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

<table>
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<tr>
<th>Sl.No</th>
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<th>Marks to be allotted</th>
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<td>5.</td>
<td>Indriya Sthan</td>
<td>10</td>
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</tbody>
</table>

Distribution of marks for Practical Examination is as follows

1. Table (Chart) preparation / Compilation
2. Presentation of any 10 Shlokas out of total memorized Shlokas (Written & Oral)
3. Analysis of Srotasas, Discussions about Dhatus and their vriddhi and kshaya (Phenomenon of their increase and decrease). Ten proforma/ case sheets should be filled from the IPD/OPD. 40 Marks
4. Assessment of Arishtas. (Five proforma/case sheets should be filled from the IPD/OPD.)
5. Viva Voice
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 Swasthavritta

I. Vyaktigata Swasthyam (Personal Hygiene)

i) Introduction

1. Definition of Swastha & Swasthy 
3. Definition of Swasthavritta
5. WHO Definition of Health

2. Arogyalingani (Signs of Health)
4. Swasthavritta prayojanamavum Mahatvam (Objectives & Importance of Swasthavritta)
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
3. Brahma Muhurtavum Utthishta
5. Sarirachinta
7. Mukha prakshalana
9. Preparation of Ayurvedic dental powder and paste

2. Aims and importance of dinacharya.
4. Usha Jalapana
6. Malatyaga
8. Dantadhavana
10. Jihvanirlekhana vidhi (Tongue cleaning)
12. Pratimarsa Nasya
14. Kabaladharana
16. Abhyangam
18. Utsadana

11. Anjana
13. Gandusha
15. Dhoomapana
17. Udvarthanam
19. Vyayama
21. Snanam
23. Vastradharonam
22. Anulepanam
24. Tambulasevanam

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

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

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 Ativayavaya
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. Vyadhidharmatva 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 aspects
7. Prevention and control of air pollution
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
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. Dhwani pradushana (Noise) – Sources, Effects & control

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

VIII. Apadravya nirmulanā (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
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

XIII. Epidemiology

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

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

19. Kuprasangaja vyadhis (STD s)

a) AIDS  b) Syphilis  c) Gonorrhoea  d) Chanchroid

20. Ayurvedic paribhasha of sankramika rogas

21. Non-Communicable disease epidemiology

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

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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  

Yoga & Nisargopachara  

Part A  

Yoga

I. Etymology
II. Definitions
III. Development of Yoga (From ancient time to present time)

IV. Different Streams of Yoga
a) Jnana Yoga  b) Bhakti Yoga  c) Raja Yoga  d) Hathayoga - features & objectives.

V. Eight Branches of Yoga
1. Yama
2. Niyama
3. Asana and its importance
a) Suryanamaskara
b) Standing postures-
   1. Ardhakatichakrasana  2. Padahasthasana
   3. Ardhachakrasana  4. Trikonasana

c) Sitting Postures-
   10. Sidhasana
d) Supine postures-

e) Prone postures-
   4. Makarasana

f) Concept of Mitahara & Pathyahara

4. Pranayama
a) Benefits of Pranayama b) Nadi sudhi pranayama

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

d) Pathyapathyahara during pranayama e) Yuktayukta lakshana

f) Nadi suddhi lakshanam

g) Kumbhakabheda
   i) Suryabhedana ii) Ujjayi iii) Shitali iv) Sitkati
   v) Bhashthrika 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 4. Mokshasyalakshana
2. Sukha dukha nivrutti 5. Ashta Aiswarya
3. Yoga and moksha 6. Satyabudhhi
7. Muktatma lakshana

VII. Panchakosha theory

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

VIII. Integrated Approach of Yoga therapy

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

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

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

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

III. Mrittika Chikitsa (Mud Therapy)
1. Types of soil or mud
2. Doctrine of mud selection
3. Mud bath

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

V. Mardana (Massage) - Different methods of Mardana

VI. Diet - Types
1) Soothing 2) Eliminative 3) Constructive diets.
   a) Positive b) Negative

VII. Upvasa Chikitsa (Fasting)
1. Importance 2. Types 3. Therapeutic effect

Part B 50 Marks

Community Health Care

I. Prathamika Swasthya Samrakshana (Primary Health Care)
1. Definition
2. Principles
3. Elements
4. Structure - at Village level, Sub centre level, PHC level, CHC level,
   Hospitals, Health Insurance, Private agencies, AYUSH, Voluntary health
   agencies in India and N.G.Os.
5. Role of Ayurveda in Primary Health Care in India
II. Parivara Kalyana Karyakrama (Family Welfare Programmes)

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

III. Rasthriya Karyakrama (National Programmes)

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

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

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

V. Preventive Geriatrics.

VI. International Health

1. Vishwa Swasthya 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) Udvarthanam 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
8. Pranayama & Meditation
   a) Nadisudhi b) Ujjayi c) Suryabhedana d) Sitali
   e) Sirkari 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 Pathyapathy, Yoga and Naturopathy
together for Swastha persons and 5 cases sheets of Communicable
diseases.
### Practical & Viva voice examination –

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<td>1. Personal Hygiene</td>
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<td>2. Public and social health</td>
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<td>3. Demonstration of Yoga</td>
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<td>4. Naturopathy</td>
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<td>5. Daily works</td>
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<td>6. Viva – Voce</td>
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### REFERENCE BOOKS

Relevant portions of Charaka, Sushruta, Vagbhata, Sharangadhara, Bhavaprakasha, Madhavanidana, Yogаратnakara & 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** - Shardà Prasad
- **Prakritik Chikitsa Vigyan** - Verma
- **Jansanakhya Shiksha Siddhant Evam** - Dr. Nirmal Sahani
- **Updeysa**
- **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
Part A

100 Marks
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, Panchabhautikatwa, 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 Brhatratri and according to Taxonomy.


4. Rasa Etymological Derivation, definition, Meaning of “Rasa” in various contexts, 6 Rasas( Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik origin of Rasa, Nirvrittiviseshakramh (manifestation in general and particular), Ritu prabhava(effect of season ),Rasanurasayyo bheda(Difference between rasa and anurasas) 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, (Dvididha-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, Samanyapratyarahdha, Vichitrarpratyaahdha, 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 –

31. Vedanasthapan 32. Prajasthapan 33. Sonithasthapan
34. Raktaprasadana 35. Shukrala 36. Sukrajanana
37. Sukrarechaka 38. Sukrastambhaka 39. Sukrasodhana
40. Stanyajanana 41. Stanyashodhana 42. Mutravirechaniya
43. Mutavirajaniya 44. Pureeshavirajeeya 45. Pureeshasangrahaneeya
46. Swedasangrakha 47. Swedana 48. Swedopaga
49. snehana 50. Snehopaga 51. Vamana
52. Vamanopaga 53. Virechana 54. Virechanopaga
55. Sirovirechanopaga 56. Asthapanopaga 57. Anuvasanopaga
58. Hikanigrhana 59. Trishnanigrahana 60. Chhardinigrahana
61. Dahaaprasamana 62. Shitaprasamana 63. Angamardaprasamana
64. Jvarahara 65. Shramahara 66. Shothahara
67. Swashara 68. Kasahara 69. Shoolaprasamana
70. Truptighna 71. Kandugna 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 Ganasa (Vegetable origin)


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

c) Parthiva Ganasa (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 (abhavpratinidhi dravya).

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

14. Ideal drug (Prashasta bhesajaha), Use of different part of medicinal plants (bhesajaha 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 (Matranischchiti).

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

15. Brief information about 6 Nighantas (Dhanwantari Nighantu, Shodala Nighantu, Kaiyyadeva Nighantu, Madanapala Nighantu, Bhavaprapaksha Nighantu, Raja Nighantu,)
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)

<table>
<thead>
<tr>
<th>1. Ahiphena</th>
<th>2. Agnimantha</th>
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<td>31. Draksha</td>
<td>32. Durva</td>
<td>33. Ela</td>
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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. Thalisapatra  96. Tila
97. Tivrut  98. Tulasi  99. Tvak
100. Ushira  101. Vacha  102. Varuna
103. Vasa  104. Vata  105. Vatsanabha
109. Yavanai  110. Deodaru

2. Brief knowledge of following drugs with respect to

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**Part B**

50 Marks

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

1. Kasturi  
2. Gorochana  
3. Gandhamarjararavirya

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


5. Introduction, Definition & scope of Pharmacology.
   Principles of general Pharmacology.

**Brief Knowledge of following**


6. Brief knowledge about WHO’s “Essential Drug List”

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

**PRACTICAL**

1. Detailed knowledge of identification of following drugs:

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

PRACTICAL MARKS DIVISION

1. Compilation/Essay 10 Marks
2. Herbarium 10 Marks
3. Single drug therapy 10 Marks
4. Pharmacognocy 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 Dwivedi
3. Ayurvediya Aushadhnarkarma vigyana - Acharya V.J. Thakur
4. Bedi Vanaspati Kosha - Prof. Ramesh Bedi
5. Bhaishajyaguna Vigyana - Dr. Alaknarayan Singh
6. Bhav Prakash Nigantu (English) - Shreekanthamurti
   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

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<td>Dravyaguna Shastrum</td>
<td>Vaidya G.A. Phadake</td>
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<td>Dravyagunavijnana basic Principles</td>
<td>Prof. D.S. Lucas</td>
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<td>Forgotten Healers (Indian Medicinal Plants)</td>
<td>Dr. Prakash Pranjape</td>
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<td>22</td>
<td>Glossary of Vegetable Drugs in Bhritrayis</td>
<td>Thakur Balwant Singh &amp; Vd. Krishna Chandra Chunekar</td>
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<td>Nighantu Adarsh (Vol. 1-2)</td>
<td>Vd. Bapa Lal</td>
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<td>Goodman &amp; Gillman</td>
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<td>Useful parts of Charaka, Sushrut, and Vagbhata.</td>
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2.4 RASASHASTRA EVUM BHAISHAJYAKALPANA

Theory Two Papers – 100 Marks Each
Practical/Viva voice – 200 Marks
Lectures – 180
Practicals and Demonstration – 90

Paper 1

Rasa-Shastra

Part A

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, Lohitikaran, Mruta Loha, Satwa Patana, Shuddhavarta, Beejavarta, Druti, Rudra bhaga and Dhanvantari bhaga, Apunarbhava, Niruttha, Rekhapurna, Varitara.


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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.


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-Grahy and Agrahyata, shodhana, marana and other processing techniques. Properties, dose, therapeutic uses of commonly used single and compound formulations of dravyas classified as under

   Uparasa - Gandhaka, Gairika, Kasisa, Kankshi, Haratala, Manahshila, Anjana and Kankustha
   Sadharana Rasa - Kampillaka, Gauri pashana,Navasadara, Mriddara shrinda, 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 Cinnamon 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).


10. Brief knowledge of Standardization of Rasaushadhi.

11. Concept of pharamcogivilance and its status in India, knowledge about Pharamcogivilance of Ayurvedic drugs.

**Practical Rasashatra**

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100 Marks

Minimum Fifty practicals to be performed out of below mentioned Practicals
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<td>Gandhaka druti</td>
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<td>4</td>
<td>Formulations</td>
<td>Rasasindoora, Swarna Vanga.&lt;br&gt;Saptamrutha lauha&lt;br&gt;Navayas lauha&lt;br&gt;Chandanadi Louha&lt;br&gt;Sarvajwarhara Louha&lt;br&gt;Agnitundi vati&lt;br&gt;Tribhuvana kirti rasa&lt;br&gt;Punarnava Mandoora&lt;br&gt;Sootshekhara rasa&lt;br&gt;Arogyavardhini vati&lt;br&gt;Laghusutashekhara rasa&lt;br&gt;Laghumalini Vasanta rasa&lt;br&gt;Sameer pannaga rasa</td>
</tr>
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Bhaishajya Kalpana

Paper II

Part A

1. Derivation, history and chronological (kramika vikasa) development of Bhaishyakalpana. Concept of Aushadha and Bhesaja.

2. Fundamental principles of Bhaishyakalpana.

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, Grahayatva and Agrahyatwa 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.


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

Ardraka swarasa, Tulasi swarasa, Vasa putapaka swarasa, Nimba kalka, Rasona kalka, Punarnavasthaka kwatha, Rasna sapthaka kwatha, Dhanyaka hima, Sarivadi hima, Panchakola phanta, Mustadi Pramathya, Kharjuradi mantha, Shadanga paniya, Ajamoda arka, Yavanayaka, Chincha panaka, Candana panaka, Banapsha sharkara, Nimbu sarkara, Bhaskaralavan churna, Simhanad Guggulu, Yogaraj Guggulu, Lavangadivati, Lasunadi vati, Eladi vati, Sitoladali Churna, Hingwashtaka Churna, Chitrakadi Gutika,, Sanjivani Vati, Triphala Guggulu, Kaishora

PART B


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.


11. Brief knowledge of Standardization of Ayurvedic formulations.


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, Kulitha 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- Chincha panaka, Candana panaka,
13. Churna- Sitopaladi Churna, Hinguwashtaka Churna
14. Gutika- Chitrakadi Gutika, Sanjivani Vati
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

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26. Peya, Vilepi, yavagu, Krishna, Vesavara
27. Yusha - Mudga yusha, Saptamushtika yusa, Kulitttha yusha
28. Takra varga – Takra, Udasvita, katvar, Mathita, Chhaccchika, Dadhi
29. Arishta- kutajarishta, takrarishta
30. Asava - Kumaryasava, kanakasava
31. Sukta kalpana- Kanji
32. Udaka- Tandulodaka
33. Upahanha- 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
2. Abhinav Rasa Shastra
3. Asava Arishta Vigyanam
4. Ayurvediya Rasa Shastra (Sachitra)
5. Ayurvediya Rasa Shastra
6. Rasa Bhaishajya Paribhasa
7. Ayurvediya Rasa Shastra
8. Ayurved Prakash
9. Drugs and Cosmetic Act
10. Paka Darpana
11. The Paka-darpana of king null - A critical study
12. Parada Vigyaniyam
13. Pratyaksha Aushadh Nirmanam

- R.K. Goyal
- Vaidya Somadev Sharma
- Dr. Pakshdhar Jha
- Chandrabhusan Jha
- Badrinarayan Pandey
- Sureshananda Thapaliyal
- Prof. Siddhi Nandan Mishra
- Vaidya Gujrat Mishra
- Dr. Indradev Tripathi
- Dr. Madhulika
- Vasudev M. Dwivedi
- Acharya Vishwanath
14. Bhaishjyakalpana Vigyanam
   Dwivdei
   - Dr. Ambikadatta Shastri
   - Sadanand Sharma
   - Prof. Bhajan Das Swami
15. Rasa Tarangini
   - Dr. Sanjay Sharma
16. Rasa Darpan
   - Rameshwar Dayal Bajpai
17. Rasa Bindu
   - Prof. Harishankar Sharma
18. Rasa Hridaya Tantra (Hindi)
   - Vaidya Santosh Kumar Khandal
19. Rasa Hridaya Tantra (English)
   - Dr. Tryambak Nath Sharma
20. Rasa Bhaishajya Kalpana Vigyan
    - Dattatreya Ananta Kulkarni
    - Srivastava, Yadav and Prof. Ramesh Saxena
21. Rasa Mitra
    - Krit Hindi Vyakhyा.
22. Rasa Ratna Samuchchaya
    - Vaidya Yadavji Tirkramji Acharya
23. Rasa Shastra Prayogiki
    - Vaidya Shyam Sunderacharya Vaishya
24. Rasamritam
    - Vaidya Hajari Lal Sukul
25. Rasayan Sara
    - Vaidya Gopal Krishna
26. Rasendra Sampradaya
    - Vaidya Satyarth Prakash
27. Rasendra Sara Sangraha
    - Dr. Indradev Tripathi
28. Rasendra Sara Sangraha
    - Dr. Avadh Bihari Agnihotri
29. Vaidyak Paribhasha Pradeep
    - Vishwanath, Gananath Dwivedi
30. Sharangdhar Samhita
    - Siddhi Nandan Mishra
31. Bharatiya Bhaishajya Kalpana Vigyan
    - Prof. Damodar Joshi
32. Bhaishjya Kalpana Vigyan
    - Prof. Damodar Joshi
33. Rasa Shastra (English)
34. Rasa Ratna Samuchchaya (English)
35. Rasendra Chintamani
36. Useful parts of Charaka, Sushruta and Vagbhata
    Pharmacopie 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
15. Detailed study of srotoomola and srotdushti 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 (Vyaadhinamakarana).
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.
10. Concept of Satmya, Asatmya and Viruddha ahara.

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.
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

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.
11. Upadrava
13. Sadhyasadhyaatwa – types, their parameters and importance.
14. General diagnostic principles of Anukta vyadhi (Cha Viman IV)
5. Pareeksha Vigyanam

1. Importance and knowledge of Aptomadeshadi, 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.
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, arishtha and sadhyasadhyata)

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

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

3. Diseases of Mamsavaha srotas
   - Introduction to granthi, arbudha and arshas.

4. Diseases of Medovaha srotas
   - Sthoulya - Karshya - Prameha
     - Introduction to Obesity and Diabetes Mellitus.
5. Diseases of Asthi - Majjavaha srotas
   - Sandhigatavata, Introduction to Asthi-majjaparipaka, Asthigata vidradhi
   - Introduction to Osteo- Arthritis, Osteomyelitis, Osteoporosis.
   - Vatavyadhi
   - 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 - Annadraava 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, Apasmaras, 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, Filaria (Demonstration)
• ESR.
• Introduction to rapid diagnostics of hematology
• Screening test for bleeding disorders - bleeding time (BT), Clotting time (CT), Prothrombin time (PT)
• Blood grouping - ABO system, Rh typing (Rhesus system)

3. **Urine Examination**

• Ayurveda anusara mutra pareeksha.
• Physical Examination - Volume, Reaction (pH) & 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.


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

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<td>Instruments –</td>
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<td>Madhav' Nidan (Madhukosha commentary) Part 1 – 2</td>
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<td>Clinical Pathology and Bacteriology</td>
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<td>Parameswarappa's Ayurvediya Vikriti Vigyan and Roga Vikriti Vigyan</td>
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<td>Clinical Diagnosis and Management by Laboratory methods</td>
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<td>Clinical Hematology In Medical Practice</td>
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<td>Robbins Basic Pathology</td>
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2.6 AGADATANTRA, VYAVAHARAYURVED EVUM VIDHIVAIDYAK

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)


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


06. Gara visha, Dooshi visha and, Viruddhahara- their concepts, classification, management and contemporary significance. Essentials of Food poisoning.

07. Study of chaturvimshatypakrama of Caraka.

08. Jangama Visha (Animal poisoning and zoonotic diseases) – Detailed study of sarpa, keeta, lootha, vischika, Mooshika, Alarka – Visha; Lakshana, Bheda, Chikitsa and their Sadhyasadhyata. (contemparary and
classical views), (Signs and symptoms, classification, management, prognosis and medico legal importance) Visha Sankata, Shanka Visha

09 **Acids and Alkalis** – Fatal Dose, Fatal period, signs and symptoms, cause of death, treatment, medico legal importance and postmortem appearance of – Sulphuric acid, Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carbolic acid, Formic acid and alkalis in general, treatment and safety measures.

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

**Stimulants** – Antihistamines, Cocaine

**Hallucinogens** – LSD

**Sedatives and Hypnotics** – Barbiturates

**Petroleum** – Kerosene Poisoning

**Organo phosphorus compounds**

Aluminum phosphate, Zinc phosphide

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

12 Metallic and Nonmetallic poisoning

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

1. Nonmetallic poisons – Phosphorous, iodine

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


**Part B**

**VYAVAHARAYURVED EVUM VIDHIVAIYAYAK**

**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.


10 Sexual offences, Sexual perversions and their medico legal aspects.

11 Forensic psychiatry.

12 Ethics as in classics. Types of physicians and methods of identification, Pranabhisara and Rogabhisara Physicians, Qualities of physician, Responsibilities of Physicians, Chaturvidha Vaidyavrutti, Duties of physician to his patient, Vaidya sadvrittam, Apojoyya 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**

<table>
<thead>
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<th><strong>50 Hours</strong></th>
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<tr>
<td>1. Post Mortem examination</td>
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<td>2. Evidence in the court</td>
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<td>3. Demonstrations in the Toxicology museum</td>
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<td>4. Clinical postings</td>
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**PRACTICAL**

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<thead>
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<th><strong>100 Marks</strong></th>
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<td>1. Daily activities (Presented as Clinical Record/ Herbarium)</td>
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<td>2. Post Mortem examination - Record</td>
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<td>3. Compilation Work</td>
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4. Identification (spotting) and clinical case presentation

5. Viva – voce

**Reference Books**

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