



**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY), PUNE**

**BVDU FACULTY OF AYURVED
BAMS
New Syllabus**



BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY) PUNE, INDIA.
FACULTY OF AYURVED

Pune- Satara Road, Pune-411043.

Accredited with 'A+' Grade (2017) by NAAC.
'A' Grade University status by MHRD, Govt. of India
Accredited (2004) & Reaccredited (2011) with 'A' Grade by NAAC

Undergraduate (B.A.M.S)
&
Post- Graduate (M.D./M.S./Diploma in Ayurved)
Syllabus/ Curriculum
2016 courses& 2021 course.

Contents

| Sr No | Topic | Page No |
|--------------|--|----------------|
| 1 | Preface | 2 |
| 2 | Vision and Mission | 3 |
| 3 | Aims and Objectives | 4 |
| 4 | Notification | 5 |
| 5 | Program Outcomes | 6 |
| 6 | Eligibility | 7 |
| 7 | Medium of instruction and Pattern of study | 7 |
| 8 | Duration of the Course Study and Subjects taught, Number of lectures/practical | 7-8 |
| 9 | Attendance and Progress | 8 |
| 10 | Scheme of Examinations | 8-9 |
| 11 | Migration | 10 |
| 12 | Subjects | |
| | Sanskritam evam Ayurved Ithihas- Sanskrit and History of Ayurveda | 11-19 |
| | PadarthaVigyan- Fundamental Principles of Ayurveda and Quantum Mechanics | 20-27 |
| | Kriya Sharira - Human Physiology | 28-34 |
| | Rachana Sharira - Human Anatomy | 35-40 |
| | Samhita Adhyayan-1 -Study of Ayurveda Classical Text | 41-51 |

Preface

Ayurveda is accepted worldwide as one of the oldest traditional systems of medicine. The ancient insight into this traditional system of medicine is still not profoundly discovered. Ayurveda signifies as "the life-science " where ayur means "life" and veda means "science" in Sanskrit. Ayurveda is the upaveda i.e., "auxiliary knowledge of Atharvaveda in Vedic tradition with its prime origin from Atharva-Veda and a supplement of the Rig-Veda. Lord Dhanvantari is worshipped as the God of Ayurveda. The goal of this traditional medicine system is to prevent illness, disease cure and preserve life. Being originated in India Ayurveda extends its wings in various parts of the world. In ancient days Ayurveda was taught in Gurukula system, which is now evolved into graduate courses from Institutions.

The National Commission for Indian System of Medicine & Ministry of AYUSH, Government of India, New Delhi mention the standards for undergraduate and postgraduate programmes. It establishes suitable qualifications in Indian medicine and recognizes various forms of traditional practice including Ayurveda.

Ayurvedic practitioners also work in rural areas, providing health care to at least 500 million people in India alone. They therefore represent a major force for primary health care, and their training and placement are important to the government of India. Being a scientific medicine, Ayurveda has both preventive and curative aspects. The preventive component emphasizes the need for a strict code of personal and social hygiene, the details of which depend upon individual, climatic, and environmental needs.

Now Bachelor of Ayurvedic Medicine and Surgery, MD/MS in various discipline of Ayurveda started with the intention to encourage integrated teaching and de-emphasize compartmentalization of disciplines to achieve horizontal and vertical integration in different phases which helps to support National Health Services.

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

**Faculty of Ayurved,
Bharati Vidyapeeth
(Deemed to be University), Pune**

Vision-

To be a world class university for social transformation through dynamic education

Mission-

- To ensure the good health and longevity of mankind.
- To carve a niche for our college in the world of Ayurved education
- To provide
 - Borderless access to Ayurved education
 - Quality Ayurved education
- To promote
 - Quality research in diverse areas of health care system.
 - Extensive use of ICT for teaching, learning and governance.
 - To develop national and international networks with industry and other academic and research institutions.

Aims of BAMS programme

- To create an efficient Physician capable of functioning independently in both urban and rural environment.
- To produce graduates of Ayurveda with thoughtful knowledge having deep base of scientific knowledge in harmony with Ayurvedic fundamentals with extensive practical training who would be able to become an efficient teacher, research worker and Kaya Chikitsak (Physician) and Shalayachikitsak (Surgeon) competent to serve for health services.

Objectives

To develop following attitude and skills in our students -

- Knowledge of Ayurveda science, pertinent modern subjects, common investigations and their clinical interpretation, art of diagnosis of common ailments, selection and administration of suitable Pancha karma procedures, common single and compound drug formulations, Pathyaapathya, preventive measures, Rasayana, National Health Programme.
- Capable to perform Para surgical procedures, conduct deliveries and resuscitate newborn babies.

Program Outcomes for Undergraduate Course of Ayurveda

- The Bachelor of Ayurved will have profound knowledge of Ashtanga Ayurved backed up by extensive practical training.
- This knowledge will be supplemented by scientific advances in modern medicine along with extensive practical training.
- The BAMS graduate will become a globally competent Ayurved practitioner and a research scholar to serve the health care services.

Program specific outcome

The BAMS degree holder should be capable of functioning independently in both urban and rural environments.

Course out comes-

After completion of B.A.M.S course the Graduates of Ayurved –

- Should have thorough knowledge of all the subjects including Sanskrit so that he/she can have the ability to interpret Sanskrit quotations from Classical texts of Ayurved.
- Must have practical/ clinical skills in all the subjects.
- Can diagnose and treat the patients independently with Ayurved management.
- Should be able to conduct minor procedures and preliminary management of accidental cases.
- Should be able to treat the patients with empathy and have proper interpersonal and communication skills as competent health care professionals.
- ought to have the current knowledge of recent advances in the field by self-learning and /or participating in continuing Medical Education Programs.
- Shall be able to critically analyze relevant published research literature and use them appropriately to influence practice of Ayurved.
- Must be able to participate in the National health program.

Regulations governing the B.A.M.S. programme (NCISM- Minimum standards of Undergraduate Ayurved education- Regulations- 2022

Eligibility

The eligibility to seek admission in Bachelor of Ayurveda education shall be as under, -

- (a) The candidate shall have passed 10+2 or its equivalent examination from any recognized Board with Physics, Chemistry, Biology and have obtained minimum of fifty per cent. marks taken together in Physics, Chemistry and Biology in the case of general category and forty per cent. marks in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes: Provided that in respect of persons with disability candidate specified under the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the minimum qualifying marks in the said examinations shall be forty-five per cent. in the case of the General category and forty per cent. in the case of the Scheduled Castes, Scheduled Tribes, and Other Backward Classes.
- (b) Students must secure minimum eligibility marks as specified in NEET or any other equivalent examinations as notified by apex bodies/Ministry of AYUSH
- (c) No candidate shall be admitted to B.A.M.S Degree programme unless the candidate attained the age of seventeen years on or before the 31st December of the year of admission in the first year of the programme.

Medium of instruction

The medium of instruction for the programme shall be Sanskrit or Hindi or any recognized regional language or English with use of Ayurvedic technical terms.

Duration of the Course Study

Total duration of course – Five and Half years

- a) **First Profession- 18 Months [Course 2021], 12 Months [Course 2017]**
- b) Second Profession- 12 Months [Course 2017]
- c) Third profession -12 Months [Course 2017]
- d) Forth Profession- 18 Months [Course 2017]
- e) Compulsory Internship- 12 Months

Subjects taught, Number of lectures/ practical and demonstrations for various subjects [First year B.A.M.S.]

| Sr No. | Subject with code | Number of teaching hours | | Total |
|--------|---|--------------------------|--------------|-------|
| | | Lectures | Non-Lectures | |
| 1 | Sanskritam evam Ayurved Ithihas AyUG-SN and AI (Sanskrit and History of Ayurveda) | 100 | 200 | 300 |
| 2 | PadarthaVigyan AyUG-PV (Fundamental Principles of Ayurveda and Quantum Mechanics) | 90 | 140 | 230 |
| 3 | Kriya Sharira AyUG-KS (Human Physiology) | 150 | 250 | 400 |
| 4 | Rachana Sharira AyUG- Human Anatomy RS | 180 | 320 | 500 |
| 5 | Samhita Adhyayan-1 AyUG-SA1 (Study of Ayurveda Classical Text) | 140 | 260 | 400 |
| 6 | Electives (Minimum Three) subjects | | | |
| | Total hours | 660 | 1170 | 1830 |

The First Professional examination shall ordinarily be held and completed by the end of first professional session.

Attendance and Progress

Each student shall be required to maintain minimum seventy-five percent attendance in each subject in theory (i.e., lecture hours) practical and clinical (i.e., non-lecture hours) separately for appearing in examination at the end of academic year subject to the condition that his/her progress and conduct are counted satisfactory by the principal.

Scheme of Examination

Periodical assessment

There shall be minimum three periodical assessments for each subject before First Term Test ordinarily at 6th month of respective professional B.A.M.S.) minimum of three periodical assessment before Second Term Test (ordinarily at 12th month of respective professional B.A.M.S.) and minimum of three periodical assessments before final university examinations (Summative Assessment) of respective professional B.A.M.S.

Scheme of Assessment (Formative and Summative)]

| Sl. No. | Professional Course | Duration of Professional Course | | |
|---------|-----------------------------|---------------------------------|---------------------------|---------------------------|
| | | First Term (1-6 Months) | Second Term (7-12 Months) | Third Term (13-18 Months) |
| 1 | First Professional B.A.M.S. | 3 PA and First TT | 3 PA and Second TT | 3 PA and UE |

Sanskrit and Samhita Adhyayan 1- Average 15 marks from the 03 periodical assessment and 15 marks of the term examination will be calculated and converted to 15 marks will be the IA practical exam marks.

Kriya Sharir, Rachana Sharir and Padartha Vijnana- Average 15 marks from the 03 periodical assessment converted to 30 marks and 30 marks of the term examination will be calculated and converted 30 marks will be the IA practical exam marks.

University Examination

The theory examination shall have twenty percentage marks for Multiple Choice Questions (MCQ), forty percentage marks for Short Answer Questions (SAQ) and forty percentage marks for Long Explanatory Answer Questions (LAQ) and these questions shall cover the entire syllabus of the subject.

The minimum marks required for passing the examination shall be fifty per cent. In theory component and fifty percent in practical component (that include practical, clinical, viva-voce, internal assessment and electives wherever applicable) separately in each subject.

Number of Papers and Marks Distribution for First Professional B.A.M.S. Subjects

| Sl.No. | Subject Code | Papers | Theory | Practical or Clinical Assessment | | | | | Grand Total |
|--------------------|--------------|--------|--------|----------------------------------|------|-------------|----|-------------|-------------|
| | | | | Practical/ Clinical | Viva | Electives | IA | Sub Total | |
| 1. | AyUG-SN & AI | 2 | 200 | - | 75* | 10 (Set-FA) | 15 | 100 | 300 |
| 2. | AyUG-PV | 2 | 200 | 100 | 60 | 10 (Set-FB) | 30 | 200 | 400 |
| 3. | AyUG-KS | 2 | 200 | 100 | 70 | - | 30 | 200 | 400 |
| 4. | AyUG-RS | 2 | 200 | 100 | 70 | - | 30 | 200 | 400 |
| 5. | AyUG-SAI | 1 | 100 | - | 75 | 10 (Set-FC) | 15 | 100 | 200 |
| Grand Total | | | | | | | | 1700 | |

*Viva voce examination shall be for Sanskrit and not for Ayurved Ithihasa (Set-FA, FB, FC – sets of Electives for First Professional B.A.M.S.)

Evaluation of Electives. -

Electives shall be evaluated in terms of attendance and assessment and based on evaluation; the student shall be awarded credits as well as grades as below.

- One credit shall be awarded for attending a minimum of five hours of a modular programme and a student can earn a maximum of five credits for each elective.
- Assessment shall be conducted at the end of each module and an average of five modular assessments shall be considered for grading i.e., up to 25 per cent. Bronze; 26-50 per cent. Silver; 51-75 per cent. Gold; 76 per cent. and above Platinum.
- Students may opt any one elective as per their choice from each set specified for respective professional B.A.M.S.
- Weightage of two marks for each credit and maximum of ten marks shall be awarded for each elective.

- Apart from three mandatory electives for each profession, students have freedom to choose and qualify as many numbers of additional electives as per their interest.
- Marks weightage shall be only for three electives per professional session i.e., one elective subject from each set of respective professional session.
- A separate online certificate shall be generated for each elective mentioning credits earned and grades obtained.

Declaration of Class

- A candidate obtaining sixty-five per cent. and above marks shall be awarded first class in the subject and seventy five percent and above marks shall be awarded distinction in the subject.
- The award of class and distinction shall not be applicable for supplementary examinations.

Migration

1. The students may be allowed to take the migration to continue their study to another college after passing the First Professional examination, but failed student's transfer and mid-term migration shall not be allowed.
2. For migration, the students shall have to obtain the mutual consent of both colleges and universities, and it shall be against the vacant seat.

Syllabi

SAMSKRITAM EVAM AYURVED ITHIHAS

(SUBJECT CODE-AyUG-SN & AI)

SANSKRIT AND HISTORY OF AYURVEDA

| AyUG-SN & AI | | | |
|---|----------|------------------|------------------------|
| Total number of Teaching hours: 300 | | | |
| Lecture hours (LH) – Theory | | 100 Hours | 100 Hours (LH) |
| Paper I | 50 Hours | | |
| Paper II (Sanskrit 40+ AI 10) | 50 Hours | | |
| Non-Lecture hours (NLH) – Theory | | 140 Hours | 200 Hours (NLH) |

AyUG-SN & AI- Contents of Course

| Sr No | A2 List of Topics AyUG-SN & AI | B2 Term | C2 Marks | D2 Lecture hours | E2 Non-Lecture hours |
|-------------------------|--|-------------------------|----------|------------------|-----------------------|
| Paper I Sanskrit | | | | | |
| 1 | संस्कृतवर्णानाम् परिचयः – माहेश्वरसूत्राणि, उच्चारणस्थानानि, बाह्यप्रयत्नानि, अभ्यन्तर प्रयत्नानि | I | 05 | 3 | 10 |
| 2 | संज्ञा- 2.1 - संयोगः, संहिता, ह्रस्वदीर्घप्लुतः, अनुनासिकः, पदम्, धातुः, उपसर्गः, गुणः, वृद्धिः [विस्तरेण पाठनम् - Detailed teaching] 2.2 - इत्, लोपः, प्रत्याहारः, उदात्तः, अनुदात्तः, स्वरितः, सवर्णः, निपातः, प्रगृह्यम्, [सङ्क्षिप्य पाठनम् – Brief teaching] | 2.1 – I 2.2 – II | 05 | 05 | - |
| 3. | उपसर्गाः- उपसर्गाः क्रियायोगे प्र, परा, अप, सम्, अनु, अव, निस्, निर्, दुस्, दुर्, वि, आङ्, नि, अपि, अधि, अति, सु, उत्, अभि, प्रति, परि, उप | II | 05 | 02 | 03 |
| 4. | अव्ययानि 4.1 - च अपि खलु हि तु किल ननु वा च एव 4.2- पुनः विना उच्चैः ऋते एवम् सह सार्धम् युगपत् यथा –तथा यावत्-तावत् इति यदा-तदा यदि-तर्हि साकम् न कुत्र कति कुतः किमर्थम् कियत् इह अत्र तत्र सर्वत्र अन्यत्र कुत्र एकत्र सदा अन्यथा एकथा [विस्तरेण पाठनम् - detailed teaching] A) Identify अव्ययानि B) Explain the meaning with reference to the context C) Construct the sentences using अव्ययानि | I A II B III C | 5 | I -01 II-01 | I-0 II-0 III-03 |
| 5. | कारकप्रकरणम् – कर्तृकारकम्, कर्मकारकम्, करणकारकम्, सम्प्रदानकारकम्, अपादान कारकम्, अधिकरणकारकम्, सम्बन्धः, उपपदविभक्तिः सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि A) Discriminate the विभक्ति and their meaning. B) Identify the karakas from Ayurveda texts like करणम् कारणम् C) Construct sentences D) Translate sentences from English to Sanskrit & from Sanskrit to English. | I A II B III C, D | 15 | I- 05 | II-05 III-05 |
| 6. | सन्धिः 6.1 - अच् सन्धिः/स्वरसन्धिः - यण् सन्धि -इको यणचि, गुण सन्धिः=आहुणः वृद्धिसन्धिः-वृद्धिरेचि, अयवायाव सन्धिः - एचोऽयवायावः/वान्तो यि | II | 15 | 10 | 10 |

| | | | | | |
|-----------|--|-----------|-----------|-----------|-----------|
| | <p>प्रत्यये, लोप सन्धिः-लोपः शाकल्यस्य, पररूपसन्धिः-एङि पररूपम्, पूर्वरूपसन्धि- एङः पदान्तादति, प्रकृतीभाव- सर्वत्र विभाषा गोः , प्लुत प्रगृह्य अचि नित्यम् सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि 6.2 - हल्सन्धिः /व्यञ्जनसन्धिः - ध्रुत्वसन्धिः- स्तोः ध्रुना ध्रुः, ष्टुत्वसन्धिः- ष्टुना ष्टुः, जश्त्व सन्धिः-झलां जशो/न्ते, अनुनासिकसन्धिः- यरोऽनुनासिकेऽनुनासिको वा/प्रत्यये भाषायां नित्यम्, परसवर्णसन्धिः-तोर्लिः/वा पदान्तस्य, चर्त्वसन्धिः खरि च, पूर्वसवर्णसन्धिः-झयोऽहोऽन्यतरस्याम्, छुत्वसन्धिः शश्छोऽटि/ छत्वममीति वाच्यम्, अनुस्वारसन्धिः- मोऽनुस्वारः, तुगागमसन्धिः- शि तुक्/छे च/पदान्ताद्वा, रुत्वआदेशसन्धिः-नश्छव्यप्रशान् सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि 6.3 - विसर्गसन्धिः - रुत्वसन्धिः-ससजुषो रुः, उत्त्वसन्धिः-अतो रोरप्लुदादप्लुते/हशि च, रो रि, भो भागो अघो अपूर्वस्य योऽशि , रोऽसुपि , एतत्तदोः सुलोपोऽकोरनञ् समासे हलि, सोऽचि लोपे चेत् पादपूरणम् सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि 6.4.- रुत्वप्रकरणसन्धिः- [सङ्क्षिप्य पाठनम् – Brief teaching] समः सुटि, कानाम्प्रेडिते च, अत्रानुनासिको पूर्वस्य तु वा, अनुनासिकात्परोऽनुस्वारः, खरवसानयोर्विसर्जनीयः, विसर्जनीयस्य सः, सम्पुङ्कानां सो वक्तव्यः </p> | | | | |
| <p>7.</p> | <p>समास 7.1 - अव्ययीभावसमासः - 7.1.1 - अव्ययम् विभक्तिसमीपसमृद्धिव्यर्थार्थाभावात्ययसम्प्रतिशब्दप्रादुर्भावावपञ्चायथानुपूर्व्ययोगप द्यसादृश्यसम्पत्तिसाकल्यान्तवचनेषु 7.1.2. - प्रथमा निर्दिष्टम् उपसर्जनम्, / उपसर्जनं पूर्वम् /नाव्ययीभावादतो/ म् त्वपञ्चम्याः/ तृतीयासप्तम्योर् बहुलम्/अव्ययीभावे चाकाले 7.2. - तत्पुरुष समासः - द्वितीया श्रितातीतपतितगतात्यस्तप्राप्तापनैः, तृतीया तत्कृतार्थेन गुणवचनेन, कर्तृकरणे कृता बहुलम्, चतुर्थी तदर्थार्थ बलिहितसुखरक्षितैः, पञ्चमीभयेन, षष्ठी, सप्तमीशौण्डैः, विशेषणं विशेष्येणबहुलम्, उपमानानि सामान्यवचनैः, नञ्, कर्मधारय, द्विगुः, उपपद तत्पुरुष 7.3 - बहुव्रीहि समासः - अनेकमन्यपदार्थे 7.4 - द्वन्त्वसमासः - चार्थे द्वन्द्वः सूत्रसहितपाठनं परं परीक्षायां सूत्रव्याख्यानादि प्रश्नानि न प्रष्टव्यानि </p> | <p>II</p> | <p>15</p> | <p>09</p> | <p>10</p> |
| <p>8.</p> | <p>शब्दरूपाणि 8.1 - पुल्लिङ्गःशब्दरूपाणि अकारान्तः - वात, वैद्य, रुग्ण, राम आदि इकारान्तः - अग्नि, मुनि आदि उकारान्तः - ऋतु, भानु गुरु आदि ऋकारान्तः - नृ, धातृ, पितृ आदि</p> | <p>I</p> | <p>10</p> | <p>02</p> | <p>14</p> |

| | | | | | |
|------------------|--|-----------------|------------------|------------------|------------------|
| | <p>ओकारान्तः - गो आदि नकारान्त – श्लेश्मन्, रोगिन्, ज्ञानिन् आदि सकारान्त – चन्द्रमस् आदि तकारान्त – मरुत् आदि दकारान्त – सुहृद् आदि जकारान्त – भिषज्, आदि शकारान्तः - कीदृश्, एतादृश् आदि</p> <p>8.2 - स्त्रीलिङ्गःशब्दरूपाणि आकारान्तः - बला, कला, स्थिरा, माला आदि इकारान्तः - सम्प्राप्ति, प्रकृति, मति आदि ईकारान्तः - धमनी, नदी आदि उकारान्तः - रज्जु, धेनु आदि ऊकारान्तः - वर्षाभू, वधू आदि ऋकारान्तः - मातृ आदि चकारान्तः - वाच् आदि तकारान्तः - योषित्, सरित् आदि दकारान्तः - परिषद् आदि जकारान्तः - स्रज् आदि सकारान्तः - जलौकस्, सुमनस् आदि षकारान्तः - प्रावृष् आदि</p> <p>8.3 – नपुंसकलिङ्ग शब्दरूपाणि अकारान्तः - पित्त, वन आदि उकारान्तः - अश्रु, मधु आदि इकारान्तः - अक्षि, अस्थि, वारि, दधि आदि ऋकारान्तः - ज्ञातृ, धातृ आदि नकारान्तः - वर्त्मन्, दण्डिन् आदि सकारान्तः - स्रोतस्, मनस् आदि षकारान्तः - सर्पिष्, आयुष् आदि तकारान्तः - शकृत्, जगत् आदि</p> <p>अष्टाङ्गहृदयसंहितायाम् विद्यमानानाम् अन्यानामपि समानानामरूपाणाम् परिचयकरणम् अभिलषणीयम् प्रश्नपत्रे न प्रष्टव्यम् </p> <p>8.4 - सर्वनामपदानि – अस्मद्, युष्मद्, तद्, एतद्, यद्, किम्, इदम् आदि</p> | | | | |
| <p>9.</p> | <p>धातुरूपाणि – [विस्तरेण पाठनम्-detailed teaching]</p> <p>9.1 - परस्मैपदि - लट्/लृट्/लङ्/विधिलिङ्/लोट् भ्वादि गण - भू सत्तायाम्, क्षि क्षये, गम्(गम्) गतौ, पा पाने, जीव्, पच्, त्यज्, दृश् (पश्य) अदादि गण - अद् भक्षणे, हन् हिम्सागत्योः, वा गतिगन्धनयोः पा रक्षणे, अस्, श्वस्, स्वप्, ब्रू जुहोत्यादि गण- धा धारणपोषणयोः, पृ - पलनपूरणयोः, हा त्यागे, दा (दाञ्) दिवादि गण- दिव् क्रीडादौ, त्रसी उद्वेगे, पुष् पुष्टौ, कुप्, नश्, तुष्, स्निह्, जृ स्वादि गण- चिञ् चयने, शक्, श्रु तुदादि गण- तुद् व्यथने, कृष् विलेखने, लिख् लेखने, दिश्, कृन्त्, क्षिप्, स्पृश्</p> | <p>I</p> | <p>10</p> | <p>05</p> | <p>05</p> |

| | | | | |
|---|-----------|-----------|-----------|-----------|
| <p>रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणे, भुज् तनादि गण- तनु विस्तारे, कृञ् करणे त्रयादि गण- प्रीञ् -तर्पणे कान्ते च, ग्रह उपादाने, ज्ञा चुरादि गण- गण संस्थाने, साध्, ताड्, धृ, कथ् वाक्यप्रबन्धे आत्मनेपदि- भ्वादि गण - वृत् वृत्तने, वृध्(वर्ध्), लभ्, सेव्, रुच् अदादि गण - शीङ् स्वप्ने, ब्रू जुहोत्यादि गण- धा धारणपोषणयोः, दा (दाञ्), दिवादि गण- जनी प्रादुर्भाव, मन्, बुध्, पद्, विद् स्वादि गण- चिञ् चयने, तुदादि गण- तुद् व्यथने, कृष् विलेखने, म्रि, विद्, मुच्, सिञ्च्, रुधादि गण- रुधिर् आवरणे, भिदिर् विदारणे, भुज् तनादि गण- तनु विस्तारे, कृञ् करणे त्रयादि गण- प्रीञ् -तर्पणे कान्ते च, ग्रह उपादाने, ज्ञा चुरादि गण- चुर्, क्षाल्, कथ्, घोष्, भक्ष् आयुर्वेदसंहितासु विद्यमानानां धतुरूपाणां परिचयीकरणम् अभिकाम्यम् 9.2 - लृङ् , आशीर्लिङ्, लिट् , लुङ्, लुङ् [सङ्क्षिप्य पाठनम्-Brief teaching] भ्वादि गण, अदादि गण, जुहोत्यादि गण, दिवादि गण, स्वादि गण, तुदादि गण, रुधादि गण, तनादि गण, त्रयादि गण, चुरादि गण पूर्वोक्तधातुष्वेकस्य पञ्चलकारेषु रूपाणि दर्शयेत् परं परीक्षायाम् न पृष्टव्यानि </p> | | | | |
| <p>10 प्रत्ययाः 10.1 – क्त - क्तवत्, तव्यत् – अनीयर्, शतृ – शानच्, ल्युट् - ष्वुलु, क्त्वा - ल्यप्, णिनिः, क्तिन्, तुमुन् प्रत्ययाणाम् प्रयोगाः एव पृष्टव्याः 10.2 - भावे घञ्, करणे घञ्, भावे ष्यञ्, कर्मणि ष्यत्, कर्त्तरि अच् अप् आयुर्वेदसंहितायां विद्यमानानां भावे/करणे/कर्त्तरि/ताच्छील्ये/ आदि प्रत्ययानां परिचयः करणीयः परं परीक्षायाम् न पृष्टव्याः परीक्षायाम् वाच्य प्रयोगः स्वरूपे पृष्टव्यः </p> | II | 10 | 05 | 6 |
| <p>11 विशेषण विशेष्य</p> | II | 05 | 02 | 03 |

| Paper II – Part A Sanskrit | | | | | |
|-----------------------------------|--|----------------------------|---------------------|---------------------------------|--|
| | A2 List of Topics (Maximum Marks – 80 (SAQ & LAQ only)) | B2 Term | C2 Marks | D2 Lecture hours | E2 Non- Lecture hours |
| 1 | निरुक्ति तथा पर्याय पदानि- A) आयुः, शरीर, मनः, अग्निः, जलम्, वातः, पित्तम्, कफः B) रस, रक्त, मांस, मेद, अस्थि, मज्जा, शुक्र, इन्द्रियम्, श्रोत्रः, चक्षुः, रसना, घ्राण C) धी, धृति, स्मृति, बुद्धी, मति, प्रज्ञा, मूत्र, पुरीषः, स्वेद, आत्मा, रोगः, निदानम्, | A - I B - II C - III | 15 | 7 (A-1, B-3, C-3) | 13 (A- 4, B-4, C-5) |

| | | | | | |
|----------|--|----------------------------|----|------------------------------|------------------------------|
| | रोगिः, भेषजचिकित्सा, आदि | | | | |
| 2 | परिभाषापदानि – A) आयुर्वेदः, पञ्चमहाभूतानि, त्रिगुणम्, दोषाः, मलाः, दूष्यम्, सम्सर्गः, सन्निपातः B) द्रव्य, गुण, कर्म, सामान्य, विशेष, गुरु, लघु, प्रकृतिः, विकृतिः, चयः, प्रकोपः, प्रसरः, स्थानसम्श्रयः, दोषगतिः भेदः, रसः, वीर्यम्, विपाकः, कार्यकारणभावः C) स्रोतस्, कोष्ठः, आमम्, विरुद्धाहम्, विरुद्धाहारः, विदाहि, विष्टम्भि, सात्म्यम्, ओकसात्म्यम्, देशसात्म्यम्, अत्यशनम्, अध्यशनम्, स्थानी, योगवाही, पथ्यम्, अपथ्यम्, कृतान्तवर्गः, अवस्थापाकः, वेगः, शोधन, शमन, लंघन, बृहण, अनुपान आदि | A - I B - II C - III | 20 | 10 (A-2, B-4, C- 4) | 15 (A- 5, B-5, C-5) |

| | | | | | |
|-----------|--|----------------------------|----|--------------------------------|--------------------------------|
| 3. | अन्वयलेखनम् - A) अष्टाङ्गहृदयम् सूत्रस्थानम् - अध्यायतः सर्वाणि सूत्राणि १. आयुष्कामीयम् २. दिनचर्या ३. रोगानुत्पादनीयम् B) अष्टाङ्गहृदयम् सूत्रस्थानम् - अध्यायतः सर्वाणि सूत्राणि दोषादिविज्ञानीयम् दोषभेदीयम् दोषोपक्रमणीयम् द्विविधोपक्रमणीयम् C) वैद्यकीय सुभाषितसाहित्यम् - shloka numbers – (भास्कर गोविन्द घाणेकर लिखित, चौखम्बा प्रकाशन) प्रथमः 1, 2 द्वितीयः 1, 7 तृतीयः 9 चतुर्थः 2, 3 पञ्चमः 2, 3 षष्ठः 1, 4, 7 सप्तमः 2, 5, 17 अष्टमः 13, 12 नवमः 12, 13 दशमः 1, 19 एकादशः 1, 2 द्वादशः 1, 6 त्रयोदशः 1, 7, 8, 9 | A - I B - II C - III | 30 | 20 (A- 4, B- 8, C- 8) | 14 (A- 4, B- 5, C- 5) |
|-----------|--|----------------------------|----|--------------------------------|--------------------------------|

| | | | | | |
|----|---|-----|----|----|----|
| | <p>चतुर्दशः 2, 3, 4</p> <p>पञ्चदशः 7, 10</p> <p>षोडशः 5, 6</p> <p>सप्तदशः 1, 4</p> <p>अष्टादशः 1, 2, 3</p> <p>एकोनविंशतिः 2, 3, 4</p> <p>विंशतिः , 12, 3, 4</p> <p>श्लोकपूरणं न प्रष्टव्यम् परीक्षायाम् पदच्छेदं विग्रहवाक्यम् अन्वयः वाक्यार्थं भावार्थं इत्यादयः एव प्रष्टव्याः </p> | | | | |
| 4. | <p>पञ्चतन्त्र-अपरीक्षितकारकम् ५ अध्याय</p> <p>कथा -१ नापितक्षपणक कथा</p> <p>कथा-२ नकुलीब्राह्मणी कथा</p> <p>कथा-३ चक्रधर कथा</p> <p>कथा-४ सिंहकारक मूर्खपण्डितकथा</p> <p>कथा-५ मूर्खपण्डित कथा</p> <p>श्लोकपूरणं तथा अन्वयलेखनं न प्रष्टव्ये </p> | III | 15 | 03 | 04 |

Paper II – Part B – Ayurved Itihas –

| | A2 List of Topics AyUG SN & AI (Maximum Marks – 20 (MCQ only)) | B2 Term | C2 Marks | D2 Lecture hours | E2 Non- Lecture hours |
|---|---|------------|-------------|------------------------|--------------------------------|
| 1 | Derivation (Vyutpatti and Nirukti) and definition of Itihasa. Necessity, Significance and Utility of knowledge of Ayurveda itihasa. Means and method of study of Ayurveda itihasa. Different Time periods relevant for the Study of Ayurveda itihasa (viz, Prevedic, Vedic, Samhita kala, Sangraha kala etc.) | I | 5 | 1 | 2 |
| 2 | Origin and lineage of Ayurveda (Ayurvedavatarana) and Introduction of references of Ayurveda in Veda, Upanishat and Puarana. | I | | 1 | 2 |
| 3 | Structure, Specialities, Time period of Ayurveda Samhitas and their commentaries (including Special contributions of authors and commentators): Charaka Samhita, Sushruta Samhita, Ashtanga Sangraha, Ashtanga Hridaya, Bhela Samhita, Hareeta Samhita, Kashyapa Samhita. | I | 5 | 2 | 2 |

| | | | | | |
|----|---|-----|---|---|---|
| 4 | Structure, Contributions and importance of Laghutrayee and Commentaries: Madhava Nidana, Sharngadhara Samhita, Bhavaprakasha. | II | | 1 | 3 |
| 5 | Origin and period of different systems of medicine in the world. | II | 5 | 1 | 2 |
| 6 | Introduction to Vrukshayurveda, Hastyayurveda and Ashwayurveda. (Included in Transitional Curriculum) | II | | - | 1 |
| 7 | Status of Ayurveda during the period of Ashoka, Mughal and British rule. | II | | 1 | 2 |
| 8 | Contribution of Scholars of modern era: Acharya Gana Nath Sen, Vaidya Yamini Bhushan Rai, Vaidya Shankar Dajishastri Pade, Acharya Swami Lakshmiram, Acharya Yadavji Tikramji, Dr. PM. Mehta, Vaidya B G Ghanekar, Vaidya Damodar Sharma Gaur, Acharya Priyavrat Sharma, Vaidya C Dwarakanath, Vaidya K R Shrikantamurthy, Vaidya VJ Thakkar, Vaidyaratnam PS Varier, Vaidya B V Gokhale. | III | 5 | 1 | 2 |
| 9 | Globalization of Ayurveda | III | | 1 | 2 |
| 10 | 1)Developmental activities in Ayurveda in the post-independence period: <ul style="list-style-type: none"> • Introduction to various committees and their recommendations • Introduction of activities of the following Organizations : Department of AYUSH, CCIM/ NCISM, CCRAS, 2) National institutions Viz- All India Institute of Ayurved (AIIA), National Institute of Ayurveda, Jaipur. ITRA, Jamnagar. Faculty of Ayurveda, BHU, Varanasi. Rashtriya Ayurveda Vidyapeetha, New Delhi. | III | | 1 | 2 |
| | | | | | |

AyUG- SN & AI -Non Lecture Activities Course

| List non lecture Teaching-Learning methods | No of Activities | Total |
|--|------------------|------------|
| Sanskrit | | |
| Presentation of videos | 2 | 120 |
| Graphical Representation of Vocal system | 1 | |
| Guided Reading, | 5 | |
| Peer learning | 4 | |
| PBL | 36 | |
| Quizes, puzzles, cross word, word cloud | 13 | |
| Group activities | 37 | |
| SDL | 17 | |
| Recitation | 5 | |
| Practical | 60 | |
| Ayurved Itihas | 20 | 20 |
| | | 200 |

Ayurved Itihas-

| List non lecture Teaching-Learning methods | No of Activities |
|--|------------------|
| Group Discussion, | 10 |
| Video clips | 5 |
| Online Search, Project | |
| Tutorial | |
| Quiz, Collage, Puzzle | 5 |
| | TOTAL 20 |

References/ Resources

7. References/ Resources

Sanskrit

Books

1. संस्कृतपाठ्यपुस्तकम् प्रथमः तथा द्वितीयभागः- Sanskrit for Ayurveda part- I and Part –II Published by CCIM New Delhi
2. आयुर्वेदस्य भाषा-पञ्चभागाः- Ayurvedasya bhaSha part I to part –V samskrita samvardhana prathisthan mumbai
3. लघुसिद्धान्तकौमुदिः - वरदराज - Laghusiddhantakaumudi of bhattojidikshita
4. सिद्धान्तकौमुदि – भट्टोजिदीक्षितः siddhantakaumudi
5. वैद्यकीयसुभाषितसाहित्यम् - Vaidyakiyasubhashitasahityam, भास्कर गोविन्द घाणेकर, चौखम्बा प्रकाशन
6. पन्तन्त्रम् अपरीक्षितकारकम् - Pancatantra aparikshitakarakam 1 to 5 stories
7. शब्दकल्पद्रुमः - Sabdakalpadruma:
8. वाचस्पत्यम्- Vachaspatyam
9. अमरकोशः- Amarakosha
10. सिद्धारूपम् - Siddharupam
11. धातुपाठः- Dhatupatha
12. Sanskrit to English and English to Sanskrit Dictionary – Monier Williams
13. Sanskrit to Hindi and Hindi to Sanskrit Dictionary – Va. Shi. Apte
14. Sanskrit to Regional/ Desirable language dictionaries.
15. Ayurvediya Shabdakosha
16. Encyclopedic dictionary of Ayurveda – Dr. Kanjiv Lochan, Dr. P.S. Byadgi (Chaukhambha Publications)

Online Recourses:-

- Crossword Online
<https://crosswordlabs.com/>
- Readymade Sanskrit Puzzles
<http://webapps.samskrutam.com/tools/CrosswordPuzzle.aspx>
- Learning Sanskrit - Pronunciation I
<https://www.sanskrit-trikashaivism.com/en/learning-sanskrit-pronunciation-1-1/456>
- Pronunciation of all Sanskrit letters.....
sanskritdocuments.org
http://sanskritdocuments.org/learning_tools/sarvanisutrani/allisutrani.htm
<http://www.taralabalu.org/panini/greetings.htm>
- Vyakarana –
<https://sites.google.com/site/samskritavyakaranam/>
- कोशाः / Dictionaries -
- Cologne Digital Sanskrit Lexicon:
<https://www.sanskritlibrary.org/cologne.html>

Ayurved Itihas

Reference book

1. Upodghata of Kashyapasamhita (Paragraph of acceptance of Indian medicine) Rajguru Hem Raj Sharma
2. Upodghata of Rasa Yogasagar Vaidya Hariprapanna Sharma
3. Ayurveda Ka Itihas KaviraSuram Chand

4. Ayurveda Sutra Rajvaidya Ram Prasad Sharma
5. History of Indian Medicine (1-3 part) Dr. GirindrNath Mukhopadhyaya
6. A Short history of Aryan Medical Science Bhagwat Singh
7. History of Indian Medicine J. Jolly
8. Hindu Medicine Zimer
9. Classical Doctrine of Indian Medicine Filiyosa
10. Indian Medicine in the classical age AcharyaPriyavrata Sharma
11. Indian Medicine (Osteology) Dr. Harnley
12. Ancient Indian Medicine Dr. P. Kutumbia
13. Madhava Nidana and its Chief Commentaries (Chapters highlighting history) Dr. G.J. Mulenbelt
14. Ayurveda Ka BrihatItihasa Vaidya Atridev Vidyalkara
15. Ayurveda Ka VaigyanikaItihasa Acharya Priyavrata Sharma
16. Ayurveda Ka PramanikaItihasa Prof. Bhagwat Ram Gupta
17. History of Medicine in India Acharya Priyavrata Sharma
18. Vedome Ayurveda Vaidya Ram GopalS hastri
19. Vedomein Ayurveda Dr. Kapil Dev Dwivedi
20. Science and Philosophy of Indian Medicine Dr. K.N. Udupa
21. History of Indian Medicine from Pre-Mauryan to Kushana Period Dr. Jyotirmitra
22. An Appraisal of Ayurvedic Material in Buddhist literature Dr. Jyotirmitra
23. Mahayana Granthon mein nihita Ayurvediya Samagri Dr. RavindraNathTripathi
24. Jain Ayurveda Sahitya Ka Itihasa Dr. Rajendra Prakash Bhatnagar
25. Ayurveda- Prabhashaka Jainacharya Acharya Raj Kumar Jain
26. CharakaChintana Acharya Priyavrata Sharma
27. Vagbhata Vivechana Acharya Priyavrata Sharma
28. Atharvaveda and Ayurveda Dr. Karambelkara
29. Ayurvedic Medicine Past and Present Pt. Shiv Sharma
30. Ancient Scientist Dr. O.P. Jaggi
31. Luminaries of Indian Medicine Dr. K.R. Shrikanta Murthy
32. Ayurveda Ke Itihasa Ka Parichaya Dr. RaviduttaTripathi
33. Ayurveda Ke Pranacharya Ratnakara Shastri
34. Ayurveda Itihasa Parichaya Prof. Banwari Lal Gaur

Padartha Vijnanam

FUNDAMENTAL PRINCIPLES OF AYURVEDA AND QUANTUM MECHANICS

Subject Code -AyUG-PV

| AyUG-PV Course | | | |
|--|----------|------------------|------------------------|
| Total number of Teaching hours: 230 | | | |
| Lecture hours (LH) - Theory | | 90 Hours | 90 Hours (LH) |
| Paper I | 45 Hours | | |
| Paper II | 45 Hours | | |
| Non-Lecture hours (NLH) – Theory | | 140 Hours | 140 Hours (NLH) |
| Paper I | 70 Hours | | |
| Paper II | 70 Hours | | |
| Non-Lecture hours (NLH) - Practical | | Hours | |

Padartha Vijnanam Paper I

| Sr No | A2 List of Topics AyUG-PV Paper I |
|-----------|---|
| 1 | <p>Ayurveda Nirupana</p> <p>1.1 Lakshana of Ayu, composition of Ayu.</p> <p>1.2 Lakshana of Ayurveda. Swaroopaa and Prayojana of Ayurveda</p> <p>1.3 Lakshana and classification of Siddhanta.</p> <p>1.4 Introduction to Basic Principles of Ayurveda and their significance.</p> |
| 2 | <p>Padartha and Darshana Nirupana</p> <p>2.1 Padartha Lakshana, Enumeration and classification of Padartha, Bhava and Abhava Padartha, Padartha according to Acharya Charaka (Karana-Padartha). 2.2 Etymological derivation of the word "Darshana".</p> <p>Classification and general introduction to 9 Schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya, Yoga, Meemamsa and Vedanta darshana.</p> <p>2.3 Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda).</p> <p>2.4 Principles and examples in contemporary sciences which will enhance understanding concept of Padartha.</p> <p>2.5 Relevance of Study of Darshana and Padartha Vignana in Ayurveda</p> |
| 3. | <p>Dravya vijnaneeyam</p> <p>3.1 Dravya: Lakshana, Classification and Enumeration</p> <p>3.2 Panchabhuta: Various theories regarding the creation (theories of Taittiriyanopanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Sushruta), Lakshana and qualities of each Mahabhoota.</p> <p>3.3 Kala: Etymological derivation, Lakshana, division / units and significance.</p> <p>3.4 Dik: Lakshana, division and significance.</p> <p>3.5 Atma: Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (atmanah jnasya pravrittih).</p> |

| | |
|----|---|
| | <p>3.6 Purusha: According to Ayurveda - Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha.</p> <p>3.7 Manas: Lakshana, Synonyms, Qualities, Objects, Functions, dual nature of mind (ubhayaatmakatvam), as a substratum of diseases, Influence of Panchabhoutika aahara and aushadha (penta-elemental diet) on manas. 3.8 Role of Panmahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively.</p> <p>3.9 Tamas as the tenth Dravya.</p> <p>3.10 Practical study/Application and Importance of each Kaarana dravya in Ayurveda.</p> <p>3.11 Principles and examples in contemporary sciences which will enhance understanding concept of Kaarana dravya.</p> |
| 4. | <p>Guna vijnaneeyam</p> <p>4.1 Etymological Derivation, Classification and Enumeration according to various Darshana and Charaka,</p> <p>4.2 Lakshana and Classification of Sartha Guna, Gurvadiguna, Paradiguna, Adhyatmaguna (41 Guna)</p> <p>4.3 Gunapradhanyata (Importance of Guna)</p> <p>4.4 Practical / clinical application of each Guna in Ayurveda</p> <p>4.5 Principles and examples in contemporary sciences which will enhance understanding concept of Guna.</p> |
| 5. | <p>Karma vijnaneeyam</p> <p>5.1 – Introduction of concept of Karma According to Darshana and Ayurveda</p> <p>– Classification of Karma</p> <p>5.3 - Practical application of karma</p> <p>5.4 - Principles and examples in contemporary sciences which will enhance understanding concept</p> |
| 6. | <p>Samanya vijnaneeyam</p> <p>6.1 – Introduction of concept of Saamaanya According to Darshana and Ayurveda.</p> <p>– Classification of Saamaanya</p> <p>6.3 - Practical application of saamaanya</p> <p>6.4 - Principle and examples in contemporary sciences which will enhance understanding the concept of Saamanya.</p> |
| 7. | <p>Vishesha vijnaneeyam</p> <p>7.1 – Introduction of concept of Vishesha according to Darshana and Ayurveda</p> <p>7.2 - Classification of Vishesha</p> <p>7.3 - Practical Application of vishesha</p> <p>7.4- Principles and examples in contemporary sciences which will enhance understanding the concept of Vishesha</p> |
| 8. | <p>Samavaya vijnaneeyam</p> <p>8.1 – Introduction of concept of Samavaaya According to Darshana and Ayurveda.</p> <p>8.2 – Practical application of Samavaaya</p> <p>8.3- Principles and examples in contemporary sciences which will enhance understanding the concept of Samavaya</p> |
| 9 | <p>Abhava vijnaneeyam</p> <p>9.1 – Introduction of concept of Abhaava According to Darshana and Ayurveda.</p> |

| |
|---|
| <p>9.2 – Classification of Abhaava. 9.3 – Practical application of Abhaava 9.4- Principles and examples in contemporary sciences which will enhance understanding the concept of Abhaava.</p> |
|---|

| A2 List of Topics – AyUG-PV | |
|------------------------------------|--|
| 1 | <p>Pariksha 1.1. Definition, Significance, Necessity and Use of Pariksha. 1.2. Definition of Prama, Aprama, Prameya, Pramata, Pramana. 1.3. Significance and importance of Pramana, Enumeration of Pramana according to different schools of Philosophy. 1.4. Four types of methods for examination in Ayurveda (Chaturvidha-Parikshavidhi), Pramana in Ayurveda. 1.5. Subsudation of different Pramanas under three Pariksha. 1.6. Practical application of methods of examination (Parikshavidhi) in Nidan and Chikitsa.</p> |
| 2 | <p>2. Aptopadesha Pariksha/Pramana 2.1. Lakshana of Aptopadesha, Lakshana of Apta. 2.2. Lakshana of Shabda, and its types. 2.3. Shabdavritti-Abhidha, Lakshana, Vyanjana and Tatparyakhya. Shaktigrahahetu. 2.4. Vaakya: Characteristics, Vaakyarthajnanahetu- Aakanksha, Yogyata, Sannidhi. 2.5. Importance of Aptopadesha in maintaining Health, Prevention of Diseases, Diagnostics, Therapeutics and Research.</p> |
| 3. | <p>3. Pratyaksha Pariksha/Pramana 3.1. Lakshana of Pratyaksha, types of Pratyaksha- Nirvikalpaka- Savikalpaka with description, description of Laukika and Alaukika types and their further classification. 3.2. Indriya-prapyakaritvam, six types of Sannikarsha. 3.3. Indriyanam lakshanam, classification and enumeration of Indriya. Description of Panchapanchaka, Penta-elemental nature of Indriya (<i>Panchabhautikatwa</i> of Indriya) and similarity in sources (<i>Tulyayonitva</i>) of Indriya. 3.4. Trayodasha Karana, dominance of Antahkarana. 3.5. Hindrances in direct perception (<i>pratyakshaanupalabdihikaarana</i>), enhancement of direct perception (Pratyaksha) by various instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha. 3.6. Practical study/ application of Pratyaksha in Sharir, Nidan (Diagnosis), Chikitsa (Treatment) and Anusandhan (Research).</p> |
| 4. | <p>4. Anumanapariksha/Pramana 4.1. Lakshana of Anumana. Introduction of Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta. Types of Anumana mentioned by Charaka and Nyayadarshana. 4.2. Characteristics and types of Vyapti. 4.3. Lakshana and types of Hetu, Description of Ahetu and Hetwabhasa. 4.4. Characteristics and significance of Tarka (logic). 4.5. Practical study/ application of Anumanapramana in Sharir, Nidan, Chikitsa and Anusandhan.</p> |
| 5. | <p>5. Yuktipariksha/Pramana 5.1. Lakshana and description.</p> |

| | |
|-----------|---|
| | 5.2. Importance in Ayurveda. 5.3. Practical study and utility in diagnostics, therapeutics and research. |
| 6. | 6. UpamanaPramana 6.1. Lakshana. 6.2. Application in Sharir, diagnostics, therapeutics and research. |
| 7. | Karya- Karana Siddhanta 7.1. Lakshana of Karya and Kaarana. Types of Kaarana. 7.2. Significance of Karya and Kaarana in Ayurveda. 7.3. Different opinions regarding the manifestation of Karya from Kaarana: Satkaryavada, Parinamavada, Vivartavada, Asatkaryavada, Arambhavada, Paramanuvada, Kshanabhanguravada, Pilupaka, Pitharpaka, Anekantavada, Swabhavavada, Swabhavoparamavada. Importance/ Utility of each of these in Ayurveda 7.4 Study of cause effect relationship, causality, causation in Contemporary sciences |

List of Practical

Course AyUG-PV_: Practical List

Marks: 100

Hours:- 45 (included in non Lecture hours)

| SN | Name of Topic/ Name of Practical | Activity / Practical |
|----|-------------------------------------|--|
| P1 | Ayurved Nirupan | Ayurved Perception identification: Ask the meaning of Ayurveda to your parents, friends and family members (min 10) and write it, give your opinion on it. Introduction to communication skills. Conduct of survey. |
| P2 | Darshana and Padartha | <ul style="list-style-type: none"> Darshan concept development: Find and write names of different philosophies? Discussions: meanings of philosophy, darshana, spirituality, religion. Are they same or different? Write in Activity Book. |
| P3 | Hitayu/ Sukhayu lakshanas | • Identification of characters of Hitayu, & Sukhayu in Healthy individuals. |
| P4 | Dravya | <p>1. Identification of Guna and Karma. Make a list of 10 dravyas surrounding you and identify Guna and Karma in it.</p> <p>2. Panchbhautik nature identification: Demonstrate the Panchamahabhuta in any five ahara dravya and five sharira dravya/ avayava with a neat labeled diagramme. (ex-cell, blood, vata, pitta, kapha etc).</p> <p>3. Determination of Directions: Identify the directions in and enlist the content in each direction in your campus.</p> <p>4. Conceptualize Time : Discussion and understanding of Kala as per Ayurved and contemporary sciences.</p> |

| | | |
|----|-------------------|---|
| | | <p>5. Categorization of Aushadhi dravya by dominance of Mahabhoot e.g. Parthiv / Jaleeya/ Agney/ Vayaveey/ Akasheey dravya with reasons.</p> <p>6. Early Clinical Exposure(ECE): Visit the OPD, find the diseases common for different age groups (balyavastha/ tarunyavastha/ vrudhdhavastha)</p> |
| P5 | Guna | <p>Identification:</p> <p>Sartha Guna : Identify concept of Shabda, Sparsha, Rupa, Rasa, Gandha in Dravya.</p> <p>Application and demonstration find the different therapies based on 5 Sartha Gunas. e.g. Gandha. Shabda, Sparsha.</p> <p>Observe /Experience/ Study / Read book or article present on (any one)</p> <p>Aromatherapy- Gandha Chikitsa. Music therapy/ Mamtra Chikitsa - Shabda guna.</p> <p>Sparsha- Touch therapy.</p> <p>Gurvadi Guna:</p> <p>Identify guna in any five ahara dravya : different vargas. in Sharir dravya: dosha, dhatu mala.</p> <p>Comparison Gurvadi gunas and corelate with concepts learned in Physics, Chemistry and Biology.</p> <p>Observation(survey) of the effects of Seasons on Gurvadi gunas in body, nature etc.</p> <p>Paradi Guna and their application in five examples.</p> <p>Atma Guna identification: Making or Framing their real life situations related to Atma Guna(sukha, dukkha etc)</p> |
| P6 | Karma | <p>Conceptualization Karma, its application in branch of Ashtanga Ayurveda.(panchakarma/ Shastrakarma etc</p> <p>Illustration: Make a collage of pictures/ photos depicting five types of karma and their similarity with concepts learned in Physics, Chemistry etc.</p> |
| P7 | Pratyaksha Praman | <p>Observation: Note down the factors from Prakruti analysis which you can understand through pratyaksh (like- colour, dry skin)</p> <p>Identification: Find few identification marks for identification of herbs/ minerals which need Pratyaksha.</p> |

| | | |
|-----|-------------------------------|---|
| | | ECE: Pramans in examination of patient and Diagnosis of disease. |
| | | Identifies the gunas which can be perceived by one sense (ekendriya) organ and more than one sense organ (Dwiendriya etc). Demonstrate with examples of Shabda,(snigdha/ ruksha etc) Sparsha (snigdha/ ruksha etc), Rupa, Rasa(taste threshold video), Gandha. (5 examples) . |
| P8 | Pratyaksha Praman Limitations | Observation: Find out how one can overcome limitations of Pratyaksha by advances in equipment. (microscope, telescope etc) Justification of use of various equipment in examination of patient and Diagnosis of disease. (X ray, USG etc) |
| P9 | Anuman Praman | Application in Real life situation Write 3 examples of Vyapti (associations)in real life. Find and explain 5 examples of Anumana pramana as per types. Write 3 examples of panchavayava vakya. Correlate it with practicals that you have conducted. Examples of Hetvabhas.(Any three) Study use of inference in various sciences. |
| P10 | Samanya Vishesh Siddhant | Identification: Visit vanaushadhi udyan of your college. Find samanyatva and visheshatva among plants. Illustration : Make a chart of food articles and activities to illustrate the relationship of samanya/vishesha with dosha-dhatu-malas. Application: Make a list/ collection of seasonal vegetables and fruits which are Samanya/Vishesha with the dosha.(five examples) |
| P11 | Samvay | Conceptualization Mention five real life examples of Nitya and anitya sambandha. |
| P12 | Abhav | Application: Write five real life experiences of pragabhava, pradhwasabhava, atyantabhava and anyonyabhav. |
| P13 | Upman Praman | Illustration : Upamana in practical life or with your prior learning. (Examples of upamana from Ashtang Hridaya and Charak samhita)and prior learning (Examples in Physics, chemistry etc) |
| P14 | Yukti Praman | Conceptualization: How various factors influence the process of the decision making? Application : Write 5 examples of Yukti in practical life or with your prior learning. ECE: Role of Yukti in Sharir, Nidan, Chikitsa and Anusandhan. |

| | | |
|-----|-------------------------------------|---|
| P15 | Satkaryavad and other vadas | <p>Justification : Parinama vada: Describe 3 real life or with your prior learning examples (Physics, Chemistry etc). Justification of Satkarya vada.: Describe 3 real life or with your prior learning examples. Swabhavoparama vada : Describe 3 real life or with your prior learning examples. Pakajotpatti siddhanta.: Write 3 examples of real life or with your prior learning. Justification of Arambhavada Describe 3 real life or with your prior learning examples</p> |
| P16 | Cause and effect theory | <p>Illustration: Karya Karan Bhav: Write Samavayi, asamavayi and Nimitta Karana of a karya in real life examples (5 examples). Examples learned in Physics, Chemistry, Biology. Search Find out use of cause effect theory in other sciences. Schematic representation of cause effect in any examples.</p> |
| | | <p>Application: Assess the 10 factors of Charakokta Karyakarana bhava regarding any task consider the task as karya Remember and write theories of evolution you learned within and other than syllabus.</p> |
| A1 | Other Activities in Journal. | <ol style="list-style-type: none"> Oral presentation: on allotted topic, PPT slides be made and Copy of slides be pasted in activity book Quiz: Participation of all students in Quiz on some topic of Padartha vijnana. Recitation: Important shloka of padartha vijnana recitation everyday or alternate days by students and written in diary. Each student will do Pick and speak on topics of Padartha Vijnana. e charts / animations etc. |

AyUG-PV- Non Lecture Activities Course -140

| | List non lecture Teaching-Learning methods * | No of Activities |
|----|--|------------------|
| 1 | Group Discussion | 20 |
| 2 | Practicals And Demonstrations | 45 |
| 3 | Activity Based Learning | 10 |
| 4 | Problem Based Learning | 10 |
| 5 | Enquiry Based Learning | 8 |
| 6 | Case Based Learning | 6 |
| 7 | Game Based Learning | 8 |
| 8 | Flipped Classrooms | 6 |
| 9 | Debate | 8 |
| 10 | Seminars | 6 |
| 11 | Tutorials | 5 |
| 12 | Role Play | 5 |
| 13 | Self Directed Learning | 3 |
| | | 140 |

AyUG-PV -Distribution of Practical Exam

Practical – (Practical 100 +Viva 60+Elective 10+ IA 30) =(Total 200 Marks)

| SN | Heads | Marks |
|-----------|--|------------|
| 1 | Practical (Total Marks 100) | 100 |
| a. | Spotting (4 Spots) Problem based on Principles in PV. Topics <ol style="list-style-type: none"> 1. Pratyaksha praman/Pratyaksha Badhakar Bhav 2. Vada (Any one) 3. Abhav/Samavay 4. Upaman/Yukti | 20 |
| b. | Journal of Activity book/ Projects. (Viva on journal and communication skill) | 20 |
| c. | Practical I (10 Marks Each) <ol style="list-style-type: none"> 1. Identify panchamahabhoot dominance in the given dravya 2. Identify Samanya- Vishesh in the given dravyas 3. Identify the Gunas in the given dravyas (Use different dravys for different students.) | 30 |
| d. | Practical II (Problem based questiones/ Situations)(10 Marks Each)(Any three) <ol style="list-style-type: none"> 1. Identify and explain the Karya Karan with types in given problem 2. Frame and Write Panchavayav vakya for the given anumana. 3. Identify Vyapti, Paksh, Sadhya, Hetu, Pakshadharmata, Sapaksha, Vipaksha in the give example. 4. Identify and explain Hetvabhas in given example. 5. Identify the vada applicable in given example.(any one vada.) 6. Identify Upama, Sajna- sajni sambhandha in given example. | 30 |
| 2 | Viva Voce Recitation of Shloka: 10 marks (sutras in Tarka sangraha, Samhitas, other) Questions on Darshan 10 marks Question on Dravya/ Guna/ Karma. 10 marks Question on Samany/vishesh/samavaya/ Abhav 10 Marks Question on one Praman 10 Marks Question on Karya karan bhav 10 Marks. | 60 |
| 3 | Internal Assessment | 30 |
| 4 | Electives | 10 |
| | Total | 200 |

AyUG-PV -References /Recourses

PadarthaVignana books

1. Padarthavigyan
2. AyurvediyaPadarthaVigyana
3. Ayurved Darshana
4. PadarthaVigyana
5. PadarthaVigyana
6. SankhyatantwaKaumadi
7. Psycho Pathology in Indian Medicine
8. CharakEvumSushrutkeDarshanik Vishay
9. AyurvediyaPadarthaVigyana
10. PadarthaVigyana
11. Post graduate text book of Samhitha&Sidhanta
12. Padartha Vigyana
13. AyurvediyaPadarthaVigyana
14. AyurvediyaPadartha Vignan Parichaya
15. AyurvediyaPadartha Darshan
16. Scientific Exposition of Ayurveda
17. Padarthavignana and Ayurveda itihasa
18. Essentials of padarthavignana
19. Padarthavignanevam Ayurveda Itihas
20. AyurvediyaPadarthavignana
21. AyurvediyaMoulikaSiddhanta

Authors

Acharya Ramraksha Pathak
Vaidya Ranjit Rai Desai
Acharya Rajkumar Jain
Kashikar
Balwant Shastri
GajananShastri
Dr. S.P. Gupta
Prof.Jyotirmitra Acharya
Dr. Ayodhya Prasad Achal
Dr. Vidyadhar Shukla
Dr P.P.Kirathamoorthy and Dr Anoop AK
Dr. Ravidutta Tripathi
Vaidya Ramkrishna Sharma Dhand
Vaidya Banwarilal Gaur
Pandit Shivhare
Dr. Sudhir Kumar
Dr C R Agnives
Dr Vinodkumar MV
Dr RamnihorTapsi Jaiswal
Dr C R Agnives
Dr V J Thakkar

Kriyasharir syllabus**Subject code-AyUG KS**

| AyUG KS | | | |
|--|----------|------------------|------------------------|
| Total number of Teaching hours: 400 | | | |
| Lecture hours (LH) - Theory | | 150 Hours | 150 Hours (LH) |
| Paper I | 75 Hours | | |
| Paper II | 75 Hours | | |
| Non-Lecture hours (NLH) – Theory | | 50 Hours | 250 Hours (NLH) |
| Paper I | 25 Hours | | |
| Paper II | 25 Hours | | |
| Non-Lecture hours (NLH) - Practical | | 200 Hours | |

AyUG-KS content of course

| SrNo | List of Topics AyUG-KS - Paper I |
|--------------------------|--|
| PART-A (Marks-60) | |
| 1 | Sharir: Definition and synonyms of term Kriya, Sharir & Shaarir. Description of Sharir Dosha and Manasa Dosha. Mutual relationship between Triguna-Tridosha & Panchmahabhuta. |
| 2 | Basic principles of Ayurveda: Dosha dhatu mala mulam hi shariram. Description of basics of Srotas |
| 3. | Tridosha: General description of Tridosha. Inter relationship between Ritu-Dosha-Rasa- Guna. Biological rhythms of Tridosha on the basis of day-night-age-season and food intake. Role of Dosha in the formation of Prakriti of an individual and in maintaining of health. Prakrita and Vaikrita Dosha. |
| 4. | Vata Dosha: Vyutpatti (derivation), Nirukti (etymology) of the term Vata, general locations, general properties and general functions of Vata, five types of Vata (Prana, Udana, Samana, Vyana, Apana) with their specific locations, specific properties, and specific functions. |
| 5. | Pitta Dosha: Vyutpatti, Nirukti of the term Pitta, general locations, general properties and general functions of Pitta, five types of Pitta (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka) with their specific locations, specific properties, and specific functions. Similarities and differences between Agni and Pitta. |
| 6. | Kapha Dosha: Vyutpatti, Nirukti of the term Kapha, general locations, general properties and general functions of Kapha, five types of Kapha (Bodhaka, Avalambaka, Kledaka, Tarpaka, Śleshaka) with their specific locations, specific properties, and specific functions. |
| 7. | Dosha Vriddhi-Kshaya: Etiological factors responsible for Dosha Vriddhi, Dosha Kshaya and their manifestations. |
| 8. | Kriyakala: Concept of Kriyakala, applied physiology of diseases produced due the vitiation of vata, pitta and kapha. |

| | |
|--------------------------|---|
| 9 | <p>Prakriti: Deha- Prakriti: Vyutpatti, Nirukti, various definitions and synonyms for the term “Prakriti”. Intra-uterine and extra- uterine factors influencing Deha-Prakriti, classification and characteristic features of each kind of Deha-Prakriti. Manasa- Prakriti: Introduction and types of Manasa- Prakriti</p> |
| 10. | <p>Ahara: Definition, classification and significance of Ahara, Ahara-vidhi-vidhana, Ashta Aharavidhi Viseshayatana, Ahara Parinamkar Bhava.</p> |
| 11. | <p>Agni: Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.</p> |
| 12. | <p>Aharapaka (Process of digestion): Description of Annavaha Srotas and their Mula. Description of Avasthapaka (Madhura, Amla and Katu). Description of Nishthapaka (Vipaka) and its classification. Role of Grahani & Pittadhara Kala. Separation of Sara and Kitta. Absorption of Sara. Genesis of Vata-Pitta-Kapha during Aharapaka process. Definition of the term Koshtha. Classification of Koshtha and the characteristics of each type of Koshtha.</p> |
| PART-B (Marks-40) | |
| 1 | <p>Physiology Homeostasis: Definition and mechanisms of maintenance of homeostasis. Cell physiology. Membrane physiology. Transportation of various substances across cell membrane. Resting membrane potential and action potential. Acid-base balance, water and electrolyte balance. Study of basic components of food.</p> |
| 2 | <p>Physiology of Respiratory system: functional anatomy of respiratory system. Definition of ventilation, mechanism of respiration, exchange and transport of gases, neural and chemical control of respiration, artificial respiration, asphyxia, hypoxia. Introduction to Pulmonary Function Tests.</p> |
| 3 | <p>Physiology of Gastrointestinal system: Functional anatomy of gastro-intestinal tract, mechanism of secretion and composition of different digestive juices. Functions of salivary glands, stomach, liver, pancreas, small intestine and large intestine in the process of digestion and absorption. Movements of the gut (deglutition, peristalsis, defecation) and their control. Enteric nervous system. Digestion and metabolism of proteins, fats and carbohydrates. Vitamins & Minerals- sources, daily requirement, functions, manifestations of hypo and hypervitaminosis.</p> |
| 4 | <p>Physiology of Nervous System: General introduction to nervous system, neurons, mechanism of propagation of nerve impulse, physiology of CNS, PNS, ANS; physiology of sensory and motor nervous system, Functions of different parts of brain, intelligence, memory, learning and motivation. Physiology of sleep and dreams, EEG. Physiology of speech and articulation. Physiology of temperature regulation.</p> |
| 5 | <p>Physiology of Endocrine glands: General introduction to endocrine system, classification and characteristics of hormones, physiology of all endocrine glands, their functions and their effects.</p> |

PAPER II

| | |
|-----------------------------------|---|
| A2 List of Topics Paper II | |
| PART-A (Marks-60) | |
| 1 | <p>Dhatu: Etymology, derivation, definition, general introduction of term Dhatu, different theories related to Dhatuposhana (Dhatuposhana Nyaya)</p> |

| | |
|-----|--|
| 2 | Rasa Dhatu: Etymology, derivation, location, properties, functions and Praman of Rasa-dhatu. Physiology of RasavahaSrotas, Formation of Rasa Dhatu from Aahara Rasa, circulation of Rasa (Rasa-Samvahana), role of Vyana Vayu and Samana Vayu in Rasa Samvahana. Description of functioning of Hridaya. Ashtavidha Sara, characteristics of Tvakasara Purusha, conceptual study of Aashraya-Aashrayi Bhaava and its relation to Rasa and Kapha. Manifestations of kshaya and Vriddhi of Rasa |
| 3. | Rakta Dhatu: Etymology, derivation, synonyms, location, properties, functions and Praman of Rakta Dhatu. Panchabhautikatva of Rakta Dhatu, physiology of Raktavaha Srotas, formation of Raktadhatu, Ranjana of Rasa by RanjakaPitta, features of Shuddha Rakta, specific functions of Rakta, characteristics of Raktasara Purusha, manifestations of Kshayaand Vriddhi of Raktadhatu, mutual interdependence of Rakta and Pitta. |
| 4. | Mamsa Dhatu: Etymology, derivation, synonyms, location, properties and functions of Mamsa Dhatu, physiology of Mamsavaha Srotas, formation of Mamsa Dhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsa Dhatu, Concept of Peshi. |
| 5. | Meda Dhatu: Etymology, derivation, location, properties,functions and Praman of Meda Dhatu, physiology of Medovaha Srotas, formation of Medo Dhatu, characteristics ofMedasara Purusha and manifestations of Kshaya and Vriddhi of Meda. |
| 6. | Asthi Dhatu: Etymology, derivation, synonyms, location, properties, functions of Asthi Dhatu. Number of Asthi. Physiology of Asthivaha Srotas and formation of Asthi Dhatu,characteristics of Asthisara Purusha, mutual interdependence of Vata and Asthi Dhatu, manifestations of Kshaya and Vriddhi of Asthi Dhatu. |
| 7. | Majja Dhatu : Etymology, derivation, types, location, properties, functions and Praman of Majjaa Dhatu, physiology of Majjavaha Srotas, formation of Majja Dhatu, characteristics of Majja Sara Purusha, relation of Kapha, Pitta, Rakta and Majja, manifestations of Kshaya and Vriddhi of Majja Dhatu. |
| 8. | Shukra Dhatu: Etymology, derivation, location, properties, functions and Praman of Shukra Dhatu, physiology of Shukraravaha Srotas and formation of Shukra Dhatu. Features of Shuddha Shukra, characteristics of Shukra-Sara Purusha, manifestations of Kshaya and Vriddhi of Shukra Dhatu. |
| 9 | Concept of Ashraya-Ashrayi bhava i.e. inter-relationship among Dosha, Dhatu Mala and Srotas. Applied physiology of diseases asserting saptadhatu enlisted under dhatu pradoshaj vikar. |
| 10. | Ojas: Etymological derivation, definition, formation, location, properties, Praman, classification and functions of Ojas. Description of Vyadhikshamatva. Bala Vriddhikara Bhava. Classification of Bala. Etiological factors and manifestations of Ojavisrams, Vyapat and Kshaya. |
| 11. | Upadhatu: General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu. Stanya: Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya. Artava: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavavaha Srotas. Tvak: classification, thickness of layer and functions. |
| 12. | Mala: Etymological derivation and definition of the term Mala. Aharamala: Enumeration and description of the process of formation of Aharamala. Purisha: Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshhaya of Purisha. Mutra: Etymological derivation, definition, formation, properties, quantity and functions of Mutra. |

| | |
|--------------------------|---|
| | Physiology of Mutravaha Srotas, physiology of urine formation in Ayurveda, manifestations of Vrid-dhi and Kshhaya of Mutra. Sveda: Etymological derivation, definition, formation and functions of Sveda. Manifestations of Vrid-dhi and Kshhaya of Sveda. Discription of Svedvaha Srotas Dhatumala: Brief description of each type of Dhatumala. |
| 13 | Indriya vidnyan: Physiological description of Panchagyaanendriya and physiology of perception of Shabda, Sparsha, Rupa, Rasa and Gandha. Physiological description of Karmendriya. |
| 14 | Manas: Properties, functions and objects of Manas. Physiology of Manovaha Srotas. |
| 15 | Atma: Properties of Atma. difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body. |
| 16 | Nidra & Swapna: Nidrotpatti, types of Nidra, physiological and clinical significance of Nidra; Svap-notpatti and types of Svapna. |
| PART-B (Marks-40) | |
| 1 | Haemopoetic system: composition, functions of blood and blood cells, Haemopoiesis (stages and development of RBCs, and WBCs and platelets), composition and functions of bone marrow, struc-ture, types and functions of haemoglobin, mechanism of blood clotting, anticoagulants, physiological basis of blood groups, plasma proteins, introduction to anaemia and jaundice. |
| 2 | Immunity: classification of immunity: Innate, acquired and artificial. Different mechanisms in-volved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity. Hypersensitivity. |
| 3 | Physiology of cardio-vascular system: Functional anatomy of cardiovascular system. Cardiac cy-cle. Heart sounds. Regulation of cardiac output and venous return. Physiologicalbasis of ECG. Heart-rate and its regulation. Arterial pulse. Systemic arterial blood pressure and its control. |
| 4 | Muscle physiology: comparison of physiology of skeletal muscles, cardiac muscles and smooth mus-cles. Physiology of muscle contraction. |
| 5 | Adipose tissue: lipoproteins like VLDL, LDL and HDL triglycerides. Functions of skin, sweat glands and sebaceous glands. |
| 6 | Physiology of male and female reproductive systems: Description of ovulation, spermatogenesis, oogenesis, menstrual cycle. |
| 7 | Physiology of Excretion: functional anatomy of urinary tract, functions of kidney. Mechanism of for-mation of urine, control of micturition. Formation of faeces and mechanism of defecation. |
| 8 | Special Senses, Sleep and Dreams: Physiology of special senses. physiology of sleep and dreams |

AyUG-KS List of practicals-

| | List of Topics |
|----|---|
| 1 | Dhatu sararata parikshana |
| 2. | Demonstrate laboratory equipment (spotting) |
| 3. | Demonstrate blood collection |
| 4. | Estimate haemoglobin |
| 5. | Estimate bleeding time & clotting time |

| | |
|-----|--|
| 6. | Estimate blood grouping |
| 7. | Prakriti parikshana |
| 8. | Dosha vriddhi kshaya parikshana |
| 9. | Dhatu vriddhi kshaya parikshana |
| 10. | Nadi parikshana |
| 11. | Pulse examination |
| 12. | WBC estimation |
| 13. | RBC estimation |
| 14. | DLC estimation |
| 15. | Measurement of Blood pressure |
| 16. | Perform the procedure Inspection of respiratory system |
| 17. | Perform the procedure Inspection of heart sound |
| 18. | Agni parikshana |
| 19. | Koshtha parikshana |
| 20. | Urine examination |
| 21. | Demonstrate ESR, PCV |
| 22. | Observe the procedure of ECG |
| 23. | Perform the procedure of examining the cranial nerves and reflexes |

AyUG-KS Non-Lecture Activities - Total Non-Lecture hours-250

| Theory Non Lecture 50 (Paper I -25 & Paper II-25) | |
|--|---------------------------------|
| 1. | Assignment - homework based |
| 2. | Brainstorming |
| 3. | Buzz group |
| 4. | Case based learning |
| 5. | Confusion technique |
| 6. | Debate |
| 7. | Demonstration |
| 8. | Direct observation skill (DOPS) |
| 9. | Flipped classroom |
| 10. | Group Discussion |
| 11. | Jigsaw or puzzle |
| 12. | Mnemonics |
| 13. | Model based learning |
| 14. | Online teaching aids |
| 15. | Panel discussion |
| 16. | Problem based learning |
| 17. | Real-life experience |
| 18. | Recitation |
| 19. | Role Play |
| 20. | Self directed learning |
| 21. | Seminar by students |

| | |
|---|--|
| 22. | Simulated condition |
| 23. | Skill assessment |
| 24. | Symposium |
| 25. | Team project work |
| 26. | Think-Pair-Share |
| 27. | Tutorial |
| 28. | Video show |
| Practical Non- Lecture 100 (200 hours) | |
| 1. | Ayurveda Practicals – 50 |
| 2. | Modern Practicals – 30 |
| 3. | Activity based learning – 20 |
| | Communication Skills, Small project / Experiment designing, Task-based learning, Teamwork based learning, Team project, Problem Based Learning (PBL)/(CBL), Group Discussion, Workshops, Field visits, Preparation of charts 1, models and computerized simulation models etc. , Seminar presentations by students |

References / Resources

- Ayurvediya Kriyasharir - Ranjit Rai Desai
- Kayachikitsa Parichaya - C. Dwarikanath
- Prakrit Agni Vigyan - C. Dwarikanath
- Sharir Kriya Vigyan - Shiv Charan Dhyani
- Abhinava Sharir Kriya Vigyana - Acharya Priyavrata Sharma
- Dosha Dhatu Mala Vigyana - Shankar Gangadhar Vaidya
- Prakrita Dosha Vigyana - Acharya Niranjana Dev
- Tridosha Vigyana - Shri Upendranath Das
- Sharira Tatva Darshana - Hirlekar Shastri
- Prakrita Agni Vigyana - Niranjana Dev
- Deha Dhatvagni Vigyana - Vd. Pt. Haridatt Shastri
- Sharir Kriya Vigyana (Part 1-2) - Acharya Purnchandra Jain
- Abhinava Sharir Kriya Vigyana - Dr. Shiv Kumar Gaur
- Pragyogik Kriya Sharir - Acharya P.C. Jain
- Kaya Chikitsa- Ramraksha Pathak
- Kaya Chikitsa Parichaya - Dr. C. Dwarkanath
- Concept of Agni - Vd. Bhagwan Das
- Purush Vichaya - Acharya V.J. Thakar
- Kriya Sharir - Prof. Yogesh Chandra Mishra
- Sharira Kriya Vijnana (Part 1 and 2) – Nandini Dhargalkar
- Sharir Kriya Vigyana - Prof. Jayaram Yadav & Dr. Sunil Verma.
- Kriya Sharir mcq – Dr. Kiran Tawalare
- Basic Principles of Kriya-Sharir (A treatise on Ayurvedic Physiology) - Dr. Srikant Kumar Panda
- Sharir Kriya – Part I & Part II – Dr. Ranade, Dr. Deshpande & Dr. Chobhe
- Human Physiology in Ayurveda - Dr Kishor Patwardhan
- Textbook of Physiology - Gyton & Hall
- Review of medical physiology – William Ganong
- Essentials of Medical Physiology - Sembulingam, K.

- Concise Medical Physiology - Chaudhari, Sujit. K.
- Fundamental of Anatomy & Physiology - Martini
- Principals of Anatomy & Physiology - Tortora & Grabowski
- Human Physiology - Richards, Pocock
- Samson Wrights Applied Physiology, Keele, Neil, joels
- Ayurveda Kriya Sharira - Yogesh Chandra Mishra
- Textbook of Medical Physiology - Indu Khurana
- Tridosha Theory - Subrahmanya Shastri
- Dosha Dhatu Mala vigyan – S. G. Vartak
- Purush Vichaya – Jayanad Thakar
- All Samhitas.
- Ayurvediya Shabda kosha.
- Vachaspatyam
- Shabdakalpadrum
- Monir Williams Sanskrit dictionary.

Rachana Sharir (Human Anatomy)**Subject code- AyUG-RS**

| AyUG-RS | | | |
|--|----------|------------------|------------------------|
| Total number of Teaching hours: 500 | | | |
| Lecture hours (LH) - Theory | | 180 Hours | 180 Hours (LH) |
| Paper I | 90 Hours | | |
| Paper II | 90 Hours | | |
| Non-Lecture hours (NLH) – Theory | | 80 Hours | 320 Hours (NLH) |
| Paper I | 40 Hours | | |
| Paper II | 40 Hours | | |
| Non-Lecture hours (NLH) - Practical | | 240 Hours | |

AyUG-RS -Content of course

| SN | A2 List of Topics AyUG-RS |
|----|--|
| 1 | Shariropkramaniya Shaarira <ul style="list-style-type: none"> • Sharir and Shaarir vyakhya (definitions of sharira and shaarira) • Shadangatvam (Six regions of the body) • Anga Pratyanga vibhaga (subdivisions) • Sharir shastra vibhag • Sharir gyan prayojan and its description in contemporary science with its clinical importance |
| 2 | Paribhasha Shaarira <ul style="list-style-type: none"> • Kurcha, Kandara, Jala, Asthisamghata, Seemnta, Seevani, Rajju, and lasika • Terminologies related shadang sharir |
| 3. | Garbha Shaarira <ul style="list-style-type: none"> • Garbha Vyakhya (Definition of Garbha) • Concept of Shukra and Artava • Garbhavkranti. Masanumasik grabhavruddhi • Role of panchamahabhoot in Garbhavruddhi • Concept of Beeja, Beejabhaga, Beejabhagavayava • Garbhposhana • Apari nirmitti, Garbhanabhinadi • Garbha Angapratyanga utpatti according to different Acharya • Garbha Vikruti |
| 4. | Asthi Shaarira Enumeration of Asthi, Types, asthi swaroopa, with its applied aspect |
| 5. | Sandhi Shaarira <ul style="list-style-type: none"> • Description of Sandhi and its enumeration, • Types of Sandhi with its clinical importance • Introduction of diseases of Sandhi explained in Ayurveda |
| 6. | Snayu sharir Concept of Snayu and its clinical importance |

| | |
|----|--|
| 7. | <p>Peshi Shaarira</p> <ul style="list-style-type: none"> • Description of Peshi, • Utpatti, types, Swaroop, function with its importance |
| 8. | <p>Kesha, Danta, Nakha Sharir</p> <ul style="list-style-type: none"> • Description of Panchbhautik swaroop and its applied value • Explanation of its swabhava (Pitruja) and its applied value • Description of Prakrita (normal) and Vikruta(abnormal) Swaroop (appearance) of kesha, danta, nakha in concern with disease • Importance of examination of kesha, danta, nakha as diagnostic tool |
| 9 | <p>Embryology</p> <ul style="list-style-type: none"> • Definitions and branches of embryology. • Embryo and Fetus. Sperm and Ovum, Fertilization, Cleavage. • Germ layers formation and their derivatives. • Laws of heredity, Sex determination and differentiation, Month-wise development of embryo. • Fetal circulation, Placenta formation, Umbilical cord formation |
| 10 | <p>Osteology</p> <ul style="list-style-type: none"> • Bone: structure, types and ossification. • Description of each bone with clinical anatomy |
| 11 | <p>Arthrology</p> <ul style="list-style-type: none"> • Joints: structure, types and movements. • Description of joints of extremities, inter-vertebral joints and temporomandibular joint with their clinical anatomy. |
| 12 | <p>Myology</p> <ul style="list-style-type: none"> • Structure and types of muscles. Description of important muscles: origin, insertion, actions, nerve supply and clinical anatomy. • Muscle movements in Yogasana. |
| 13 | <p>Nervous System</p> <ul style="list-style-type: none"> • Nervous system: Introduction and classification • Meninges • Description of Brain and Spinal cord. • Description of Peripheral Nervous System: Cranial and Spinal nerves, Brachial, Cervical, Lumber and Sacral nerve plexus, • Anatomical consideration of Autonomic Nervous System, • Formation and circulation of cerebrospinal fluid • Blood supply of Brain and Spinal cord. |
| 14 | <p>Endocrinology</p> <ul style="list-style-type: none"> • Description of endocrine glands (Pituitary, Thyroid, Parathyroid, Thymus, Pineal and Suprarenal glands) with clinical aspects. • Histology of all glands. |
| 15 | <p>Lymphatic system</p> <ul style="list-style-type: none"> • Introduction Structure included in lymphatic system: Lymph vessels, Lymph nodes, Lymph glands with their clinical importance. |

| SN | A2 List of Topics AyUG-RS |
|----|---|
| 1 | Pramana Sharira: Anguli pramana & Anjali praman with its applied importance |
| 2 | Koshtha Evam Ashaya Sharira <ul style="list-style-type: none"> • Definition of Koshtha with its applied importance and • Enumeration of Koshtanga and its description • Concept of Ashaya with its clinical importance |
| 3. | Sira Sharir <ul style="list-style-type: none"> • Concept of Sira • Nirukti, types, enumeration of Sira and its applied aspect • Introduction to Sira vedha |
| 4. | Dhamani Sharir <ul style="list-style-type: none"> • Concept of Dhamani • Nirukti, types, enumeration of Dhamani and its applied aspect |
| 5. | Strotas Shaarira <ul style="list-style-type: none"> • Concept of Strotas • Nirukti, types, number of Strotas, Strotomool and its applied aspect • Types of Strotas and its description. • Applied aspect of Strotas |
| 6. | Kala Shaarira <ul style="list-style-type: none"> • Definition and etymology of Kala • Enumeration and description of Kala • Applied aspect of Kala |
| 7. | Indriya Shaarira <ul style="list-style-type: none"> • Definition of Indriya, Indriya artha and Indriya adhisthan, • Number and importance of Indriya • Description of Gyanendriya, Karmendriya and Ubhayendriya (Manas). • Ayurved sharir of Indriya adhisthan- Karna, Twacha, Netra, Jivha, Nasa • Applied aspect of Indriya |
| 8. | Twacha Sharir Definition, types and characteristics of Twacha with its clinical importance, significance of Twacha adhisthana in disease manifestation, its relation with Dhatu. |
| 9 | Marma Sharira <ul style="list-style-type: none"> • Marma: definition, enumeration, classification, location • Surface demarcation of Marma • Explanation of Trimarma • Detail description of Marma with its applied importance. |
| 10 | Respiratory System <ul style="list-style-type: none"> • Bronchial tree and Lungs with their clinical aspects. • Respiratory tract: Nasal cavity, Pharynx, Larynx, Trachea • Pleura with its clinical aspects • Diaphragm and its opening • Histology of all organs |

| | |
|-----------|--|
| 11 | Digestive system <ul style="list-style-type: none"> • Regions of abdomen • Organs of digestive tract (alimentary tract) with their clinical aspects. • Digestive glands: Liver, Spleen and Pancreas. • Description of peritoneum with its clinical aspects • Histology of all organs |
| 12 | Cardiovascular system <ul style="list-style-type: none"> • Description of Heart • Structure of artery & vein • Importance blood vessels with their course and branches. • Pericardium with applied aspect • Histology of Heart |
| 13 | Urinary System <ul style="list-style-type: none"> • Urinary tract: Kidney, Ureter, Urinary Bladder and Urethra with their clinical aspects • Histology of all organs |
| 14 | Reproductive system <ul style="list-style-type: none"> • Male Reproductive system: Reproductive organs, Scrotum and glands (Testis, Prostate and Seminal vesicles) with their clinical aspects. • Female reproductive system: Introduction of external genital organ in brief and internal reproductive organs in detail, tract and glands with clinical importance. • Histology of all organs |
| 15 | Sensory organs Description of structures of Eye, Ear, Nose, Tongue and Skin with their clinical aspects. |

AyUG-RS List of practicals-

| SN | Name of Practical |
|----|--|
| P1 | <ul style="list-style-type: none"> • Branches of anatomy. History of Anatomy • Ethics in dissection hall |
| P2 | Anatomical Terminologies Anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves. |
| P3 | Preservation methods of the cadaver, Mrut sharir Samshodhan <ul style="list-style-type: none"> • Different methods of preservation techniques. Brief introduction of chemical composition of preservative fluid. |
| P4 | Introduction of Anatomy Act and Brief detailing about Bio medical waste management act 1960 |
| P5 | Shava vichhedana – detailed dissection of the whole body <ul style="list-style-type: none"> • Line of incision • Dissection technique • Identification of different tools and its Uses • Identification and characteristics of Different layers and its relation |
| | <u>In Extremities:</u> Dissection of extremities & Identification of related structures |
| | <u>In Trunk region:</u> Demonstration of visceral relation of thoracic, abdominal and pelvic organ |
| | <u>In Head Region:</u> Dissection of head, Identification of Meninges, Major Sulci and gyri, Superficial origin of Cranial Nerve and venous Sinus. |

| | |
|-----|--|
| | Dissection of sensory organs |
| P6 | <ul style="list-style-type: none"> Practical study of vital organs, Histological slides Identification of external features of thoracic, abdominal and pelvic viscera |
| P7 | Practical study of bones |
| | Identification of external features of bones and different attachment |
| | <p>Surface and Radiological anatomy</p> <p><u>In Radiology Anatomy:</u> Characteristics of radio imaging film and detailing about its color contrasting</p> <p>Identification of Normal alignment of bodily structure – X ray film</p> <ol style="list-style-type: none"> Chest X Ray – A.P And P.A view Detailing of A.P view of Shoulder joint, Elbow Joint, Wrist joint, Hip joint, knee joint, Ankle joint. Identification of basic clinical finding through X ray film related to long bones and Joints |
| P8 | <p><u>In Surface Anatomy Section:</u></p> <ul style="list-style-type: none"> Identification of Underlying viscera of Nine region based upon Cadaveric and Living Anatomy <p>Surface marking of thoracic, abdominal and pelvic viscera</p> |
| P9 | <p>Practical study of Marma</p> <p>Surface markings of all Marma points and its anatomical demarcation.</p> |
| P10 | Brief detailing about body donation, organ donation and its awareness (Communication skills) |

AyUG-RS Non-Lecture Activities -

| 1 | List non lecture Teaching-Learning methods | No of Activities (Values in hours) |
|---|---|------------------------------------|
| a | Seminar / Workshop | 14 |
| b | Tutorial (TT) / Group Discussion (GD) | 14 |
| c | Problem based learning (PBL) | 8 |
| d | Integrated teaching (IT) | 8 |
| e | Early Clinical Exposure (ECE)/ Case Base Learning (CBL) | 18 |
| f | Self-Directed Learning (SDL) / Summary writing | 12 |
| g | Field visit | 6 |
| | | 80 |
| 2 | Practical (refer Table 4) | 240 |
| | Total | 320 |

AyUG-RS-Other Educational Activities (Additional):

- Field visit (community/anatomy museum) - II & III term
- Practical journal – II & III term
- Summary/ Essay writing (Research papers/Samhitas literature review)- II or III term

AyUG-RS Distribution of practical examination-

| SN | Heads | Marks |
|----|--|-------|
| 1 | Spotting (Refer Table 6 H II below) | 20 |
| 3 | Kostha Ashay Sharir, Dissected organs and histology slides | 20 |
| 4 | Ashti, Sandhi, Peshi, Bones and Joints, | 20 |

| | | |
|---|---|------------|
| 5 | Marma Sharir, Surface & Radiological anatomy | 20 |
| 6 | Practical record (15 Marks) and Communication Skill (5 Marks) | 20 |
| 7 | Viva-Voce (Objective Structured) (Refer table 6 H – III) | 70 |
| 8 | Internal assessment | 30 |
| | Total Marks | 200 |

AyUG-RS -Reference and Resources

1. Parishadhya Shabdarth Sharir
2. Pratyaksha shaririram
3. Sharisthana of all Samhita
4. Sushrut Samhita Sharirshtana- Dr. Bhaskar Govind Ghanekar
5. Brihat Shariram Vaidyaratna- P.S. Varrier
6. Abhinava Shariram- Acharya Damodar Sharma Gaur
7. Manava Sharir (Revised Edition)- Prof. Dinkar Govind Thatte
8. Sharir Rachana Vigyan (English)- Vaidya P.G. Athawale
9. Manual of Practical Anatomy Cunnigham Practical Manual Vol-1, Vol-2, Vol-3
10. Clinical Anatomy in Ayurveda - Prof. D.G. Thatte & Prof. Suresh Chandra
11. Ayurvedic Human Anatomy - Prof. Dr. Giridhar M. Kanthi
12. Sharir Rachana Vigyan Vol I & II– Dr. Sunil Kumar Yadav
13. Regional Anatomy - B. D. Chaurasia
14. Rachana Sharir Vigyana - Dr. Mahendra Sing
15. Relevant chapters of Brihtrayee and Laghuthrayee
16. Gray's Anatomy
17. Text Book of Human Anatomy- Inderbir Singh
18. Clinical Anatomy- Richard S Snell
19. Fundamentals of Human Anatomy- Dr. Chakraborty
20. Human Osteology - Poddar
21. A Handbook of Anatomical Terminology, Dr. Nidhi Shrivastava, Dr. Ravi Kumar Shrivastava, Dr. Rakesh Kumar Sharma.

Samhita Adhyayan 1 Syllabus- Subject Code: AyUG-SA1**Theory- Two Papers****Teaching Hours - 400 [Lecture (LH) - Theory -140, Non-Lecture (NLH) – Theory**

| Sr No | A2 List of Topics AyUG-SA1 |
|-------|---|
| 1. | <p>Introduction to Samhita-</p> <ul style="list-style-type: none"> i. Definition of Samhita and its types and nomenclature. (Samhita- forms, nomenclature, commentary, types etc.) ii. Brief Introduction of Samhitas (Bruhatrayee), their commentaries and commentators (Preceptors, authors, redactors, commentators) iii. Tantrayukti, Tantraguna and Tantradosh iv. RachanaShaili & BhashaShaili (Composition and Language style) of Bruhatrayee. v. Anubandha Chatushtya vi. Ashta-Prashna vii. Trividha Jnyanopaya |
| | Ashta ng Hriday Samhita - Sutrasthan (1-15 Adhyaya) :50 Marks |
| 2. | <p>AH Su.1. Ayushkamiya Adhyaya-</p> <ul style="list-style-type: none"> i. Ashtang Hridaya parichaya (Introduction to Ashtang Hridaya) ii. Dosha-dhatu-mala parichaya (Introduction to dosha, dhatus and mala) iii. Agni- koshta swarup (Concept of digestive fire and bowel habits) iv. Rasa, virya, vipaka prabhav guna parichaya (Introduction to rasa, virya, vipaka, prabhav and guna) v. Rog-aarogya swarup (Concept of health and disease) vi. Roga-aatur parikshan (Assessment of disease and diseased) vii. Desha and kaala parichaya (Introduction to habitat and time) viii. Chikitsa bheda (Types of treatment) ix. Pada chatushtaya Swarupam (Concepts of four factors of treatment) x. Vyadhi sadhyasadyatva (Types of prognosis) xi. Recitation of important shlokas |
| 3. | <p>AH Su.2. Dinacharya Adhyaya-</p> <ul style="list-style-type: none"> i. Dinacharya vihaar (Importance of various regimen in Dinacharya) ii. Shuddhi Niyam (Personal hygiene) iii. Dharmapalan evam sadvrutta palan iv. Recitation of important shloka |
| 4. | <p>AH Su.3. Rutucarya Adhyaya-</p> <ul style="list-style-type: none"> i. Shadrutu (Classification of seasons according to Uttarayan and Dakshinayan) ii. Rutucharya (detailed regimen of the six seasons) iii. Rutusandhi (inter-seasonal period) iv. Recitation of important shlokas |
| 5. | <p>AH Su.4. Roganutpadaniya Adhyaya-</p> <ul style="list-style-type: none"> i. Adharaneeya vega and chikitsa (symptoms arising due to suppression of natural urge and their treatment) ii. Dharneeya vega (Concept of urges which have to be suppressed) iii. Shodhan chikitsa (Importance of purification treatments) iv. Hita-aahar-vihar sevan (Importance of following healthy lifestyle) v. Recitation of important shlokas |
| 6. | <p>AH Su.5. Dravadravaya Vijnaniya Adhyaya-</p> |

| | |
|----|---|
| | <ul style="list-style-type: none"> i. Jala Varga (Water from different sources, various states of water) ii. Dugdha Varga (Milk and milk products) iii. Ikshu Varga (Sugarcane and its products) iv. Madhu varnana (Properties of honey) v. Tail Varga (Oils of various sources) vi. Madya Varga (Types of alcoholic beverages) vii. Mutra Varnana (Types of urine) viii. Recitation of important shlokas |
| 7. | <p>AH Su.6. Annaswaroopa Vijnaneeya Adhyaya-</p> <ul style="list-style-type: none"> i. Shuka- Dhanyanam Samanya Gunah (Properties of various types of cereals) ii. Shimbi- Dhanyanam Samanya Gunah (Properties of various types of Pulses) iii. Mamsasya Samanya Gunah (Properties of meat of various animals) iv. Shakayoh Samanya Gunah (Properties of various types of vegetables) v. Phalayoh Samanya Gunah (Properties of various types of Fruits) vi. Kritanna varganam Samanya Gunah (Properties of various types of cooked food) vii. Aushadhanam Samanya Gunah (Properties of various types of medicinal herbs) |
| 8. | <p>AH Su.7. Annaraksha Adhyaya-</p> <ul style="list-style-type: none"> i. Rajnikate- Vaidyasthiti (Important place of Vaidya in Kings palace) ii. Savishanna Lakshanam (Properties of poisoned food) iii. Savishanna Pariksha (Examination of food contaminated with poison) iv. Savishanna-Lakshana- Aushadha (Signs of food poisoning and its treatment) v. Viruddha Aahar (Incompatible food and food practices) vi. Satmikaran Krama (Method of adaptation of wholesome food habits and to taper unwholesome food habits) vii. Aahar-Shayan-Abrahmacharya – Trayopasthambha (Three accessory pillars of Health) viii. Recitation of important shlokas |
| 9. | <p>AH Su.8. Matrashitiya Adhyaya-</p> <ul style="list-style-type: none"> i. AaharMatra (appropriate quantity of food) ii. Heen-matra, ati-matra bhojan dosha Demerits of excess and less quantity of food) iii. Alasak, Visuchika (Etiopathogenesis and management principles of Vishuchika and Alasak) iv. Apatarpan chikitsa v. Types of Ajeerna (indigestion) and its causes vi. Bhojan-samyak yog (Ideal regimen and time for taking food) vii. KukshiVibhag (Imaginary parts of the stomach) viii. Details of Anupan (Liquid consumed along with or after food) ix. Recitation of important shlokas |
| 10 | <p>AH Su.9. Dravyaadi Vijnaniya Adhyaya-</p> <ul style="list-style-type: none"> i. Dravya shreshthtva(Predominance of Dravya) ii. Dravyasya panchbhautikatvam (Prevalence of Panchamahabhutas in dravyas) iii. Panchbhautik dravyanaam guna (Characteristics of PanchabhautikDravyas) iv. Principles of dravyas viz Veerya-Vipaka- Prabhava v. Recitation of important shlokas |
| 11 | <p>AH Su.10. Rasabhedhiya Adhyaya-</p> <ul style="list-style-type: none"> i. Shadrasanaam utpatti (Origin of Shadrasa) ii. Shadrasa parichaya (Identity of Six Rasas) iii. Shadrasa karma, guna, atiyoga lakshana (Functions, properties, and presentation of excessive intake of Six Rasas.) |

| | |
|--|--|
| | iv. Recitation of important shlokas |
| 12. | AH Su.11. Doshadi Vijnaniya Adhyayai. i. Importance of dosha dhatu mala ii. Dosha dhatu mala prakruta and vaikruta karma (normal and abnormal functions) iii. Dosha dhatu mala ashraya- ashrayi bhava (relation between dosha and dhatus) iv. Samanya chikitsa siddhanta for dosha dhatu mala vruddhi kshaya (treatment principles) vi. Agni (Digestive fire) vi. General pathophysiology for origin of diseases vii. Ojus (Essence of dhatus) viii. Vriddhi-kshaya bshesaja ix. Recitation of important shlokas |
| 13. | AH Su.12. Doshabhedhiya Adhyayai. i. Dosha and dosha bheda (Dosha and their types) ii. Dosha chaya, prakopa, prasham karanani (Causes of dosha accumulation, aggregation and alleviation) iii. Trividhakarana (three causative factors of disease) iv. Trividha Roga marga (three pathways of disease) v. Aatura parikshbhaav (assessment methods) vi. Recitation of important shlokas |
| 14. | AH Su.13. Doshopakramaniya Adhyayai. i. Tridosha- upakrama (Treatment principles of vitiated doshas) ii. Shuddha-ashuddha chikitsa lakshana (Accurate and inaccurate treatment) iii. Dosha gati (movement of doshas inside the body) iv. Concept of aama v. Dasha aushadha-kaala (ten types of times for administering medicines) vi. Recitation of important shlokas vii. Research Updates – Langhan : Fasting and autophagy induction – how cell recycle and renew their content, a process called autophagy. |
| 15. | AH Su.14. Dvididhopakramaniya Adhyayai. i. Concept of Langhan and Brihan therapies (Treatment procedures for making the body thin and for nourishment) ii. Concept of Shodhan and shaman therapies (Purification and palliative treatments) iii. Concept of Atistaulya and atikarshya (Obesity and emaciation) iv. Recitation of important shlokas |
| 16. | AH Su.15. Shodhanadigana Sangraha Adhyayai. i. Groups of dravyas according to specific action ii. Groups of dravyas according to major ingredient as well as action |
| Charak Samhita – Sutrasthan (1-12 Adhyaya):50 Marks | |
| 17. | Ch S Su 1. Deerghanjiviteeya Adhyayai. Ayurvedavataranam (Genealogy of Ayurveda) ii. Arogsya chaturvarge pradhanam karanam iii. Trisutra Ayurveda iv. Details of Shat padartha v. Ayurvedasya lakshanam tatha prayojan vi. Ayusho lakshanam paryayashcha vii. Samanyavisheshayorlakhanam viii. Tridanda |

| | |
|-----|--|
| | <p>ix. Vyadhinam trividho hetusamgrah x. Vyadhinam ashraya tatha Arogasya karanam xi. Atmano lakshanam xii. Details about Sharira and manas dosha xiii. Sadhyaasadhyata vikara chikitsa xiv. Rasa varnanam xv. Dravya bheda xvi. Aushadhinam nama-rupa-upyog gyan xvii. Bhashagbubhushoh kartavyam xviii. Yuktasya bhaishajyasya lakshanam xix. Bhishaktamasya lakshanam xx. Recitation of important shlokas</p> |
| 18. | <p>Ch S Su 2. Apamarga Tanduliya Adhyayai. i. Shiro Virechana Dravya & Main Indications ii. Vamana Dravya & Main Indications iii. Virechana Dravya & Main Indications iv. Asthapana Dravya & Main Indications v. Anuvasana Dravya & Main Indications vi. Ashtavimshathi Yavagu vii. Panchakarma Mahatwa & Vaidya Guna viii. Recitation of important shlokas</p> |
| 19. | <p>Ch S Su 3. Aragvadhya Adhyayai. Dwa Trimshath Churna Pradeha & Main Indications</p> |
| 20. | <p>Ch S Su 4. Shadvirechana-shatashritiya Adhyayai. i. Shadvirechan aashrya ii. Panchkashaya yoni iii. Panchvidh kashaya kalpana iv. Panch kashaya shatani</p> |
| 21. | <p>Ch S Su 5. Matrashiteeya Adhyayai. Matravat Ahara ii. Nature of Ahara (Guru, Laghu) iii. Ahara Matra iv. Matravat Ahara Phala v. Ahara Sevana Vidhana on the bases of its nature vi. Swasthavrutta vii. Anjana viii. Dhumapana ix. Nasya x. Dantadhavana xi. Jivhanirlekhana xii. Gandusha xiii. Abyanga xiv. Parimarjana xv. Vastra Gandha Malyadi Dharana xvi. Shouchavidhi xvii. Kshoura Karma xviii. Padatra Dharana xix. Chatra Dharana</p> |

| | |
|-----|---|
| | <p>xx. Important Shlokas for recitation</p> <p>xxi. Research Updates: Role of Dinacharya to maintain circadian rhythm Role of therapeutic message for cell rejuvenation Mechanism of satiation and proper quantity of food (Sauhitya Matra)</p> |
| 22. | <p>Ch S Su 6. Tasyashiteeya Adhyayai.</p> <p>Classification Samvastara</p> <p>ii. Visarga Kala</p> <p>iii. Adana kal;a</p> <p>iv. Shadrutuvivechana and Charya</p> <p>v. Hamsodaka vi. Saatmya</p> <p>vii. Important shlokas for recitation</p> <p>viii. Research Updates: What causes the season: Summer and winter solistice Equinoxes Rotation of earth around sun.</p> |
| 23. | <p>Ch S Su 7. Naveganadharaniya Adhyayai.</p> <p>i. Adharneeya-Dharneeya vega lakshan, chikitsa</p> <p>ii. Vyayam (Details regarding exercise)</p> <p>iii. Ahita sevan evam varjya vidhi</p> <p>iv. Deha prakruti (Body constitution)</p> <p>v. Agantuja evam Pradnyaapradh janya vyadhi evam chikitsa</p> <p>vi. Impotant Shlokas for recitation</p> <p>vii. Research Updates: Corelation of genomic variation with the classification of Prakriti</p> |
| 24. | <p>Ch S Su 8. Indriyopakramaniya Adhyayai.</p> <p>i. Enumeration of Indriya, Dravya, Adhishthana, Artha, Buddhi</p> <p>ii. Manas Lakshana</p> <p>iii. Ekatvam of Manas</p> <p>iv. Sattvikatva, Rajasatva and Tamasatva of Manas</p> <p>v. Indriya PanchaPanchaka</p> <p>vi. Adhyatma Dravya Guna Sangraha</p> <p>vii. Mahabhuta – Indriya sambandh</p> <p>viii. Prakriti – Vikriti hetu</p> <p>ix. SadvrittaAnushthana</p> <p>x. Hetuchatushtaya xi. AnuktaSadvritta</p> <p>xii. Important Shlokas for Recitation</p> <p>xiii. Research updates: Mental health and gut microbiota</p> |
| 25. | <p>Ch S Su 9. Khuddakachatushpada Adhyayai.</p> <p>i. Chikitsa Chatushpada</p> <p>ii. Roga-Arogya Lakshana</p> <p>iii. Chikitsa Lakshana</p> <p>iv. Vaidya, Dravya (Bheshaja), Paricharaka, Aatura guna</p> <p>v. Vaidya pradhanatva</p> <p>vi. Adnya chikitsak dosha</p> <p>vii. Sadvaidya lakshana</p> <p>viii. Vaidya kartavya</p> <p>ix. Vaidya Vritti</p> <p>x. Recitation of important Shlokas</p> <p>xi. Research Updates: Medical ethics-principles Soft Skill development for medical students Emotional Intelligence as a crucial component in medical edication</p> |
| 26. | <p>Ch S Su 10. Mahachatushpada Adhyayai.</p> <p>i. Catushpaada-bheshajam alamaarogyaayeti (aatreya-krta)</p> |

| | |
|-----|--|
| | <p>ii. Bheshaja-abheshajayo tulyatvapratipaadana – (maitreya-krta)</p> <p>iii. Its conclusion by Atreyaiv.</p> <p>iv. Pareekshya-kaarino hi kusalaa bhavanthi</p> <p>v. Cikitsaa sootram</p> <p>vi. Cikitsaayaam yasolaabhe kaaranam</p> <p>vii. Asaadhyaroga-cikitsaayaam haani</p> <p>viii. Further division of saadhyaasaadhyata</p> <p>ix. Sukha-saadhya lakshanam</p> <p>x. Krcchra-saadhya lakshanam</p> <p>xi. Yaapya lakshanam</p> <p>xii. Pratyaaakhyeya lakshanam</p> <p>xiii. Benefit of knowledge of prognosis</p> <p>xiv. The versatile usage of the term ‘mithyaa-buddhi’</p> <p>xv. Recitation of important shlokas</p> |
| 27. | <p>Ch S Su 11. Tisraishaniya Adhyayai.</p> <p>i. TrividhaEshana (Three Desires of life)</p> <p>ii. Paralokaeshana</p> <p>iii. Chaturvidhpariksha</p> <p>iv. Punarjanma siddhi by Chaturvidhapramanas</p> <p>v. Trayopasthambha</p> <p>vi. Trividhabala</p> <p>vii. Trividhaayatana</p> <p>viii. Atiyoga, Heenayoga and Mithya yoga of artha, karma and kaala</p> <p>ix. Trividharoga</p> <p>x. Treatment for manasavyadhi</p> <p>xi. Trividharogamarga</p> <p>xii. Trividhavaidya</p> <p>xiii. Trividhaoushadha</p> <p>xiv. Ashtatrika</p> <p>xv. Important Shloka for Recitation</p> |
| 28. | <p>Ch S Su 12. Vatakalakaliya Adhyayai.</p> <p>i. Vata guna</p> <p>ii. Views of various Acharyas on Vata dosha Guna avum Karma</p> <p>iii. Vayu prakop-prasham karan</p> <p>iv. Akupita, kupita vayu karma</p> <p>v. Vata Dosha – Clinical application</p> <p>vi. Akupita-kupita pitta karma</p> <p>vii. Akupita- kupita kapha karma</p> <p>viii. Atreya’s exploration on Tridosha</p> <p>ix. Important shloka for recitation</p> |

Non Lecture Activities Course AyUG-SA1

Non Lecture activities- (Samhita Pathan / In Class Activities & Hospital Based activities) : 260 hrs

| SN | Name of Practical |
|-----|---|
| 1. | Samhita Pathan |
| | In Class Activities/ Case Based Activities/ Field Activities |
| 2. | 1. Introduction to Samhita Problem based learning : Application of Tantrayukti for chapter number 1, 2 of Ashtang Hridaya and chapter 1 st of charak Samhita. |
| | Group Activity Interpret Anubandha Chatushtya with examples Interpret Ashta Prashna with example |
| | Ashtang Hriday Samhita - Sutrasthan (15Adhyaya) |
| 3. | AH Su 1. Ayushkamiya Adhyaya Commentary Based activity- Fetch the meaning of important terms on the basis of commentary. (Any 30 important words). Make your own dictionary. |
| 4. | AH Su 2. Dinacharya Adhyaya- Survey Activity: Application of concepts- Dinacharya and its application: Proforma based assessment in healthy volunteers/ patients. Daily routine shall be recorded on the basis of predesigned proforma and then shall discuss. Communication Skill introduction. Survey Role play. |
| 5. | AH Su 3. Rutucarya Adhyaya- Application of concepts- Ritucharya and application - Proforma based assessment in healthy individuals or patients. |
| 6. | AH Su 4. Roganutpadaniya Adhyaya- Case Based Activity/Learning- Assess the sign and symptoms of given case on the basis of learning of Adharaneeya Vegas and find out the probable causative factors on the basis of principles taught. |
| 7. | AH Su 5. Dravadravya Vijnaniya Adhyaya Group Activity-(Group presentation)- Utility of Dravyas:- Allocate the Dravadravya Vargas among student groups. Every group will Justify (represent) the practical utility of dravyas allotted to them. |
| 8. | 6. Annaswaroopa Vijnaneeya Adhyaya- Group presentation- Justify the utility of this chapter in present era- Every group will illustrate the utility of their assigned Aahara Dravya Varga (Discuss practically available dravyas) |
| 9. | 7. Annaraksha Adhyaya- Discussion- Explore the present dietary habits- Explore the Various diet combinations used in present society (by four family/ Relatives/ neighborhood) on the basis of principles learned for viruddhahar. Discuss them in class. Trayopastambha -Importance of Nidra- Flipped classroom- Share the prerecorded videos/ other material with students before class. On the basis of these have discussion. |
| 10. | 8. Matrashitiya Adhyaya- Case Based learning- Determine adverse effects of heena matra (inadequate quantity of food) and atimatra (excess quantity of food) ahara:- |

| | |
|-----|---|
| | <p>(Video clip of patient suffering from a type of Ajeerna can be shared in class and then group wise discussion on the concept.)</p> <p>Group Activity-</p> <p>Differentiate between the food items recommended and non-recommended for daily use:-</p> <p>Cross refer the previous chapters and demonstrate the rationale behind the wholesome or unwholesome nature of these enlisted Dravyas referring their qualities.</p> |
| 11. | <p>9. Dravyaadi Vijnaniya Adhyaya- Application of concepts-</p> <p>Enlist the dravyas according to Rasa, Veerya, Vipaka, Prabhav. (Can refer chapter 5,6,10 of Ashtang Hriday and Chapter 2, 3, 4 of Charak Samhita). Apply the concepts learned in present chapter to understand the action of Dravyas.</p> |
| 12. | <p>10. Rasabhediya Adhyaya- Case based learning-</p> <p>Prepare proforma enlisting the sign and symptoms of excess consumption of six Rasas and regular diet pattern. Assess the predominance of Rasa consumption in patients or healthy volunteers. Then Correlate with the case findings.</p> |
| 13. | <p>11. Doshadi Vijnaniya Adhyaya- Case Based learning-(CBL)-</p> <p>Assess the patient for Vriddhi and Kshaya Lakshanas of Dosha-Dhatu-Mala, based on predesigned proforma. Discuss these case findings later in class.</p> |
| 14. | <p>12. Doshabhediya Adhyaya- Model making Activity-</p> <p>Working models on Dosha Sthanas or Subtypes of Doshas, Chaya, Prakop and Prashama of Doshas: PBL/CBL</p> <p>Give one problem/case based on Samanya Dosha Nidan. Student will identify possible causative factors responsible for vitiation of Doshas in given problem.</p> |
| 15. | <p>13. Doshopakramaniya Adhyaya- Case Based learning-(CBL)- Group activity-</p> <p>Observe the signs and symptoms of Ama in any five patients (Group wise) and present and discuss it in class.</p> <p>Seminar Presentation-</p> <ol style="list-style-type: none"> Understand Aushadha Kaal in relation with subtypes of Vata Dosha. Recognize the principles applicable during treatment of Saam Dosha and Dushyas. |
| 16. | <p>14. Dvididhopakramaniya Adhyaya-</p> <p>Case based learning-</p> <p>Find out the causative factors of Atishulya in present era (On the basis of predesigned proforma) CBL</p> <p>Share video clip of any patient suffering from Atikarshya- On the basis of previous learning discuss the contributing factors responsible for malnourishment. (Explore Dhatu Sneha Parampara in present context).</p> |
| 17. | <p>15. Shodhanadigana Sangraha Adhyaya- Group Presentation-</p> <p>Divide the various Aushadha Vargas among students and a group will represent each varga and related practical information.</p> |
| | <p>Charak Samhita – Sutrasthan (1-12 Adhyaya)</p> |
| 18. | <p>CS Su 1. Deerghanjiviteeya Adhyaya-</p> <p>Compilation work: (based on commentry)</p> <ul style="list-style-type: none"> Student has to write 20 terminologies with meanings referring Chakrapani commentary. Then after these terms shall be discussed in class. |
| 19. | <p>CS Su 2. Apamarga Tanduliya Adhyaya-</p> <p>Visit to Dravyaguna Department- Identify the dravyas on the basis of different karmas</p> |
| 20. | <p>CS Su 3. Aragvadhya Adhyaya- Group Discussion-</p> |

| | |
|-----|---|
| | <p>Probable mode of action of drugs applied externally? In which form they will more absorbable? (May take help of published literature; discuss linking with Ayurveda fundamentals.)</p> <p>Practical demonstrations in Panchakarma unit on patients.</p> <p>Workshop/ demonstration of preparation of different lepas useful in different conditions.</p> |
| 21. | <p>CS Su 4. Shadvirechana-shatashritiya Adhyaya-</p> <p>Practical Demonstration: Visit to Dravyaguna Department and demonstration of various Mahakashay and its uses (Integration with Dravyaguna department)</p> |
| 22. | <p>CS Su 5. Matrashiteeya Adhyaya-</p> <p>Visit to Panchakarma Unit of Hospital – Demonstration of abhyanga, mardana, udvartana and other procedures to be followed in daily routine (Integration with Panchakarma Department)</p> <p>Group Project :</p> <p>Gather information about nutritive values of Nitya Sevaniya Dravyas. Assess their classical properties. Discuss why these dravyas are specially advised for regular consumption.</p> |
| 23. | <p>CS Su 6. Tasyashiteeya Adhyaya- Documentation- Festival and rutu-</p> <p>Documenting the changes in the food habits and lifestyle as per the rutu with the parents and elders and also discussing on relevance of rutucharya concept with Indian festivals.</p> <p>Short Essay writing /Poster making-</p> <p>Does and don'ts to be followed according to various seasons (Refer both the Samhitas for this activity)</p> |
| 24. | <p>CS Su 7. Naveganadharaniya Adhyaya:-</p> <p>Vedio clip making Activity-</p> <p>Educating people about harms of vega dharana by social media campaigns</p> <p>Group Discussion-</p> <p>Finding reasons for vega dharana in present day lifestyle.</p> |
| 25. | <p>CS Su 8. Indriyopakramaniya Adhyaya- Group Presentation-</p> <p>Sadvrutta – Interpreting relevance of different sadvrutta in present scenario. Developing new sadvрутtas as per todays' lifestyle referring classics.</p> |
| 26. | <p>CS Su 9. Khuddakachatushpada Adhyaya-</p> <p>Doctor Patient communication introduction, Role play. Feedback collection of chikitsa chatushpada Group activity-</p> <p>Collect Feedback on qualities of Vaidya from rogi and upasthata. Collect Feedback on qualities of rogi from vaidya and upasthatha Collect Feedback on qualities of upasthatha from rogi and Vaidya</p> |

| | |
|-----|---|
| | Collect feedback on qualities of dravya from the experts of dravyaguna and rasa shastra |
| 27. | CS Su 10. Mahachatuspada Adhyaya- Developing proforma for sadhya asadhya vyadhi lakshanas- Guide students on how to prepare a proforma to assess any available parameters. |
| 28. | CS Su 11. Tisraishaniya Adhyaya- Debate :- Punarjanma siddhant as per different thoughts. Debate on punarjanma with different references as per classics and contemporary understanding. |
| 29. | CS Su 12. Vatakalakaliya Adhyaya- Role Play (Enact sambhasha parishad) – Distribute the characters of the rishis given in chapter. And guide them with the script. Arrange a forum where these students will be doing sambhasha parishad on vata kala-akala. Decode the sutras- Students in groups will use different tools like infographics/ animation/ ppts to illustrate the normal functions of Vata Dosha explained in present chapter. (Refer Chakrapani commentary thoroughly to understand the meaning of Sanskrit shlokas). Introduction to Group Dynamics. Communication skills for Group Discussions. |
| 30. | Shloka Recitation Competition- At the end of the year/ every term such competition shall organized by department. |
| 31. | Ayurveda Quiz- On the basis of assigned syllabus. |
| 32. | Poster making Competition / SA writing completion / Making video clips for general people to make awareness about Ayurved living. |

Distribution of Practical Exam Practical 100 Marks – (Viva 75 + Elective 10 (Set-FC) + IA 15) Marks

Distribution of Practical Exam

Practical 100 Marks – (Viva 75 + Elective 10 (Set-FC) + IA 15) Marks

| SN | Heads | Marks |
|----|---|------------|
| A | Viva (75 Marks) | |
| 1 | Viva on Record Book (of yearly conducted non lecture activities) | 15 |
| 2 | Viva on Shloka Book and Shloka Recitation | 10 |
| 3 | Identification of Tantrayukti Viva on .Introduction to Samhita | 15 |
| 4 | Viva Voce on AH | 15 |
| 5 | Viva Voce on Ch Su | 15 |
| 6 | Communication Skill | 05 |
| B | Internal Assessment | 15 |
| C | Electives | 10 |
| | Total Marks | 100 |

Reference books/Resources

• Introduction to Samhita

1. Ashtanghridayam with the commentaries 'Sarvangasundara' of Arundatta and 'Ayurvedarasayana' of Hemadri, Collated by Dr. Anna Moreshwar Kunte and Krishna Ramchandra Shastri Navre
2. Sushruta Samhita by Dr. Ambikadutta Shastri
3. Ayurvedeeya Padartha Vijnana by Prof. C. R. Agnivesh
4. Ayurvedeeya Padartha Vijnana and Ayurvedeeya itihaasam by Prof. C. R. Agnivesh
5. Ayurvediya Padarth Vidnyan by Vd. Ranjit Rai Desai
6. History of Medicine in India by Acharya Priyavrat Sharma
7. History of Indian Medicine by J. Jolly

• Ashtang Hridaya

1. Ashtanghridayam with the commentaries 'Sarvangasundara' of Arundatta and 'Ayurvedarasayana' of Hemadri, Collated by Dr. Anna Moreshwar Kunte and Krishna Ramchandra Shastri Navre
2. Ashtanga Hridaya : English commentary by Dr. T. Shreekumar
3. Ashtanga Hridaya : English commentary by Dr. Vishwavasudhar Gaur
4. Ashtang Hridayam : English translation by Prof. K.R. Srikantha Murthy
5. Ashtanga Hridaya –English translation by Vd. Anantram Shastri
6. Ashtanga Hridayam by Dr. B. Ramarao
7. Illustrated Ashtanga Hridaya text with English Translation by Dr. R. Vidyant
8. Ashtanga Hridaya: Hindi commentary by Lalchanda Vaidya
9. Ashtanga Hridaya: Hindi commentary by Vd. B.L.Gaur

• Charak Samhita

1. Charakasamhita by Agnivesha Revised by Charaka and Dridhbala with the Ayurveda Dipika commentary of Chakrapanidatta Edited by Vaidya Yadavji Trikamji Acharya
2. Charak Samhita (English Commentary): Dr. Ram Karan Sharma and Vd. Bhagwan Dash or Acharya Priyavrata Sharma
3. Charak Samhita with translation of Chakrapani commentary by Harishchandra Kushvaha
4. Charak Samhita by Acharya P.V.Sharma
5. Charak Samhita (Hindi commentary): Vaidya Jayadev Vidyalankar
6. Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalankar
7. Charak Samhita (Hindi commentary): Prof. Gorakhanath Chaturvedi and Kashinath Shastri
8. Charak Samhita (Hindi commentary): Dr. Brahmanand Tripathi
9. Charak Samhita (Hindi commentary): Dr. Ravidatta Tripathi
10. Charaka Samhita –Ayurveda Dipika Commentary- Hindi translation by Dr. B.L.Gaur
11. Legacy of Charak – M S Valiathan
12. Charak e-Samhita –National Institute of Indian Medical Heritage – <http://niimh.nic.in/ebooks/ecaraka>
13. Charakasamhitaonline.com- [Charak Samhita New Edition \(carakasamhitaonline.com\)](http://Charak Samhita New Edition (carakasamhitaonline.com))



BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY) PUNE, INDIA.

FACULTY OF AYURVED

Pune- Satara Road, Pune-411043.

Accredited with 'A+' Grade (2017) by NAAC.

'A' Grade University status by MHRD, Govt. of India

Accredited (2004) & Reaccredited (2011) with 'A' Grade by NAAC.

Undergraduate (B.A.M.S)
&
Post- Graduate (M.D./M.S./Diploma in Ayurved)
Syllabus/ Curriculum
2016 courses

Contents

| Sr No | Topic | Page No |
|--------------|--|----------------|
| 1 | Preface | 2 |
| 2 | Vision and Mission | 3 |
| 3 | Aims and Objectives | 4 |
| 4 | Notification | 5 |
| 5 | Program Outcomes | 6 |
| 6 | Eligibility | 7 |
| 7 | Medium of instruction and Pattern of study | 7 |
| 8 | Duration of the Course Study and Subjects taught, Number of lectures/practical | 7-8 |
| 9 | Attendance and Progress | 8 |
| 10 | Scheme of Examinations | 8-9 |
| 12 | Subjects | |
| | Dravyaguna Vigyan | 10-20 |
| | Rasashastra evam Bhaishajyakalpana | 21-38 |
| | Roga Nidan evam Vikriti Vigyan | 39-51 |
| | Agad Tantra evam Vidhi Vaidyaka | 52-59 |
| | Samhita Adhyayan-2 | 60-74 |
| | Swasthavritta evam Yoga | 75-83 |

Preface

Ayurveda is accepted worldwide as one of the oldest traditional systems of medicine. The ancient insight in this traditional system of medicine is still not profoundly discovered. Ayurveda signifies as "the life-science " where ayur means "life" and veda means "science" in Sanskrit. Ayurveda is the upaveda i.e. "auxiliary knowledge of Atharvaveda in Vedic tradition with its prime origin from Atharva-Veda and a supplement of the Rig-Veda. Lord Dhanvantari is worshipped as the God of Ayurveda. The goal of this traditional medicine system is to prevent illness, disease cure and preserve life. Being originated in India Ayurveda extends its wings in various parts of the world. In ancient days Ayurveda was taught in Gurukula system, which is now evolved in to underundergraduate graduate courses from Institutions.

The Indian Medical Council was set up in 1971 by the Indian government to establish maintenance of standards for undergraduate and postgraduate education. It establishes suitable qualifications in Indian medicine and recognizes various forms of traditional practice including Ayurveda.

Ayurvedic practitioners also work in rural areas, providing health care to at least 500 million people in India alone. They therefore represent a major force for primary health care, and their training and placement are important to the government of India. Being a scientific medicine, Ayurveda has both preventive and curative aspects. The preventive component emphasizes the need for a strict code of personal and social hygiene, the details of which depend upon individual, climatic, and environmental needs.

Now Bachelor of Ayurvedic Medicine and Surgery, MD/MS in various discipline of Ayurveda started with the intention to encourage integrated teaching and de-emphasize compartmentalization of disciplines so as to achieve horizontal and vertical integration in different phases which helps to support National Health Services.

Looking into the health services provided to the public, understanding the need of practitioners of Ayurvedic system of medicine, as per the guidelines of apex body NCISM and suggestions provided by the faculty of various sections, stake holders and strategy of university this governance is framed

based on following aims and objectives -

Aims of BAMS programme

- To create an efficient Physician capable of functioning independently in both urban and rural environment.
- To produce graduates of Ayurveda with thoughtful knowledge having deep base of scientific knowledge in harmony with Ayurvedic fundamentals with extensive practical training who would be able to become an efficient teacher, research worker and Kaya Chikitsak (Physician) and Shalayachikitsak (Surgeon) competent to serve for health services.

Objectives

To develop following attitude and skills in our students -

- Knowledge of Ayurveda science, pertinent modern subjects, common investigations and their clinical interpretation, art of diagnosis of common ailments, selection and administration of suitable Pancha karma procedures, common single and compound drug formulations, Pathyaapathya, preventive measures, Rasayana, National Health Programme.
- Capable to perform Para surgical procedures, conduct deliveries and resuscitate newborn babies.

Faculty of Ayurved, Bharati Vidyapeeth (Deemed to be University), Pune

Vision-

To be a world class university for social transformation through dynamic education

Mission-

- To ensure the good health and longevity of mankind.
- To carve a niche for our college in the world of Ayurved education
- To provide
 - Borderless access to Ayurved education
 - Quality Ayurved education
- To promote
 - Quality research in diverse areas of health care system.
 - Extensive use of ICT for teaching, learning and governance.
 - To develop national and international networks with industry and other academic and research institutions.

Program Outcomes for Undergraduate Course of Ayurveda

- The Bachelor of Ayurved will have profound knowledge of Ashtanga Ayurved backed up by extensive practical training.
- This knowledge will be supplemented by scientific advances in modern medicine along with extensive practical training.
- The BAMS graduate will become a globally competent Ayurved practitioner and a research scholar to serve the health care services.

Program specific outcome

The BAMS degree holder should be capable of functioning independently in both urban and rural environments.

Course outcomes

After completion of B.A.M.S course the Graduates of Ayurved –

- Should have thorough knowledge of all the subjects including Sanskrit so that he/she can have the ability to interpret Sanskrit quotations from Classical texts of Ayurved.
- Must have the practical/ clinical skills of all the subjects.
- Are able to diagnose and treat the patients independently with Ayurved management.
- Should be able to conduct minor procedures and preliminary management of accidental cases.
- Should be able to treat the patients with empathy and have proper interpersonal and communication skills as competent health care professionals.
- Ought to have the current knowledge of recent advances in the field by self-learning and /or participating in continuing Medical Education Programs.
- Shall be able to critically analyze relevant published research literature and use them appropriately to influence practice of Ayurved.
- Must be able to participate in National health program.

Regulations governing the B.A.M.S. programme (CCIM- Minimum standards of Undergraduate Ayurved education- Regulations- 2016

Eligibility –

The student who failed in one or two subjects of First Professional shall be allowed to keep terms of the Second Professional session and to appear in Second Professional examination;

The student who failed in more than two subjects shall not be allowed to keep term in Second Professional session and the subsequent supplementary examination of First Professional shall be held at every six months.

Medium of instruction

The medium of instruction for the programme shall be Sanskrit or Hindi or any recognized regional language or English with use of Ayurvedic technical terms.

Total duration of course – Five and Half years

- a) First Profession- 18 Months [Course 2021], 12 Months [Course 2017]
- b) **Second Profession- 18 Months [Course 2021], 12 Months [Course 2017]**
- c) Third profession -12 Months [Course 2017]
- d) Forth Profession- 18 Months [Course 2017]
- e) Compulsory Internship- 12 Months

Total teaching hours for Second Professional session shall be not less than 2240 and the proportion of teaching hours in Lecture to Non-lecture shall be 1:2.

The Second Professional session shall ordinarily start after completion of First Professional examination.

Subjects taught, Number of lectures/ practical and demonstrations for various subjects [Second year B.A.M.S.]

The following subjects shall be taught as per the syllabus laid down by the National Commission for Indian System of Medicine from time to time, namely:-

| Sl.No. | Subject Code | Subject | Equivalent Terms |
|--------|-----------------------------------|---------------------------------------|---|
| 1 | AyUG-DG | Dravyaguna Vigyan | Pharmacology and Materia Medica- Herbal |
| 2 | AyUG-RB | Rasashastra evam Bhaishajyakalpana | Materia Medica- Minerals & Metals and Pharmaceutical Science |
| 3 | AyUG-RN | Roga Nidan evam Vikriti Vigyan | Methods of Diagnosis, Diagnostic Procedures and Pathology |
| 4 | AyUG-AT | Agad Tantra evam Vidhi Vaidyaka | Clinical Toxicology and Medical Jurisprudence |
| 5 | AyUG-SA2 | Samhita Adhyayan-2 | Study of Ayurveda Classical Text |
| 6 | AyUG-SW | Swasthavritta evam Yoga | Lifestyle Management, Public Health and yoga |
| 7 | Elective (Minimum Three) Subjects | | |

(Teaching Hours for Second Professional B.A.M.S. Subjects)

| Sl.No. | Subject Code | Number of teaching hours | | |
|--------------|--------------|--------------------------|--------------|-------------|
| | | Lectures | Non-Lectures | Total |
| 1. | AyUG-DG | 150 | 250 | 400 |
| 2. | AyUG-RB | 150 | 300 | 450 |
| 3. | AyUG-RN | 150 | 300 | 450 |
| 4. | AyUG-AT | 100 | 200 | 300 |
| 5. | AyUG-SA2 | 100 | 140 | 240 |
| 6. | AyUG-SW | 150 | 250 | 400 |
| Total | | 800 | 1440 | 2240 |

The Second Professional examination shall ordinarily be held and completed by the end of the second professional session.

Scheme of Examination

Periodical assessment

There shall be minimum three periodical assessments for each subject before First Term Test ordinarily at 6th month of respective professional B.A.M.S.) minimum of three periodical assessment before Second Term Test (ordinarily at 12th month of respective professional B.A.M.S.) and minimum of three periodical assessments before final university examinations (Summative Assessment) of respective professional B.A.M.S.

Scheme of Assessment (Formative and Summative)]

| Sl. No. | Professional Course | Duration of Professional Course | | |
|---------|-----------------------------|---------------------------------|---------------------------|---------------------------|
| | | First Term (1-6 Months) | Second Term (7-12 Months) | Third Term (13-18 Months) |
| 1 | First Professional B.A.M.S. | 3 PA and First TT | 3 PA and Second TT | 3 PA and UE |

PA: Periodical Assessment; TT: Term Test; UE: University Examinations.

***University Examination Shall be on entire syllabus.**

Theory i.e. Written by the MCQ, SAQ, LAQ as per MSE and Practical Examination by Practical / Clinical/ Viva.

- Internal evaluation shall be conducted by the College and Institute at the end of six months (First Term Test) for thirty per cent. of the syllabus and at twelve months (Second Term Test) for forty per cent. new part of the syllabus.
- The remaining thirty per cent. of syllabus shall be completed in the last six months (Third Term) before university examination;
- There shall be minimum three periodical assessments for each subject before First Term Test (ordinarily at 6th month of respective professional B.A.M.S.) minimum of three periodical assessment before Second Term Test (ordinarily at 12th month of respective professional B.A.M.S.) and minimum of three periodical assessments before final university examinations (Summative Assessment) of respective professional B.A.M.S.

Number of Papers and Marks Distribution for Second Professional BAMS Subjects

| S. No. | Subject Code | Papers | Theory | Practical/Clinical Assessment | | | | | Sub Total | GRAND TOTAL |
|--------------------|--------------|--------|--------|-------------------------------|------|-------------|----|-------------|-----------|-------------|
| | | | | Practical/Clinical | Viva | Elective | IA | | | |
| 1. | AyUG-DG | 2 | 200 | 100 | 70 | - | 30 | 200 | 400 | |
| 2. | AyUG-RB | 2 | 200 | 100 | 70 | - | 30 | 200 | 400 | |
| 3. | AyUG-RN | 2 | 200 | 100 | 70 | - | 30 | 200 | 400 | |
| 4. | AyUG-AT | 1 | 100 | 100 | 60 | 10 (Set-SA) | 30 | 200 | 300 | |
| 5. | AyUG-SA2 | 1 | 100 | - | 75 | 10 (Set-SB) | 15 | 100 | 200 | |
| 6. | AyUG-SW | 2 | 200 | 100 | 60 | 10 (Set-SC) | 30 | 200 | 400 | |
| Grand Total | | | | | | | | 2100 | | |

(Set-SA, SB, SC – sets of Electives for Second Professional BAMS)

Evaluation of Electives. -

Electives shall be evaluated in terms of attendance and assessment and based on evaluation; the student shall be awarded credits as well as grades as below.

- One credit shall be awarded for attending a minimum of five hours of a modular programme and a student can earn a maximum of five credits for each elective.
- Assessment shall be conducted at the end of each module and an average of five modular assessments shall be considered for grading i.e., up to 25 per cent. Bronze; 26-50 per cent. Silver; 51-75 per cent. Gold; 76 per cent. and above Platinum.
- Students may opt any one elective as per their choice from each set specified for respective professional B.A.M.S.
- Weightage of two marks for each credit and maximum of ten marks shall be awarded for each elective.
- Apart from three mandatory electives for each profession, students have freedom to choose and qualify as many numbers of additional electives as per their interest.
- Marks weightage shall be only for three electives per professional session i.e., one elective subject from each set of respective professional session.
- A separate online certificate shall be generated for each elective mentioning credits earned and grades obtained.

Before appearing for Third (Final) Professional examination the students shall have to pass all the subjects of first and second professional **and shall qualify for nine electives.**

Declaration of Class

A candidate obtaining sixty per cent. and above marks shall be awarded first class in the subject and seventy five percent and above marks shall be awarded distinction in the subject.

- The award of class and distinction shall not be applicable for supplementary examinations.

Dravyaguna Vigyan

AyUG-DG

| Total number of Teaching hours: 400 | | |
|-------------------------------------|-----|----------|
| Lecture hours(LH)-Theory | 150 | 150(LH) |
| Paper I | 75 | |
| Paper II | 75 | |
| Non Lecture hours(NLH)-Theory | 250 | 250(NLH) |
| Paper I & II | 75 | |
| Non Lecture hours(NLH)-Practical | | |
| Paper I & II | 175 | |

Contents of Course Paper 1 Fundamental Dravyaguna

| Sr. No | List of Topics |
|--------|---|
| 1 | 1.Dravyaguna Vigyana |
| 2 | 2.Dravya 2.1 Panchabhoutikatwa of Dravya 2.2 Classification of Dravya based on Utpattibheda, Yonibheda, Prayogabheda, Prabhavbheda, Doshagnabheda, Rasabheda and Karmbheda |
| 3 | 3. Guna 3.1 Panchabhoutikatva, characteristics and classification 3.2 Gurvadiguna and its karma on Dosha, Dhatu and Mala, clinical application and research updates 3.3 Paradiguna with examples, clinical applications and research updates |

| | |
|---|---|
| 4 | <p>4. Rasa</p> <p>4.1 Meaning of “Rasa” in various contexts</p> <p>4.2 Shadrasa in relative correlation with taste of chemical constituents</p> <p>4.3 Rasotpatti and Panchabhoutika constitution of Shadrasa</p> <p>4.4 Rasopalabdhi and pathway of taste perception & sites of taste receptors in the body</p> <p>4.5 Rasa -Lakshana, Guna & Karmas of each Rasaon Dosha, Dhatu and Mala</p> <p>4.6 Atiyogalakshana,</p> <p>4.7 Clinical application and Research updates of Shadrasa</p> <p>4.8 Anurasa</p> <p>4.9 Rasa Sevanakrama of Aushadha</p> |
| 5 | <p>5. Vipaka</p> <p>5.1 Trividha Vipaka</p> <p>5.2 Vipak karma on Dosha, Dhatu and Mala</p> <p>5.3 Clinical application and Research updates</p> <p>5.4 Vipakopalabdhi (Determination of Vipaka) & Taratamya (Degree of variation)</p> |
| 6 | <p>6. Virya</p> <p>6.1 Difference between Guna and Virya</p> <p>6.2 Karmas of Virya on Dosha, Dhatu and Mala</p> <p>6.3 Clinical application and Research updates</p> <p>6.4 Viryaopalabdhi (Determination of Virya) and understanding of Virya with respect to actions of active constituents</p> |
| 7 | <p>7. Prabhava</p> <p>7.1 Samanapratyayarabdha and Vichitrapratyayarabdha</p> <p>7.2 Clinical application of Prabhava and Research updates</p> |
| 8 | <p>8. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava</p> <p>Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength- Pharmacodynamics</p> |

| | |
|----|--|
| 9 | <p>9. Karma</p> <p>9. Individual Karma, correlation with contemporary pharmacological action, examples, clinical application and research updates</p> <p>9.1 Deepana</p> <p>9.2 Pachana</p> <p>9.3 Samshodhana</p> <p>9.4 Samshamana</p> <p>9.5 Anulomana</p> <p>9.6 Sransana</p> <p>9.7 Bhedana</p> <p>9.8 Rechana</p> <p>9.9 Chhedana</p> <p>9.10 Lekhana</p> <p>9.11 Grahi</p> <p>9.12 Sthambhana</p> <p>9.13 Madakari</p> <p>9.14 Pramathi</p> <p>9.15 Abhishyandi</p> <p>9.16 Vyavayi</p> <p>9.17 Vikashi</p> <p>9.18 Rasayana</p> <p>9.19 Vajeekarana</p> <p>9.20 Medhya</p> |
| 10 | <p>10. Karmas of Dashemani Gana</p> |

| | |
|-----------|--|
| <p>11</p> | <p>11. Principles of General Pharmacology</p> <p>11 Drug definition, drug dosage forms, route of drug administration, pharmacokinetics (ADME), pharmacodynamics, Drug dose, principles of drug action, mechanism of drug action & bioavailability</p> <p>11.1 Drugs Acting on Central Nervous System: Anaesthetics, Sedative Hypnotics, Antiepileptics, Antiparkinsonian, Antidepressants, Antianxiety Drugs, Opioid - Analgesics Drugs</p> <p>11.2 Drugs Acting on Peripheral (somatic) Nervous System: Skeletal Muscle Relaxants, Local Anaesthetics</p> <p>11.3 Autacoids and Related Drugs: Nonsteroidal, Anti-inflammatory (NSAIDs)/Antipyretic and Analgesics Drugs</p> <p>11.4 Drugs for Respiratory Disorders: Bronchodilators, Aerosols/ Inhalants, Expectorants, Antitussive Drugs</p> <p>11.5 Cardiovascular Drugs: Antihypertensive, Antianginal Drugs</p> <p>11.6 Drugs Acting on Kidney: Diuretics</p> <p>11.7 Drugs Affecting Blood: Haematinics, Coagulants, Anticoagulants, Hypolipidaemic Drugs</p> |
| | <p>11.8 Gastrointestinal Drugs: Antacid, Carminatives, Digestants, Antiemetics, Laxatives, Antidiarrhoeal, Hepatoprotective Drugs</p> <p>11.9 Antibacterial Drugs: Antibiotics, Antitubercular Drugs</p> <p>11.10 Antifungal, Antiviral, Antimalarial and Antihelmintic Drugs</p> <p>11.11 Hormones and Related Drugs: Thyroid Hormone, Thyroid Inhibitors, Insulin, Oral Antidiabetic, Hormonal Contraceptives, Uterine Stimulants, Uterine Relaxants Drugs</p> <p>11.12 Miscellaneous Drugs: Antiseptics and Disinfectants, Vaccines, Vitamins, Water imbalance and IV fluids</p> |

| | |
|----|--|
| 12 | <p>12. Mishraka Gana</p> <p>12. Mishrakagana: its composition, guna karma and therapeutic uses. 12.1 Brihatpanchamoola. 12.2 Laghupanchamoola.</p> <p>12.3 Vallipanchamoola. 12.4 Kantakapanchamoola. 12.5 Trinapanchamoola. 12.6 Panchavalkala. 12.7 Triphala. 12.8 Trikatu. 12.9 Trimada. 12.10 Chaturusana. 12.11 Panchakola. 12.12 Shadusana 12.13 Chaturbeeja. 12.14 Trijataka. 12.15 Chaturajataka. 12.16 Panchatikta. 12.17 Chaturbhadra. 12.18 Trikarshika.</p> |
| 13 | 13. Nomenclature of dravya as per Nighantu, Vedic taxonomy and Botany |
| 14 | 14. Prashasta Bhesaja, Bhesaja Pariksha and drug evaluation method with correlation as per Pharmacognosy |
| 15 | 15. Dravyasangrahana and Drug collection methods as per GFCP (Good Field collection practices) |
| 16 | 16. GCP (Good cultivation practices), seed bank, conservation of medicinal plants, knowledge about RET (Rear, Endangered & Threatened) medicinal plants. |
| 19 | 19. Adverse drug reaction and Pharmacovigilance with recent updates |
| 20 | 20. NMPB (National Medicinal Plant Board), CCRAS (Central Council of Research in Ayurveda Sciences), API (Ayurvedic Pharmacopeia of India), GCTM (Global Centre for Traditional Medicine), PCIMH (Pharmacopeia Commission of Indian Medicine and Homeopathy) |
| 21 | 21. Vrikshayurveda and Ethno-medicine |
| 22 | 22. Network pharmacology and Bioinformatics |

Paper 2 Applied Dravyaguna

| Sr. No | List of Topics |
|-----------|----------------|
|-----------|----------------|

| | |
|----|--|
| 23 | 1. Bhesajavacharaniya (Criteria's to be considered for selection of drugs in vyadhis) |
| 24 | 2.1 Dravya (Drug) Nama-Guna-Karma Jnana Amalaki, Aragvadha, Arjuna, Ashok, Ashwagandha, Ativisha ,Bala, Bhallataka Bharangi Bhrungaraja,Bhumyamalaki ,Bilva, Brahmi, Chandana ,Chitraka, Dadima ,Dhataki ,Dhamasa ,Eranda ,Gokshura ,Guduchi ,Gugguka ,Haridra, Haritaki, Hingu, Jambu ,Jatamansi ,Jotishmati ,Kanchanar ,Kantakari Kapikachhu Karkatshrungi Katuki Khadir Kumari Kutaja Latakaranja Lodhra Agnimantha Ahiphena(NK) Ajamoda (DK) Asthishrunkhala Bakuchi Bruhati Chakramarda Dhanyaka Ela Gambhari Japa Jatiphala Jeeraka (DK)Kalamegha Kampillaka Kulatha (NK)Kumkum Lajjalu, Lavanga |
| 25 | 2.2 Dravya (Drugs) Nama -Guna-Karma-Jnana Madanphala Mandukaparni Manjishta Maricha Meshashrungi Methika Musta Nagkeshar Nimba Nirgundi Palasha Pashanabheda Patha Pippali Punarnava Rasna Rasona Sarapagandha Sairayak Sariva Shallaki Shalmali(Mocharasa) Shankhapushpi Shatavari Shigru Shunthi Talisapatra (NK)Trivrut Tulasi Twak Usheera Vacha Varuna Vasa Vatsanabha Vibhitaki Vidanga Yashtimadhu |

List of Practical's- Total Marks 200

| Practicals (Marks-100) | |
|-------------------------------|---|
| S.No | List of Topics |
| 1 | 1. Assessment and Understanding the relation between Parthivatwa & subjective/objective parametric tests |
| 2 | 2. Assessment of objective parametric measures of Guna |
| 3 | 3. Assessment of Rasa |
| 4 | 4.Comparative organoleptic and macroscopic examination |
| 5 | 5. Microscopic Identification of genuine and adulterated drug |
| 6 | 6. Demonstration of skills to identify the medicinal plants in the college garden. |
| 7 | 7. Out campus visit (Cultivated gardens, Tissue culture lab, Herbaria, Pharmacognosy lab, Quality control lab and Forest plant demonstration) |
| 8 | 8. Dravya prayoga |
| 9 | 9. Physico-chemical study |
| 10 | 10. Phytochemical |

| | |
|----|--|
| 11 | 11. Thin Layer Chromatography (TLC) technique |
| 12 | 12. Demonstration of skills to identify the medicinal plants in the college garden |
| 13 | 13. Out campus visit (cultivated gardens & In-situ plant demonstration) |
| 14 | 14. Ekala dravya prayoga |
| 15 | 15. Different Cultivation technique including methods mentioned in Vrikshayurveda |
| 16 | 16. Exercise on Network pharmacology |
| 17 | 17. Preparations of digital herbarium |
| 18 | 18. Demonstration of skills to identify the medicinal plants in the college garden |
| 19 | 19. Out campus visit (cultivated gardens & In-situ plant demonstration) |
| 20 | 20. Ekala dravya prayoga |

Distribution of Practical Exam

| S.No | Heads | Marks |
|------|--|-------|
| 1 | 1) 15 dry & 15 wet sample dravya spotting test- 30 minutes Test should include at least one each from Leaf, Stem, Root, Rhizome, Gall, Flower, Fruit, Seed, Bark & Resin. | 30 |
| 2 | 2) Skill based assessment -There shall be three components in skill assessment A. Identify and separate Grahya & Agrahya of given sample- 10 minutes B. Identifying and grouping of drugs of given Mishraka Gana- 10 minutes | 30 |

| | | |
|---|---|----|
| | <p>C. Understand the clinical scenario and identify five suitable single drug- 10minutes</p> <p>Instructions:</p> <p>Spotting stations are to be numbered as per the batch. Each spotting station contain: A. Mixture of Grahya & Agrahya B. Name of Misraka Gana and C. Clinical Scenario. Students are allotted with the spotting station by lottery method.</p> <p>Arrangement of Spotting Stations:</p> <p>A. Identify and separate Grahya & Agrahya of Given Sample: Sufficient quantity (approximately 20 gm of Vidanga & Maricha) of mixture of Grahya and Agrahya dravya to be provided. There shall be two empty bowels each one labelled as 'Grahya' and 'Agrahya'. Students are asked to separate the given sample into Grahya and Agrahya. There shall be different drugs for each station.</p> <p>B. Identifying and grouping of drugs of given Misraka Gana: Each stationshall contain one label containing name of the Misraka Gana with question 'Recollect the drugs belonging to the given Misraka Gana, identify those drugs, collect and make a group. There shall be empty bowl of sufficient size as per the given Gana for collection of drugs.</p> <p>C. Understand the clinical scenario and identify five suitable 5 single drugs:</p> <p>Provide the clinical scenario in not less than 100 words and not more than 200 words with or without investigation reports shall be provided at each spotting station (preferably separate cases for each station). Students are asked to go through the scenario and understand the clinical conditions , select 1 single drug, identify, collect and place it in the bowl given for the same. Select five suitable drugs and write as per preference base.</p> | |
| 3 | <p>3. QC practical (30 minutes)-Performance based components</p> <p>3.1. Comparison Macroscopic evaluation of one genuine and one</p> | 40 |

| | | |
|---|---|----|
| | <p>adulterant sample -10 marks- 15 minutes</p> <p>3.2. Panchamahabhoutikatwa assessment by parametric measures by pH of a given sample phant/ Kwatha - (Concern drug Phant / Kwatha should be prepared by college for pH analysis)- 10 marks -</p> <p>15 minutes</p> <p>3.3. Panchabhaoutikatwa assessment by parametric measures by Specific Gravity of a given sample Phat/ Kwatha (Concern drug Phant/ Kwatha should be prepared by college for Specific Gravity)-</p> <p>20 marks- 30 minutes</p> | |
| 4 | <p>4. Viva voce (10 minutes per student) Questions should be asked on following topics -</p> <p>1. Fundamentals (Dravya, Guna, Rasa, Vipaka, Veerya & Prabhav)- 3 questions- 15 marks</p> <p>2. Karmas, Dashemani, Mishrak Gana- 3 questions- 15 marks</p> <p>3. Pharmacology & Network pharmacology- 3 questions- 15 marks</p> <p>4. Clinical application of drugs- 3 questions - 15 marks</p> <p>5. Viva on practical records -06 marks</p> <p>6. Communication skill (4 marks)</p> | 70 |
| 5 | 5. Internal Assessment | 30 |

References Books/ Resources

- 1 Dravya Guna Shastram Vaidya G.A. Phadke, Pradnya Mudranalaya, Vaidya Vamanrao Deenanath Shuddhaayurved Pathyakrama Samitee, Dadabhai Navroji Path, Mumbai
- 2 Bhavaprakasha Sri Brahmasankara Mishra and Sri Rupalalaji vaishya, Chaukhamba Sanskrit Series office, Varanasi,
- 3 Aushadhi Vigyna Shastra (Ayurvedic Pharmacology) Sri. Vishvanatha Dwidevi ,Shri Baidyanath Ayurved Bhavan Pvt Ltd; Nagpur
- 4 Ayurvediya Aushadkarma Vigyana Acharya V.J. Thakar, Gujurat Ayurveda University, Jamnagar
- 5 Bhava Prakash Nighantu Vd. Krishna Chandra Chuneekar Commentary, Chaukhambha Sanskrit Sansthan, Varanasi
- 6 Classical Uses of Medicinal Plants Acharya Priyavrata Sharma ,Chaukhamba Visvabharati, Varanasi
- 7 Some Controversial Drugs in Indian Medicine Dr. Bapalal, Vaidya, Chaukhambha Orientalia, Varanasi
- 8 Dravyaguna Kosha Acharya Priyavrata Sharma, Chaukhambha Orientalia, Delhi
- 9 Dravyaguna Vigyana (Vol.1-3) Dr. Gyanendra Pandey, Chaukhambha Krishnadas Academy, Varanasi
- 10 Dravyaguna Vigyana (Vol. 1-2) Acharya Yadavji Tikramji, Baidyanath Ayurved Bhavan Ltd

- 11 Dravyaguna Vigyana (Vol. 1-5) Acharya Priyavrata Sharma, Chaukhambha Bharti Academy, Varanasi
- 12 Nighantu Adarsh (Vol. 1-2) Vd.G.Bapa Lal, Chaukhambha Bharti Academy, Varanasi
- 13 Ayurvedic Pharmacology & Therapeutic Uses of Medicinal Plants Dravyagunavignyan Vaidya V M Gogte, Chaukhambha Publications, New Delhi
- 14 Dravyagunavijnana(Part I and II) Prof.D.S.Lucas, Chaukhamba Visvabharati, Varanasi
- 15 Glossary of Vegetable Drugs in Brihatrayi Thakur Balwant Singh & Vd. Krishna Chandra Chunekar,Chaukhamba Amarbharti Prakashakan, Varanasi
- 16 Introduction to Dravyaguna(English) Acharya Priyavrata Sharma ,Chaukhambha Orientalia, Varanasi
- 17 A Text Book of Dravyaguna Vijnana (Vol 1,2 & 3) Dr. Prakash L.Hegde and Dr. Harini A.,Chaukhambha Publications, New Delhi
- 18 Raspanchaka Prof. Shiv Charan Dhyani,Chaukhambha Krishnadas Academy, Varanasi
- 19 Dravyaguna Siddhanta Prof. Shiv Charan Dhyani,Chaukhambha Krishnadas Academy, Varanasi
- 20 The Ayurvedic Pharmacopoeia of India, Part I Vol. 1-VII Ministry of AYUSH. India, New Delhi
- 21 Medicinal Plants used in Ayurveda (2nd Edition) Rashtriya Ayurveda Vidyapeeth, New Delhi
- 22 Plants of Bhavaprakash (English) Prof.K.C.Chunekar & Dr. N.P. Hota,Rashtriya Ayurveda Vidyapeeth, New Delhi.
- 23 Database of Medicinal Plants used in Ayurveda Vol. 1 to 8 CCRAS New Delhi
- 24 A Text Book of Dravyaguna Vijnana (Vol.1 to 2) Dr. J. L. N Sastry and Dr. Tanuja M Nesari.
- 25 Dravyaguna Vigyana (Vol.1to 2) Dr. Manasi Deshpande and Dr Arvind Deshpande, Chaukhamba Sanskrit Pratisthan. New Delhi
- 26 Essentials of Medical Pharmacology K.D.Tripathi. Jaypee Brothers Medical Publishers (P) Ltd
- 27 Pharmacological basis of Medical Practice Goodman & Gillman,McGraw-Hill Education
- 28 Pharmacology and Pharmacotherapeutics Satoskar Bhandarkar & Ainapure,Popular Prakashan Mumbai
- 29 Textbook of Pharmacognosy Trease & Evans, Elsevier publication
- 30 Textbook of Pharmacognosy Tyler, Brady & Robber,Lea & Febiger, USA
- 31 Quality Control of Herbal Drugs: An Approach to Evaluation of Botanicals Pulok K Mukharjee, Elsevier
- 32 Ausadhinamarupa vijnanam (Vol. 1 and 2) Dr Sanjeev Kumar Lale.,Mr. Hemraj Lale, Indore
- 33 Practical Pharmacognosy Dr. K. R.. Khandelwal and Dr. Vrunda Sethi , Nirali Prakashan Pune
- 34 Pharmacognosy S.B. Gokhale, C.K. Kokate and A.P. Purohit
- 35 Botany of commonly used medicinal Plants with Diagnostic keys Dr. Hema Sane and Dr. Yogini Kulkarni. Vision Publication Pune
- 36 Basic Bioinformatics S Gladis Hepsyba Helen,MJP Publishers
- 37 Pharmacovigilance in Ayurveda Manjunath Ajanal, B S Prasad, Shreddha U Nayak, Chaukhambha Prakashak, Varanasi
- 38 Cultivation Of Medicinal And Aromatic Crops Azhar Ali Farooqi, B. S. Sreeramu, Universities Press (India) Pvt. Ltd. Hyderabad
- 39 WHO Guidelines on Good Agricultural and Collection Practices (GACP) for Medicinal Plants World Health Organization, World Health Organization, Geneva
- 40 Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation K. Thammasiri, Chunlin Long, Henrik Lutken, Shaik Mahammad Khasim,Springer Link
- 41 Network Pharmacology Shao Li, Springer Link
- 42 Vrikshayurveda - Ancient Science of Plant Life and Plant Care S. Rajasekharan, G.S. Unnikrishnan Nair, Kerala State Biodiversity Board, Kerala
- 43 Evidence-Based Validation of Herbal Medicine - Translational Research on Botanicals Pulok K. Mukherjee,Elsevier Science

- 44 Research updates of Gurvediguna 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala.
2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
3. Mishra S, Dwivedi RR, Ravishankar B. Conceptual and applied study of Snigdha and Ruksa Guna with special reference to Rasa-raktagata Sneha (hyperlipidemia). Ayu. 2011 Apr;32(2):200-6.
4. Nair JU, Vyas HA, Nariya MB. An experimental study to evaluate Gunasankarya (combination of properties). Ayu. 2021 Oct-Dec;42(4):169-174.
5. Gupta, Monika & Gudipudi, Sarvabhousma & Pujar, Rashmi & Gopikrishna, S. (2019). Clinical aspect of Guna Siddhanta with special reference to Trisutra Ayurveda. 6. 2407-2414.
- 45 Research updates of Paradiguna
1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala.
2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
3. Gupta, Monika & Gudipudi, Sarvabhousma & Pujar, Rashmi & Gopikrishna, S. (2019). Clinical aspect of Guna Siddhanta with special reference to Trisutra Ayurveda. 6. 2407-2414.
- 46 Research updates of Shadrassa
1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala.
2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
3. Standard Protocol for quality assessment of Raw medicinal plants materials on the basis of Rasa.
4. Rath SK, Panja AK, Nagar L, Shinde A. The scientific basis of rasa (taste) of a substance as a tool to explore its pharmacological behavior. Anc Sci Life. 2014 Apr-Jun;33(4):198-202.
5. Gilca M, Dragos D. Extraoral Taste Receptor Discovery: New Light on Ayurvedic Pharmacology
- 47 Research updates of Vipaka
1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala.
2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
3. Ranade AV, Shirolkar A, Pawar SD. Gut microbiota: One of the new frontiers for elucidating fundamentals of Vipaka in Ayurveda. Ayu. 2019 Apr-Jun;40(2):75-78.
- 48 Research updates of Virya
1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala.
2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
- 49 Research updates of Prabhava 1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala.
2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
- 50 Research updates of Karma
1. Vaidyabhushanam K. Raghavan Tirumulpad. Rasavaisheshika. (Text with commentary). Arya Vaidya Sala, Kottakkal Malappuram Dist., Kerala.
2. Interactive workshop on Ayurveda (Dravyaguna), Published by Rashtriya Ayurveda Vidyapeetha, New Delhi.
-

Rasashastra evam Bhaishajyakalpana AyUG-RB

Total number of Teaching hours

| | | |
|-------------------------------------|-----|----------|
| Total number of Teaching hours: 450 | | |
| Lecture hours(LH)-Theory | | 150 |
| Paper I | 75 | 150(LH) |
| Paper II | 75 | |
| Non Lecture hours(NLH)-Theory | | 300 |
| Paper I &II | 90 | 300(NLH) |
| Non Lecture hours(NLH)-Practical | | |
| Paper I &II | 210 | |

Contents of Course-

| Sr. No | List of Topics |
|--------|--|
| 1 | <p>1.Chronological development of Ayurvediya Aushadhi Nirmana Definition, chronological development, significance and scope of Rasashastra and Bhaishajya Kalpana. Concept of Rasashala , Rasa-mandapa and Bheshajagara Concept of Rasa-Rasayana Briefing on Indians are first to prepare metal based medicines and Recent development in Ayurvedic Pharmaceuticals.</p> |
| 2 | <p>2.Paribhasha (Terminology)</p> <ul style="list-style-type: none"> • Definition and Importance of Paribhasha • Word Derivation- Aushadha, Bheshaja, Kalpana, Kashaya, Pancha kashaya Yoni, Samskara <p style="text-align: right;">3.Dravya/Varga Paribhasha- (Classical Names, English names,Chemical Composition/ Formula)</p> <ul style="list-style-type: none"> • Rasa, Maharasa, Uparasa, Dhatuvarga, Upadhatu, Ratna, Uparatna, Sudhavarga, Sikatavarga, Lavanavarga, Visha, Upavisha, Kajjali, Mitrapanchaka, Dravaka Gana, • Sandigdha(Contraversial): Vaikranta, Chapala,Rasanjana, Pushpanjana, Vahnijara, Girisindura, Kankushtha. • Anupalabdha (Not Available): Rasaka, Sauviranjana • Krutrima (Artificial): Sasyaka, Gandhaka, Kasisa, Rasanjana, Hingula • Pratinidhi (Substitute) : Vajrabhave Vaikranta, Suvarna-Suvarna Makshika <p>4. Prakriya Paribhasha-</p> <ul style="list-style-type: none"> • Shodhana: Types of Shodhana, Samanya Shodhana, Vishesa Shodhana, Different techniques used for Shodhana, Swedana, Mardana, Dhalana, Nirvapa, Nirjaleekarana, Nimajjana, Bhavana,Bharjana • Marana,: Definition, Importance of Marana, Types of Marana- Agnipaka Method, Putapaka Method, Kupipakwa Method, Bhanupaka Method, Swanga Sheeta • Amrutikarana, Lohitikarana • Sattvapatana, Shuddhavarta, Beejavarta • Druti: Definition, Druti lakshana • Parada Samskara: Definition, Importance, Ashtasamskara <p>Parada Jaranaa, Murchchhana, Names of Parad-Bandhas</p> |

| | |
|---|--|
| | <p>5) Pramanikarana Paribhasha (Terms for Standardization)-</p> <ul style="list-style-type: none"> • Grahy-Agrahyattva, Siddhilakshana <p>Bhasma pariksha: Varitara, Rekhapurnata, Unama, Slakshnattva, Sukshma, Anjana Sannibha, Dantagre na</p> <p>Kachakacha Bhavati, Varna, Avami, Apunarbhava, Niruttha, Gata Rasattva, Nischandrattva, Niramlattva, Nirdhumattva, Jihvagre adahyamanattva, Dadhi/ Nimbu Pariksha,</p> <p>6) Puraka Paribhasha (Supplementary)- Rudra Bhaga, Dhanvantari Bhaga</p> <p>7) Mana-Paribhasha-</p> <ul style="list-style-type: none"> • Definition, Classical Types <p>Classical and Modern- Conversion chart as per AFI, Scientific Metrology C) Essential Kala- mana.</p> |
| 3 | <p>3. Adharbhuta Siddhanta (Application of fundamental principles)</p> <p>Dravya Sangrha and Samrakshana</p> <ul style="list-style-type: none"> • Time of drug Collection • General Rules • Specific time for specific plant part collection • Time of the day for drug collection • Collection of Pranija Dravya • Place of Drug collection Bhumi mahabhuta predominance • Places from where drugs should not be collected • Stage of drug collection • Rule of Duplication(Dwiguna Mana Ganana) • Ardra and Shushka Dravya mana • Dravya Sangraha Vidhi and Dravya samrakshana • Rasa, Guna, Virya , Vipaka, Prabhava <p>Anukta Visheshokta grahana: Considering Anukta Dravya</p> <p>Aushadha Namakarana: Naming a Preparation</p> <p>Aushadha Sevana Kala: Time of Drug Administration</p> <p>Saveeryata Avadhi (Shelf life of different kalpana)</p> <p>Aushadha Matra: Dosage / Posology</p> <p>Anupana & Sahapana (Adjuvant)</p> <p>Yougika Dravya Siddhanta (Drug Combination)</p> |

| | |
|---|--|
| 4 | <p>4.Yantropakaranani- I (Equipments and machineries) Principles involved, currently used yantras, their correlation, utility, and Instruments used in Large scale Production</p> <p>Dola Yantra Valuka Yantra Putra Yantra Khalwa Yantra Patana Yantra Darvika Yantra Ulukhala Yantra Patala Yantra Kupi Yantra Arkapatana Yantra Pithara Yantra Sharava Yantra Palika Yantra Sthali Yantra Swedana Yantra Vidyadhara Yantra</p> <p>Modern Machinery-Grinder</p> <p>Disintegrator Pulverizer Powder Mixer Mechanical sifter Ball mill Granulator Dryer Tablet compressing machine Pills making machine Coating pan Polishing pan End runner machine Edge runner machine Capsule filling machine Ointment mixer Tube filling machine Sieves & Meshes Liquid filling machine Distillation plant Strip packing machine Pouch filling machine Pyrometer</p> |
|---|--|

| | |
|---|---|
| 5 | <p>5.Yantropakaranani -II (Equipments, fuel and Heating Devices) Principle involved, importance of temperature, currently used heating devices utility, quantum of heat and Instruments used in Large scale Production Puta- Chandra Puta Surya Puta Maha Puta Gaja Puta Varaha Puta Kukkuta Puta Kapota Puta Lavak Puta Budhar Puta Gorvara Puta Valuka Puta Kumbha / Bhandha Puta Musha Samanya Musha Crucibles- Silica Mudra Sandhi Bandhan Material Koshthi- Chullika Angar Koshthi Satwapatan Bhrashtri Gas Stove Hot Plate Heating Mantle Induction Stove Hot Air Oven Muffle Furnace- Horizontal and Vertical Heating Material- Solid- Kashtha, coal(wooden / stone), Kshara, Lavana, Valuka, Shakrit, Dhanya Drava- Jala/ steam, Taila Indirect heating- Dhanya Rashi, Bhugarbha sthapanana</p> |
|---|---|

| | |
|---|--|
| 6 | <p>6.Kalpana Nirmana I (Primary &Secondary dosage forms) Definition, classification with suitable examples, reference ingredients, quantity, method of preparation, principle involved, instruments used in small and large scale production, siddhi lakshana, storage, shelf life, modern aspect of related preparation of the following Panchavidha Kashya Kalpana (Primary dosage forms): Swarasa, Kalka, Kwatha, Hima, Phanta Upaklpana (Secondary dosage forms): Kalka: Churna Kalpana Kwatha: Pramathya Kalpana, Paniya Kalpana, Ushnodaka, Ksheera Paka Kalpana, Laksha Rasa, Mamsa Rasa Hima Kalpana : Mantha Kalpana, Udaka Kalpana, Panaka Kalpana Phanta Kalpana: Arka</p> |
| 7 | <p>7.Kalpana Nirmana-II (Method of Preparation of different dosage forms&Dietary Supplements)) Avaleha Definition, reference, essential ingredients, general method of preparation, specific rules of avaleha preparation, importance of temperature, siddhi lakshana, shelf life with examples i.e Vasavaleha, Kushmanda avaleha, research updates on Avaleha Kalpana, market survey Sneha Kalpana Aims of Sneha Kalpana, definition,reference, essential ingredients, general method of preparation, specific rules of sneha preparation, importance of temperature, gritha murchana, taila murchana, sneha siddhi lakshana, types of snehapaka, Patra(Gandha Paka), time duration to cook sneha preparation, shef life with examples Phala grita andKsheerabala Bala Taila, Concept of Avartana, Research updates on snehakalpana, market survey Sandhana Kalpana Introduction, significance of sandhana kalpana, classification, difference between Madhya and Shukta Kalpana, general method of preparation, essential ingredients, anukta Mana, sandhana vidhi, observations, Burnig candle test, Lime water Test, important factors in Asava Arishta Preparation like sandhanan patra selection, place for fermentaion, importance of room temperature, sandhana kala, adding of honey, bhasma, prakshepaka dravya, difference between Asava &Arishta, shelf life and alcohol % with examples Draksharista and Usheerasava, Research updates on Sandhana Kalpana, market survey Pathya Kalpana Definition , significance of Pathya, types, general, method of preparation Manda, Peya, Yavagu, Vilepi, Anna or Odana Kalpana, Krashara, Yusha, Takra, Khada, Kambalika, Raga, Shadava, Related Research updates, Market survey of Dietary Supplements</p> |

| | |
|---|---|
| | <p>Ksheerabala Bala Taila, Concept of Avartana, Research updates on snehalkalpana, market survey</p> <p>Sandhana Kalpana Introduction, significance of sandhana kalpana, classification, difference between Madhya and Shukta Kalpana, general method of preparation, essential ingredients, anukta Mana, sandhana vidhi, observations, Burnig candle test, Lime water Test, important factors in Asava Arishta Preparation like sandhanan patra selection, place for fermentaion, importance of room temperature, sandhana kala, adding of honey, bhasma, prakshepaka dravya, difference between Asava & Arishta, shelf life and alcohol % with examples Draksharista and Usheerasava, Research updates on Sandhana Kalpana, market survey</p> <p>Pathya Kalpana Definition , significance of Pathya, types, general, method of preparation Manda, Peya, Yavagu, Vilepi, Anna or Odana Kalpana, Krashara, Yusha, Takra, Khada, Kambalika, Raga, Shadava, Related Research updates, Market survey of Dietary Supplements</p> |
| 8 | <p>8.Rasa Dravya Parichaya- I Synonyms, minerological identification, sources, types, grahya and agrahyata, doshas, shodhana, marana and other processing techniques, Probable Physico-chemical Changes, importance of temperature while processing , yoga, Research updates of the following Must to know Drugs</p> <p>Parada (mercury) Abhraka (Biotite Mica) Makshika (Chalco-pyrite) Shilajatu(Asphaltum Punjabanum) Gandhaka (Sulfur) Gairika(Red Ochre) Kankshi (Alum) Haratala (Orpiment) Manahshila (Realgar) Kampillaka(Mallotus Philippinensis) Navasadara (Ammonium chloride) Hingula (Red Cinnabar) Swarna (Gold) Rajata (Silver) Tamra (Copper) Loha (Iron) Mandur (rust iron) Vanga (Tin) Naga (Lead) Yashada (Zinc) Mukta (Pearl), Pravala (Coral) Vajra (Diamond) Kaparda (Cowries) Shukti (Oyster Shell) Shankh (Conch Shell) Godanti (Gypsum) Samudraphena (Cattle Fish bone) Kukkutanda twak (Hen's EggShell)</p> |

| | |
|----|---|
| | Tankana kshara (Borax) |
| 9 | <p>9.Rasa Dravya Parichaya II Synonyms, mineralogical identification, sources, types, grahya and agrahyata, shodhana, marana and other processing techniques with probable chemical reactions, the importance of temperature, yoga, research updates of the following: Desirable to know drugs: Sasyaka (Peacock ore) Kaseesa (Green Vitriol), Gauri pashana (Arsenic oxide); Trinakanta, Akika(Agate), Sudha (Lime stone), Khatika Ajashthi; Jaharmohara (Serpentine) Dugdhapashana (Talc)</p> |
| 10 | <p>10.Rasadravya Parichaya III Synonyms, Mineralogical Identification, sources, types, Grahya, Agrahyata, Shodhana, Marana, Probable Chemical Changes, Properties,dose, Ashuddha/Apakwa Bhasma Sevanajanya Vydhi and their shantyupaya, yoga, Research updates Nice to know drugs: Vaikrantha, Vimala (Iron Pyrite), Chapala Rasaka Anjana Kankustha Agnijara Giri Sindura (Red oxide of Hg) Mriddara shringa (Litharge) Kamsya (Bronze) Pittala (Brass) Vartaloha. Manikya (Ruby) Tarkshya (Emerald) Pushparaga (Topaz) Nilam (Sapphire) Gomeda (Zircon or Cinnamone stone) Vaidurya (Cats eye) Mriga shringa (Stag horn) Sikata (Silica) Vyomashma (Sangeyashab - Jade) Kousheyashma (Asbestos) Badarshama (silicate of lime)</p> |

| | |
|-----------|---|
| <p>11</p> | <p>11.Kalpana Nirman -III (Method of Preparation of different dosage forms) Sharkara Kalpana General method of preparation, difference between sharkara kalpana and syrup, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Tulasi Arka Sharkara Gudapaka General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of ManibhadraGuda, Guda Pippali Lavana Kalpana General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Narikela Lavana Kshara Kalpana General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Kadali Kshara, chinch Kshara Ayskriti Kalpana General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example Ayaskriti Lepa Kalpana General Method of Preparation, importance of temperature, precautions, confirmatory tests, packing, preservation, shelf life with Example of Avalgunjadi Lepa, Keshavardhaka Lepa.</p> |
| <p>12</p> | <p>12.Chaturvidha Rasayana Introduction, definition, importance, types, Procedure, necessary equipment, Shelf life with following example Kharaliya Rasayana: Shwasakuthara rasa and Vatavidwansana rasa Parpati Rasayana: Loha parpati and sudha parpati Kupipakwa Rasayana: Rasasidhura and Rasa karpura Pottali Rasayana: Tamragarbha pottali and Loha garbha pottali</p> |
| <p>13</p> | <p>13.Current and emerging trend in Ayurvedic pharmaceuticals Cosmetics-Formulation, Regulatory Provisions Brief Introduction to Cosmetics-Formulation, Regulatory Provisions, Plant Layout and other factory requirements, process used in the manufacture of Cosmetics, Most commonly used cosmetic Raw materials , Control of microbial contamination in the manufacture of cosmetics and Quality Control of cosmetics, Skin Sensitization Sensitivity Testing, In vitro-Tests for Skin Irritation, Quality Control of Raw materials, Intermediates and Finished Products, Stability of Cosmetics Introduction to Dosage forms Introduction, Classification of Dosage forms(Solid dosage forms, Liquid dosage forms and Semisolid dosage forms), Need of dosage forms.</p> |

| | |
|----|---|
| 14 | <p>14.GMP(Schedule T) &Regulatory aspects of Ayurvedic drugs Brief overview of following Drug and Cosmetics Act 1940 and Rules 1945 import, manufacture, sale distribution of drugs and cosmetics standards of quality, misbranded, adulterated, spurious drugs and cosmetics as amended from time to time. New Acts related to Drugs and Devices. Good Manufacturing Practices (GMP) of ASU Drugs in accordance to Schedule- T Food Safety and Standards Authority of India (FSSAI) and FDA Approval Drugs.</p> |
|----|---|

Paper 2 Ayurvediya Aushadhi Prayoga Vigyana

| Sr. No | List of Topics |
|--------|---|
| 15 | <p>1.Aushadhi Prayoga Vigyana Introduction, Ethymology, Scope of Aushadhi Prayoga vigyana Prashastha bhesaja Lakshana</p> |
| 16 | <p>2.Single drug (Herbal &Mineral) Single drug its variety of formulations and their different indications• Chemical/phyto-chemical composition</p> <ul style="list-style-type: none"> • Pharmacodynamics and pharmacokinetics as per formulation • Therapeutic properties • Awasthanusara Uses(as applicable) • Matra • Anupana • Pathyapathya • Sevana Kala • Kala maryada (duration of medication as applicable) • Side effects of medication (as applicable) • Research updates and clinical evidences for each of the following formulations <p>Guduchi Guduchi Swarasa (Sha.Sam.Ma. Kh. Chp1/7 page 138) Guduchyadi Churna (B.R. Pleehayakrut Rogdhikara) Guduchi Kwatha (B.R. Jwaradhikara) Guduchi Hima (B.R. Chardi Rogadhikara) Guduchi Ghana- Samshamani Vati (AFI Part II Page 183) Guduchi Satva (AFI-Part I, Page 205) Amrutadi Guggulu (AFI-Part III, Page 107) Amritarishta (AFI Part I page 6) Amalaki Amalaki Swarasa (Sha.Sam.Ma.Kha.) Amalakyadi Churna (Sha.Sam.M.Kha. Churna kalpana) Triphala Rasayana (Cha.Chi. Rasayana Adhyaya) Chyavanaprasha (AFI Part I page 37) Dhatri Lauha (AFI Part I Page 284) Amalakyadi Gutika (Sha.Sam.Ma.Kha.Vati Kalpana) Phalatrikadi Kwatha (Sha.Sam.Ma.Kha.Kwatha Kalpana) Triphala Ghrita (Sha.Sam.Ma.Kha. Ghrita Kalpana) Bhallataka</p> |

| | |
|----|---|
| | <p>Bhallataka Modaka (B.R. Pleeha-Yakrit Rogadhikara) Bhallataka Ghrita (B.R. Gulma Rogadhikara) Bhallataka Guda (B.R. Arsha Rogadhikara) Bhallatakadi Taila (B.R. Nadivrina Rogadhikara) Bhallataka Avaleha (B.R. Arsha Rogadhikara) Bhallatakadi Lepa (B.R. Kushta Rogadhikara) Bhallatakadi Kwatha (B.R. Urusthabha Rogadhikara)Note: For Bhallataka additional ashud- dha, avidhi sevanajanya vyadhi and their shantyupayaGandhaka Gandhaka churna (SY page 217) Gandhaka Rasayana (AFI-Part II, Page 115) Gandhaka Druti (RRR 3rd Chapter) Gandhaka Taila (R.T. 8th Chapter) Gandhakadya Malahara (AFI-Part II, Page 165) Gandhakadi Lepa (RRS Shiroroga Chikitsa) Gandhaka Vati (B.R. Agnimandya Rogadhikara) Gairika Gairika Pradeha (Cha.Chi. Visarpa Rogadhyaya Laghusuta shekhara Rasa (AFI Part II Page 282) Gairikadya Malahara (AFI-Part III, Page 224) Gairikadya Gutikanjana (B.R. Netraroga) Gairika rasakriya (Cha.Chi.26/235) Varnakara lepa (Cha.Chi.25/117)</p> |
| 17 | <p>3.Single drug(Bhasma, Shuddha &Pishti)</p> <ul style="list-style-type: none"> • Single drug/ formulation and its mode of action indifferent indications •Chemical/phytochemical composition • Pharmacodynamics and pharmacokinetics as performulation • Therapeutic properties • Awasthanusara Uses(as applicable) • Matra • Anupana • Pathyapathya • Sevana Kala • Kala maryada (duration of medication as applicable) • Side effects of medication(as applicable) • Ashuddha apakwa, avidhi sevanajanya vyadhi andtheir shantyupaya, • Research updates and clinical evidences for each ofthe following formulations: Ab- hraka Bhasma <p>Swarna Makshika Bhasma Swarna Bhasma Rajata Bhasma Lauha Bhasma Tamra Bhasma Vanga Bhasma Naga Bhasma Yashada Bhasma Kasisa Bhasma Shuddha Shilajatu Shuddha Gandhaka Shuddha Gairika Shuddha Kankshi Mukta Pishti &Bhasma Pravala Pishti &Bhasma</p> |

| | |
|----|---|
| | <p>Vajra Bhasma Kaparda Bhasma Shankh Bhasma Godanti Bhasma Shuddha Tankana Shuddha Kankshi</p> |
| 18 | <p>4.Aushadhi Kalpa -I (Compound formulations)</p> <ul style="list-style-type: none"> • Chemical/phytochemical composition • Pharmacodynamics and pharmacokinetics as per formulation • Therapeutic properties and its mode of action indifferent indications, • Awasthanusara Uses(as applicable) • Matra • Anupana • Pathyapathya • Sevana Kala • Kala maryada (duration of medication as applicable) • Side effects of medication(as applicable) • Ashuddha apakwa processed , avidhi sevanajanyavyadhi and their shantyupaya, • Research updates and clinical evidences for each of the following formulations: <p>Kharaliya Rasayana</p> <ul style="list-style-type: none"> • Arogyavardhini Gutika : A.F.I. - I, Rasayoga, 20:4, R.R.S. Visarpa Chi. 20/106 • Kumara Kalyana Rasa : A.F.I. - I, Rasayoga, 20:9, B.R. Balaroga / 163 • Garbhapala Rasa : A.F.I. - II, Rasayoga, 16:14,R.T.Sa.Part - I, 140 <p>Chandraprabha Vati : A.F.I. - I, Vati Gutika, 12:10,Sha.Sa.M.7/40</p> <ul style="list-style-type: none"> • Pravala Panchamrita Rasa : A.F.I. - II, Rasayoga, 16:37,B.R. Gulma / 139 • Anandbhairava Rasa : A.F.I. - I, Rasayoga, 20:3,R.Sa.Sa.Jwara 2/103 • Yogendra Rasa : A.F.I. - I, Rasayoga, 20:31,B.R. Vatavyadhi / 506 • Laxmivilas Rasa : A.F.I. - I, Rasayoga, 20:39, B.R. Rasayana / 55 • Vasantakusumakara Rasa : A.F.I. - I, Rasayoga,20:42,R.Sa.Sa.Rasayana Vajikarana / 80 • Vasantamalti Rasa : A.F.I. - I, Rasayoga, 20:41, Si.Bhai.Ma.Ma.Jwara / 60 <p>Brihat Vata Chintamani Rasa : A.F.I. - I, Rasayoga, 20:26, .R.,Vatavyadhi/502</p> <ul style="list-style-type: none"> • Shankha Vati : A.F.I. - I,Vati Gutika, 12:32,B.R. Agnimandya / 182 • Shwaskuthara Rasa : A.F.I. - I, Rasayoga, 20:49,Yo.Ra., Swasa / Page 373 • Kamadudha Rasa : A.F.I. - II, Rasayoga, 16:9,R.Ta.Sa. <p>Kharaliya Rasayana / 80</p> <ul style="list-style-type: none"> • Sutashekhara Rasa : A.F.I. - II, Rasayoga, 16:63,Yo.Ra. Amlapita / Page 125 • Navayasa Loha : A.F.I. - II, Lauha, 17:2,Cha.Sa.Chi.16/70 • Ichchhabhedi Rasa : A.F.I. - I, Rasayoga, 20:5,B.Ra. Udararoga / 84 • Krimikuthara Rasa : A.F.I. - II, Rasayoga, 16:12,R.Ta.Sa.Kharaliya Rasayana / P. 103 <p>Parpati Rasayana</p> <ul style="list-style-type: none"> • Panchamruta Parpati : A.F.I. - I, Parpati, 16:1, B.R.Grahani / 461 • Bola Parpati : A.F.I. - I, Parpati, 16:2, Yo.R.,Pradara / P 842 <p>Kupipakwa Rasayana</p> <ul style="list-style-type: none"> • Swarna Vanga : A.F.I. - I, Kupipakva, 15:9, Rasamruta 3/ 95 • Makaradhwaaja : A.F.I. - I, Kupipakva, 15: 2, B. R.Vajikarana 2/ 237 • Sameerpannaga Rasa : A.F.I. - I, Kupipakva, 15:8, A.A.G.S. Part - 4 Page 88 <p>Pottali Rasayana</p> <ul style="list-style-type: none"> • Hemagarbha Pottali : A.F.I. - II, Rasayoga, 16:66, Rasamruta Rasavigyaniya 9/218 |

| | |
|----|--|
| 19 | <p>5.Aushadhi Kalpa-II (Compound Drugs/Formulations)</p> <ul style="list-style-type: none"> • Chemical/phytochemical composition • Pharmacodynamics and pharmacokinetics as per formulation • Therapeutic properties and its mode of action indifferent indications, • Awasthanusara Uses(as applicable) • Matra • Anupana • Pathyapathya • Sevana Kala • Kala maryada (duration of medication as applicable) • Side effects of medication(as applicable) • Improperly processed , avidhi sevanejanya vyadhiand their shantyupaya, • Research updates and clinical evidences for each of the following formulations: <p>Dashamoola Kwatha (AFI Part I Page 55) Mahamanjistadi Kwatha (AFI Part I page 59) Pushyanuga Churna (AFI-Part I, Page 113) Sudarshana Churna (AFI Part I Page 116) Lavana Bhaskara Churna (AFI-Part I, Page 114) Bilvadi Gutika (AFI Part I Page 188) Chittrakadi Gutika (AFI-Part I, Page 186) Sanjivani Vati (B.R. Jwaradhikara) Vyoshadi Vati (AFI Part III Page 253) Bala Chaturbhadra Rasa (B.R. Balarogadhikara) Simhanada Guggulu (AFI-Part I, Page 71) Yogaraja Guggulu (AFI-Part I, Page 69) Chyavanaprashavaleha (AFI Part I page 37) Dadimavaleha (Y.R. Jwaratisaradhyaya) Panchagavya Ghrita (AFI Part I Page 90) Brahmi Ghrita (AFI Part I Page 93) Narayana Taila (AFI Part I Page 138) Neelibhringadi Taila (AFI Part I Page 139) Panchaguna Taila (AFI-Part II, Page 145) Aravindasava (AFI Part I page 7) Ashokarishta (AFI Part I page 8) Kumaryasava (AFI Part I page 10) Kutajarishta (AFI Part I page 10) Gandhakadya Malahara (AFI-Part II, Page 165) Lepa Guti (AFI Part III page 232)</p> |
| 20 | <p>6.Dosage Forms &Cosmetic Products</p> <p>Definition of dosage form,-Cosmetics</p> <p>Advantages and disadvantages of currently available dosage forms and cosmetics. Route of their administration. Research updates on modification of classical Ayurvedic dosage forms and relevant case studies.</p> |

| | |
|----|---|
| 21 | <p>7.Nutraceuticals Introduction Types, non Indian nutraceuticals and their uses Ayurvedic Perspective of Nutraceuticals with special reference to dietic preparation, rasayana with one examples for each category , mode of action, nutritional value calculation, research updates and case studies on below mentioned category General Health : Kushmanda avaleha Pediatric Health: Preenana Modaka(Kashyapa) Geriatric Health: Chavanaprasha avaleha Reproductive Health: Phala Grita Women's health: Soubhagya shuntipaka, Shatavari grita Cardio-protective: Arjuna Ksheerapaka &Rasona ksheera paka Sports endeavor: Kharjuradi mantha Mental health: Brahma Rasayana</p> |
| 22 | <p>8.Anupana Prayoga for Aushadhi Kalpa</p> |
| 23 | <p>9.Aushadhi Prayoga Marga Introduction Types in ayurveda Advantages and disadvantages of each aushadhi prayoga marga and probable mode of action after administration of following dosage forms in below mentioned routes 1. Mukha (Oral Cavity): Vati, Gutika, Churna, Asava, Arishta,Kashaya, Avaleha, Khanda, Sneha (Ghrita/Taila), 2. Nasa(Nasal Route)- Dosage form used - Churna, taila, swarasa, arka</p> <ul style="list-style-type: none"> • Karna (Through Ear)- Taila, Ghrita • Akshi (Through Eyes)- - Ghrita, Taila, • Twak (Through Skin)- Lepa, Alepa, Pralepa, Malahara,upanaha,pradeha, abhyanga, udvartana • Shirodhara - Takra • Abhyanga- Sahacharadi Taila • Ashti Bhagna- Murivenna Taila • Vrana- Jatyadi Taila • Smashru – Shankha Bhasma • Kesha Ghanata- Bringaraja Taila • Akala Palita – Hasthi Danta Masi • Indralupta – Icchabhedi Rasa • Lomashatana – Lomashatana Lepa • Guda (Anal Route)- Dosage forms - Vartis, taila, ghrita,kalka, churna, kashaya <p>Mutra marga (Through urethra)- Uttara Basti with Dosage forms- Taila, ghrita 8. Yoni marga (Through vagina)- Yoni Dharana, Yoni</p> <ul style="list-style-type: none"> • Dhavana, Yoni Pichu, Yoni Dhoopana |
| 24 | <p>10.Rational prescription along with safe dispensing of Ayurvedic formulations. Rational prescription along with safe dispensing of Ayurvedic formulations as per NABH guideline</p> |
| 25 | <p>11.Traditional &Local health Practices Introduction to Traditional &Local health Practices and Government initiatives to preserve it. Brief introduction to TKDL</p> |

| | |
|----|---|
| 26 | 12.Pharmacovigilance for Ayurveda drugs Pharmacovigilance and Adverse Drug Reactions (ADR) Pharmacovigilance Programme of Ayurveda, Siddha, Unani and Homeopathy (ASU &H) Drugs Central Sector Scheme and Centres of Pharmacovigilance of ASU &H Drugs |
|----|---|

List of Practicals

- 1.Paribhasha concept based Practicals
- 2.Panchavidha Kashaya Kalpana & their Upakalpana Practicals
- 3.Rasa Dravya Aushadhi Nirmana Practicals
- 4 Bheshaja Kalpana Practicals –
- 5.Bheshaja Kalpana Practicals -II
- 6.Dosage Forms & Self-care Products Practicals
- 7.Field Visit/ Study Tour
- 8.Hospital IPD Practical
9. Drug Dispensing Practical
- 10.Quality Control Practicals

Distribution of Practical Exam Total 200 Marks

| S.No | Heads | Marks |
|------|--|-------|
| 1 | 1.Spotting (10 sample + 5 Instruments/ equipments) Identification (1 mark) answering sub question related to spot-ter(1 mark) 15x2=30 marks Choose Spotter from below mentioned list. 1.Parada (mercury), 2.Abhraka (Biotite Mica), 3.Makshika (Chalco-pyrite), 4.Shilajatu(Asphaltum Punjabianum) 5.Gandhaka (Sulfur) 6.Gairika(Red Ochre) 7. Kankshi(Alum) 8.Haratala (Orpiment) 9.Manahshila (Realgar) 10.Kampillaka(Mallotus Philippinensis) 11.Navasadara (Ammonium chloride) 12.Hingula (Red Cinnabar) 13.Tamra (Copper) 14.Loha (Iron) 15.Mandur (rust iron) 16.Vanga (Tin) 17.Naga (Lead) 18.Yashada (Zinc) 19.Pravala (Coral) 20.Kaparda (Cowries) 21.Shukti (Oyster Shell) 22.Shankh (Conch Shell) 23.Godanti (Gypsum) 24.Samudraphena (Cattle Fish bone) | 30 |

| | | |
|---|--|----|
| | <p>25.Kukkutanda twak (Hen's EggShell), 26.Tankana kshara (Borax) 27. Sasyaka (Peacock ore) 28.Kasisa (Green Vitriol), 29.Gauri pashana (Arsenic oxide) 30.Akika(Agate), 31.Sudha (Lime stone) 32.Khatika 33.Dugdhapashana (Talc) 34.Vimala 35.Rasaka 36.Yantra</p> | |
| 2 | <p>2. Long Practical Selection of Ingredients with proportion(10Marks) Preparation following SOP (15 marks) Demonstration of Siddhi lakshana(05Marks) on site viva (10 Marks) List of Long Practicals 1. Sitopaladi churna 2.Hingwastaka Churn 3.Agni Tundi Vati 4.Chitrakadi Vati 5.Lavangadi Vati 6.Triphala Guggulu 7.Kaishor Guggulu 8. Phala Varti 9.Chandrodaya Varti 10.Arka Lavana 11.Narikela Lavana 12.Atasi Upanaha 13.Dasha- nasamskara churna 14.Gandhaka Malahara 15.Dashanga Lepa 16.Mustadi Pramathya 17. Shadanga Paneeya 18.Kharjuradi Mantha 19.Chincha Panaka 20.Chandana Panaka 21.Ghrita Murchana 22.Taila Murchana 23.Triphala Ghrita 24.Amruta Ghrita 25.Ksheera Bala Taila 26.Arka Taila 27.Vasavaleha 28.Nimbu Sharkara 29.Kutaja Ghana 30.Guduchi Ghana 31.Haridra Khanda 32.Narikela Khanda 33.Ananda Bhairava Rasa 34.Tribhuvana Keerti rasa 35. Rasa Parpati 36. Sweta Parpati 37. Laghusutsekhararasa 38. Navayasa loha 39. Saptamrita loha</p> <p>Note: for preparation shuddha dravya, decoction,murchita gritha, murchita taila etc are to be provided for long practical</p> | 40 |
| 3 | <p>3.Short Practical Selection of Ingredients with proportion(5Marks) Preparation following SOP (5 marks) Demonstration of Siddhi lakshana(5Marks) on site viva (5 Marks) List of Short Practicals 1.Godanti Shodhana 2. Shankha Shodhana 3.Kapardika shodhana 4.Guggulu Shodhana 5.Gandhaka Shodhana 6.Vanga Shodhana</p> | 20 |

| | | |
|---|---|----|
| | <p>7.Yashada shodhana 8.Abhraka Shodhana 9.Tamra Shodhana 10.Tankana Shodhana 11.Kankshi shodhana 12.Hingula Shodhana 13.Gairika Shodhana 14.Hingu Shodhana 15.Mugdha Rasa 16.Tamra Bhasma (Dadhi/ Nimbu Pariksha) 17.Triphala Masi 18.Mayura Piccha Masi 19.Vasaputapaka Swarasa 20.Amruta Satva 21.Arjuna Ksheera Paka 22.Lashuna Ksheerapaka 23. Punarnavashtaka kwatha 24.Rasna Saptaka Kwatha 25. Specific Gravity 26. Refractive Index 27. PH</p> | |
| 4 | 4.Practical Record Four Record books- for each record book 2.5 Marks | 10 |
| 5 | <p>5.Viva-Voce Structure of Viva 1. Paribhasha – (2 questions 3 marks each) - 6 Marks 2. Shodhana, marana –(1 question from each 5 marks each) -10 Marks 3.Yantropakarana –(2questions 3 marks each) - 6 Marks 4.Chemical composition Raasadravya –(1 questions 2 marks each)-2 Marks 5.Therapeutic application of single drugs – (2 question 3 marks each) -6 marks 6.Yoga - (Shloka-3 marks; ingredients-5 marks: indications -5 marks dose & anupana-2Marks)-15Marks (Select the yoga having at least 5 ingredients) 7. Siddhi lakshana & quality control tests –(2 questions 5 marks each)-10 Marks 8.D& C act, GMP, FSSAI- 2 Marks 9.Viva on Non Lecture hour activity book-8 Marks 10.Communication skills -5 Marks</p> | 70 |
| 6 | 6. Internal assessment | 30 |

References Books/ Resources

- 1 Adyatan Rasa Shastra R.K. Goyal Chaukhamba Surbharati Prakashan, Varanasi
- 2 .Ayurvediya Aushadhi gunadharma shastra Vol I, II, III, IV, V, Gune Gangadharashastri, Gune Bandhu Prakashan
3. Asava Arishta Vigyanam Dr. Pakshdhar Jha, Chaukhambha Sanskrit Sansthan, Varanasi

4. Ayurvediya Rasa Shastra (Sachitra) Chandrabhusan Jha by Chaukhamba Surbharati Prakashan Varanasi, Reprint 2012
5. Ayurvediya Rasa Shastra Prof. Siddhi Nandan Mishra, Chaukhamba Orientalia, Varanasi
6. Ayurved Prakash Vaidya Gulraj Mishra. Chaukhambha Bharati Academy, Varanasi
7. Drugs and Cosmetic Act - 1940 Vijay Malik, Eastern Book Company Delhi
8. Pratyaksha Aushadh Nirmanam Acharya Vishwanath Dwivedi
9. Rasa Tarangini Sadanand Sharma, Motilal Banarasidas, Varanasi
10. Rasa Bhaishajya Kalpana Vigyan Vaidya Santosh Kumar Khandal, Choukhamba Publishers, New Delhi
11. Rasa Ratna Samuchchaya (Hindi) Dattatreya Ananta Kulkarni, Meharchand Lachamdas Publications, New Delhi
12. Rasendra Sara Sangraha Vaidya Gopal Krishna, Chaukhambha Sanskrit Series of Varanasi
13. Ayurvediya Paribhasha Indradev Tripathi Chaukhamba Orientalia, Varanasi
14. Sharangadhara Samhita Radhakrishna Parashar Vaidyanath Ayurved Bhavan Pvt
15. Bharatiya Bhaishajya Kalpana Vigyana Gananath Vishwanath Dwivedi Krishnadas Academy, Varanasi
6. Ayurvedic formulary of India Govt. of India Ministry of Health & Family welfare New Delhi
17. Ayurvedic Pharmacopiea of India CCRAS Govt. of India Ministry of Health & Family welfare New Delhi
18. Abhinava Bhaishajya Kalpana Siddhi Nandan Mishra, Chaukhamba Surbharati Prakasha, Varanasi
19. Bhaishajya Ratnawali Prof S N Mishra Choukhamba Publishers, Varanasi
20. Ayurvediya Rasashastra Ka Udbhava Evam Vikas Satyendrakumar Arya, Krishnadas Academy, 1984
21. Yoga Ratnakar Shri Laxmipathi Shastri, Chaukhambha Prakashana Varanasi, Reprint 2018
22. A Text book of Rasashastra Prof. Parimi Suresh Chaukhambha Prakashak, Varanasi
23. Siddhoushadi Sangraha Vaidyaratna G. A. Phadke, Ayurvedacharya, Satara, N. H Kolhatkar, Maharashtra mitra Mudranalaya, Shukravara peth, Satara
24. Application on standardised Namburi phased spot test in identification of Bhasma and Sindura preparations of Ayurveda published Namburi Hanumantha Rao, CCRAS., New Delhi
25. Evidence based safety of Ayurvedic herbo-mineral formulations Kumar Anhimanyu published by CCRAS, New Delhi
26. Introduction to Ayurvedic Pharmaceutics Dr Devendra Joshi & Dr Geeta Joshi Chaukhambha Orientalia
27. A Handbook of Cosmetics B. M. Mithal & R.N. Saha Published by Delhi Vallabh Prakashana
28. Sahasrayoga (Sanskrit and Hindi) Reprint by CCRAS, New Delhi
29. Manual on Quality Parameters for Ayurveda & Siddha drugs CCRAS, New Delhi
30. Safety and Prescription Trends of Rasaushadhis Critical appraisal of Reported Medical Practices of Ayurveda Herbomineral formulations from CCRAS experience.
31. General Guidelines for Drug Development of Ayurvedic Formulations CCRAS New Delhi, Volume I 1st Edn. 2018
32. General Guidelines for Safety/Toxicity Evaluation of Ayurvedic Formulations CCRAS New Delhi, Volume II 1st Edn. 2018
33. General Guidelines for Clinical Evaluation of Ayurvedic Interventions CCRAS New Delhi, Volume III 1st Edn. 2018
34. WHO international standard terminologies on Ayurveda WHO International Standard Terminology on Ayurveda, WHO 2022
35. Inorganic Pharmaceutical Chemistry Gundu Rao P, Vallabha Prakashana 36. Organic Pharmaceutical Chemistry Singh Harkishan; Kapoor V K, Vallabha Prakashana

- 37 Shlokavali of Rasashastra Bhaishajya Kalpana Ninad Sathye; Shivaji Wavhal, Shantanu Prakashan Pune, 2009
38. Ansel's Pharmaceutical Dosage Forms and Drug Delivery Systems Loyd V Allen : Others, 9th volume, Lippincott Williams & Willkins Wolters Kluwer Co.2011
39. Laboratory Guide for the Analysis of Ayurveda and Siddha Formulations Lavekar G S, Central Council For Research in Ayurveda & Siddha, 2010
40. Pharmaceutics I & II Mehta R M, Vallabha Prakashana, 2014
41. Central Drugs Standard Control Organization Directorate General of Health Services Ministry of Health & Family Welfare Government of India <https://cdsco.gov.in/opencms/opencms/en/Home/>
42. FSSAI official website <https://www.fssai.gov.in/>
43. PHARMACOPOEIA COMMISSION FOR INDIAN MEDICINE & HOMOEOPATHY OFFICIAL WEBSITE <https://pcimh.gov.in/>

RogaNidan evam VikritiVigyan

Ayu- RN

| Total number of Teaching hours: 450 | | |
|-------------------------------------|-----|----------|
| Lecture hours(LH)-Theory | 150 | 150(LH) |
| Paper I | 60 | |
| Paper II | 90 | |
| Non Lecture hours(NLH)-Theory | 300 | 300(NLH) |
| Paper I & II | 90 | |
| Non Lecture hours(NLH)-Practical | | |
| Paper I & II | 210 | |

Contents of Course

Paper 1 Fundamental Principles of Vikriti Vigyan

| Sr. No | List of Topics |
|--------|---|
| 1 | 1. Roganidana – Pathophysiology and clinical diagnosis |
| 2 | 2. Pareeksha Roga and RogiPareeksha |
| 3 | 3. Methods of Rogipareeksha |
| 4 | 4. Sapekshanidana - Vyavacchedakanidana Sapekshanidana - Vyavacchedakanidana of Ukta/Anuktavyadhi: Methods of differential diagnosis |
| 5 | 5. Upashaya/ Anupashaya |
| 6 | 6. DoshaVikriti A. Nidana (Vyadhijanakahetu) B. Agni bheda and Vikriti C. DoshaVridhhi, Kshaya and Dushta Karma, Ashyapakarsha, Avarana, Samsargaja, Sannipataja. D. Doshaswabhaba - Nityasamshleshita (Leena) dosha and Pariccheditadosha E. Paridhavamanaadosha |
| 7 | 7. Doshagati and Rogamarga |

| | |
|----|---|
| 8 | 8. Srotodushti Samanyasrotodustinidana and lakshana |
| 9 | 9. Concept of Ama A. Samanyanidana, and Samanyalakshana B. Bheda (Anna rasa. Mala sanchaya (Dhatwagnimandyanit). Doshadushti) |
| 10 | 10. Assessment of Ama Sama and niramadoshalakshana, Pureeshalakshana |
| 11 | 11. Sthanasamshtaya – Poorvaroopa |
| 12 | 12. Dushyadushti A. Dhatu and mala vriddhikshayalakshana B. Specific Srotodustilakshana in relation to Dosha, Upadhatu, Mala, Indriya, Avayava, and Manadushtilakshana |
| 13 | 13. Samprapti A. Sampraptibheda B. Vyadhijanma and Vyadhijanya |
| 14 | 14. Rupa Pratyatma/ Samanya/ VishishtaRupa |
| 15 | 15. Vyadhinamakarana |
| 16 | 16. Vyadhi A. Definition, B. Classification – Dwividha/ Trividha/ Chaturvidha/ Saptavidha (Adibala/ Sahaja - Genetic, Janmabala/ Garbhaja - Congenital, Doshabala/ Jataja Acquired, Sanghatabala/ Peedaja - Traumatic, Daivabala/ Prabhavaja - Iatrogenic, Kalabala/ Kalaja – Environmental and Geriatric, Swabhavabalapravrutta), etc. |
| 17 | 17. Ashtanindita (Endocrine disorders) |
| 18 | 18. Janapadodhwamsavikara (Pandemic disorders) |
| 19 | 19. NidanarthakaraVyadhi, Vyadhisankara |
| 20 | 20. Vyadhikshamatva A. VikaravighataBhava&Abhava, SatmyaB. Ojus - Bheda – Two types and Four types C. Doshapaka D. ImmunityE. Healing/repair |
| 21 | 21. RogibalaPareeksha |
| 22 | 22. DhatuPaka A. DhatupakaB. Ojodustilakshana C. Asatmya - Immune pathologyD. Cell Injury and Cellular adaptations E. Inflammation F. Haemodynamic disorders G. Neoplasia |

| | |
|--|---|
| 23 | 23. Infection and Nutritional disorders |
| 24 | 24. Upadrava |
| 25 | 25. Arishta |
| 26 | 26. Vyadhibalapareeksha |
| 27 | 27. Sadhyasadhyatva – Prognosis |
| 28 | 28. Digital health and Artificial intelligence in the context of Roganidana |
| Paper 2 Vyadhi Vigyan, contemporary understanding and updates | |
| 29 | 1. Agnimandya – Ajeerna, Anaha, Adhmana, Atopa |
| 30 | 2. Chhardi |
| 31 | 3. Amlapitta |
| 32 | 4. Shoola ParinamaShoola, AnnadravaShoola |
| 33 | 5. Atisara, and Pravahika |
| 34 | 6. Grahani |
| 35 | 7. Visuchika, Alasaka, Vilambika |
| 36 | 8. Common GIT diseases Ulcerative dyspepsia and Non-ulcerative dyspepsia, Irritable Bowel Syndrome, Inflammatory Bowel Diseases |
| 37 | 9. Mutrakrichhra |
| 38 | 10. Mutraghata |
| 39 | 11. Common Urinary diseases Urinary Tract Infection, Prostatomegaly, Nephrotic syndrome, Nephritic syndrome, Acute Kidney Injury and Chronic Kidney Disease |
| 40 | 12. Hikka |
| 41 | 13. Shwasa |

| | |
|----|--|
| 42 | 14. Kasa |
| 43 | 15. Rajayakshma&Shosha |
| 44 | 16. Common lung disorders Pneumonia, Chronic Obstructive Pulmonary Disease, Pleural effusion, Bronchiectasis |
| 45 | 17. Jwara Jwarabheda - Doshaja and Agantuja (Abhishangajwara), VishamaJwara, PunaravartakaJwara, Jwaraavastha - Ama, Pachyamana and NiramaJwara |
| 46 | 18. Masurika – Romantika |
| 47 | 19. Fever A. General mechanism of Fever. B. Introduction to Eruptive fevers - Measles, Chicken pox, Rubella, Hand foot mouth disease, Herpes zoster C. Parasitic fevers – Filariasis, Malaria, D. Detailed descrip- tion of Common infective fevers – Typhoid, Dengue, Influenza, Chikungunya, E. Common regional disorders presenting with fever |
| 48 | 20. Pandu |
| 49 | 21. Raktapitta |
| 50 | 22. Hematopoietic diseases Anaemia, Nutritional anaemia, Thalassemia, Sickle cell Anaemia, Leukaemia, Thrombocytopenia |
| 51 | 23. Hridroga |
| 52 | 24. Shotha |
| 53 | 25. Cardiovascular disorders Coronary Artery Disease (Ischemic Heart Disease, and Myocardial Infarction) and Congestive cardiac failure |
| 54 | 26. Kamala |
| 55 | 27. UdaraRoga |
| 56 | 28. Hepatobiliary diseases Liver cirrhosis, Alcoholic and Non - Alcoholic Liver Disease, Hepatitis, Jaundice and Ascites |
| 57 | 29. Kushtha - MahaKushtha&KshudraKushtha |
| | (According to Charaka) |

| | |
|----|--|
| 58 | 30. Sheetapitta |
| 59 | 31. Shwitra |
| 60 | 32. Visarpa |
| 61 | 33. Skin diseases Allergic disorders - Eczema, Urticaria; Squamous lesions -Psoriasis, Lichen planus; Bullous lesion – Pemphigus and Pemphigoid; Mycotic skin diseases; Leprosy; Vitiligo; Cellulitis |
| 62 | 34. Galaganda |
| 63 | 35. Thyroid disorders Hypothyroidism and hyperthyroidism |
| 64 | 36. Sthoulya – Karshya |
| 65 | 37. Obesity |
| 66 | 38. Prameha |
| 67 | 39. Diabetes Mellitus and Pancreatitis |
| 68 | 40. Vatavyadhi Samanyanidana, Samanyapurvarupa, Samanyalakshana |
| 69 | 41. Snayugatavata Snayugatavata, Akshepaka – Apatanaka; Ardita, Pakshaghata, Kampavata, Gridhrasi, Vishwachi, Pangutwa Diseases of bone and Joints - Osteoarthritis, Osteoporosis. Frozen Shoulder, Calcaneal spur/ Plantar fasciitis, Tennis elbow, Carpel tunnel syndrome; Muscular diseases - Muscular Dystrophy |
| 70 | 42. Common neurologic and spine disorders Common neurologic diseases: Parkinson’s disease, Stroke, Bell’s Palsy, Motor Neuron Disease, Transverse myelitis, Epilepsy (Organic). Common Spine disorders: LumbagoSciatica syndrome, Brachial neuralgia, Cervical and Lumbar Spondylosis |
| 71 | 43. Sandhigatavata and Asthimajjagatavata Sandhigatavata, Katigraha, Manyasthambha, Vatakantaka, Avabahuka, Amsashosha |
| 72 | 44. Diseases of bone, joints, and muscles |

List of Practicals

| PRACTICALS (Marks-100) | |
|-------------------------------|---|
| S.No | List of Topics |
| 1 | 1. Aptopadesha Pareeksha/Prashna Pareeksha |
| 2 | 2. Introduction to case sheet. Pratyaksha and Anumana Pareeksha. |
| 3 | 3. General clinical and Systemic examination -A |
| 4 | 4. General clinical and Systemic examination - B |
| 5 | 5. Common Symptomatology of different systems |
| 6 | 6. Vyavachedakanidana/ Differential diagnosis |
| 7 | 7. Case presentation |
| 8 | 8. Introduction to Diagnostic procedures - Hematology, Biochemistry, Microbiology, Urine, Stool |
| 9 | 9. Introduction to Electro Cardio Gram (ECG), Different imaging techniques |
| 10 | 10. Introduction to Histopathology |
| 11 | 11. Study of Histopathology Specimens |
| 12 | 12. Retaspareeksha |
| 13 | 13. Pathology practical (Perform/ Observation/ Interpretation) |

Distribution of Practical Exam

| | | |
|----------|--|-----------|
| <p>1</p> | <p>Spotting/ Identification: (10 Questions X 3 Marks = 30 Marks):(Note: Minimum of one spotting should be kept mandatorily from all the different heads mentioned below)X-Ray/ECG/ Clinical sign picture/ Slide/ Diagnostic report/ Causative factors</p> <p>X-Ray (Assessment format) On a given X-Ray film (Any of the below):</p> <ul style="list-style-type: none"> • Comment on inspiration and rotation (chest), position, penetration or exposure, and artifacts in a given X-Ray film • Find out the abnormal findings or sign that indicates a specific condition <p>(By assessing size, shape, density, and location of structures) – Airway/ Bones and soft tissue/ Cardiac/ Diaphragm/ Effusion/ Gastric bubble/ Hila and mediastinum)</p> <p>ECG (Assessment format): On a given Electro Cardio Gram (Any of the below):</p> <ul style="list-style-type: none"> • Determine and comment on rhythm and rate (Paper and pencil method/ Caliper method/ 10-times method/ 1500 method) • P wave interpretation (Location/ Amplitude/ Duration/ Configuration/Deflection) • PR interval interpretation (Location and duration) • QRS complex interpretation (Location/ Amplitude/ Duration/ Configuration/ Deflection) • ST segment interpretation (Location and deflection) • T wave interpretation (Location/ Amplitude/ Configuration/ Deflection) <p>Clinical sign/ image or picture (Assessment format): On a given image of a patient with sign (Any of the below):</p> <ul style="list-style-type: none"> • Identify the sign • Possible aetiologies behind the case • Possible investigations for further confirmation of a case • Differential diagnosis • Diagnose the condition or disease associated with the sign <p>Slide (Assessment format): Identify and mention the provisional diagnosis of (Any of the below):</p> <ul style="list-style-type: none"> • Haematology (Peripheral blood smear) • Histopathology (Lung and trachea/ Blood, Spleen and lymph/ Heart and vessels/ Glands/ Liver) • Stool microscopy (Ova, Cyst, Pus cells) | <p>30</p> |
|----------|--|-----------|

| | | |
|--|--|--|
| | <ul style="list-style-type: none"> • Urine microscopy (Epithelial cells, RBCs, Leukocytes, Casts, Crystals) • Microbiology (Bacterial identification – Shape, Gram+ve/ Gram –ve) • Parasitology (Slide/ Specimen) <p>Diagnostic report (Assessment format): Interpret the report and mention the provisional diagnosis (Any of the below):</p> <ul style="list-style-type: none"> • Hemogram • Liver Function Test (LFT) • Renal Function Test (RFT) • Diabetic profile • Thyroid profile • Lipid profile <p>Causative factors/ Hetu (Assessment format): Mention the disease or diseases that are associated with the cause or hetu (Shown as an object/ model/ specimen/ picture) with brief justification (Any of the below):</p> <ul style="list-style-type: none"> • Any specific diet • Any specific regimen • Any specific factor mentioned for causing a disease | |
|--|--|--|

| | | |
|---|--|----|
| 2 | <p>Long Case: History taking, Examination, Investigation (Order and interpretation), Differential Diagnosis, Provisional Diagnosis (1 Case X 40 Marks = 40 Marks)</p> <p>a. History taking (Including communication skills) - 10 Marks History taking should cover the following points:</p> <ul style="list-style-type: none"> • AturaVivara (Basic patient details) • PradhanaVedana with Kala prakarsha (Chief complaints with duration) • Vartamanavyadhivruddhant (History of present illness) • PoorvavyadhiVrittanta (Past illness) • Kula vruttanta (Family history) • ChikitsaVruddhant (Treatment history) • VayaktikaVruddhant (Personal history) – Ahara, Vihara, Vyasana, Vyayamashakti, Mala pravritti, Mutrapravritti, Raja pravritti, Koshta, Nature of work and duration of work, Emotional makeup, and Social Relation. <p>b. Examination & Order and interpretation of investigations – 20 Marks The examination should include the following points:</p> <ul style="list-style-type: none"> • General examination including Ashtasthanapareeksha • Systemic examination - Pratyaksha and AnumanaPariksha/PanchajnanendriyatahaPareeksha (Affected system/ systems), Srotopareeksha and Manapareeksha <p>Investigations should include the following points: • Ordered investigation to patient</p> <ul style="list-style-type: none"> • Any further comment on the previously ordered investigations and any further suggestions • Interpretation of ordered investigation to the relevant case <p>c. Differential Diagnosis, Provisional Diagnosis, and Final diagnosis. – 10 Marks Differential diagnosis and diagnosis (Vyavachedakanidana and vyadhivinishchaya) should include the following:</p> <ul style="list-style-type: none"> • Group of suspicious diseases based on your knowledge on Ayurveda and contemporary science against your observation on patient • Justification for inclusion and exclusion of diseases based on pratyatmalakshana • Arriving at a final diagnosis based on the clinical acumen • Drafting the sampraptighataka (Involvement of dosha, dushya, indriya, manas, agni, koshta, srotas, srotodushtiprakara, udbhavasthana, sancharasthanavyaktasthana, rogamarga, upadrava, arishta, sadhyasadhya) | 40 |
|---|--|----|

| | | |
|---|--|----|
| 3 | <p>Demonstration: Clinical examination on the simulator or a patient or Simulated patient (SP) (1 Demonstration X30 Marks= 30 Marks):</p> <p>The student will be given a specific case or a scenario (other than the case given for long case taking) and asked to perform the examination of a particular system as a whole or a part of the examination such as inspection or palpation or percussion or auscultation or any specific tests or group of tests or elicit any particular sign for any of the following system (Only steps of examination to be written with observation and interpretation after demonstration):</p> <ul style="list-style-type: none"> • Respiratory system examination • Cardiovascular System examination • Oral cavity and per abdominal examination • Nervous system examination • Locomotor system examination • Integumentary system examination | 30 |
| 4 | <p>Viva mark distribution and basic instructions</p> <p>Conceptual and theoretical questions:</p> <p>MK: Pareeksha, DoshaVkruti, Dhatu and Srotovaigunya, Ama, NidanaPanchaka, Kriyakala, Vyadhi, Vyadhikshamatwa, DhatuPaka etc. Annavaha, Pureeshavaha, Pranavaha, Mutravaha, Rasavaha, Raktavaha, Medovaha, Vatavyadhi, Snayugata, Sandhigatavikara etc. (20 Marks)</p> <p>DK: Rogi and RogaBalapareeksha, Doshagata and Rogamarga, Nidanarthakararoga, Vyadhinamakarana, Sadyasadyata, Upadrava etc. Common GIT diseases, Common Urinary diseases, Common lung disorders, Fever, Hematopoietic diseases, Cardiovascular disorders, Hepato-biliary disorders, Skin diseases, Thyroid disorders, Obesity, Metabolic diseases, Common neurologic and spine disorders, Diseases of bone, joints, and muscles, Immunological & Metabolic disorders, Common parasitic disorders, Tuberculosis etc.(10 Marks)</p> <p>Link to existing literature and critical thinking:</p> <p>MK: Pareeksha, DoshaVkruti, Dhatu and Srotovaigunya, Ama, NidanaPanchaka, Kriyakala, Vyadhi, Vyadhikshamatwa, DhatuPakaetc.Annavaha, Pureeshavaha, Pranavaha, Mutravaha, Rasavaha, Raktavaha, Medovaha, Vatavyadhi, Snayugata, Sandhigatavikara etc. (20 Marks)</p> <p>DK:</p> | 70 |

| | | |
|---|--|----|
| | Rogi and RogaBalapareeksha, Doshagata and Rogamarga, Nidanarthakara- roga, Vyadhinamakarana, Sadyasadyata, Upadrava etc. (10 Marks) | |
| 5 | Internal assessments | 30 |

References Books/ Resources

1. Madhava Nidana Srikanta Murthy KR. Madhava Nidanam (Rogaviniscaya) of Madhavakara. Varanasi: Chaukhambha Orientalia; 2013
2. Charaka Samhita Agnivesh, Charaka, Dridhbala . Reprint. Varanasi: Chowkhamba Sanskrit Series Office; 2009. Charaka Samhita
3. Susruta Samhita Acharya YT, editor. Sushruta Samhita of Sushruta. Reprint ed. Varanasi: Chaukhambha Orientalia; 2017
4. Ashtanga Hrudaya Sadashiva HS, editor. 1st ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2011. Astanga Hrudaya of Vagbhata
5. Ashtanga Sangraha Vagbhata. Ashtanga Sangraha. Edited by Shivprasad Sharma. Chowkhambha Sanskrit series office, Varanasi
6. Roga vigan evum vikruti vigan Yashwant Govind Joshi
7. Roganidan evum vikruti vigan Prof. Ajay Kumar Sharma; Chaukhambha Bharati Academy
8. Textbook of Ayurvediya vikrtivijnana & Roga Vijnana Dr. Parameswarappa S. Byadgi; Chaukhambha publications, New Delhi
9. Textbook of Pathology with Pathology Quick Review and MCQs 2018; Jaypee Brothers Medical Publishers; Harsh Mohan
10. A guide to pathology Jaypee Brothers Medical Publishers; Eighth edition (2005); K Chaudhary
11. Robbins & Cotran Pathologic Basis of Disease 10th Edition - May 11, 2020; Kumar, Abbas, Aster; Elsevier publishers
12. Davidson's Principles and Practice of Medicine 24th Edition 2022 by Ian Penman (Editor), Stuart H. Ralston (Editor), Mark Strachan (Editor), Richard Hobson (Editor); Elsevier publishers
13. A textbook of pathology N.C Dey & T. K Dey; NCBA publisher 2009
14. Boyds Textbook of Pathology 10th Edition by J R Bhardwaj, Prabal Deb (Author), Wolters Kluwer India (Publisher)
15. Kundu's Bedside Clinics in Medicine 2020; KSP Udyog Publisher; Arup Kumar Kundu 16. P. J. Mehta's Practical Medicine 21st Edition – 2021; The National Book Depot; Nihar P Mehta, SP Mehta, SR Joshi
17. Macleod's Clinical Examination 13th Edition, 2013 by J. Alastair Innes, Anna R. Dover, Karen Fairhurst
18. Clinical Methods in Medicine : Clinical Skills and Practices 2015; Jaypee Brothers Medical Publishers; S. N. Chugh, Eshan Gupta
19. Chamberlain's Symptoms and Signs in Clinical Medicine 2010; CRC Press; Andrew R. Houghton & David Gray
20. Hutchison's Clinical Methods: An Integrated Approach to Clinical Practice 2012; Elsevier publishers Michael Glynn, William M. Drake
21. Bates' Guide to Physical Examination and History Taking Lippincott Williams & Wilkins; 2016 by M.D. Bickley, Lynn S. (Author), M.D. Szilagyi, Peter G. (Author), M.D. Hoffman, Richard M. (Editor)

22. French's Index of Differential Diagnosis An A-Z 1 2016; CRC Press; by Mark T. Kinirons (Editor)
23. Savills System Of Clinical Medicine 14th Edition 2005; CBS Publishers; by E C Warner (Author)
24. Todd-Sanford-Davidsohn clinical diagnosis and management by laboratory methods 2016; Saunders publishers; by Campbell James Todd (Author)
25. Clinical Methods In Ayurveda 2013; Chaukhamba Orientalia; by Prof. K.R. Srikantha Murthy (Author)
26. Clinical Diagnosis in Ayurveda (A Practical book of Ayurvedic Diagnosis in the Light of Modern Medical Science) 2015; Chaukhamba Sanskrit Pratishthan; by M. Srinivasulu (Author)
27. Medical Laboratory Technology 2009; Jaypee Brothers Medical Publishers; by Ramnik Sood (Author)
28. Textbook of Medical Laboratory Technology Revised Reprint 2021; B. Godkar, Darshan P. Godkar; Bhalani publishing house
29. Practical biochemistry for medical, dental and allied courses 3 rd Edition; by Bd Toora G Rajagopal (Author)
30. Essential of clinical pathology 2010; First edition; Jaypee Brothers Medical Publishers; by Shirish M Kawthalkar (Author)
31. Textbook of human parasitology protozoology and helminthology 2020; CBS Publishers by Sood R. (Author)
32. Clinical Pathology & Clinical Bacteriology (For Medical Students and Practitioners) Jaypee Brothers Medical Publishers; 9th Edition; 2000 by Sachdev (Author)
33. Practical Pathology Arya Publications; by K. Uma Chaturvedi (Author), Tejindar Singh (Author)
34. Text book on clinical biochemistry and hematology Naveen Chandra, Anmol Publisher ; First edition, 2015
35. Medical Laboratory Technology Third Edition, 2019; NCBA publishers by C R Maiti
36. Diagnosis and Treatment of Common Skin Diseases 2016; Jaypee Brothers Medical Publishers; by Virendra N Sehgal (Author)
37. Ananthanarayan and Paniker's Textbook of Microbiology Eleventh Edition; 2020; Universities Press (India) Pvt. Ltd; by R Ananthanarayan and CK Jayaram Paniker (Author), Reba Kanungo (Editor)
38. Learning Radiology: Recognizing the Basics 2015; Saunders publishers; by William Herring MD FACR (Author)
39. Radiology in Medical Practice 2015; Elsevier India; by A B M Abdullah (Author)
40. Clark's Positioning in Radiography 13th Edition; 2015; CRC Press; by A. Stewart Whitley (Author), Gail Jefferson (Author), Ken Holmes (Author), Charles Sloane (Author), Craig Anderson (Author), Graham Hoadley (Author)
41. Textbook Of Radiology For Residents And Technicians 2018; CBS Publishers; by Bhargava S. K (Author)
42. Essentials Of ECG 2017; Avichal Publishing Company; by Vipin Gupta (Author)

43. Nidana chikitsa hastamalaka 2016; Baidyanath Ayurved publication; by Vaidya Ranjit Rai Desai
44. Rasavaisheshikam Kottakal Ayurveda Series:120; 3rd Edition; 2014; by K. Raghavan Tirumulpad
45. Taber's Cyclopedic Medical Dictionary 23rd Edition; 2017; F.A. Davis Company; by Venes (Author)
46. Doshakaranatwa Mimamsa Chowkhamba Bharati Academy ; 2013; by Acharya P.V. Sharma
47. Nadi Darshan Motilal Banarsidass publishers; by Vaidya Tara Shankar Mishra
48. Ayurvediya shabdakosha Laxmanshastri Joshi, Maharashtra Rajya Sahitya Mandal; 1968; by Veni Madhava Shastri
49. Kayachikitsa Indrayani Sahithya Prakashan; 2015; by Vd Yashwant Govind Joshi
50. Dermatological Diseases A Practical Approach 3rd Edition – 2023; TreeLife Media (A division of Kothari Medical); by - (Author), Venkataram Mysore, K H Satyanarayana Rao, Sacchidanand S, M Deepthi, (Editor)
51. Introduction to Kayachikitsa Chaukhamba Orientalia Varanasi; 3rd Edition; 1996; C. Dwara-kanath
52. Digestion and metabolism in Ayurveda Chowkhambha Krishnadas Academy; 1997; 2nd Edition; by C. Dwarakanath
53. Ayurvedic Nadi Pariksha Vijnana Chaukhamba Surbharati Prakashan; 2015; by Dr. Govind Prasad Upadhyay
54. NAMASTE portal <http://namstp.ayush.gov.in/#/index>
55. AYUR PRAKRITI WEB PORTAL http://www.ccras.res.in/ccras_pas/
56. AYUSH research portal <https://ayushportal.nic.in/>
57. Dharaonline <http://www.dharaonline.org/Forms/Home.aspx>
58. Stanford Medicine25 <https://stanfordmedicine25.stanford.edu/>
59. Medscape Clinical Reference www.medscape.com
60. UpToDate www.uptodate.com
61. Merck Manual Professional Edition www.merckmanuals.com/professional
62. DynaMed www.dynamed.com
63. ClinicalKey www.clinicalkey.com
64. Taber's Medical Dictionary www.tabers.com/tabersonline
65. MedlinePlus Medical Dictionary <https://medlineplus.gov/>
66. WebMD Symptom Checker <https://symptoms.webmd.com/>.
67. Mayo Clinic Symptom Checker <https://www.mayoclinic.org/symptom-checker/selectsymptom/itt-20009075>.
68. Simulated cases EM SIM CASES <https://emsimcases.com/>
69. Daily rounds <https://dailyrounds.org/>
70. Prognosis <https://play.google.com/store/apps/details?id=com.medicalj oyworks.prognosis&hl=en&gl=US&pli=1>
71. PubMed Central <https://www.ncbi.nlm.nih.gov/pmc/>
72. Radiopaedia <https://radiopaedia.org/>



Agad Tantra evam Vidhi Vaidyaka
AyUG-AT

| | | | |
|--|-----|-----|----------|
| Total number of Teaching hours: 300 | | | |
| Lecture hours(LH)-Theory | | | |
| Paper I | 100 | 100 | 100(LH) |
| Non Lecture hours(NLH)-Theory | | 200 | 200(NLH) |
| Paper I | 60 | | |
| Non Lecture hours(NLH)-Practical | | | |
| Paper I | 140 | | |

Contents of Course-**Total Marks- 100**

| Sr. No | List of Topics |
|--------|---|
| 1 | <p>Concepts of Agada Tantra (Clinical Toxicology)</p> <p>1.1 Agada Tantra and Clinical Toxicology. 1.2 Scope of Agada Tantra. 1.3 Definition of visha and poison, synonyms, visha guna, difference between visha, madya and oja guna, visha gati, classification of visha and poison, sthavara and jangama visha adhishtana. 1.4 Difference between poison, venom and toxin. 1.5 Routes of administration of poison. 1.6 Mode of action of visha (visha gunanusara karma) and poison (Introduction to toxicokinetics) 1.7 Factors modifying the action of poison. 1.8 Visha vardhaka bhava and visha sankata 1.9 Vishavega, vegantara and sthavara visha veganusara lakshana and chikitsa. 1.10 Visha peeta and vishamukta lakshana.</p> |
| 2 | <p>Visha Chikitsa (Management of Poisoning) 2.1. Diagnosis of poisoning in living & dead 2.2. Chaturvimshati upakrama. 2.3. General principles of management of poisoning. 2.4. Duties of medical officer in case of suspected poisoning.</p> |

| | |
|---|--|
| 3 | <p>Vishakta aahara pariksha and Viruddha ahara 3.1. Sources of exposure of visha with contemporary relevance. 3.2. Vishakta aahara pariksha. 3.3. Adulteration and tests for its detection. 3.4. Techniques used in the detection of poisons. 3.5. Viruddha-ahara with contemporary relevance. 3.6. Food poisoning and amavisha.</p> |
| 4 | <p>Garavisha and Dooshivisha 4.1. Garavisha 4.2. Dooshivisha 4.3. Contemporary aspects of garavisha and dooshivisha. 4.4. Role of garavisha and dooshivisha in the manifestation of diseases 4.5. Research updates in garavisha and dooshivisha</p> |
| 5 | <p>Visha Upadrava and diseases caused due to exposure to Visha/poisons 5.1 Visha upadrava 5.2 Drug-induced toxicity 5.3 Occupational hazards. 5.4 Allergic manifestations 5.5 Endocrine disrupters</p> |
| 6 | <p>Environmental Toxicology 6.1 Vishakta vayu, jala and bhumi (air, water and land pollution) 6.2 Effect of biological, chemical and nuclear warfare. 6.3 Ecotoxicology & biomagnification. 6.4 Toxicovigilance.</p> |
| 7 | <p>Dermatological manifestations of visha/poisons. 7.1. Contact dermatitis and its management. 7.2. Signs and symptoms and management of abhyanga visha, lepa visha, vastra visha, paduka visha, abharana visha etc. with contemporary relevance. 7.3. Signs and symptoms and management of dermatological manifestations due to cosmetics, chemicals, occupational and other allergens. 7.4. Dermatological manifestation due to dooshivisha and garavisha. 7.5. Dermatological manifestation due to bites and stings.</p> |
| 8 | <p>Therapeutic utility of Agada yoga 8.1 Dooshivishari agada 8.2 Bilwadi agada 8.3 Dashanga agada 8.4 Murvadi agada 8.5 Panchashirisha agada 8.6 Vishaghna mahakashaya (Charaka Samhita) 8.7 Ekasara gana (Sushruta Samhita)</p> |
| 9 | <p>Sthavara visha – Poisons of Plant origin 9.1. Cardiac Poisons - Vatsanabha, Karaveera, Digitalis, Tobacco and Cerbera odollam 9.2. Neurotoxic Poisons- Kupeelu, Ahipheena, Dhattura, Bhanga. 9.3. Irritant Poisons - Jayapala, Gunja, Bhallataka, Arka, Snuhi, Langali..</p> |

| | |
|----|--|
| 10 | <p>Sthavara Visha – Poisons of Metallic origin</p> <p>10.1. Arsenic. 10.2. Mercury. 10.3. Lead. 10.4. Copper</p> |
| 11 | <p>Jangama Visha</p> <p>11.1. Sarpa visha 11.2. Loota visha 11.3. Vrischika visha 11.4. Mushika visha and its contemporary relevance. 11.5. Alarka visha and its contemporary relevance. 11.6. Keeta visha 11.7. Vector borne diseases.</p> |
| 12 | <p>Kritrima visha</p> <p>12.1. Inorganic Acids – Sulphuric acid, Hydrochloric acid, Nitric acid. 12.2. Organic Acids - Oxalic acid, Carbolic acid, Formic acid. 12.3. Alkalies - Potassium hydroxide and Sodium hydroxide. 12.4. Asphyxiants – Carbon monoxide, Carbon dioxide. 12.5. Non-metallic poisons – Phosphorous, cyanide 12.6. Hydrocarbons – Kerosene. 12.7. Agrochemical Poisoning – Organo-phosphorus compounds, Carbamates, Organo-chlorine compounds, Aluminium phosphide. 12.8. Household poisons.</p> |
| 13 | <p>Substances of abuse</p> <p>13.1. Madya and madatyaya, Alcoholism. 13.2. Addiction - Alcohol, Bhang, Opioids, Tobacco and Digital addiction. 13.3. Drugs of abuse- Lysergic acid diethylamide (LSD) and 3,4-Methylenedioxy methamphetamine (MDMA). 13.4. Narcotic Drugs and Psychotropic Substances (NDPS) Act.</p> |
| 14 | <p>Agada Tantra perspectives on cancer</p> <p>14.1. Toxic carcinogens. 14.2. Toxicities due to chemo and radiotherapy and its Ayurvedic approach. 14.3. Agada and visha dravya prayoga in the prevention and management of cancer along with its research updates.</p> |
| 15 | <p>Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhi vaidyaka):</p> <p>15.1 Forensic Medicine and Medical Jurisprudence. 15.2 Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.</p> |
| 16 | <p>Vaidya sadvritta : Duties and Responsibilities of medical practitioner</p> <p>16.1 Vaidya sadvritta, medical ethics and code of conduct, Charaka oath and Hippocratic oath. 16.2 NCISM - constitution, objectives and functions. 16.3 Duties, rights and privileges of a registered medical practitioner. 16.4 Consent, professional secrecy and privileged communication. 16.5 Professional negligence, professional misconduct and unethical practices. 16.6 Defenses in medical negligence suits. 16.7 Medical records. 16.8 Consumer Protection Act.</p> |

| | |
|----|---|
| 17 | Legal Procedures 17.1. Courts and their powers 17.2. Inquest, evidence and witnesses 17.3. Court procedures: summons, oath, recording of evidence and conduct money. 17.4. Conduct of a medical professional in the court of law. |
| 18 | Personal identity 18.1. Identification data 18.2. Age 18.3. Race, religion, sex. 18.4. Moles, tattoos, scars, occupational marks & hairs. 18.5. Hand writing, dactylography, DNA typing and superimposition |
| 19 | Thanatology 19.1. Death 19.2. Signs of death. 19.3. Medicolegal autopsy and exhumation. 19.4. The Transplantation of Human Organs and Tissues Act (THOTA). |
| 20 | Asphyxial deaths 20.1. Hanging. 20.2. Strangulation and suffocation 20.3. Drowning. |
| 21 | Injury 21.1. Basics of injury 21.2. Mechanical injury 21.3. Firearm injury 21.4. Thermal injury 21.5. Dowry death |
| 22 | Pregnancy, delivery and abortion 22.1 Medico-legal aspects of pregnancy, delivery, infanticide and battered baby syndrome. 22.2 Abortion, Medical Termination of Pregnancy (MTP) Act and Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act. 22.3 Medico-legal aspects of artificial insemination and surrogacy. |
| 23 | Sexual offences 23.1. Rape 23.2. Medico-legal aspects of sexual offences 23.3. Protection of Children from Sexual Offences (POCSO) Act |
| 24 | Forensic psychiatry. 24.1. Common symptoms associated with psychiatric disorders 24.2. Lucid interval 24.3. Civil and criminal responsibilities of a mentally ill person 24.4. Mental Health Act (MHA) |
| 25 | Forensic science laboratory 25.1. Hierarchy and major divisions of forensic lab services. 25.2. Newer techniques and recent advances - polygraphy, narcoanalysis, DNA profiling. |

| | |
|----|---|
| 26 | <p>Laws, Acts, Rules and Regulations</p> <p>26.1 Clinical Establishments Act</p> <p>26.2 State AYUSH registration board rules and regulations.</p> <p>26.3 Medicare Service Persons and Medicare Service Institutions (Prevention of violence and damage or loss to property) Act, 2008.</p> <p>26.4 Drugs and Cosmetics Act and Rules – Schedules related to poison.</p> <p>26.5 The Occupational Safety, Health and Working Conditions Code, 2020</p> <p>26.6 Employees State Insurance Act, 1948.</p> <p>26.7 Rights of Person with Disability Act, 2016.</p> |
|----|---|

List of Practicals- (Marks-200)

| S.No | List of Topics |
|------|---|
| 1 | Visha Chikitsa |
| 2 | Vishakta Ahara Pariksha |
| 3 | Dooshivisha, Garavisha, Visha Upadrava |
| 4 | Dermatological manifestation of visha |
| 5 | Environmental toxicology |
| 6 | Jangama Visha |
| 7 | Sthavara visha |
| 8 | Substance abuse |
| 9 | Legal Procedures |
| 10 | Vaidya Sadvritta |
| 11 | Personal Identity |
| 12 | Thanatology |
| 13 | Injury |
| 14 | Sexual offences |
| 15 | Field Visits (Field visits should be integrated along with the educational tour conducted by Dravyagunavijnan, Rasasatra and Swasthavrutha Departments) |

| | |
|----|---------------------------------------|
| 16 | Topics related to regional preference |
|----|---------------------------------------|

Distribution of Practical Exam

| Sr No. | Heads | Marks |
|--------|---|-------|
| 1 | <p>Spotting (15 specimens of 4 marks each)</p> <p>1.1. Snake – 2 specimens</p> <p>1.1.1 Identification - 1 mark</p> <p>1.1.2 Differentiating features of poisonous/ non-poisonous snake – 1 mark</p> <p>1.1.3 Important clinical signs - 1 mark</p> <p>1.1.4 Ayurvedic management - 1 mark</p> <p>1.2. Mineral poisons/ Kritrima visha (1 specimen each)-2 specimens</p> <p>1.2.1. Identification - 1 mark</p> <p>1.2.2 Identification of symptom clusters mimicking other diseases and their differential diagnosis - 2 marks</p> <p>1.2.3 Method of detoxification and Antidotes - 1 mark</p> <p>1.3. Toxic plants– 2 specimens</p> <p>1.3.1 Identification with scientific, family and sanskrit names 1 mark</p> <p>1.3.2 Mode of use in Visha cases – 1 mark</p> <p>1.3.3 detoxification method, Class of poison and Active principles present in the plant - 1 mark</p> <p>1.3.4 Antidotes used against the specimen - 1 mark</p> <p>1.4. Antitoxic plants – 3 specimens</p> <p>1.4.1 Identification with scientific, family and sankrit names - 1 mark</p> <p>1.4.2 Mode of use in visha - 1 mark</p> <p>1.4.3 Active principles - 1 mark</p> <p>1.4.4 Important formulations - 1 mark</p> <p>1.5. Injuries – 2 specimens</p> <p>1.5.1. Identify the injury - 1 mark</p> <p>1.5.2. Identify the weapon/criminal act causing such injury - 2 mark</p> <p>1.5.3. Medico-legal importance - 1 marks</p> <p>1.6. News item – paper cuttings or other medico-legal case scenarios – 2 specimens</p> <p>1.6.1. Identify the crime – 1 mark</p> <p>1.6.2. Relevant IPC/CrPC sections associated with the crime – 1 mark</p> <p>1.6.3. Relevant Act related to the crime – with sub-questions related to its sub-sections, punishment etc. - 2 marks</p> <p>7. Jangama visha – other poisonous creatures – 2 specimens</p> <p>1.7.1. Identification – 1 mark</p> <p>1.7.2. Adhishtana/samanya lakshana/ chikitsa – 2 marks</p> <p>1.7.3. specific formulations/doses – 1 mark (Sub-questions mentioned against each item is for a purpose of example only. Different questions may be framed on the various aspects of the guidelines provided)</p> | 60 |
| 2 | Practical Records | 10 |
| 3 | Medical and Medico-legal Certificate Writing Students will be provided with a case-scenario based on which they are asked to write a medical certificate for a specific purpose. Evaluation guidelines should be based on the essential criteria in the format of a valid medical certificate. | 10 |

| | | |
|---|--|----|
| 4 | Short CaseCase scenarios with pictures to diagnose a specific case of poisoning and specific questions asked regarding its clinical examination, investigations, treatment, prognosis etc. | 10 |
| 5 | Clinical Applications of Agada Identification of Agada for a case scenario detailed – 2 marks Select the ingredients of the formulation from a group of drugs and identify using scientific names and answer sub-questions based on its preparation, anupana, dose etc. – 8 marks | 10 |
| 6 | Viva Questions will be asked on the following topics Agada Tantra (2 questions 5 marks each) - 10 marks Forensic Science (Vyavaharayurveda) (2 questions 5 marks) - 10 marks Jurisprudence (Vidhivaidyaka) (2 questions 5 marks) - 10 marks Toxicology (2 questions 5 marks each) - 10 marks Concepts of Agada Tantra in cancer and substance abuse (one question from each) (2 questions 5 marks each) - 10 marks Viva on Compilation and Communication skills (2 questions 5 marks each) - 10 marks | 60 |
| 7 | Electives | 10 |
| 8 | IA | 30 |

References Books/ Resources

- 1 Concise Forensic Medicine & Toxicology- KS Narayana Reddy, Jaypee Medical Publisher
- 2 Essentials of Forensic Medicine & Toxicology
K S Narayana Reddy, Jaypee Medical Publisher
- 3 Principles of Forensic Medicine & Toxicology
Rajesh Bardale, Jaypee Medical Publisher
- 4 Modern Medical Toxicology VV Pillay, Jaypee Medical Publisher
- 5 Recent Advances in Forensic Medicine and Toxicology (Volume 1 & 2)
Gautam Biswas, Jaypee Medical Publisher
- 6 Textbook on Medicolegal Issues: Related to Various Medical Specialties by Satish Tiwari Mahesh Baldwa Mukul TiwariAlka Kuthe
Jaypee Medical Publisher
- 7 Manual on Doctor and Law RN Goel Narendra, Malhotra Shashi Goel,
Jaypee Medical Publisher
- 8 Jaypee's Video Atlas of Medicolegal Autopsy Sujith Sreenivas C
Prasannan K Thomas Mathew, Jaypee Medical Publisher
- 9 Jaypee Gold Standard Mini Atlas Series Forensic Medicine by Ashesh
Gunwantrao Wankhede Jaypee Medical Publisher
- 10 MODI's Textbook of Medical Jurisprudence and Toxicology

- K Kannan, Jaypee Medical Publisher
11 A Text book of Agada Tantra Dr Shobha Bhat, Chaukamba Orientalia
12 Agada Tantra Dr Ramesh Chandra Tiwari, Chaukamba Orientalia
13 Text Book of Agad Tantra Evam Vyavaharayurveda
Dr Sandeep Charak Dr.Piyush Gupta Dr Divya Tiwari, Ayurveda Sanskrit Hindi Pustak Bhandar.
14 Ayodhyaprasad Achal's Agada Tantra Dr Jina Patnaik, Chaukamba Surbharati Prakashan
15 Illustrated Agada Tantra Dr PVNR Prasad, Chaukamba Sanskrit Series Varanasi
16 Textbook on Agada Tantra DR V P JOGLEKAR, RASHTRIYA SHIKSHAN MANDAL, PUNE
17 Review of Forensic Medicine and Toxicology by Dr Gautam Biswas Jaypee Medical Publisher
18 Toxicology - An Ayurvedic Perspective Department of Agadtantra, Vaidyaratnam PS Varier Ayurveda College, Kottakkal

Samhita Adhyayan-2 AyUG-SA2

| Total number of Teaching hours: 240 | | | |
|-------------------------------------|-----|-----|----------|
| Lecture hours(LH)-Theory | | | |
| Paper I | 100 | 100 | 100(LH) |
| Non Lecture hours(NLH)-Theory | | 140 | 140(NLH) |
| Paper I | 140 | | |
| Non Lecture hours(NLH)-Practical | | | |
| Paper I | NA | | |

Contents of Course

| Sr. No | List of Topics |
|--------|--|
| 1 | <p>Cha.Su.13- Sneha Adhyaya</p> <p>I. Adhyaya parichaya</p> <p>II. Siddhanta vivarana</p> <ol style="list-style-type: none"> 1. Sneha yoni 2. Chaturvidha sneha and its qualities 3. Sneha kaala and its anupana 4. Pravicharana sneha 5. Acchapeya 6. Sneha matra and its indications 7. Introduction to sneha yogya and ayogya purusha 8. Introduction to ayoga, samyak yoga and atiyoga of snehapana 8. Koshta pariksha 9. Introduction to snehapana vidhi 10. Introduction to sadyasneha 11. Sneha vyapat kaarana, lakshana and chikitsa <p>III. Adhyaya sangraha</p> |
| 2 | <p>Cha.Su.14- Sveda Adhyaya</p> <p>I. Adhyaya parichaya</p> <p>II. Siddhanta vivarana</p> <ol style="list-style-type: none"> 1. Benefits of swedana 2. Swedana bh eda 3. Swedana vidhi 4. Samyak swinna lakshana 5. Atiswinna lakshana and chikitsa 6. Swedana yogya and ayogya 7. Trayodasha agni sweda vivarana |

| | |
|---|--|
| | <p>8. Dasha vidha niragni sweda III. Adhyaya sangraha</p> |
| 3 | <p>Cha.Su.15- Upakalpaneeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Samshodhana upayogi dravya sangraha 2. Aturalaya nirmana 3. Introduction to vamaana vidhi 4. Samsarjana krama 5. Introduction to virechana vidhi 6. Benefits of samshodhana III. Adhyaya sangraha</p> |
| 4 | <p>Cha.Su.16- Chikitsaprabhritiya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Samyak virikta – avirikta - ativirikta lakshana 2. Bahudosha lakshana 3. Benefits of samshodhan 4. Importance of samshodhan 5. Samshodhana atiyoga and ayoga chikitsa 6. Swabhavoparama vada 7. Chikitsa paribhasha 8. Qualities of chikitsa-prabhrita vaidya III. Adhyaya sangraha</p> |
| | |
| 6 | <p>Cha.Su.18-Trisotheeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Types of shotha 2. Trividha bodhya (three types of assessment of diseases) 3. Ekadeshaja shotha 4. Aparisankhyeyatwa of roga 5. Anukta roga (unnamed diseases) and its management 6. Karmas of prakrita doshas. III. Adhyaya sangraha</p> |
| 7 | <p>Cha.Su.19-Ashtodareeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sankhya samprapti of samanyaja vyadhi 2. Tridosha pradhanyata 3. Nija-agantu sambandha III. Adhyaya sangraha</p> |

| | |
|----|---|
| 8 | <p>Cha.Su.20- Maharoga adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Vyadhibheda (classification of disease) 2. Agantu-mukha (causes of agantu diseases) 3. Trividha-prerana (three etiological factors) 4. Samanyaja-nanatmaja-vikara – classification 5. Vataja-nanatmaja vikaras, atmarupa and prakupitakarma 6. Pittaja- nanatmaja vikaras, atmarupa and prakupitakarma 7. Kaphaja-nanatmaja vikaras, atmarupa and prakupitakarma III. Adhyaya sangraha</p> |
| 9 | <p>Cha.Su.21- Ashtauninditeeya adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Ashta nindita purusha 2. Ati sthula and ati karshya 3. Ashta dosha of sthaulya 4. Dosha-lakshana-hetu of karsya and sthaulya 5. Prasasta purusha lakshana 6. Chikitsa sutra of sthaulya and karsya 7. Nidra paribhasha 8. Arha and varjya for divaswapna 9. Effects of ratri jagarana and divaswapna 10. Types of Nidra III. Adhyaya sangraha</p> |
| 10 | <p>Cha.Su.22- Langhanabrimhaneeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Shadupakrama 2. Swaroopa and lakshana of shadupakrama 3. Dasavidhalanghana 4. Dasavidhalanghana-prayoga-niyama 5. Properties of dravyas used in shadupakrama 6. Samyaklakshana of langhana, brimhana and sthambhana 7. Atiyoga and ayoga of shadupakrama III. Adhyaya sangraha</p> |
| 11 | <p>Cha.Su.23- Santarpaneeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Santarpana dravya 2. Santarpanajanya vyadhi 3. Chikitsasutra of santarpanajanya vyadhi 4. Apatarpanajanya vyadhi 5. Chikitsasutra of apatarpanajanya vyadhi III. Adhyaya sangraha</p> |

| | |
|-----------|--|
| <p>12</p> | <p>Cha.Su.24- Vidhishoniteeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Shonita-pradhanyata 2. Shonita-dushti-karana 3. Shonitajanya roga 4. Shonita-dushti-chikitsa 5. Raktadushtilakshana in relation to dosha 6. Vishuddharaktalakshana 7. Vishuddharakta-purusha-lakshana 8. Pathya in raktamoksha 9. Introduction to mada-murchaya-sanyasa III. Adhyaya sangraha</p> |
| <p>13</p> | <p>Cha.Su.25- Yajjapurushheeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Factors responsible for generation of purusha and diseases 2. Concept of hita ahara and its importance 3. Different factors related with ahara like aharayoni, prabhava, udarka, upayoga, rasa, gurvadi guna etc 4. Agryasangraha- (Aushadha- Anna-Vihara) 5. Terminology of pathya and apathya 6. Enumeration of aasavayoni III. Adhyaya sangraha</p> |
| <p>14</p> | <p>Cha.Su.26- Atreyabhadhrakaapeeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sambhasha parishat on number of rasa 2. Gunas of parthivadi dravyas 3. Dravya prabhava and guna prabhava 4. Dravya karmukata siddhanta (pharmacodynamics) with respect to adhikarana, kala, karma, veerya, upaya and phala 5. Paradi guna 6. Rasadi-panchaka – Additional knowledge 7. Examples of samanapratyabdhha and vichitra pratyabdhha dravyas 8. Properties of vipaka 9. Perception of rasa, vipaka and veerya 10. Examples of prabhava 11. Types of viruddha and management of complications 12. Principles of treatment of diseases caused by viruddha ahara III. Adhyaya sangraha</p> |

| | |
|-----------|--|
| <p>15</p> | <p>Cha.Su.27- Annapaana vidhi Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Benefits of hita ahara 2. Examples of hita ahara and ahita ahaara 3. Ahara vargas 4. Importance of anna III. Adhyaya sangraha</p> |
| <p>16</p> | <p>Cha.Su.28- Vividhashitapeeteeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Caturvidha-ahara 2. Difference between hita aahara and ahita aahara 3. Susceptibility to diseases (with respect to pathya and apathya) 4. Vyadhi-saha shareera 5. Dhatupradoshaj, upadhatupradoshaj, indriyapradoshaja, malapradoshaja vikaras and treatment principles 6. Shakhagati and koshtagati of doshas 7. Causes of health and diseases 8. Importance of prajnaaparadha III. Adhyaya sangraha</p> |
| <p>17</p> | <p>Cha.Su.29- Dashapraanaayataneeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Enumeration of dasa pranaayatana 2. Terminology of praanaabhisara vaidya and rogaabhisaravaidya, chadmachara, yoga bhisak and karmakovida III. Adhyaya sangraha</p> |
| <p>18</p> | <p>Cha.Su.30- Arthedashamahamooleeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Importance of hridaya 2. Best factors for life (shreshtatama bhava) 3. Four types of Ayu 4. Shashwatatwa of Ayurveda 5. Quality of Learner of Ayurveda 6. Ashtaprashna 7. Dashaprakaran 8. Synonyms of tantra III. Adhyaya sangraha</p> |

| | |
|-----------|---|
| <p>19</p> | <p>Cha.Ni.01-Jwara nidana Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Description of nidanapanchaka 2. Nidanaparyaya 3. Vyadhiparyaya 4. Ashtavidha jwaranidana , samprapti and lakshana. 5. Jwarapurvarupa 6. Jwara mahaprabhava vivarana 7. Jwara samkshipta chikitsa sutra. 8. Importance of ghrutapaan in jeerna jwara. III. Adhyaya sangraha</p> |
| <p>20</p> | <p>Cha.Ni.02-Raktapitta nidana Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Raktapitta paryaya and nirukti. 2 Raktapitta nidana, purvarupa, upadrava 3. Raktapitta marga, dosha anubhandha and sadhyaasadyata. 4. Raktapitta chikitsa sutra 2. III. Adhyaya sangraha</p> |
| <p>21</p> | <p>Cha.Ni.03-Gulma nidana Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sankhya samprapti 2. Gulma sthanas 3. Nidana, lakshana and samprapti of vata-pitta-kaphajulma 4. Shonita gulma 5. Gulma purvarupa 6. Sadhya asadhya 7. Chikitsa sutra III. Adhyaya sangraha</p> |
| <p>22</p> | <p>Cha.Ni.04-Prameha nidana adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sankhyasamprapti (vimsatiprameha) 2. Sampraptighataka (doshavishesha and dushyavishesha) 3. Nidanapanchaka of doshaja prameha (vata, pitta and kapha) Sadhyaasadyata Poorvarupa Upadrava Chikitsasutra III. Adhyaya sangraha</p> |

| | |
|-----------|--|
| <p>23</p> | <p>Cha.Ni.05-Kushta nidana Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Saptadravya of kushta 2. Aneka rupa of kushta 3. Samanya nidana and samanya purvarupa 4. Sadhyasadhyata 5. Sapta kushta lakshana 6. Upadrava III. Adhyaya sangraha</p> |
| <p>24</p> | <p>Cha.Ni.06-Shosha nidana Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Vishesha nidana, samprapti and lakshana of shosha 2. Purvarupa 3. Ekadasa rupa 4. Sadhyasadhyata III. Adhyaya sangraha</p> |
| <p>25</p> | <p>Cha.Ni.07-Unmada nidana Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sankhya samprapti 2. Unmadaabhimukha karana (predisposing factors of unmada) 3. Unmada nirvacana (ashta vibhrama) 4. Purvarupa 5. Vata-pitta-kapha-sannipataj unmada lakshna 6. Role of prajnaparadha 7. Chikitsasutra of unmada 8. Agantuja unmada- nidana, purvarupa, lakshana, chikitsasutra III. Adhyaya sangraha</p> |
| <p>26</p> | <p>Cha.Ni.08-Apasmara nidana adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Definition of apasmara 2. Apasmaraabhimukakarana (predisposing factors of unmada) 3. Vishesha lakshana of apasmara 4. Chikitsasutra 5. Nidanarthakara roga 6. Vyadhisankara 7. Suddha-asuddha cikitsa 8. Sadhyasadhyata – nirvacana 9. Tiryaggatadosha - cikitsasutra III. Adhyaya sangraha</p> |

| | |
|----|--|
| 27 | <p>Cha.Vi.01- Rasa vimana Adhyayam</p> <p>I. Adhyaya parichaya</p> <p>II. Siddhanta vivarana</p> <ol style="list-style-type: none"> 1. Importance and objective of vimanasthana 2. Prakritisamasamaveta and vikrutivishamasamavetasiddhanta 3. Chaturvidha Prabhava (rasa-dravya-dosh-vikaraprabhava) 4. Examples of dravyaprabhava- taila, ghruta and madhu. 5. Dravyas which are avoided for regular consumption 6. Satmyaparibhasha and types 7. Aharavidhi visheshayatana 8. Ahara vidhi vidhana and bhojyasaadgunyam <p>III. Adhyaya sangraha</p> |
| 28 | <p>Cha.Vi.02-Trividha kuksheeya Adhyayam</p> <p>I. Adhyaya parichaya</p> <p>II. Siddhanta vivarana</p> <ol style="list-style-type: none"> 1. Three divisions of amashaya for deciding aharamatraa <ol style="list-style-type: none"> 2 Matraavat ahaara lakshan 3. Amatravatva of ahara 4. Effects of heenamaatra and atimatra of ahara 5. Mental factors which affect the digestion of food 6. Two types of amadosha 7. Hetu-linga and aushasda of amadosha. 8. Demarcation of amasaya <p>III. Adhyaya sangraha</p> |
| 29 | <p>Cha.Vi.03-Janapadodhwansaneeya Vimanam Adhyaya</p> <p>I. Adhyaya parichaya</p> <p>II. Siddhanta vivarana</p> <ol style="list-style-type: none"> 1. Importance of timely collection of medicines. 2. Janapadodhwamsakara samanya bhavas (four causes of epidemic diseases) 3. Lakshanas of vikrut vayu, jala, desha and kala. 4. Chikitsa siddhanta of janapadodhwamsakara vikaras 5. Role of adharna in janapadodwamsa 6. Niyata and aniyata ayu 7. Daiva and purushakara 8. Examples of hetuviparita chikitsa in jwara 9. Apatarpana and its types 10. Description of desha <p>III. Adhyaya sangraha</p> |
| 30 | <p>Cha.Vi.04-Trividha roga vishesha vijnyaneeya adhyaya</p> <p>I. Adhyaya parichaya</p> <p>II. Siddhanta vivarana</p> <ol style="list-style-type: none"> 1. Three methods of diagnosing diseases 2. Characteristics of aptopadesh, pratyaksha and anumana 3. Application of aptopadesha, pratyaksha and anumana in clinical examination <p>III. Adhyaya sangraha</p> |

| | |
|----|--|
| 31 | <p>Cha.Vi. 05- Sroto vimana Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Srotas paribhasha 2. Types of srotas 3. Types of srotodushti 4. Hetu, lakshan and chikitsa of strotodushti III. Adhyaya sangraha</p> |
| 32 | <p>Cha.Vi. 06-Roganika vimana adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Dvididha vyadhi bhedha based on prabhava, bala,adhishtana, nimitta, ashaya bheda. 2. Vyadhi aparisamkheyatva 3. Relation between shareerika and manasika dosha. 4. Anubhandhy-anubandha roga 5. Agni bheda, prakruti bheda 6. Vatala prakrutigata roga, their hetu and chikitsa, pittaprakrutigata roga, their hetu and chikitsa-kapha-prakrutigata roga, their hetu and chikitsa 7. Raja vaidya gunas III. Adhyaya sangraha 8. Vatala prakrutigata roga, their hetu and chikitsa, pittaprakrutigata roga, their hetu and chikitsa-kapha-prakrutigata roga, their hetu and chikitsa 9. Raja vaidya gunas III. Adhyaya sangraha</p> |
| 33 | <p>Cha.Vi. 07- Vyadhita rupeeya vimana Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Dvididha vyadhita purusha based on severity of diseaseand clinical presentation 2. Krimi bheda 3. Trividha chikitsa III. Adhyaya sangraha</p> |
| 34 | <p>Cha.Vi. 08-Rogabhishagjiteeyam Adhyaayam. I. Adhyaya parichaya II. Siddhanta vivarana 1. Shastra pareeksha 2. Means of learning shastra 3. Adhyayana and adhyapana vidhi 4. Sambhasaha vidhi- Types 5. Three types of parishat 6. Vadamarga padani 7. Methodology of Vada and its benefits 8. Dashavidha pareeksya bhava 9. Dashavidha atura pareeksha III. Adhyaya sangraha</p> |
| 35 | <p>Cha.Sha.01-Katithapurushheeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sareera and sareerasthana 2. Purusha and its types 3. Manonirupanam</p> |

| | |
|----|---|
| | <p>4. Atmalinga 5. Ashtaprakriti and shodasavikara 6. Srishtyutpatti and pralaya 7. Trividha dukhahetu 8. Prajnaparadha 9. Daiva 10. Naishtikichikitsa 11. Vedana and vedana adhishtana 12. Vedananasahetu 13. Moksha 14. Smriti hetus III. Adhyaya sangraha</p> |
| 36 | <p>Cha.Sha.02-Atulyagothreeyam Adhyaaya I. Adhyaya parichaya 1. Siddhanta vivarana 2. Prerequisites of conception 3. Shodashadhatu in shareera 4. Sexual abnormalities 5. Sadyogriheeta garbhinee lakshana 6. Ativahikapurusha 7. Daiva & paurusha 8. Roganutpatti II. Adhyaya sangraha</p> |
| 37 | <p>Cha.Sha.03-Khuddika garbhavakranti Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Matrujadi bhavas in garbha 2. Beeja & beejabhaga III. Adhyaya sangraha</p> |
| 38 | <p>Cha.Sha.04-Mahatee garbhavakranti Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Garbha & garbhaposhana 2. Garbhopaghatakara bhava 3. Congenital abnormalities 4. Trividhasatva bheda (manasaprakriti) III. Adhyaya sangraha</p> |
| 39 | <p>Cha.Sha.05-Purushavichaya Shareera Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Lokapurushasamya 2. Hetwadi panchaka 3. Satya buddhi III. Adhyaya sangraha</p> |

| | |
|----|---|
| 40 | <p>Cha.Sha.06-Sareeravichaya adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Definition of sareera 2. Samanyavishesha sidhanta – applied aspect 3. Shareera dhatuguna 4. Shareeravriddhikarabhava 5. Balavriddhikarabhava 6. Aharaparinamakarabhava 7. Sareeraguna bheda 8. Kala-akala mrityu 9. Param ayu karanam III. Adhyaya sangraha</p> |
| 41 | <p>Cha.Sha.07- Sareerasankhya sareera Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Paramanu bheda of shareera III. Adhyaya sangraha</p> |
| 42 | <p>Cha.Sha.08-Jathisutreeya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sutikagara 2. Garbhopaghatakara bhava III. Adhyaya sangraha</p> |
| 43 | <p>Cha.In.1-Varnasvariya Indriya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Factors for assessing rishta 2. Six types of prakruti bheda 3. Rishtaadhikara kruta vikruti bheda 4. Prakruta and vaikarika varna 5. Varnavishayak arishta 6. Prakruta and vaikarika swara 7. Swara vishayak arishta III. Adhyaya sangraha</p> |
| 44 | <p>Cha.In.2-Pushpitakam Indriya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Gandha vishayaka samgrah 2. Rasa vishayaka arishta III. Adhyaya sangraha</p> |
| 45 | <p>Cha.In.3-Parimarshaneeyam Indriyam Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sparshagamy bhava (palpable signs) 2. Sparshavishayak arishta lakshana III. Adhyaya sangraha</p> |

| | |
|----|---|
| 46 | <p>Cha.In.4-Indriyaneeekam Indriya adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Indriya vishayaka arishta samanya niyama (general rule regarding involvement of indriya) III. Adhyaya sangraha</p> |
| 47 | <p>Cha.In.5-Purvarupeeyam Indriyam Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Jvara rupa vishayaka poorvaroopiya rishta (rishta basedon purvarupa of jvara) 2. Swapna bheda (types of swapna) III. Adhyaya sangraha</p> |
| 48 | <p>Cha.In.6-Katamanisharireeyam Indriyam Adhyaya I. Adhyaya parichaya II. Sidhanta vivarana 1. Rishta related to pureesha, mutra and swayathu III. Adhyaya sangraha</p> |
| 49 | <p>Cha.In.7-Pannarupiyam Indriyam Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Praticaya vishayaka arishta 2. Chaya vikruti arishtas 3. Five types chaya bheda 4. Seven types prabha bheda III. Adhyaya sangraha</p> |
| 50 | <p>Cha.In.8-Avakshiraseeyam Indriyam Adhyaya I. Adhyaya parichaya II Adhyaya sangraha</p> |
| 51 | <p>Cha.In.9-Yasya shyavanimittiya Indriya Adhyaya I. Adhyaya parichaya II. Sidhanta vivarana 1. Ashtamaharogas III. Adhyaya sangraha</p> |
| 52 | <p>Cha.In.10-Sadyomaraneeyam Indriya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Sadyo maraneeya arishtas III. Adhyaya sangraha</p> |
| 53 | <p>Cha.In.11-Anujyotiyam Indriya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Definition of Arishta III. Shloka sangraha</p> |

| | |
|----|--|
| 54 | Cha.In.12-Gomayachurniyam Indriya Adhyaya I. Adhyaya parichaya II. Siddhanta vivarana 1. Mumurshu lakshana, 2. Prashasta doota lakshana and mangalika dravya. 3. Arogya janaka bhava III. Adhyaya sangraha |
|----|--|

Practicals Topic list (Marks-100)

| S.No | List of Topics |
|------|---|
| 1 | SHLOKA PATHANA- 1 |
| 2 | LEARNING THROUGH VYAKHYANA-1 |
| 3 | OBSERVING THE PRACTICAL UTILITY OF SNEHANA AND SWEDANA |
| 4 | IDENTIFICATION OF BAHUDOSHA LAKSHANA IN PATIENTS |
| 5 | ASSESSMENT OF DISEASES BASED ON TRIVIDHA BODHYA SANGRAHA |
| 6 | IDENTIFICATION OF ASHTA DOSHA IN STHOULYA |
| 7 | CLINICAL OBSERVATIONS ON NIJA AGANTUJA RELATIONSHIP |
| 8 | CLINICAL OBSERVATION ON SHADUPAKRAMA |
| 9 | ASSESSMENT OF RAKTA DUSHTI KARANA IN SPECIFIC CLINICAL CONDITIONS |
| 10 | OBSERVATIONS ON USE OF AGRYA AUSHADHA IN CLINICAL PRACTICE |
| 11 | ASSESSMENT OF DHATU-UPADHATU-MALA PRADOSHAJA VIKARAS IN PATIENTS |
| 12 | SHLOKA PATHANA- 2 |
| 13 | LEARNING THROUGH VYAKHYANA-2 |
| 14 | CASE TAKING IN RELATION TO NIDANA PANCHAKA |

| | |
|----|---|
| 15 | DIFFERENTIAL DIAGNOSIS OF SKIN DISEASES BASED ON GUIDELINES ON KUSHTA |
| 16 | PRAMANA PARIKSHA |
| 17 | IDENTIFICATION OF VIKARAVIGHATA BHAVA ABHAVA IN PATIENTS |
| 18 | EXPLORATION OF LOKA PURUSHA SAMYA VADA IN THE BACK GROUND OF ONE HEALTH |
| 19 | SHLOKA PATHANA-3 |
| 20 | LEARNING THROUGH VYAKHYANA-3 |
| 21 | LEARNING THROUGH SAMHASHA PARISHAD |
| 22 | SROTAS PROFORMA |
| 23 | LEARNING THROUGH TANTRA YUKTI |
| 24 | ASSESSMENT OF HEALTH THROUGH DHATU SAMYA PAREEKSHA |
| 25 | AGNI ASSESSMENT BASED ON APACHARA |
| 26 | TRIVIDHA ROGA VISHESHAVIJNANA IN DIAGNOSIS |
| 27 | ASSESSMENT OF UPASAYA AND ANUPASAYA IN PATIENTS |

Distribution of marks for Practical Exam

| S.No | Heads | Marks |
|------|--------------------------|-------|
| 1 | Viva on Practical record | 10 |
| 2 | Shloka recitation | 10 |
| 3 | Viva on vyakhyana | 5 |
| 4 | Viva on Sutrasthana | 20 |
| 5 | Viva on Nidanasthana | 10 |
| 6 | Viva on Vimanasthana | 10 |
| 7 | Viva on Shareerasthana | 5 |

| | | |
|--------------------|----------------------|------------|
| 8 | Viva on Indriyasthan | 5 |
| 9 | Electives | 10 |
| 10 | IA | 15 |
| Total Marks | | 100 |

References Books/ Resources

- 1 Charakasamhita with Cakrapani Commentary Yadavji Trikamji, editor. Agnivesha. Charaka Samhita. Ayurveda Dipika. Chakrapanidatta (comm)(Sanskrit) Varanasi: Chaukambha Sanskrit Sansthan
- 2 Charak Samhita (English Commentary) Ram Karan Sharma and Bhagawan Dash, editor. Charak Samhita (English Commentary): Varanasi: Chowkambha Sanskrit Series
- 3 Charak Samhita (Hindi commentary) Harishchandra Singh Kushvaha, editor and translator. Charak Samhita (Hindi Commentary): Varanasi: Chaukambha Orientalia
- 4 Charak Samhita (Hindi commentary) Jayadev Vidyalkar, editor. Charak Samhita (Hindi commentary): Motilal Banarsi Dass Publishers Pvt. Ltd
- 5 Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalkar Charak Samhita (Hindi commentary): Vaidya Atridev Vidyalkar
- 6 Charak Samhita (Hindi commentary) Gorakhanath Chaturvedi and Kashinath Pandeya Shastri, editor. Charak Samhita (Hindi commentary): Varanasi: Chaukhamba Bharati Academy
- 7 Charak Samhita (Hindi commentary) Brahmanand Tripathi, editor. Charak Samhita (Hindi commentary): Varanasi: Chaukhamba Surbharati Prakashan
- 8 Charak Samhita (Hindi commentary): Dr. Ravidatta Tripathi Vidyadhar Shukla and Ravidatta Tripathi Charak Samhita (Hindi commentary): Varanasi: Chaukhamba Sanskrit Pratishtan
- 9 Charaka Samhita (Hindi commentary) Banwari Lal Gaur, editor. Charaka Samhita (Hindi commentary): Rashtriya Ayurved Vishwavidyalaya
- 10 Legacy of Caraka M S Valiathan, Legacy of Caraka (English): Hyderabad: Orient Longman
- 11 Charakasamhita Charak e-Samhita –National Institute of Indian Medical Heritage – <http://niimh.nic.in/ebooks/ecaraka>
- 12 Charakasamhita Charakasamhitaonline.com - www.carakasamhitaonline.com
- 13 Illustrated Charakasamhita, Dr. R Vidyanath R Vidyanath, editor. Illustrated Charakasamhita (English Commentary): Varanasi Chaukhamba Prakashak
- 14 Namaste Portal NAMASTE - Portal (ayush.gov.in)
- 15 CCRAS Prakriti tool CCRAS Prakriti Tool <http://www.ccras.res.in/>
- 16 Sanskrit English Dictionary Monnier Williams. A Sanskrit English Dictionary. Delhi. Motilal Banarsidasspublishers Pvt Ltd.
- 17 Shabdakalpadruma Raja Radha Kanta Deva, Shabda Kalpa Drum: Varanasi: Chowkhamba Sanskrit Series Office 18 Vaidyak Shabda Sindhu Kaviraj Shri Nagendra Nath Sen Vaidya Shastri, Vaidyak Shabda Sindhu: Varanasi: Chowkhamba Orientalia

Swasthavritta evam Yoga**AyUG-SW**

| Total number of Teaching hours: 400 | | |
|--|-----|----------|
| Lecture hours(LH)-Theory | 150 | 150(LH) |
| Paper I | 75 | |
| Paper II | 75 | |
| Non Lecture hours(NLH)-Theory | 250 | 250(NLH) |
| Paper I & II | 75 | |
| Non Lecture hours(NLH)-Practical | | |
| Paper I & II | 175 | |

Contents of Course-

| Sr. No | A2 List of Topics |
|-----------|--|
| 1 | <p>Swastha and Swasthya Definition of Swasthavritta and its objective. Swasthalakshanas, Arogyalakshanas, Dhatusamyalakshanas. Concept of Health & Operational definition of health. Importance of Shodhana in Swastha in relation to Sanchita&AsanchithaDosha& Classification of Swasthapurusha as Sanchitadosha and AsanchitaDosha. Dimensions of health -Physical, Mental and Social. Concept of well-being : objective component of well-being - standard of living and level of living and subjective component of well-being Quality of Life. One health concept / Vasudhaiva Kutumbakam” or “One Earth · One Family- One Future”</p> |
| 2 | <p>Healthy Life style -Dinacharya (Daily regimen) Concept of Primordial, Primary, Secondary and Tertiary Prevention along with examples in Ayurveda. Importance of Ahara and Vihara as the health promotive and disease preventive measures. Importance of Niyatakalavihara (Dinacharya, Ritucharya) and Aniyatakalavihara (Vegadharana, Vegaudirana, Ritushodhana, Brumhana and Bhutadisparsana) for health promotion and disease prevention. Concept of waking up at 'Brahmemuhurta' in the present scenario and the effect of early rise on health, sleep, alertness and memory. UshaJalapana' (Drinking water in early morning). Importance of Malatyaga in vatakaala - early morning (Good Bowel Habits.). Mukhaprakshalana and face washes used currently. Concept of Dantadhavana and modern-day brushing techniques and dentifrices. Concept of Jihwanirlekhana and the tools used in today's era and their benefits. Concept of Anjana as a health promotive measure. Kavala and gandusha for oral hygiene including mouthwashes available in the market. Abhyangaas as health promotive measure. Importance of the Tambula. PrayogikaDhoo-</p> |

| | |
|---|--|
| | <p>mapana(Practicable&nonpracticableDhoomapana- inhalation of herbal fumes/ herbal inhalers with their benefits and contraindications. Ill effects of tobacco smoking of various sorts viz. beedi, cigarette, hookah on health. Applied aspects of SarvangaAbhyanga, Padabhyanga, Shiroabhyanga and their possible physiological effects. Application of Abhyanga according to different age groups and occupation/activity. Different snehas/oils to be used for daily abhyanga as per seasons and geographical variations. Concept of Vyayama and present-</p> |
| | <p>day practices such as aerobic exercises, muscle strengthening exercises etc.to be practiced as per prakriti, age and occupation. Ardhashakti lakshanas of vyayama and the consequences of ativyayama. Udwartana, Utsadana Udgharshana . Snana- Types of different types of bath and Physiological effects of snana on body and mind. Importance and benefits of Anulepana. Merits and demerits of present-day applications like face powder, face pack, balm, lotions, lipsticks, deodorants and perfumes etc. Importance of proper clothing (Vastradharana) in social life.</p> |
| 3 | <p>Ratricharya- Ratrichojanvidhi and its relation to health. Ratrishayanavidhi in relation to the proper time of sleep. Relation between Nidra and health. Effects of Yukta&Ayuktanidra. Effects of RatriJagarana, Diwaswapna, Anidra, Atinidra and AkalaNidra. Ahara and Vihara Causing sound sleep as well as disturbed sleep. Formulation of the duration of sleep according to age and Sleep in healthy and ailing persons. Various Aspects of Sleep like: a. Daytime Sleepiness and Alertness b. Sleep Deprivation c. Sleep and Host Defense d. Master Circadian Clock and Master Circadian Rhythm e. Human Circadian Timing System and Sleep-Wake Regulation f. Circadian Rhythms in Sleepiness, Alertness, and Performance g. Circadian Disorders of the Sleep-Wake Cycle. Sleep apnea, insomnia, narcolepsy and restless leg syndrome. Solutions to Asatmyajagarana (sleep disorders). Importance of observing brahmacharya and abrahmacharya in ratricharya in relation to health. Brahmacharya with special reference to lifestyle guidelines. Reproductive and sexual health according Ayurveda.</p> |
| 4 | <p>Ritucharya- Classification of kaala , Adana kala and visargakala , identification of seasons based on the ritulakshanas in different geographical areas. Sanchaya- Prakopa- Prashamana of Dosha with their gunas in each ritu. Relation of Agni ,Bala and Ritu with its application. Ritushodhana for the prevention of diseases. Pathya - Apathya in regards to Ahara -Vihara in all six ritus in present scenario. Importance of ahara and vihara in ritusandhi and Yamadanshtrakala. Rituharitaki as a rasayana with research updates. Effects of Ritu viparyaya on health and its relation to janapadaudhwamsa/marakavyadhis with present day examples.</p> |
| 5 | <p>Roganutpadaniya- Concept of vegadharana and vega-udirana in relation to health and morbidity. Symptoms and management principles of adharaniyavegajanyavyadhis from bruhattrayee. Concept of vegaudirana (viz. Use of snuffing powder, forcible evacuation of bowels & bladder etc.). Importance of dharaniyavegas in promotion of mental health</p> |

| | |
|---|--|
| 6 | <p>Sadvritta Sadavritta measures for the maintenance of personal ,social and spiritual health. Observance of Sadvritta for the prevention of Adharma. AcharaRasayana" and its role in the prevention and control of diseases.Characteristics of a mentally healthy person, warning signals of poor mental health, types of mental illness and causes of mental illhealth. Mental health services and comprehensive mental health programme. Role of trigunas and satvavajaya in mental health promotion in present era. Digital health promotion</p> |
| 7 | <p>Ahara Significance of Ahara for health and well-being according to Ayurveda & Contemporary science. Classification of aharadravyas as per Ayurveda & Contemporary science. Ahara-vidhividhana, Aharasevanakala&Dwadashaashanpravicharana . Applied aspect of Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana. Ahara&vihara leading to SantarpanajanyaevamApatarpanajanyavyadhi and importance of upavasa and concept of intermittent fasting. Benefits of Shadrasabhojana. Importance of Ashtaaharavidhivisheshaayatanani in present era. Importance of Nityasevaniyadravyas in the maintenance of health. Properties (Guna& karmas) of Aharadravyas in the following vargas with their nutritive value: Dhanyavarga – ShukaDhanya (Cereals and Millets), ShamiDhanya (Pulses), Shaka and Haritavarga (Leafy and Non leafy vegetables), Kanda varga (roots and tubers), Phalavarga (Fruits), Tailavarga (Fats and Oils), Ikshuvarga (Sugarcane Products) &Madyavarga(Alcoholic Beverages), Dugdhavarga (Milk and Milk products), Ahara UpayogiVarga (Spices & Condiments), Kritannavarga(Prepared Food), Mamsavarga (Meat types) and JalaVarga.Definition of Pro-biotics and Pre-biotics and their utility. Proximate principles of Food - Recommended Daily Allowance according to various conditions, Sources and deficiency diseases of Protein, Carbohydrate, Fats, Vitamins, and Minerals. Definition of Balanced diet and diet for an individual depending on age, body weight and physiological status and Social Aspects of Nutrition.Food hygiene, Sanitation of eating places, Preservation of food, Food handlers, Foodborne diseases, Food fortification, Food adulteration and Food toxicants. Milk Hygiene, Milk composition, Source of infection for Milk, Milk borne diseases, Clean and Safe milk and Pasteurization of milk Meat Hygiene, Meat inspection, Slaughterhouse and Freshness of fish and egg. Safety and hygiene measures for Fruits and Vegetables.Formulation of Pathya-Apathya diet for prevention of lifestyle disorders such as Obesity, Diabetes mellitus,Cardiovascular diseases and Acid peptic diseases.Description of Food safety and standards regulation(Ayurveda Ahara Regulations), 2022 and Food safety and standards Act, 2006. Different Dietary Supplements and Ergogenic Aids.Impact of different dietary patterns: Mediterranean diet, Keto Diet, DASH diet, the MIND diet, Vegan diet, Ovo-lacto-vegetarian, Pescovegetarian, Plant-based diet, Intermittent diet, the Nordic diet, importance of organic foods, merits and demerits of genetically modified foods and inflammatory foods such as fried foods, cookies, hot dogs, red meat, refined grains, pizza, burger etc., and instant foods like Maggi etc., Concept of slow and fast foods and impact of cooking processes like boiling, steaming, sautéing, fermenting etc. (samskara) on health. Definition of Nutraceuticals, Nutrigenomics, Nutrigenetics. Concept of Viruddhaahara with classical and modern-day examples and the application of this in the prevention of diseases.</p> |

| | |
|--|--|
| 8 | <p>Rasayana for Swastha Definition of Rasayana and benefits of Rasayana. Classification and types of Rasayana with examples. UrjaskaraRasayanas as per age and occupations /Activities .Antioxidant &immunomodulatory effects of Rasayana with reference to research articles. Importance of lifestyle counselling with its methods.</p> |
| 9 | <p>Yoga Etymology/derivation of the word 'Yoga'. Definitions of Yoga according to PatanjaliYogasutras, Bhagavad Gita and CharakaSamhita. Difference between Rajayoga, Hathayoga and Karmayoga.YogabhyasaPratibhandhakas and Yoga Siddhikarabhavas. Mitahara and Pathya-apathyas during Yogabhyasa . Concept of Pan-chakosha theory. Description of Ashtangas of Yoga - Yama ,Niyama , Asana .Pranayama , Pratyahara, Dharana, Dhyana and Samadhi. Suryanamaskara . Description of Shatkarmas - Dhauti, Basti, Neti, Trataka, Nauli, and Kapalabhati.Bandha procedure and benefits of Mulabandha, Jalandharabandha and Uddi-yanabandha. Mudras - Shanmukhi mudra and Jnana mudra. Shatchakras and their importance in Yoga practice. Description of Ida-Pingala-Sushumnanadis and their importance in yoga practice.Conceptof Moksha according to Charaka , Muktatmalakshana and Moksha upayas.Importance of International Day of Yoga (IDY). Adverse effects of improper Yoga practices</p> |
| 10 | <p>Naturopathy Basic principles of Naturopathy. Concept of Panchabhutopasana.Therapeutic effects of Mud therapy. Therapeutic effects of Sun bath. Fasting therapy - its types and benefits. Hydrotherapy - types of water used based on the temperature and therapeutic effects of Hydrotherapy. Therapeutic effects of Massage</p> |
| Paper 2 Public health Total Marks-100 | |
| 11 | <p>Janapadodhwamsa / MarakaVyadhi Causes of Janapadodhwamsa/ marakavyadhi. Manifestation and control measures of Janapadodhwamsa.Principles and uses of epidemiology. Dynamics of disease transmission.Theory of disease causation - epidemiological triad and natural history of disease.Concept of prevention, modes of intervention, risk factors, incidence and prevalence.Susceptible host and host defense. Immunizing Agents. Concept of vyadhikshamatwa.Investigation of an epidemic. Prevention and control of an epidemic. Sankramakaroga as per Ayurveda.Epidemiological determinants, brief pathology ,transmission, incubation period , clinical features, diagnosis and preventive measures of 1. Droplet Infections such as Chicken Pox, Measles, Rubella, Diphtheria, Pertussis, Mumps, Tuberculosis, SARS, Influenza, Pneumonia, Covid-19 and Leprosy. 2. Water borne Infections / intestinal infections - Cholera, Polio, Viral Hepatitis, Typhoid. 3. Intestinal infestations – Ascariasis, Hook worm and Tape worm. 4.Emerging and re-emerging diseases. Explain Role of Ayurveda in Epidemics like COVID-19, ZikaVirus , H1N1,H3N2,etc,. 5.Sexually transmitted diseases (STDs) with prevention and control - HIV/ AIDS, Syphilis and Gonorrhea. Role of Ayurveda in the prevention and control with recent research updates of Lifestyle diseases such as DM, Obesity, Coronary artery disease (CAD) and Cancer. Epidemic Diseases (Amendment) Ordinance Act,2020 .,</p> |

| | |
|----|--|
| 12 | <p>Environmental health Air: Properties of Vayu and composition of air. Changes in air of the occupied room. Comfort zone and indices of thermal comfort. Air pollution -causes, prevention, and control. Effects of air pollution on health and social aspects .Effects of Global warming with recent updates. Definition of ventilation and types of Ventilation. Effects of high altitude and mountain air on health.Water :Safe and wholesome water and water requirements. Properties of water from different sources. Water pollution and health hazards. Contemporary and Ayurvedic methods of water purification. Hard Water - its effects on health and methods of removal of hardness. Quality of water stored in different vessels as per classics. Rain water harvesting - methods and its importance. Soil : Types of soil and relation between soil and health. Land pollution - its prevention and control. Land purification as per the classics. Social goals of Housing and Housing standards. The Building and other construction workers (Regulation of employment and conditions of services) Act, 1996 Effects of housing on health. Overcrowding and its impact on health. Light: Good lighting, natural lighting and artificial lighting. Biological effects of lighting.Noise :Definition of noise and its sources, effects on health and control measures. Radiation: Radiation - sources and effects on health and control measures.Waste disposal : Types of solid waste, Storage and collection of refuse. Methods of disposal of solid waste (Rural & urban). Excreta Disposal methods & Sanitary Latrines. Modern Sewage disposal methods. Disposal methods of Excreta during camps, fairs, and festivals. Bio-medical waste management and Biomedical waste management rules, 2016. Environment protection Act,1986.</p> |
| 13 | <p>Disaster management Definition of disaster and disaster management. Effects of natural and man-made disasters. Epidemiologic surveillance and disease control measures.</p> |
| 14 | <p>Occupational Health Definition of occupational health and Ergonomics. Occupational Hazards and Occupational diseases. Prevention and control of Occupational diseases . ESI Act ,1948 and The factories Act.1948. Role of Ayurveda in various Occupational health problems. The Merchant Shipping / Medical Examination Rules,2000</p> |
| 15 | <p>School health services Health problems of school children. Aspects of school health services.Duties of school medical officers. Healthy environment in the school.</p> |
| 16 | <p>Disinfection Definition of different term used in relation to disinfection. Types of disinfection. Natural agents, Physical agents and Chemical agents of disinfection. Recommended disinfection procedures of feces & urine, sputum, and room. Ayurvedic disinfection methods.</p> |
| 17 | <p>Primary health care Definition of Primary Health Care. Principles and elements of primary health care. Levels of health care. Structure of Primary health care at village, sub-center, Primary health center (PHC), Community health center (CHC) and Rural hospital levels. Primary health care in Health insurance, Private agencies, Voluntary health agencies, NGOs and the AYUSH sector. Role of Ayurveda in Primary Health Care.</p> |
| 18 | <p>Mother and Child health care</p> |

| | |
|----|---|
| | Objectives of Maternal and Child Care services. MCH problems & indicators of MCH care. |
| 19 | Family welfare programme Definition of Demography and sources of demographic statistics in India. Demographic cycle & definition of life expectancy. Definition of family planning, eligible couple and target couple. Objectives of family planning. Problems of population explosion . National population policy. Methods of Contraceptive (Fertility Regulating Methods). |
| 20 | Preventive Geriatrics Health problems of the aged and prevention and control measures. Relation between life-style and healthy aging. Role of Rasayana in preventive geriatrics. |
| 21 | World Health Organization and International health agencies Definition of World Health organization. Structure, regions, and works of the World Health Organization. Functions of various international health agencies - United Nations health agencies, Bilateral health agencies and Non- Governmental agencies. Contribution of the World health organization to the global acceptance of Ayurveda. |
| 22 | Vital Statistics Definition of Vital Statistics. Sources of Vital statistics. Fertility , Morbidity and Mortality rates. Registration of Birth and Death Act, 1969 |
| 23 | Health Administration Health administration including AYUSH at the Central, State, District, and Village levels. |
| 24 | National Health Programmes National Health Programs : Leprosy(NLEP), AIDS (NACP), Blindness (NPCB), Polio , National TB Elimination program , Vector born disease control program, RCH program, ICDS program, Universal Immunization program, National mental health program , National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) , Swachha Bharat mission, Ayushman Bharat Yojana, Ayushman Bharat Digital Mission, National health mission (NRHM&NUHM), National AYUSH Mission (NAM). National nutrition programs: National Iodine Deficiency Disorders Control program, National Iron Plus Initiative for Anemia Control, National Vitamin A prophylaxis program, Mid-Day Meal program & Balwadi nutrition program. |
| 25 | National Health Policy National Health Policy (NHP) and the scope of Ayurveda in NHP. |

PRACTICALS (Marks-100)

| S.No | List of Topics | Term | Hours |
|-------------|---|-------------|--------------|
| 1 | Dinacharya | 1 | 25 |
| 2 | Disinfectants | 1 | 2 |
| 3 | Ahara | 1 | 30 |
| 4 | Health Education (IEC) | 2 | 10 |
| 5 | Yoga performance | 2 | 35 |
| 6 | Community survey | 3 | 20 |
| 7 | Local Health Educational Visits | 3 | 36 |
| 8 | Visit to Observe National Health Programs and Ayurveda Centre | 3 | 12 |
| 9 | Monitoring of health and hygiene | 1 | 5 |

Distribution of Practical Exam

| S.No | Heads | Marks |
|-------------|---|--------------|
| 1 | Yoga - Demonstration of 4 Asanas and 1 Pranyama or Shatkarmaproedure Any four asanas from following list for demonstration- Trikonasana, Ardhakatichakrasana, Gomukhasana, Bhadrasana, Pavanamuktasana, Sarvangasana, Bhujangasana and Shalabhasana. Each asana will carry 4 marks x 4 = 16 Procedure -1 mark, Final posture Holding time - 1, Breathing pattern-1 mark and On site viva - 1 mark Any one Pranayama among Nadishuddhi, Suryabhedana, Seetali, Seetkari , Bhramari or any one shatkarma among Neti and KapalabhatiEach pranayama or Shatkarma will carry 4 marks | 20 |
| 2 | Diet and Lifestyle advice case sheet A. Advise on Diet case - 25 Marks Scenario will be given and asking student to prescribe diet as per the age, prakriti, occupation, agnibalaetc,.. B. Advise on Lifestyle - 15 Marks Scenario will be given and asking student advise lifestyle modifications such as Brahmehurtau- thishteth, Vyayama, Kavala- gandusha,Abhyanga, Udwartana ,Pratimarshanasyaetc,.. , | 40 |

| | | |
|---|---|----|
| 3 | <p>Problem-based evaluation - Disinfection, Communicable diseases Environmental health, & Non- Communicable including deficiency diseases.</p> <p>A. Disinfection (identification, dose, suitsbility , dilution and contactperiod), Communicable diseases (giving scenarios and identifying diseases and mentioning preventive measures) and Environmental health (giving scenarios related environmental health issues and asking students to mention preventive and control measures) - 15 Marks</p> <p>B. Non- Communicable diseases (creating scenarios and asking to identify the diseases with preventive and control methods) and deficiency diseases (creating scenarios and asking students to indentify the deficiency conditions and asking the students to recommend the nutrients with nutrional profile etc., - 15 Marks</p> | 30 |
| 4 | Practical Records | 10 |
| 5 | Viva Viva on project work (Activity Based) -10 marks | 60 |

References Books/ Resources

- 1 Relevant portions of Charaka, Sushruta, Vagbhata, Sarngadhara, Bhavaprakasha, Yogaratnakara, Madhavanidana and Bhelasamhita.- relevant Samhithas Print /online samhithas
- 2 SwasthavrittaSamucchaya Vaidya . Rajeswaradutta shastri , Chaukhambha Viswabharathi, Varanasi, India
- 3 Swasthavrittavigyan Dr.Ramaharsha singh , Chaukhambha Publishing house, Varanasi, India
- 4 Yoga sutras of Patanjali BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
- 5 Hathayogapradipika Swami Muktibodananda , Published by Yoga publications trust, Ganga darshan, Munger, Bihar, India
- 6 Gheranda samhitha Edited with Sweta , English commentary of Mrs.Shweta Bhat and Edited by Goswami Prahlad Giri, Published by Krishnadas Academy , Varanasi- 221001
- 7 Yoga deepika BKS Iyengar , Published by Harper collins , Publishers India , New delhi
- 8 Light on Yoga BKS Iyengar , Published by Harper collins , Publishers India , New delhi
- 9 Light on Pranayama - BKS Iyengar , Published by Harper collins , Publishers India , Newdelhi
- 10 The Foundations of Contemporary Yoga Professor RH Singh , Published by Chaukhambha Sanskrit Pratishtan, Newdelhi ..
- 11 Park's Text book of Preventive and Social Medicine K.Park , Published by M/s BANARASIDAS BHANOT, LABALPUR, INDIA
- 12 Text book of Preventive and Social Medicine MC Gupta & BK Mahajan, Published by JAYPEE BROTHERS , Medical publishers , New delhi
- 13 Dr. Reddy's comprehensive guide to Swasthavritta Dr.P.Sudhakar Reddy , Published by Chaukhambha Sanskrit Pratishtan, New Delhii
- 14 Indian food composition Tables T Longvah , Published by National institute of Nutrition, Hyderabad
- 15 Food and nutrition Swaminathan , Published by Bangalore Printing & Publishing Co.Ltd, Bangalore
- 16 Swasthavrittisudha Vd.Kashinath Samagandi, Published byb Ayurveda Sanskrit hindi pustak bhandar , Jaipur .

- 17 S.Kashi's Text book of Svasthavrtttamritam Vd.Kashinath Samagandi, Published by Ayurved Sanskrit hindi pustak bhandar, Jaipur
- 18 Text Book of Swasthavrittam Dr. Mangala Gouri V Rao, Chaukhambha Orientalia, Varanasi, India (2022)
- 19 Text book on Swasthavritta Dr.P. Sudhakar Reddy , Dr.Beena MDPublishers : Chaukhambha Orientalia, Varanasi, India Year : 2022
- 20 Bhojanakutuhalam Raghunatha suri, Edited by Scholars of the Centre for Theoretical foundations (CTF), Institute of Ayurveda and Integrative Medicine I-AIM, FRLHT , Bengaluru- 560064
- 21 Kshemakutuhalam Compiled by Kshema sharma , Published By Indian institute of Ayurveda & Integrative medicine , Bengaluru-560064
- 22 Recent trends in Community Medicine Suryakantha AH, Published by JAPEEPY BROTHERS
- 23 The Essentials of Natur cure Dr.Mangala Gouri.V. Rao, Published by Chaukhambha Orientalia, Varanasi
- 24 WHO <https://www.who.int>
- 25 Food laws <https://www.corpseed.com/knowledge-centre/food-lawsand-regulations-in-india>
- 26 Food acts : <https://fssai.gov.in/cms/food-safety-and-standardsact-2006.php>
- 27 National health programs <https://ncdc.mohfw.gov.in/index4.php?lang=1&level=0&linkid=55&lid=138>
- 28 Family welfare programme <https://ncdc.mohfw.gov.in/index4.php?lang=1&level=0&linkid=55&lid>
- 29 Health & Family welfare <https://www.india.gov.in/topics/health-family-welfare>
- 30 Census of India : <https://censusindia.gov.in>
- 31 Hatha yoga Pradeepika Pandith. Hariprasad Tri[athi, Published by Chaukhambha Krishna das Academy, Varanasi , India
- 32 A Complete Handbook of Nature cure H.K.BAKHRU , JAICO Publishing house, Bombay
- 33 Yoga & Ayurveda Satyendra prasad Mishra , Published by Chaukhambha Sanskrit Samsthan , Varanasi
- 34 The Yoga Science Dr. Ravi R Javalgekar , Published by Chaukhambha Sanskrit Sansthan , Varanasi, India
- 35 Concept of Ayurveda for perfect Health & Longevity Vaidya H.S. Kasture , Published by Shree baidyanath Ayurveda Bhavan Private LTD, Nagpure , India
- 36 Essentials of Community medicine practicals DK Mahabalaraju, Published by JAYPEE BROTHERS Medical publishers , Newdelhi
- 37 Positive health through Ayurveda Dr.LP Gupta & Dr.LV Guru, Published by Chaukhambha sanskrit Pratishtana , Newdelhi
- 38 Food Science B Srilakshmi , Published by NEW AGE INTERNATIONAL (P)LIMITED, PUBLISHERS , NEWDELHI
- 39 Apollo Clinical Nutrition- Handbook Anita Jatan, Daphnee DK, Haritha Shyam, Priyanka Rohatgi and Kajal Pandya Yephtho- Published by JAYPEE BROTHERS MEDICAL PUBLISHERS PVT LTD, NEWDELHI

#####



**BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY), PUNE**

**FACULTY OF AYURVED
BAMS
Old Syllabus**



BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY) PUNE, INDIA.
FACULTY OF AYURVED

Pune- Satara Road, Pune-411043.

Accredited with 'A+' Grade (2017) by NAAC.
'A' Grade University status by MHRD, Govt. of India
Accredited (2004) & Reaccredited (2011) with 'A' Grade by NAAC

Undergraduate (B.A.M.S)
&
Post- Graduate (M.D./M.S./Diploma in Ayurved)
Syllabus/ Curriculum
2016 courses

Contents

| Sr No | Topic | Page No |
|--------------|--|----------------|
| 1 | Preface | 2 |
| 2 | Vision and Mission | 3 |
| 3 | Aims and Objectives | 4 |
| 4 | Notification | 5 |
| 5 | Program Outcomes | 6 |
| 6 | Eligibility | 7 |
| 7 | Medium of instruction and Pattern of study | 7 |
| 8 | Duration of the Course Study and Subjects taught, Number of lectures/practical | 7-8 |
| 9 | Attendance and Progress | 8 |
| 10 | Scheme of Examinations | 8-9 |
| 11 | Migration | 10 |

Preface

Ayurveda is accepted worldwide as one of the oldest traditional systems of medicine. The ancient insight into this traditional system of medicine is still not profoundly discovered. Ayurveda signifies as "the life-science " where ayur means "life" and veda means "science" in Sanskrit. Ayurveda is the upaveda i.e., "auxiliary knowledge of Atharvaveda in Vedic tradition with its prime origin from Atharva-Veda and a supplement of the Rig-Veda. Lord Dhanvantari is worshipped as the God of Ayurveda. The goal of this traditional medicine system is to prevent illness, disease cure and preserve life. Being originated in India Ayurveda extends its wings in various parts of the world. In ancient days Ayurveda was taught in Gurukula system, which is now evolved into graduate courses from Institutions.

The National Commission for Indian System of Medicine & Ministry of AYUSH, Government of India, New Delhi mention the standards for undergraduate and postgraduate programmes. It establishes suitable qualifications in Indian medicine and recognizes various forms of traditional practice including Ayurveda.

Ayurvedic practitioners also work in rural areas, providing health care to at least 500 million people in India alone. They therefore represent a major force for primary health care, and their training and placement are important to the government of India. Being a scientific medicine, Ayurveda has both preventive and curative aspects. The preventive component emphasizes the need for a strict code of personal and social hygiene, the details of which depend upon individual, climatic, and environmental needs.

Now Bachelor of Ayurvedic Medicine and Surgery, MD/MS in various discipline of Ayurveda started with the intention to encourage integrated teaching and de-emphasize compartmentalization of disciplines to achieve horizontal and vertical integration in different phases which helps to support National Health Services.

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

**Faculty of Ayurved,
Bharati Vidyapeeth
(Deemed to be University), Pune**

Vision-

To be a world class university for social transformation through dynamic education

Mission-

- To ensure the good health and longevity of mankind.
- To carve a niche for our college in the world of Ayurved education
- To provide
 - Borderless access to Ayurved education
 - Quality Ayurved education
- To promote
 - Quality research in diverse areas of health care system.
 - Extensive use of ICT for teaching, learning and governance.
 - To develop national and international networks with industry and other academic and research institutions.

Aims of BAMS programme

- To create an efficient Physician capable of functioning independently in both urban and rural environment.
- To produce graduates of Ayurveda with thoughtful knowledge having deep base of scientific knowledge in harmony with Ayurvedic fundamentals with extensive practical training who would be able to become an efficient teacher, research worker and Kaya Chikitsak (Physician) and Shalayachikitsak (Surgeon) competent to serve for health services.

Objectives

To develop following attitude and skills in our students -

- Knowledge of Ayurveda science, pertinent modern subjects, common investigations and their clinical interpretation, art of diagnosis of common ailments, selection and administration of suitable Pancha karma procedures, common single and compound drug formulations, Pathyaapathya, preventive measures, Rasayana, National Health Programme.
- Capable to perform Para surgical procedures, conduct deliveries and resuscitate newborn babies.

Program Outcomes for Undergraduate Course of Ayurveda

- The Bachelor of Ayurved will have profound knowledge of Ashtanga Ayurved backed up by extensive practical training.
- This knowledge will be supplemented by scientific advances in modern medicine along with extensive practical training.
- The BAMS graduate will become a globally competent Ayurved practitioner and a research scholar to serve the health care services.

Program specific outcome

The BAMS degree holder should be capable of functioning independently in both urban and rural environments.

Course out comes-

After completion of B.A.M.S course the Graduates of Ayurved –

- Should have thorough knowledge of all the subjects including Sanskrit so that he/she can have the ability to interpret Sanskrit quotations from Classical texts of Ayurved.
- Must have practical/ clinical skills in all the subjects.
- Can diagnose and treat the patients independently with Ayurved management.
- Should be able to conduct minor procedures and preliminary management of accidental cases.
- Should be able to treat the patients with empathy and have proper interpersonal and communication skills as competent health care professionals.
- ought to have the current knowledge of recent advances in the field by self-learning and /or participating in continuing Medical Education Programs.
- Shall be able to critically analyze relevant published research literature and use them appropriately to influence practice of Ayurved.
- Must be able to participate in the National health program.

Regulations governing the B.A.M.S. programme (NCISM- Minimum standards of Undergraduate Ayurved education- Regulations- 2022

Eligibility

The eligibility to seek admission in Bachelor of Ayurveda education shall be as under, -

- (a) The candidate shall have passed 10+2 or its equivalent examination from any recognized Board with Physics, Chemistry, Biology and have obtained minimum of fifty per cent. marks taken together in Physics, Chemistry and Biology in the case of general category and forty per cent. marks in the case of the Scheduled Castes, Scheduled Tribes and Other Backward Classes: Provided that in respect of persons with disability candidate specified under the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the minimum qualifying marks in the said examinations shall be forty-five per cent. in the case of the General category and forty per cent. in the case of the Scheduled Castes, Scheduled Tribes, and Other Backward Classes.
- (b) Students must secure minimum eligibility marks as specified in NEET or any other equivalent examinations as notified by apex bodies/Ministry of AYUSH
- (c) No candidate shall be admitted to B.A.M.S Degree programme unless the candidate attained the age of seventeen years on or before the 31st December of the year of admission in the first year of the programme.

Medium of instruction

The medium of instruction for the programme shall be Sanskrit or Hindi or any recognized regional language or English with use of Ayurvedic technical terms.

Duration of the Course Study

Total duration of course – Five and Half years

- a) **First Profession- 12 Months [Course 2017]**
- b) Second Profession- 12 Months [Course 2017]
- c) Third profession -12 Months [Course 2017]
- d) Forth Profession- 18 Months [Course 2017]
- e) Compulsory Internship- 12 Months

Subjects taught, Number of lectures/ practical and demonstrations for various subjects [First year B.A.M.S.]

| Sr No. | Subject with code | Number of teaching hours | | Total |
|--------|--------------------------------------|--------------------------|-----------|-------|
| | | Lectures | Practical | |
| 1 | PADARTHA VIGYAN AND AYURVED ITIHAS | 100 | - | 100 |
| 2 | SANSKRIT | 090 | - | 90 |
| 3 | KRIYA SHARIR | 180 | 180 | 360 |
| 4 | RACHANA SHARIR | 180 | 180 | 360 |
| 5 | MAULIK SIDDHANT AVUM ASHTANG HRIDAYA | 120 | - | 120 |
| | Total hours | 670 | 360 | 1030 |

The First Professional examination shall ordinarily be held and completed by the end of first professional session.

Attendance and Progress

Each student shall be required to maintain minimum seventy-five percent attendance in each subject in theory (i.e., lecture hours) practical and clinical (i.e., non-lecture hours) separately for appearing in examination at the end of academic year subject to the condition that his/her progress and conduct are counted satisfactory by the principal.

Scheme of Examination

Scheme of Examination

Internal assessment

There shall be minimum three internal assessments for each subject before First Term Test ordinarily at 6th month of respective professional B.A.M.S.) minimum of three periodical assessment before Second Term Test (ordinarily at 12th month of respective professional B.A.M.S.) and minimum of three internal assessments before final university examinations (Summative Assessment) of respective professional B.A.M.S.

University Examination

The theory examination shall have twenty percentage marks for Multiple Choice Questions (MCQ), forty percentage marks for Short Answer Questions (SAQ) and forty percentage marks for Long Explanatory Answer Questions (LAQ) and these questions shall cover the entire syllabus of the subject.

The minimum marks required for passing the examination shall be fifty per cent. In theory component and fifty percent in practical component (that include practical, clinical, viva-voce, internal assessment and electives wherever applicable) separately in each subject.

Number of Papers and Marks Distribution for First Professional B.A.M.S. Subjects

| Sl. No. | Subject Code | Papers | University Examination | | Internal Examination IA | | Sub Total | | Grand Total |
|--------------------|--------------------------------------|--------|------------------------|------------------------|-------------------------|------------------------|-----------|-----------|-------------|
| | | | Theory | Practical/ Clinical | Theory | Practical/ Clinical | Theory | Practical | |
| 1. | PADARTHA VIGYAN AND AYURVED ITIHAS | 2 | 160 | 80 | 40 | 20 | 200 | 100 | 300 |
| 2. | SANSKRIT | 1 | 80 | - | 20 | | 100 | - | 100 |
| 3. | KRIYA SHARIR | 2 | 160 | 80 | 40 | 20 | 200 | 100 | 300 |
| 4. | RACHANA SHARIR | 2 | 160 | 80 | 40 | 20 | 200 | 100 | 300 |
| 5. | MAULIK SIDDHANT AVUM ASHTANG HRIDAYA | 1 | 80 | - | 20 | | 100 | - | 100 |
| Grand Total | | | | | | | | | 1100 |

Declaration of Class

- A candidate obtaining sixty-five per cent. and above marks shall be awarded first class in the subject and seventy five percent and above marks shall be awarded distinction in the subject.
- The award of class and distinction shall not be applicable for supplementary examinations.

Migration

1. The students may be allowed to take the migration to continue their study to another college after passing the First Professional examination, but failed student's transfer and mid-term migration shall not be allowed.
2. For migration, the students shall have to obtain the mutual consent of both colleges and universities, and it shall be against the vacant seat.

CENTRAL COUNCIL OF INDIAN MEDICINE
NEW DELHI

SYLLABUS OF AYURVEDACHARYA (BAMS) COURSE

INDEX

1ST PROFESSIONAL

| | | |
|-----|--------------------------------------|-------|
| 1.1 | PADARTHA VIGYAN AND AYURVED ITIHAS | 2-6 |
| 1.2 | SANSKRIT | 7-8 |
| 1.3 | KRIYA SHARIR | 9-14 |
| 1.4 | RACHANA SHARIR | 15-18 |
| 1.5 | MAULIK SIDDHANT AVUM ASHTANG HRIDAYA | 19 |

1.1 PADARTHA VIGYAN EVUM AYURVEDA ITIHAS
(Philosophy and History of Ayurveda)

Theory- Two papers– 200 marks (100 each paper)
Total teaching hours: 150 hours

PAPER-I

Padartha Vigyanam

100marks

PART A

50 marks

1. Ayurveda Nirupana

- 1.1 Lakshana of Ayu, composition of Ayu.
- 1.2 Lakshana of Ayurveda.
- 1.3 Lakshana and classification of Siddhanta.
- 1.4 Introduction to basic principles of Ayurveda and their significance.

2. Ayurveda Darshana Nirupana

- 2.1** Philosophical background of fundamentals of Ayurveda.
- 2.2** Etymological derivation of the word "Darshana". Classification and general introduction to schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya and Yoga.
- 2.3** Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda).
- 2.4** Padartha: Lakshana, enumeration and classification, Bhava and Abhava padartha, Padartha according to Charaka (Karana-Padartha).

3. Dravya Vigyanam

- 3.1 **Dravya:** Lakshana, classification and enumeration.
- 3.2 **Panchabhuta:** Various theories regarding the creation (theories of Taittiriyanopanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Susruta), Lakshana and qualities of each Bhoota.
- 3.3 **Kaala:** Etymological derivation, Lakshana and division / units, significance in Ayurveda.
- 3.4 **Dik:** Lakshana and division, significance in Ayurveda.
- 3.5 **Atma:** Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (*atmanah jnasya pravrittih*).
- 3.6 **Purusha:** as mentioned in Ayurveda - Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha.
- 3.7 **Manas:** Lakshana, synonyms, qualities, objects, functions, dual nature of mind (*ubhayaatmakatvam*), as a substratum of diseases, penta-elemental nature (*panchabhutatmakatvam*).
- 3.8 Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively.
- 3.9 Tamas as the tenth Dravya.
- 3.10 Practical study/application in Ayurveda.

PART B**50 marks****4. Gunavigyaniyam**

- 4.1 Etymological derivation, classification and enumeration according to Nyaya-Vaisheshika and Charaka, Artha, Gurvadiguna, Paradiguna, Adhyatmaguna.
- 4.2 Lakshana and classification of all the 41 gunas.
- 4.3 Practical / clinical application in Ayurveda.

5. Karma Vigyaniyam

- 5.1** Lakshana, classification in Nyaya.
- 5.2** Description according to Ayurveda.
- 5.3** Practical study/ application in Ayurveda.

6. Samanya Vigyaniyam

- 6.1 Lakshana, classification.
- 6.2 Practical study/ application with reference to Dravya, Guna and Karma.

7. Vishesha Vigyaniyam

- 7.1** Lakshana, classification.
- 7.2** Practical study/ application with reference to Dravya, Guna and Karma.
- 7.3** Significance of the statement "*Pravrittirubhayasya tu*".

8. Samavaya Vigyaniyam

- 8.1 Lakshana
- 8.2 Practical study /clinical application in Ayurveda.

9. Abhava Vigyaniyam

- 9.1 Lakshana, classification
- 9.2 Clinical significances in Ayurveda.

PAPER II**Padartha Vigyan and Ayurveda Itihas****100 marks****PART A - Pramana/ Pariksha- Vigyaniyam****75 marks****1. Pariksha**

- 1.1. Definition, significance, necessity and use of *Pariksha*.
- 1.2. Definition of *Prama*, *Prameya*, *Pramata*, *Pramana*.
- 1.3. Significance and importance of *Pramana*, Enumeration of *Pramana* according to different schools of philosophy.
- 1.4. Four types of methods for examination in *Ayurveda* (Chaturvidha-Parikshavidhi), *Pramana* in Ayurveda.
- 1.5. Subsudation of different *Pramanas* under three *Pramanas*.
- 1.6. Practical application of methods of examination (Parikshavidhi) in treatment (Chikitsa).

2. Aptopdesha Pariksha/ Pramana

- 2.1. Lakshana of Aptopadesha, Lakshana of Apta.
- 2.2. Lakshana of Shabda, and its types.
- 2.3. Shabdavritti-Abhidha, Lakshana, Vyanjana and Tatparyakhya. Shaktigrahahetu.
- 2.4. Vaakya: Characteristics, Vaakyarthagyanahetu- Aakanksha, Yogyata, Sannidhi.

3. Pratyaksha Pariksha/ Pramana

- 3.1. Lakshana of Pratyaksha, types of Pratyaksha- Nirvikalpaka- Savikalpaka with description, description of Laukika and Alaukika types and their further classification.
- 3.2. Indriya-prapyakaritvam, six types of Sannikarsha.
- 3.3. Indriyanam lakshanam, classification and enumeration of Indriya. Description of Panchapanchaka, Penta-elemental nature of Indriya by Panchamahabhuta (*Panchabhautikatwa* of Indriya) and similarity in sources (*Tulyayonitva*) of Indriya.
- 3.4. Trayodasha Karana, dominance of Antahkaran.
- 3.5. Hindrances in direct perception (*pratyaksha-anupalabdihikaaran*), enhancement of direct perception (Pratyaksha) by various instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha.
- 3.6. Practical study/ application of Pratyaksha in physiological, diagnostic, therapeutics and research grounds.

4. Anumanapariksha/Pramana

- 4.1. Lakshana of Anumana. Introduction of Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta. Types of Anumana mentioned by Charaka and Nyayadarshana.
- 4.2. Characteristic and types of Vyapti.
- 4.3. Lakshana and types of Hetu, description of Ahetu and Hetwabhasa.
- 4.4. Characteristic and significance of Tarka.
- 4.5. Practical study/ application of Anumanapramana in physiological, diagnostic, therapeutics and research.

5. Yuktipariksha/ Pramana

- 5.1. Lakshana and discussion.
- 5.2. Importance in Ayurveda.
- 5.3. Practical study and utility in therapeutics and research.

6. Upamana Pramana

- 6.1 Lakshana.
- 6.2 Application in therapeutics and research.

7. Karya- Karana Siddhanta (Cause and Effect Theory)

- 7.1. Lakshana of Karya and Karana. Types of Karana.
- 7.2. Significance of Karya and Karana in Ayurveda.
- 7.3. Different opinions regarding the manifestation of Karya from Karana: Satkaryavada, Asatkaryavada, Parinamavada, Arambhavada, Paramanuvada, Vivartavada, Kshanabhangurvada, Swabhavavada, Pilupaka, Pitharpaka, Anekantavada, Swabhavoparamavada.

PART B - Ayurved Itihas

25 marks

1. Etymological derivation (Vyutpatti), syntactical derivation (Nirukti) and definition of the word Itihas, necessity of knowledge of history, its significance and utility, means and method of history, historical person (Vyakti), subject (Vishaya), time period (Kaal), happening (Ghatana) and their impact on Ayurveda.
2. Introduction to the authors of classical texts during Samhitakaal and their contribution: Atreya, Dhanwantari, Kashyapa, Agnivesha, Sushruta, Bhela, Harita, Charaka,

Dridhabala, Vagbhata, Nagarjuna, Jivaka.

3. Introduction to the commentators of classical Samhitas – Bhattaraharicchandra, Jējjata, Chakrapani, Dalhana, Nishchalakara, Vijayarakshita, Gayadas, Arunadutta, Hemadri, Gangadhara, Yogindranath Sen, Haranachandra, Indu.
4. Introduction to the authors of compendiums (Granthasamgrahakaala) – Bhavmishra, Sharngadhara, Vrinda, Madhavakara, Shodhala, Govinda Das (Author of Bhaishajyaratnawali), Basavraja.
5. Introduction to the authors of Modern era –Gana Nath Sen, Yamini Bhushan Rai, Shankar Dajishastri Pade, Swami Lakshmiram, Yadavji Tikramji, Dr. P. M. Mehta, Ghanekar, Damodar Sharma Gaur, Priyavrat Sharma.
6. Globalization of Ayurveda – Expansion of Ayurveda in Misra (Egypt), Sri Lanka, Nepal other nations.
7.
 - a) Developmental activities in Ayurveda in the post-independence period, development in educational trends.
 - b) Establishment of different committees, their recommendations.
 - c) Introduction to and activities of the following Organizations :- Department of AYUSH, Central Council of Indian Medicine, Central Council for Research in Ayurvedic Sciences, Ayurvedic Pharmacopeia commission, National Medicinal Plants Board, Traditional Knowledge Digital Library (TKDL)
 - d) Introduction to the following National Institutions :
 - National Institute of Ayurved, Jaipur.
 - IPGT&RA, Gujrat Ayurved University, Jamnagar.
 - Faculty of Ayurved, BHU, Varanasi.
 - Rashtriya Ayurveda Vidyapeetha, New Delhi.
 - e) Drug and Cosmetic Act.
8. Introduction to national & international popular journals of Ayurveda.
9. Introduction to activities of WHO in the promotion of Ayurved.

Reference Books:-

A). Padartha Vigyan:-

- | | |
|--|--------------------------------|
| 1. Padarthavigyan | Acharya Ramraksha Pathak |
| 2. Ayurvediya Padartha Vigyana | Vaidya Ranjit Rai Desai |
| 3. Ayurved Darshana | Acharya Rajkumar Jain |
| 4. Padartha Vigyana | Kashikar |
| 5. Padartha Vigyana | Balwant Shastri |
| 6. Sankhyatantwa Kaumadi | GajananS hastri |
| 7. Psycho Pathology in Indian Medicine | Dr. S.P. Gupta |
| 8. Charak Evum Sushrut ke Darshanik Vishay ka Adhyayan | Prof. Jyotirmitra Acharya |
| 9. Ayurvediya Padartha Vigyana | Dr. Ayodhya Prasad Achal |
| 10. Padartha Vigyana | Dr. Vidyadhar Shukla |
| 11. Padartha Vigyana | Dr. Ravidutta Tripathi |
| 12. Ayurvediya Padartha Vigyana | Vaidya Ramkrishna Sharma Dhand |
| 13. Ayurvediya Padartha Vigyan Parichaya | Vaidya Banwarilal Gaur |
| 14. Ayurvediya Padartha Darshan | Pandit Shivhare |

15. Scientific Exposition of Ayurveda Dr. Sudhir Kumar
16. Relevant portions of Charakasamhita, Sushrutasamhita.

B) History of Ayurveda:-

- | | |
|---|--------------------------------|
| 1. Upodghata of Kashyapasamhita Paragraph of acceptance of Indian medicine | Rajguru Hem Raj Sharma |
| 2. Upodghata of Rasa Yogasagar | Vaidy Hariprapanna Sharma |
| 3. Ayurveda Ka Itihas | KaviraSuram Chand |
| 4. Ayurveda Sutra | Rajvaidya Ram Prasad Sharma |
| 5. History of Indian Medicine (1-3 part) | Dr. GirindrNath Mukhopadhyaya |
| 6. A Short history of Aryan Medical Science | Bhagwat Singh |
| 7. History of Indian Medicine | J. Jolly |
| 8. Hindu Medicine | Zimer |
| 9. Classical Doctrine of Indian Medicine | Filiyosa |
| 10. Indian Medicine in the classical age | AcharyaPriyavrata Sharma |
| 11. Indian Medicine (Osteology) | Dr. Harnley |
| 12. Ancient Indian Medicine | Dr. P. Kutumbia |
| 13. Madhava Nidan and its Chief Commentaries (Chapters highlighting history) | Dr. G.J. Mulenbelt |
| 14. Ayurveda Ka BrihatItihasa | Vaidya Atridev Vidyalankara |
| 15. Ayurveda Ka VaigyanikaItihasa | Acharya Priyavrata Sharma |
| 16. Ayurveda Ka PramanikaItihasa | Prof. Bhagwat Ram Gupta |
| 17. History of Medicine in India | Acharya Priyavrata Sharma |
| 18. Vedomein Ayurveda | Vaidya Ram GopalS hastri |
| 19. Vedomein Ayurveda | Dr. Kapil Dev Dwivedi |
| 20. Science and Philosophy of Indian Medicine | Dr. K.N. Udupa |
| 21. History of Indian Medicine from Pre-Mauryan to Kushana Period | Dr. Jyotirmitra |
| 22. An Appraisal of Ayurvedic Material in Buddhist literature | Dr. Jyotirmitra |
| 23. Mahayana Granthon mein nihita Ayurvediya Samagri | Dr. RavindraNathTripathi |
| 24. Jain Ayurveda Sahitya Ka Itihasa | Dr. Rajendra Prakash Bhatnagar |
| 25. Ayurveda- Prabhashaka Jainacharya | Acharya Raj Kumar Jain |
| 26. CharakaChintana | Acharya Priyavrata Sharma |
| 27. Vagbhata Vivechana | Acharya Priyavrata Sharma |
| 28. Atharvaveda and Ayurveda | Dr. Karambelkara |
| 29. Ayurvedic Medicine Past and Present | Pt. Shiv Sharma |
| 30. Ancient Scientist | Dr. O.P. Jaggi |
| 31. Luminaries of Indian Medicine | Dr. K.R. Shrikanta Murthy |
| 32. Ayurveda Ke Itihasa Ka Parichaya | Dr. RaviduttaTripathi |
| 33. Ayurveda Ke Pranacharya | Ratnakara Shastri |
| 34. Ayurveda Itihasa Parichaya | Prof. Banwari Lal Gaur |

1.2 संस्कृतम्

THEORY - ONE PAPER - 100 marks

TEACHING HOURS - 90 hours

PART-A

50 marks

संस्कृतव्याकरणाध्ययनम्

- 1- संज्ञाप्रकरणम्
- 2- विभक्त्यर्थाः
- 3- सन्धिप्रकरणम् (सन्धिविच्छेदः, सन्धिकरणम्)
- 4- षड्लिंगप्रकरणम् (षड्भूतव्ययेषु)
- 5- धातुप्रकरणम् (धातुरूपाण्येव)
(भ्वादिगण्य धातूनां पञ्च लट् लोट् लृट् विधिलिङ् लकारेषु रूपाणि)
- 6- वाच्यप्रयोगाः (कर्तरि कर्मणि भाववाच्यप्रयोगाः)
- 7- समासप्रकरणम्
- 8- प्रत्ययाः
(णिच्, क्त, क्तवत्, शतृ, शानच्, तुमुन्, तव्यत्, तृच्, क्त्वा, ल्यप्, ल्युट्, अनीयर्, मतुप्, इनि, तन्, इतच्, अण्, इञ्, इक्, त्व, ता, षन्, इम्, निच्, तः, त्र, दा, धा, तरप्, तमप्, टाप्, डाप्)
- 9- अनुवादः
A) From English / Hindi / regional language to Sanskrit
B) From Sanskrit to English / Hindi / regional language
C) Identification and correction of grammatical errors in the given sentences

The sentences for translation should be selected from the under mentioned reference books-

- 1) Laghusiddhanta Kaumudi- Acharya Varadaraja (Commentary by Shri Dhananand Shastry)
- 2) Brihatrayee- (Charaka Samhita, Sushruta Samhita, Ashtanga Hridayam)
- 3) Anuvada Chandrika-Chakradhara Hansa Nautiyal
- 4) Sanskruta Ayurved Sudha- Dr. Banwari Lal Gaur
- 5) Rachananuvada Kaumudi- Dr. Kapildev Dwivedi
- 6) Bhasha Sopanam- Published by Rashtreeya Samskruta Samsthanam, New Delhi

PART- B**50 marks****भाषाध्ययनम्**

- 1.) आयुर्वेदार्षग्रन्थाध्ययनायुः—जमचूपेम उमजीवक वऱजनकल वऱलनतअमकं ।तौं छतंदर्ी ;नौतनजौं डीपजंए
ौतममतौं जीदंडए ढेचजमत.4द्व 25 marks
- 2.) वैद्यकीय—सुभाषितसाहित्यम् (अध्यायाः 1—10) 15 marks
- 3.) पंचतन्त्रम्—अपरीक्षितकारकम् (क्षपणक कथातः मूर्खपण्डितकथापर्यन्तम्
पंचकथाः) 10 marks

REFERENCE BOOKS-

- 1.) Sushruta Samhita, Shareera Sthanam, Chapter-4
- 2.) Prabhashanam Work Book, Su.sam.chap.4
Published by-AYURVEDA ACADEMY@ BANGALORE;
Email-ayuacademy@gmail.com
- 3.) Vaidyakeeya Subhashita Sahityam - Dr. Bhaskara Govinda Ghanekar
- 4.) Panchatantra-(Apareekshitakarakam) -Pt. Vishnu Sharma

**1.3 KRIYA SHARIR
(PHYSIOLOGY)**

**Theory-Two Papers-200 Marks (100 marks each)
Teaching hours-180 hours**

PAPER- I

100 marks

PART- A

50 marks

1. Conceptual study of fundamental principles of Ayurvediya Kriya Sharir e.g - Panchamahabhuta, Tridosha, Triguna, Loka-Purusha Samya, Samanya-Vishesha. Description of basics of Srotas.
2. Definition and synonyms of the term Sharir, definition and synonyms of term Kriya, description of Sharir Dosha and Manasa Dosha. Mutual relationship between Triguna-Tridosha & Panchmahabhuta. Difference between Shaarir and Sharir. Description of the components of Purusha and classification of Purusha, role of Shatdhatupurusha in Kriya Sharira and Chikitsa.
3. Dosha- General description of Tridosha. Inter relationship between Ritu-Dosha-Rasa-Guna. Biological rhythms of Tridosha on the basis of day-night-age-season and food intake. Role of Dosha in the formation of Prakriti of an individual and in maintaining of health. Prakrita and Vaikrita Dosha.
4. Vata Dosha: Vyutpatti (derivation), Nirukti (etymology) of the term Vata, general locations, general properties and general functions of Vata, five types of Vata (Prana, Udana, Samana, Vyana, Apana) with their specific locations, specific properties, and specific functions.
Respiratory Physiology in Ayurveda, Physiology of speech in Ayurveda.
5. Pitta Dosha: Vyutpatti, Nirukti of the term Pitta, general locations, general properties and general functions of Pitta, five types of Pitta (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka) with their specific locations, specific properties, and specific functions. Similarities and differences between Agni and Pitta.
6. Kapha Dosha: Vyutpatti, Nirukti of the term Kapha, general locations, general properties and general functions of Kapha, five types of Kapha (Bodhaka, Avalambaka, Kledaka, Tarpaka, Śleshaka) with their specific locations, specific properties, and specific functions.
7. Etiological factors responsible for Dosha Vriddhi, Dosha Kshaya and their manifestations.
8. Concept of Kriyakala.
9. Prakriti:
 - a) Deha- Prakriti: Vyutpatti, Nirukti, various definitions and synonyms for the term 'Prakriti'. Intra-uterine and extra-uterine factors influencing Deha-Prakriti, classification and characteristic features of each kind of Deha-Prakriti.
 - b) Manasa- Prakriti: Introduction and types of Manasa- Prakriti.
10. Ahara: Definition, classification and significance of Ahara, Ahara-vidhi-vidhana, Ashta Aharavidhi Viseshayatana, Ahara Parinamkar Bhava.

11. Aharapaka (Process of digestion): Description of Annavaha Srotas and their Mula. Role of Grahani & Pittadhara Kala.
12. Description of Avasthapaka (Madhura, Amla and Katu). Description of Nishthapaka (Vipaka) and its classification. Separation of Sara and Kitta. Absorption of Sara. Genesis of Vata-Pitta-Kapha during Aharapaka process. Definition of the term Koshtha. Classification of Koshtha and the characteristics of each type of Koshtha.
13. Agni – Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.

PART- B

50 marks

Modern Physiology

- a) Definition and mechanisms of maintenance of homeostasis. Cell physiology. Membrane physiology. Transportation of various substances across cell membrane.
- b) Resting membrane potential and action potential.
- c) Physiology of respiratory system: functional anatomy of respiratory system. Definition of ventilation, mechanism of respiration, exchange and transport of gases, neural and chemical control of respiration, artificial respiration, asphyxia, hypoxia. Introduction to Pulmonary Function Tests.
- d) Physiology of Nervous System: General introduction to nervous system, neurons, mechanism of propagation of nerve impulse, physiology of CNS, PNS, ANS; physiology of sensory and motor nervous system, Functions of different parts of brain and physiology of special senses, intelligence, memory, learning and motivation. Physiology of sleep and dreams, EEG. Physiology of speech and articulation. Physiology of temperature regulation.
- e) Functional anatomy of gastro-intestinal tract, mechanism of secretion and composition of different digestive juices. Functions of salivary glands, stomach, liver, pancreas, small intestine and large intestine in the process of digestion and absorption. Movements of the gut (deglutition, peristalsis, defecation) and their control. Enteric nervous system.
- f) Acid-base balance, water and electrolyte balance. Study of basic components of food. Digestion and metabolism of proteins, fats and carbohydrates. Vitamins & Minerals- sources, daily requirement, functions, manifestations of hypo and hypervitaminosis.

PAPER- II

100 marks

PART- A

50 marks

1. Dhatu:

Etymology, derivation, definition, general introduction of term Dhatu, different theories related to Dhatuposhana (Dhatuposhana Nyaya)

2. Rasa Dhatu:

Etymology, derivation, location, properties, functions and Praman of Rasa-dhatu. Physiology of Rasavaha Srotas, Formation of Rasa Dhatu from Aahara Rasa, circulation of Rasa (Rasa-Samvahana), role of Vyana Vayu and Samana Vayu in Rasa Samvahana. Description of functioning of Hridaya. Ashtavidha Sara (8 types

of Sara), characteristics of Tvakasara Purusha, conceptual study of mutual interdependence (Aashraya-Aashrayi Bhaava) and its relation to Rasa and Kapha. Manifestations of Kshaya and Vriddhi of Rasa.

3. Rakta Dhatu:

Etymology, derivation, synonyms, location, properties, functions and Praman of Rakta Dhatu. Panchabhautikatva of Rakta Dhatu, physiology of Raktavaha Srotas, formation of Raktadhatu, Ranjana of Rasa by Ranjaka Pitta, features of Shuddha Rakta, specific functions of Rakta, characteristics of Raktasara Purusha, manifestations of Kshaya and Vriddhi of Raktadhatu, mutual interdependence of Rakta and Pitta.

4. Mamsa Dhatu :

Etymology, derivation, synonyms, location, properties and functions of Mamsa Dhatu, physiology of Mamsavaha Srotasa, formation of Mamsa Dhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsa Dhatu .Concept of Peshi.

5. Meda Dhatu :

Etymology, derivation, location, properties, functions and Praman of Meda Dhatu, physiology of Medovaha Srotas, formation of Medo Dhatu, characteristics of Medasara Purusha and manifestations of Kshaya and Vriddhi of Meda.

6. Asthi Dhatu:

Etymology, derivation, synonyms, location, properties, functions of Asthi Dhatu. Number of Asthi. Physiology of Asthivaha Srotas and formation of Asthi Dhatu, characteristics of Asthisara Purusha, mutual interdependence of Vata and Asthi Dhatu, manifestations of Kshaya and Vriddhi of Asthi Dhatu.

7. Majja Dhatu :

Etymology, derivation, types, location, properties, functions and Praman of Majjaa Dhatu, physiology of Majjavaha Srotas, formation of Majja Dhatu, characteristics of Majja Sara Purusha, relation of Kapha, Pitta, Rakta and Majja, manifestations of Kshaya and Vriddhi of Majja Dhatu.

8. Shukra Dhatu:

Etymology, derivation, location, properties, functions and Praman of Shukra Dhatu, physiology of Shukraravaha Srotas and formation of Shukra Dhatu. Features of Shuddha Shukra, characteristics of Shukra-Sara Purusha, manifestations of Kshaya and Vriddhi of Shukra Dhatu.

9. Concept of **Ashraya-Ashrayi** bhava i.e. inter-relationship among Dosha, Dhatu Mala and Srotas.

10. Ojas: Etymological derivation, definition, formation, location, properties, Praman, classification and functions of Ojas. Description of Vyadhikshamatva. Bala Vriddhikara Bhava. Classification of Bala. Etiological factors and manifestations of Ojavisramsa, Vyapat and Kshaya.

- 11. Upadhatu:** General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu.
- Stanya: Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya.
 - Artava: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavavaha Srotas.
 - Tvak: classification, thickness of each layer and functions.
- 12. Mala:** Etymological derivation and definition of the term Mala. Aharamala: Enumeration and description of the process of formation of Aharamala.
- Purisha: Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshaya of Purisha.
 - Mutra: Etymological derivation, definition, formation, properties, quantity and functions of Mutra. Physiology of Mutravaha Srotas, physiology of urine formation in Ayurveda, manifestations of Vriddhi and Kshaya of Mutra.
 - Sveda: Etymological derivation, definition, formation and functions of Sveda. Manifestations of Vriddhi and Kshaya of Sveda. Description of Svedvaha Srotas
 - Dhatumala: Brief description of each type of Dhatumala.
- 13. Panchagyanendriya:** Physiological description of Panchagyaanendriya and physiology of perception of Shabda, Sparsha, Rupa, Rasa and Gandha. Physiological description of Karmendriya.
- 14. Manas:** Etymological derivation, definition, synonyms, location, properties, functions and objects of Manas. Physiology of Manovaha Srotas.
- 15. Atma:** Etymological derivation, definition, properties of Atma. Difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body.
- 16. Nidra:** Nidrotpatti, types of Nidra, physiological and clinical significance of Nidra; Svapnotpatti and types of Svapna.

PART –B

50 marks

Modern Physiology

- Haemopoetic system – composition, functions of blood and blood cells, Haemopoiesis (stages and development of RBCs, and WBCs and platelets), composition and functions of bone marrow, structure, types and functions of haemoglobin, mechanism of blood clotting, anticoagulants, physiological basis of blood groups, plasma proteins, introduction to anaemia and jaundice.
- Immunity, classification of immunity: Innate, acquired and artificial. Different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity. Hypersensitivity.
- Muscle physiology – comparison of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.
- Physiology of cardio-vascular system: Functional anatomy of cardiovascular system. Cardiac cycle. Heart sounds. Regulation of cardiac output and venous

return. Physiological basis of ECG. Heart-rate and its regulation. Arterial pulse. Systemic arterial blood pressure and its control.

5. Adipose tissue, lipoproteins like VLDL, LDL and HDL triglycerides.
6. Functions of skin, sweat glands and sebaceous glands.
7. Physiology of male and female reproductive systems. Description of ovulation, spermatogenesis, oogenesis, menstrual cycle.
8. Physiology of Excretion – functional anatomy of urinary tract, functions of kidney. Mechanism of formation of urine, control of micturition. Formation of faeces and mechanism of defecation.
9. Endocrine glands – General introduction to endocrine system, classification and characteristics of hormones, physiology of all endocrine glands, their functions and their effects.

PRACTICAL

100 marks

Teaching hours-180

Ayurvedic practical

1. Assessment of Prakriti
2. Assessment of Dosha (Features of Vriddhi- Kshaya)
3. Assessment of Dhatu (Features of Vriddhi- Kshaya)
4. Assessment of Agni
5. Assessment of Koshtha
6. Assessment of Sara
7. Nadi pariksha

Modern physiology practical

1. Introduction to laboratory instruments- Simple & Compound Microscope, Scalp vein set, bulbs for blood collection, Sahli's Haemometer, Haemocytometer, pipettes, Urinometer, Albuminometer, Stethoscope, B.P. Apparatus, Harpenden's caliper, Clinical Hammer, Tuning Fork, Stop Watch, Thermometer, Centrifuge machine, ECG Machine
2. Collection of blood sample – prick, vene-puncture method, use of anticoagulants
3. Preparation of blood smear and staining
4. Estimation of Hemoglobin
5. Microscopic examination of blood
 - a. Total RBC count
 - b. Total WBC count
 - c. Differential leucocyte count
6. Packed cell volume (PCV) demonstration
7. ESR demonstration
8. Bleeding time, Clotting time
9. Blood grouping and Rh typing
10. Examination of Cardio-Vascular system
 - a. Pulse examination
 - b. Arterial blood pressure measurement
 - c. Examination of heart sounds
 - d. ECG demonstration
11. Examination of Respiratory system
 - a. Respiratory rate
 - b. Breath sounds
 - c. Spirometry
12. Examination of Nervous System- Sensory & Motor.

13. Urine examination –Physical examination, chemical examination. Test for normal constituents of urine. Detection of specific gravity and reaction of urine.

Distribution of Practical marks

| | |
|-----------------------------|------|
| 1. Laboratory Practical | - 20 |
| 2. Human Experiment | - 15 |
| 3. Spotting | - 15 |
| 4. Prakriti Saradi pariksha | - 20 |
| 5. Practical Record | - 10 |
| 6. Viva- voce | - 20 |

REFERENCE BOOKS:-

- Ayurvediya Kriyasharir - Ranjit Rai Desai
- Kayachikitsa Parichaya - C. Dwarkanath
- Prakrit Agni Vigyan - C. Dwarkanath
- Sharir Kriya Vigyan - Shiv Charan Dhyani
- Abhinava Sharir Kriya Vigyana - Acharya Priyavrata Sharma
- Dosha Dhatu Mala Vigyana - Shankar Gangadhar Vaidya
- Prakrita Dosha Vigyana - Acharya Niranjana Dev
- Tridosha Vigyana - Shri Upendranath Das
- Sharira Tatva Darshana - Hirlekar Shastri
- Prakrita Agni Vigyana - Niranjana Dev
- Deha Dhatvagni Vigyana - Vd. Pt. Haridatt Shastri
- Sharir Kriya Vigyana (Part 1-2) - Acharya Purnchandra Jain
- Sharir Kriya Vigyana - Shri Moreshwar Dutt. Vd.
- Sharira Kriya Vijnana (Part 1 and 2) – Nandini Dhargalkar
- Dosha Dhatu Mala Vigyana - Basant Kumar Shrimal
- Abhinava Sharir Kriya Vigyana - Dr. Shiv Kumar Gaur
- Pragyogik Kriya Sharir - Acharya P.C. Jain
- Kaya Chikitsa Parichaya - Dr. C. Dwarkanath
- Concept of Agni - Vd. Bhagwan Das
- Purush Vichaya - Acharya V.J. Thakar
- Kriya Sharir - Prof. Yogesh Chandra Mishra
- Sharir Kriya Vigyana - Prof. Jayaram Yadav &Dr. Sunil Verma.
- Basic Principles of Kriya-Sharir (A treatise on Ayurvedic Physiology) by Dr. Srikant Kumar Panda
- Sharir Kriya – Part I & Part II – Dr. Ranade, Dr. Deshpande & Dr. Chobhe
- Human Physiology in Ayurveda - Dr Kishor Patwardhan
- Sharirkriya Vignyan Practical Hand Book– Dr.Ranade, Dr.Chobhe, Dr. Deshpande
- Sharir Kriya Part 1 – Dr.R.R.Deshapande, Dr.Wavhal
- Sharir Kriya Part 2 – Dr. R.R.Deshapande, Dr.Wavhal
- Ayurveda Kriya Sharira- Yogesh Chandra Mishra
- Textbook of Physiology - Gyton & Hall
- A Textbook of Human Physiology – A.K.Jain
- Essentials of Medical Physiology - Sembulingam, K.
- Concise Medical Physiology - Chaudhari, Sujit K.
- Principals of Anatomy & Physiology - Tortora & Grabowski
- Textbook of Medical Physiology- Indu Khurana

1.4 RACHNA SHARIR (ANATOMY)

**Theory- Two Papers-200 Marks-(100 marks each)
Teaching Hours-180 hours**

PAPER-I

100 marks

PART-A

50 marks

1. Shariropkramaniya Shaarira

Sharira and shaarira vyakhya (definitions of sharira and shaarira), shadangatvam (six regions of the body), anga pratyanga vibhaga (sub divisions). Mrita sharir samshodhan. Shaarira shastra vibhaga, shaarira gyan prayojana . Constitution of purusha according to dhatubheda, panchabhautikatvam, trigunatmakatvam, tridoshamayatvam, karma purusha, and doshadhatumala-mulakatvam.

2. Paribhasha Shaarira

Kurcha, kandara, jala, asthisanghat, seemanta, seevani, rajju, snayu and lasika.

3. Garbha Shaarira

Garbha definitions, explanation of shukra, artava, garbhadhana. Role of tridosha and panchmahabhuta in the fetal development. Beeja, beejabhaga and beejabhagavayava, linga vinischaya, masanumasika garbha vriddhi-krama, garbhottpadakbhava, garbhavridhdikara bhava, garbha poshana, apara nirmana , nabhinadi nirmana. Aanga pratyanga utpatti.

4. Pramana Shaarira: Anguli pramana.

5. Asthi Shaarira

Asthi vyakhya, number, types, asthi swaroopa, vasa, meda and majja.

6. Sandhi Shaarira

Sandhi vyakhya, numbers, types of asthi sandhi.

7. Sira, Dhamani, Srotas Shaarira

- Definition, types and number of sira and dhamani.
- Description of Hridaya.
- Sroto shaarira: Definition, types of srotas and srotomula.

8. Peshi Shaarira

- Peshi vyakhya, structure, types, number and importance.
- Description of Peshi.

9. Koshtha Evam Ashaya Shaarira

- Definition of koshta and number of koshtanga.
- Types and description of ashaya.

10. Kalaa Shaarira

Kalaa: definition and types.

11. Uttamangiya Shaarira

Shatchakra, ida, pingala and sushumna nadi - brief description.

12. Marma Shaarira

Marma: definition, number, location, classification, clinical importance with viddha lakshana. Explanation of trimarmas. Detail description of marmas.

13. Indriya Shaarira

Definition of indriya, indriya artha and indriya adhisthan, their number and importance. Description of gyanendria, karmendriya and ubhayendriya (manas).

PART-B

50 marks

1. Definition and branches of anatomy. Preservation methods of the cadaver.

2. Anatomical Terminologies

Anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves,.

3. Embryology

Definitions and branches of embryology. Embryo and fetus. Sperm and ovum, fertilization. Cleavage. Germ layers formation and their derivatives. Laws of heredity, Sex determination and differentiation, Month-wise development of embryo. Foetal circulation, placenta formation, Umbilical cord formation.

4. Osteology

Bone: Definition, ossification, structure and types. Description of bones with clinical anatomy.

5. Arthrology

Joints: Definition, structure types and movements. Description of joints of extremities, vertebral joints and temporomandibular joint with their clinical anatomy.

6. Cardiovascular system

- a. Definition, types and structure of arteries and veins.
- b. Description of heart and blood vessels with their course and branches.
- c. Pericardium with applied aspect.

7. Lymphatic system

Definition, types and structure of lymph vessels, lymph glands with their clinical aspect.

8. Myology

- a) Structure and types of muscles.
- b) Description of muscles; their origin, insertion, actions, nerve supply and clinical anatomy.

Paper II

100 marks

Part A

50 marks

1. Respiratory System

- a. Bronchial tree and lungs with their clinical aspects.
- b. Respiratory tract: nasal cavity, pharynx, larynx, trachea, bronchial tree.
- c. Pleura with its clinical aspects.
- d. Diaphragm.

2. Digestive system

- a. Organs of digestive tract (alimentary tract) with their clinical aspects.
- b. Digestive glands: liver, spleen and pancreas.
- c. Description of peritoneum with its clinical aspects.

3. Urinary System

Urinary tract: kidney, ureter, urinary bladder and urethra with their clinical aspects.

4. Reproductive system

- a. Male Reproductive system: reproductive organs, tract and glands (prostate and seminal vesicles) with their clinical aspects.
- b. Female reproductive system: reproductive organs, tract and glands with their clinical aspects.

5. Endocrinology

Definition, classification & description of endocrine glands (pituitary, thyroid, parathyroid, thymus and suprarenal glands) with clinical aspects.

PART B

50 marks

6. Nervous System

Nervous system: definition, classification and its importance. Description of brain and spinal cord.

Description of peripheral nervous system: cranial and spinal nerves, nerve plexuses, and autonomic nervous system, formation and circulation of cerebrospinal fluid and blood supply of brain and spinal cord.

7. Sensory organs

Description of structures of eye, ear, nose, tongue and skin with their clinical aspects.

8. Surface and radiological anatomy

- a. Study of radio-imaging of limbs, abdomen, pelvis and vertebral column with its clinical application.
- b. Surface anatomy of thoracic and abdominal viscera.

PRACTICAL

100 marks

Teaching hours: 180

Content of practical

1. Practical study of bones
2. Practical study of organs
3. Practical study of surface and radiological anatomy.
4. Shava vichhedana – detailed dissection of the whole body.
5. Practical study of location of marma
6. Demonstration of histology slides (10 slides)

Distribution of marks

- | | |
|--|----------|
| 1. Spotting - | 20 marks |
| 2. Dissected organs and histology slides - | 20 Marks |
| 3. Bones, joints, marma - | 20 Marks |
| 4. Surface & radiological anatomy - | 10 Marks |
| 5. Practical records - | 10 Marks |
| 6. Viva-Voce - | 20 Marks |

Total

100 Marks

Reference Books :-

| S. No. | Name of Book | Author |
|---------------|--|--|
| 1. | Brihat Shariram Vaidyaratna- | P.S. Varrier |
| 2. | Abhinava Shariram- | Acharya Damodar Sharma Gaur |
| 3. | Manava Sharir (Revised Edition)- | Prof. Dinkar Govind Thatte |
| 4. | Manava Bhruna Vigyana - | Prof. Dinkar Govind Thatte |
| 5. | Manava Anga Rekhankan Vikrian - | Prof. Dinkar Govind Thatte |
| 6. | Sharir Rachana Vigyan (English)- | Vaidya P.G. Athawale |
| 7. | Manual of Practical Anatomy Cunnigham | Practical Manual Vol-1, Vol-2, Vol-3 |
| 8. | Clinical Anatomy in Ayurveda - | Prof. D.G. Thatte & Prof. Suresh Chandra |
| 9. | Sharir Rachna Vigyan (English)- | Prof. D.G. Thatte |
| 10. | Ayurvedic Human Anatomy - | Prof. Dr. Giridhar M. Kanthi |
| 11. | Regional Anatomy - | B. D. Chaurasia |
| 12. | Rachana Sharir Vigyana - | Dr. Mahendra Sing |
| 13. | relevant chapters of Brihtrayee and Laghuthrayee | |
| 14. | Gray's Anatomy | |
| 15. | Text Book of Human Anatomy- | Inderbir Singh |
| 16. | Clinical Anatomy- | Richard S Snell |
| 17. | Fundamentals of Human Anatomoy- | Dr. Chakraborty |
| 18. | Human Osteology - | Poddar |

1.5 Maulik Siddhant avum Ashtang Hridaya
(Basic Principles and Ashtang Hridaya- An ancient text of Ayurveda)

Theory- One Paper- 100 marks
Teaching Hours -120 hours

Part A

60 marks

Ashtang Hridaya Sutrasthana Adhyaya 1 to 15

Part B

40 marks

1. Ashtang Hridaya Sutrasthana Adhyaya 16 to 30
2. Description of Ashta Prakriti
3. Shastra Lakshan (Tantra), Tantraguna, Tantradosha, Tachitalya, Arthasraya, Kalpana

Reference Books:

1. Astang Hridaya : Hindi commentary by Lalchanda Vaidya
2. Astang Hridaya : Hindi commentary by Vd. B.L. Gaur
3. Astang Hridaya : English commentary by Dr. T. Sreekumar
4. Astang Hridaya : English commentary by Dr. Vishwavasudhan Gaur
5. Astang Hridaya : Sanskrit commentary by Hemadri
6. Astang Hridaya : Sanskrit commentary by Arunadatta



BHARATI VIDYAPEETH
(DEEMED TO BE UNIVERSITY) PUNE, INDIA.

FACULTY OF AYURVED

Pune- Satara Road, Pune-411043.

Accredited with 'A+' Grade (2017) by NAAC.

'A' Grade University status by MHRD, Govt. of India

Accredited (2004) & Reaccredited (2011) with 'A' Grade by NAAC.

Undergraduate (B.A.M.S)
&
Post- Graduate (M.D./M.S./Diploma in Ayurved)
Syllabus/ Curriculum
2016 courses

Contents

| Sr No | Topic | Page No |
|--------------|--|----------------|
| 1 | Preface | 2 |
| 2 | Vision and Mission | 3 |
| 3 | Aims and Objectives | 4 |
| 4 | Notification | 5 |
| 5 | Program Outcomes | 6 |
| 6 | Eligibility | 7 |
| 7 | Medium of instruction and Pattern of study | 7 |
| 8 | Duration of the Course Study and Subjects taught, Number of lectures/practical | 7-8 |
| 9 | Attendance and Progress | 8 |
| 10 | Scheme of Examinations | 8-9 |
| 11 | Migration | 10 |
| 12 | Subjects | |
| | Dravyaguna Vigyan | 11-19 |
| | Roga Nidan evam Vikriti Vigyan | 20-28 |
| | Rasashastra evam Bhaishjya Kalpana | 29-34 |
| | Charak Samhita (Purvardh) | 35-40 |

Preface

Ayurveda is accepted worldwide as one of the oldest traditional systems of medicine. The ancient insight in this traditional system of medicine is still not profoundly discovered. Ayurveda signifies as "the life-science " where ayur means "life" and veda means "science" in Sanskrit. Ayurveda is the upaveda i.e. "auxiliary knowledge of Atharvaveda in Vedic tradition with its prime origin from Atharva-Veda and a supplement of the Rig-Veda. Lord Dhanvantari is worshipped as the God of Ayurveda. The goal of this traditional medicine system is to prevent illness, disease cure and preserve life. Being originated in India Ayurveda extends its wings in various parts of the world. In ancient days Ayurveda was taught in Gurukula system, which is now evolved in to underundergraduateest graduate courses from Institutions.

The Indian Medical Council was set up in 1971 by the Indian government to establish maintenance of standards for undergraduate and postgraduate education. It establishes suitable qualifications in Indian medicine and recognizes various forms of traditional practice including Ayurveda.

Ayurvedic practitioners also work in rural areas, providing health care to at least 500 million people in India alone. They therefore represent a major force for primary health care, and their training and placement are important to the government of India. Being a scientific medicine, Ayurveda has both preventive and curative aspects. The preventive component emphasizes the need for a strict code of personal and social hygiene, the details of which depend upon individual, climatic, and environmental needs.

Now Bachelor of Ayurvedic Medicine and Surgery, MD/MS in various discipline of Ayurveda started with the intention to encourage integrated teaching and de-emphasize compartmentalization of disciplines so as to achieve horizontal and vertical integration in different phases which helps to support National Health Services.

Looking into the health services provided to the public, understanding the need of practitioners of Ayurvedic system of medicine, as per the guidelines of apex body NCISM and suggestions provided

by the faculty of various sections, stake holders and strategy of University this governance is framed based on following aims and objectives -

Aims of BAMS programme

- To create an efficient Physician capable of functioning independently in both urban and rural environment.
- To produce graduates of Ayurveda with thoughtful knowledge having deep base of scientific knowledge in harmony with Ayurvedic fundamentals with extensive practical training who would be able to become an efficient teacher, research worker and Kaya Chikitsak (Physician) and Shalayachikitsak (Surgeon) competent to serve for health services.

Objectives

To develop following attitude and skills in our students -

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

Faculty of Ayurved, Bharati Vidyapeeth (Deemed to be University), Pune

Vision-

To be a world class university for social transformation through dynamic education

Mission-

- To ensure the good health and longevity of mankind.
- To carve a niche for our college in the world of Ayurved education
- To provide
 - Borderless access to Ayurved education
 - Quality Ayurved education
- To promote
 - Quality research in diverse areas of health care system.
 - Extensive use of ICT for teaching, learning and governance.
 - To develop national and international networks with industry and other academic and research institutions.

Program Outcomes For Undergraduate Course of Ayurveda

- The Bachelor of Ayurved will have profound knowledge of Ashtanga Ayurved backed up by extensive practical training.
- This knowledge will be supplemented by scientific advances in modern medicine along with extensive practical training.
- The BAMS graduate will become globally competent Ayurved practitioner and a research scholar to serve the health care services.

Program specific outcome

The BAMS degree holder should be capable of functioning independently in both urban and rural environment.

Course outcomes

After completion of B.A.M.S course the Graduates of Ayurved –

- Should have thorough knowledge of all the subjects including Sanskrit so that he/she can have the ability to interpret Sanskrit quotations from Classical texts of Ayurved.
- Must have the practical/ clinical skills of all the subjects.
- Are able to diagnose and treat the patients independently with Ayurved management.
- Should be able to conduct minor procedures and preliminary management of accidental cases.
- Should be able to treat the patients with empathy and have proper interpersonal and communication skills as the competent health care professionals.
- Ought to have the current knowledge of recent advances in the field by self-learning and /or participating in continuing Medical Education Programs.
- Shall be able to critically analyze relevant published research literature and use them appropriately to influence practice of Ayurved.
- Must be able to participate in National health program.

Regulations governing the B.A.M.S. programme (CCIM- Minimum standards of Undergraduate Ayurved education- Regulations- 2016

Eligibility

- The failed student of first Professional shall be allowed to appear in second professional examination, but the student shall not be allowed to appear in third professional examination unless the student passes all the subjects of first professional examination and maximum four chances shall be given to pass first professional examination within a period of maximum three years.
- The second professional session shall start every year following completion of first professional examination and the second professional examination shall be ordinarily held and completed every year after completion of one year of second professional session.
- The failed student of second professional who have passed all the subjects of first professional examination shall be allowed to appear in third professional examination, but the student shall not be allowed to appear in final professional examination unless the student passes all the subjects of second professional examination and maximum four chances shall be given to pass second professional examination within a period of maximum three years.
- The student failed in any of the four professional examinations in four chances shall not be allowed to continue his or her studies:

Medium of instruction

The medium of instruction for the programme shall be Sanskrit or Hindi or any recognized regional language or English with use of Ayurvedic technical terms.

Duration of the Course Study

Total duration of course – Five and Half years

- a) First Profession- 18 Months [Course 2021], 12 Months [Course 2017]
- b) Second Profession- 12 Months [Course 2017]**
- c) Third profession -12 Months [Course 2017]
- d) Forth Profession- 18 Months [Course 2017]
- e) Compulsory Internship- 12 Months

Attendance and Progress

Each student shall be required to maintain minimum seventy-five percent attendance in each subject in theory (i.e., lecture hours) practical and clinical (i.e., non-lecture hours) separately for appearing in examination at the end of academic year subject to the condition that his/her progress and conduct are counted satisfactory by the principal.

Subjects taught, Number of lectures/ practical and demonstrations for various subjects [Second year B.A.M.S.]

| Sr No. | Subject with code | Number of teaching hours | | Total |
|--------|------------------------------------|--------------------------|--------------------|-------------|
| | | Lectures | Practical/ Clinics | |
| 1 | Dravyaguna Vigyan | 200 | 200 | 400 |
| 2 | Roga Nidan evam Vikriti Vigyan | 200 | 100 | 300 |
| 3 | Rasashastra evam Bhaishjya Kalpana | 200 | 200 | 400 |
| 4 | Charak Samhita (Purvardh) | 100 | 050 | 150 |
| | Total hours | 700 | 550 | 1250 |

The Second Professional examination shall ordinarily be held and completed by the end of the second professional session.

Scheme of Examination

Internal assessment

There shall be minimum three internal assessments for each subject before First Term Test ordinarily at 6th month of respective professional B.A.M.S.) minimum of three periodical assessment before Second Term Test (ordinarily at 12th month of respective professional B.A.M.S.) and minimum of three internal assessments before final university examinations (Summative Assessment) of respective professional B.A.M.S.

University Examination

The theory examination shall have twenty percentage marks for Multiple Choice Questions (MCQ), forty percentage marks for Short Answer Questions (SAQ) and forty percentage marks for Long Explanatory Answer Questions (LAQ) and these questions shall cover the entire syllabus of the subject.

The minimum marks required for passing the examination shall be fifty per cent. In theory component and fifty percent in practical component (that include practical, clinical, viva-voce, internal assessment and electives wherever applicable) separately in each subject.

Number of Papers and Marks Distribution for Second Professional B.A.M.S. Subjects

| Sl. No. | Subject Code | Papers | University Examination | | Internal Examination IA | | Sub Total | | Grand Total |
|--------------------|------------------------------------|--------|------------------------|---------------------|-------------------------|---------------------|-----------|-----------|-------------|
| | | | Theory | Practical/ Clinical | Theory | Practical/ Clinical | Theory | Practical | |
| 1. | Dravyaguna Vigyan | 2 | 160 | 160 | 40 | 40 | 200 | 200 | 400 |
| 2. | Roga Nidan evam Vikriti Vigyan | 2 | 160 | 80 | 40 | 20 | 200 | 100 | 300 |
| 3. | Rasashastra evam Bhaishjya Kalpana | 2 | 160 | 160 | 40 | 40 | 200 | 200 | 400 |
| 4. | Charak Samhita (Purvardh) | 1 | 80 | 40 | 20 | 10 | 100 | 50 | 150 |
| Grand Total | | | | | | | | | 1250 |

Declaration of Class

- A candidate obtaining sixty per cent. and above marks shall be awarded first class in the subject and seventy five percent and above marks shall be awarded distinction in the subject.
- The award of class and distinction shall not be applicable for supplementary examinations.

Migration

1. The students may be allowed to take the migration to continue their study to another college after passing the First Professional examination, but failed student's transfer and mid-term migration shall not be allowed.
2. For migration, the students shall have to obtain the mutual consent of both colleges and universities, and it shall be against the vacant seat.

DRAVYAGUNA VIGYAN
(PHARMACOLOGY & MATERIA MEDICA)

Lectures: 200 Hrs Practicals: 200 Hrs.

Theory Two Papers– 100 Marks Each
Practical/Viva voce – 200 Marks
Total- 400 marks

PAPER-1 -100 Marks

PART-A- 50 Marks

| Sr No | TOPIC | HOURS |
|-------|--|-------|
| 1 | DravyagunaShastra Paribhasa- Lakshana of SaptaPadartha of DravyagunaVijnana viz Dravya- Rasa-Guna- Virya- Vipaka- Prabhava and Karma | 02 |
| 2 | Dravya:-Etymological derivation, definition, panchbhoutikatwa. Classification of Dravya according to Samhitas and Nighantus Taxonomical classification. | 03 |
| 3 | Guna: Etymological derivation, definition, and Classification of Guna. Detailed knowledge of Gurvadi Guna &Paradigunas. | 05 |
| 4 | Rasa- Etymological derivation, definition, Meaning of “Rasa” in various contexts. Shad Rasas (Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik constitution of Rasas, Nirvrittivisheshakrama (manifestation in general and particular), Ritu and shad rasa Rasanurasayobheda (Difference between rasa and anurasa), Lakshana (characteristics),Guna and Karma of shad Rasas, Kopana and Shamana of Dosha and dushya by Shad rasas. Effects of excess usage of Rasa. Rasopalabधि, Rasaskandha. | 06 |
| 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), Vipakopalabधिhetu (Factors to determineVipaka). | 02 |
| 6 | Veerya-Etymological derivation, definition and Swarupa of Virya, Number of Virya(Dwividha&Ashtavidha), Panchabhauthikatva Viryakarmani (Effects of Virya), General principles in determination of virya along with exceptions. | 02 |
| 7 | Prabhava- Definition, Effects of Prabhava. | 01 |
| 8 | Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength (balabalnirupana).Samanapratyayarabdha and Vichitrapratyayarabdhadravayas. | 01 |
| 9 | Karma: Lakshana, swaropaa and bheda of karma (Definition, nature and types of action). Deepan, Pachana, Samshodhana, Samshaman,Anuloman, Stansana,Bhedan,Rechan, Chedana, Lekhana, Grahi, Sthambhana, Madakari, Pramathi, Abhishandi, Vyavai, Vikasi, Rasayana, Vajeekaran, Jeevaneeya, Balya, Brimhana, Langhana, Medhya. | 10 |
| 10 | Brief information on Karmas of dashemanigana of Charak Samhita. | 15 |

| | | |
|----|---|----|
| 11 | MishrakaGana: AudbhidaGana (Vegetable origin) Brihatpanchamoola, Laghupanchamoola, Vallipanchamoola, Kantakapanchamoola, Trinapanchamoola, Madhyamapanchamoola, Jeevaneeyapanchamoola, Panchapallava, Panchavalakala, Triphala, Trikatu, Trimada, Chaturusana, Panchakola, Shadusana, Chaturbeeja, Jeevaniyagana, Ashtavarga, Trijataka, Chaturajataka, KatuchaturjatakaPanchatikta, Amlapanchaka, Chaturbhadra, Trikarshika, Swalpatriphala, Madhuratriphala, Mahavisha, Upavisha, Agryaashadhavarga- Knowledge of Agryaashadha Varga with example. JangamaGana (Animal origin)- Ksheerashtaka, Mutrashtaka, Pitta panchaka. ParthivaGana (Mineral origin) - LavanaPanchaka, Ksharadvaya, KsharaAshtaka. | 10 |
| 12 | Basis of nomenclature: Basis of nomenclature of dravya, Basis and Derivation of synonyms. | 01 |
| 13 | BheeshajaParikshavidhi (as described in Charakasamhita vimana sthana 8), Dravya Sangrahana (collection of dravya)- Ecology- Classification of desha (geographical area) and bhumi (soil), swarupa of sangrahaniyadravya of (Nature and quality of drug to be collected). Sangrahanavidhi (Method of collection) -Vegetable and Animal origin drugs according to part used. Period of collection according to virya, samrakshanavidhi (preservation of collected dravyas), bheeshajagara (Storehouse), study on different prayojyanga (useful plant parts). | 03 |
| | PAPER-1 - PART-B-50 Marks | |
| 14 | Concept of dravyashodhan (purification of dravya). Brief knowledge of Apamishran (adulterants) Concept of Abhavapratidinidhravya (substitutes) | 02 |
| 15 | Prashastabheeshaja (ideal drug), plant extracts. Concept of viruddha Dravya (incompatibility of the dravya). | 04 |
| 16 | Introduction to Nighantu Vigyan - Dhanwantari Nighantu, Bhavaprakashanighantu, Rajanighantu. | 03 |
| 17 | Brief knowledge of cultivation, conservation of medicinal plants and information about endangered species | 01 |
| 18 | Introduction, Definition & scope of Pharmacology and Principles of general Pharmacology. Brief Knowledge about pharmacology of the 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, Antithyroid, Oxytocic. Galactagogues, Contraceptives, Styptics, Antihistamines, 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. | 30 |

| PAPER -2, PART-A---70 Marks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---------------------|---------|--------------|------------|--------------|--------|------------|----------|---------------------|----------|-------|--------------|---------|-------|-----------|----------|-----------|--------------|-----------|----------|-------|-----------|--------------|--------|---------------|-------------|----------|--------|-----------|-----------|--------|------------|-------------|-----------|------------|-------------|-------------|-----------|------------|-------|------------|----------|----------|-----------------|----------|---------|---------|---------------|-------------|--------|-----------|------------|---------|--------|----------|-------------|----------|------------|--------|----------|-----------|---------------|--------------|-----------------|--------|------|-------|--------|---------|--------|--------|--------|---------|---------|------|----------------|--------|--------|----------|-------------|-------|--------|---------------|--------|----------|------------|--------|---------|---------|--------|-------|-------|------|-----------|-------------|------------|--------|-------|---------|----------|----------|--------|----------|---------|------------|---------|---------|--------|--|
| Sr No | TOPIC | HOURS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | <p>Detailed Knowledge of Following Dravya – drugs with respect to Basonym of drug, Main Synonyms, Regional Name, Botanical Name, Family, Classification of Dravya (Gana) as described in Charak and Sushrut, External morphology, Useful parts, Important phytoconstituents, Rasa panchaka, Action on Dosha, Dhatu, Mala, Prayogarhavyadhi (therapeutic indications), Amayikaprayoga and Matra (Therapeutic administration and Dose), Vishishta yoga (names of important formulations), Vishakta-Lakshan(adverse effects), Chikitsopachara (remedial measures) and Shodhana (as required)</p> | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="0"> <tr> <td>Agaru</td> <td>Guggulu</td> <td>Pashanabheda</td> </tr> <tr> <td>Agnimantha</td> <td>Haridradvaya</td> <td>Patala</td> </tr> <tr> <td>Agnimantha</td> <td>Haritaki</td> <td>Pippali-Pippalimula</td> </tr> <tr> <td>Ahiphena</td> <td>Hingu</td> <td>Prishniparni</td> </tr> <tr> <td>Amalaki</td> <td>Jambu</td> <td>Punarnava</td> </tr> <tr> <td>Apamarga</td> <td>Jatamansi</td> <td>Pushkarmoola</td> </tr> <tr> <td>Aragvadha</td> <td>Jatiphal</td> <td>Rasna</td> </tr> <tr> <td>Aragvadha</td> <td>Jeerakadvaya</td> <td>Rasona</td> </tr> <tr> <td>Ardraka-Sunti</td> <td>Jyotishmati</td> <td>Rohitaka</td> </tr> <tr> <td>Arjuna</td> <td>Kalamegha</td> <td>Saireyaka</td> </tr> <tr> <td>Arjuna</td> <td>Kampillaka</td> <td>Sarivadvaya</td> </tr> <tr> <td>Arkadvaya</td> <td>Kanchanara</td> <td>Sarpagandha</td> </tr> <tr> <td>Ashvagandha</td> <td>Kantakari</td> <td>Shalaparni</td> </tr> <tr> <td>Asoka</td> <td>Kapikacchu</td> <td>Shallaki</td> </tr> <tr> <td>Ativisha</td> <td>Karkatakshringi</td> <td>Shalmali</td> </tr> <tr> <td>Bakuchi</td> <td>Karpura</td> <td>Shankhapushpi</td> </tr> <tr> <td>Baladvayam.</td> <td>Katuki</td> <td>Shatavari</td> </tr> <tr> <td>Bhallataka</td> <td>Khadira</td> <td>Shigru</td> </tr> <tr> <td>Bharangi</td> <td>Kiratatikta</td> <td>Shirisha</td> </tr> <tr> <td>Bhrungaraj</td> <td>Kumari</td> <td>Shyonaka</td> </tr> <tr> <td>Bibhitaka</td> <td>Kumkum Kesara</td> <td>Talisa Patra</td> </tr> <tr> <td>Bijak/ Vijaysar</td> <td>Kupilu</td> <td>Tila</td> </tr> <tr> <td>Bilva</td> <td>Kushta</td> <td>Trivrut</td> </tr> <tr> <td>Brahmi</td> <td>Kutaja</td> <td>Tulasi</td> </tr> <tr> <td>Bruhati</td> <td>Lavanga</td> <td>Tvak</td> </tr> <tr> <td>Chandanadvaya,</td> <td>Lodhra</td> <td>Ushira</td> </tr> <tr> <td>Chitraka</td> <td>Madanaphala</td> <td>Vacha</td> </tr> <tr> <td>Dadima</td> <td>Mandukaparni.</td> <td>Varahi</td> </tr> <tr> <td>Devadaru</td> <td>Manjishtha</td> <td>Varahi</td> </tr> <tr> <td>Dhataki</td> <td>Maricha</td> <td>Varuna</td> </tr> <tr> <td>Durva</td> <td>Musta</td> <td>Vasa</td> </tr> <tr> <td>Eladvayam</td> <td>Nagakeshara</td> <td>Vatsanabha</td> </tr> <tr> <td>Eranda</td> <td>Nimba</td> <td>Vidanga</td> </tr> <tr> <td>Gambhari</td> <td>Nirgundi</td> <td>Vidari</td> </tr> <tr> <td>Gokshura</td> <td>Palasha</td> <td>Yastimadhu</td> </tr> <tr> <td>Guduchi</td> <td>Parpata</td> <td>Yavani</td> </tr> </table> | Agaru | Guggulu | Pashanabheda | Agnimantha | Haridradvaya | Patala | Agnimantha | Haritaki | Pippali-Pippalimula | Ahiphena | Hingu | Prishniparni | Amalaki | Jambu | Punarnava | Apamarga | Jatamansi | Pushkarmoola | Aragvadha | Jatiphal | Rasna | Aragvadha | Jeerakadvaya | Rasona | Ardraka-Sunti | Jyotishmati | Rohitaka | Arjuna | Kalamegha | Saireyaka | Arjuna | Kampillaka | Sarivadvaya | Arkadvaya | Kanchanara | Sarpagandha | Ashvagandha | Kantakari | Shalaparni | Asoka | Kapikacchu | Shallaki | Ativisha | Karkatakshringi | Shalmali | Bakuchi | Karpura | Shankhapushpi | Baladvayam. | Katuki | Shatavari | Bhallataka | Khadira | Shigru | Bharangi | Kiratatikta | Shirisha | Bhrungaraj | Kumari | Shyonaka | Bibhitaka | Kumkum Kesara | Talisa Patra | Bijak/ Vijaysar | Kupilu | Tila | Bilva | Kushta | Trivrut | Brahmi | Kutaja | Tulasi | Bruhati | Lavanga | Tvak | Chandanadvaya, | Lodhra | Ushira | Chitraka | Madanaphala | Vacha | Dadima | Mandukaparni. | Varahi | Devadaru | Manjishtha | Varahi | Dhataki | Maricha | Varuna | Durva | Musta | Vasa | Eladvayam | Nagakeshara | Vatsanabha | Eranda | Nimba | Vidanga | Gambhari | Nirgundi | Vidari | Gokshura | Palasha | Yastimadhu | Guduchi | Parpata | Yavani | |
| Agaru | Guggulu | Pashanabheda | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Agnimantha | Haridradvaya | Patala | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Agnimantha | Haritaki | Pippali-Pippalimula | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ahiphena | Hingu | Prishniparni | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amalaki | Jambu | Punarnava | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Apamarga | Jatamansi | Pushkarmoola | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aragvadha | Jatiphal | Rasna | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aragvadha | Jeerakadvaya | Rasona | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ardraka-Sunti | Jyotishmati | Rohitaka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arjuna | Kalamegha | Saireyaka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arjuna | Kampillaka | Sarivadvaya | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arkadvaya | Kanchanara | Sarpagandha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ashvagandha | Kantakari | Shalaparni | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asoka | Kapikacchu | Shallaki | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ativisha | Karkatakshringi | Shalmali | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bakuchi | Karpura | Shankhapushpi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Baladvayam. | Katuki | Shatavari | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bhallataka | Khadira | Shigru | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bharangi | Kiratatikta | Shirisha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bhrungaraj | Kumari | Shyonaka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bibhitaka | Kumkum Kesara | Talisa Patra | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bijak/ Vijaysar | Kupilu | Tila | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bilva | Kushta | Trivrut | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brahmi | Kutaja | Tulasi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bruhati | Lavanga | Tvak | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chandanadvaya, | Lodhra | Ushira | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chitraka | Madanaphala | Vacha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dadima | Mandukaparni. | Varahi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Devadaru | Manjishtha | Varahi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dhataki | Maricha | Varuna | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Durva | Musta | Vasa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eladvayam | Nagakeshara | Vatsanabha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eranda | Nimba | Vidanga | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gambhari | Nirgundi | Vidari | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gokshura | Palasha | Yastimadhu | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Guduchi | Parpata | Yavani | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PAPER-2 PART-B

| S r | TOPIC | HOUR S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|--|-------------------|------|---------|---------|----------|-----------------|------------|----------|----------|------------|---------|---------|------|---------|-----------|-------------------|----------|-------------|--------|-----------|-----------|-----------|--------|-----------|----------|---------|--------------|-----------|---------|-------|-----------------|-------------|--------|-------|----------|----------|----------|--------|------|----------|---------|---------|---------|-----------|-----------|--------|-------|---------|--------|-------|----------|-------------|--------|------|----------|----------|--------|------|--------|--------------|-------------|----------|-----------------|----------|---------|----------|--------------|------------|-------------|----------|-----------|------------|--------|---------|-------|-----------|--------|-------|------------|-------|-------|-------|----------|-------|--------|---------|-------------|---------|---------|----------|------------|-------------|-------|----------|-------------|-------|---------|-------------|------------|-------------|-----------|--------------|-----------------|--------------|----------|---------|------------|------------|----------|-------|---------|---------------|------------|--------|-------|-----------|------------|---------|-----------|------------|---------|--------------|----------|---------|---------|----------|--|
| 2 | - Brief Knowledge of following dravyas with Respect to Sanskrit Name, Botanical Name, Family, Habit (Samanya Swarupa), Parts Used and Indications. | 44 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Agastya</td> <td style="width: 33%;">Jati</td> <td style="width: 33%;">Palandu</td> </tr> <tr> <td>Ajamoda</td> <td>Jayapala</td> <td>Parasika Yavani</td> </tr> <tr> <td>Akarkarabh</td> <td>Jeevanti</td> <td>Parijata</td> </tr> <tr> <td>Amlavetasa</td> <td>Kadali,</td> <td>Parisha</td> </tr> <tr> <td>Amra</td> <td>Kadamba</td> <td>Parnabija</td> </tr> <tr> <td>Amragandhiharidra</td> <td>Kaidarya</td> <td>Parnayavani</td> </tr> <tr> <td>Ankola</td> <td>Kakamachi</td> <td>Parpataka</td> </tr> <tr> <td>Aparajita</td> <td>Kamala</td> <td>Parushaka</td> </tr> <tr> <td>Ashvagol</td> <td>Kankola</td> <td>Patalagarudi</td> </tr> <tr> <td>Ashvattha</td> <td>Karanja</td> <td>Patha</td> </tr> <tr> <td>Asthishrunkhala</td> <td>Karavellaka</td> <td>Patola</td> </tr> <tr> <td>Atasi</td> <td>Karavira</td> <td>Patranga</td> </tr> <tr> <td>Avartaki</td> <td>Karira</td> <td>Pilu</td> </tr> <tr> <td>Avartani</td> <td>Karpasa</td> <td>Plaksha</td> </tr> <tr> <td>Babbula</td> <td>Kasamarda</td> <td>Prasarani</td> </tr> <tr> <td>Badara</td> <td>Kasha</td> <td>Priyala</td> </tr> <tr> <td>Bakula</td> <td>Kasni</td> <td>Priyangu</td> </tr> <tr> <td>Bhumyamalki</td> <td>Kataka</td> <td>Puga</td> </tr> <tr> <td>Bijapoor</td> <td>Katphala</td> <td>Putiha</td> </tr> <tr> <td>Bola</td> <td>Kebuka</td> <td>Putranjivaka</td> </tr> <tr> <td>Chakramarda</td> <td>Kharjura</td> <td>Rajika/Sarshapa</td> </tr> <tr> <td>Champaka</td> <td>Kitmari</td> <td>Rohitaka</td> </tr> <tr> <td>Chandrashura</td> <td>Kokilaksha</td> <td>Saptachakra</td> </tr> <tr> <td>Changeri</td> <td>Koshataki</td> <td>Saptaparna</td> </tr> <tr> <td>Chavya</td> <td>Kulatha</td> <td>Saral</td> </tr> <tr> <td>Chirbilva</td> <td>Kumuda</td> <td>Sarja</td> </tr> <tr> <td>Chopachini</td> <td>Kusha</td> <td>Shala</td> </tr> <tr> <td>Danti</td> <td>Kusmanda</td> <td>Shara</td> </tr> <tr> <td>Darbha</td> <td>Lajjalu</td> <td>Sharapunkha</td> </tr> <tr> <td>Dattura</td> <td>Langali</td> <td>Shatahwa</td> </tr> <tr> <td>Dhanvayasa</td> <td>Latakaranja</td> <td>Shati</td> </tr> <tr> <td>Dhanyaka</td> <td>Latakasturi</td> <td>Snuhi</td> </tr> <tr> <td>Draksha</td> <td>Madayantika</td> <td>Sringataka</td> </tr> <tr> <td>Dronapushpi</td> <td>Mahanimba</td> <td>Svarnakshiri</td> </tr> <tr> <td>Gandhaprasarini</td> <td>Mandukaparni</td> <td>Tagara .</td> </tr> <tr> <td>Garjara</td> <td>Markandika</td> <td>Tailaparni</td> </tr> <tr> <td>Gojihva,</td> <td>Masha</td> <td>Talmuli</td> </tr> <tr> <td>Gorakshaganja</td> <td>Mashaparni</td> <td>Taruni</td> </tr> <tr> <td>Gunja</td> <td>Matulunga</td> <td>Tavakshira</td> </tr> <tr> <td>hinsapa</td> <td>Mayaphala</td> <td>Teja Patra</td> </tr> <tr> <td>Hinstra</td> <td>Meshashrungi</td> <td>Tuvaraka</td> </tr> <tr> <td>Hribera</td> <td>Methika</td> <td>Udumbara</td> </tr> </table> | Agastya | Jati | Palandu | Ajamoda | Jayapala | Parasika Yavani | Akarkarabh | Jeevanti | Parijata | Amlavetasa | Kadali, | Parisha | Amra | Kadamba | Parnabija | Amragandhiharidra | Kaidarya | Parnayavani | Ankola | Kakamachi | Parpataka | Aparajita | Kamala | Parushaka | Ashvagol | Kankola | Patalagarudi | Ashvattha | Karanja | Patha | Asthishrunkhala | Karavellaka | Patola | Atasi | Karavira | Patranga | Avartaki | Karira | Pilu | Avartani | Karpasa | Plaksha | Babbula | Kasamarda | Prasarani | Badara | Kasha | Priyala | Bakula | Kasni | Priyangu | Bhumyamalki | Kataka | Puga | Bijapoor | Katphala | Putiha | Bola | Kebuka | Putranjivaka | Chakramarda | Kharjura | Rajika/Sarshapa | Champaka | Kitmari | Rohitaka | Chandrashura | Kokilaksha | Saptachakra | Changeri | Koshataki | Saptaparna | Chavya | Kulatha | Saral | Chirbilva | Kumuda | Sarja | Chopachini | Kusha | Shala | Danti | Kusmanda | Shara | Darbha | Lajjalu | Sharapunkha | Dattura | Langali | Shatahwa | Dhanvayasa | Latakaranja | Shati | Dhanyaka | Latakasturi | Snuhi | Draksha | Madayantika | Sringataka | Dronapushpi | Mahanimba | Svarnakshiri | Gandhaprasarini | Mandukaparni | Tagara . | Garjara | Markandika | Tailaparni | Gojihva, | Masha | Talmuli | Gorakshaganja | Mashaparni | Taruni | Gunja | Matulunga | Tavakshira | hinsapa | Mayaphala | Teja Patra | Hinstra | Meshashrungi | Tuvaraka | Hribera | Methika | Udumbara | |
| Agastya | Jati | Palandu | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ajamoda | Jayapala | Parasika Yavani | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Akarkarabh | Jeevanti | Parijata | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amlavetasa | Kadali, | Parisha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amra | Kadamba | Parnabija | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amragandhiharidra | Kaidarya | Parnayavani | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ankola | Kakamachi | Parpataka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aparajita | Kamala | Parushaka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ashvagol | Kankola | Patalagarudi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ashvattha | Karanja | Patha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Asthishrunkhala | Karavellaka | Patola | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Atasi | Karavira | Patranga | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Avartaki | Karira | Pilu | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Avartani | Karpasa | Plaksha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Babbula | Kasamarda | Prasarani | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Badara | Kasha | Priyala | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bakula | Kasni | Priyangu | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bhumyamalki | Kataka | Puga | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bijapoor | Katphala | Putiha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bola | Kebuka | Putranjivaka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chakramarda | Kharjura | Rajika/Sarshapa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Champaka | Kitmari | Rohitaka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chandrashura | Kokilaksha | Saptachakra | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Changeri | Koshataki | Saptaparna | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chavya | Kulatha | Saral | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chirbilva | Kumuda | Sarja | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chopachini | Kusha | Shala | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Danti | Kusmanda | Shara | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Darbha | Lajjalu | Sharapunkha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dattura | Langali | Shatahwa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dhanvayasa | Latakaranja | Shati | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dhanyaka | Latakasturi | Snuhi | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Draksha | Madayantika | Sringataka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dronapushpi | Mahanimba | Svarnakshiri | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gandhaprasarini | Mandukaparni | Tagara . | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Garjara | Markandika | Tailaparni | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gojihva, | Masha | Talmuli | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gorakshaganja | Mashaparni | Taruni | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gunja | Matulunga | Tavakshira | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| hinsapa | Mayaphala | Teja Patra | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hinstra | Meshashrungi | Tuvaraka | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hribera | Methika | Udumbara | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | |
|----------|---|--|---|-----------|
| | Hrutpatri Ikshu Indravaruni Ingudi Irimeda Ishvaku Isvari Japa | Mudgaparni Mulaka Murva Nagabala Nala Narikela Nili Padmaka | urana Vamsha Vata Vatada Vrudhadaru Vrukshamla | |
| 3 | Introduction, Guna, Karma and Uses of following Jantava Dravya (Drugs of Animal Origin). Kasturi, Gorochana , Mrigasringa | | | 01 |
| 4 | Introductory Knowledge of Following Annapana Varga: Jala Varga, Dugdha Varga, Madhu Varga, Taila Varga Shukadhanya Varga, Shamidhanya Varga, Phala Varga, Shaka Varga, Mamsa Varga, Aharayogi. | | | 05 |

PRACTICALS

- 1.** A. Study of Macroscopic, Microscopic characters and Demonstration of organoleptic characteristics and grahya-agrahyatva of following plants and their useful parts.
 - i.Kanda (stem) - Guduchi or Ashtishrinkhala
 - ii.Patra (leaves) - Vasa or Kumari
 - iii.Pushpa (flower and Parts of flower)- Dhataki o Japa
 - iv.Phala (fruit) – Maricha or Madanaphala or Vidanga
 - v.Beeja (seeds) – Eranda or Kapikacchhu vi.Twak (bark) – Kutaja or Arjuna or Ashwattha
 - vii.Moola(Root)- Punarnava or Chitraka
 - viii.Niryasa (exudate) – Guggulu or Mocharasa
 - ix.Jangamadravya - Madhu or Ghrita.

- 2.** Records of Herbarium sheets of 50 medicinal plants Compulsory study tour other state/s for field knowledge and procurement of plant species.

PRACTICAL MARKS DIVISION -

| Sr No | Topic | Marks |
|-------|---------------------|-------|
| 1 | Herberium | 20 |
| 2 | Shushka Dravya | 25 |
| 3 | Adra Dravya | 25 |
| 4 | Spotting | 20 |
| 5 | Journal | 10 |
| 6 | Viva | 60 |
| 7 | Internal assessment | 40 |
| | Total | 200 |

Reference Books

| | | |
|-----|---|--|
| 1. | Abhinav Buti Darpan (Vol.1-2) - | Vd. Roop Lal Vaishya |
| 2. | AushadnaVigyna Shastra - | Acharya Pt. VishvanathaDwidevi |
| 3. | AyurvediyaAushadnkarmavigyana - | Acharya V.J. Thakur |
| 4. | Bedi Vanaspati Kosha - | Prof. Ramesh Bedi |
| 5. | BhaishajyagunaVigyana - | Dr.Alakhnarayan Singh |
| 6. | Bhav Prakash Nigantu (English) - | Shreekanthamurti |
| 7. | Bhav Prakash Nighantu - | With Vd. Krishna Chandra Chunekar commentary |
| 8. | Bhrinaddravyagunadarsha - | 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 - | Vd. Shiv Kumar Vyas Kshetra Me Yogadana |
| 12. | Dravyaguna Kosha - | Acharya Priyavrata Sharma |
| 13. | DravyagunaSutram - | Acharya Priyavrata Sharma |
| 14. | DravyagunaVigyana - | Dr. Gyanendra Pandey |
| 15. | DravyagunaVigyana(Vol. 1-2) - | Acharya YadavjiTikram Ji |
| 16. | DravyagunaVijyana - | Dr. V.M. Gogate |
| 17. | DravyagunaVigyana (Vol. 1-5) - | Acharya Priyavrata Sharma |
| 18. | DravyagunaShastrum - | Vaidya G.A. Phadake |
| 19. | DravyagunaVijyana - | Dr. A.P. Deshpande |
| 20. | Dravyagunavijnana basic Principles - | Prof.D.S.Lucas |
| 21. | Forgotten Healers (Indian Medicinal - | Dr. Prakash Pranjape Plants) |
| 22. | Glossry of Vegetable Drugs in - | Thakur Balwant Singh &Vd. |
| | Bhritrtrayis | Krishna Chandra Chunekar |
| 23. | Introduction to Dravyaguna - | Acharya Priyavrata Sharma |
| 24. | KriyatamkaAushadiParichaya - | Acharya Pt. VishvanathDwidevi |
| 25. | Materia Medica - | Acharya Ghosh |
| 26. | Nighantu Adarsh (Vol. 1-2) - | Vd. Bapa Lal |
| 27. | Pharmacological basis of Medical - | Goodman & Gillman |
| | Practice | |
| 28. | Pharmacology and - | Satoskar Bhandarkar &Ainapure |
| | Pharmacotherapeutics | |
| 29. | PrayogatamakaDravyagunaVigyana - | Dr. Maya Ram Uniyal |
| 30. | Priya nighantu - | Acharya Priyavrata Sharma |
| 31. | Raspanchaka/Dravyaguna Siddhanta - | Prof. Shivcharan Dhyani |
| 32. | System of Plant Nomenclature in - | Dr. Gyanendra Panday Ayurveda |
| 33. | Text Book of Pharmacognosy - | Trees & Valis |
| 34. | Textbook of Dravyaguna - | Dr.K.Nishteswar |
| 35. | Unani DravyagunaVigyana - | Hakim Daljeet Singh |
| 36. | Useful parts of Charaka, Sushurut and Vagbhata. | |
| 37. | Uttarakand Ki Vanaspatiya - | Dr. Gyanendra Pandey |
| 38. | VanoaushadiDarshika - | Thakur Balwant Singh |
| 39. | VanoaushadiNidarshika - | Dr. Ram Sushil Singh |
| 40. | Vedic Vanaspatiyan - | Dr. Dinesh Chandra Sharma |

ROGNIDAN

Theory Two Papers – 100 Marks Each

Practical/Viva voce – 100 Marks

PAPER 1 -MARKS-100 HOURS-100

| PART A-50 MARKS | | |
|------------------------|---|--------------|
| Sr No | TOPIC | HOURS |
| 1 | <p align="center">Dosha Dushyadi Vigyan</p> <ol style="list-style-type: none"> 1. Definition and importance of Roganidana. 2. Samanya Nidana and Samanya Lakshana of Dosha Vriddhi, Kshaya and Prakopa. 3. Dosha Dhatu Ashraya Ashrayi Bhava. 4. Dhatu KshayaVriddhiLakshana. 6. Mala KshayaVriddhiLakshana. 7. Hetu, Bheda and Lakshana of Agni Dushti. 8. Definitions and Samanya Lakshana of Ama. 9. Sama and nirama Dosha, DushyaLakshana. 10. Dosha Paka and Dhatu Paka Lakshana. 11. Concept, classification, diagnosis and general complications of Avarana. 12. Doshagati and Rogmarga. 13. Detailed study of Srotomoola and Srotodushti Samanya and VishishtaHetuLakshana of all Srotas. Differences between Srotodushti and Kha Vaigunya. | 19 |
| 2 | <p align="center">Vyadhi Vigyan</p> <ol style="list-style-type: none"> 1. Definition, synonyms and classification of Vyadhi&VyadhiGhatak. 2. Criteria for nomenclature of Diseases in Ayurveda (Vyadhinamakarana). 3. Bija, Bija Bhaga and Bija Bhaga AvayavaDushti. 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 NanatmajaVikara. NidanarthakaraVyadhi, Hetu Sankara, Lingasankara, Vyadhisankara, VyadhiAwastha. 7. Dhatu, Updhatu, Mala and IndriyaPradoshajVikara. 8. Concept of AshtaMahagada . 9. Introduction to AshtaNindita. 10. Definition and classification of Vyadhikshamatva. 11. Ojas – types of Ojo Dushti- Visrimsa- Vyapad&Kshaya& It's Diseases. | 15 |
| 3 | <p align="center">Basic Pathology</p> <ol style="list-style-type: none"> 1. Introduction to pathology and its sub-divisions. 2. Introduction to Cell Injury and Cellular adaptations. 3. Definition and brief description of inflammation – Healing/repair. 4. Definition and brief description of edema – shock – hemorrhage, Thrombosis , embolism, Ischemia and Infarction. 5. Types of Immunity – different types of immune responses in the body – Basic knowledge of auto immune diseases, Acquired immune deficiency disease and hypersensitivity. | 16 |

| | | |
|--------------------------------|--|----|
| | 6. Nomenclature and classification of tumors - difference between benign and malignant tumors. 7. Introduction to Nutritional disorders – disorders of macro and micro nutrients. 8. Introduction to infections. 9. Introduction and classification of microorganisms such as virus- bacteria- fungus | |
| PAPER-1-PART B-50 MARKS | | |
| 4 | NidanaPanchakaVigyana 1. Difference between Roga and Rogi Pariksha. 2. Importance of NidanPanchaka. 3. Hetu - Definition, Synonyms and Classification. 4. Purva Rupa – Definition, Synonyms, Samanya and VishishtaPurvarupa. 5. Rupa - Definition, Synonyms, Samanya and PratyatmaLakshana. Difference between Vyadhi and Lakshana. 6. Upashaya / Anupashaya– Definition, Types and its importance in diagnosis. 7. Samprapti – Definition, Synonyms and Type and SampraptiGhataka. 8. Shat Kriyakaala. Relationship between NidanaPanchaka and Shat Kriyakaala. 9. Upadrava and Udarka. 10. ArishtaVigyan – Definition, Types and its importance. 11. Sadhyasadhyatwa – Types, their parameters and importance. 12. General diagnostic principles of AnuktaVyadhi (Ch. Vi. 4). | 24 |
| 5 | ParikshaVigyana 1. Importance and knowledge of Aptopadeshadi&DarshanadiTrividha, Chaturvidha, and ShadvidhaPariksha. 2. Importance and Knowledge of AshtasthanaPariksha. 3. Importance and Knowledge of KaranadiDashavidhaParikshya Bhava. 4. Importance and Knowledge of DashavidhaPariksha. Basic knowledge of ECG, USG, X Ray, CT Scan,MRI. | 26 |

PAPER 2100 MARKS

| | PART-A | 50 MARKS | |
|--------------|---|-----------------|--------------|
| Sr No | TOPIC | | HOURS |
| 1 | Systematic study of NidanaPanchaka of following diseases (Including Upadrava Arishta and Sadhyasadhyata). Diseases of RasavahaSrotas (a) Jwara(Jwarabheda-Ama, Pachyamana and NiramaJwara,Agantukajwara, PunaravartakaJwara,VishamaJwara, DhatugataJwara, CharakoktaSannipataJwara. 1.(b) General mechanism of Fever, Introduction to the Aetiopathogenesis of Malaria,Typhoid, Dengue fever, Influenza and Chikungunya. | | 5 |
| 2 | Pandua, Introduction to Anaemia & its Classification | | 2 |
| 3 | Amavata Rheumatic fever, Rheumatoid Arthritis, | | 3 |

| | | |
|----|--|----|
| 4 | Hridroga Hypertension, Angina, Ischaemic Heart Disease, Myocardial Infarctioand CCF. | 4 |
| 5 | Shotha | 3 |
| 6 | Diseases of RaktavahaSrotas Introduction to Hepatomegaly, Spleenomegaly, Kamala | 2 |
| 7 | RaktapittaLeukaemia, Thalessemia, Sickle cell Anaemia. | 2 |
| 8 | Vatarakta, Kroshtuksheersha | 2 |
| 9 | Shitapitta Urticaria, Maha Kushtha – Visarpa – Shwitra Psoriasis,Eczema,Pemphigus. | 7 |
| 10 | KshudraKushtha. | 2 |
| 11 | Diseases of MamsavahaSrotas (a) Galganda (b) Introduction to Thyroid disorders | 3 |
| 12 | Diseases of MedovahaSrotas 1. Sthoulya - Karshya – Prameha. 2. Introduction to Obesity and Diabetes Mellitus. | 5 |
| 13 | Diseases of Asthi – MajjavahaSrotas 1. Vatavyadhi - Akshepaka - Apatanaka - Ardita - Pakshaghata– Gridhrasi –Vishwachi, Avabahuka, - Manyasthambha ,Katigraha,Pangutwa 2. Sandhigatavata, Asthi-Majjagatavata. | 5 |
| 14 | 1. Introduction to Osteo- Arthritis, Osteoporosis. 2. Introduction to Parkinson’s disease, Stroke, Lumbago- Sciatica syn- drome, Bell’s Palsy, Cervical- Lumber & Ankylosing Spondylitis. | 3 |
| 15 | Diseases of ShukravahaSrotas 1. Introduction to Klaibya and Vandhyatva. 2. Introduction to male and female infertility. | 2 |
| | PART-B 50 MARKS | |
| 16 | Diseases of PranavahaSrotas 1(a). Kasa - Shwasa - Hikka – Urahkshata – Shosha – Rajayakshma. 1(b). Introduction to the aetiopathogenesis of Pneumonia, Pleural ef- fusion, Bronchitis, Bronchiectasis, Bronchial Asthma. | 13 |
| 17 | Diseases of Annavaha- PureeshavahaSrotas 1. Agnimandya - Ajirna - Aruchi- Chhardi - Amlapitta- Shoola – ParinamaShoola – AnnadravaShoola- Atisara – Pravahika- Grahani –Gulma- Udara Roga. 2. Introduction to Anaha, Adhmana, Atopa, VisuchikaAlasaka, Vilambika. Introduction to Peptic Ulcer, Irritable Bowel Syndrome (IBS) Diar- rhea, Dysentery, Constipation, Inflammatory Bowel Diseases. | 18 |
| 18 | Diseases of UdakavahaSrotas1 (a)Introduction to Trishna Daha. b) Introduction to water and electrolyte imbalance disorders. | 01 |
| 19 | Diseases of MutravahaSrotas1 (a) Mutrakrichha – Mutraghata. | 04 |

| | | |
|-----------|---|-----------|
| | Introduction to Urinary Tract Infection, Nephropathies. | |
| 20 | Diseases of SwedavahaSrotas 1(a) Introduction to Khalitya, Palitya | 01 |
| 21 | Diseases of ManovahaSrotas (a) Apasmara, Unmada, Atatwabhinivesha-Vishada, Anidra, Mada, Murchha, Sanyasa. (b) Introduction to Epilepsy, Depression, Anxiety neurosis. | 06 |
| 22 | UpasargajanyaVyadhi (Communicable diseases) 1(a) Romantika – Masurika – Upadamsha – Phiranga. (b) Introduction to Measels, Chickenpox, Leprosy, Tuberculosis and AIDS. | 05 |
| 23 | KrimiVigyana 1) Definition, classification of Krimi and features of Krimiroga 2) Snayuka, Shleepada. 3) Introduction of Filariasis and classification of common parasites | 02 |

PRACTICAL

(100 Marks)

| Sr No | TOPIC | HOURS |
|--------------|---|--------------|
| 1 | i) Fundamental Principles of Laboratory Tests Introduction to laboratory, Sterilization, glass wares, solutions reagents and safety procedures, Disposal of biomedical wastes. | 02 |
| 2 | ii) Haematology 1 Haemoglobin estimation. 2 Blood cells counting - WBC, RBC, platelets. 3 Hematocrit /Packed cell volume (PCV). 4 Erythrocyte indices - MCV, MCH, MCHC. 5 Peripheral blood smear, staining technique and differential leucocyte count. 6 Peripheral blood film examination in Anemia, Leukemia, Malaria, Filaria (Demonstration). 7 ESR. 8 Screening test for bleeding disorders- bleeding time (BT), Clotting time (CT), Demonstration of Prothrombin time (PT). 9 Blood grouping - ABO system, Rh typing (Rhesus system). | 12 |
| 3 | Urine Examination 1. Ayurveda anusaramutrapariksha. 2. Physical Examination - Volume, Reaction (Ph) & Specific Gravity. 3. Chemical Examination for - Proteins, Glucose, Phosphate, Ketone, Bile salts, Bile pigment. 4. Dipstick examination 5. Demonstration of Microscopic Examination. | 06 |
| 4 | Stool Examination 1 Ayurveda anusarapurishapariksha. 2 Physical examination, Sama-NiramaPariksha. 3 Microscopic examination of ova & cyst (Demonstration) 4 Occult Blood Test. | 04 |
| 5 | Demonstration of Sputum Examination | 04 |

| | | |
|---|--|----|
| | 1. Ayurveda anusara sthivana pariksha. 2. Physical, Chemical and Microscopic Examination of the sputum. Sample collection and Demonstration of AFB. | |
| 6 | Demonstration of Semen examination 1. Ayurveda anusara Retas pariksha. 2. Semen examination. | 04 |
| 7 | Biochemical Examination – (Demonstration) 1. Blood Glucose, Serum Bilirubin, Blood Urea, Lipid Profile, Serum Creatinine, Serum Uric acid etc. 2. Demonstration of different staining techniques in microbiology. 3. Demonstration of Sero-immunological Investigations: RA and Widal. | 17 |
| 8 | Laboratory record – maintenance of laboratory record book. | 07 |

Bed side Practical (Clinical Methods)

| Sr No | TOPIC | HOURS |
|-------|--|-------|
| 1 | 1. Introduction and demonstration of clinical methods (General and Systemic Examination). | 07 |
| 2 | Practical demonstration of examination of Roga based on Pancha Nidana | 04 |
| 3 | 1. Demonstration of instruments used for clinical examination. | 04 |
| 4 | 1. Practical records of clinical examination of at least 20 long cases in I.P.D including Aturbala-pramanapareeksha. | 20 |
| 5 | 1. Practical records of clinical examination of at least 20 short Cases based on Ashtavidhpariksha in O.P.D. | 04 |
| 6 | Demonstration of ECG, USG and Radio imaging techniques | 05 |

Distribution of Marks for final Practical Examination

| Sr No | Topic | Marks |
|-------|-------------------------------|-------|
| 1 | Long case taking | 15 |
| 2 | Short case taking | 10 |
| 3 | Laboratory experiment | 15 |
| 4 | Identification of instruments | 10 |
| 5 | Journal | 10 |
| 6 | Viva voce | 20 |
| 7 | Internal assessment | 20 |
| | Total | 100 |

Reference Books

1. Madhava Nidana (Madhukosha Pt. Yadunandan Upadhyay Commentary) Part 1 – 2
2. Doshakaranatwa Mimamsa - Acharya P.V. Sharma
3. Nadi Darshan - Vd. Tara Shankar Mishra
4. Nadi Vigyana Vidyotini Hindi Tika
5. Nadi Vigyan- Shri Satya Dev Vashisht
6. Nadi Vigyan- Gangadhar Tika
7. Rogi Parikshavidhi Acharya- Priyavrata Sharma

8. AyurvediyaRogaVargikaran- Vd. Ramanath Dwivedi &Vd. Gurdip Singh.
9. AyurvediyaNidanEvumChikitsaKe Siddhanta - Prof. Ram Harsh Singh.
10. Relevant portions of Charak Samhita, Sushrut Samhita and Vagbhata.
11. Text Book of Pathology- William Boyds.
12. Text Book of Pathology- Harsh Mohan.
13. Text Book of Pathology- Dey and Dey.
14. Text Book of Parasitology -Ramnik Sood.
15. Clinical Pathology and Bacteriology- S.P. Gupta.
16. Clinical methods in Ayurveda- K. R . S. Murthy.
17. Parameswarappa'sAyurvediyaVikriti Vigyan and RogaVikriti Vigyan-Dr. P.S. Byadgi.
18. Oxford Handbook of Clinical Examination Oxford Handbooks and Practical Skills.
19. Advanced Clinical Evaluation System for Practical Assessment of Clinical Examination Skills.
20. Symptoms & Signs in Clinical Medicine - Chamberlains.
21. Clinical Methods- Hutchison's.
22. Bedside Clinics in Medicine Part- I & II-Kundu.
23. Common Medical Symptoms- Mehta.
24. Advances in Pathology & Lab Med- Weimstean, Gralem, Anderson, Cortan, Wick, Zumwelt.
25. Clinical Laboratory medicine Edited by Kenneth D Mc. Chately.
26. General Pathology- Walter & Israel Churchill Living stone.
27. A Comprehensive Dictionary of Pathology- Chris Newann.
28. Practical Pathology- Dr. K. Uma Chaturvedi.
29. Clinical examination- Douglas/Macleod's.
30. Pathology Practical book for Undergraduates- Harsh Mohan.
31. Medical Laboratory Technology - R. Sood.
32. Clinical Diagnosis and Management by Todd, Sanford and Davidson Laboratory methods
33. Clinical HematologyIn Medical Practice- Degruchy's.
34. Robbins Basic Pathology- Kumar, Abbas, Fausto at al.

Rasashastra Evam Bhaishajyakalpana
(IATROCHEMISTRY AND AYURVEDIC PHARMACEUTICS)

Theory -Two Papers Total Marks- 200 Teaching hours 200

Practical

Total Marks-200 Teaching hours 200

PAPER-1 100 Marks

| RASASHASTRA | | |
|--------------------|--|------------------|
| PART-A | | Marks- 50 |
| Sr No | Topic | Marks |
| 1 | Definition and etymology of Rasa, History of Rasashastra, Importance of Rasaushadhi, Concept of Rasa-Rasayana, Concept of Raseshwar Darshana. Concept of Rasashala and Rasamandap | 04 |
| 2 | Brief Description and Application of Technical terminologies (Paribhasha): Avapa, Nirvapa, Dhalana, Bhavana, Jarana, Murchana, Shodhana, Marana, Amrutikarana, Lohitikarana, MrutaLoha, SatwaPatana, Druti, Apunarbhava, Niruttha, Rekhapurna, Varitara. | 05 |
| 3 | Dravya Varga: Amlavarga, Panchamrittika, Panchagavya, Panchamrita, Ksharashtaka, Dravakagana, Mitra panchaka, Rakta varga, Lavanapanchaka. | 03 |
| 4 | Brief description of Yantras and their application Ulukhala Yantra, Khalwa Yantra, Kachhapa Yantra, Damaru Yantra - Vidhyadhara Yantra-Urdhwapatan, Addhapatan&Tiryakpatana Yantra, JaranarthaTulayantra, Dolayantra, Patalayantra, Palika Yantra, Baluka Yantra, Bhudhara Yantra, Sthali Yantra, Swedana Yantra. | 10 |
| 5 | Brief description & application of Musha (Crucible): Samanya Musha, Gostani musha, Vajra Musha, Maha musha, Yoga musha, Vrintaka Musha, Malla / Pakwa musha. Different types of crucibles e.g. Silica crucible, platinum crucible. Mudra and Sandhi Bandhana | 05 |
| 6 | Brief description & applications of Chullika, SatwapatanaKoshthi, Patala Koshthi, GaraKoshthi, Angarakoshthi and knowledge of various heating appliances viz. Gas stove, Hot plate, Heating mantle, Induction Stove, Hot Air Oven. | 03 |
| 7 | Concept, definition and types of Puta: Suryaputa, Chandraputa, Gomayaputa, Lawakaputa, Kukkutaputa, Kapotaputa, Varahaputa, Gajaputa, Mahaputa, Kumbhaputa, Valukaputa, Bhudharaputa, Applications of Electric muffle furnace and fuel (diesel) dependent furnace. Brief introduction to thermocouple and pyrometer. | 05 |
| 8 | Knowledge of Parada: Synonyms, Occurrence, natural and artificial sources of Parada, Hingulothparada, Types of Parada, Parada Dosha: Naisargika, Yougika, Aupadhika(Kanchuka). Grahya-Agrahya Parada, Parada gati, Parada bandha, Shodhana of Parada. Parada sanskara and brief description of Ashtasamskara. | 07 |
| 9 | Concept of Murchhana and Jarana of Parada, Preparation of Kajjali, Classification of Rasaushadhi: Khalvi rasa e.g. TribhuvanaKeerti Rasa, | 06 |

| | | |
|-----------------------|---|----|
| | Parpati Rasa- Rasa Parpati, Kupipakva Rasa- Rasa sindur, Pottali rasa - Hemagarbhapottali. Rasa sevanavidhi and pathya and apathya | |
| 10 | Brief introduction of quality control , standardization and GMP of Rasaoushadhies. | 02 |
| PART B 50MARKS | | |
| 1 | Occurrence, Synonyms, Minerological identification, Sources, Types, Grahya and Agrahyata, Shodhana, Marana and other processing techniques. Properties, dose, anupan and therapeutic uses, pathya – apathya and ashuddha, apakwa and avidheesevanjanya dosha and its management, important formulations of the following: Maharasa –Abhraka (Biotite Mica), Vaikrantha, Makshika (Chalco-pyrite), Vimala (Iron Pyrite), Shilajatu, Sasyaka (Peacock ore), Chapala and Rasaka (Sphalerite). Uparasa – Gandhaka (Sulfur), Gairika (Red Ochre), Kasisa (Green Vitriol), Kankshi (Alum), Haratala (Orpiment), Manahshila (Realgar), Anjana and Kankustha. Sadharana Rasa – Kampillaka, Gauri pashana (Arsenic oxide), Navasadara (Ammonium chloride), Kaparda (Cowry), Agnijara, Giri Sindura (Red oxide of Hg), Hingula (Red Cinnabar) and Mriddarashringa (Litharge). | 18 |
| 2 | Dhatu -Swarna (Gold), Rajata (Silver), Tamra (Copper), Loha (Iron), Vanga (Tin), Naga (Lead), Yashada (Zinc), Kamsya (Bronze), Pittala (Brass), Vartaloha. Dhatu -grahasambandha. | 05 |
| 3 | Ratna - Manikya (Ruby), Mukta (Pearl), Pravala (Coral), Tarkshya (Emerald), Pushparaga (Topaz), Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamone stone), Vaidurya (Cats eye). Ratnapariksha, Ratnadosha, Ratna-grahasambandha. | 03 |
| 4 | Uparatna -Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis lazuli), Perojaka (Turquoise), Sphatikamani (Quartz), Trinakanta, Palanka, Putika, Rudhir. | 03 |
| 5 | Sudha varga – Sudha (Lime stone), Kaparda (Cowries), Shukti (Oyster Shell) , Shankh (Conch Shell), Mrigashringa (Stag horn), Khatika, Godanti (Gypsum) and Samudraphena (Cattle Fish bone), Kukkutandatwak (Hen's Egg Shell). | 03 |
| 6 | Sikatavarga - Sikata (Silica), Dugdhapashana (Talc), Nagapashana / Jaharmohara (Serpentine), Badarshama (silicate of lime), Vyomashma (Sangeyashab - Jade), Kousheyashma (Asbestos) and Akika (Agate). | 02 |
| 7 | Ksharavarga - Sarjakshara (Sodium bicarbonate), Yavakshara, Tankanakshara (Borax), Surya Kshara (Potassium Nitrate). | 03 |
| 8 | Miscellaneous - Mandura, Bola, Dam-ulAkhawayan (Raktabandhini), Kasturi, Bhoonag, Mayurpiccha, Sarjarasa, Madhoochishta. | 03 |
| 9 | Visha and Upavisha -Introduction, collection and storage, classification, synonyms, shodhana, antidote, therapeutic and toxic doses, anupan, therapeutic uses, and formulations of following Visha andUpavisha-Vatsanabha, Kuchala, Jayapala, Dhatura, Bhanga, Bhallataka, Gunja, Arka, Snuhi. Langali, Karaveera, Ahipena and Chitrakmool | 03 |

| | | |
|----|--|----|
| 10 | DESIRED TO KNOW Aushadhi Yoga Gyanam- ingredients, manufacturing process, and bhesajprayogvidhi. Arogya VardhiniGutika, Kasturibhairava Rasa, Kumara Kalyana Rasa, Garbhapala Rasa, ChandraprabhaVati, Chandramrita Rasa, Pratapalankeshwara Rasa, Pravalapanchamrita Rasa, Anandbhairava Rasa, Yogendra Rasa, Laxmivilas Rasa, Vasantakusumakara, Vasantamalati Rasa, BrihatVata Chintamani Rasa, Shankhavati, Shwaskuthara Rasa, Hinguleswara Rasa, Hemagarbhapottali, Hridyarnava Rasa, Swarnavanga, Makaradhvaja, PutapakwavaishamJwarantakaLoha, Vatvidhvamsan Rasa, Kamadugha Rasa, Laghusutshekhar Rasa, NavayasaLoha, Saptamrita Loha, TamraParpati, PanchamritaParpati, Sveta Parpati. | 05 |
| 11 | Introduction to pharamcovigilance and its status in India, with reference to Ayurvedic drugs. | 02 |

Practical

100 Marks

Minimum Twenty five practicals to be performed

- | | | |
|----|----------------------|--|
| 1. | Rasa [Parada] | Samanya Shodhana of Parada Kajjali Mugdha rasa |
| 2 | Maharasavarga | Shodhana of Abhraka Dhanyabhrakanirmanashodhana of MakshikaShodhana of ShilajatuShodhana of Sasyaka. |
| 3. | Uparasavarga | Shodhana of Gandhaka Shodhana of Gairika Shodhana of Kasisa Shodhana of Kankshi Shodhana of Haratala Rasa manikyanirman 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 Pravalamula Shodhana of Godanti |
| 6. | Dhatu varga | Samanya Shodhana of Lauha Shodhana of Mandura Samanya 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 and Swetaparpati |
| 9. | Vishavarga | Shodhana of Vatsanabha, Bhallataka, Kupilu, Dhaturabeeja, Jayapala, Gunja, Chitrakamoola. |

PRACTICAL FOR DEMONSTRATION / GROUP PRACTICALS

1. Hinguladrasakrishti (Hingulottha Parada).
2. Bhasma: 4 (One from each group)
 - i. Abhrakabhasma, Swarna Makshikabhasma, Tamrabhasmaii. Vanga bhasma, Naga bhasma, Yashadabhasmaiii. Mandurabhasma, Kasisabhasmaiv. Shankhabhasma, Kapardikabhasma, Godantibhasma.
3. Pishti : 1 Pravalapishti, Jaharmohara / Akikapishti, Trina kantha manipishti, Mukta pishti.
4. Druti : 1Gandhakadruti.
5. Formulations 4 (one from each group)
 - i. Rasasindura, Swarna vanga, Sameer pannaga rasa
 - ii. Saptamrutalauha, Punarnava mandura, Navayasalauha
 - iii. Agnitundivati, Tribhuvanakirti rasa, Sootshekhara rasa, Laghusutashekhara Rasa
 - iv. Arogyavardhinivati, Laghumalinivasanta rasa, Hinguleshwar rasa, Anandbhairav rasa, Rajapravartinivati

PAPER -2 MARKS-100 BHAISHAJYAKALPANA

| PART-A MARKS-50 | | |
|-----------------|---|-------|
| Sr No | TOPIC | MARKS |
| 1 | History and Chronological (kramikavikasa) development of Bhaishajyakalpana. Concept of Aushadha and Bhesaja. | 02 |
| 2 | Fundamental principles of Bhaishajya Kalpana. | 03 |
| 3 | Study of Ancient and Contemporary systems of ‘Maana’ (Units of measurement), Shushka -ardra –drava- dravyagrahanniyam (Rules of measures of dry, fresh, liquid drugs); Grahyagrahyatva, Nava Puran dravya grahanniyam. | 04 |
| 4 | Guidelines and Methods of collection, storage, preservation of Aushadhidravya. Concept of Saviryatavadi (shelf life) and stability in ancient and contemporary science. | 03 |
| 5 | Bheshajprayogavidhi :AushadhaMatra, Anupana and sahapan and Aushadhsevankaala. (Posology). | 03 |
| 6 | Panchavidha kashaya kalpana and Other kalpana : Kashaya Yoni, Swarasa, Kalka, Kwatha, Hima and Phanta, Pramathya, Aushadha siddha paniya, Tandulodaka, Laksha rasa, Mantha, Panaka, Arka, Churna, Rasakriya, Ghana, Phanita, Avaleha, Prasha, Gudapaka, Sharkara, Syrups, Ksheerapaka, Satva, Guggulokalpana, Vati, Gutti, Pinda, Modaka, Varti Preparation of Tablets, pills, capsule and Suppositories. Masi kalpana, Lavanakalpana, Ksharakalpana and Kshara sutra. | 11 |
| 7 | Introduction and general knowledge of useful instruments/ Equipments Disintegrator, Mixer, Grinder, End Runner, Edge Runner, Sieve-Shaker, Granulator, Tableting machine, Pill making machines, coating and polishing pan, capsule filling machine, sieves and mesh. | 07 |

| | | |
|---------------|--|-----------------|
| 8 | Sneha kalpana :Sneha yoni, Types of Sneha, Sneha murchanavidhi, Sneha pakavidhi, patrapaka, types and their use. Sneha siddhi lakshana, dose, Preparation and uses of TriphalaGhrita, Bramhighrita, Narayana taila, Anutaila. | 06 |
| 9 | Sandhana Kalpana and its types: Madya Kalpana, Asava, Arishta, Sura (Prasanna - Kadambari - Medaka - Jagala - Bakkasa), Maireya, Surasava, Shukta, Kanjika, Sauviraka, Tushodaka, Sidhu kalpana their methods of preparation, siddhi lakshana, properties, uses, doses. Takrarishta, Draksharishta, Ashokarishta, Dashamoolarishta, Kumaryasava, Chandanasava. | 05 |
| 10 | Kritanna and Aushadhisiddha anna Kalpana: Definition of Kritanna, Concept of Pathya and Apathya, Yavagu –types of yavagu, Manda, Peya, Vilepi, Anna, Bhakta, Odan, Yush -types, Krishara, Mansa rasa, Vesavara, KhadKamblika, Raga, Shadava, Dadhi and Takra Varga – Takra, Udasvita, Katvar, Mathita, Chhachika. | 06 |
| PART-B | | 50 MARKS |
| 1 | Bahyopacharartha kalpana (External Applications)-Lepa -Types of Lepa, methods of preparation and mode of application. Udvartan and Avachurnan, Method of preparation of SikthaTaila, Malahara – SarjarasaMalahara, GandhakMalahara, Upanaha, Atasi upanaha, Shatadhouta and SahastradhoutaGhrita. Brief introduction of semi solid dosage forms- Ointments, Creams, Emulsions, Gels, Lotions. | 18 |
| 2 | Principles and precautions for preparation of formulations for following: 2.1 Netra upacharartha kalpana (Ophthalmic preparations) – Seka, Drava, Pindi, Anjana - Ashchyotana - Tarpana - Putapaka and Vidalaka, Methods of preparation of eye drops, eye ointments. 2.2 Nasyopachararth Kalpana - Classification of Nasya, Navana, Avapidana, Pradhaman, Marsha and Pratimarshanasya. 2.3 Dhumapanarthkalpana- Classification of dhumpaana, Method of preparation of dhumvarti and it's therapeutic uses. Dhupan: Vranadhupan, arshodhupan. 2.4 Mukhaprayogarthkalpana - Gandoosha - Kavala - Pratisaran, Tooth paste, Tooth powders and Mouth wash. 2.5 Basti kalpana- Classification, Method of preparation of Niruha and Anuvasana, Basti Therapeutic properties and uses of Basti. | 18 |
| 3 | Brief knowledge of Standardization of Ayurvedic formulations- Kasthaushadhi | 05 |
| 4 | Brief introduction of Drug and Cosmetics Act 1940 and Rules 1945. | 04 |
| 5 | Concept of, Aushadhi Nirmanshala, with respect to Good Manufacturing Practices (GMP) in accordance to Schedule T. | 05 |

Practical Bhaishajya Kalpana - 100 Marks

Following practicals to be performed- (Minimum one from each category)
Method of preparation, therapeutic uses, dose and anupana of the following

1. Swarasa- Ardrakaswarasa, Tulasi swarasa, Kumari Swarasa, Vasa putapakaswarasa
2. Kalka- Nimbakalka, Rasonakalka.
3. Kwatha- Punarnavasthakakwatha, Rasna Sapthakakwatha, Kulatthakwath.
4. Hima- Dhanyakahima, Sarivadihima .
5. Phanta- Panchakolphanta, YastimadhuPhanta.
6. Pramathya- Mustadipramathya
7. Mantha- Kharjuradimantha
8. Aushadh siddha paniya- Shadangapaniya
9. Laksha Rasa.
10. Arka - Yavaniarka, Gulab arka, Misreyaarka
11. Panaka- Chinchapanaka, Chandan panaka.
12. Sharkara- Banapshasharkara, Nimbusarkara.
13. Churna- SitopaladiChurna, HinguwashtakaChurna.
14. Gutika- ChitrakadiGutika, Sanjivani Vati.
15. Guggulu-TriphalaGuggulu, KaishoraGuggulu.
16. Avaleha- Chyavanaprashavaleha, Vasavaleha, VyaghriHaritakiavaleha, Manibadraa-
valeha.
17. Rasa kriya - DarviRasakriya, Guduchi Ghana, Kutaja Ghana.
18. Khanda- Haridra khanda, Narikela khanda, Sowbhagyashuntipaka
19. Satva- Amruta satva,
20. Varti- Phala varti, Chandrodaya varthi
21. Lavana- Arka lavana, Narikelalavana
22. Masi- Triphalamasi, Mayurpiccha Masi
23. Ksheerapaka- Arjuna ksheerapaka, Rasonaksheerapaka, ShunthiKsheerpaka
24. Kshara- Apamargakshara, Snuhikshara, Ksharasutra. .
25. Manda, Peya, Vilepi, Yavagu, Krishra, Vesavara
26. Yusha - Mudgayusha, Saptamushtikayusha, Kulatthayusha
27. Aristha- Kutajarishta, Takrarishta .
28. Asava - Kumaryasava, Kanakasava
29. Suktakalpana- Kanji
30. Udaka- Tandulodaka
31. Upanaha- Atasi Upanaha
32. SikthaTailaNirmaan
33. Malahara- Sarjarasamalahara, Gandakamalahara, Cream, Emulsion. Sneha
Kalpana
34. Sneha Murchhana- GhritaMurchana, TailaMoorchhana, Ghritakalpana: Jatyadighrita,
Triphalaghrita, ksheerashatphalaghrita- Tailakalpana-Panchagunataila, Arkataila, Bala taila, Jatyaditaila
35. Tailapatana- Bhallatakatailapatana, Jayapalatailapatana
36. Shodhana- Guggulu, Hingu.

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

Distribution of Practical Marks-

| Sr No | Topic | Marks |
|-------|---|------------|
| 1 | Rasashastra practical performance | 30 |
| 2 | BhaishajyaKalpana practical performance | 30 |
| 3 | Spot examination (Paper 1+2) | 20 |
| 4 | Journal Rasashastra | 10 |
| 5 | Journal BhaishajyaKalpana | 10 |
| 6 | Table viva | 60 |
| 7 | Internal assessment | 40 |
| | (Rasashastra 100+Bhaishajya Kalpana 100) | 200 |
| | Total | |

Reference Books

- | | |
|--|---------------------------------|
| 1. Adyatan Rasa Shastra | R.K. Goyal |
| 2. Abhinav Rasa Shastra | Vaidya Somadev Sharma |
| 3. AsavaArishtaVigyanam | Dr.Pakshdhar Jha |
| 4. Ayurvediya Rasa Shastra (Sachitra) | Chandrabhusan Jha |
| 5. Ayurvediya Rasa Shastra | Badrinarayan Pandey |
| 6. Rasa BhaishajyaParibhasa | SureshanandaThapaliyal |
| 7. Ayurvediya Rasa Shastra | Prof. Siddhi Nandan Mishra |
| 8. Ayurved Prakash | Vaidya Gujrat Mishra |
| 9. Drugs and Cosmetic Act - 1940 | |
| 10. Paka Darpana | Dr.Indradev Tripathi |
| 11. The Paka-darpana of King Nala | Dr. Madhulika critical study |
| 12. Parada Vigyaniyam | Vasudev M. Dwivedi |
| 13. PratyakshaAushadhNirmanam | Acharya VishwanathDwivedi |
| 14. BhaishjyakalpanaVigyanam | Dr. Agnihotri |
| 15. Rasa Tarangini | Sadanand Sharma |
| 16. Rasa Darpan | Prof. Bhajan Das Swami |
| 17. Rasa Bindu | Dr. Sanjay Sharma |
| 20. Rasa Bhaishajya Kalpana Vigyan | Vaidya Santosh Kumar Khandal |
| 21. Rasa Mitra | Dr. Tryambak Nath Sharma |
| 22. Rasa Ratna Samuchchaya (Hindi) | Dattatreya Ananta Kulkarni. |
| 23. Rasaratnasamuchchaya- | Ambikadatta shastri |
| 24. Rasaratna samuchchaya - | Damodar Joshi |
| 25. Rasa Shastra PrayogikiSrivastava, | Yadav and Prof. Ramesh Saxena |
| 26. Rasamritam | Vaidya YadavjiTirkramji Acharya |
| 25. Rasayan Sara Vaishya | Vaidya Shyam Sunderacharya |
| 26. Rasendra Sampradaya | Vaidya Hajari Lal Sukul |
| 27. Rasendra Sara Sangraha | Vaidya Gopal Krishna |
| 29. VaidyakParibhasa Pradeep (Hindi Translation) | Dr.Indradev Tripathi |
| 30. Sharangadhara Samhita | Dr. Radhakrishna Parashar |
| 31. BharatiyaBhaishajya Kalpana Vigyana | Gananath Vishwanath Dwivedi |
| 32. Bhaishajya Kalpana Vijnanam | Dr. K Ramachandra Reddy |
| 33. Rasa Shastra (English) | Prof. Damodar Joshi |
| 34. Rasa Ratna Samuchchaya (English) | Prof. Damodar Joshi |

35. Rasendra Chintamani (Hindi) Prof. Siddhinandan Mishra
36. Ayurvedic formulary of India
38. Ayurvedic Pharmacopiea of India , CCRAS
39. Bhaishjya Kalpana Vigyan Siddhi Nandan Mishra
40. Textbook of Rasashastra Dr. K Ramachandra Reddy.
41. Ashadhayoga Vigyanam Dr. K. Ramachandra reddy
42. Vaidyaka Paribhasha Pradipa (English Translation) Dr. K. Ramachandra Reddy & Dr. P. Suresh
43. Relevant parts of Brihatrayee
44. Text book of Bhaishjya Kalpana - Dr Shobha G Hiremath
45. Text Book of Rasa Shastra Dr P H C Murthy
46. Rasa Chandashu Prof S S Savirkar (CCRAS Publication)
47. Bhaishjya Ratnawali Prof S N Mishra
48. Yoga Ratnakar

CHARAKASAMHITA -PURVARDHA

(Sutrasthana, Nidanasthana, Vimanasthana, Sharirasthana and Indriyasthana)

Theory- One Paper– 100 Marks **Practical Marks Distribution – 50 Marks**

Total Teaching Hours -200

Part A

1. Sutrasthana - 40 Marks
2. Indriyasthana - 10 Marks

Part B

1. Nidanasthana - 15 Marks
2. Vimanasthana - 20 Marks
3. Sharirasthana - 15 Marks

| PART -A | | |
|--|---|-----|
| Sutra Sthana- 40 Marks, 107 Hours | | |
| Unit | Topic | Hrs |
| 1. | <u>Deerghanjiviteeya Adhyaya,</u> | 8 |
| 2. | <u>Apamarga Tanduliya Adhyaya</u> | 2 |
| 3. | <u>Aragvadhya Adhyaya</u> | 1 |
| 4. | <u>Shadvirechanashatashritiya Adhyaya</u> | 2 |
| 5. | <u>Matrashiteeya Adhyaya, , ,</u> | 4 |
| 6. | <u>Tasyashiteeya Adhyaya</u> | 4 |
| 7. | <u>Naveganadharaniya Adhyaya</u> | 6 |
| 8. | <u>Indriyopakramaniya Adhyaya</u> | 3 |
| 9. | <u>Khuddakachatuspada Adhyaya,</u> | 2 |
| 10. | <u>Mahachatuspada Adhyaya,</u> | 3 |
| 11. | <u>Tistraishaniya Adhyaya</u> | 3 |
| 12. | <u>Vatalakaliya Adhyaya</u> | 3 |
| 13. | <u>Snehaadhyaya</u> | 7 |
| 14 | <u>Swedadhyaya</u> | 5 |
| 15 | <u>Upakalpaniya Adhyaya</u> | 4 |
| 16 | <u>Chikitsaprabhritiya Adhyaya</u> | 2 |
| 17 | <u>Kiyantashirashiya Adhyaya</u> | 6 |
| 18 | <u>Trishothiya Adhyaya</u> | 4 |
| 19 | <u>Ashtodariya Adhyaya</u> | 1 |
| 20 | <u>Maharoga Adhyaya</u> | 1 |
| 21 | <u>Ashtauninditiya Adhyaya</u> | 3 |
| 22 | <u>Langhanabrihaniya Adhyaya</u> | 4 |
| 23 | <u>Santarpaniya Adhyaya</u> | 3 |
| 24 | <u>Vidhishonitiya Adhyaya</u> | 4 |
| 25 | <u>Yajjapurushiya Adhyaya</u> | 4 |
| 26 | <u>Atreyabhadrakapyiya Adhyaya</u> | 5 |
| 27 | <u>Annapanavidhi Adhyaya</u> | 4 |
| 28 | <u>Vividhashitapitiya Adhyaya</u> | 3 |
| 29 | <u>Dashapanayataniya Adhyaya</u> | 3 |
| 30 | <u>Arthedashamahamuliya Adhyaya</u> | 3 |

| INDRIYASTHANA- 10 Marks. 12 Hours | | |
|--|---|----|
| 1 | Varnasvariya Indriyam Adhyaya | 1 |
| 2 | Pushpitakam Indriyam Adhyaya | 1 |
| 3 | Parimarshaneeyam Indriyam Adhyaya | 1 |
| 4 | Indriyaneekam Indriyam Adhyaya | 1 |
| 5 | Purvarupeeyam Indriyam Adhyaya | 1 |
| 6 | Katamanisharireeyam Indriyam Adhyaya | 1 |
| 7 | . Pannarupiyam Indriyam Adhyaya | 1 |
| 8 | Avakshiraseeyam Indriyam Adhyaya | 1 |
| 9 | Yasyashyavanimittiyam Indriyam Adhyaya | 1 |
| 10 | Sadyomaraneeyam Indriyam Adhyaya | 1 |
| 11 | Anujyotiyam Indriyam Adhyaya | 1 |
| 12 | Gomayachurniyam Indriyam Adhyaya | 1 |
| PART B | | |
| Nidanasthana- 15 Marks 22 hrs | | |
| 1 | Jwaranidana Adhyaya | 6 |
| 2 | Raktapitta Nidana Adhyaya | 2 |
| 3 | Gulmanidana Adhyaya | 2 |
| 4 | Pramehanidana Adhyaya | 2 |
| 5 | Kushthanidana Adhyaya | 2 |
| 6 | Shoshanidana Adhyaya | 2 |
| 7 | Unmadanidana Adhyaya | 3 |
| 8 | Apasmar Nidana Adhyaya | 3 |
| Vimanasthana - 20 Marks, 39 Hours | | |
| 1 | Rasavimana Adhyaya | 4 |
| 2 | Trividhakukshiyavimana Adhyaya | 4 |
| 3 | Janapadodhwansaniya Vimana Adhyaya | 3 |
| 4 | Trividharogavisheshvigyaniya Vimana Adhyaya | 3 |
| 5 | Srotovimana Adhyaya | 4 |
| 6 | Roganikavimana Adhyaya | 4 |
| 7 | Vyadhitarupiya Vimana Adhyaya | 3 |
| 8 | Rogabhishagjitiya Vimana Adhyaya | 14 |
| Sharirasthana - 15 Marks 20 Hours | | |
| 1 | Katidhapurusha Sharira Adhyaya | 4 |
| 2 | Atulyagotriya Sharira Adhyaya | 1 |
| 3 | Khuddika Garbhavakranti Sharira Adhyaya | 2 |
| 4 | Mahatigarbhavakranti Sharira Adhyaya | 2 |
| 5 | Purusha Vichaya Sharira Adhyaya | 1 |
| 6 | Sharira Vichaya Sharira Adhyaya | 4 |
| 7 | Sharira Sankhya Sharira Adhyaya | 2 |
| 8 | Jatisutriya Sharira Adhyaya | 4 |

Practical Marks Distribution

| Sr No | Topic | Marks |
|-------|-----------------------------------|-------|
| 1 | Viva and Shloka recitation | 30 |
| 2 | Compilation/ Manas Prakriti cases | 10 |
| 3 | Internal assessment | 10 |
| | Total | 50 |

Reference Books

1. Charak Samhita -Chakrapani Tika (Sanskrit Commentary)
2. Charak Samhita (Hindi Commentary) Vd. Jayadev Vidyalkar or Vd. Atridev Vidyalkar or Prof. Gorakh Nath Chaturvedi & Kashinath Shastri or Dr. Brahmanand Tripathy or Dr. Ravidutta Tripathy
3. Charak Samhita (English Commentary): Dr. Ram Karan Sharma & Vd. Bhagwan Dash or Acharya Priyavrata Sharma.
4. Dr.Prabhakar Rao MCQ on Cara-ka Samhita RP-2014 Chawkambha Publishers & Distribu-tors of Oriental Cultural Lit-erature.
5. Dr.Vasant C Patil. Comprehensive Guide on Caraka Samhita RP-2009 Chawkambha Publishers and Distributors of OrientalCultu ralLitreature. Vidyalkar / Prof. GorakhNathChaturvedi&Kashinat hShastri or
6. Dr. BrahmanandTripathy or Dr. RaviduttaTripathy Charak Samhita Uttarardha RP-2008 RP-2003 RP-2007 Choukhambh aBharati academy Surabharati Sanskrit.
- 7.(Ayurveda –dipika - Ayushi Hindi Commentary)Vd. HarischandraKushavaha Charak Samhita Uttarardha RP-2011 Krishna-das academy Orientalia
8. Ayurveda deepika commentary of cakrapanidatta with vidyotini Hindi commentary by Pt kashinathsastri edited by GangasahasyaPandeya Charak SamhitaUttarar dha RP-2011, Rashtriya Sanskrit Sansthan New Delhi