakola phanta, Yastimadhu Phanta.
6. Pramathya- Mustadi pramathya
7. Mantha- Kharjuradi mantha
8. Aushadh siddha paniya- Shadanga paniya
9. Laksha rasa
10. Arka- Yavani arka, Gulab arka, Misreya arka
11. Panaka- Chinchu panaka, Candana panaka,
12. Sharkara- Banapsha sharkara, Nimbu sarkara.
13. Churna- Sitopaladi Churna, Hinguwashtaka Churna
14. Gutika- Chitrakadi Gutika,, Sanjivani Vati
15. Guggulu-Triphala Guggulu, Kaishora Guggulu.
16. Avaleha- Chyavanaprashavaleha, Vasavaleha, Vyaghri Haritaki avaleha, Manibadra avalehya.
17. Rasa kriya-Darvi rasakriya., Guduchi Ghana, Kutaja Ghana .
18. Khanda- Haridra khanda, Narikela khanda, Sowbhagya sunti paka
19. Satva- Amruta satva, Ardraka satva
20. Varti- Phala varti, Chandrodaya varthi
21. Lavana- Arka lavana, Narikela lavana
22. Masi- Triphala masi
23. Ksheerapaka- Arjuna ksheerapaka, Rasona ksheerapaka
24. Kshara- Apamarga kshara, Snuhi kshara, Ksharasutra.
25. Manda - Ashtaguna manda, Laja manda

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

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

Reference Books

- | | |
|--|------------------------------|
| 1. Adyatan Rasa Shastra | - R.K. Goyal |
| 2. Abhinav Rasa Shastra | - Vaidya Somadev Sharma |
| 3. Asava Arishta Vigyanam | - Dr. Pakshdhar Jha |
| 4. Ayurvediya Rasa Shastra (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 |

- | | |
|---|---|
| | Dwivdei |
| 14. Bhaishjyakalpana Vigyanam | - Dr. Ambikadatta Shastri |
| 15. Rasa Tarangini | - Sadanand Sharma |
| 16. Rasa Darpan | - Prof. Bhajan Das Swami |
| 17. Rasa Bindu | - Dr. Sanjay Sharma |
| 18. Rasa Hridaya Tantra (Hindi) | - Rameshwar Dayal Bajpai |
| 19. Rasa Hridaya Tantra (English) | - Prof. Harishankar Sharma |
| 20. Rasa Bhaishajya Kalpana Vigyan | - Vaidya Santosh Kumar
Khandal |
| 21. Rasa Mitra | - Dr. Tryambak Nath Sharma |
| 22. Rasa Ratna Samuchchaya | - 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 Paribhasha 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
Ayurvedic formulary of India-Part I
and II
Pharmacopic standards for
Ayurvedic formulation published by
CCRAS, Publication of Govt. of
India. | - |

2.5 ROGA VIGYAN EVUM VIKRITI VIGYAN

Theory Two Papers– 100 Marks Each

Practical/Viva voice – 100 Marks

Lectures – 180

Practicals – 90

Paper I

100 Marks

Part A

50 Marks

1. Dosha Dooshyadi Vigyanam

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

2. Vyadhi Vigyanam

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

10. Concept of Satmya , Asatmya and Viruddha ahara.
11. Ojas – types of Ojo Dosa / vikriti- Ojas and Vyadhi kshamatva.

3. Basic Pathology

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

Part B

50 Marks

4. Nidana Panchaka Vigyanam

1. Difference between roga and rogi pareeksha.
2. Importance of Nidana panchaka.
3. Hetu - definition, synonyms and classification.
4. Purva rupa – definition, synonyms, Samanya and Vishistha Purva rupa.
5. Rupa - definition, synonyms, Samanya and Pratyatma lakshana. Difference between vyadhi and lakshana.
6. Samprapti – definition, synonyms and types
7. Samprapti ghataka.
8. Shat kriyakala.
9. Relationship between nidana panchaka and shat kriyakala.
10. Upashaya – definition, types and its importance in diagnosis.
11. Upadrava
12. Arishta vijnana – definition, types and its importance.
13. Sadhyasadhyatwa – types, their parameters and importance.
14. General diagnostic principles of Anukta vyadhi (Cha Viman IV)

5. Pareeksha Vigyanam

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

Paper II

100 Marks

Part A

50 Marks

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

1. Diseases of Rasavaha Srotas

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

2. Diseases of Raktavaha Srotas

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

3. Diseases of Mamsavaha srotas

Introduction to granthi, arbudha and arshas.

4. Diseases of Medovaha srotas

Sthoulya - Karshya - Prameha

- Introduction to Obesity and Diabetes Mellitus.

5. Diseases of Asthi - Majjavaha srotas

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

6. Diseases of Sukravaha srotas

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

Part B

50 Marks

7. Diseases of Pranavaha srotas

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

8. Diseases of Annavaha- Pureeshavaha Srotas

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

9. Diseases of Udakavaha Srotas

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

10. Diseases of Mutravaha srotas

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

11. Diseases of Swedavaha srotas

- Introduction to Khalitya, Palitya and Cosmetology.

12. Diseases of Manovaha Srotas/ Sanjnavaha Srotas

- Introduction to Vishada, Udvega, Bhaya, Bhrama, Anidra, Mada, Murchha, Sanyasa, Apasmara, Unmada, Atatwabhinivesha

- Introduction to Depression, Anxiety neurosis, Phobia, Personality disorders.

13. Upasargajanya Vyadhis (Communicable diseases)

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

14. Krimi Vigyanam

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

PRACTICAL

100 Marks

LABORATORY PRACTICALS

1. Fundamental Principles of Laboratory Tests

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

2. Hematology

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

3. Urine Examination

- Ayurveda anusara muṭra pareeksha.
- Physical Examination - Volume, Reaction (P^H) & Specific Gravity
- Chemical Examination for
 - Proteins, Glucose, Phosphate, Ketone, Bile salts, Bile pigment
- Microscopic Examination

4. Stool Examination

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

5. Sputum Examination

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

6. Semen examination

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

7. Biochemical Examination – (Demonstration)

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

8. Demonstration of different staining techniques in microbiology.

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

10. Demonstration of Aspiration techniques.

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

BEDSIDE PRACTICALS (CLINICAL METHODS)

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

DISTRIBUTION OF MARKS FOR PRACTICAL EXAMINATION

Total Marks

100 Marks

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

Reference Books

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

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



2.6 AGADATANTRA, VYAVAHARAYURVED EVUM VIDHIVADYAK

Theory One Paper – 100 Marks

Practical/Viva voice –100 Marks

Lectures – 100

Practicals / Demonstrations – 50

Paper I 100 Marks

Part A 50 Marks

AGADATANTRA– VISHA CHIKITSA (AYURVEDIC & CONTEMPORARY TOXICOLOGY)

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

- classical views),(Signs and symptoms, classification, management, prognosis and medico legal importance) Visha Sankata, Shanka Visha
- 09 **Acids and Alkalis** – Fatal Dose, Fatal period, signs and symptoms, cause of death, treatment, medico legal importance and postmortem appearance of – Sulphuric acid, Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carboic acid, Formic acid and alkalis in general, treatment and safety measures.
- 10 **Asphyxiants** – Carbon monoxide, Carbon dioxide, Hydrogen sulphide;
Stimulants – Antihistamines, Cocaine
Hallucinogens – LSD
Sedatives and Hypnotics – Barbiturates
Petroleum – Kerosene Poisoning
Organo phosphorus compounds
 Aluminum phosphate, Zinc phosphide
- 11 Definition of Toxicology, classification of poisons, their actions and routes of administration, absorption, excretion, metabolism, diagnosis and general principles of treatment, duties of a medical practitioner in case of suspected poisoning.
- 12 Metallic and Nonmetallic poisoning
 General characters, Signs and symptoms, Fatal dose, fatal period, Treatment, Medico Legal Importance and Postmortem Appearance of
1. Nonmetallic poisons – Phosphorous, iodine
 2. Metallic poisoning – Arsenic, Mercury, Lead, Copper, Zinc, Tin and Radiation metals.
- 13 Madya Visha and Madatyaya; Alcohol poisoning (Ethanol and Methanol)
- 14 Laws related to poisons - Poisons act 1919, Dangerous Drug act 1930, Drugs and cosmetic act 1940, Narcotic drugs and Psychotropic substances Act 1985, Pharmacy Act 1948, Criminal poisoning.

Part B

50 Marks

VYAVAHARAYURVED EVUM VIDHIVAIDYAK

(FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)

- 01 Introduction, Definition and concise history of Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (vidhivaidyaka). Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.

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

PRACTICAL

50 Hours

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

PRACTICAL

100 Marks

- | | |
|---|----|
| 1. Daily activities (Presented as Clinical Record/ Herbarium) | 10 |
| 2. Post Mortem examination - Record | 10 |
| 3. Compilation Work | 10 |

4. Identification (spotting) and clinical case presentation	40
5. Viva – voce	30

Reference Books

- 1 Topics related to Agada Tantra from Caraka Samhita, Sushruta Samhita, Ashtanga Hridaya, Ashtanga Samgraha, kasyapasamhitha, yogaretnakara, Bhavaprakasha and Madhavanidana.
- 2 Vidhivaidyaka (Vyavaharayurveda Vijnan) - Dr. Charuchandra Pathak
- 3 Medical Jurisprudence and toxicology - Modi
- 4 Basavarajeeyam - Edited by Vd.Govardhan
- 5 Agada Tantra - Sh. Ramanath Dwivedi
- 6 Text book of Agadatantra - Edited by Dr Huparikar
- 7 Agad tantra - Dr Shekher Namboodri
- 8 Agadatantra ki patyakram - Edited By Dr Huparikar
- 9 Vishachikitsa (Ayurveda Toxicology English Translation) - Vaidy Balakrishnan Nair, Kerala
- 10 Medical ethics and Medical Laws in India - Dr. H.S. Mehta
- 11 Toxicology Ayurvedic Perspective - VPSV Ayurveda college Kottakkal
- 12 Kautilya arthashastra (English) - Prof. Kangle
- 13 Kautilya arthashastra (Hindi) - Dr. Raghunath Singh
- 14 Vyavaharayurveda - Dr.Ayodhya Prasad Achal
- 15 Relevant topics from Manu Smriti

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