

**Ordinance Governing**

**MD / MS-AYURVEDA  
Part-2**

**Syllabus/Curriculum  
2020-21**

**(Applicable to 2019, 2020, 2021, 2022  
and 2023 batches)**



Accredited 'A' Grade by NAAC (2nd Cycle)  
Placed in Category 'A' by MHRD (Govt)

**KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH**

(Formerly known as KLE University  
(Deemed-to-be-University established u/s 3 of the UGC Act, 1956))

JNMC Campus, Nehru Nagar, Belgaum-590010, Karnataka, INDIA.

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Ref. No. KAHER/AC/20-21/D- 780620092

02 April 2020

### NOTIFICATION

Sub : **Consideration of revision in the course curriculum of MD (Ayurveda) – Part-II.**

Ref : Minutes of the 43<sup>rd</sup> meeting of the Academic Council of the KAHER held on 20<sup>th</sup> March 2020.

In exercise of the powers conferred under Rule A-04 (i) of the Memorandum of Association of the University, the Academic Council of the KAHER is pleased to approve revision in the course curriculum of MD (Ayurveda) – Part-II in the subjects as detailed in the Agenda, based on the new Regulations issued by CCIM.



By Order

REGISTRAR

To

**The Principal,**  
KLE BMK Ayurveda Mahavidyalaya,  
BELAGAVI

CC to:

1. The Secretary, University Grants Commission, New Delhi.
2. The PA to Hon. Chancellor, KAHER, Belagavi.
3. The Special Officer to Hon. Vice-Chancellor, KAHER, Belagavi.
4. Dean, Faculty of Ayurveda, KAHER, Belagavi.
5. All Officials of the KAHER- Academic Affairs / Examination Branch.

Edition Year : 2020

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## **VISION**

To be an outstanding University of excellence ever in pursuit of newer horizons to build self reliant global citizens through assured quality educational programs.

## **MISSION**

- To promote sustainable development of higher education consistent with statutory and regulatory requirements.
- To plan continuously provide necessary infrastructure, learning resources required for quality education and innovations.
- To stimulate to extend the frontiers of knowledge, through faculty development and continuing education programs.
- To make research a significant activity involving staff, students and society.
- To promote industry / organization, interaction/collaborations with regional/national / international bodies.
- To establish healthy systems for communication among all stakeholders for vision oriented growth.
- To fulfill the national obligation through rural health missions.

## **OBJECTIVES**

The objectives are to realize the following at university and its constituent institutions:

- To implement effectively the programs through creativity and innovation in teaching, learning and evaluation.
- To make existing programs more careers oriented through effective system of review and redesign of curriculum.
- To impart spirit of enquiry and scientific temperament among students through research oriented activities.
- To enhance reading and learning capabilities among faculty and students and inculcate sense of life long learning.
- To promulgate process for effective, continuous, objective oriented student performance evaluation.
- To ordinate periodic performance evaluation of the faculty.
- To incorporate themes to build values. Civic responsibilities & sense of national integrity.
- To ensure that the academic, career and personal counseling are in-built into the system of curriculum delivery.
- To strengthen, develop and implement staff and student welfare programs.
- To adopt and implement principles of participation, transparency and accountability in governance of academic and administrative activities.
- To constantly display sensitivity and respond to changing educational, social, and community demands.
- To promote public-private partnership.



# INSIGNIA



The Emblem of the University is a Philosophical statement in Symbolic.

## ***The Emblem...***

A close look at the emblem unveils a pillar, a symbol of the "University of Excellence" built on strong values & principles.

## ***The Palm and the Seven Stars...***

The Palm is the palm of the teacher- the hand that acts, promises & guides the students to reach for the Seven Stars...

The Seven Stars signify the 'Saptarishi Dnyanamandal', the Great Bear- a constellation made of Seven Stars in the sky, each signifying a particular Domain. Our culture says: The true objective of human birth is to master these Knowledge Domains.

The Seven Stars also represent the Saptarishis, the founders of KLE Society whose selfless service and intense desire for "Dnyana Dasoha" laid the foundation for creating the knowledge called KLE Society.

Hence another significance of the raised palm is our tribute to these great Souls for making this University a possibility.

## ***Empowering Professionals...***

'Empowering Professionals', inscription at the base of the Emblem conveys that our Organization with its strength, maturity and wisdom forever strive to empower the student community to become globally competent professionals. It has been a guiding force for many student generations in the past, and will continue to inspire many forthcoming generations.

# CONTENTS

Sl. No.	Topics	Page No.
Section I	Preamble	01
Section II	Goals of the Course	02
Section III	Aims and Objectives of this Course	02
Section IV	Regulations Governing MD/MS (Ayurveda) 1. Eligibility 2. Intake of the Student 3. Medium of instructions 4. Duration of the Course Study 5. Course of study 6. Attendance and Progress 7. Subjects taught, Number of lectures/practical and demonstrations for various subjects 8. Scheme of Examinations a. University Examination b. University Question paper pattern c. University Practical Examination pattern d. Criteria for Pass e. Declaration of Class 9. Migration 10. Dissertation 11. Nomenclature of Degree to be awarded	04
Section V	Training Programmes	11
Section VI	Model check list	12
Section VII	Log Book	19
Section VIII	Para Clinical subjects Syllabus	21
Section IX	Clinical subjects Syllabus	50

Ordinance Governing

Regulations & Syllabus of  
Post Graduate Course  
in Ayurveda

MD / MS-AYURVEDA PART-II

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## **Section I**

### **Preamble:**

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

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

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

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

Looking in to the health services provided to the public, understanding the need of Practitioners of Ayurvedic system of medicine, need of research in contest with application of treatment modalities to present generation, to establish new formulations/medicines, to answer the problems related to the present days lifestyle disorders as per the guidelines of apex body CCIM and suggestions provided by the faculty of various sections, stake holders and strategy of University, this Post Graduate studies in Ayurveda is framed.

### **Section II**

#### **Goal of the Course:**

To produce specialized Post Graduate Physician/Surgeon to render best health service, research oriented and finding solutions for challenging health problems of the community.

### **Section III**

#### **1. AIMS AND OBJECTIVES:**

The aims of the Post-graduate degree courses is to provide orientation of specialties & super specialties of Ayurved and to produce experts & specialties who can be competent and efficient teachers, physicians, surgeons, obstetricians & gynecologist (Stree Roga, Prasuti Tantragya, pharmaceutical experts, panchakarma tantragya, researches & profound scholars in various fields of specialization of Ayurved.

#### **2. Attitude and Skills:**

- Intensive training shall be provided in classical knowledge along with comparative & critical study in the respective specialty.
- The emphasis shall be given on theoretical and intensive applied training and not in dictative lectures.
- The students shall have to acquire the knowledge about the methods and techniques of research in the respective fields making use of Information Technology.
- In clinical subjects the students shall undertake responsibility in management and treatment of patients independently and deal with emergencies.

- The students shall have to participate in the teaching and training programme of under-graduate students or interns in the respective Specialties\ Department.
- In the first year of the course, the students shall have to acquire knowledge in the applied aspects of the fundamentals of Ayurved.
- In the clinical training the student shall have to acquire the knowledge of independent work as a specialist.
- In the specialties of Shalya, Shalakya and Stri Roga and Prasutitantra, the student shall have to undergo training of investigative procedures, techniques and surgical performance of procedures and management in the respective specialty.
- The student shall have to undertake training in teaching technology and research methods during the course of studies

#### **Section IV**

#### **Regulations Governing Post Graduate Degree in Ayurveda & MD/MS (Ayurveda) Part – 1 Curriculum**

##### **1. Eligibility:**

A person possessing the degree in Ayurved of a University or Board or medical institution specified in the Second Schedule to the Act shall be eligible for admission in the post-graduate degree course.

##### **2. Intake of the Student:**

According to the Departmental intake permitted by CCIM/AYUSH New Delhi,

##### **3. Medium of instructions:**

Medium of Instruction shall be English (with a working knowledge of Sanskrit to serve the study)

##### **4. Duration of the Course Study:**

The Course of study shall be for a period of three academic years.

##### **5. Course of Study:**

All the candidates admitted for P.G.Degree (M.D/MS Ayurveda) are required

to pursue the recommended duration for at least three academic years as full time candidates out of which:

- (a) Preliminary course for one year -MD/MS Part 1 and
- (b) Specialty course for two years -MD/MS Part 2.

#### **6. Attendance and Progress:**

A minimum of 75% of the attendance in theory and practical separately in each subject is required to be eligible for examination at the end of academic year subject to the condition that his/her progress and conduct are counted to be satisfactory by the Principal.

#### **7. Subjects taught, Number of lectures/practical and demonstrations for various subjects:**

No.	Paper	Hours	
		Theory	Practical
1	Research Methodology & Medical Statistics	100	200
2	Maulika Siddhanta*	100	200

\*Maulika Siddhanta - (Paper related to respective specialization)

Part A – applied aspects of fundamentals regarding concerned subject

Part B – concerned subject

#### **8. Scheme of Examinations:**

##### **a) University Examination of MD (Ayu) Part I:**

- \* To be held at the end of one year.
- \* The 1st M.D/MS.(Part 1) period shall start from 1st working day of August and end on last working day of July next year. The examination shall ordinarily be completed by the end of July.
- \* The subsequent University examination will be held every six months.

1st M.D/MS. (Part 1) Examination shall be held in the following subjects:

No.	Paper	Marks	
		Theory	Practical
1	Research Methodology & Medical Statistics	100	100
3	Maulika Siddhanta*	100	100

\*Maulika Siddhanta - (Paper related to respective specialization)

Part A – applied aspects of fundamentals regarding concerned subjects  
 Part B – concerned subject

**b) University Theory Question Paper Pattern of M.D/MS. -Part 1 :**

Sl. No.	Type of Questions	No of Questions	Marks Per Question	Total Marks
01	Long essay questions	2	20	40
02	Short essay questions	6	10	60
		<b>Total Marks</b>		<b>100</b>

**Valuation of Theory Answers Scripts:**

- Each Theory Answer scripts are valued for twice before declaration of results.
- Highest of the both valuation taken for the declaration of the result.
- If a difference of 15 marks between two valuations, third valuation conducted and Marks of the third valuation considered for declaration of result.

**c) University Clinical/ Practical and Oral Examination Marks division:**

No		Marks
1	Long case / Long Practical as the case may be,	40
2	Short case/ Short Practical as the case may be,	20
3	Medical procedure/Lab analysis	20
4	Instruments/Identification	30
5	Practical/clinical records	10
6	Viva voce	80
	<b>Total Marks</b>	<b>200</b>

**Practical Examiners:**

There shall be two Examiners, one Internal & one External for Part-1

**d) Criteria for Pass:**

- Minimum marks to be secured in each Theory and Practical 50% separately.
- For being declared successful in the University Examination, student shall have to pass all the subjects separately in M.D/MS. Part 1 University examination.



- If a student fails in M.D/MS. Part 1 examination, he/she shall have to pass before appearing in MD/MS Part 2 University Examination.
- If the student fails in theory or practical in the M.D/MS. Part 2 University examination he/she can appear in the subsequent examination without requiring to submit a fresh Dissertation.
- The Post graduate degree shall be conferred after the dissertation is accepted and student passes the MD/MS Part 2 University examination.
- A student failed in one subject of 1st M.D/MS. examination may be allowed to keep the term in 2nd M.D/MS. Part 2 course.
- However, a student failed in more than one subject of Part 1 examination not allowed keeping term in M.D/MS. Part 2.

**e) Declaration of class:**

- A candidate obtaining 50% and more, but less than 60% of the marks in the grand total in the first attempt shall be declared to have passed the examination in Second Class.
- A successful candidate obtaining 60% marks or more but less than 75% of the marks in the grand total in the first attempt shall be declared to have passed the examination in First Class.
- Successful candidates obtaining 75% of marks or more of the marks in the grand total in the first attempt shall be declared to have passed the examination in Distinction.
- A candidate passing a university examination in more than one attempt shall be placed in Pass class irrespective of the percentage of marks secured by him/her in the examination.

**9. Migration:**

The students are not allowed take migration to continue his/her study to another college during entire course of study.

**10. Dissertation:**

- Every candidate pursuing postgraduate degree course is required to carry out work on a selected research project under the guidance of a recognized

postgraduate teacher. The results of such work shall be submitted in the form of a dissertation.

- The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, and comparison of results and drawing conclusions.
- Every candidate shall submit to the registrar of the university in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within six months from the date of commencement of the course on or before the dates notified by the university. The synopsis shall send through the proper channel.
- Such synopsis will be reviewed by the scrutiny committee constituted by the University and the dissertation topic will be registered by the university. No change in the dissertation topic or guide shall be made without prior approval of the university.
- One copy of the synopsis of the dissertation shall be submitted to the Department & one copy to Central Library as soon as the title is approved.
- The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding reference, tables and other annexure. It should be neatly typed in double line spacing on one side of the paper (A4 Size), with a font size of 12, Style New time roman and bound properly. Spiral binding should be avoided.
- The dissertation shall be certified by guide, head of the department and head of the institution.
- Dissertation should be written under the following headings;
  - I. Introduction
  - II. Aims and Objectives of study
  - III. Review of Literature
  - IV. Material and Methods

- V. Results
- VI. Discussion
- VII. Conclusion
- VIII. Summary
- IX. References
- X. Tables
- XI. Annexure

- Three copies of dissertation and one soft copy thus prepared shall be submitted to the Controller of Examinations six months before final examination on or before the date notified by the University.
- The dissertation shall be valued by examiners appointed by the university. Approval of dissertation work is an essential pre condition for a candidate to appear in the university examination.
- The subject of every dissertation shall be practical oriented, devoid of unpromising specialties and helpful in the development of Ayurved.
- The registration of the student shall be cancelled if he/she fails to submit the title of dissertation and synopsis within the period specified.
- No student shall be allowed to submit the dissertation before the expiry of one calendar year after approval of the topic and before six months of final year; Provided that the student shall continue his or her regular studies in the institution after submission of dissertation.
- The subject of the dissertation shall have relation with the subject matter of the specialty.
- The dissertation shall contain the methods and data of the research carried out by the student on the problem selected by him and completed under the guidance of the teacher approved by the University.
- The dissertation shall consist critical survey of relevant literature, methodology, results of the research, discussion on the basis of existing literature of the subject, summary conclusion, and references cited in the dissertation.

- The dissertation shall contain, at the end, a summary of not more than one thousand five hundred words and the conclusion not exceeding one thousand words.
- The dissertation shall be a literary presentation and suitable for publication either as such or in an abridged form. The dissertation shall be assessed by two external and one internal examiners appointed by the University
- The dissertation shall be accepted only after the approval of examiners appointed under sub-regulation (17) CCIM and in case of disapproval by one external examiner, the dissertation shall be referred to third examiner.
- If the dissertation is not accepted, the same shall be returned to the student with the remarks of the examiners and the student can resubmit the dissertation after making necessary improvement in the light of examiners' report to the University within a further period of six months.
- The student shall be permitted to appear in the final examination of post-graduate degree course only after the examiners appointed for the purpose have approved the dissertation.

#### **11. Degree to be awarded:**

Degree to be awarded after completion of prescribed courses of study extending over the prescribed period & passing final Examination .

01. Ayurveda Vachaspati (M.D. -Ayurveda ) - Ayurved Samhita and Sidhanta,
02. Ayurveda Vachaspati (M.D. -Ayurveda ) - Rachna Sharir,
03. Ayurveda Vachaspati (M.D. -Ayurveda ) - Kriya Sharir (Dosha-Dhatu-Mala Vigyana),
04. Ayurveda Vachaspati (M.D. -Ayurveda ) - Dravya Guna Vigyana,
05. Ayurveda Vachaspati (M.D. -Ayurveda ) - Ras Shastra
06. Ayurveda Vachaspati (M.D. -Ayurveda ) - Bhaishajya Kalpana
07. Ayurveda Dhanwantri (M.S. - Ayurveda )- Prasuti Tantra avum Stri Roga,
08. Ayurveda Vachaspati (M.D. -Ayurveda ) - Kaumar Bhritya - Bala Roga,
09. Ayurveda Vachaspati (M.D. -Ayurveda ) - Kayachikitsa,
10. Ayurveda Vachaspati (M.D -Ayurveda ) - Swastha Vritta & Yoga

11. Ayurveda Vachaspati (M.D -Ayurveda ) - Rog Nidan avum Vikriti Vigyana,
12. Ayurveda Dhanwantri (M.S.-Ayurveda) -Shalya Tantra - Samanya,
13. Ayurveda Dhanwantri (M.S.- Ayurveda) -Shalya Tantra - Kshar Karma avum Anushastra Karma,
14. Ayurveda Dhanwantri (M.S.-Ayurveda) - Shalakya Tantra - Netra Roga,
15. Ayurveda Dhanwantri (M.S.- Ayurveda ) - Shalakya Tantra: Shiro-Nasa-Karna avum Kantha Roga,
16. Ayurveda Dhanwantri(M.S -Ayurveda ) - Shalakya Tantra - Danta avum Mukha Roga,
17. Ayurveda Vachaspati (M.D.-Ayurveda) -Mano Vigyan avum Manas Roga,
18. Ayurveda Vachaspati (M.D.-Ayurveda) - Panchkarma,
19. Ayurveda Vachaspati (M.D.-Ayurveda) - Agad Tantra avum Vidhi vaidyaka,
20. Ayurveda Vachaspati (M.D.- Ayurveda) - Sangyahaarana,
21. Ayurveda Vachaspati (M.D.-Ayurveda) - Chhaya avum Vikiran Vigyan,
22. Ayurveda Dhanwantri(M.S -Ayurveda )-Asthi Sandhi & Narmagata Roga,
23. Ayurveda Dhanwantri(M.S -Ayurveda )-Rasayana -Vajikaran

### **Section V**

#### **TRAINING PROGRAMMES**

It is essential to monitor the learning process of each candidate through continuous appraisal and regular assessment. This helps teachers to evaluate students, also students to evaluate themselves.

Candidate has to participate in the below mentioned training programmes conducted by the department

#### **1. CLASSROOM PRESENTATIONS BY STUDENT:**

- I. Journal Article Review
- ii. Subject seminar
- iii. Formulations
- iv. Investigations
- v. Instruments

- vi. Analysis
- vii. Shloka (Quotation)
- viii. Classical text review
- ix. Interdepartmental presentation
- x. Clinical presentation

## **2. OTHER INDIVIDUAL ACADEMIC ACTIVITIES:**

- i. Research article publication
- ii. Compilation
- iii. Conduct of UG Theory Classes
- iv. Conduct of UG Practical

## **3. GROUP ACTIVITIES:**

- i. Field visits
- ii. Institutional visits
- iii. Group discussion
- iv. Practical:
  - a. In college Lab.
  - b. In other recognized dept/establishment Lab.
  - c. Animal house
- v. Clinics
- vi. Conduct of surveys

## **4. SUBJECTWISE PRACTICAL/CLINICAL RECORDS:**

Student has to conduct and record practical/clinical case study in RECORD BOOK and shall be certified by the Head of the Department and Head of the Institution, and presented in the University Practical/Clinical examination.

## **Section VI**

### **MODEL CHECK LISTS**

Assessment of student's activities helps to improve their performance. Each activity shall be assessed by at least two teachers and one student from first, second and third year. All the observations summarized and suggestions are made at the end of respective presentation.

## 1. SUBJECT SEMINAR

NAME OF THE PRESENTER:

TOPIC:

No.	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of the Topic			
2	Understanding of the subject & content			
3	Organizing the matter in Logical sequences			
4	Use of specific cross references, examples to explain subject			
5	Incorporation of own Research Views			
6	Presentation skill (Body language, Language fluency, , change of pace etc)			
7	Answering skill to the question			
8	A/V aid use			
9	Critical analysis of the subject			
10	Summarized the matter at the end			
	TOTAL			

Suggestions:

Date: Sign & Name:

## 2. SHLOKA

NAME OF THE PRESENTER:

Sloka:

Reference:

No.	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of Topic			
2	Breakup of shloka			
3	Use of specific cross references, examples to explain subject			
4	Collection & explanation skill of the Matter			
5	Understanding of the subject			
6	Incorporation of own research views			
7	Presentation skill ( body language, A/V aid use, change of pace, language fluency etc)			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date: Sign & Name:

### 3. ANALYSIS

NAME OF THE PRESENTER:

NAME OF THE TECHNIQUE:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Narration of History, types of technique			
3	Description of the technique			
4	Narration of Method of use, unit & applied aspects			
5	Narration of its limitations, precautionary measures			
6	Collection of the Matter			
7	Organizing matter in logical sequence			
8	Presentation skill (body language, A/V aid use, change of pace, Language fluency etc)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date- Sign & name .

### 4. FORMULATION

NAME OF THE PRESENTER:

Formulation:

Reference:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of Topic			
2	Assessment of Ingredients using cross references			
3	Assessment of Pharmacodynamics of ingredients			
4	Explanation of applied aspects			
5	Explanation of quality tests (Shastric/Lab)			
6	Explanation of related recent Research Works			
7	Incorporation of own research views			
8	Presentation skill ( body language, A/V aid use, change of pace, language fluency etc)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date- Sign & Name



## 5 INSTRUMENT

NAME OF THE PRESENTER:

NAME OF THE INSTRUMENT:

	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Narration of History, types of instruments			
3	Description of the Instrument			
4	Narration of Method of use, unit & applied aspects			
5	Narration of its limitations, precautionary measures			
6	Collection of the Matter			
7	Organizing matter in logical sequence			
8	Presentation skill (body language, A/V aid use, change of pace, Language fluency etc)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & name .

## 6 INVESTIGATION

NAME OF THE PRESENTER:

TITLE:

	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of topic			
2	Narration of History, types of investigation & instruments /equipments used			
3	Narration of method of Investigation			
4	Narration of method of calibration & possible errors			
5	Narration of its application & Incorporation of own research views			
6	Presentation skill ( body language, A/V aid use, change of pace Language fluency etc)			
7	Organizing matter in logical sequence			
8	Answering skill to the question			
9	Understanding of the subject			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign with name.

## 7. CLASSICAL TEXT REVIEW

NAME OF THE PRESENTER:

CLASSICAL TEXT TITLE:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	About Author, commentators, publication,			
3	About content, volume, chapters,			
4	Uniqueness of the text			
5	Incorporation of own views			
6	Presentation skill ( body language, A/V aid use, change of pace etc)			
7	Language fluency			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & Name.

## 8. ARTICLE PUBLISHED IN JOURNAL / PERIODICAL

NAME OF THE PRESENTER:

TITLE:

JURNAL/PERIODICAL:

NO	OBSERVATIONS	Good	Average	Poor
1	Article & Journal/Text selected			
2	Narration of the OBJECTIVES of Article			
3	Understanding of the subject			
4	Use of specific cross references, examples to explain subject			
5	Incorporation of own research views			
6	Presentation skill ( body language, A/V aid use, change of pace etc)			
7	Language fluency			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & Name.

## 9. CLINICAL PRESENTATION

NAME OF THE PRESENTER:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Completeness of the History			
3	Accuracy of general physical examination			
4	Incorporation of own research views			
5	Diagnosis-whether it follows logically from History & findings			
6	Organizing matter in logical sequence			
7	Investigation required, interpretation of investigations			
8	Ability to defend diagnosis & to justify differential diagnosis			
9	Justification of Line of treatment			
10	Presentation skill ( body language, A/V aid use, change of pace, Language fluency etc)			
11	Answering skill to the question			
	TOTAL			

Suggestions:

Date- Sign & Name.

## 10. UG TEACHING SKILLS

Date- Sign & Name.

NAME OF THE TEACHER:

SUBJECT:

NO	SKILLS PRACTICED	YES	TO SOME EXTENT	NO
1	Raised interest in the beginning relating to topic by questing or by throwing new idea			
2	Specified the OBJECTIVES of presentation			
3	Teaching material organized in a logical sequence			
4	Used relevant content matter			
5	Changed pace of presentation			
6	Used specific examples to explain subject			
7	Used non-verbal clues, eye contact, etc,			
8	Used teaching aids effectively			
9	Allowed questions from students			
10	Asked questions to students			
11	Rewarded students answers/questions			
12	Summarized the matter at the end			

Suggestions:

Date-

Sign & Name.

## **Section VII**

### **LOG BOOK:**

Every student must maintain Log Book in which every activities of teaching training evaluation programmes recorded.

The log book is a record of the all the activities of the candidates during his training. Internal assessment is based on the evaluation of log book. Totally, logbooks are a tool for the evaluation of the training programme of Institution by external agencies. The record includes academic activities as well as the presentations and procedures, etc., carried out by candidate.

### **CONTENT OF THE LOG BOOK:**

1. Subject Seminar Presented
2. Analysis Seminar Attended.
3. Analysis Seminar Presented.
4. Animal Module Seminar Attended.
5. Animal Module Seminar Presented.
6. Classical Text Review Seminar Attended.
7. Classical Text Review Seminar Presented.
8. Clinical Case Presentation Attended.
9. Clinical Case presented.
10. Clinical Seminar Attended.
11. Clinical Seminar presented.
12. Synopsis/Dissertation Activities.
13. Formulation Seminar Attended.
14. Formulation Seminar Presented.
15. General Seminar Attended.
16. General Seminar Presented.
17. Guest Lectures Attended.
18. Instrument Seminar Attended.
19. Instrument Seminar Presented.
20. Interdepartmental seminars Attended.
21. Investigation Seminar Attended.

22. Investigation Seminar Presented.
23. Journal Article Review Attended.
24. Journal Article Review Presented.
25. Practical/Clinics Attended.
26. Research article Published.
27. Seminar/workshop / conference. Attended.
28. Sloka Seminar Presented.
29. Slokas Seminar Attended.
30. Subject Seminar Attended.
31. Theory Class Attended.
32. Under Graduate Practical Classes Conducted.
33. Under Graduate Theory Classes Conducted

## AGADATANTRA

Total Papers	: 04	Total Theory Marks	: 400(100 each)
Practical Marks	: 200	Duration	: 02 Years
Grand Total Marks	: 600		

PAPER 1-Agada Tantra (Ayurvedic And Contemporary Toxicology)	100 Marks	100 Hours
PAPER 2- Visha Chikitsa Vigyan (Management Of Poisoning)	100 Marks	100 Hours
PAPER 3- Vyavahara Ayurved Evam Vidhi Vaidyaka	100 Marks	100 Hours
PAPER 4 - Aushadha Yoga Vigyan	100 Marks	100 Hours

### PAPER 1

#### Agada Tantra (Ayurvedic And Contemporary Toxicology)

100 Marks

100 Hours

#### PART-A

Sl. No	Topics	Hrs
Unit-1	Agada Tantra, its sequential development during Veda kala, Samhita kala, Sangraha kala and Adhunik kala. Shaiva, Vaishnava, Boudha& Contemporary Toxicology.	4
Unit-2	Definition of Visha, properties of visha and its comparison with madya and oja, visha samprapti, visha prabhava, visha-vega, vegantara and visha karmukata (toxicodynamic and toxicokinetic study).	5
Unit-3	Descriptive and comparative study of Upavisha in union with Contemporary Toxicology.  Visha and Upavisha - Arka, Snuhi, Langali, Karaveera, Gunja, Ahiphena, Dhattura, Bhallataka, Vatsanabha, Kupeelu, Jayapala, Bang, Tobacco, Parthenium historiferous, Chitraka Eranda, Digitalis, Cerebra Odollum Danti, Dravanti etc.	15
Unit-4	Examination of poisons as per Contemporary and Ayurvedic Methods	5

Unit-5	<p>Detailed study of the following:</p> <p>Acids and Alkalis -Sulphuric acid, Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carbolic acid, Formic acid and alkalis etc.</p> <p>Asphyxiants - Carbon monoxide, Carbon dioxide, Hydrogen sulphide etc.</p> <p>Antihistamines, Cocaine Hallucinogens - LSD Sedatives and Hypnotics Barbiturates Petroleum - Kerosene Poisoning Organo phosphorus compounds -Aluminium phosphate, Zinc phosphide etc.</p> <p>i) Nonmetallic poisons - Phosphorous, iodine etc.</p> <p>ii) Metallic poisoning - Arsenic, Mercury, Lead, Copper, Zinc, Tin, Radiation metals etc.</p>	15
Unit-6	<p>Study of Jangama visha and their sources (Animal poisoning and Zoonotic Diseases). Descriptive study of snakes according to ancient and contemporary knowledge. Causes of snake bite and its types.</p> <p>Composition of snake venom and its pharmacological actions. Signs and symptoms of envenomation and its prognostic signs. Clinical features of Vrischika (scorpion), Luta (spider), Grihagodhika (Lizard), Mushaka (rats), Alarka (dogs), Makshika and Mashaka (mosquitoes) and their pathologic manifestations including their role in the manifestation of communicable diseases.</p> <p>I. Snakes (Ayurvedic aspect), Introduction to snakes, Ancient and Modern classification of snakes and Anatomy of snakes, skeleton, Fangs and teeth, Bite marks, poison glands. Identification of venomous snakes, King cobra, common cobra, Russel's viper, saw scaled viper, Banded krait, common krait, sea snake brief introduction, Difference between poisonous and non-poisonous snakes</p>	23

	ii. Descriptive study of Snakes according to Ancient & Contemporary knowledge: Anatomy, Physiology, Behavior, Habitat, Identification features common non-venomous snakes of India (Rat Snake, Trinket Snake, Vine Snake, Keel backs, Tree Snake, Common wolf Snake, Common Sand boa & Red Sand boa, Cat snake, etc).	
Unit-7	Shankaa visha and its management. Visha sankat & Visha kanya	2
PART-B		
Unit-8	Garavisha and Dushi visha, their varieties, signs, symptoms and management with contemporary relevance. Detailed study of Allergies including allergic manifestations in the eyes, nose, lungs and skin.	4
Unit-9	Detailed study of Madya visha and substances acting on the nervous system; substance abuse. (Diagnosis, Management and De-addiction).	8
Unit-10	Detailed study of the contemporary knowledge about vishajanya Janpadodhvansaniya roga (community health problems due to poisons - Environmental pollution, water pollution, soil pollution, air pollution, Industrial pollutions etc. their features and management according to ancient and recent concepts.	5
Unit-11	Concept of Virudha aahara, Aahara visha and Satmyasatmyata in contemporary and Ayurvedic views.  Conceptual study:- Drug interactions and incompatibility, Pharmacovigilance  Introductory knowledge to FSSAI standards	9
Unit-12	Knowledge of Keraleeya Visha Chikitsa – Texts – Prayoga Samucchaya & Visha Jyotsnika	5



**PAPER-2**  
**Visha Chikitsa Vigyan (Management Of Poisoning)**

100 Marks

100 Hours

**PART-A**

Sl. No	Topics	Hrs
Unit-1	Fundamental Principles for treatment of poisoning	16
Unit-2	General and specific treatment of different types of Sthavara visha.	30
Unit-3	General and specific treatment of different types of Jangama visha (animal poisons, insect poisons, snake bites and other zoonotic diseases).  Snakes (Ayurvedic aspect), Introduction to snakes, Ancient and Modern classification of snakes and Anatomy of snakes, skeleton, Fangs and teeth, Bite marks, poison glands. Identification of venomous snakes, King cobra, common cobra, Russel's saw scaled viper, Banded krait, common krait, sea snake brief introduction, difference between poisonous and non-poisonous snakes	15
Unit-4	Emergency medical management of poisoning including preparation, administration and complications of antivenoms/antisera.	6
Unit-5	Chaturvimsati upakrama (24 management procedures).	8
Unit-6	Management of Garavisha and Dushivisha. Treatment of Allergies including allergic Manifestations in the eyes, nose, lungs and skin.	2

**PART-B**

Unit-7	Diagnosis and Management of Drug Induced Toxicity	4
Unit-8	Management of the toxic manifestations caused by the contact poisons (paduka, vasthra, abharana, mukhalepa- vishabadha etc). Contemporary Significance of Contact poisoning.	4

Unit-9	Management of food poisoning.	3
Unit-10	Death due to poisoning, Duty of physician in poisoning, in cases of suspected poisoning. Post mortem findings in poisoning.  Extra -corporeal techniques (dialysis etc) for removal of poisons	12

### **PAPER 3**

#### **Vyavahara Ayurved Evam Vidhi Vaidyaka**

100 Marks

100 Hours

#### **PART-A**

Sl. No	Topics	Hrs
Unit -1	Definition of Vyavahara Ayurveda, its evolution in ancient and contemporary Periods	1
Unit -2	Personal identity and its medico-legal aspects.	8
Unit -3	Death and its medico-legal aspects (Medical Thanatology)	7
Unit -4	Asphyxial deaths and its medico-legal importance	8
Unit -5	Death due to starvation, heat and cold, lightening and electricity Suspended Animation	6
Unit -6	Medico-legal autopsy	6
Unit -7	Injuries due to explosions, chemical and nuclear warfare	2
Unit -8	Medico-legal aspects of injuries and wounds	5
Unit -9	Impotence and sterility-Its medico-legal aspects  Regulations of Artificial Insemination  Medico -legal aspects of surrogate motherhood	4

Unit -10	Sexual offences and perversions	2
Unit -11	Medico-legal aspects of virginity, pregnancy, delivery, abortion, infanticide and legitimacy with related acts	5

#### **PART- B**

Unit -12	Indian Penal Code, Criminal procedure code and study of related acts like Indian Evidence Act, Pre Natal Diagnostic Test Act, Nursing Home Act, Human Organ Transplantation Act, Drugs and Cosmetic Act 1940, Narcotic drugs and Psychotropic substances Act 1985, Pharmacy Act 1948, Drugs and Magical Remedies (Objectionable Advertisements) Act 1954, Medicinal and Toilet Preparations Act 1955 and Anatomy Act etc. Any related act enacted by the government from time to time	5
Unit -13	Courts and Legal procedures	4
Unit -14	Forensic Science Laboratory	6
Unit -15	Medico legal aspects of mental illness	8
Unit -16	Duties and privileges of physician	5
Unit -17	Structure of Central Council of Indian Medicine, its jurisdiction and functions  Code and Conducts as per the CCIM, Rules and Regulations there under	2
Unit -18	Respective State Council of Indian Medicine, its structure, power, voluntary duties	2
Unit -19	Doctor - patient relationship	2
Unit -20	Rights and privileges of patients; Euthanasia	1
Unit -21	Professional secrecy and privileged communication	3

Unit-22	Professional negligence and malpractice	2
Unit-23	Indemnity Insurance scheme	2
Unit-24	Consumer Protection Act related to medical practice	2
Unit-25	Ethics as in classics. Types of physicians and methods of identification, Pranabhisara and Rogabhisara Physicians, qualities of physician, responsibilities of Physicians, Chathurvedha vaidya vriti, duties of physicians towards patients, Vaidya sadvritam, Apuiya Vaidya who is accepting fees, relationship with femal	2

**PAPER 4**  
**Aushadha Yoga Vigyan**

100 Marks

100 Hours

**PART-A**

Sl. No	Topics	Hrs
Unit -1	Pharmaco-dynamics of different formulations used in Agadatantra	15
Unit -2	Study of pharmacology and usage of antidotes as per the Ayurvedic and contemporary science: Ingredients, ratio, method of preparation and therapeutic indication of Bilvadi Agada, Dushi visgari Agada, Ajit agada, Kalyanaka Gruta, Ajeya ghrita, Amruta Ghrita, Ksharagada, Dashnga agada, Maha agada, Aragwadadi Yoga, Sheerisha Beejadi Agada, Chandanadi Parisheka, Padmakadi Yoga, Charmavruksha Kashaya, Natadi Yoga, Drakshadi Agada, Karaveeradi Agada, Ekasaragana, Himavan Agada, Kakolyadi Yoga, Kovidaradi, Aragvadadi yoga Sheerisha bijaadi Agada, Kovidaradi yoga, Krishna Mrttikaadi yoga, Sanjeevan Agada, Ksheeradi sechana Yoga, Taarkhya Agada, Maha agada, Saarvakaamika Agada, Rishabha Agada, Panchshirisha Agada, Lodrasevyadi yoga, Shigrupunarnavadi Yoga,	10

Unit -3	Fundamentals of pharmaceuticals according to Ayurvedic and contemporary point of view-Study of the process of shodhana, Marana different types of sanskaras of minerals (parada, lohas, dhatu upadhatu and vegetable poisons)	25
Unit -4	Chemical, analytical, laboratory examination of poisons and suspicious substance	10

#### **PART-B**

Unit -5	Introduction of different instruments /equipments used in the examination of poisons	25
Unit -6	Introduction to Clinical toxicology	5
Unit -7	Introduction to Experimental toxicology-  Introduction to Experimental Toxicology with various Acute, Sub acute and Chronic toxicity models: Experimental animal models - 1. Hepato -curative & protective, 2. Nephro curative -protective models 3. Cardio protective 4. Teratogenicity models 5. Envenomation models	5
Unit -8	Introduction to Toxico - genomics	3
Unit -9	Survey and study of the traditional and folklore vishachikista sampradaya	2

#### **Practical**

- Adulteration detection Test: 05 Numbers
- Preparation of Agada Yogas: 05 Numbers
- Short Case: 05
- Long Case: 05
- Autopsy : 05
- Medico-Legal Cases: 05

#### **Practicals / Demonstration**

1. Identification of specimens models and equipments of toxicological and jurisprudence importance.
2. Practical training in postmortem examination (10 cases)

3. Regular clinical posting in Agada OPD and IPD
4. Medico-legal cases (20 cases)
5. Chemical Identification of various acids, alkalies, alcohols - Hydrochloric acid, Nitric acid, Sulphuric acid, Ascorbic acid, Sodium Hydroxide and Potassium Hydroxide
6. Detection of minerals Copper, Mercury, Lead, Arsenic and their compounds.
7. Physical and Chemical analysis of Datura, Karaveera, Vatsanabha, Jayapala, Arka and Bhallataka with Microscopy, powder microscopy, TLC, solvent extraction, detection of Phenol, tannins etc. (10 studies)
8. Detection of human blood, hair, semen and other biological secretions of Forensic importance:
9. Short Case: As per availability of Patients during posting hours
10. Long Case: As per availability of Patients during posting hours
11. Preparation of Herbarium of 15 stavara Visha and 10 Agadas
12. Preparation of Agada Yogas: 10
13. Clinical posting:
  - Modern Medical Hospital 2 weeks for emergency management of poisoning
  - Posting at autopsy center for 2 week
  - Court posting 1 week
  - Poison Detection Center
  - Inhouse interdepartmental Posting
  - Various Visha Chikitsa Centers
14. Adulteration detection Test: 14
15. Medico-Legal Cases Presentations
16. Instruments and Equipment's used in Toxicological Laboratory
17. Training in Blood-letting procedures  
 {As per MSR, at least one paper to be published/accepted in a peer reviewed journal. Regular clinical postings in the Agadatantra OPD / IPD. Modern medical hospitals - 2 weeks (For emergency management of poisoning)}

### Visits

1. Forensic Science Laboratory
2. Anti -snake venom serum manufacturing Unit (Optional).
3. Visit to snake park and Entomology departments

4. Pollution control Board
5. Central Jails
6. Visit to folklore practitioners
7. Visit to forest for Identification of Poisonous and Antidotal plants
8. CFTRI for Food processing and Safety measures.

### Reference Books

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Agnivesh	Charaka Samhita with Chakrapaani Commentary	RP-2011	Rashtriya Sansthan New Sanskrit Delhi
2.	Sushruta	Sushruta Samhita with Dalhana Commentary	1 <sup>st</sup> -2012	Choukhambha Surabharati
3.	Vruddha Vagbhata	Ashtanag Sangraha with Indu Commentary	RP-2000	Krishnadas Academy Varanasi
4.	Vagbhata	Ashtanga Hrudaya with Arunadatta & Hemadri Commentary	3 <sup>rd</sup> -2012	Choukhambha Sanskrit Series
5.	Huparikar S G	Textbook of Agadatantra	1 <sup>st</sup> -2008	Rashtriya Shikshana mandal Pune
6.	Narayan Reddy	Essential of forensic medicine	33 <sup>rd</sup> -2014	Jaypee Brothers
7.	J P Modi	Medical jurisprudence and toxicology 23rd Edition	24 <sup>th</sup> -2013	Lexis Nexis Butterworth
8.	Parikh	Textbook medical jurisprudence and toxicology	6 <sup>th</sup> -2012	CBS Publishers

9.	Bose S C	Handbook of medical jurisprudence and toxicology	2 <sup>nd</sup> -1995	Current Distributers
10.	Nishteshwar K	Agadatantra & vyvaharayurveda	1 <sup>st</sup> -2009	Choukhambha Surabharati
11.	Nageshkumar G Rao	Textbook of Forensic medicine and toxicology	2 <sup>nd</sup> -2010	Jaypee Brothers
12.	Shekar Namburi	Textbook of Agadatantra	1 <sup>st</sup> -2007	Choukhambha Sanskrit Series
13.	Prasad K D	Medicolegal postmortem in India	1 <sup>st</sup> -1984	Medical Publication
14.	M Balakrishnan Nair	Visha Chikitsa	1 <sup>st</sup> -2008	Choukhambha Sanskrit Series
15.	Nagesh Kumar G Rao	Practical of forensic medicine	3 <sup>rd</sup> -2007	Jaypee Brothers
16.	Ramesh Karmegam	First aid to forensic medicine	-	-
17.	Nagesh kumar G Rao	Practicle forensic medicine	3 <sup>rd</sup> -2007	Jaypee Brothers
18.	Krishnan V	Basic of DNA & Evidentiary Issues	1 <sup>st</sup> -2004	Jaypee Brothers
19.	Halen Whitwell	Forensic Neuropathology	1 <sup>st</sup> -2005	Hodder Stoughton
20.	Gautam Biswas	Color Atlas of Forensic Medicine & Toxicology\	-	-
21.	Govindiah D	Color Atlas of Forensic Medicine	2 <sup>nd</sup> -2009	Jaypee Brothers
22.	Pekka Saukko	Knight's Forensic pathology	3 <sup>rd</sup> -2004	CRC Press LLC Interpharma Govt Works USA
23.	Henry Torsey Fernald Mc Graw-Hill book company	Applied Entomology: an introductory text-book of insects in their relations to man	-	-
24.	Charles A. riplehorn, Norman F. Johnson, Donald Joyce Borror	Borror and DeLong's introduction to the	-	-



	7th Ed, illustrated Thompson Brooks/Cole	study of insects		
25.	Deben Delhay Herpetology Press 2009	The Encyclopedia of Snake Species	-	-
26.	Alfred John Wall General Books 2012	Indian Snake Pois- ons, Their Nature and Effects\	-	-
27.	Romulus Whitaker & Ashok Captain, Draco Books	Snakes of India – The field guide	-	-
28.	Casarett & Doull's Mc Grow Hill 2 <sup>nd</sup> Edition	Casarett & Doull's Essentials of Toxicology	2 <sup>nd</sup> -2010	McGraw hill Company
29.	Manohar V R 33 <sup>rd</sup> Edition	Ratanlal & Dhirajlal's The Indian Penal Code	33 <sup>rd</sup> -2012	Lexis Nexis Butterworth
30.	Manohar V R	Code of Criminal Procedure	20 <sup>th</sup> -2011	Lexis Nexis Butterworth
31.	Manohar V R	Law of Evidence	24 <sup>th</sup> -2011	Lexis Nexis Butterworth

## DRAVYAGUNA

Total Papers	: 04	Total Theory Marks	: 400(100 each)
Practical Marks	: 200	Duration	: 02 Years
Grand Total Marks	: 600		

PAPER 1- Namanurupa Vigyana (Ayurveda and Modern Pharmacognosy)	100 Marks	100 Hours
PAPER 2- Guna Karma Vigyana (Ayurveda and Modern Pharmacology)	100 Marks	100 Hours
PAPER 3- Prayoga Vigyana (Pharmacotherapeutics/ Clinical Pharmacology)	100 Marks	100 Hours
PAPER 4 - Nighantu & Yoga Vigyana (Materia Medica and Formulations)	100 Marks	100 Hours

### PAPER 1

#### Namanurupa Vigyana (Ayurveda and Modern Pharmacognosy)

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit-1	Importance of Namagyana of Dravya, origin of Namarupagyana of Aushadhi in Veda, etymological derivation of various names and synonyms of Aushadhi. Dravya and its classification, Introduction to Pharmacognosy- following methods of classification of crude drugs	5
Unit-2	Rupagyana in relation to Aushadhi. Sthula and Sukshma description (Macroscopic and Microscopic study) of different parts of the plant.	8
Unit-3	Synonyms of dravyas( aushadha and Ahara) mentioned in Vedic compendia, Brihatrayee, Bhavaprakasha and Rajanighantu.	12
Unit-4	Basonyms, synonyms and distinguish morphological characteristic features of medicinal plants listed in Ayurvedic Pharmacopoeia of India(API).	30
Unit-5	Knowledge of Anukta dravya (Extrapharmacopial drugs)with regards to namarupa.	3

Unit-6	Sandigdha dravya(Controversial drugs) vinischaya	5
Unit-7	Knowledge of biodiversity, endangered medicinal species	2
Unit-8	Knowledge of TKDL, Introduction to relevant portions of Drugs and cosmetic act, Magic remedies Act, Biodiversity Act etc., Intellectual Property Right (IPR) and Regulations pertaining to Import and Export of Ayurvedic drugs.	5
Unit-9	Knowledge of tissue culture techniques & its application to Ayurvedic drugs.	2
Unit-10	Knowledge of Genetically Modified Plants.	1
	Knowledge of advances in cultivations of medicinal plants.	1
	Good Agricultural Practices, Good Collection Practices etc.,	1
Unit-11	Pharmacognostical study of different parts of the plant with reference to Macroscopic and Microscopic study and Qualitative and Quantitative analysis like foreign matter, extractive (Water and alcohol), ash value, acid insoluble ash and TLC separation).	20
Unit-12	Methods of drug Standardization and Quality control	5

## PAPER-2

### Guna Karma Vigyana (Ayurveda and Modern Pharmacology)

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit1	Fundamental principles of drug action in Ayurveda and conventional medicine.	1
Unit-2	Detailed study of rasa-guna- virya- vipaka-prabhava and karma with their applied aspects and commentators (Chakrapanidatta, Dalhana, Arunadatta, Hemadri and Indu) views on them	15
Unit-3	Comprehensive study of karma as defined in Brihatrayee & Laghutrayee	15

	(duration of drug administration), Pathyapathya (Dos' /Donts' /Contraindications), complete Prescription writing (Samagra Vyavastha patraka).	
Unit-4	Amayika prayoga (therapeutic uses) of important plants ascribed in as well as Brihatrayee, Chakradutta, Yoga ratnakara and Bhavaprakasha.	55
Unit-5	Samyoga- Viruddh Sidhanta and its importance	2
Unit-6	Knowledge of Pharmaco-vigilance in Ayurveda and conventional system of medicine	2
Unit-7	Adverse drug reactions & Drug interaction of medicinal plants.	2
Unit-8	Knowledge of clinical pharmacology and clinical drug research as per GCP guide lines.  Clinical trial - stages of clinical drug, protocol designing, clinical Research & data management, Bioethics	10
Unit-9	Knowledge of Pharmacogenomics	2
Unit-10	Introduction of Pharmaco epidemiology/observational study, reverse pharmacology	2

### PAPER 3

#### Prayoga Vigyana (Pharmacotherapeutics/ Clinical Pharmacology)

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit-1	Bhaishjya Prayog Siddhant [Principles of drug administration] - Bhaishajya Marga (routes of drug administration), Vividha Kalpana (Dosage forms), Principles of Yoga Vijnan( compounding), Matra (Dosage), Anupana (Vehicle), Aushadha grahankal (Time of drug administration ), Sevankal avadhi	25

Unit-2	Detailed study Aushadha kalpana mentioned in Sharangadhara samhita and Ayurvedic Formulary of India (AFI).  Importance and principles of formulations as per Ayurveda.	50
Unit-3	General awareness on poshaka ahara (Nutraceuticals), Varnya (cosmoceuticals), food additives, Excipients etc.	5
Unit-4	Knowledge of plant extracts, colors, flavors and preservatives.	5
Unit-5	Review of important modern works on classical medicinal plants published by Govt of India, department of AYUSH, CSIR and ICMR.  Knowledge of recent literature of Dravyaguna.	3
Unit-6	Knowledge of Pharmacopies of India & different countries- e.g. API, BHP; Quality control procedures of formulations prescribed by Drug Regulatory Authorities; Good Manufacturing Practices (GMP)	5

#### **PAPER 4**

#### **Nighantu & Yoga Vigyana (Materia Medica and Formulations)**

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit-1	Etymology of Nighantu, their relevance, utility and salient features.	2
Unit-2	Chronological history of the following Nighantus with their authors name, period and content- Paryaya ratnamala, Dhanvantari nighantu, Hridayadipika nighantu, Ashtanga nighantu, Rajanighantu, Siddhamantra nighantu, Bhavaprakasha nighantu, Madanpala nighantu, Rajavallabha nighantu, Madhava Dravyaguna, Kaiyadeva nighantu, Shodhala nighantu, Saligram nighantu, Nighantu ratnakara, Nighantu adharsha and Priya nighantu	30
Unit-3	Detailed study of Guna and Karma of dravyas listed in API and Bhavaprakasha Nighantu along with current research review.	20

Unit-4	Detailed study of aharadravya/ ahara varga ascribed in Brihatrayee and various nighantus along with Kritanna varga.	5
Unit-5	Knowledge of guna and karma of anukta dravya	2
Unit-6	Studies on changes occurring in purification of poisonous plants drugs	2
Unit-7	Pharmacological principles and knowledge on drugs acting on various systems.	10
Unit-8	Basic knowledge on experimental pharmacology for the evaluation of -analgesic, anti pyretic, anti inflammatory, anti diabetic, anti hypertensive, hypo lipidemic, anti ulcer, cardio protective, hepatoprotective, diuretics, adaptogens, CNS activities.  Knowledge on evaluation of anti microbial and antimycotic activities.	15
Unit-9	Knowledge on Heavy metal analysis, pesticidal residue and aflatoxins.  Toxicological and safety Evaluation of Ayurvedic Drugs - Acute, sub-acute and chronic as well as specific toxicity studies.	3
Unit-10	Knowledge on procedures, Equipments and instruments used in pharmacological evaluation.	12

### Practical's

Sl. No	Contents
1	<b>Study tours:</b> Field identification of medicinal plants through at least three local Dravyaguna study tours within the state and one study tour out of state. Preparation of minimum 50 herbarium sheets, along with raw drug either from field, of plants be collected during study tours. Identification based on Floras.
2	<b>Evaluation of Crude drugs:</b> Macro and microscopic methods of examining five drugs of each of different useful parts of plants, including their

	powders.Collection, Preservation & Storage techniques of herbal drugs.
3	<b>Phytochemical evaluation of raw material:</b> Quantitative standards like foreign matter, extractive ( water and alcohol), ash value, acid insoluble ash and TLC separation of various parts of minimum two plants of Ayurvedic Pharmacopoeia of India.Other pharmacopoeial tests.
4	<b>Pharmacology:</b> Rasa nirdharana by Taste Threshold method of minimum one drug for each of rasas.  Observation of animal experimentation models (both in vitro and in vivo)- 05 models for possible rasadi gunas.
5	<b>Yoga vijnana :</b> Preparation of two yoga of each kalpana of Ayurvedic Formulary of India;
6	<b>Clinical :</b> Regular clinical training in the hospital for submission of Single Aushadhi Prayoga (Single drug trial/ Clinico-pharmacological studies.) - minimum of 6 months posting in different units of the hospital.  Survey for Amayika prayoga of aushadhi(Pharmaco epidemiology) for studying their role in clinical practice in contemporary period - observational study- minimum of 3 months posting in house or outhouse ( or folklore remedies)
7	<b>Dissertation :</b> A Dissertation, as per the approval of Departmental Research Committee/Competent Committee for the purpose, be prepared under the guidance of approved supervisor PG Final Year Syllabus-14  in Dravyaguna and submitted 6 months before the final examination. The approval of Dissertation shall be essential before appearing the final examinations.
8	<b>Method of practical training – Posting for minimum one month in each of the following units :</b> Quality control laboratory of nearest pharmacy/institution for crude drug identification, adulterants and substitutes & understanding standardization techniques – 6 months  Experimental pharmacology laboratory for developing skills in animal

	<p>experimentation – 2 monthsRegular clinical training in the Teaching hospital for studying Ekala Aushadhi Prayoga &amp; Adverse drug reactions(ADR) – 6 months</p> <p>Posting to GMP certified Ayurveda Pharmacy – for a minimum of 3 months. Posting to Vrikshayurveda – for a minimum of 1 month.</p>
9	Post Graduate Scholar is expected to present minimum two scientific papers in National / international seminars during the course of study
10	Post Graduate Scholar is expected to publish / get accepted at least one paper in indexed/ peer reviewed journal under the supervision of guide.

#### Reference Books

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Sayana Bhashya Sahitam	Rigvedasaya Aushadhi Suktam		
2.	Agnivesh	Charaka Samhita with Chakrapaani Commentary	1st Edition	Rashtriya Sanskrit Sansthan New Delhi
3.	Sushruta	Sushruta Samhita with Dalhana Commentary	1st Edition	Choukhambha Surabharati
4.	Vruddha Vagbhata	Ashtanag Sangra- ha with Indu Commentary	1st Edition	Krishnadas Academy Varanasi
5.	Vagbhata	Ashtanga Hrudaya with Arunadatta & Hemadri Commentary	1st Edition	Chaukhambha Sanskrit Series Office New Delhi
6.	Pt. Brahma Shankar Mishra and Dr. Indradev Tripathi	Yogaratanakar	1st Edition	Chaukhambha Sanskrit Series Office New Delhi



7.	pt. Gangadhar Shastri Gune	Aushadhagunadh- arma Shastra	1st Edition	Gune Bhandhu Prakashan
8.	Vishwanath Dwivedi	Vedon Main Dravyagunashastra	1st Edition	Vaidyanath Ayurveda Bhavan
9.	Vishwanath Dwivedi	Ayurved ki Aushadhiyan Aur Unka Vargikaran	1st Edition	Vaidyanath Ayurveda Bhavan
10.	Vishwanath Dwivedi	Aushadhi Vigyan Shastra	1st Edition	Vaidyanath Ayurveda Bhavan
11.	Vd. Roop Lal Vaishya	Abhinav Buti Darpan (Vol.1-2)	I vol-I & II	Chaukhambha Sanskrit Sansthan Varnasi
12.	Acharya Pt. Vishvanatha Dwidevi	Aushadna Vigyna Shastra	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
13.	Acharya V.J. Thakur	Ayurvediya Ausha- dnkarma vigyana	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
14.	Prof. Ramesh Bedi	Bedi Vanaspati Kosha	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
15.	Dr. Alakhnarayan Singh	Bhaishajyaguna Vigyana	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
16.	Shreekanthamurti	Bhav Prakash Nigantu (English)	5th Edition	Chaukhambha Sanskrit Series Office New Delhi
17.	With Vd. Krishna Chandra Chunekar commentary	Bhav Prakash Nighantu	4th Edition	Chaukhambha Sanskrit Series Office New Delhi
18.	Mahendra Kumar Shastri	Bhrinad dravyagunadarsha	1st Edition	Chaukhambha Sanskrit Series Office New Delhi

19.	Acharya Priyavrata Sharma	Classical Uses of Medicinal Plants	1st Edition	Chaukhambha Visvabharati
20.	Vd. G. Bapa Lal	Controversial Medicinal Plants	2nd Edition	Chaukhambha Sanskrit Sansthan Varnasi
21.	Vd. Shiv Kumar Vyas	Dalhana Ka Dravyaguna Shashtra Ke Kshetra Me Yogadana	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
22.	Acharya Priyavrata Sharma	Dravyaguna Kosha	2nd Edition	Chaukhambha Sanskrit Sansthan Varnasi
23.	Acharya Priyavrata Sharma	Dravyaguna Sutram	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
24.	Dr. Gyanendra Pandey	Dravyaguna Vigyana	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
25.	Acharya Yadavji Tikram Ji	Dravyaguna Vigyana(Vol. 1-2)	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
26.	Dr. V.M. Gogate	Dravyaguna Vijyana	1st Edition	Bharatiya Vaidya Bhavan Mumbai
27.	Acharya Priyavrata Sharma	Dravyaguna Vigyana (Vol. 1-5)	1st Edition	Chaukhambha Bharati Academy Varnasi
28.	Vaidya G.A. Phadake	Dravyaguna Shastrum	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
29.	Dr. A.P. Deshpande	Dravyaguna Vijyana	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
30.	Prof.D.S.Lucas	Dravyagunavijnana basic Principles	1st Edition	Chaukhambha Visvabharati Varnasi

31.	Dr. Prakash Pranjape	Forgotten Healers (Indian Medicinal Plants)	1st Edition	Chaukhamba Sanskrit Pratishthan Varnasi
32.	Thakur Balwant Singh & Vd. Bapalaal	Glossry of Vegetable Drugs in Bhratrayis	2nd Edition	Chaukhamba Amarbharti Prakashan Varnasi
33.	Acharya Priyavrata Sharma	Introduction to	1st Edition	Dravyaguna Chaukhamba Ori entalia Varnasi
34.	Acharya Pt. Vishvanath Dwidevi	Kriyatamka Aush -adi Parichaya	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
35.	Acharya Ghosh	Materia Medica	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
36.	Vd. Bapa Lal	Nighantu Adarsh (Vol. 1-2)	1st Edition	Chaukhamba Vidyabhavan Varnasi
37.	Goodman & Gillman	Pharmacological basis of Medical Practice	13th Edition	Macmillan Publishing Company
38.	Satoskar Bhandarkar & Ainapure	Pharmacology and Pharmacotherape- utics	17th Edition	Popular Prakashan Private Ltd
39.	Dr. Maya Ram Uniyal	Prayogatamaka Dravyaguna Vigyana	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi
40.	Acharya Priyavrata Sharma	Priya nighantu	1st Edition	Chaukhamba Surbharati Prakashan Varnasi
41.	Prof. Shivcharan Dhyani	Raspanchaka / Dravyaguna Siddhanta	1st Edition	Chaukhambha Sanskrit Sansthan Varnasi

42.	Dr. Gyanendra Pandey	System of Plant Nomenclature in Ayurveda	1st Edition	Chaukhambha Sanskrit Series Office Varnasi
43.	Trees & Valis	Text Book of Pharmacognosy	5th Edition	CBS Publications and Distributors
44.	Dr. K. Nishteswar	Textbook of Dravyaguna	1st Edition	Chaukhambha Surbharati Prakashan Varnasi
45.	Hakim Daljeet Singh	Unani Dravyaguna Vigyana	1st Edition	Ayurvedic Avam Tibbi Academy
46.		Ayurvedic Pharmacopoeia Of India	1st-2010	Govt of India (Ayush) New Delhi
47.		Indian Pharmacopoeia	7th-2014	Indian pharma Ghaziabad
48.		All the classical texts related to medicinal plants		
49.		All the scientific publications on medicinal plants		
50.		Journals on medicinal plants		
51.		Different Floras		

## **RASASHASTRA & BHAISHAJYAKALPANA**

### **PG part -2**

Total Papers	: 04	Total Theory Marks	: 400(100 each)
Practical Marks	: 200	Duration	: 02 Years
Grand Total Marks	: 600		

PAPER 1- RASASHASTRA	100 Hours
PAPER 2-BHAISHAJYA KALPANA	100 Hours
PAPER 3- RASACHIKITSA AND OUSHADHA YOGA VIGYANA	100 Hours
PAPER4-PHARMACY MANAGEMENT & PHARMACOLOGY	100 Hours

### **Paper I RASASHASTRA**

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit-1	History and Chronological evolution of Rasashastra, Concept of Raseshwaradarshan. Fundamental Principles of Rasashastra, Technical terminologies (Paribhasha) used in Rasa shastra.	5
Unit-2	Detailed knowledge of ancient and contemporary Yantropakarana and their accessories used in aushadhikaran and their contemporary modification such as yantras, mushas, putas, koshtis, bhrashtris, muffle furnaces and other heating appliances, ovens, driers etc. used in manufacturing of Rasaushadhis in small scale and large scale, along with their applications.	5
Unit-3	Study of Samskara, Role of Agni (Heat), Jala (Water) and other dravas (Liquids), Kala (Season), Patra (Container) etc. and their significance in Aushadhikarana	1
Unit-4	Concept of Bhavana, Study of Mardana and its significance and knowledge of ancient and contemporary grinding techniques	2
Unit-5	Detailed Knowledge of different procedures of Shodhana, Jarana, Murchana and Marana, Concept of Puta, definition, types and specifications of different Putas. Significance of different Putas in relation to Bhasmikanarana and therapeutic efficacy of dravya under process. Bhasmaparikshavidhi and its significance in relation to contemporary testing procedures. Amritikarana and Lohitikarana	10

Unit-6	Detailed knowledge of Satva and Druti, Satvashodhana, mrudukarana and Marana of Satva, its significance, in relation to therapeutic efficacy of dravya under process.	10
Unit-7	Concept of Pratinidhi (Substitute) dravya and discussion on controversial drugs.	2
	<b>Part-B</b>	
Unit-8	Detailed ancient and contemporary knowledge of Parada and its compounds with reference to source, occurrence, physico-chemical characterization, graahya- agraahyatva, Paradadosha, Paradagati, Paradashodhana, Study of Ashtasanskara, Ashtadashasanskara etc., HingulotthaParada. Concept of Paradajarana, murcchana, bandhana, pakshachheda and marana etc. Therapeutic properties and uses of Parada. Contemporary Mercurial preparations used in therapeutics.	10
Unit-9	Detailed ancient & contemporary knowledge with Geochemical / mineralogical / biological identification, source, occurrence, physico-chemical characterization, graahya- agraahyatva, Shodhana, Maranadividhi and therapeutic properties and uses of dravyas in addition to contemporary therapeutics included in Maharasa, Uparasa, Sadharana rasa, Dhātu, Upadhātu, Ratna, Uparatna, Visha, Upavisha, Sudhavarga, Lavanavarga, Ksharavarga, Sikatavarga and other miscellaneous drugs used in Rasashastra.	30
Unit-10	Detailed knowledge of manufacturing, pharmacopeial standards, storage, shelf life, therapeutic efficacy, dose, anupana, vikarashantiupaya and development of technology with Standard Operating Procedures of processing, standardization, quality control of following Bhasmas and Pishtis with research updates. <b>B h a s m a</b> - AbhrakaBhasma, Vaikrantabhasma, SvarnamakshikaBhasma, Kasisa Bhasma, SvarnaBhasma, RajataBhasma, TamraBhasma, LohaBhasma, MandurBhasma, Naga Bhasma, VangaBhasma, YashadBhasma, TrivangaBhasma, Pittala, Kamsya and VarthalohaBhasma, ShankhaBhasma, ShuktiBhasma, KapardikaBhasma, GodantiBhasma, PravalBhasma, MrigashringaBhasma, MayurpicchaBhasma, Muktabhasma, KukkutandtwakBhasma, HirakaBhasma, ManikyaBhasma. <b>Dravaka</b> –ShankhaDravaka <b>Pishti</b> - Pravalpishti, Manikyapishti, Muktapishti, Jaharamoharapishti, Trinakantamanipishti and Akikapishti etc.	10

Unit-11	Detailed knowledge of manufacturing, storage, shelf life, pharmacopeial standards, therapeutic efficacy, dose, anupana and development of technology with Standard \ Operating Procedures of processing, standardization and quality control of Kharaliya rasa, Parpatikalpa, Kupipakva rasa and Pottali rasa.	4
Unit-12	Study of classical texts with respective commentaries and special emphasis on Rasarnava, Rasahridayatantra, Rasa RatnaSamucchaya, RasendraChintamani, RasendraChudamani, Rasa Ratnakara, Rasadhyaya, Rasa Kamdhenu, Rasa Chandanshu, Anandkanda, Siddha BhesajaManimala, Ayurveda Prakash, Rasatarangini, BhaishajyaRatnavali, Rasamritam etc. and the books mentioned in the Schedule I of D & C Act - 1940. Relevant portions of Brihatrayi.	16

**Paper –II**  
**Bhaishajyakalpana**  
**Part – A**

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit-1	History and Chronological evolution of BhaishajyaKalpana, Concept of Bhesaja and Aushadha, fundamental principles of BhaishajyaKalpana. Technical terminologies (Paribhasha) used in BhaishajyaKalpana.	05
Unit-2	Classical and Contemporary (Good Collection Practice and Storage Practice as per WHO and NMPB guidelines), concepts of Collection, Storage, SaviryaAvadhi and Preservation methods of different fresh and dry Aushadhidravyas and their grahya- agraahyatva.	05
Unit-3	Administration, Aushadhamatra (Posology), Anupana, Sahapana, AushadhaSevana Kala, SevanaKalaAvadhi, Pathya, Apathya. Detailed knowledge of routes of drug.	05
Unit-4	Detailed knowledge of manufacturing, standardization, quality control, pharmacopeial standards, storage, shelf life and development of innovative technology with Standard manufacturing Operating Procedures of following dosage forms,  Panchavidha Kashayakalpana, Churna, Rasakriya, Ghana,Avaleha, Pramathya, Mantha, Panaka, Sarkara, Kshirapaka,Ushnodaka, Aushadha Siddha Udaka,Shadangodaka, Tandulodaka, Laksharasa,Arka, Satva, Kshara, Lavana, Masi, Gutika, Vatika, Modaka, Guggulu and Varti etc.	10



Unit-5	SnehaKalpana: Concept of Acchasneha and Snehapravicharana and Murchhana, Snehapaka, types of Snehapaka and Sneha siddhi lakshana, Avartana. Snehakalpakarmukata (Pharmacokinetics and dynamics of snehakalpa). Role of Sneha in relation to absorption of drug.	10
Unit-6	Kritanna and Bheshaja Siddha Anna Kalpana, Aharopayogivarga, concept of medicinal and functional food, dietary supplements and nutraceuticals etc.	5
Unit-7	Sandhanakalpana: Madyavarga and Shuktavarga. Asava yoni. Alcoholic and acidic fermentation. Sandhanakalpakarmukata (Pharmacokinetics and dynamics) Advancements in fermentation technology. Knowledge of regulations in relation to alcoholic drug preparations.	7
Unit-8	Bahyaprayogarthakalpana: Lepa, Upanaha, Udvartan, Utsadana, Avachurana/Avadhulana, Abhyanga, Dhupana and Malahara.	3
<b>Part-B</b>		
	All the following procedures are to be studied in relevance to Ayurvedic Bhaishajya Kalpas.	
Unit-9	Methods of Expression and Extraction: Maceration, percolation, distillation, infusion and decoction.	4
Unit-10	<b>Liquids:</b> Clarified liquid, syrup, elixir, filtration techniques	5
Unit-11	<b>Solid dosage Forms: Powders:</b> Size reduction, separation techniques, particle size determination, principles of mixing. <b>Tablets:</b> Methods of tableting, suppositories, pessaries and capsules, sustained release dosage forms.	10
Unit-12	<b>Semisolid dosage forms,</b> emulsions, suspensions, creams and ointments, sterilization of ophthalmic preparations.	8
Unit-13	An introduction to various cosmetic preparations.	6
Unit-14	Drying, open and closed air drying, freeze drying, vacuum drying and other drying methods pharmaceutical excipients.	7
Unit-15	Study of classical texts with special emphasis on Chakradatta, Sharangadhara Samhita, Bhaishajya Ratnavali, Bhava Prakasha, Yogaratnakara, relevant portions of Brihatrayi, Ayurvedic Pharmacopeia of India, Ayurvedic Formulary of India.	10



**Paper –III**  
**Rasachikitsa and Oushadha Yoga Vigyana**  
**Part –A**

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit-1	<p>Rasachikitsa, Kshetrikaran, Rasajirna, Lohajirna, Aushadhi Sevana Vikarashanti Upaya. Ashuddha, Apakva, Avidhi Rasadravya Sevanajanya Vikara evam Vikara shanti upaya. (Management and knowledge of untoward effects of inappropriately processed and administered drugs).</p> <p>Detailed knowledge of Aushadhi patha Nischiti and Sanyojan (Formulation design and composition), Dose, Anupana and Method of administration, therapeutic efficacy and uses (indications and contra-indications), probable mode of action etc. of the following Aushadhi yogas.</p>	5
Unit-2	<p><b>Kharaliya Rasa :</b> Shwasa kuthara Rasa, Tribhuvana kirti Rasa, Hinguleshwara Rasa, Ananda bhairava Rasa, Maha Lakshmilasa Rasa, Vasanta kusumakara Rasa, Vasanta malati Rasa, Brihat vata chintamani Rasa, Laghu suta shekhar Rasa, Suta shekhara Rasa, Ram bana Rasa, Chandra kala Rasa, Yogendra Rasa, Hridyarnava rasa, Grahani kapata Rasa, Garbha pala Rasa, Jalodarari Rasa, Mrityunjaya Rasa, Madhumalini vasanta Rasa, Arsha kuthara Rasa, Krimi mudgara Rasa, Suchika bharana Rasa, Tri netra Rasa, Smruti sagara Rasa, Vata gajankusha Rasa, Agni kumar Rasa, Ekangavira Rasa, Kama dugha Rasa, Purna chandrodaya Rasa, Pratap lankeshwara Rasa, Maha vata vidhwansaka Rasa, Kasturi bhairava Rasa, Ashwa kanchuki Rasa, Gulma kuthara Rasa, Maha jwarankusha Rasa, Chandra mrita Rasa, Kapha ketu Rasa, Prabhakara Vati, Praval Panchamrita, Gandhaka Rasayana, Chaturbhuj rasa, Navajivan rasa, Shonitargal rasa, Raktapitta kulakandan rasa, Amavatari Rasa, Kravyada Rasa, Garbha chintamani Rasa, Chintamani Rasa, Trilokya chintamani Rasa, Pradarantaka Rasa, Vangeshwara Rasa, Brihat vangeshwara Rasa, Shwasakasa Chintamani Rasa, Arogya vardhini Vati, Chandra prabha Vati, Agni tundi vati, Shankha Vati.</p>	20
Unit-3	<p><b>ii. Kupipakva Rasa:</b> Rasa Sindura, Makaradhwaja, Sidha makaradhwaja, Samira pannaga, Swarnavanga, Swarnarajvangeshvar, Malla sindura, Tala sindura, Rasa karpura, Rasa pushpa, Manikya Rasa.</p>	5
Unit-4	<p><b>iii. Parpati Rasa :</b> Rasa Parpati, Loha Parpati, Tamra Parpati, Suwarna Parpati, Gagana Parpati, Vijay Parpati, Panchamrit Parpati.</p>	5

	Shwet Parpati, Bola Parpati, Sudha parpati.	
Unit-5	<b>Pottali Rasa:</b> Rasagarbha pottali, Hemagarbha pottali, Mallagarbha pottali, Hiranyagarbha pottali, Shankagarbha pottali, Lokanatha rasa, Mriganka Pottali.	5
Unit-6	<b>Loha evam Mandura Kalpa:</b> Ayaskriti, Loha Rasayana, Amla pittantaka loha, Chandanadi loha, Dhatri loha, Navayasa loha, Putapakva vishama jwarantaka loha, Shilajatwadi loha, Tapyadi loha, Saptamrita loha, Amritasara Loha, Shankaramat loha, Pradarantaka loha, Rohitaka loha: Punarnava Mandura, Shatavari Mandura, Triphala Mandura, Mandura Vataka, Tara Mandura etc.	10
	<b>Part-B</b>	
Unit-7	<p>Detailed knowledge of Aushadhi patha Nischiti and sanyojan (Formulation designing and composition), dose, anupana and method of administration, therapeutic efficacy and uses (indications and contra-indications), probable mode of action etc. of the following Aushadhi yogas.</p> <p><b>Panchavidha Kashayas and their Upakalpa:</b> Ardraka swarasa, Tulasi swarasa, Vasa putapaka, Nimba kalka, Rasona kalka, Kulattha Kwatha, Punarnavasthaka kwatha, Rasna saptaka kwatha, Dhanyaka hima, Dhanyakadi hima, Sarivadi hima, Panchakola phanta, Tandulodaka, Mustadi pramathya, Kharjuradi mantha, Shadanga paniya, Laksha rasa, Arjuna kshirapaka, Rasona kshirapaka, Chinchapanaka, Chandana panaka, Banapsha sharkara, Nimbu sharkara, Amrita satva, Ardraka satva, Haridra satva, Ajamoda arka, Yavanyadi arka.</p>	5
Unit-8	<b>Kritanna and Bhesaja Siddha Ahara Kalpana:</b> Yavagu, (Krita and Akrita), Manda, Ashtaguna manda, Laja manda, Peya, Vilepi, Krishara, Yusha, Mudga yusha, Kulattha yusha, Saptamushtika yusha, Khada, Kambalika, Raga, Shadava, Mamsarasa, Veshavara, Dugdha Vikara - Piyush, Kilata, Kshirashka, Hyaiyangavina, Morata, Santanika, Dadhi and Dadhi Vikara, Katvar Dadhi, Dadhi Mastu, Takra, Ghola, Udasvita, Mathita, Chhacchika etc.	5
Unit-9	<b>Churna:</b> Sitopaladi Churna, Talisadi Churna, Triphala Churna, Hingvashtaka Churna, Avipattikara Churna, Swadishta Virechana Churna, Bhaskar Lavana Churna, Sudarshana Churna, Maha Sudarshana Churna, Gandharva Haritaki Churna, Pushyanuga Churna, Ajamodadi Churna, Hingvadi Churna, Eladi Churna, Dadimashtaka	5

	Churna, Trikatu Churna, Vaishwanara Churna, Gangadhara Churna, Jati phaladi Churna, Narayana Churna etc.	
Unit-10	<b>Gutika:</b> Arogya vardhani vati, Chandra prabha vati, Chitrakadi Gutika, Sanjivani Vati, Lasunadi vati, Lavangadi Vati, Vyoshadi vati, Khadiradi Vati, Kankayana Vati, Abhayadi modaka, Marichyadi gutika, Amalakyadi gutika, Samshamini Vati, Kutaja Ghana vati, Amarasundari Vati, Shiva Gutika, Eladi Vati, Kasturyadi Gutika, Arshoghni Vati, Bilvadi gutika, Dashangadi gulika, Dooshivishari agada.	5
Unit-11	<b>Guggulu:</b> Yogaraja Guggulu, Maha yogaraja Guggulu, Trayodashanga Guggulu, Kanchanara Guggulu, Rasnadi Guggulu, Triphala Guggulu, Simhanada Guggulu, Gokshuradi Guggulu, Kaishora Guggulu, Panchatikta Guggulu, Amritadi Guggulu, Vatari Guggulu, Lakshadi Guggulu, Abha Guggulu, Navaka Guggulu, Nava Karshika Guggulu, Panchatikta ghrita guggulu.	5
Unit-12	<b>Sneha Kalpa</b> <b>Sneha Moorchhana</b> - Ghrita Moorchhana, Taila Moorchhana <b>Siddha Ghrita</b> - Shatavari Ghrita, Jatyadi Ghrita, Phala Ghrita, Dadimadi Ghrita, Kshirashatpala Ghrita, Triphala Ghrita, Mahatriphala Ghrita, Dhanvantari Ghrita, Amritaprasha Ghrita, Kalyanaka Ghrita, Brahmi Ghrita, Changeri Ghrita, Panchatikta Ghrita, Sukumara Ghrita, Panchagavya Ghrita, Tangashree ghrita, Hingvadi ghrita, Samvardhana ghrita. <b>Siddha Taila</b> - Maha Narayana Taila, Maha Masha Taila, Bala Taila, Nirgundi Taila, Shadbindu Taila, Vishagarbha Taila, Sahacharadi Taila, Jatyadi Taila, Apamarga Kshara Taila, Tuvarka Taila, Kshirabala Taila (Avartita), Lakshadi Taila, Anu Taila, Kumkumadi Taila, Hingutriguna Taila, Kottumchukadi Taila, Prasariyadi Taila, Dhanwantari Taila, Balashwagandhadi Taila, Balaguduchyadi Taila, Nilibhringyadi Taila, BrihadSaindhavadi Taila, Irimedadi Taila, Chandanadi- Taila, Panchaguna taila, Arka taila, Pinda Taila, Kasisadya Taila, Nalpamaradi taila, Kutaja suryapaki taila, Gandharva hastadi taila.	10
Unit-13	<b>Rasakriya, Avaleha, Khanda etc.:</b> Darvi Rasakriya, Vasa Avaleha, Brahma rasayana, Chyavanprasha Avaleha, Kushmanda Avaleha, Dadima Avaleha, Bilvadi Avaleha, Kantakaryavaleha, Haridra Khanda, Narikela khanda, Saubhagya shunthi paka, Amrita Bhallataka, Kamsa Haritaki, Chitraka Haritaki, Vyaghri Haritaki, Bahushala Guda, Kalyana Guda, Trivritta avaleha.	5

Unit-14	<b>viii. Sandhana Kalpa:</b> Lodhrasava, Kumaryasava, Ushirasava, Chandanasava, Kanakasava, Sarivadyasava, Pippalyasava, Lohasava, Vasakasava, Kutajarishta, Draksharishta, Raktamitrarka, Dashamularishta, Abhayarishta, Amritarishta, Ashokarishta, Sarasvatarishta, Arjunarishta, Khadirarishta, Ashwagandha Arishta, Vidangarishta, Takrarishta, Drakshasava, Mahadrakshasava, Mritasanjivani sura, Maireya, Varuni, Sidhu, Kanji, Dhanyamla, Madhu Shukta, Pindasava.	5
Unit-15	<b>ix. Anya Kalpa :</b> Phala varti, Chandrodaya varti, Arka lavana, Narikela lavana, Triphala masi, Apamarga kshara, Snuli kshara, Ksharasutra, Atasi upanaha, Sarjarasa malahara, Gandhaka malahara, Sindhuradi Malahara, Shatadhouta Ghrita, Sahasra Dhouta Ghrita, Siktha taila, Dashanga lepa, Doshaghna lepa, Bhallataka taila patana, Jyotishmati Taila, Bakuchi Taila, Dashanga dhupa, Arshoghna dhupa, Nishadi Netra bindu, Madhutailika Basti, Piccha Basti, Yapana Basti.	5

**Paper –IV**

**PHARMACY MANAGEMENT AND PHARMACOLOGY**

100 Marks

**Part –A**

100 Hours

Sl. No	Contents	Hrs
Unit-1	General Pharmacology: a) Principles of Pharmacology, Pharmacodynamics & Pharmacokinetics: Absorption, distribution, Metabolism & excretion, mechanism of action, dose determination and dose response, structure activity relationship. b) Routes of drug administration. c) Factors modifying drug effect, Bioavailability and Bioequivalence, drug interactions, adverse drug reaction and drug toxicity. d) Preclinical evaluation: experimental pharmacology [bioassay, in vitro, in vivo, cell line studies] animal ethics. e) Introduction to Bioinformatics & Network pharmacology.	30
Unit-2	Clinical pharmacology: Evaluation of New Chemical Entity – phases and methods of clinical research. Ethics involved in human research.	5
Unit-3	Elemental constituents of human body and its physiological importance. Deficiencies and excess of various elements (micro-nutrients).	5
Unit-4	Toxicity of heavy metals and chelation therapy.	5
Unit-5	Knowledge of toxicity and pharmacological activities of herbo-mineral compounds.	3

Unit-6	Detailed Knowledge of Pharmacovigilance – National and International Scenario. Pharmacovigilance of Ayurvedic Drugs.	2
<b>Part-B</b>		
Unit -7	Scope and evolution of pharmacy. Information resources in pharmacy and pharmaceutical Science.	5
Unit -8	Pharmaceutical dosage form design (Pre-formulation).	5
Unit -9	Packaging materials and Labeling.	3
Unit-10	Management of pharmacy, store and inventory management, personnel management, Good Manufacturing Practices related to Ayurvedic drug industry.	2
Unit-11	Pharmaceutical Marketing, product release and withdrawals.	5
Unit-12	Hospital, Dispensing and Community pharmacy.	3
Unit-13	Patenting and Intellectual Property Rights.	2
Unit-14	<p>Laws Governing Ayurvedic drugs</p> <ul style="list-style-type: none"> <li>• Relevant regulatory provisions of Ayurvedic drugs in Drug and Cosmetics Act - 1940 and Rules - 1945</li> <li>• Laws pertaining to Drugs and Magic remedies (Objectionable Advertisement) Act – 1954</li> <li>• Prevention of Food Adulteration (PFA) act.</li> <li>• Food Standards and Safety Act – 2006</li> <li>• Laws pertaining to Narcotics</li> <li>• Factory and Pharmacy Acts</li> <li>• Consumer Protection Act -1986</li> </ul> <p>Good clinical Practices and Inspection Manual prescribed by Dept of AYUSH, Govt of India.</p> <p>Regulatory Affairs related to International Trade and Practices of Ayurvedic Drugs.</p>	20
Unit-15	Introduction to Ayurvedic Pharmacopeia of India, Ayurvedic Formulary of India, Pharmacopeia Codex, Indian Pharmacopeia and United States Pharmacopeia, British Pharmacopeia, Introduction to Traditional Knowledge Digital Library.	5

**Reference Books**

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Daulatram Rasashastrī	Rasahridaya Tantra	03	Chaukhambha Publishers
2.	Indradev Tripathi	Rasarnava	04	Chaukhambha Sanskrit Series Office
3.	A D Satpute	Rasaratna Sarnuccahaya	01	Chaukhambha Sanskrit Pratishthan
4.	Gulraj Sharma Mishra	Ayurved Prakasha	02	Chaukhambha Bharati Academy
5.	Siddhinandan Mishra	Rasendrachuda- mani	02	Chaukhambha Orientalia
6.	Siddhinandan Mishra	Rasendra Chintamani	02	Chaukhambha Orientalia
7.	Kashinath Shastri	Rasatarangini	11	Motilal Banarasidas
8.	Siddhinandan Mishra	Rasapraksha Sudhakar	03	Chaukhambha Orientalia
9.	Damodhar Joshi	Rasamrita	02	Chaukhambha Sanskrit Bhavan
10.	Dr. Jnanendra Pandey	Rasa Chandanshu	01	Publisher: Chowkhamba Krishnadas Academy.
11.	Parashar	Sharangadhara Samhita	03	Baidyanath Ayurveda Bhavan
12.	(BP Pandey)	Sharangadhara Darpan	02	Chaukhambha Orientalia



13.	Bhavashankar Mishra	Bhavaprakasha Pt I,II	11	Chaukhambha Sanskrit Sansthan
14.	Lakshmipati Shastri	Yoga Ratnakara	05	Chaukhambha Sanskrit Sansthan
15.	Rajeshwardatta Shastri	Bhaishajya Ratnavali	16	Chaukhambha Sanskrit Sansthan
16.		Siddha Bhaishajya Manimala		
17.	Gopinath Gupta	Bharat Bhaishajya Ratnakara	1	Motilal Banarasidas
18.	Harriprapanna	Rasayoga Sagara Pt I,II	01	Krishnadas Academy
19.	Bhatta Krishnaram.	Siddha Bhaishajya Manimala Vaishwanarahin- dicommentary	02	Bhatta R Kaladhara (edi.). Varanasi: Krishnadas Academy; 1999
20.	K Nishteshwar	Sahasrayoga	2	Chaukhambha Sanskrit Series Office
21.	Yadavaji Trikamji Acharya	Siddha Yoga Sangraha - Hindi comentry	01	Chaukhambha Sanskrit Series Office
22.	Govindasena	Vaidyaka Paribh- asha Pradeepa	1	Chaukhambha Sanskrit Bhavan
23.	Puranik and Dhamanakar	AyurvediyaAusha- dhikarana		Dhoodapape- shwar Prakashan
24.	Yadavji Trikamji	Dravyaguna Vijnan Part - 1 and 2 -	4	Baidyanath Ayurveda Bhavan

25.	Jagdishwar Prasad tripathi	Chakradatta - Ratnaprabha, Relevant Parts from Charaka Samhita, Sushruta Samhita, Kashyapa Samhita, Ashtanga Sangraha, Ashtanga Hridaya,	5	Chaukhambha Sanskrit Series Office
26.	Joseph.P.Ramington,A lfonso R Gennaro	Remington: Science and Practice of Pharmacy	21	Lippincott Williams & Williams publications
27.	Leon Lachman	Theory and Practice of Industrial Pharmacy	02	CBS Publications and Distributors
28.	KD Tripathi	Clinical Pharmacology,	06	Jaypee Brothers
29.	D.R Lawrence & P.N Benette	Clinical Pharmacology	01	Published April 28th 1997 by Churchill Livingstone
30.	HG Vogel	Drug Discovery and Evaluation (Pharmacological assays	03	Springer reference
31.	Goodman and Gilman	Pharmacological Basis of therapeutics -	13	Publisher: McGraw-Hill
32.	PC Sharma,MBYelne, T J Dennis	Data Base of Medicinal Plants of CCRAS	7th	CCRAS Dept of AYUSH GoI New Delhi
33.		Quality and Standards of Medicinal Plants		- ICMR publication
34.	Dr. Devendra Joshi . Dr. Geeta Joshi	Quality Control of Ayurvedic Drugs		Choukamba Orintalia, Varanashi



35.	API COMMITTEE	Ayurvedic Pharmacopeia of India	01-07	Dept of Indian System of Medicine & Homoeopathy
36.	CCRAS	Ayurvedic Formulary of India	01	Dept of Indian System of Medicine & Homoeopathy
37.	IP Committee	Indian Pharmacopeia	01(2018)	Health and Family welfare GoI
38.	BP Committee	British Pharmacopeia	A-J, K-Z (2018)	BP Committee
39.	USP Committee	United States Pharmacopeia		US Health and Human services
40.	BM Journal	Pharmacopeia Codex		<a href="http://www.bmj.com/content/2/4895/1044.2">www.bmj.com/content/2/4895/1044.2</a>
41.	Vijay Malik	Current Good Manufacturing Practices	01	Health and Family welfare GoI <a href="http://www.fda.gov/downloads/">http://www.fda.gov/downloads/</a>
42.	Vijay Malik	Drugs and Cosmetic Act 1940 and Rules 1945 with latest amendments	19	Eastern Book Company Delhi
43.	Vijay Malik	Drugs and Magic remedies (Objectionable advertisement) Act-1954	2018	Eastern Book Company Delhi
44.	Ministry of Health	Prevention of Food Adulteration (PFA) act	2018	PRINTED IN INPIA BY THB MANAGER,, GOVERNMENT 01' INDIA

				PRESS, FABID- ABAD AND PUBLISHED BY THE MANAGER OF PUBLICATIO- NS, DELHI, 1692
45.	Gol	Laws pertaining to Narcotics		Drug Policy of India
46.	Gol	Factory and Pharmacy Acts	2018	Ministry of Human Resoueces and Management Govt of India, New Delhi
47.	Vishwanath N	Consumer Protec- tion Act -1986		21st Century Publications
48.		Brief information on the peer review- ed journals, official websites and other official search engines along with their links (related with the subject)		
49.	C. D. Gribble	Rutleys Elements of Mineralogy	23	Publisher London, T. Murby & co. Collection cdl; americana. Digitizing sponsor MSN. Contributor University of California Libraries. Language English. Call number

				nrlf_ucb: GLAD- ...
50.	Harisharananand	Bhasma Vigyaniyam	01	Ayurvedic Vijnana Granthamal Karyalaya
51.	Sharananand	Kupipakva Vigyaniyam	02	Baidyanath Ayurveda Bhawan Ltd
52.	Dr. Swaminath Mishra	Anupana Tarangini	01	Choukhamba publications

## PANCHAKARMA

Total Papers	: 04	Total Theory Marks	: 400(100 each)
Practical Marks	: 200	Duration	: 02 Years
Grand Total Marks	: 600		

PAPER 1- Purva Karma-Snehana And Svedana	100 Marks	100 Hours
PAPER-2 -Vamana And Virechana Karma	100 Marks	100 Hours
PAPER 3- Basti Karma And Nasya Karma	100 Marks	100 Hours
PAPER 4 -Raktamokshana & Physiotherapy	100 Marks	100 Hours

### PAPER 1 Snehana And Svedana PART-A

100 Marks

100 Hours

Sl. No	Topics	
	<b>Introduction</b>	<b>Hrs</b>
Unit-1	Detail knowledge of Shadupakram and relation of Shodhan. Importance of Pachana prior to Snehana, methods, drugs, duration and dose for Pachana, samyak Lakshana of Pachana	2
Unit-2	Usefulness of shodhana according to the seasons General precautions (Pariharya vishaya) during Panchakarma. Relevance of Panchakarma in present era, Specifications of Panchakarma theater and necessary equipments Ashta varja bhavas	8
	<b>Snehana</b>	
Unit-3	General considerations about Snehana, Classifications of Sneha, Sneha-Yoni, detailed knowledge of four types main Sneha- Ghrita, Taila, Vasa and Majja with their characteristics, importance and utility, various aspects of Uttama Sneha. Properties of Snehana Dravya and their interpretation, effects of Snehana	8
Unit-4	Sneha Kalpana, various types of Sneha Paka with their utility Indications and contraindications of Snehana Classification of Snehana: Bahya and Abhyantara Snehana Bahya Snehana and Bahir-Parimarjana, utility and importance of Bahya Snehana	8

Unit-5	Classification of Bahya Snehana Methods, indications, contraindications, specific utility of the following- Abhyanga, Mardana, unmardana, Padaghata, Samvahana, Udvartana/Utsadana, Udgharshana, Avagaha, Pariseka, Lepa, Pralepa, upanaha etc various types of lepa having cosmetic values along with the drugs and methods; Ayurveda face pack; lepa for cosmetic problems such as tilakalak, neelika, nyaccha, mukha dushika etc with drugs and methods. Gandusha, Kavala; Karna and Nasa Purana, Akshi Tarpana; Murdhni Taila; Shiro-abhyanga, Shirodhara, Shiro Pichu and Shiro Basti, Shiro Lepa (Talapotichil), Talam and Takradhara etc	9
Unit-6	Knowledge of digestion and metabolism of fat: absorption of fatty substances through skin; types of skin like dry, moist etc and their Ayurvedic management Karmukata of Abhyantara and Bahya Snehana Knowledge of different contemporary massage techniques Abhyantara Snehana: Definition of Brimhanartha, Shamanartha and Shodhanartha, method and utility of Brimhanartha and shamanartha Snehana; difference between Shamanartha and Shodhanartha Snehana.	9
Unit-7	Methods of Abhyantara Snehana Shodhanartha Snehana: Acchapana and Vicharana, Utility and various methods of Sadyasnehana, Avapidaka Snehana Matra of Sneha : Hrasiyasi, Hrasva, Madhyama and Uttama Matra with their indications, specific utility of Ghrita, taila, Vasa and majja; Anupana of Sneha along with justification and their role in the drug action Need and method of Rukshana before performing Snehana in specific conditions and Samyak Rukshana Lakshan Shodhananga Snehana Vidhi and methods of fixation of dose Diet and Pathya during Snehana Observation of sneha Jiryamana, Ama and Ajirna Lakshana Samyak, Asnigdha and Atisnigdha Lakshana of Snehana Sneha vyapat and their management Pariharya vishaya and Parihara Kala	6

#### **PART-B**

#### **Swedana**

Sl. No		Hrs
Unit-8	Etymology and definition of Swedana, General considerations about Swedana Properties of Swedana and Swedopaga Dravya Indications and contraindications of Swedana, Various Classifications of Sweda and Swedana, Detailed knowledge of four types of Sweda of	10

	Sushruta with their utility, Hina, Mridu, Madhy and Mahan Sweda; Ekanga and Sarvanga sweda with their utility Utility and method of each of 13 types of Saagni and 10 types of Niragni Sweda	
Unit-9	<p>Shodhananga and Samshamaniya Sveda</p> <p>Methods to protect the vital organs (varjya anga) during Swedana Procedure</p> <p>Detailed Knowledge about Utility of below mentioned Swedana procedures: Patrapinda Sweda, Shashtika Shalipinda Sweda, Churna Pinda Sweda, Jambira Pinda Sweda, Dhanya Pinda Sweda, Kukkutanda Sweda, Anna lepa, Valuka Sweda, Ishtika Sweda, Nadi Sweda, Bashpa Sweda, Kshira bashpa Sweda, Avagaha Sweda, Parisheka Sweda, Pizichil, Dhanyamla Dhara, Kashaya Dhara, Kshira Dhara and Upanaha Sweda etc</p>	12
Unit-10	<p>Avasthanusari Swedana in various disorders</p> <p>Samyak, Ayoga and Atiyoga Lakshana, Sweda Vyapat-and their management</p> <p>Diet and regimens during and after Swedana</p> <p>Karmukata of Swedana; kleda and sweda; pathophysiology of sweat and sebum; fat metabolism and skin and its appendages; secretory and excretory function of skin; skin as sparshanendriya; various types of nerve endings in skin; effects of stimulation by touch, friction pressure and temperature etc</p>	12
Unit-11	<p>Current sudation modalities like Sauna bath, Steam Bath, Infrared, etc. along with their effects and mode of action, role of snehana and svedana in promotion of skin health</p> <p>Swedana with Kati Basti, Janu Basti and Griva Basti etc along with karmukata</p> <p>Study of Snehana and Svedana related portions in classics with commentaries</p> <p>Clinical Examination of the musculoskeletal system, Excretion of Urine, Feaces, Saliva, Management of burns, wounds and shock</p> <p>Various heat therapies, Mechanism of swedana Swedana in various disease conditions Investigation of the musculoskeletal diseases. Principles of drug action Stimulation, Irritation.</p>	16

**PAPER-2**  
**Vamana and Virechana Karma**

100 Marks

100 Hours

**PART-A**

Sl. No	Topics	Hrs
Unit-1	<p>Etimology, definition and general considerations of vamana Properties of Vamaka and Vamanopaga drug, Knowledge and utility of important Vamaka drugs and their preparations (Vamana Yoga) Avasthanusara Vamana and its utility, Indications of Vamana, Contraindications of Vamana with reasons Pachana prior to Snehan Detailed knowledge and method of preparation of patient with Snehana Abhyanga and Svedana as Purvakarma of Vamana. Diet and management.</p> <p>Need of increasing of Kapha for proper Vamana, Kapha increasing diet Preparation and management of Patients on the morning of Vamana Administration of food articles prior to Vamana</p>	10
Unit-2	<p>Selection of Drug and time of administration; Anupana, Sahapana, dose and method of administration of Vamana and Vamanopaga preparations</p> <p>Method of Vamana Karma, waiting period for Sva-Vamana Vega and manipulation in its absence</p> <p>Observations prior to beginning of Vamana such as sweat on forehead, horripilation, fullness of stomach and nausea along with its phramaco-dynamics</p> <p>Observation; and assistance to the patient during Vamana Vega and Upavega of Vamana and its counting, observations and preservation of vomitus matter and its weighing</p>	12
Unit-3	<p>Samyak, Ayoga and Atiyoga of Vamana</p> <p>Laingiki, Vaigiki, Manaki and Antiki Shuddhi</p> <p>Hina, Madhya and Pravara Shuddhi and Samsarjana Krama accordingly</p> <p>Detail knowledge of methods of Samsarjana Krama and its importance</p> <p>Kavala and Dhumapana after vamana</p> <p>Management of Ayoga, Atiyoga and Vyapat of Vamana with Ayurveda and modern drugs</p> <p>Parihara Vishaya and Kala for Vamana</p>	12
Unit-4	<p>Vamana Karmukata with Pharmaco-dynamics of Vamana</p> <p>Study of Vamana related portions in classics with commentaries</p> <p>Recent advances of researches on the effect of Vamana</p>	16

	<p>Scope of research in vamana</p> <p>Role of Vamana in promotion of health, prevention and treatment of diseases</p> <p>Mechanism of vomiting, Management of blood vomiting</p> <p>Vamana in various diseases</p>	
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### PART-B

Sl. No	Topics	Hrs
Unit-5	<p>Etymology, definition and general considerations of Virechana. Importance of Vamana and Virechana as shodhana. Virechana better than Vamana Necessity of Vamana prior to Virechana Preparation of patients for Virechana after Vamana, Preparation of patients directly for Virechana</p> <p>Properties of main Virechaka and Virechanopaga drugs, Classifications of Virechana drugs with definition, example and utility of each type</p> <p>Indications of virechana Karma Contraindications of Virechana with reasons Utility of Virechana for the specific conditions and stages of the diseases Internal Snehana for Virechana with diet Management of 3 gap days and importance of low Kapha for proper Virechana</p>	15
Unit-6	<p>Abhyanga and Svedana as Purvakarma of Virechana</p> <p>Preparation and Management of Patients on the morning of Virechana</p> <p>Reason for performing Virechana on empty stomach</p> <p>Selection of virechana Drug and time of administration; Anupana, sahapana and method of administration of Virechana and Virechanopaga preparations</p> <p>Method of performing of Virechana Karma</p>	15
Unit-7	<p>Observations during Virechana, Vega and Upavega of Virechana and its counting, observations and preservation of faeces and its weighing</p> <p>Samyak, Ayoga and Atiyoga of Virechana</p> <p>Laingiki, Vaigiki, Manaki and Antiki Shuddhi of Virechana. Hina, Madhya and Pravara Shuddhi and Samsarjana Karma accordingly</p> <p>Management of Giddiness &amp; Unconsciousness ,Management of Electrolyte imbalance</p> <p>Management of rectal bleeding. Management of acute pain abdomen</p>	20



**PAPER- 3**  
**Basti Karma and Nasya Karma**  
**PART-A**

100 Marks

100 Hours

Sl. No	Topics	Hrs
Unit-1	Etymology, definition and general considerations of Basti. Importance of Basti in Kayachikitsa and other branches of Ayurveda, Classifications of Basti and Basti drugs Drugs useful in Basti, Indications of Basti, its role at the various stages of diseases, Contraindications of Basti with reasons Discriptions of Basti yantras, Basti Netra and Basti Putak and their doshas	6
Unit-2	Modified Basti Yantra, Their Merits and demerits, Dose schedules of niruha and anuvasana basti, Indication & Contraindication of Uttara basti, Detailed knowledge of administration of uttara basti in to mutrashaya & Garbhashaya, Basti Karmukata, Asthapana basti, Anuvasana basti, Uttar basti i. Intra vesical ii. Intra Uterine Absorption in Gut, Hypoglycemia	10
Unit-3	Niruha Basti: Etymology, synonyms, definition and classifications and subclassifications of niruha Basti, and detailed knowledge of each type of Niruha Basti along with indications and contradictions and benefits Contents of various types of Niruha Basti, their proportions , methods of missing basti Drvya, Niruha Basti and its relations with other Shodan therapies: Relations of niruha vasti with anuvasana vasti	10
Unit-4	Purvakarma for Niruha basti:Pathya before, during and after Niruha Basti; all the aspects of administration of various Niruha Basti. Method of Preparations of Various Niruha Basti. Method of Preparations of Verious Niruha Vasti Dravya; Rationale behind use of various ingredients, sequential mixing and position of patient	10
Unit-5	Observation during and after Niruha Basti Basti pratyagamana, Samyakyoga, Ayoga and Atiyoga Lakshana and various Vyapat of Niruha Basti and their management according to Ayurveda and modern systems of medicine. Management during and after Niruha Basti	6
Unit-6	Anuvasana Basti; Etymology, Synonyms, definition and classifications of Anuvasana Basti and detailed knowledge of each	8

	Anuvasana Basti along with indications and contradictions and benefits, various types of Ghrita and Taila useful Anuvasana Basti: Anuvasana Basti with Vasa and Majja along with their merits and demerits, Relations of Virechana, Shodhana, Niruha Basti, Snehana with Anuvasana Basti Purvakarma for Anuvasana Basti: Pathya before, during and after Anuvasana Basti; all the aspects of administration of Anuvasana Basti including Kala	
Unit-7	Observations during and after Anuvasana Basti Anuvasana Basti Pratyagamana, Samyakyoga, Ayoga and Atiyoga Lakshana and Various Vyapat of Anuvasana Basti and their management Management during and after Anuvasana Basti Pariharya vishaya, Pathya and pariharakala for Anuvasana basti, Various combined basti schedules such as Karma, Kala, yoga Basti etc	8
Unit-8	Detailed knowledge of sneha basti and Matra Basti Detailed Knowledge of different basti formulations like Piccha Basti, Kshira Basti, Yapana Basti, Madhutailika Basti, Erandamuladi Niruha Basti, Panchaprasrutika Basti, Kshara Basti, Vaitarana Basti, Krimighna Basti, Lekhana Basti, Vrishya Basti, Manjishtadi Niruha Basti, Dashamula Basti, Ardhamatrika Basti, Sarva rogahara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti and Kaphaghna Basti etc, and their practical utility	6
Unit-9	Karmukata of Basti. Applied anatomy and physiology of colon, Pharmacodynamics of Basti, Concept of 'Gut Brain' and its relevance to Basti, Therapy, Study of relevant portions of Basti in classics with commentaries Recent advances of researches on the effect of Basti Scope of research in Basti, Role of Basti in promotion of health, prevention and treatment of diseases	6

**PART- B**  
**Uttara Basti and Nasya Karma**

Sl. No	Topics	Hrs
Unit-10	Definition and Classification of Uttara Basti, its Netra and Putaka. Dose of Uttara Basti, Sneha and Kashaya Basti. Different Uttara Basti Kalpanas in various diseases Detailed knowledge of Purvakarma and Administration of uttara Basti in male and female; precautions, aseptic measures, complications and thier management, Karmukata of uttara Basti. Applied anatomy and physiology of urethra and related female genitalia, Pharmacodynamics of uttara Basti	10

Unit-11	<p><b>Nasya Karma;</b> Etymology, Synonyms, importance and definition of Nasya, Nasya drugs according to various samhita, Classification and sub-classifications of Nasya with detailed knowledge of each type</p> <p>Indications and contraindications of each type of nasya with reasons</p> <p>Drugs useful for Nasya with dose and methods of Preparations and their dose Nasya Kala and Pathya before, during and after Nasya, Durations of different Nasyas, Puruvakarma of each type of Nasyas, Detailed knowledge of administration of each type of Nasya with management during and after Nasya</p>	10
Unit-12	<p>Detailed knowledge of common Nasya formulations such as Shadbindu Taila, Anu Taila, Kshirabala Taila, Karpasastyadi Taila, Bramhi Ghrita etc</p> <p>Samyak Yoga, Ayoga and Atiyoga of each types of Nasya, its Vyapat and their management Pashchat Karma; Role of Dhumapana, Kavala after Nasya</p> <p>Diet and Pathya before, during and after Nasya Karma Pariharya vishaya, Parihara Kala, Nasya Karmukata, Applied anatomy and physiology related to Nasa hi Shiraso Dvaram, blood and nerve supply to nose, Shringataka marma, olfactory nerve and centers, aroma therapy, trans nasal administration of drug, recent advances in nasal drug deliver, Study of relevant portion in classics with commentaries, Recent advances of researches on the effect of Nasya</p> <p>Scope of research in Nasya, Role of Nasya in promotion of health, prevention and treatment of diseases Anatomy &amp; Physiology of Nasal &amp; Oral cavity. Introduction, Etymology, definition &amp; Importance of Nasya karma Administration of Navana, Marsha, Pratimarsha, Avapeedaka, Dhumapana &amp; Dhooma Nasya</p>	10

## PAPER- 4

### PART-A

### Raktamokshana & Physiotherapy

100 Marks

100 Hours

Sl. No	Topics	Hrs
Unit-1	<p>Definition, importance, classifications and detailed knowledge of each type of Raktamokshana with their methods of performance, General principles, indications, contraindications of Raktamokshana Detailed knowledge of Jalaukavacharana: Indications and contraindications of Jalaukavacharana, various types of Jalauka with their beneficial and harmful effects</p>	10

Unit-2	Purvakarma and method of Jalaukavacharana, observations and Pathya before during and after Jalaukavacharana. Management during and after Jalaukavacharana, Symptoms of Samyak, Ayoga , Atiyoga and Vyapat of Raktamokshana and their management with Ayurveda and Modern medicines Pariharya vishaya and Parihara kala Karmukata of different types of Raktamokshana	10
	<b>Clinical Physical Medicine/ Physiotherapy</b>	
Unit-3	Definition and terminology of clinical physical medicine Biomechanics of human movements; Physiology of exercise Treatment modalities used in Physical Medicine- general properties and detailed clinical use of each A)Heat - general physiological properties and mode of action as a treatment agent, Forms of heat therapy - superficial and deep heating. General knowledge of Infrared Paraffin Wax bath, short wave diathermy, electro magnetic therapy ultra sound therapy, convection heating devices B) Cold as a therapeutic agent C) Prescription of physical modalities and their applications in medicine	15
Unit-4	Clinical use of massage, manipulation, stretching Principles of occupational therapy, training in activities of daily living for rehabilitation self-help devices (walking aids, wheelchairs, tricycles & modified vehicles), instrumental activities of daily living Physiotherapy exercises for Paralytical disorders, cervical spondylosis, frozen shoulder and slip disc Knowledge of emergency management in complications, such as water & Electrolyte imbalance. Hypo-volumic shock, Assessment and treatment of OA,RA,CS,LBA Basic knowledge of Physiotherapy Instruments	10

**Part -B : Disease-Wise Panchakarma**

Sl. No	Topics	Hrs
Unit-5	Role of Panchakarma in different Stages of the diseases mentioned in Ayurveda particularly in following: "Jvara, Raktapitta, Madhumeha, Kushtha, Shvitra, Unmada, Apasmara, Shotha Plihodara, Yakridalyodara, jalodara,, Arsha, Grahani, Kasa,Tamaka Shwasa, Vatarakta, Vatavyadhi, Amlapitta, Parinama Shula, Ardhavabhedaka, Ananta Vata,, Amavata Sheetapitta, Shleepada, Mutrakruchhra, Mutrashmari, Mutraghata, Hrudroga, Pinasa Drushtimandya, Pandu, Kamala, Sthaulya, Krimi, Madatyaya, Moorccha, Padadari, Mukhadushika, Khalitya, Palitya etc	30

Unit-6	Use of Various Panchakarma procedures in the following disorders - Migraine, Parkinson's Disease, trigeminal neuralgia, Bell's palsy, cerebral palsy, Muscular dystrophy, hemiplegia, paraplegia, Lumbar Disc disorders, Spondylolisthesis, Ankylosing spondylosis, Carpel Tunnel Syndrome, Calcaneal Spur, Plantar fascitis, GB syndrome, Alzhiemer's disease, Irritable Bowel Syndrome, ulcerative colitis, psoriasis, hypothyroidism, hyperthyroidism, hypertension, allergic rhinitis, Eczema, diabetes mellitus, Chronic obstructive pulmonary Disease, Insomnia, Rheumatoid Arthritis, Gout, Osteoarthritis, multiple sclerosis, SLE, male & female infertility, cirrhosis of liver, Jaundice, General Anxiety Disorders	25
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### Reference Books

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Bhela	Bhela Samhita	1st-2009	Choukhambha Surabharati
2.	Kashyapa Kashyapa	Kashyapa Samhita	1st-2008	Choukhambha Sanskrit
3.	Bhavamishra	Bhavaprakasha of Bhavamishra	1st-2006	Choukhambha Orientalia
4.	Sharangadhara	Sharangadhara Samhita	1st-2010	Choukhambha Surabharati
5.	Vangasen	Vangasen	1st-2009	Choukhambha Sanskrit
6.		Gadanigraha	3rd-1999	Choukhambha Sanskrit
7.	Dr Mukundilal Dwivedi Dr Haridas Shreedhar	Ayurvediya Panch- karma Kasture chikitsa Panchka- rma Vigyan Illustrated	1st-2008	Choukhambha Sanskrit
8.	Dr. G Srinivasa Acharya	Panchkarma	RP-2009	Choukhambha

## SHALYATANTRA

Total Papers	: 04	Total Theory Marks	: 400(100 each)
Practical Marks	: 200	Duration	: 02 Years
Grand Total Marks	: 600		

PAPER 1: Shalya Siddhanta – Fundamentals of Surgery	100 Marks	100 Hours
PAPER 2: Vishishta Shalya Vigyan (Shalyatantra Specialty)	100 Marks	100 Hours
PAPER 3: Adhunik Shalya Karma (Modern Surgery)	100 Marks	100 Hours
PAPER 4: Shalya Vangmaya- Shalya Literature, Research and Development	100 Marks	100 Hours

### PAPER 1

#### Shalya Siddhanta – Fundamentals of Surgery

100 Marks

100 Hours

#### PART-A

Sl. No	Topics	Hrs
Unit-1	<ol style="list-style-type: none"> <li>1. Dosha, Dhatu and Mala Vigyan and their importance in surgical diseases</li> <li>2. Scope of Shalya Tantra and its importance.</li> <li>3. Contributions of Sushruta and Ashwinikumar for modern surgery</li> <li>4. Descriptions of Dosha, Dhatu, Mala Vigyan and Shatkriyakala in surgical disease manifestation.</li> <li>5. Significance and importance of Rakta as the fourth Dosha.</li> </ol>	10
Unit-2	Yantras and Shastras – Ancient and Recent.	4
Unit-3	<ol style="list-style-type: none"> <li>1. Trividha Karma – Purva, Pradhana and Pashchat Karma. Importance of Trividhakarma.</li> <li>2. Purva karma: Preoperative procedure and guidelines – Preparation of a Patient, Doctor, O.T. Instruments and its Importance, pre surgical assessments, well informed consent taking, counseling a patient at each level in the hospital till discharge, case recording system, discharge summary and referral writing methods.</li> <li>3. Assessment of fitness for anaesthesia and surgery.</li> </ol>	14



	<ul style="list-style-type: none"> <li>i. Tests of respiratory, cardiac and renal function.</li> <li>ii. Management of associated medical conditions, eg: diabetes; respiratory disease</li> <li>iii. Cardiovascular disease; malnutrition; anaemia; steroid, anticoagulant,</li> <li>iv. Immunosuppressant and other drug therapy.</li> </ul> <p>Pradhana Karma: Operative procedures and guidelines  Pashchat Karma: Postoperative procedure and guidelines</p> <ul style="list-style-type: none"> <li>1) Post-operative complications –Prevention, Monitoring, Recognition and Management.</li> <li>2) Ventilatory support - Indications</li> <li>3) Post-operative Sequelae -Pain control.</li> <li>4) Immune response to trauma, infections and tissue transplantation.</li> <li>5) Pathophysiology of the body's response to trauma.</li> </ul>	
Unit-4	<ul style="list-style-type: none"> <li>1. Surgical infections – Principles of Asepsis and Antisepsis. Sepsis, Tetanus, Hepatitis, HIV-AIDS, Gangrene, Chlamydial, nosocomial.etc.</li> <li>2. Surgical sepsis and its prevention. Aseptic techniques.</li> <li>3. Care of patients suffering from Hepatitis, HIV-AIDS, STD and other associated infectious diseases.</li> <li>4. Surgery in the immuno-compromised patient</li> <li>5. Pathophysiology of the body's response to infection.</li> <li>6. The sources of surgical infection - prevention and control.</li> <li>7. Surgically important micro-organisms.</li> <li>8. Skin preparation.</li> <li>9. Knowledge of Antibiotics, Analgesics, Anti-inflammatory and Emergency drugs in surgical practice.</li> <li>10. Nirjantukarana – Sterilization – various Methods for surgical equipments, endoscopies, linen, fumigation methods of surgical equipment's, Types and O.T.</li> <li>11. Guidelines of NABH for aseptic measures</li> </ul>	22

### PART-B

Sl. No	Topics	Hrs
Unit-5	Ashtavidha Shastra Karma – Critical knowledge and their application in surgical practice.	6

Unit-6	<ol style="list-style-type: none"> <li>1. Sadyovrana management- Seevanadi Chikitsa upakarma</li> <li>2. Suturing materials. appropriate use of sutures, drains, prosthetic, grafts and surgical implants.</li> <li>3. Concept of Bandana – Bandaging techniques</li> </ol>	7
Unit-7	<ol style="list-style-type: none"> <li>1. Concept of Marma in Shalya Tantra and their clinical application.</li> <li>2. Marmaghata lakshanani and chikitsa.</li> <li>3. Concept of shock - Its varieties and management</li> </ol>	4
Unit-8	<ol style="list-style-type: none"> <li>1. Raktasrava – Types, clinical features and management.</li> <li>2. Concept of Raktastambhana – Haemostasis.</li> <li>3. Blood Transfusion – blood groups, components, compatibility, Indication, contraindications and complications with management.</li> <li>4. CVP, blood products, Acute adrenal insufficiency, Hyperbaric oxygen and Bleeding disorders</li> </ol>	4
Unit-9	<ol style="list-style-type: none"> <li>1. Vranasopha- Inflammation, Vidradhi- Abscess</li> <li>2. Granthi-Cyst and Arbuda – benign and malignant neoplasm – concept of oncogenesis and genetics of cancer</li> <li>3. Gulma and Udararoga</li> </ol>	6
Unit-10	Kshudra Roga – Classification and their critical approach for management of actinomycosis, syphilis, leprosy and Madura foot diseases.	4
Unit-11	<p>Fluid, electrolyte, Acid Base Balance and Nutrition</p> <ol style="list-style-type: none"> <li>1. Introduction to physiology of fluids and electrolytes</li> <li>2. Dehydration and over hydration,</li> <li>3. Specific electrolyte losses and symptomatology and management of Acidosis, Alkalosis and Acid base balance.</li> <li>4. Electrolyte changes are specific surgical conditions and their management.</li> <li>5. Plasma volume expanders and their use in surgical conditions.</li> <li>6. Various replacement fluids in surgery, mode of administration and complications.</li> <li>7. Nutrition – indications, types, mode of administration and complications.</li> <li>8. Nutrition – pre-operative, post-operative and intravenous</li> </ol>	15



**PAPER-2**  
**Vishishta Shalya Vigyan (Shalyatantra Speciality)**

100 Marks

100 Hours

**PART-A**

Sl. No	Topics	Hrs
Unit-1	<ol style="list-style-type: none"> <li>1. Yogyavidhi - Practical and Experimental training</li> <li>2. Practice of surgical procedures on different models.</li> <li>3. Training of laparoscopic and endoscopic procedures</li> <li>4. Vishikhanupravesha – Guidelines and Deliberations for a medical profession, hands on training of ward procedures like catheterization naso gastric intubation, venesection, FNAC, dressing wound care, etc.</li> <li>5. Description of Yogya mentioned in texts.</li> <li>6. Specific knowledge of surgical procedures in different diseases.</li> </ol>	10
Unit-2	<ol style="list-style-type: none"> <li>1. Vrana – Wound management</li> <li>2. Management of NijaVrana, AgantujaVrana, DushtaVrana and Nadi Vrana. Infection of hands and foot.</li> <li>3. Vrana Chikitsa – Pathya-apathya and Shashti Upakramas</li> <li>4. Types and management of Dagdha Vrana - Burn and scalds.</li> <li>5. Infection of hands and foot, Diabetic wound, Prameha pidaka- Diabetic carbuncle and its management.</li> <li>6. Management of Pressure ulcers, venous ulcers and other chronic non healing ulcers</li> <li>7. Gangrene and its management.</li> </ol>	10
Unit-3	<ol style="list-style-type: none"> <li>1. Mutra Roga – Urological diseases.</li> <li>2. Applied Anatomy and physiology of urogenital system.</li> <li>3. Investigations of mutravaha srotas - urinary tract</li> <li>4. Etiopathogenesis and surgical procedures of ashmari-urinary stone disease</li> <li>5. Kidney and ureter – Clinical presentation, investigations and management of - congenital anomalies, Trauma, Infection, Neoplasm, Hydronephrosis and Hydroureter</li> <li>6. Renal failure – causes, diagnosis and management.</li> </ol>	30

**PART-B**

Sl. No	Topics	Hrs
Unit-4	Urinary bladder - Urethra	10

	<ol style="list-style-type: none"> <li>1. Urinary bladder - Clinical presentation, investigations and management of - congenital anomalies, Trauma, Infection, Neoplasia, Diverticulum, atony, schistosomiasis</li> <li>2. Urethra- Clinical presentation, investigations and management of - congenital anomalies- Hypospadias, epispadias, posterior urethral valve, Trauma, Infection and Neoplasm.</li> </ol>	10
Unit-5	Prostate and seminal vesicles – <ol style="list-style-type: none"> <li>1. Benign and malignant enlargement of prostate, prostatitis, prostatic abscess and calculi.</li> <li>2. Penis- clinical presentation, investigations and management of - congenital anomalies- Trauma, Infection, phimosis, paraphimosis, Peyronie's disease and neoplasm.</li> </ol>	10
Unit-6	Testis and scrotum <ol style="list-style-type: none"> <li>1. Clinical presentation, investigations and management of - congenital anomalies, ectopic testis, Trauma, Infection, Neoplasia, testicular torsion, hydrocele, varicocele, spermatocele, chylocele, pyocele, haematocele, epididymal cyst, Fourniers' gangrene</li> <li>2. Urinary diversions – indications, types and techniques.</li> <li>3. Retention of urine – Mutraghata, Mutrakrichra – Aetiology, diagnosis investigation and management.</li> <li>4. Saraktamutra- hematuria, aetiology, diagnosis, investigation and management.</li> </ol>	20
Unit-7	Asthiroga and Marma Chikitsa – Orthopaedics. <ol style="list-style-type: none"> <li>1. Anatomy and physiology of Bone.</li> <li>2. Diseases of Asthi/Bone and Sandhi/ Joints – congenital, degenerative, infective, metabolic and neoplastic disorders of bones and joints.</li> <li>3. Aetiopathogenesis, treatment along with surgical procedures of Bhagna - fracture, Sandimoksha - dislocation and bone grafting.</li> <li>4. Diseases of Spine, vertebral column and spinal cord.</li> </ol>	10

### PAPER 3

#### Adhunika Shalyakarma - (Modern Surgery)

100 Marks

#### PART-A

100 Hours

Sl. No	Topics	Hrs
Unit-1	1. Applied Basic Sciences include applied anatomy, physiology,	10

	<p>biochemistry, microbiology and pathology.</p> <p>2. Fundamentals of modern surgery and treatment of surgical disorders including surgical anatomy, physiology and pathology.</p>	
Unit-2	<p>1. Diagnosis and Surgical treatment of head and spine injury, thoracic trauma, and abdominal trauma.</p> <p>2. Blast injuries and management</p>	5
Unit-3	<p>Diagnosis and Surgical management of neck disorders e.g. salivary glands, thyroid, thyroglossal cyst and fistula, branchial cyst and fistula, cystic hygroma, Lymphadenopathies etc</p>	6
Unit-4	<p>Diagnosis and Surgical management of breast diseases – benign and malignant breast tumours</p>	5
Unit-5	<p>Diagnosis and surgical measures of diseases of Gastrointestinal system-</p> <p>1. Oral cavity- Oral ulcers, oral cancer, precancerous conditions, sub mucosal fibrosis, leukoplakia, Cleft lip and cleft palate, lip tumors, mucosal cyst, Nasopharyngeal cancer.</p> <p>Tongue ulcers and cancers.</p> <p>2. Oesophagus- esophageal varices, dysphagia, neoplasia, strictures, gastro esophageal reflex</p> <p>3. Stomach and duodenum –Congenital anomalies, injuries, inflammation, ulcer, neoplasm, pyloric stenosis, acute dilatation, Hiatus hernia, Foreign bodies, Hematemesis.</p> <p>4. Pancreas - Congenital anomalies, acute and chronic pancreatitis, calculi neoplasia, cysts of pancreas.</p> <p>5. Peritoneum, omentum, mesentery, retroperitoneal space – peritonitis, abscess, neoplasia, mesenteric cyst, torsion of mesentery, vascular thrombosis, retroperitoneal cyst .fibrosis.</p> <p>6. Small intestine - Congenital anomalies, inflammation, ulcer, neoplasia, stenosis, injuries, Foreign bodies, diverticuli, peutz-jegher syndrome, chrons diseases, carcinoid tumours. Enteric perforation, intestinal fistula.</p> <p>7. Large intestine - Congenital anomalies, inflammation, ulcer, neoplasia, stenosis, injuries, foreign bodies, diverticuli, faecal fistula, amoebic ulcer, Familial polyposis.</p> <p>8. Caecum vermiform appendix- appendicitis, appendicular abscess, appendicular mass perforation, carcinoid tumor and other neoplasm.</p> <p>9. Gastrointestinal bleeding – hematemesis, melena, haemobelia, bleeding per anum - causes, diagnosis and management.</p>	24

	10. Abdominal mass- diagnosis and management. 11. Rectum and anal canal - Diagnosis and surgical management of Congenital anomalies, inflammation, ulcer, neoplasia, stenosis, prolapse, hemorrhoids, fistula, fissure, anorectal abscess, incontinence, injuries, Foreign bodies, sacro coccygeal teratomas, pilonidal sinus.	
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## **PART- B**

Sl. No	Topics	Hrs
Unit-6	1. Umbilicus and abdominal wall – Congenital anomaly, umbilical infection, sinus, neoplasm. 2. Abdominal dehiscence, Divarication of recti, Desmoid tumour, Melaney's gangrene.	10
Unit-7	Diagnosis and surgical measures of diseases of Hepatobiliary system - liver, gall bladder, bile ducts and spleen and portal hypertension 1. Liver – abscess, Cyst- hydrated cyst, primary and secondary malignant tumors, Budd-chirai syndrome. 2. Gall bladder and bile duct - Congenital anomalies, acute and chronic cholecystitis, cholelithiasis, neoplasia, cholangitis, stenosis, choledocholithiasis, choledochal cyst, cholangio carcinoma and injuries. 3. Spleen - Splenomegaly, splenic injury.	10
Unit-8	Diagnosis and surgical measures for disorders of vein, artery, ligaments, joints and muscles.	8
Unit-9	Diagnosis and surgical management of Hernias – Inguinal, femoral, umbilical, incisional, abdominal wall and other hernias.	6
Unit-10	1. Endoscopic procedures –Oesophago - Gastroduodenoscopy, Sigmoidoscopy, Colonoscopy, ERCP etc. 2. Diagnostic and therapeutic laparoscopy.	10
Unit-11	Anaesthesia - Definition, Types, anaesthetic agents, indications, contraindications, procedures, complications and management	6

#### **PAPER 4**

### **Shalya Vangmaya – Shalya Literature, Research and Development**

100 Marks

100 Hours

#### **PART-A**

SL No	Topics	Hrs
Unit-1	1. Critical study of Sushruta Samhita along with the commentary 2. Relevant portions of Shalya literature, Research and Development and also modern texts and journals related to advance modalities. 3. Thorough study of the text including portions related to surgical aspects.	20
Unit-2	1. Knowledge and importance of Surgical audit 2. Outcome of Surgery 3. The evaluation of surgery and general topics. 4. Decision-making in surgery 5. Clinical audit	20
Unit-3	1. Medico legal issues - Understanding the implications of acts of omission and commission in practice. 2. Issues regarding Consumer Protection Act, medical profession, national health policy 3. Implications in a medico-legal case like accidents, assaults etc.	10

#### **PART-B**

Sl. No	Topics	Hrs
Unit-4	Surgical ethics including Informed consent.	3
Unit-5	Knowledge of different type of experimental surgical model for research in surgery	2
Unit-6	1. Sandhana Karma – Plastic reconstructive and cosmetic surgery. Fundamentals of Sandhana Karma. 2. Karna Sandhana – Earplasty 3. Nasa Sandhana – Rhinoplasty 4. Osta sandhana – Cheiloplasty 5. Grafts, flaps- Techniques and applications 6. Vascular anastomosis and grafting.	20
Unit-7	Anushalya Karma – Parasurgical procedures Kshara Karma, Kshara Sutra, Agnikarma and Raktamokshana	12
Unit-8	1. Principles of ICU 2. Indications for admission	13

	3. Organization and staffing 4. Scoring 5. Costs 6. Problems in Intensive Care 7. Sepsis, predisposing factors, organisms causing septicemia Localized sepsis, pneumonia, lung abscess, bronchiectasis, empyema, Mediastinitis. 8. Complications of thoracic operations.	
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### Pattern of practical examination

100 Marks

Sl.No	Practical	Marks	Total Marks
1.	Long case/ Long Practical as the case may be	20 marks	10 marks
2.	Short case/ Short Practical as the case may be	10 marks	
3.	Medical Procedure/ Lab Analysis	10 marks	
4.	Identification of Specimen/ Radiograph and Instruments	20 marks	
5.	Thesis presentation	20 marks	
6.	Viva- voce	20 marks	

## PRACTICALS

### Paper - 1

### SHALYA SIDDHANTA - FUNDAMENTALS OF SURGERY

1. Yantra and Shastra – Ancient and Recent.
2. Skin preparation for surgery
3. Sterilization – Methods, O.T. fumigation
4. Practice of Ashtavidha Shastra Karma
5. Sadyovrana management- Seevanadi chikitsa
6. Diagnosis and management of Vranasopha, Vidradhi and Prameha Pidaka
7. Granthi and Arbuda – diagnostic techniques of benign and malignant neoplasia
8. Bandana – Practice of Bandaging techniques
9. Raktastambhana –Haemostasis

## **PAPER – 2**

### **VISHISHTA SHALYA VIGYAN (SHALYATANTRA SPECIALITY)**

1. Practice of surgical procedures on different models.
2. Catheterization, naso gastric intubation, venesection, FNAC, dressing, wound care, etc.
3. Diagnosis and prognostic decision making in Dagdha, Vrana - Burn and scalds.
4. Vrana– Wound. Management of Nija, Vrana
5. Management of Agantuja, Vrana, Dushta, Vrana, Nadi, Vrana
6. Para Surgical and medical management of Ashmari – Urinary stone diseases.
7. Critical management of Hydroureter, Hydronephrosis and Haematuria
8. Emergency management of Urethral strictures, Retention of urine, Mutraghata, Mutrakrucchra
9. Management of diseases of Prostate, Penis, Testis and scrotum
10. Asthira – Orthopaedics. General and specific management of bone fractures Osteomyelitis, tumours of bones and chronic joint diseases
11. Diagnosis and management of limb ischemia, gangrene and vatarakta
12. Sandhana Karma – Plastic reconstructive and cosmetic surgery
13. Parasurgical procedures: Kshara Karma, Kshara Sutra, Agnikarma and Raktamokshana

## **PAPER - 3**

### **ADHUNIKA SHALYA KARMA-(MODERN SURGERY)**

1. Diagnosis and Surgical treatment for
  - i. Abdominal trauma
  - ii. Thyroid,
  - iii. Leukoplakia.
  - iv. Tongue ulcer and Cancer.
  - v. Mucosal cyst.
  - vi. Gastro esophageal reflex
2. Assessment and diagnosis of ailments of Hepatobiliary system and Portal hypertension
3. Liver – Abscess, Cyst-hydrated cyst
4. Cholecystitis, cholelithiasis, choledocholithiasis, Splenomegaly, splenic injury.
5. Diagnosis of disorders of vein, artery, ligaments, joints and muscles.
6. Diagnosis and surgical management of Hernias – Inguinal, femoral, umbilical, incisional, abdominal wall and other hernias
7. Practice of Endoscopic procedures - Gastroduodenoscopy, Sigmoidoscopy, Colonoscopy etc.
8. Diagnostic and therapeutic laparoscopy.
9. Anaesthesia: Procedures, Complications and Management



## **PAPER –4**

### **SHALYA VANGMAYA – SHALYA LITERATURE, RESEARCH AND DEVELOPMENT**

1. Surgical audit: writing a surgical audit report
2. The evaluation of surgery and writing a case report
3. Decision-making in surgery
4. Clinical audit: framing a committee, conduction and coordination of proceedings of meeting
5. Analysis of clinical trials
6. Critical evaluation of innovations - Technical and Pharmaceutical.
7. Medico legal issues - Understanding the implications of acts of omission and commission in practice.
8. Seminar on Consumer Protection Act, medical profession, national health policy
9. Implication in a medico-legal case like accidents, assaults etc.
10. Surgical ethics including Informed consent
11. Anushalya Karma – Para surgical procedures Kshara Karma, Kshara Sutra, Agni karma and Raktamokshana.
12. Principles of ICU, Scoring
  - a. Organization and staffing
  - b. Indications for admission
  - c. Problems in Intensive Care

### **Reference Books**

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Agnivesha	Charaka Samhita with Chakrapani Commentary	RP-2011	Rashtriya Sanskrit Sansthan New Delhi
2.	Sushruta	Sushruta Samhita with Dalhana Commentary	1st -2012	Choukhambha Surabharati
3.	Vruddha Vagbhata	Ashtanga Sangraha with Indu Commentary	RP-2000	Krishnadas Academy Varanasi



4.	Vagbhata	Ashtanga Hrudaya with Arunadatta and Hemadri Commentary	3rd-2012	Choukhambha Sanskrit Series
5.	Vd. Kanak Prasad Vyas.	Arsha Evum Bhagandar Me Sutravacharan	-	-
6.	Dr. S.N.Pathak	Kshara Sutra	-	-
7.	Dr. S. Sankaran	Surgical ethics of Ayurved	-	-
8.	Dr. D.N. Pande	Anushastra Karma	-	-
9.	Dr. Lakshman Singh	Concept of Vrana in Ayurveda	-	-
10.	Dr. Lakshman Singh	Significance for Purva Karma in Surgical Patient	-	-
11.	Sabistan	Text book of Surgery	19th-2012	Elsevier
12.	Rob and smith	Operative Surgery	-	-
13.	Watson-Jones	Fractures and Joint Injuries	1st-2002	B.I Publication
14.	Farquharsons'	Text books of Operative Surgery	9th-2005	Hodder Stoughton
15.	Schwartz	Principles of Surgery	9th-2010	Mc Graw hill
16.	Hamilton Bailey's	Emergency Surgery	13th-2006	Jaypee Brothers
17.	Willing Worth	Surgical pathology	-	-

18.	S. Das	Clinical methods in surgery	-	-
19.	S. Das	Methods of Surgical Procedure	-	-
20.	Bailey and love's	Short practice of surgery	25th-2008	Hodder Stoughton
21.	Filinge, Davice	Essential P.G. Surgeon	-	-
22.	J. C. Adams	Outline of Orthopaedics	-	-
23.	Suresh Pandey	Clinical orthopaedic diagnosis	-	-
24.	Rajgopal Shenoy	Manipal manual of surgery	RP-2009	CBS Publications
25.	Vd S G Joshi.	ShalyaShalakyat-antra	2nd-1960	AD Athawale

## SWASTHAVRITTA AND YOGA

Theory Papers : 04	Theory Marks : 400 Marks (100 each)
Practical Marks : 200	Duration : 02 Years
Grand Total Marks : 600	

PAPER 1: Vaiyaktika Swasthavritta & Sadvritta	100 Marks	100Hours
PAPER 2: Samajika Swasthavritta	100 Marks	100Hours
PAPER 3: Samkramaka Rogapratishedha & Swasthyaprashasanam	100 Marks	100 Hours
PAPER 4: Yoga & Nisargopachara	100 Marks	100 Hours

### PAPER I Vaiyaktika Swasthavritta & Sadvritta

100 Marks

100 Hours

Sl. No	Topics	Hrs
Unit-1	Concept of holistic health according to Ayurveda.	2
Unit-2	Spectrum of health, Iceberg phenomenon of diseases, dimensions of health. Sustainable development goals	4
Unit-3	Study of indicators of health – Mortality indicators, morbidity indicators, disability rates and nutritional status indicators	2
Unit-4	Role of Swasthavritta in Socio cultural, ethical developmental and environmental aspects of health,	1
Unit-5	Integrative health – its relevance in current scenario	1
Unit-6	Dinacharya – Detailed accounts by Charaka, Sushruta, Vagbhata and Bhavamishra.	5
Unit-7	Practical application of Dinacharya in today's era and probable physiological effects of these procedures	5
Unit-8	Ratricharya– Bhavamishra and other classics.	2
Unit-9	Study of Day and night pattern in various countries and its relevance to the status of health	1

Unit-10	Chronobiology – Basics – infradian rhythm, ultra-radian, gene oscillations, Circadian rhythm, Concept of Chronobiology of Humans in relation to Dinacharya, rutucharya, recent developments in Chronobiology	2
Unit-11	Ritucharya – Classical description by Charaka, Sushruta, Vagbhata, Bhela Samhita and Bhavamishra. Preventive and promotive aspect of Ritucharya and its need and importance in present era, importance of ritusandhi and Yamadamshtra	3
Unit-12	Ritu Shodhana techniques with reference to various Ritus, its method and mode of action in disease prevention.	1
Unit-13	Ritus prevalent in various Indian states.	1
	Ritu pattern in various countries of the world.	1
Unit-14	Concept of Vegas, types and the physiology behind each vega and vegadharana. Relevance of vegadharana and udhirana in disease manifestation and management	4
Unit-15	Ahara – Classical food items described in Charaka, Sushruta, Vagbhata, yogaratnakara and Sharangadhara.	5
Unit-16	Ahara Vargas and their comparison with today's food items.	3
Unit-17	Nutritional Biochemistry – basics and major physiological process related to Nutrition	2
Unit-18	Concept of Keto diet, Mediterranean diet, Recent advances in Nutrition Research, Food processing and food industry	2
Unit-19	Dietetic intervention in malnutrition, undernutrition and overnutrition as per Ayurveda and modern science, rules of dietetics according to Charaka, Sushruta and Vagbhata	6
Unit-20	Pros and cons of vegetarian and Non vegetarian food	1
Unit-21	Staple diet of various States of India.	2
Unit-22	Staple diet of various countries in correlation with their climate.	1
Unit-23	Knowledge about assessment of nutritional status of individual and community	1

Unit-24	Pathya and apathya in various diseases as per Ayurvedic Classics	2
Unit-25	Balanced diet for healthy adult, adolescent, elderly people, pregnant ladies and lactating mothers.	4
Unit-26	Viruddhahara – Classical and modern-day examples.	2
Unit-27	Ayurveda ahara aushada kalpana in relation to nutraceuticals and nutrigenomics (prakruti anurupa ahara)	2
Unit-28	Food adulteration, methods for detecting, controlling food adulteration and its legislative control	1
Unit-29	Role of Nidra, Sleep and Health, brahmacharya Abrahmacharya in maintenance of health and causation of diseases and their management,	1
Unit-30	Sadvritta – description of Charaka, Sushruta and Vagbhata.	1
Unit-31	Prajnaparadha – Causes, Effects and solution.	2
Unit-32	Clinical importance of Achara Rasayana, Nityarasayana and sadvritta in prevention of diseases and promotion of health	2
Unit-33	Rasayana and its utility in health and diseased condition	2
Unit-34	Scope of vajikarana in health; pathya apathy kalpana and vihara for Vajeeekarana.	2
Unit-35	Mental Health and the role of Ayurveda in it.	3
Unit-36	Vyadhikshamatva – Modern and Ayurvedic concepts and its practical implementation	8
Unit-37	Principles of Health Education.	6
Unit-38	Genetics in Ayurveda and Modern Science	2
Unit-39	Concept of genomics in relation with status of health - Nutrigenomics	2

**PAPER II**  
**Samajika Swasthavritta**

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit-1	Concept of community health.	2
Unit-2	Ayurvedic aspects of social health	2
Unit-3	Concept of Prevention according to Ayurveda.	1
Unit-4	Concept of prevention according to Modern medicine. Levels of prevention. Stages of intervention.	4
Unit-5	Vyadhisankarya as a causative factor of a vyadhi.	1
Unit-6	Web of causation of diseases, Multifactorial causation.	2
Unit-7	Natural History of diseases. International Classification of Diseases	2
Unit-8	Role of Ayurveda in palliative, rehabilitative and convalescence care	2
Unit-9	Ecology and community health. Impact of bio-geo-chemical cycle (impact of changing Global Nitrogen cycle on human health)	2
Unit-10	Disinfection practices with recent technologies for the community – Modern and Ayurvedic	3
Unit-11	Immunization programmes. Possible contribution of Ayurveda. Ex: Suvarna prashana karnapali bhedana etc	10
Unit-12	Environment and community health (Bhumi, Jala, Vayu, Shuddhikarana, Prakasha, Shabda, Vikirana and current research updates)	10
Unit-13	Housing standards – W.H.O Standards. Design of Aaturalaya(hospital), Sutikagara, Kumaragara, Panchakarmagara and Mahanasa (Kitchen)	6
Unit-14	Disposal of Wastes- Refuse, Sewage. Methods of excreta disposal in sewerred and unsewerred areas. Disposal of dead body	6

Unit-15	Management of Biomedical waste. Biomedical waste act- 1998-2016	1
Unit-16	Occupational Health. Ergonomics. Role of Ayurveda in occupational health and in ESI and other sector (IT Sectors)	7
Unit-17	Medical Entomology– Arthropods of Medical Importance and their control measures. Recent research updates in medical entomology	6
Unit-18	Medical parasitology and control in relation to communicable diseases.	2
Unit-19	School Health Services and possible contribution of Ayurveda.	2
Unit-20	Demography and Family Planning. Recent developments in Family planning measures and contribution of Ayurveda	9
Unit-21	Family Welfare Programme and the role of Ayurveda in it.	3
Unit-22	Old age problems in community. Role of Swasthavritta in Geriatric care.	3
Unit-23	Care of the disabled.	1
Unit-24	Life Style disorders (Non-Communicable diseases) in community and the role of Ayurveda in them.	5
Unit-25	Health tourism. Ayurvedic Resort Management- Panchakarma and allied procedures.	3
Unit-26	Medical Sociology – adolescent health, social and behavioural problems. its policy for prevention and control, public relation, doctor patient relationship and hospital sociology	2
Unit-27	Health Planning and Management	3

### **PAPER -3**

#### **Samkramaka Roga Pratishedham Evam Swasthya Prashasanam**

100 Marks

100 Hours

Sl. No	Topics	Hrs
Unit-1	Modern Concept of Epidemiology & Applied epidemiology	4
Unit-2	Critical evaluation of Janapadodhwamsa.	3

Unit-3	Clinical epidemiology of different Communicable diseases, Re-emerging and Newer diseases and the role of Ayurveda in them.	25
Unit-4	General investigations for Communicable diseases	2
Unit-5	Sexually Transmitted Diseases and their control	5
Unit-6	Ayurvedic view on Samkramaka Rogas.	6
Unit-7	Investigation of an Epidemic	1
Unit-8	Control of Epidemics.	1
Unit-9	Probable role of Ayurveda in investigating and control of epidemic.	2
Unit-10	Host Defences – its mechanism & role in certain infectious diseases	1
Unit-11	Concept of Vyadhikshamatva w.s.r. to Immunity.	5
Unit-12	Role of Ayurveda in tourism development. Health advice to travellers. Role of Ayurveda in maintenance of health for travellers.	2
Unit-13	Nosocomial, Iatrogenic diseases, Opportunistic infection, Isolation ward.	3
Unit-14	National Health Programmes. Recent updates in National Health Programmes.	16
Unit-15	Health administration under Ministry of H & FWD.	2
Unit-16	AYUSH-aims, objectives, structure, function and health policies. National Health Mission - NRHM, NUHM administration, functions and programmes, National AYUSH Mission, administration, functions and programmes, Swachh Bharat Abhiyana, Ayushman Bharat Campaign	5
Unit-17	Contribution of Ayurveda in National Health Programmes. National Health Policy-2017	2
Unit-18	National and International Health Agencies and their current activities.	6
Unit-19	Disaster management; Role of NSS/NCC	1



Unit-20	Notifiable diseases and procedure for notification and other formalities.	2
Unit-21	Statistics related with Infectious diseases at International, National and State levels.	2
Unit-22	Vital Statistics	2
Unit-23	Ayurvedic perspectives in - Suthikagara, Kumaragara & Panchakarmagara	2

#### **PAPER-4**

#### **Yoga and Nisargopachara**

100 Marks

100 Hours

Sl. No	Contents	Hrs
Unit-1	History and Evolution of Yoga: Various definitions of Yoga by different authors.	2
Unit-2	Different Schools of Yoga	2
Unit-3	Rajayoga (Ashtanga yoga); Overview on Patanjali YogaSutras.	2
Unit-4	Hathayoga (Hathayoga Pradeepika), Gheranda Samhita and Shiva Samhita, Yajnya Valkya Smriti.	4
Unit-5	Karmayoga – Philosophy according to Bhagavad Gita	2
Unit-6	Mantrayoga, Layayoga, Jnanayoga and Bhaktiyoga.	4
Unit-7	Physiological effect of Yoga on Body and mind – Ancient and modern concepts. Personality development through yoga	6
Unit-8	Concept of Sthula, Sukshma and Karana Sharira	2
Unit-9	Concept of Panchakoshas	2
Unit-10	Concept of Shad chakras, Nadis and Kundalini. Signs of Nadi Shuddhi	2
Unit-11	Shad Kriyas and their therapeutic effects.	7

Unit-12	Introduction to Suryanamaskara, its beejakshara mantra and effects on health & diseases	2
Unit-13	Therapeutic effect of yogic practice in the following diseases - Diabetes, Hypertension, Cardiovascular disorders, Obesity, Asthma, Piles, Irritable Bowel Syndrome, Eczema, Psoriasis, Stress Disorders, Eye disorders, Headache, Juvenile Delinquency, Mental retardation, Depression, Neurosis, Sexual Dysfunction, Uterine Disorders, Cancer, Dysmenorrhoea, Anxiety, Insomnia, ENT disorders.	30
Unit-14	Yoga in Ayurveda –Concept of Moksha, Tools for Moksha, Naishthiki chikitsa, Tatva Smriti, Satyabudhi, Yoga sadhika buddhi, Yoginam Balam, Ashta Aishwaryam & Ashta Siddhi (Charaka Samhita Sharira sthana chapter 1 & 5)	6
Unit-15	Various Relaxation Techniques in yoga; Utility of yoga in Rehabilitation and the usage of props.	2
Unit-16	History of Nisargopachara. Practice of Prakruti Chikitsa in ancient India	2
Unit-17	Basic Principles of Western School of Nature Cure	2
Unit-18	Basic Principles of Indian School of Nature Cure – Panchabhuta Upasana and its therapeutic utility	2
Unit-19	Different types of Mud therapy, Hydrotherapy, Heliotherapy, Chromo therapy, Magneto therapy. Massage and Exercise Therapy, Fasting and Relaxation therapy and their therapeutic effects and utility	16
Unit-20	Concepts of Acupuncture, Acupressure & Reflexology	3

## PRACTICALS

200 Marks

200 Hours

1. **Health Promotive and Protective Practices of Dinacharya procedures** - 25 hours  
Dantadhavana vidhi & preparation of Danta manjana choorna, Anjana vidhi, Nasya vidhi, Kavala vidhi, Gandusha vidhi, Dhumapana vidhi & Dhumavarti Nirmana, Abhyanga vidhi, Udvartana vidhi & Udgharshana vidhi in Swastha purusha
- 2) **Practical Demonstration of Yoga** - 50 hours
  - a) Sukhshma and Sthoola vyayama – Practice of Loosening Exercises & its importance
  - b) Practice of Surya namaskara with beejakshara mantra

**c) Practice of Aasanas:**

**Practice of sitting posture asana**

- Padmasana
- Swasthikasana
- Siddhasana
- Bhadrasana
- Gomukhasana
- Vajrasana
- Supta-vajrasana
- Simhasana
- Paschimottanasana
- Ardhamatsyendrasana
- Ustrasana

**d) Practice of supine position asana**

- Shavasana
- Uttanapadasana
- Sarvangasana
- Halasana
- Karnapeddanasana
- Naukasana
- Matsyasana
- Setubandhasana

**e) Practice of prone position asana**

- Makarasana
- Niralambasana
- Shalabhasana
- Bhujangasana
- Dhanurasana
- Mayurasana

**f) Practice of standing position asana**

- Tadasana
- Utkatasana
- Vrukshasana
- Ardha-katichakrasana
- Trikonasana
- Natarajasana

**g) Practice of Pranayama**

Nadishudhhi –Anulom-Vilom Pranayam,Sectional Breathing

**h) Practice of Ashta Kumbhaka (Bheda):**

Suryabhedhi & Chandrabhedhi, Ujjayi, Bhastrika, Bhramari, Sheetal, Sitkari, Kapalabhati

**I) Practice of Dhyana and Advanced Yoga techniques (Cyclic Meditation and Mind Sound Resonance Technique)**

**j) Practice of YOGANIDRA**

**3) Practical Demonstration of Naturopathy procedures: - 50 hours**

- a) Mruttika Snana
- b) Mruttika Patti
- c) Pada and Hasta Snana
- d) Bashpa snana (Steam bath)
- e) Awagaha snana (Immersion bath)
- f) Prishtha snana (Spinal bath)
- g) Kati snana (Hip bath)
- h) Alternate hot and cold bath
- i) Water packs
- j) Chromotherapy
- k) Different massage techniques
- l) Sun bath techniques
- m) Relaxation techniques – QRT, IRT, DRT

**4) Long Case sheets for Pathya, Apathya, Aushadhi (if needed), Yoga and Nisargopachara advice to:**

**-25 hours**

- a) Non-Communicable Diseases –10 Cases
- b) Communicable Diseases - 10 Cases
- c) Garbhini Paricharya- 10 Cases
- d) Mal-nutrition Treatment cases -10 Cases

**5) Educational Visits:**

**- 50 hours**

- a) Visit to Water Purification Centre
- b) Visit to Milk Dairy
- c) Visit to Industry
- d) Visit to Leprosy Centre
- e) Visit to T.B. Centre
- f) Visit to Yoga Centre
- g) Visit to Naturopathy Centre
- h) Visit to Primary Health Centre

- i) Disposal of Waste Unit
- j) Visit to Sewage Disposal Unit
- k) Visit to observe Hospital Disinfections procedures
- l) Visit to Govt. Psychiatric Hospital
- m) Visit to Isolation ward in the Hospital
- m) Visit to A.R.T./V.C.T.C Centre
- n) Food and Drug Administration Centre
- o) Visit to District/Civil Hospital

**6) Field Work:**

- a) Active Participation in Various National Health Programmes
- b) Community Health Survey
- c) School Health Services

**7. Departmental Duties:**

Regular Attendance as - Duty in OPD and IPD with regard to Pathya-Apathya, Yoga and Nisargopachar.

- 1. Museum Development
- 2. Yoga training for Swastha and Patients.
- 3. Departmental Seminars
- 4. Research Journal /Article Reviews –minimum 2
- 5. Submitting minimum 2 papers in any publications.
- 6. Practical knowledge of Ahara dravya & Adulteration of Food
- 7. Proper planning, beginning, completion of thesis work under the guides.
- 8. Micro-Teaching (Training to take Lectures and Practicals of UG) - Minimum 10.
- 9. Daily diary - Log book
- 10. Health awareness talks for public

**Reference Books**

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Agnivesh	Charak Samhita With Chakrapani Commentary	RP-2011	Rashtriya Sanskrit Sansthan New Delhi
2.	Sushruta	Sushruta Samhita With Dalhan	IST -2012	Choukhamba- surabharati

		Commentary		
3	Vagbhata	Ashtanghrudaya With Arunadatta & Hemadri Commentary	3RD -2012	Choukhamba Sanskrit Series
4	Vruddhavagbhata	Ashtang Samgraha With Indu Commentary	RP-2000	Krishnadas Academy Varanasi
5	Sharangadhara	Sharangadhara Samhita	IST -2010	Choukhamba Surabharati
6	Bhavamishra	Bhavaprakasha	IST -2006	Choukhamba Orientalia
7	Vijayarakshit	Madhavanidana		
8	Pt. Brahma Shankar Mishra And Dr. Indradevtripathi	Yogaratnakara	IST -1998	Choukhamba Sanskrit Series
9	Bhela	Bhela Samhita	IST -2009	Choukhamba Surabharati
10	Vaidyaptrajesvarduttash- astri	Swasthavritta Samuchaya	4th- 2005	Sanjeevani Aushadhalaya
11	Dr.B.G.Ghanekarshastri	Swasthya Vignyana	6th-2005	Choukhamba Sanskrit Series
12	Kedarnath Gupta	Prakritika Chikitsa	4th 1967	Choukhamba Sanskrit Series
13	Dr.P.Sudhakar	Reddy Reddy's Comprehensive Guide to Swasthavritta	1st -2005	Akash Publication, Mysore
14	Dr. Mukundswaroopverma	Swastha Vigyan	2nd - 1993	Motilalbanara- sidas

15	Vd.Ranjitrai Desai	Ayurvediya Hitopadesh	1st - 1955	Vidyapeeth Ayurveda Bhavan
16	Dr. Rajkumar Jain	Yoga and Ayurveda	1st - 1974	Aanekantasah- istiyasamsthan
17	Dr. Ramharsha Singh.	Swasthvritta Vigyan	1st - 1997	Choukambha Sanskrit Pratishthan
18	Dr. Bramhanandtripathi	Swasthvrittam	-	-
19	Vd. Jalukar	Ayurvediya Swasthvrittam	1st - 1966	Maharashtra Vidyapith Graha Mandal
20	Swatmaramyogendra (Kaivalyadhama)	Hathayog Pradipika	1st - 1975	Thomas Press Limited
21	Bharatiyaprakrutikchiki- tsapadhat	Yogik Yog Padhati	-	-
22	Shrikedarnath Gupta	Yogik Chikitsa	-	-
23	Verma	Prakrutik Chikitsa Vigyan	-	-
24	S.C.Seel	Janasankhyashiks- hasidhantaevam- upadeysa	-	-
25	Dr. Shivkumar Gaud	Swasthvritta	4th - 1999	Nath Pustak Bhandar
26	T.L.Devraj	Health and Family Welfare	2nd - 1985	Dhanwanatri Orientalia
27	Dr. Indramohanjha	Sachitra Yogasan Darshika	1st - 2002	Choukhamba Sanskrit Series

28	J. K. Park	Preventive and Social Medicine	23rd 2005	Banarasidsa Publishers
29	Shri. B.K.S. Iyengar	Yogadeepika	1st 2008	Dorling Kindlers
30	Vd.Sakad	Swasthavritta	-	-
31	Dr.L.P.Gupta	Positive Health	1st 2000	Choukambha Sanskrit Pratishthan
32	Dr.L.P.Gupta	Biogenic Secreates of Food in Ayurveda	-	-
33	Ramharsha Singh	Yoga and Yogikchikitsa	-	-
34	R.H.Singh	Foundation of The Contempary Yoga	1st 1991	Choukambha Sanskrit Pratishthan
35	H.S.Datar	Yogasidhantaevum Sadhna	-	-
36	Maharshipatanjali, Karambelkar	Patanjal Yoga Sutra	-	-
37	Sharan Prasad	Prakrutik Chikitsa Vidhi	-	-
38	Dr.Ranade, Dr.Bobade, Dr.Deshpande	Text Book of Swasthavritta	1	Choukambha Sanskrit Pratishthan
39	Shweta Bhat	Gherand Samhita	1st 2001	Krishnadas Academy
40	B.K. Mahajan	Bio-Statistics	6th 2005	Jp Bros



41	Dr.Mangala Gauri	Swasthavritta Vijnyan	1st 2007	Choukhamba Sanskrit Series
42	Baride And Kulkarni.	Community Medicine	3rd 2005	Vora Medical Publications
43	Shri. B.K.S. Iyengar	Light on Yoga	29th 2004	Harper Collins
44	Shri.B.K.S. Iyengar	Light on Pranayama	1st 2008	Harper Collins
45	Shri.B.K.S. Iyengar	Light on Patanjali Yoga Sutra	1st 2007	Harper Collins
46	Kaivalyadhama	Shiva Samhita	-	-
47	Kaivlyadhama	Gheranda Samhita	1st	Krishnadas Academy
48	Vd. Patrikar Vijay	Swasthavritta Vigyan	-	-
49	Vdyashwantpatil And Vd. Vhawal	Swasthavritta	-	-
50	Swaminathan	Food and Nutrition	5th 1993	B'lore Printing And Pub
51	Mahajan	Preventive and Social Medicine	3rd2005	JP Bros & Medical Publishers
52	B.N.Ghosh	Preventive and Social Medicine	-	-
53	Gupta	Preventive and Social Medicine	-	-
54	Vd. Prama Joshi	Yoga and Nisarg- opachara	-	-
55	Dr.L.P.Gupta	Biogenic Secrets of Food In Ayurveda		

56	Dr.L.P.Gupta	Positive Health	-	-
57	Swami Dheerendra Bramhachari	Yogic Sukshma Vyayamam	-	-
58	Dr. Nagaratna And Dr.H R Nagendra	Integrated Approach for Yoga Therapy for Positive Health	-	-
59	K. Pathwardhan, G Tillu	Integrative Approach for Health	1st Edition	-
60	Jay C Dunlap, Jennifer J Loros, Patricia J Decoursey	Chronobiology	-	Sinauer Associates Inc, Us
61	Russell G Foster & Leon Kreitzman	Circadian Rhythms: A Very Short Introduction	-	Oxford University Press
62	A N Shukla	Text Book Of Chronobiology	-	Discovery Publishing Pvt Ltd
63	Kadri Am	lapsm"s Text Book Of Community Medicine	1st Edition	Jaypee
64	Rajoriya Brijkishore	Hospital and Healthcare Accreditation	1st Edition	Jaypee
65	Kashinath Samangadi	Yoga Sudha	1st Edition	Ayurveda Samnathan
66	Kashinath Samangadi	Swathavritta Sudha	1st Edition	Ayurveda Samnathan
67	Pathwardhan Neeta	Hospital-Associated Infections: Epidemiology, Prevention & Control	1st Edition	Jaypee Brothers Medical Publishers

68	Ray Dutta	Yogic Exercises Physiologic and Psychic Processes	1st Edition	Jaypee Brothers Medical Publishers
69	Dixit Subhal & Ohters	Principles in Critical Care Nutrition	1st Edition	Jaypee Brothers Medical Publishers
70	Dhaar G M: Robbani I	Foundations of Community Medicine	1st Edition	Elsevier
71	Dr. Sanjeev S. Tonni	Yoga & Wellness	1st Edition	Saraswati Publisher Belagavi

## KAYACHIKITSA

Theory Papers : 04	Theory Marks : 400 Marks (100 each)
Practical Marks : 200	Duration : 02 Years
Grand Total Marks : 600	

PAPER 1 : Fundamentals of Kayachikitsa	100 Marks	100 Hours
PAPER 2 : Samanya Roga Chikitsa	100 Marks	100 Hours
PAPER 3 : Vishishta Roga Chikitsa	100 Marks	100 Hours
PAPER 4 : Advances in Kayachikitsa	100 Marks	100 Hours

### PAPER 1 Fundamentals of Kayachikitsa

100 Marks

100 Hours

Sl. No	Topics	Hrs
Unit-1	Rogi-Rog Pariksha:Nidana Panchaka, Trividhapariksha, Shadvidha pariksha, Ashtavidhapariksha, Dashavidhapariksha and their clinical relevance in view of modern knowledge. Clinical methods-Detailed history taking and patient examination, Systemic examination as per ayurveda and modern system of medicines.	20
Unit-2	Knowledge of fundamentals and basic interpretation of common investigations: like ECG, Echo cardiography, TMT, Spirometry, X-ray, USG, CT-Scan, MRI, EEG, EMG, etc.	15
Unit-3	Principles of Chikitsa: Types of Chikitsa, General principles of Ayurvedic management like, Yuktivyapashraya chikitsa, Daivavyapashraya chikitsa, Satvavajaya chikitsa etc. Principles and practices of Rasayana and Vajikarana.	15
Unit-4	National Health Programmes and prospective role of ayurvedic services and therapeutics in them	10
Unit-5	Medical ethics, Common laws and regulations applicable to clinical practice. Application of IT and Communication skills in Chikitsa.	5
Unit-6	Elaborate knowledge of undertaking common medical procedures like Ryle's tube feeding, tapping, transfusions, catheterization, tractions, etc.	15

Unit-7	Ayurveda Dietetics in medicine, importance of Pathya, Apathya and anupana.	15
Unit-8	Drug-drug interactions and adverse drug reactions, Iatrogenic disorders	5

**PAPER-2**  
**Samanya Roga Chikitsa**

100 Marks

100 Hours

Unit-1	Pranavahasrotas: Shwasa, Hikka, Kasa, Rajayakshma, Hridroga, Parshwashoola, Urakshata, Svarabheda. Cardio-respiratory system: Bronchitis, Bronchiectasis, Bronchial asthma, COPD, Cor- pulmonale, Pneumonias, Occupational lung diseases, Pulmonary tuberculosis, Congenital Heart disorders, IHD, RHD- Valvular diseases, Cardiac failures, Cardiomyopathy, Pericarditis, Endocarditis, Hypertension.	20
Unit-2	Annavahasrotas: Agnimandya, Ajirna, Aruchi, Amadosha, Amlapitta, Chhardi, Shoola, Grahani. Gastrointestinal disorders: GERD, APD, Malabsorption Syndrome, Pancreatitis.	15
Unit-3	Udakavahasrotas: Trishna, Shotha, Udararoga, water and electrolyte imbalance	5
Unit-4	Rasavahasrotas: Jwara, Amavata, Pandu, Madatyaya, Anaemias, Rheumatoid arthritis.	10
Unit-5	RaktavahaSrotas: Raktapitta, Kamala, Vatarakta, Kushtha, Kshudraroga, Sheetpitta, Udarda, Kotha, Visarpa, Shvitra, Haemopoeitic disorders, Bleeding and Coagulation disorders, Leukaemias, Thrombocytopenia, Disorders of Bone Marrow, Hepatobiliary disorders, Hepatitis, Fatty Liver, Cirrhosis, Cholecystitis, Liver abscess, Jaundice, Dermatological disorders, Parasitic, Infective, Allergic, Autoimmune skin disorders such as Psoriasis, Eczemas.	15
Unit-6	Mamsa-Medovahasrotas: Medoroga, Sthaulya, Prameha, Galaganda, Gandamala, Urustambha, Diabetes mellitus, Obesity.	7
Unit-7	Asthi-Majjavahasrotas: Asthikshaya, Sandhigatavata, Osteoarthritis, Osteopenia, Osteoporesis, Spondylosis, Spondylitis, Avascular	5

	necrosis of head of femur.	
Unit-8	Shukravahasrotas: Klaihya, Dwajabhanga, impotence etc Arthavavaha srotas dusti and chikitsa	5
Unit-9	Mutravahasrotas: Mutrakricchra, Mutraghata, Ashmari, Urinary disorders: Urinary Tract Infections, Lithiasis, Acute Renal Failures. Chronic Renal Failures, Uraemia, Benign Prostatic Hyperplasia	8
Unit-10	Purishvahasrotas: Atisara, Pravahika, Arsha, Anaha, Adhamana, Krimi, Udavarta, Diarrheas, Dysentery, Enteritis, Ulcerative colitis, Irritable Bowel Syndrome, Intestinal Worm infestation.	10

### PAPER 3

#### Vishishta Roga Chikitsa

100 Marks

100 Hours

Unit-1	Vata-Vyadhi:- Pakshavadha, Ekangvata, Ardhangavata, Sarvangavata, Anantavata, GataVata, Gridhrasi, Ardita, Akshepaka, Apatantraka, Vishvachi, Avabahuka, Avarana, Urustambha. Musculoskeletal disorders: Myopathies, Muscular dystrophies, Lumbago. Neurological disorders: Neurodegenerative disorders like Alzheimer's, Parkinsonism, CVA, Neuropathies, Facial palsy, GB Syndrome, Motor Neuron Diseases, Sciatica, Movement Disorders	23
Unit-2	Sankramaka roga: Sheetala, Masoorika, Updansha, Phiranga, Gonorrhea, Cancroids, Syphilis.	8
Unit-3	Manasavyadhi: Unmada, Apasmara, Atatvabhinivesha, Mada, Moorcha, Sanyasa. Common psychiatric disorders: Classification of psychiatric ailments. Disorders of thought like Schizophrenia. Disorders of Mood like Mania, Depression. Neurosis, personality disorders, psychosexual disorders, Epilepsy, Substance abuse disorders.	13
Unit-4	Metabolic disorders: Gout, Dyslipidaemia, Atherosclerosis, Metabolic Syndrome	8
Unit-5	Endocrinal disorders: Disorders of Pituitary, Thyroid, Adrenal Medulla, Reproductive hormones. Ashtaninditiya Purusha and their clinical relevance. Shanda, Gynecomastia	10

Unit-6	Parasitic/Infective/Communicable disorders: Shlipada, Filariasis, VishamaJvara, Malaria, MantharaJwara, Enteric Fever, Rickettesial fever, Dengue,Brucellosis, Chickenpox, Measles, Influenza, Kalaazar, Mumps, Rabies, Poliomyelitis, Plague, Meningitis, Encephalitis, Chikungunya, HIV/AIDs, Common worm infestations	11
Unit-7	Neoplastic disorders and their management strategies. Role of Ayurvedic medicines in cancer care including palliative care.	6
Unit-8	Autoimmune diseases: Myopathies, Rheumatic fever, Systemic Lupus Erythematosus.	8
Unit-9	Common poisonings and their management like Insecticide/Pesticide poisoning, Snake poisoning, Vegetable and chemical poisoning.	8
Unit-10	Janapadodhvamsa Vikara:- Environmental diseases and their Causes, impact on human health and their management.	5

#### **PAPER 4**

#### **Advances in Kayachikitsa**

100 Marks

100 Hours

Unit-1	Hospital management strategies, Infrastructure, use of Information technology, essential manpower, equipment, patient care, management and coordination with contemporary health institutions and field institutions.Hospital accreditations like NABH, etc.	7
Unit-2	National Health Campaigns of AYUSH and components under NRHM, Ayushman Bharat.	7
Unit-3	Clinical Research in Kayachikitsa and its application in clinical medicine as per new evidence base in different systemic disorders. Nutraceuticals.	10
Unit-4	New emerging health challenges and Ayurvedic medicines: Chickungunya, HIV/AIDS, Swineflu, Chickenflu, Dengue, Restless leg syndrome, Sick building syndrome, Fibromyalgia, etc.	15
Unit-5	Role of Ayurveda in immune-protection, immuno-modulation and in management of other allergies and immunological disorders.	10
Unit-6	Indications and importance of Organ transplantation, Ethical and legal issues involved in that.	5

Unit-7	Knowledge Geriatric care and terminal care medicine	10
Unit-8	Basic knowledge of Gene therapy, Stem cell therapy, Genetic modeling and chromosomal disorders in different disease conditions	5
Unit-9	Radio-isotopes, disease and tumor markers in diagnosis and assessment of therapy	5
Unit-10	Scope and methods of independent and collaborative research in Kayachikitsa.	7
Unit-11	Disaster management strategies and role of medicine.	4
Unit-12	Application of advances in Rasayana and Vajikarana therapies	9
Unit-13	Application of emerging trends in Panchakarma in medical management.	3
Unit-14	Physical medication, Physiotherapy and rehabilitation.	3

### Reference Books

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Agnivesh	Charaka Samhita with Chakrapani Commentary	RP-2011	Rashtriya Sanskrit Sansthan New Delhi
2.	Sushruta	Sushruta Samhita with Dalhana Commentary	1st -2012	Choukhambha Surabharati
3.	Vruddha Vagbhata	Ashtanga Sangraha with Indu Commentary	RP-2000	Krishnadas Academy Varanasi
4.	Vagbhata	Ashtanga Hrudaya with Arunadatta & Hemadri Commentary	3rd-2012	Choukhambha Sanskrit Series



5.	Bhela	Bhela Samhita	1st-2009	Choukhambha Surabharati
6.	Kashyapa Kashyapa	Kashyapa Samhita	1st-2008	Choukhambha Sanskrit
7.	Bhavamishra	Bhavaprakasha of Bhavamishra	1st-2006	Choukhambha Orientalia
8.	Sharangadhara	Sharangadhara Samhita	1st-2010	Choukhambha Surabharati
9.	Vangasen	Vangasen	1st-2009	Choukhambha Sanskrit
10.		Gadanigraha	3rd-1999	Choukhambha Sanskrit
11.	Prof. G. Sreenivas Acharya	Ayurvediya Panchkarma chikitsa Vigyan Illustrated		Choukhambha Orientalia
12.	Kaviraj Ambikadutta Shastri	Bhaishajya Ratnawali	1st-2004	Choukhambha Sanskrit Bhavan
13.	Pt. Brahma Shankar Mishra and Dr. Indradev Tripathi	Yogaratanakar	1st-1998	Choukhambha Sanskrit Series
14.	Dr. Nirmal Saxena	Yogaratanakar (English)	2nd -2003	Choukhambha Orientalia
15.	Dr. Jagdishwar Prasad Tripathi	Chakradatta	1st -2008	Choukhambha Sanskrit Series
16.	Acharya Priyavrat Sharma	Chakradatta (English)	3rd -2002	Choukhambha Orientalia
17.	Vd. Rajeshwar Datta Shastri	Chikitsadarsh	3rd -1977	Akhileshwara Dutta

18.	Vd. Bhaskar Vishwasnath Gokhle	Chikitsa Pradeep	-	-
19.	By Tissatacharya, Hindi and English translation by Acharya Priyavrat Sharma	Chikitsa Kalika	-	-
20.	Dr. Ganga Sahay Pandey	Kayachikitsa	3rd -1981	Choukhama Bharati Academy Varanasi
21.	Acharya Ramaraksha Pathak	Kayachikitsa	1st -2002	Choukhambha Vishwabharati
22.	Prof. Banwarilal Gaur	Kayachikitsa	-	-
23.	Prof. Shiv Charan Dhyani	Kayachikitsa	-	-
24.	Vd. Tara Shaar Mishra	Kayachikitsa	-	-
25.	Vd. Hariprapanna Sharma	Rasayogasagar	1st -2004	Krishnadas Academy
26.	Ram Krishna Bhatt	Sidha Bhesaj Manimala	-	-
27.	Vrinda Madhav	Sidhyoga	-	-
28.	Madhavkar	Madhav chikitsa	-	-
29.	Vd. Gulraj Sharma Mishra	Siddha Prayoga Latika	1st -2003	Choukhambha Orientalia
30.	Vd. Gulraj Sharma Mishra	Vishikhanupraves vijnana	1st -1989	Choukhambha Orientalia
31.	Dr. Anant Ram Sharma	Kaya chikitsa samanvaya	-	-
32.	V.V. Natraj Sharstri	Siddha Valdyakam	-	-

33.	Prof.Ram Niwas Sharma and Dr. Surendra Sharma	Sahasrayogam (Keraliya Ayurveda Chikitsa)	1st -2009	Choukhambha publication
34.	Ballabhacharya	VaidyaChintamani	2nd -1996	Choukhambha Surabharati
35.	Lolimbaraja	Vaidya Jeevan	1st -2000	Krishnadas Academy
36.	Lolimbaraja	Chamatkar Chintamani	1st -2001	Krishnadas Academy
37.	Dr. Badri Prasad Shah	Ayurvediya Pathyapathya Vijnana	1st -2000	Krishnadas Academy
38.	Laxman Pandit, Dr.AshaKumari, Prof. Premvati Tiwari	Yog Chandrika	-	-
39.	Dr. Bramhadatta Sharma	Atyayik Vyadhi Nidana Chikitsa	-	-
40.	Dr. Anant Ram Sharma, Dr.Krishna ChandraVerma and Dr.SanjaySharma	Atyayik Vyadhi Nidana evam Pratikara	-	-
41.	Acharya MukandiLal Drivedi	Ayurvediya Panchkarma Chikitsa	2nd -2008	Choukhambha Sanskrit Series
42.	Dr.Haridas Shridhar Kasture	Ayurvediya Panchkarma V ijana	8th -2005	Baidyanath
43.	Dr. T. L.Devraj	Keraliya Panchakarma	-	-
44.	Dr.T.L.Devraj	Ayurvedic Remedies for common disease	-	-

45.	Dr. R. A. Prasad and Dr. G. K. Gurjar	Panchakarma Chikitsa Vijnana	-	-
46.	Prof. Divakar Ojha	Panchakarma Chikitsa	-	-
47.	Prof. Ram Harsh Singh	Holistic Principle of Ayurvedic Medicine	-	-
48.	Prof. Ram Harsh Singh	Kayachikitsa	RP-2009	Choukhambha Sanskrit Series
49.	Dr. PriyaKumar Chobe	Madak Dravyajanya roga evam chikitsa	-	-
50.	Vd.Goverdhan Sharma Changani	Basava Rajiyam	-	-
51.	Dr.Balkrishna Amarji Pathak	Manas Roga Vijnana	4th -1973	Vaidyanath Ayurveda + Bhavan
52.	Prof.Ram Harsh Singh	Ayurvediya Manas Vijnana	1st -1986	Choukhambha Amarabharati Prakashan Varanasi
53.	Dr.Rajendra Prasad Bhatnagar	Adhunik Manas Rog Vijnana	-	-
54.	Dr. Kamta Prasad Shukla	Psychiatry in Brithatrayi	-	-
55.	Dr. Satyapal Gupta	Psychopathology in Indian Medicine	1st -1977	Ajay - Publishers
56.	Pt. Shiv Sharma	Yoga against Spinal pain	RP-1985	B.I Publications

## RASAYANA & VAJIKARANA

Theory Papers : 04	Theory Marks : 400 Marks (100 each)
Practical Marks : 200	Duration : 02 Years
Grand Total Marks : 600	

PAPER 1 : Concept & practice of rasayana	100 marks	100 hours
PAPER 2 : Concepts of apatya & susantaana:	100 marks	100 hours
PAPER 3 : Concepts and practice of Vajikarana:	100 marks	100 hours
PAPER 4 :Pharmaco-therapeutics of Rasayana & Vajikarana:	100 marks	100 Hours

### PAPER -1

#### CONCEPT & PRACTICE OF RASAYANA

100 Marks

100 Hours

Sl. No	Content	Hrs
Unit-1	<b>1. Fundamentals and concepts of Rasayana</b> Derivation, definition and synonyms of Rasayana Classification of Rasayana	02
	<b>2. Understanding rasayana in perspective of:</b> Nutraceutical action Oxygen free radicals & Antioxidant activity Adaptogenesis Cell proliferative activity Cell regenerative activity Genoprotective activity Micronutrients Anabolic activity	16
	<b>3. Interpretation of different types of Rasayana</b> Prakruti-Guna/character wise Rasayana Sara wise rasayana Dhatu specific rasayana Indriyanusara Rasayana like Netrya, Hridya, Tvacchya Srotas wise rasayana Occupation wise rasayana Season wise Rasayana	05
	<b>4. Molecular Biology concerned to Rasayana</b> Human genome project	05

	Genetics and Gene therapy Stem cell theories  <b>5.Introduction to Bioinformatics</b>  <b>6.Concept of Bala</b> Types of bala, vridddhi kshaya hetu Knowledge of measures to improve bala  <b>7.Concept of ojas.</b> Types of ojas. Ojo-vridddhi-kshaya-karabhava, Ojodusti prakara , hetu, samprapti and their management  <b>8.Immunology</b> Immune system & components Knowledge of immune mechanisms Immune disorders Rasayana- Immune specific/immunoglobulin specific Rasayana as Immuno modulator Rasayana in Immune compromised disease like, HIV/AIDS, Tuberculosis, Cancer, Liver cirrohosis etc.	05  02  02  10
Unit-2	<b>Concept of Jara (geriatrics) and ageing (gerontology)</b> Physiological & Psychological changes of Ageing Nutrition in Geriatrics Geriatric profile	10
Unit-3	Concept of swabhava bala pravritta vyadhi with special reference to Jara Its classification (kalaja & akalaja), Actio pathogenesis and management	3
Unit-4	Common geriatric disorders & their management w r t Organ / System	5
Unit-5	Yogya, ayogya vidhi and prayojana of: Kutipraveshikarasayana Dronipraveshikarasayana Karapratichiyarasayana Indraproktarasayana Vaatatapikarasayana	5
Unit-6	Concept & practice of Achararasayana	2

Unit-7	Knowledge & application of swasthavritta measures	2
Unit-8	Swasthyanuvarataka rasayana	2
Unit-9	Rasayana as nutrient supplement	3
Unit-10	Panchakarma and its role in Rasayana Rasayana poorva shodhana (Preventive) Rutu Shodhana, Haritakyadi Rasayanartha (Shodhana roopi) Bastis as rasayana	3
Unit-11	Application of Kamya rasayana to achieve - Smriti, Medha, Bala, Prabha, Varna and Swara Desired effect in terms of Medya, Ajasrik rasayana, Sadvrutta	3
Unit-12	Concept of Vayasthaapana As Ayushya sthapana- Rasayana/ Youthfulness Assessment of higher mental function & IQ, Quality of life Rasayana as a preventive medicine	05
Unit-13	Naimittika Rasayana Vyadhihara and vyadhi apunarbhava Swasthasya urjaskara	02
Unit 14	Basics of Anthropology Understand stem cell therapy	08

## PAPER-2

### CONCEPTS OF APATYA & SUSANTAANA

100 Marks

100 Hours

Sl. No	Content	Hrs
Unit-1	Etymology, derivation, definition, synonyms of vandhya, vandhyaa, apatya, santaankara, susantaana	02
Unit-2	Importance and essentials of fertility Basics of Embryology Physiology of oogenesis Physiology of spermatogenesis	10
Unit-3	Knowledge of Garbha sambhava samagri	02

Unit-5	Knowledge of Garbhaadana paricharya	02
Unit-6	Knowledge of Garbhotpatti	02
Unit-7	Knowledge of Shukravridddhi, kshaya hetu, lakshana and chikitsa	05
Unit-8	Knowledge of Shukrapradoshajavyadhi and its management	05
Unit-9	Knowledge of Shukradustihetu, prakara, lakshana, diagnosis and management	05
Unit-10	Knowledge of Retodusti prakara, hetu, lakshana and chikitsa	05
Unit-11	Knowledge of Sukravaha sroto dusti karana, lakshana, diagnosis & management	05
Unit-12	Knowledge of Disorders of spermatogenesis (etio-pathogenesis, diagnosis and management) Oligozoospermia, Asthenozoospermia, Teratozoospermia, Azoospermia, Aspermia, Pyospermia, Necrozoospermia, OAT Syndrome, Sertoli cell only Syndrome, Klinefelters Syndrome, Kallaman's Syndrome, Dal-Castele's Syndrome	05
Unit-13	Obstructive azoospermia-diagnosis, medical management and knowledge of surgical intervention	05
Unit-14	Knowledge, diagnosis and management of Retrograde ejaculation and other ejaculatory disturbances with respect to fertility	03
Unit-15	Reproductive endocrinal disorders and management Physiology of oogenesis Physiology of spermatogenesis Hypogonadotrophic hypogonadism Hyperprolactaemia	05
Unit-16	Immunological Infertility -Various components involved in immunological infertility, mechanism, diagnosis and management	05
Unit-17	Semen Analysis Sperm function tests, semen and cervical mucus interaction, post coital test	05



Unit-18	Knowledge of karyotyping and interpretation Knowledge of Eugenics	05
Unit-19	Knowledge of cloning Knowledge of chromosomal, genetic disorders pertaining to fertility and management	02
Unit-20	Knowledge and practice of Genetic counseling	02
Unit-21	Knowledge of Normal and abnormal sexual differentiation	01
Unit-22	Applied aspects of Panchakarma in Rasayana and Vajikarana	02
Unit-23	Applied aspects of Uttara Basti	02
Unit-24	Knowledge of Susantaana (epigenetics): Preconceptional measures	02
Unit-25	Knowledge and technique of Pumsavana karma for healthy progeny PNDT act and provisions	02
Unit-26	Introduction to MART (Medically Assisted Reproductive Technologies): IUI, IVF-ET, ICSI,	02
Unit-27	Testicular biopsy – indications, surgical procedure, interpretation of HPE results	01
Unit-28	Knowledge of cystoscopy – diagnostic and interventional	01
Unit-29	Scrotal scan, Doppler studies and Interpretation	01
Unit-30	Knowledge of Varicocele: diagnosis, medical and surgical management	02
Unit-31	Disorders of Accessory sex glands and management	02
Unit 32	Concept of Reproductive health	02

### PAPER 3

#### CONCEPTS AND PRACTICE OF VAJIKARANA

100 Marks

100 Hours

Sl. No	Content	Hrs
Unit-1	Etymology, derivation, definition, scope and understanding of word vajikarana and its application in present scenario	02
Unit-2	Physiology of sexual act including mechanism of erection, ejaculation and orgasm	03
Unit-3	Knowledge of hypothalamo-pituitary-testicular axis	03
Unit-4	Knowledge of Psycho-neuro-endocrino-vasculogenic mechanism of sexual activity	03
Unit-5	Knowledge of Haemodynamics and different stages of erection	03
Unit-6	Psychological aspects of sexual function	03
Unit-7	Sukrottejakabhava. Factors influencing sexual function	02
Unit-8	Knowledge of Sukrasrutikarabhava	02
Unit-9	Knowledge of erogenous zones and lunar relationship	02
Unit-10	Maithunavidhi –asthangamaithuna, rules and regulations to have intercourse as per ritu, kala, gotra, kula etc.	02
Unit-11	Concept of Brahmacharya& its application in the present context	02
Unit-12	Sexual ethics	02
Unit-13	Myths & misconcepts regarding sex & sexuality	02
Unit-14	Sex education& counseling including pre- marital counseling	02
Unit-15	Knowledge of contraception and contraceptives	04
Unit-16	Knowledge of sukragatavata/sukrasthavatasukravritavata	05
Unit-17	Klaibya – definition, nidana, prakara, spamprapti, and chikitsa	05

Unit-18	Male Sexual dysfunctions (Etio-pathogenesis, diagnosis & management) A. Disorders of sexual desire (increased libido, decreased libido, no desire) B. Erectile dysfunction(psychological, endocrinological, neurological & vasculogenic) C. Ejaculatory disturbances (early, delayed, anejaculation, retrograde ejaculation) D. Orgasmic disorders (anorgasmia)	10
Unit-19	Female sexual disorders, causes, diagnosis and management Vaginismus Frigidity Dyspareunia Nymphomania Mood disorders Psychosexual disorders	10
Unit-20	Knowledge of various sexual postures and advantages Knowledge of Kamasutra	05
Unit-21	Napumsaka, shanda, trinaputrika, vaarta, hermaphroditism – definition, classification, samprapti, clinical manifestation, diagnosis and management Narashanda Naarishanda Knowledge about Intersex	05
Unit-22	Knowledge of paraphilia, abnormal sexual behavior, perversions and management	02
Unit-23	Knowledge of diagnostic aids pertaining to sexual disorders a. ICIVAD (Intra Cavernal Injection of Vaso Active Drugs) b. Vacuum erection devices c. Penile vibrators d. Rigi scan NPT (Nocturnal Penile Tumescence)/snap gauge test e. Penile biothesiometer f. Penile Doppler	06
Unit-24	Knowledge of Dhat syndrome, night emissions	01
Unit-25	Mutrasukra, shukrashmari, sukrameha	03

Unit-26	Aharsha & Apraharshabhava	02
Unit-27	Knowledge of Sexual performance assessment scales: MSP, GRISS, GRIMS, HARDS, Libido score, IIEF-5 scoring system for ED, Androgen deficiency score	07
Unit-28	Knowledge of Priapism and its management	01
Unit-29	Knowledge about the theories of Andropause and management	01

#### PAPER 4

### PHARMACO-THERAPEUTICS OF RASAYANA&VAJIKARANA

100 Marks

100 Hours

Sl. No	Content	Hrs
Unit-1	Definition, derivation, etymology, synonyms of vajikarana, vrishya	02
Unit-2	Pharmacology and pharmacodynamics of rasayana and vajikarana drugs	05
Unit-3	Definition, scope and understanding of a. Rasayana as I. Vyadhibalavirodhi ii. Vyadyutpadakapratibandhak iii. Vayasthapan iv. Balya v. Santarpana vi. Brimhana b. Sukrajanaka/sukrala c. Sukrapravarthaka/rechaka d. Shukrashodhana e. Shukrastambhaka f. Sukrashoshaka, vyavayi/vikashi g. Kamoddeepana/kamottejaka	15
Unit-4	Pharmacology of drugs belonging to: a. Sukrajanaka/sukrala b. Sukrapravarthaka/rechaka c. Shukrashodhana d. Shukrastabhaka e. Sukrashoshaka, vyavayi/vikashi f. Kamoddeepana/kamottejaka etc.	13

Unit-5	Pathya and apathya in relation to shukradhatu	05
Unit-6	Formulation, indications & uses of: Vrishyabasti, Vajikarana basti, Yapanabasti Siddha basti	05
Unit-7	Pharmacology of: a. Akarakarabha b. Amalaki c. Aswagandha d. Bhallataka e. Bhanga f. Bhrihati g. Gokshura h. Guduchi I. Haritaki j. Ikshu k. Jatiphala l. Jivanti m. Kapikacchu n. Kokilaksha o. Ksheeravidari p. Mandukaparni q. Masha r. Punarnava s. Shatavari t. Shweta Musali u. Yastimadhu v. Indraproktharasayanaa w. Shalmali X. Pippali y. Shunti Pathya prayoga ahara varga Mamsa varga Phala varga	20
Unit-8	Pharmacology of following Rasaushadhis: a. Abhraka b. Kukkutanda tvak bhasma c. Naga d. Rajata e. Shilajit f. Svarna	10

	g. Svarnamakshika h. Vanga i. Yashada	
Unit-9	<p>Ingredients, properties, indications and phalasaruti of:</p> <ul style="list-style-type: none"> <li>• Agasthyarasayanaa</li> <li>• Ajamamsarasayanaa</li> <li>• Akarakarabhadivati</li> <li>• Amrita PrashaGritha</li> <li>• AswagandhaGritha</li> <li>• AvalgujaRasayanaa</li> <li>• Balaswagandha Taila</li> <li>• Bhallathakarasayana</li> <li>• Brahmarasayana</li> <li>• Brihatechagalladyagritha</li> <li>• Chandraprabhavati</li> <li>• Chyavanaprasha</li> <li>• GokshuradiGuggulu</li> <li>• HaritakyadiRasayana</li> <li>• Jatiphaladi Vati</li> <li>• Kaminividravana Rasa</li> <li>• KhadiraRasayana</li> <li>• KushmandaRasayanaa</li> <li>• Lasunarasayana</li> <li>• Mahamasha Taila</li> <li>• Makaradhwaja</li> <li>• NagabalaRasayana</li> <li>• NarasimhaRasayanaa</li> <li>• PippaliVardhamanaRasayanaa</li> <li>• Pippalirasayana</li> <li>• PurnachadrodayaMakaradhwaja</li> <li>• ShatavariGrita</li> <li>• Shilajathurasayana</li> <li>• Siddha Makaradhwaja</li> <li>• Srigopala Taila</li> <li>• VanariGutika</li> <li>• Vasantakusumakara</li> <li>• Veeryastambha Vati</li> <li>• VidangaRasayana</li> <li>• VidaryadiGritha</li> <li>• VrishyaGritha</li> </ul>	15

Unit-10	Pharmacology & Pharmacodynamics of various vajikara, vrishya and Rasayana bastis	02
Unit-11	Neuro-psycho pharmacology of rasayana, vajikarn drugs	02
Unit-12	Endocrinological aspects of rasayana, vajikarana drugs Receptive Pharmacology	04
Unit-13	Recent advances in rasayana and vajikarana drugs, formulations and therapeutic techniques	02

### **PRACTICAL / CLINICAL TRAINING**

1. Assessment of Prakriti
2. Assessment of saara
3. Assessment of manasaprakriti
4. History taking & clinical examination of Geriatric patients / Geriatric profile
5. Examination of Male genito-urinary system
6. Examination of Female reproductive system
7. Semen analysis- Retopariksha
8. Post coital test, semen & cervical mucus interaction test
9. Technique of ICTVAD
10. Preparation of Rasayana and Vajikarana Bastis
11. Uttarbasti
12. Technique of Psychosexual counseling
13. Application of assessment scales pertaining to vajikarana /sexual functions
14. Technique of Genetic counseling
15. Panchakarma modalities and application in Rasayana& Vajikarana
16. Technique of measuring penile BP

### **Reference Books**

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Agnivesh	Charaka Samhita with Chakrapaani Commentary	RP-2011	Rashtriya Sanskrit Sansthan New Delhi
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3.	VruddhaVagbhata	Ashtanga Sangraha with Indu Commentary	RP-2000	Krishnadas Academy Varanasi
4.	Vagbhata	Ashtanga Hrudaya with Arunadatta& Hemadri Commentary	3rd-2012	Choukhambha Sanskrit Series
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8.	Sharangadhara	Sharangadhara Samhita	1st-2010	Choukhambha Surabharati
9.	Vangasen	Vangasen	1st-2009	Choukhambha Sanskrit
10.	Indradev Tripathi	Gada nighraha	3rd-1999	Choukhambha Sanskrit
11.	Prof. G. Sreenivas Acharya	Ayurvediya Panchkarma chikitsaVigyan Illustrated	2006	Choukhambha Orientalia
12.	Kaviraj Ambikadutta Shastri	Bhaishajya Ratnawali	1st2004	Choukhambha Sanskrit Bhavan
13.	Pt. Brahma Shankar Mishra and Dr.Indradev Tripathi	Yogaratanakar	1st-1998	Choukhambha Sanskrit Series
14.	Dr.NirmalSaxsena	Yogratnakar (English)	2nd -2003	Choukhambha Orientalia



15.	Dr.Jagdishwar Prasad Tripathi	Chakradatta	1st -2008	Choukhambha Sanskrit Series
16.	Pandit Rajeshvar Dutta Shastri	Cikitsadarsha	1st -2008	Choukhambha Sanskrit Series
17.	Ramaraksha Pathak	Kayachikitsa	1st-2019	Choukhambha Bharati Academy Publisher
18.	Priyavrat Sharma	Rog ParikshaVidhi	1st 2013	Choukhambha Bharati Academy Publisher
19.	Haridas Sridhar Kasture	Panchakarma Vigyan	1st -2016	Shree Baidyanath Ayurved Bhavan Pvt Ltd
20.	Prof. R.H.Singh.	Ayurvediya Nidana-Chikitsa Siddhanta	2015	Choukhambha
21.	Prof. R.H.Singh.	Kayachikitsa Vol. 1 and 2	2012	Choukhambha
22.	Prof. R.H.Singh.	The Holistic Principles of Ayurvedic Medicine	RP-2013	Chaukhamba Sanskrit Pratishtan Oriental Publisher
23.	Dr. Aruna	Essentials of Kayachikitsa -II, Vol. 1 -1st -2008		Sri Basavannappa Halshetty
24.	Prof. Ajay Kumar	Kayachikitsa Vol. I-IV.	1st - 2019	Choukhmbha Orientalia
25.	Prof.R.H.Singh	Panchakarma Therapy	1st - 2014	Choukhambha Sanskrit Series Office

26.	Prof.G.Shrinivasa Acharya	Panchakarma Illustrated	2006 2015	Choukhanbha Sanskrit Prathishtana
27.	Prof.A.K.Tripathi	Practice of Ayurvedic Medicine (Kayachikitsa)	2010	Choukhanbha surbharati prakashan
28.	Prof. R.R.Desai	Nidanachikitsa Hastamalaka	1st - 2016	Shree Baidyanath Ayurved Bhavan Pvt Ltd
29.	Prof. K.R. Srikantamurthy	Clinical Methods in Ayurveda	1st - 2002	Choukhmbha Orientalia, Varanasi
30.	Gangadharshastri Gune	Aushadhi Gunadharma	Shastra 2017	Choukhanbha Sanskrit Prathishtana
31.	Dr. Haridas Shridhar Kasture	Ayurvediya PanchkarmaVijana	8th -2005	Baidyanath
32.	Prof. Ram Harsh Singh	Holistic Principles of Ayurvedic Medicine	2003	Chaukhamba Ayurvijnan
33.	Prof.Ram Harsh Singh	Ayurvediya Manas Vijnana	1st -1986	Choukhambha Amarabharati Prakashan Varanasi
34.	Dr.Satyapal Gupta	Psychopathology in Indian Medicine	1st -1977	Ajay Publishers
35.	Stuart H Ralston Ian D Penman Mark W J Strachan Richard P Hobson	Davidson's Principles and Practice of Medicine.	23rd - 2018	ELSEVIER

36.	Dr Sandhya A Kamath	API Text Book of Medicine.	11th -2019	CBS Publishers & Distributors Pvt. Ltd
37.	Dennis Kasper Anthony Fauci Stephen Hauser Dan Longo J. Larry Jameson and Joseph Loscalzo.	Harrison's Text Book of Medicine.	19th - 2014	Mc Graw Hill Education
38.	Goldman- Cecil	Cecil Text Book of Medicine.	International edition - 25th	Elsevier
39.	K J Hiremath S K Hiremath	Ayurvediya Rasayana Vajikarana Chikitsa	2001	Kalmeshwar prakashana belgaum
40.	Sadhana Desai Mandakini Parihar Gautam Allahbadia	Infertility Principles and Practice	2004	B. I. Publications Pvt. Ltd.
41.	Adam H Balen Howard S Jacobs	Infertility in Practice	Second 2006	Churchill Livingstone An imprint of Elsevier
42.	Gyanendra Pandey	Aphrodisiac Therapy:Vajikarana Tantram	First 2005	Choukhambha Sanskrit Series Office, Varanasi
43.	S N Prasad	Illustrated Kalyanamalla's Anangaranga: An indian Erotic	First 1983	Choukhambha Orientalia, Varanasi
44.	J L N Shastry K Nishteshwar	Vajikarana Tantra	First 2009	Choukhambha Orientalia, Varanasi

45.	G N Allahbadia Rubina Merchant	Gynaecological Endoscopy & Infertility (with cd)	1st 2006	Jaypee Brothers Medical Publishers (P) Ltd.
46.	S C Basu	Male Reproductive Dysfunction	1st 2005	Jaypee Brothers Medical Publishers
47.	Sadhana Desai Gautam Allahbadia	Infertility & Trans- vaginal Sonography Current Concepts	1st 1995	Jaypee Brothers Medical Publishers
48.	V Kapur R K Suri	Basic Human Genetics	2nd 2005	JAYPEE The Health Sciences Publisher
49.	Kanthi Bansal	Practical Approach to Infertility Management	1st 2004	Jaypee Brothers Medical Publishers
50.	Sushma Deshmukh	Infertility Management Made Easy	1st 2007	Jaypee Brothers Medical Publishers
51.	Mehroo Hansotia Sadhana Desai Mandakini Parihar	Advanced Infertility Management	1st 2002	Jaypee Brothers Medical Publishers
52.	A M Phadke	Clinical Atlas of Sperm Morphology	1st 2007	Jaypee Brothers Medical Publishers

53.	A S Pathak	Kama Samuha	1st 2008	Choukhambha Publications, New Delhi.
54.	Jyotir Mitra	Kamashastra Antargata Vajikarana Vijnana	1st 2004	Choukhambha Orientalia, Varanasi
55.	Adam H Balen Howard S Jacobs	Infertility in Practice	2nd 2003	Churchill Livingstone An imprint of Elsevier
56.	S D Gangane	Human Genetics	3rd 2009	ELSEVIER
57.	K K Pathak	Kuchimara Tantram	1st 2007	Choukhmbha Sanskrit Series Varanasi
58.	Juan A Garcia-Velasco Manish Banker Mahajan Nalini	Intrauterine Insemination	1st 2014	Jaypee Brothers Medical Publ - ishers (P) Ltd
59.	Jaideep Malhotra	Practical Tips For Infertility Management	1st 2016	Jaypee Brothers Medical Pub - lishers (P) Ltd
60.	Rishma Dhillon Pai Nandita Palshetkar Hrishikesh Pai Kinjal R Shah	Textbook Of Iui And Art	1st 2016	Jaypee Brothers Medical Publi - shers (P) Ltd
61.	Kamini.A Rao Howard Carp Robert Fischer	Principles And Practice Of Assisted Reproductive Technology Vol.1	1st 2014	Jaypee Brothers Medical Publishers

62.	Kamini.A Rao Howard Carp Robert Fischer	Principles And Practice Of Assisted Reproductive Technology Vol.2	1st2014	Jaypee Brothers Medical Publishers
63.	Kamini.A Rao Howard Carp Robert Fischer	Principles And Practice Of Assisted Reproductive Technology Vol.3	1st 2014	Jaypee Brothers Medical Publishers
64.	Sunita R Tandulwadkar	The Art And Science Of Assisted Reprod- uctive Technology	1st 2015	Jaypee Brothers Medical Pub- lishers (P) Ltd
65.	Anil.K Dubey	Infertility Diagnosis, Management And Ivf	1st 2012	Jaypee Brothers Medical Pub- lishers (P) Ltd, New Delhi
66.	Pankaj Talwar	Manual Of Assisted Reproductive Technologies And Clinical Embryology (With Cds)	1st 2012	Jaypee Brothers Medical Publishers (P) Ltd
67.	Naveenchandra Acharya S Majumdar R.Ramayya	Handbook Of Male Infertility And Andrology	1st 2015	Jaypee Brothers Medical Pub- lishers (P) Ltd
68.	David. K Gardner Ariel Weissman Colin M. Howles Zeev Shoham	Textbook of Assisted Reproductive Techniques. Vol.1	4th 2012	CRC Press
69.	David. K Gardner Ariel Weissman Colin M. Howles Zeev Shoham	Textbook of Assisted Reproductive Techniques. Vol.2	4th 2012	CRC Press

70.	K Jayakrishnan	Insights into Infertility Management	1st 2012	JAYPEE
71.	Jayant G Mehta Bryan Woodward	Male Infertility: Sperm Diagnosis, Management and Delivery	1st 2014	JP medical publishers
72.	Khaldoun Sharif Arri Coomarasamy	Assisted Reproduction Techniques	1st 2012	Wiley-Blackwell Publishing
73.	Godwin I Meniru	Cambridge Guide to Infertility Management and Assisted Reproduction	1st 2001	Cambridge university press
74.	G.N Allahbadia M.M Chawla Rita B Das Goral N Gandhi Esther V Garcia Rubina Merchant	The Art and Science of Assisted Reproductive	2nd 2017	JAYPEE Brothers Medical Publishers (P) LTD, New Delhi
75.	Nilamdhhab Kar Gopal Chandra Kar	Comprehensive Textbook Of Sexual Medicine	2nd 2014	JAYPEE Brothers Medical Publishers
76.	Y A Sontakke	Principles Of Clinical Genetics	1st 2018	JAYPEE The Health Sciences Publisher
77.	Sulbha Arora Rubina Merchant G N Allahbadia	Reproductive Medicine; Challenges, Solutions And Breakthroughs	1st 2014	JAYPEE Brothers Medical Publishers

78.	Gab Kovacs	The Subfertility Handbook: A Clinician's Guide	2nd 2011	Cambridge university press
79.	Peter.D Turnpenny Sian Ellard	Emery's Elements Of Medical Genetics	15th2017	ELSEVIER
80.	Guy Bradley-Smith Sally Hope	Oxford Handbook Of Genetics	1st 2011	Oxford University Press
81.	Kamini A Rao	The Infertility Manual	3rd2009	JAYPEE Brothers Medical Publishers
82.	Dr Ajaykumar Dr Tina Singhal	Male Infertility and Management	1st 2017	Choukhambha Vishwabharati
83.	Gautam N Allahabadia	Intrauterine Insemination	3rd 2014	JAYPEE Brothers Medical Publishers
84.	S Bhattacharya M Hamilton	Management of Infertility for the Mrcog and Beyond	3rd 2014	Cambridge university press
85.	Craig Niederberger	An Introduction to Male Reproductive Medicine	1st 2011	Cambridge university press
86.	David K Gardner Botros R.M.B. Rizk T Falcone	Human Assisted Reproductive Technology	1st 2011	Cambridge university press
87.	Botros R.M.B. Rizk N Aziz A Agarwal E Sabanegh JR	Medical & Surgical Management of Male Infertility	1st 2014	JAYPEE Brothers Medical Publishers



88.	Chakravarty BN	Clinics in Reproductive Medicine and Assisted Reproductive Technology VOL-I	1st 2015	CBS Publishers & Distributors Pvt. Ltd.
89.	Chakravarty BN	Clinics in Reproductive Medicine and Assisted Reproductive Technology VOL-I I 1st 2017		CBS Publishers & Distributors Pvt. Ltd.
90.	Mathur Manish	Male Infertility: Factors, Consequences and Natural Remedies	1st 2016	Stadium Press (India) Pvt. Ltd.
91.	L.B Jorde J.C Carey M.J Bamshad	Medical Genetics	1st 2017	ELSEVIER
92.	G G Mukherjee G Khastgir B Pal	Practical Guide in Reproductive Surgery	1st 2018	JAYPEE Brothers Medical Publishers
93.	Jaideep Malhotra R Haththotuwa J D Tank	Handbook on Managing Infertility	1st 2012	JAYPEE Brothers Medical Publishers
94.	G G Mukherjee G Khastgir S Chatterjee	Practical Guide in Assisted Reproductive Technology	1st 2018	JAYPEE Brothers Medical Publishers
95.	Kamini A Rao P S Divyashree	The Infertility Manual	4th 2018	JAYPEE The Health Sciences Publisher

96.	Hemant Deshpande Munjal Pandya	Male Infertility (Problems and perspectives)	1st 2019	CBS Publishers & Distributors Pvt. Ltd.
97.	Tejinder singh Piyush Gupta Daijit Singh	Principles of Medical Education	4TH	JAYPEE Brothers Medical Publishers
98.	Manu L Kothari Lopa A Mehta Sadhana S Roychoudari	Essentials of Human Genetics	5TH	Universities Press
99.	Dr. Santosh N Belavadi	Rasayana Sarvaswam	1ST	Vaishnavi Publications, Gadag
100.	Dr. Santosh N Belavadi	Vajeekarana 1ST Hastamalaka		Vaishnavi Publications, Gadag
101.	Mandakini Parihar Ashwini Bhalerao-Gandhi	Contraception Past, Present and Future	1st 2006	JAYPEE
102.	S. K. Choudari	Practice of Fertility control	7th	ELSEVIER
103.	Dr Amal Shib Pathak	Kama sutra of Vatsyayana	1st 2014	Choukhambha Sanskrit Sansthan, Pune
104.	MKC Nair	Sexual Reproductive Health of Young People(10-24 Years)	1st2006	JAYPEE Brothers Medical shers Publi-(P) LTD, New Delhi
105.	Duru Shah Gautam Allahbadia	Practical Infertility Management	2nd2003	Orient Longman

106.	K J Hiremath S K Hiremath	Ayurvediya Rasayana Vajikarana Chikitsa	2001	
107.	Sadhana Desai Mandakini Parihar Gautam Allahbadia	Infertility Principles and Practice	2004	B. I. Publications Pvt. Ltd.
108.	Adam H Balen Howard S Jacobs	Infertility in Practice	Second 2006	Churchill Livingstone An imprint of Elsevier

## SHALAKYATANTRA

Theory Papers : 04	Theory Marks : 400 Marks (100 each)
Practical Marks : 200	Duration : 02 Years
Grand Total Marks : 600	

PAPER I : Shalakya - Netra roga	100 Marks	100 Hours
PAPER II : Shalakya - Shiro - Nasa - Karna - Kantha roga	100 Marks	100 Hours
PAPER III: Shalakya- Mukha - Danta roga	100 Marks	100 Hours
PAPER IV: Shalakya - Vishishtha Chikitsa Vigyan	100 Marks	100 Hours

### PAPER I Shalakya - Netra roga Part-A

100 Marks

100 Hours

Sl. No	Topics	50 Hrs
Unit-1	Nidanapanchaka, and samanya chikitsa of netrarogas	3
Unit-2	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Sandhigata, Vartmagata and Pakshmagatarogas with their comparative knowledge of modern science.	10
Unit-3	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Shuklagata and Krishnagatarogas with their comparative knowledge of modern science.	10
Unit-4	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Drishtigata and Sarvagatarogas with their comparative knowledge of modern science.	10
Unit-5	Descriptive knowledge of Ashtavidhashastrakarma (eight types of surgical procedures) and Chaturvidhachikitsa (Bheshaja, Shastra, Kshara and Agni) and post-operative care of the patient with respect to Netrarogas.	5

Unit-6	Diseases of eyelids and lacrimal apparatus and their Modern and Ayurvedic Management.	6
Unit-7	Disorders of conjunctiva, cornea and sclera and their Modern and Ayurvedic Management.	6

### Part-B

Sl. No	Topics	50 Hrs
Unit-08	Disorders of uveal tract and lens and their Modern and Ayurvedic Management.	7
Unit-09	Disorders of vitreous, retina, optic nerve, visual pathway and visual cortex and their Modern and Ayurvedic Management.	8
Unit-10	Benign and malignant tumours of the eye and their Ayurvedic Management.	6
Unit-11	Study of Nayanabhighata with prevention and management.	8
Unit-12	Concept of congenital, developmental disorders of eye and prevention and management through Ayurveda and modern science.	7
Unit-13	Ocular motility disorders and their management as per Ayurvedic and modern science.	7
Unit-14	Neurological and systemic disorders affecting Eyes and their Modern and Ayurvedic Management. Degenerative diseases affecting Eyes and their Modern and Ayurvedic Management.	7

### PAPER II

### Shalakya - Shiro - Nasa - Karna - Kantha roga

### Part-A

100 Marks

100 Hours

Sl. No	Topics	50 Hrs
Unit-1	Samanya chikitsa of shiro-nasa-karna and kantharogas	05
Unit-2	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Shiro and kapalgatha rogas with their	10

	comparative knowledge of modern science.	
Unit-3	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Nasarogas with their comparative knowledge of modern science.	15
Unit-4	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Karna rogas with their comparative knowledge of modern science.	13
Unit-5	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Kantharogas with their comparative knowledge of modern science.	07

### Part-B

Sl. No	Topics	50 Hrs
Unit-6	Descriptive knowledge of Ashtavidhashastrakarma (eight types of surgical procedures) and Chaturvidha chikitsa (Bheshaja, Shasthra, kshara and Agni) and post-operative care of the patient with respect to ENT disorders.	10
Unit-7	Study of various types of Headache and their Modern and Ayurvedic Management.	08
Unit-8	Diseases of the Nose and paranasal sinuses and their Modern and Ayurvedic Management.	10
Unit-9	Diseases of the Ear and their Modern and Ayurvedic Management.	10
Unit-10	Diseases of the Throat and their Modern and Ayurvedic Management. Dysphasia and Description various Endoscopic investigations with their significance in Dysphasia. Obstructive lesions of Throat.	8
Unit-11	Clinical anatomy and physiology pertaining to voice Diseases of the Larynx and their Modern and Ayurvedic Management.	4

**PAPER III**  
**SHALAKYA - MUKHAGATA ROGAS**

100 Marks

**Part-A**

100 Hours

Sl. No	Topics	50 Hrs
Unit-1	Descriptive Introduction to Mukha rogas And Ayurvedic Dentistry. Enumeration of Mukharogas according to different authors Nidanapanchaka and samanyachikitsa of Mukha-Dantarogas.	5
Unit-2	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Oshthagata rogas with their comparative knowledge of modern science.	10
Unit-3	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Dantamulagata rogas with their comparative knowledge of modern science.	10
Unit-4	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Danta rogas with their comparative knowledge of modern science.	10
Unit-5	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Jiwhagata rogas with their comparative knowledge of modern science.	08
Unit-6	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Talugata rogas with their comparative knowledge of modern science.	07

**Part-B**

Sl. No	Topics	50 Hrs
Unit-7	Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications, differential diagnosis, prognosis and management of Sarvasara mukha rogas with their comparative knowledge of modern science.	10
Unit-8	Jalandhar bandha and its importance and application in painless tooth	03

	extraction	
Unit-9	Diagnostic Methodology in oral and dental diseases	15
Unit-10	Oro- Dental diseases with their Modern and Ayurvedic management.	10
Unit-11	Knowledge of essential modern drugs and anesthetic agents for diagnosis and surgical procedures in oro-dentistry.	07
Unit-12	Updated knowledge of modern instruments of Oro-Dental Disorders.	05

**PAPER IV**  
**shalakya - vishishtha chikitsa vigyan**

100 Marks

**Part-A**

100 Hours

Sl. No	Topics	50 Hrs
Unit-1	Detailed study of Netra kriyakalpas and vishishta aushadhikalpas with their standard operative procedures and their critical analysis.	05
Unit-2	Critical analysis of classical treatment procedures and vishishta aushadhikalpas with their standard operative procedures and their critical analysis in the context of Anya Urdhwajatrugata vikaras	05
Unit-3	Role of Panchakarma chikitsa in Urdhwajatrugata vikaras.	02
Unit-4	Descriptive knowledge of common ocular surgical procedures like DCT, DCR, Pterygium, Entropion, Ectropion, Chalazion surgery, Cataract surgery, Evisceration, Enucleation, surgical procedures of glaucoma etc.	15
Unit-5	Descriptive knowledge of common ENT surgical procedures like Tympanoplasty, Mastoidectomy, Septoplasty, Septorhinoplasty, antral puncture, Turbinectomy, Polypectomy, Tonsillectomy etc.	10
Unit-6	Applied aspects of Imaging in ENT and head disorders Applied aspects of Imaging in EYE	3
Unit-7	Speech therapy and rehabilitation of the deaf and mute.	2
Unit-8	Recent advances in the medical and surgical management of Eye, ENT and Oro-Dental diseases.	3



Unit-9	Karna sandhana, Nasasandhana, Oshthasandhana with their recent advances.	4
Unit-10	Scope of researches in Shalakya Tantra in present era.	1

### **Part-B**

Sl. No	Topics	50 Hrs
Unit-11	Ocular emergencies and their management.	04
Unit-12	Knowledge of preventive and community ophthalmology -WHO and National Programme for control of blindness and role of Ayurveda in these Programmes.	04
Unit-13	Knowledge of National Programme for deafness and tinnitus and role of Ayurveda in these Programmes.	05
Unit-14	Knowledge of National Programme for prevention of oral cancer and role of Ayurveda in these Programmes.	05
Unit-15	Effects of environmental hazards, and life style disorders of Eye, ENT and Oro dental disorders and their Modern and Ayurvedic preventive and therapeutic measures.	06
Unit-16	Management of emergencies in ENT, Head and Oro-Dental disorders	10
Unit-17	Effects of systemic diseases on Eye, ENT, Head and Oro-dental diseases and their Modern and Ayurvedic management.	05
Unit-18	Removal of foreign bodies from Eye, ENT and Oro-Dental disorders.	05
Unit-19	Importance of Yogic kriyas, Yogasana and pranayama in Shalakya tantra	04
Unit-20	Knowledge of rules, regulations and medico-legal aspects of Ophthalmic, ENT and Oro-dental practice.	02

### **PRACTICALS / CLINICAL TRAINING**

- Intensive integrative training would be imparted to scholars in understanding the classical Ayurvedic aspects with an emphasis of critical comparative interpretation.
- Mandatory participation of scholars in seminars, group discussions, clinical demonstrations, journal review meetings, case study, continuing education activities and research clinical projects.

- During the first year course the emphasis would be laid to impart adequate knowledge on fundamental aspects and their applications, with a focus on latest diagnostic tools, instrumentations and laboratory procedures. Practical orientation and hospital based clinical training is an integral part of the curriculum all through and also to be involved in the dissertation work.
- In the second year, training would stress upon extending the knowledge on techniques and imparting skill for surgical performance, so that the scholar is able to perform Eye, Ear, Nose, Throat and Dental surgical procedures independently.
- In the third year the scholar should concentrate on the clinical work and research work based on the dissertation.
- The participation of the scholars in all the aspects of educational process is mandatory.
- Hospital postings- The student has to work for 6 terms (one term of 6 months each) of resident posting is compulsory you to which first 2 postings will be as a JR 1, the next two postings will be as a JR 2 and final two postings as JR 3.
- The student should also develop in the academic work of the department.

### Reference Books

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1	Sushruta	Sushruta Samhita with Dalhana Commentary	1st -2012	Choukhambha Surabharati
2	Agnivesh	Charaka Samhita with Chakrapaani Commentary	RP-2011	Rashtriya Sanskrit Sansthan New Delhi
3	Vruddha Vagbhata	Ashtanag Sangraha with Indu Commentary	RP-2000	Krishnadas Academy Varanasi
4	Vagbhata	Ashtanga Hrudaya with Arunadatta & Hemadri Commentary	3rd-2012	Choukhambha Sanskrit Series
5	Dr. R.C. Choudhary	Shalakya tantra	18th 2003	Choukhambha orientiala Varanasi

6	Prof K. S. Dhiman	Shalakyta Tantra. Kriyakalp Vigyan	1st 2013	Choukhambha Vishwabharati Varanasi
7	Bhargav Shah	Diseases of Nose Throat and Ear	17th 2002	Usha publications, Mumbai
8	EB Edr.	Diseases of Nose Throat and Ear, Head and Neck	6th Edi 2017	Paras Publication, Mumbai
9	Scott Browns editions	A Text book of otorhinololaryng- ology	7th 2008	Hoddes Stoughton
10	Dhingra	Text book of Ear Nose Throat diseases	10th 2010	Elsevier
11	Mohd. Maqbool	Text book on ENT	19th 2012	Jaypee brothers medical publications
12	Logan Turner	Disease of Nose Throat Ear	10th 2007	Jaypee brothers
13	Ballenger	Disease of ENT	7th -1 jan 2017	Elsevier
14	Cumming's	Oto Laryngology	6th 9 march 2010	Mosby
15	Rob Smith's	Operative surgery head & neck	4 sept 1998	C R C Press
16	Paprella's	Year book of otolaryngology head 7 neck surgery	2000	Mosby , 2000
17	Hazarika's	Text book on ENT	30 jan 2010	C B S publisher

18	Anirwan Biswas	Clinical Audio Vestibulometry	5th edition	1 jan 2016
19	Ramanath Dwivedi - R.C. Chaudhary	Shalakya Tantra	5th 1977	Choukhmba Sanskrit series
20	N. Srikanth	The Actions and uses of Indigenous Ophthalmic Drugs	2009	Choukhamba Sanskrit series
21	Agarwal and Gupta	Clinical Examination of Ophthalmic Cases	3rd edition	CBS Publisher
22	Cotlier, St. Louis	Alder's Physiology of the Eye and Clinical Applications	5th Ed 2012	Willis Paschure Publication
23	Duke Elder, St. Louis	System of Ophthalmology	1958	St. Louis Mosby publisher
24	Bailliere Tindal and Castell. Ahmed E, Dhanda, Dutta, L.C Jaypee brothers, May C and Worth C	Manual of the Diseases of the Eye	25 feb 2012	Lippincott Williams and Wilkins
25	Duke and Elder	Manual of Refraction	1 jan 1993	Elsevier
26	Stallard's	Eye Surgery	5 April 1989	Butterworth Heinemann ltd
27	Parsons	Diseases of Eye	2015	Elsevier
28	Hazarika's	Text book on ENT	30 jan 2010	C B S PUBLISHER

## KAUMARABHRITYA

Theory Papers : 04	Theory Marks : 400 Marks (100 each)
Practical Marks : 200	Duration : 02 Years
Grand Total Marks : 600	

PAPER I : Bija, GarbhaVigyaniya	100 Marks	100 Hours
PAPER II : NavajataShishuVigyanaevumPoshana	100 Marks	100 Hours
PAPER 3 : Balaroga (Paediatric Disorders)	100 Marks	100 Hours
PAPER 4 : Balaposhana and Recent advances	100 Marks	100 Hours

### PAPER- 1

#### Bija, Garbha Vigyaniya (Human Genetics, Embryology)

#### PART-A

#### Prakrita Bija-Bijabhaga-Bijabhagavayava evam Tadjanya Vikriti (Genetics and related disorders) BijaVigyaniya (Human Genetics)

100 Marks

100 Hours

Sl. No	Topics	Hrs
Unit-1	Ayurvedic genetics with modern interpretation: Shukra, Shonita, Shukrashonita Doshas, Bija-Bijabhaga-Bijabhiag aavayava Vikriti, Shadbhavas-Matrija and PitrajaBhavas, Atmaja, satwaja, Satmyaja and Rasaja bhavas Yajjah Purushiya and Atulyagotriya adhyaya; Measures for obtaining good progeny.	08
Unit-2	<b>Modern genetics</b> Basic Concepts: <ul style="list-style-type: none"> <li>Cell, Cell division, nucleus, DNA, chromosomes, Classification</li> <li>Introduction to genetics and its branches</li> <li>Molecular and cytogenetics -structures of gene, and molecular screening</li> <li>Human Chromosomes – Structures, number and classification, methods of chromosome preparation and banding patterns, karyotype</li> <li>Single gene pattern inheritance: Autosomal &amp; Sex chromosomal pattern of inheritance, Intermediate pattern of inheritance and multiple alleles, Mutations, Non Mendelian</li> </ul>	22

	<p>inheritance, Mitochondrial inheritance, Genomic imprinting, parental disomy</p> <ul style="list-style-type: none"> <li>Criteria for multi-factorial inheritance</li> </ul>	
Unit-3	<p><b>Pathogenesis:</b></p> <ul style="list-style-type: none"> <li>Pathogenesis of chromosomal aberrations and their effects, Chromosomal aberration (Klinefelter, Turner and Down's syndrome), Chromosomal disorders</li> <li>Chromosomal abnormalities: Autosomal &amp; Sex chromosomal abnormalities and syndromes</li> <li>Recombinant DNA, genetic inheritance, Inborn errors of metabolism.</li> <li>Multifactorial pattern of inheritance: Teratology</li> <li>Cancer Genetics – Haematological malignancies</li> <li>Pharmacogenetics.</li> <li>Immunogenetics</li> <li>Genetic Counseling</li> <li>Ethics and Genetics</li> </ul>	20

**PART-B: Prakrita Bija-Bijabhaga-Bijabhagavayava evam Tadjanya Vikriti (Genetics and related disorders) - GarbhaVigyanaya (General Embryology) and Balavridhhi vikasakrama**

Sl. No	Topics	Hrs
Unit-4	<p>Garbha (Embryo), Garbhavastha (Gestational Period), Sperm, Ovum; spermatogenesis, oogenesis, structure of ovum</p> <p>Sperm in the male genital tract, sperm in the female genital tract, activation and capacitation of sperm.</p> <p>Garbhamasanumasika Vriddhievam Vikasa (Ayurvedic and Modern concepts of embryo and fetal development)</p> <ul style="list-style-type: none"> <li>First week of development</li> <li>Second week of development</li> <li>Third week of development</li> <li>Fourth to eighth week of development (Embryonic period)</li> <li>Development from third month till birth (Fetal period)</li> </ul>	11hrs
Unit-5	<p>Formation of Prakriti, their assessment in Bala, Kumara, Yauvana. Pathya-Apathya according to prakriti</p>	(10) 5hrs
Unit-6	<ul style="list-style-type: none"> <li>Apara (Placenta) Apra Nirmana (Formation of Placenta), ApraKarya (Functions of Placenta); ApraVikara (Placental abnormalities).</li> </ul>	(15) 22hrs

	<ul style="list-style-type: none"> <li>• Nabhinadi (Umbilical Cord).</li> <li>• Formation and features of umbilical cord.</li> <li>• Garbha Poshana (Nutrition) from conception to birth.</li> <li>• Yamala Garbha (twins)</li> <li>• Garbha Vriddhikara Bhavas</li> <li>• Garbhopaghatkara Bhavas, effect of maternal medications, diet and illness over fetus.</li> <li>• Teratology including defects of bija, atmakarma, kal, ashaya etc.: causative factors for teratogenicity, mode of actions of teratogenes, critical periods</li> <li>• Perinatal care and perinatal complications</li> <li>• Scientific study Jataharini Specific in children.</li> <li>• Prenatal diagnosis</li> </ul>	
Unit-7	<b>Samanya Janmajata Vikara (Common Congenital anomalies of different systems):</b> Sahaja Hridaya Vikara ( Congenital Cardiac Disorder), Jalashirshaka (Hydrocephalus), Khandaoushtha ( cleft lip), Khanda-Talu (cleft Palate), Sanniruddha Guda (Anal Stricture/ Imperforated anus), Pada-Vikriti (Talipes equinovarus and valgus), Tracheoesophageal Fistula (TOF), spina bifida, Meningocele, Meningomyelocele, Pyloric Stenosis.	(15) 12hrs

## PAPER-2

### Part-A

100 Marks

### Navajata Shishu Vigyana evum Poshana

100 Hours

Sl. No	Topics	Hrs
Unit-1	<ol style="list-style-type: none"> <li>1. Navajata Shishu Paribhasha, Vargikarana. (Important definitions and classification related to neonates)</li> <li>2. Navajata Shishu Paricharya evam Prana-Pratyagamana. (care of the newborn including recent methodology for the resuscitation)</li> <li>3. Samanya Navajata Shishu Paricharya (General Neonatal Care- Labour room onwards).</li> <li>4. Samayapurv evam Samaya pashchat Jata Shishu Paricharya (Management of preterm, post term and IUGR newborn).</li> <li>5. Prasava Kalina Abhighataja Vyadhi (Birth injuries): Upashirshaka (Caput Succedaneum, cephalohematoma), Bhagna (Fractures), Mastishkantargata Raktasrava (ICH, IVH, Subdural hemorrhage).</li> <li>6. Navajata Shishu Parikshana (Examination of new born): Ayu Parikshana (including Lakshanadhyaya) Modern approach of Neonatal Examination including assessment of gestational age.</li> <li>7. Kumaragara: Navajata shishu kasha prabhandan (Nursery</li> </ol>	35



management, NICU, Nursery plan, staff pattern, medical records, visankramanikaran (sterilization), knowledge of equipments used in nursery.

## PART-B

Sl. No	Topics	Hrs
Unit-2	<ol style="list-style-type: none"> <li>1. Navajata Shishu Vyadhi (Early neonatal disorders): Hypothermia, Shwasavarodha (Asphyxia Neonatorum/Respiratory distress), Ulvaka (Aspiration pneumonia), Rakta Vishamayata (Neonatal septicemia), Kamala (Neonatal Jaundice), Akshepaka (Neonatal convulsion), Pandu (Anemia), Atisara (Diarrhea), Asamyak Nabhinalakartanajanyavyadhi.</li> <li>2. Navjata Kshudra Vikara (Minor neonatal ailments): Chhardi (Vomiting), Vibandha (constipation), Udarashula (Infantile colic), Puya Sphota (Pyoderma), Shishu Netrabhishyanda (Ophthalmia neonatorum).</li> <li>3.-Sadyojatasya Atyayika Chikitsa (Management of neonatal emergencies): Shock, Fluid and electrolyte imbalance, Convulsion, Hemorrhagic diseases of Newborn etc.</li> <li>4.Procedures: Shiro-Pichu, Abhyanga, Parisheka, Pralepa, Garbhodaka Vamana (Stomach wash), Ashchyotana, Neonatal resuscitation techniques, Blood sampling, Intravenous canalization, Umbilical vein catheterization, Bone marrow aspiration, Phototherapy, Naso-Gastric tube insertion, Urethral catheterization, Exchange blood transfusion, Thoracocentesis, Bone marrow infusion, Lumbar puncture.</li> </ol>	35
Unit -3	<p><b>Neonatal Nutrition:</b></p> <p>A. Navjat Shishu Ahara (Neonatal feeding):</p> <ol style="list-style-type: none"> <li>1. Specific Feeding methodology as per Ayurveda and recent advances: Day to day fluid, milk, caloric requirement for the newborn, feeding technique for the preterm baby.</li> <li>2. Stanyotpatti and Prasruti (Lactation physiology), Stanya Samghatana (Composition of breast milk), Stana Sampat (Characteristics of normal breast), Stanya Sampata evam Mahatva (Properties &amp; importance of pure milk), Stanya-Piyusha (Colostrum); Stanya-Pana-Vidhi (Method for breast milk feeding), Stanyakshaya / Stanyanasha (Inadequate production and absence of breast milk), Stanya parikshana (Examination of breast milk), Stanyabhava Pathya Vyavastha (Alternative feeding methods in absence of breast milk).</li> </ol>	15



	<p>Various feeding methods, TPN( Total Parenteral Nutrition)</p> <p>3. Stanyadosha (Vitiation of Breast milk), Stanya Shodhana (Purification of breast milk), Stanya Janana and Vardhanopakrama (Methods to enhance breast milk formation)</p> <p>4. Dhatri (Wet nurse): Dhatri Guna and Dosha (Characteristics of Wet nurse), Concept of Breast Milk Banking.</p> <p>5. Lehana (Elucturies)</p>	
Unit -4	<p><b>Pediatric Nutrition:</b></p> <p>B Bala-Poshana (Child Nutrition):</p> <p>1. Daily requirements of nutrients for infant and children</p> <p>2. Common food sources</p> <p>3. Satmya and Asatmya Ahara (Compatible and incompatible diet)</p> <p>4. Pathya evam Apathya Ahara (Congenial and non-congenial diet)</p> <p>5. Stanyapanayana (Weaning)</p>	15

**PAPER- 3**  
**Balaroga (Pediatric Disorders)**  
**PART-A**

100 Marks

100 Hours

Sl. No	Topics	Hrs
Unit-1	<b>Pranvaha srotojanya Vyadhi</b> (Respiratory disorders)- Kasa (Cough), Shwasa (Respiratory distress Syndrome), Tamaka Shwasa (Childhood Asthma), Bronchiolitis, Shvasanaka Jwara (Pneumonia- bacterial, viral etc), Rajyakshma (Tuberculosis), Vaksha-Puyata (Pyothorax), Vaksha Vata-Purnata (Pneumothorax).	10
Unit-2	<b>Annavaha Srotasjanya Vyadhi</b> (Gastrointestinal disorders): Jwara (Fever), Chardi (Vomiting) Ajirna (Indigestion), Kshiralsaka, Atisara (Diarrhea), Pravahika, Vibandha (Constipation), Udarshula (Pain in abdomen), Gudabhramsha (Rectal prolapse).	10
Unit-3	<b>Rasa evam Raktavaha Srotojanya vyadhi</b> (Hematological and circulatory disorders), Pandu (Anemia, and its various types like nutritional hemolytic etc ) Raktapitta (Bleeding disorders), Vishishta Hridroga (Specific cardiac- diseases-RHD etc), Hypertension, Leukemia.	10
Unit-4	<b>Mansavaha srotojanya vyadhi</b> : Myopathies Mutravaha srotojanya vyadhi (disorders of Urinary System): Vrikkashotha: (Glomerulonephritis and nephrotic syndrome),	20

	<p>Mutrakrichra (Dysuria), Mutraghata (Anuria).</p> <p>Vatavaha Sansthanajanya vyadhi (disorders of Nervous system) : Apasmara (Epilepsy), Mastulunga-Kshaya, Mastishka-Shotha (Encephalitis), Mastishkavrana-Shotha (Meningitis).</p> <p>Pediatric disabilities and rehabilitation –Cerebral palsy, ardhita (facial palsy), pakshavadha (hemiplegia), ekanagavata (monoplegia), adharanga vayu (diplegia), amavata (juvenile rheumatoid arthritis)</p> <p>Manovaha Srotas vayadhi : Breath holding spell, Shayyamuṭrata (Bed wetting), Autism, ADHD (Attention Deficit and hyperactive disorders), Learning Disability, Mental retardation, Temper tantrum, Pica.</p>	
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## PART- B

Sl. No	Topics	Hrs
Unit-5	<p><b>Antahsravi evam Chayapachayajanya Vyadhi (Endocrine and Metabolic disorders).</b></p> <p>Kuposhanjanya Vyadhi (Nutritional disorders): Karshya-Phakka-Balshosha-Parigarbhika (PEM and allied disorders), Deficiency disorders of Vitamins, minerals and trace elements, Hypervitaminosis.</p>	10
Unit-6	<p><b>Krimievam Aupsargika Vyadhi (Infestations and Infections):</b></p> <p>Krimi (Giardiasis and intestinal helminthiasis, Amoebiasis) Common bacterial, viral infections with special reference to vaccine-preventable diseases: Rohini (Diphtheria), Whooping cough, Apatanaka (Tetanus including neonatal tetanus), Romantika (Measles), Karnamula Shotha (Mumps), Rubella, Masurika (Chickenpox), AntrikaJwara (Typhoid and Paratyphoid), Viral Hepatitis, Vishama Jwara (Malaria), Kala-azar, Dengu fever, HIV (AIDS), Poliomyelitis, mastishaka aavaran shotha (meningitis), mastishaka shotha (encephalitis), Chickengunia, TvakVikara (Skin disorders): Ahiputana (Napkin Rashes), Shakuni (Impetigo), Sidhma, Pama, Vicharchika, Charmadal (Infantile atopic dermatitis), Gudakutta.</p>	10
Unit-7	<p><b>Any Vyadhyi (Miscellaneous disorders):</b> Jalodara (Ascites), Gandamala, Apachi (Cervical lymphadenitis), KukunakadiAkshi Roga, Hodgkin &amp; non-Hodgkin Lymphoma, Abnormal growth patterns, Short stature, Niruddhaprakasha (Phimosis), Paridagdha Chhavi, Utphullika.</p> <p>Sanghata- Bala Pravrita Vyadhi (damstra): Dog bite, Snake bite, Scorpion bite etc</p>	10
Unit-8	<p><b>Atyayika Balaroga Prabandhana (Pediatric emergency management):</b> Shock and Anaphylaxis, Fluid and electrolyte</p>	13

	management, Drowning, Foreign body aspiration, Status epilepticus, Acute hemorrhage, Acute renal failure, Febrile convulsion, Status asthmaticus, Burn, Acute Poisoning	
Unit-9	<b>Balagraha:</b> Scientific study of Bala Graha and its management	5
Unit-10	<b>Life style disorders</b> and its management	2

#### (PAPER- 4

#### **Balaposhana, Samvardhana (Nutrition, Growth and Development) and Recent advances in Kaumarabhritya**

100 Marks

100 Hours

Sl. No	Topics	Hrs
Unit-1	Significant contributions of Kashyapasamhita,	(30)
Unit-2	ArogyarakshaKalpadrum	(10)
Unit-3	1. other texts /treatises of Ayurveda such as Harita Samhita, Bhaishajya Ratnavali, Bhel Samhita, Ravana Kruta Kaumara tantra, Arka Prakash etc 2. References of Kaumarabhritya from brihitrayi and Laghutrayi	(20)
Unit-4	<b>Panchakarma:</b> Principles of Panchakarma,( swedan- hasta- patta sweda etc) and their application in pediatric practice in detail.	(20)
Unit-5	Updated knowledge of clinical pediatrics including recent researches in Kaumarabhritya.	(10)
Unit-6	Fundamentals of Hospital management with special emphases on Pediatrics ward	(10)

#### **Practicals**

1. Full term, preterm, post term new born baby care
2. Practical procedures like - phototherapy, premature baby care, venipuncture, cord blood sampling, stomach wash, suction, resuscitation, etc.
3. Practical skill of Pediatric Panchakarma procedures
4. Child Health Check up
5. IQ Assessment in Children

6. Exposure to National Health Programmes related to Children, including Immunization I Program.
7. Patient case Records (50 Records)
8. Practical knowledge of modern diagnostic tools (invasive & non invasive) and technique used in pediatrics.
9. Management of common pediatrics emergencies.
10. Participation in UG teaching/training.
11. Minimum 15 days compulsory reciprocal exposures in Kaumarbhritya department of other institution during the study period.
12. Participation in National/international seminars.
13. Publication/acceptance of two research papers in indexed/peer reviewed/ISSN journals.

### Reference Books

Sl. No	Name of Author/ commentators	Title of the book	Edition	Name of the publication
1.	Prof. Premvati Tiwari English translation	Kashyapa Samhita	1st-2002	Choukhambha Surabharati
2.	Satyapal Vidhyalankara Hindi translation	Kashyapa Samhita	1st-2002	Choukhambha Surabharati
3.	CHS Shastri	Principles & practice of PediatricS' in Ayurveda:	1st-2006	SDM College of Ayurveda Hassan
4.	Abhimanyu Kumar	Child Health Care in Ayurveda	-	-
5.	Abhimanyu	Ayurvedic Concepts of human Embryology	-	-
6.	Prof. D.N. Mishra	Kumar Kaumarbhritya	RP-2007	Choukhambha Prathishthan
7.	Prof. Chanchal Sharma	Kaumarbhritya Ke Antargata Balgraho Ka Kramika Evam Vaigyanika Adhyana	-	-

8.	Dr. Dinesh K S	Kaumarbhritya	RP-5th 2014	Choukhambha Publication New Delhi
9.	Dr. B.M. Singh	Pran - Pratyagamanam	1st-2010	Choukhambha Orientalia
10.	Dr. KS Patel, V.K. Kori 81 Rajgopal S	Ayurveda Dwara Matra Evam Shishu Paricharya	-	-
11.	Meharban Singh	Clinical Methods in Paediatrics	RP-2006	Sagar Publication
12.	Meharban Singh	Pediatrics Emergencies	-	-
13.	O.P. Ghai	Essential Pediatrics	RP-2010	CBS Publications
14.	Nelson	Text Book of Pediatrics	19th-2012	Elsevier
15.	Meharban Singh	Care of New Born	7th-2010	Sagar Publication
16.	Inderbeer Singh.	Human Embyology	10th-2014	Jaypee Brothers
17.	Gangane.	Human Genetics	RP-2009	Elsevier
18.	Prof. PremvatiTiwari English translation	Kashyapa Samhita	1st-2002	Choukhambha Surabharati
19.	Satyapal Vidhyalankara Hindi translation	Kashyapa Samhita	1st-2002	Choukhambha Surabharati
20.	Inderbeer Singh.	Human Embyology	10th-2014	Jaypee Brothers
21.	Gangane.	Human Genetics	RP-2009	Elsevier

22.	Prof. Premvati Tiwari English translation	Prasutitantra	1st-	Choukhambha Surabharati
23.	Meharban Singh	Care of Newborn	7th- 2010	Sagar publications
24.	Dr. I. Tripathi	Arka prakash	1st Edition 1995	Krishna das Akadami
25.	Dr. Anataram Sharma	Madhava Nidana	1st Edition 2007	Choukhambha Surabharati
26.	Dr. Prabhakar Rao	Sharanga dhara Samhita	1st Edition 20013	Choukhambha Surabharati
27.	Dr. K. C. Chuneekar	Bhavaprakash Nighthu	11th Edition 2004	Choukhambha Surabharati
28.	Dr. Ghyanedra R.	Bhaishajya Ratnavali	1st Edition, 2008	Choukhambha Surabharati



**Ordinance Governing  
Post Graduate Course  
In Roga-nidana evam Vikruti vigyana  
Syllabus/Curriculum  
2021-22**



**KLE ACADEMY OF HIGHER EDUCATION & RESEARCH  
(DEEMED-TO-BE-UNIVERSITY)  
(Re-Accredited 'A' Grade by NAAC (2<sup>nd</sup> Cycle) || Placed under Category 'A' by MHRD  
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## CONTENTS

Chapter I	General need assessment <ol style="list-style-type: none"> <li>1. Health care problem</li> <li>2. Current approach</li> <li>3. Ideal approach</li> </ol>
Chapter II	Target need Assessment <ol style="list-style-type: none"> <li>1. Choose targeted learners</li> <li>2. Find out information about the targeted learners</li> <li>3. Determine characteristics of the learning environment</li> </ol>
Chapter III	Goal, Competencies and objectives <ol style="list-style-type: none"> <li>1. Define goal</li> <li>2. Identify and define competencies</li> <li>3. Objectives -specific and measurable</li> </ol>
Chapter IV	Educational strategies -Content, T-L methods <ol style="list-style-type: none"> <li>1. Cognitive Objectives: Lecture, SDL</li> <li>2. Psychomotor Objectives</li> <li>3. Skill or Competency Objectives- simulations</li> <li>4. Affective Objectives- Reflection, role models</li> </ol>
Chapter V	Implementation
Chapter VI	Evaluation Program and assessment -formative and summative methods
Chapter VII	Annexure – Evaluation Formats



## Preamble-

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

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

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

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

To meet the needs of the student and the public with respect to learning and the health care, an emerging branch like Roga-nidana evam Vikruti vigyana play a major essential role in both areas of life. The post graduate Curriculum of Roga-nidana evam vikruti vigyana is competent enough to make the PG scholar a better Clinician with over all development in all possible diagnostics.

## **Chapter 1**

### **General needs assessment.**

#### **1. Health care problem.**

The traditionally rich developing country like India is stratified into multiple communities bifurcated with respect to caste, creed, culture and geographical distribution. The reflection of physical, mental, psychological, social expression is all the matter that is going to make a difference in the hallmark of health & diseases. Along with the maintenance of health (swastha) timely attention to the disease (Dukha) is the need of the hour. Due to delay in approach to the healthcare provider, non availability of health provisions, poverty & ignorance are the hurdles in the prosperity of health care system. Due to rapid changes in the ecology, environment, lifestyle changes, work culture the newer pathologies are getting added to the existing ones.

The thorough understanding and the diagnosis of the ailment in time with maximum accuracy and specificity makes a great difference in the healthcare system. Emphasis is laid on timely diagnosis. The department of Roga- Nidana & Vikruti Vigyan strives hard in teaching communication skills for better history taking & clinical examination also the interpretation of available diagnostic modalities.

#### **2. Current approach.**

The technological era with maximum sedentary lifestyle has contributed to the infinite non-communicable diseases with existing vulnerable communicable diseases. Roga- nidana effectively adopts OSCE in collaboration to irreplaceable traditional Ayurveda pariksha for better understanding of the clinical examination to arrive at a final diagnosis (from the list of diseases of provisional diagnosis) Vikruti vigyan imbibes the orthodox ways of learning the steps of pathogenesis.

#### **3. Ideal Approach**

Integrated diagnostic protocols are need of the hour. A thorough knowledge of Ayurveda & the contemporary science guide for a better diagnosis. An ideal approach

would be with proper history taking (skillful) clinical examination (OSCE) interpretation of the required investigation to help in timely arriving at a pinpoint diagnosis for the disease ailment.

In the order to attain the competencies, several advanced techniques in teaching-learning assessments & evaluation, are genuinely incorporated with due consideration of unaltered Ayurvedic concepts. Scientifically adoption of newer teaching methodologies into the curriculum will bring out an outstanding Ayurvedic PG scholar to contribute for better healthcare to the society.

## **Chapter 2**

### **Target need assessment.**

- **Choose target learners.**

The post graduates of Roga- nidana (Part I and II).

- **Find out information about the targeted learners.**

A post – graduate of Ayurveda in general & Roga-Nidana scholar in specific, will have learnt and oriented the basic knowledge & skills with certain limitation and conditions. As an undergraduate student, the scholar lacks the confidence in clinical examination, differentiating the diseases & decision making skill & timely referral as well.

The post –graduate scholar of Roga-Nidana should be competent enough to extract patient history, clinical examination & interpretations of diagnostics report/ techniques efficiently. Thus the enhanced communication skills, confident attitude, teamwork, leadership qualities by proper decision making caliber will make the scholar a perfect clinician to practice authenticated principals of Roga-nidana & Vikruti Vigyan.

- **Determine characteristics of learning environment.**

The scholar are the main stake holder of the teaching learning program hence the curriculum needs to be designed with flexibility, student centric, availability & openness to access to the learning resources. The scholastics learning platform can be created with proper planning of timely feedback from stakeholders (PG Scholar) subject specialty teachers, alumni of the Roga nidana speciality, external peers at regular intervals.

## Chapter 3 - Goals, Competencies and objectives

### Goals -

The goals of post –graduate training program in Roga-Nidana evam Vikruti vigyana are,

- To provide & practice the basic knowledge of Ayurveda diagnostic modalities, understand & justify the sequential reflection of Ayurveda pathology & Pathogenesis.
- To provide & facilitate a platform for learning Hematology, Biochemistry, microbiology related techniques & interpretation of the result.
- To expertise the scholar with communication skills for better history taking & clinical examination skills.
- To understand & interpret the reports of Invasive & Non- invasive techniques, by comprehending the working principals.
- To execute the Basic Knowledge of Roga- nidana for better differential diagnosis by proper interpretation of the diagnostics to have a pin point diagnosis

### Objectives

On completion of the curriculum the following objectives will be achieved with various subheadings.

- Knowledge ( cognitive domain)
- Skills (Psycho-motor domains)
- Human values, Ethical practice & communication abilities.

## Knowledge

A list of objectives related to knowledge and higher cognitive abilities that are expected to be achieved during the course are given.

1. Describe the Nidana, Samprapti, Pareeksha, NidanaSaadhana(Diagnostic aids), Chikitsa possibilities, Sadhyasadyata with respect to Ayurveda and the contemporary science and also timely referral to save the life.
2. Basic knowledge of Dosha,Dhatu,Upadhatu,Mala,Agni with respect to sthana,Vruddhi,Kshaya,Prakopa effects on health & disease and exhibited laxanas and karana of the same.
3. Basic knowledge of srotus with respect to Moolasthan,laxanas, kaarana and Vikara for dusti & Pradushan of Srotus to produce srotodusti Vikara and Indriya pradhushaja Vikara.
4. Basic knowledge of basic Pathology of Contemporary science.
5. Knowledge of Ayurveda modalities of Pareeksha and Principles of Clinical examinations.
6. Basic knowledge of Microbiology and it's units like Serology, Parasitology, virology etc.
7. Basics and Principles in Biochemistry, Pathology, Radiology, ECG,EEG....etc.
8. Update the knowledge component by attending Seminars, workshops, Electives,emerging courses as required.
9. Apply the knowledge for carrying out the Research activities and also Presenting & Publishing the outcomes of research.

## Skills

1. Capability in accurate appraisal of Ayurvedic fundamental parameters like Darshanadi, Pratyakshadi, Nadyadi, Prakrutyadi etc.
2. Ability to frame the customised Samprapti (Pathogenesis) & differentiate specific samprapti Ghataka.
3. Competency in History taking, Clinical examination and co-relating the History with clinical outcomes by Ayurveda & contemporary science.
4. Expertise in requisiting minimum investigatory modalities to arrive at a Pin Point diagnosis.
5. Accomplishment in performing biochemical, Haematological, Serological, Microbiological tests individually.
6. Proficiency in commenting/justifying the invasive&non invasive techniques

## **Human values, Ethical practice and Communication abilities**

- Adopt ethical principles in all aspects of History taking and Clinical examination. Professional honesty and integrity are to be fostered. Clinical care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- To develop communication skills to reveal the outcomes of clinical examination, interpret the diagnostic findings, possible treatment modalities in Ayurveda and the contemporary science, Prognosis etc.
- Inculcating leadership qualities for timely decision with respect to choosing the diagnostics, prognosis, possible medical or surgical intervention and also a timely referral, to maintain the healthy work culture.
- Adopt and practice high moral ethics and etiquettes in carrying out the Human & animal research studies.
- Accept the limitations & possibilities available with respect to basic knowledge and skill for better health care provision to the society.
- Provision to provide patients rights and privileges.

## **COMPONENTS OF THE PG CURRICULUM-**

The major components of the PG curriculum shall be:

- a. Theoretical knowledge
- b. Practical/Clinical Skills
- c. Training in Thesis.
- d. Attitudes, including communication.
- e. Training in Research methodology.

### **a) Theoretical knowledge-**

Roga-nidana evam vikruti vigyana syllabus topics include the following:

All the candidates admitted for P.G Degree (MD Ayurveda) are required to pursue the recommended duration of three academic years as full time candidates out of which:

- (i) Preliminary course for one year - MD Part 1 and
- (ii) Specialty course for two years - MD Part 2.

(i) Syllabus of Preliminary course for one year -MD/MS Part 1 Roganidana evam vikriti vigyana

Name Of The Subject : <u>ROGA NIDANA AVUM VIKRITI VIGYAN</u> (Pathology and Diagnostic Procedure)			
Theory-100 Marks		Practical-100 Marks	
Theory- 100 Hours		Practical- 200 Hours	
Part- A			
Marks-50 Hours:50			
Unit	Contents (Theory)	Hours	Teaching Methods
1	Understanding of Samprapti of diseases in Charaka Nidana Sthana in contemporary context	8	Didactic/Interactive/ audiovisual
2	Clinical aspects of Dosha, Dhatu, Upadhatu, Mala, Agni, Ama, Srotas and Indriya	8	Didactic lecture /Interactive /audio-visual
3	Understanding of the role of Trividha Avasthapaka in the vitiation of Dosha	4	Didactic/Interactive/ audiovisual
4	Concept of Nanatmaja and Samanyaja Vikara	4	Didactic/Interactive/ audiovisual
5	Clinical application of Avarana in diagnosis of various diseases	6	Didactic/Interactive/ audiovisual
6	Clinical application of Shatkriyakala in diagnosis of diseases.	5	Didactic/Interactive/ audiovisual

<b>7</b>	Clinical and applied aspects of concept of Upadrava and Arista	<b>5</b>	Didactic/Interactive/ audio visual
<b>50</b>	<b>Part- B</b>	<b>Marks – 50</b>	<b>Hours -</b>
<b>1</b>	Ayurvedic interpretation of various laboratory investigations to derive treatment principles.	<b>10</b>	Didactic/Interactive/ audio visual
<b>2</b>	Interpretation of various Rogi Bala and Roga Bala technique to plan Chikitsa Sutra	<b>10</b>	Didactic/Interactive/ audio visual
<b>3</b>	Clinical examination of Deha Bala, Roga Bala, Agnibala And Chetas Bala	<b>6</b>	Didactic/Interactive/ audio visual
<b>4</b>	Knowledge of current diagnostic tools like ECG, X-Ray, CT scan, MRI and USG	<b>15</b>	Didactic/Interactive/ audio visual
<b>5</b>	Ayurvedic interpretation of various laboratory investigations to derive treatment principles.	<b>9</b>	Didactic/Interactive/ audio visual



## PRACTICAL

100 marks

### Contents:

1. Duty in hospital OPD and IPD.
2. Duty in pathology laboratory.
3. Case taking – 25 cases
4. Performance of pathology and biochemistry practicals – 10
5. Interpretation of ECG, EEG, X-ray, CT-Scan, MRI and USG

### Practical exam pattern for 1<sup>st</sup> MD

#### Distribution of marks (practical):

Sr No	Particulars	Details	Internal Distributions	Marks Distributions
01	Records	1. In Patient case history records-25 2. Biochemistry & Pathology record-10 3. Microbiology record 4. Haematology record		10
02	Bedside Clinical Case taking	Long Case Short Case		20 10
03	Procedure	Haematology-01, Biochemistry-01, Microbiology-01		20
04	Spotting	Interpretation of ECG, EEG, X-ray, CT, MRI, USG etc. of the given specimen diagnostics		10
05	Viva Voce	Part A - 15 Marks Part B – 15 Marks		30
Total				100

## REFERENCE BOOKS:

No	Title Of The Book	Name of The Authors and commentators	Edition	Name of the Publication
1.	Charak Samhita	Agnivesha& Chakrapanidatta	1 <sup>st</sup> -2015	Chaukhambha Sanskrit Series Office
2.	Sushruta Samhita	Sushruta& Dalhana	RP-2019	Chaukhambha Sanskrit Series Office
3.	Ashtang sangara	Laghuvaghbata& Arunadatta& Hemadri	3 <sup>rd</sup> -2012	Chaukhambha Sanskrit Series Office
4.	Madhava Nidan part 1	Yadunandan Upadhyaya	32 <sup>nd</sup> -2002	Chaukhambha Sanskrit Series Office
5.	Madhava Nidan part 2	Yadunandan Upadhyaya	31 <sup>st</sup> -2002	Chaukhambha Sanskrit Series Office
6.	Siddhantanidanam	Gananath Sen	6 <sup>th</sup> -1966	Charuchandra Bisharada
7.	Nidan Panchakam	Kudatarkar V N	1959	VN Kudatarkar
8.	Ayurvediya Vyadhi Vijnana	Acharya Y T	2 <sup>nd</sup> -1976	Vaidyanath Ayurved Bhavan
9.	Ayurvediya Vikruti Vijnana	Shrikanthmurthy K R	6 <sup>th</sup> -1972	Karnatak University
10.	Vikruti Vijnana	Subhash Ranade,Others	1994	Anmol Prakashan
11.	Nidan Chikitsa Hastamalaka	Ranjeet Rai Desai	2 <sup>nd</sup> RP-2010	Vaidyanath Ayurved Bhavan
12.	Madhava Nidan	Shrikanthmurthy K R	7 <sup>th</sup> -2005	Chaukhamba Orientalia 1
13.	Madhava Nidan	Narendranath Shastri	1 <sup>st</sup> -1979	Motilal Banarasidas
14.	Ayurvediya Vikruti Vijnana	Vidyadhar Shukla	2003	Chaukhamba Sanskrit Pratishthan

15.	Vikruti Vijnana	Hiremath K J	1 <sup>st</sup> -1995	Smt. Prabhavati K Hiremath, Kalmeshwar Prakashana
16	Roga Vijnana Evam Vikruti Vijnana	Vinaykumar Sharma	1 <sup>st</sup> -2000	Rishi Publications
17	Nadi Pariksha	Indradev Tripathi	1 <sup>st</sup> -1987	Chaukhamba Orientalia
18	Rogi Pariksha Vidhi	Sharma P V	1998	Chaukhambha Bharati Academy
19	Ayurvediya Vikruti Vijnana	Dwivedi B K	1 <sup>st</sup> -2003	Chaukhamba Sanskrit Pratishthan
20	Roga Vijnana	Radhakant Sharma	5 <sup>th</sup> -2004	Publication Scheme
21	Roga Vijnana	Vinaykumar Sharma	1 <sup>st</sup> -2000	Nath Pustak Bhandar
22	Roga Vijnana	Vinaykumar Sharma	1 <sup>st</sup> -2000	Nath Pustak Bhandar
23	Vikruti Evam Rogavijnan	Madhavsingha Baghel, Others	1 <sup>st</sup> -1983	Publication Scheme
24	Ayurveda Nidan	Kulkarni P H	2 <sup>nd</sup> -2000	Satguru Publication Delhi
25	Madhava Nidan	KRL Gupta	2 <sup>nd</sup> -1997	Satguru Publication Delhi
26	Madhava Nidan	Anantaram Sharma	1 <sup>st</sup> -2007	Chaukhambha Sanskrit Series Office
27	Siddhantanidanam	Shrikanthmurthy K R	6 <sup>th</sup> -1966	Chaukhambha Sanskrit Series Office
28	Madhava Nidan	P Himasagara Chandra Murthy	1 <sup>st</sup> -2006	Chaukhambha Sanskrit Series Office
29	Roga Vijnana & Vikruti Vijnana	Manoj Sankarnarayana	1 <sup>st</sup> -2007	Chaukhambha Sanskrit Series Office
30	Madhava Nidan Atankadarpan	Yadavji Tricumji Acharya	6 <sup>th</sup> -2001	Chaukhamba Orientalia
31	Madhava Nidan	Brahmanand Tripathi	1 <sup>st</sup> -2005	Chaukhamba Surbharati Prakashan

32	Madhava Nidan	Ravidatta Tripathi	1993	Varanasiya Sanskrit Sansthan Varanasi
33	Ayurvediya Vikruti Vijnana and Roga Nidan	Byadgi PS	1 <sup>st</sup> -2016	Chaukhamba Publications Delhi
34	Diabetes Ayurvedic Overview	Nishant Shukla: C P Shukla	1 <sup>st</sup> -2006	Chaukhamba Orientalia
35	Over view of Nadi Pariksha	Suresh Babu	1 <sup>st</sup> -1983	Choukhamba Krishnadas Academy
36	Vikruti evam Roga Vijnana	Madhav Sihna : Others	1 <sup>st</sup> -1983	Publication Scheme
37	Ayurvediya Roga Vijnana and Vikruti Vijnana	Radha Vallabha Sati	2008	Chaukhamba Orientalia
38	Shlokavali of Roga Vijnana & Vikruti Vijnana	Ragini Patil; Shivaji Wavhal	4 <sup>th</sup> -2009	Shantanu Prakashan Pune
39	Textbook of Microbiology	Surinder Kumar	1 <sup>st</sup> -2009	Jaypee Brothers Medical Publishers
40	Charmaroga Nidarshika	Raghuveer Prasad Trivedi	3 <sup>rd</sup> -2011	Baidyanath Ayurveda Bhawan Ltd
41	Andrology Laboratory manual	Kamini A Rao	1 <sup>st</sup> -2010	Jaypee Brothers Medical Publishers
42	Stem Cells	Eapen Cherian	1 <sup>st</sup> -2011	Jaypee Brothers Medical Publishers
43	Robbins Basic Pathology	Vinaykumar: Others	9 <sup>th</sup> -2013	Saunders an Inprint of Elsevier
44	Diagnostic Imaging	Andrea Rockall: Others	7 <sup>th</sup> -2013	WILEY-BLACKWELL
45	Demonstrations of Physical Signs Picture Tests	Hamilton Bailey	1 <sup>st</sup> -2013	Butterworth Heinemann
46	Good Laboratory Practice	Jurg P Seiler	2 <sup>nd</sup> -2007	Springer Pvt Lte New Delhi
47	Prescotts Microbiology	Joanne M Willey: Others	8 <sup>th</sup> -2011	Mc Graw Hill Asia
48	Interpretation of Common Investigations	Gupta L C: Others	5 <sup>th</sup> -2006	Jaypee Brothers Medical Publishers
49	Microbiology Theory for MLT	Namita Jaggi	2 <sup>nd</sup> -2013	Jaypee Brothers Medical Publishers
50	Textbook of Pathology	Harshmohan	7 <sup>th</sup> -2015	Jaypee Brothers Medical Publishers
51	Pathology Practical Book (with cd)	Harshmohan	2 <sup>nd</sup> -2007	Jaypee Brothers Medical Publishers

52	Medical Laboratory Technology	Ramnik Sood	6 <sup>th</sup> -2009	Jaypee Brothers Medical Publishers
53	Medical Laboratory Technology	Ramnik Sood	6 <sup>th</sup> -2009	Jaypee Brothers Medical Publishers
54	Microbiology	Richard A Harvey: Others	2 <sup>nd</sup> -2008	Lippincott Williams & Willkins Wolters Kluwer Co.
55	Symptoms and Signs in Clinical Medicine	Chamberlain;Ogilvie	12 <sup>th</sup> -1997	The English Language Book Society
56	Hutchinsons Clinical Methods	Michael Swash	22 <sup>nd</sup> 2007	The English Language Book Society
57	Macleod's Clinical Examination	Dauglas Graham : Others	11 <sup>th</sup> -2007	Elsevier
58	Ttext book of clinical Biochemistry	Sood Ramnik	1 <sup>st</sup> -2019	CBS Publications and Distributors
59	Dacie and Lewis practical Haematology	Bain barbara j;bates imelda ;laffan m.a	12 <sup>th</sup> -2017	Elsevier

ii) Specialty course for two years -MD/MS Part 2.

**MD/MS Part 2. (AYU) ROGA NIDANA AVUM VIKRITI VIGYAN**  
(Pathology and Diagnostic Procedure)

- Theory Papers : 04
- Theory Marks : 400 Marks (100 each)
- Practical Marks : 200 Marks
- Duration : 02 Years
- Grand Total : 600 Marks

PAPER	NAME OF PAPER	MARKS	TEACHING HOURS
PAPER I	FUNDAMENTAL PRINCIPLES OF ROGANIDANA	100 Marks	100 Hours
PAPER II	ROGA VIGYANA	100 Marks	100 Hours
PAPER III	PARIKSHA VIGYANA	100 Marks	100 Hours
PAPER IV	VIKRITI VIGYANA AND JIVANU VIGYANA	100 Marks	100 Hours

<b>Name Of The Subject : ROGA NIDANA AVUM VIKRITI VIGYAN</b>			
<b>(Pathology and Diagnostic Procedure)</b>			
<b>PAPER-I</b>		<b>FUNDAMENTAL PRINCIPLES OF ROGANIDANA</b>	
<b>Marks- 100</b>		<b>Hours- 100</b>	
<b>1</b>	Concept of Tridosha and its Pathological implications. 63 permutations and combination of Tridosha. Lina and Stambhita Dosha, their cause and importance in manifestation of Samprapti	<b>4</b>	didactic lecture/ audiovisual/interactive
<b>2</b>	Concept of Rakta as a Chaturtha Dosha. Importance of Rakta in the manifestation of diseases.	<b>3</b>	didactic lecture/ audiovisual/interactive
<b>3</b>	Concept of Ashrayashrayi bhava and its applied utility.	<b>3</b>	didactic lecture/ audiovisual/interactive
<b>4</b>	Different types of Dosha Gati.	<b>3</b>	didactic lecture/ audiovisual/interactive
<b>5</b>	Causative factors and practical utility of movement of Doshas from Koshtha to Shakha and Shakha to Koshtha.	<b>3</b>	didactic lecture/ audiovisual/interactive
<b>6</b>	concept of Ashayapakarsha. Trayo roga marga, their diseases and clinical importance of Roga Marga.	<b>3</b>	didactic lecture/ audiovisual/interactive
<b>7</b>	Concept and classification of Avarana, its role in pathogenesis, mode of diagnosis of Avarana and its importance in chikitsa sutra.	<b>3</b>	didactic lecture/ audiovisual/interactive
<b>8</b>	Applied aspect of Dhatu Poshana Krama and Dhatu Samvahana.	<b>3</b>	didactic lecture/ audiovi

			sual/int eractive
9	Concept of Margaga and Sthanastha Dhatus. Conept and applied aspects of Doshapaka and Dhatupaka Fundamental and applied aspect of Dhatu, Upadhatu and Mala.	3	didactic lecture/ audiovi sual/int eractive
10	Diseases developed due to their vitiation (pradoshaja vikara). Concept and applied aspects of Srotas, their importance in health and diseased conditions.	3	didactic lecture/ audiovi sual/int eractive
11	Concept of Rakta as a Chaturtha Dosha. Importance of Rakta in the manifestation of diseases.	3	didactic lecture/ audiovi sual/int eractive
12	Concept of Ashrayashrayi bhava and its applied utility. Different types of Dosha Gati.	3	didactic lecture/ audiovi sual/int eractive
13	Causative factors and practical utility of movement of Doshas from Kostha to Shakha and Shakha to Koshttha.	3	didactic lecture/ audiovi sual/int eractive
14	Concept of Ashayapakarsha. Trayo roga marga, their diseases and clinical importance of Roga Marga.	3	didactic lecture/ audiovi sual/int eractive
15	Concept and classification of Avarana, its role in pathogenesis, mode of diagnosis of Avarana and its importance in chikitsa sutra. 3	3	didactic lecture/ audiovi sual/int eractive
16	Applied aspect of Dhatu Poshana Krama and Dhatu Samvahana.	3	didactic lecture/ audiovi sual/int eractive
17	Concept of Margaga and Sthanastha Dhatus. Conept and applied aspects of Doshapaka and Dhatupaka Fundamental and applied aspect of Dhatu, Upadhatu and Mala.	3	didactic lecture/ audiovi sual/int eractive
18	Diseases developed due to their vitiation (pradoshaja vikara). Concept and applied aspects of Srotas, their importance in health and diseased conditions.	3	didactic lecture/ audiovi

			sual/int eractive
19	Concept and applied aspects of Sroto Dushti and Khavaigunya	3	didactic lecture/ audiovi sual/int eractive
20	Understanding the various srotas which are not included in classical list of srotas but enumerated while describing the samprapti of diseases.	3	didactic lecture/ audiovi sual/int eractive
21	Description of Dosha-Dushya-Sammurchhana, Concept of Prakriti Sama Samaveta and Vikriti Vishama Samaveta Sammurchhana.	3	didactic lecture/ audiovi sual/int eractive
22	Importance of Dosha-Dushya-Sammurchhana in Diagnosis and treatment.	3	didactic lecture/ audiovi sual/int eractive
23	Concept of Vikara vighata bhavabhava prativisesha.	3	didactic lecture/ audiovi sual/int eractive
24	Concept of Agni and its role in manifestation of health and disease.	3	didactic lecture/ audiovi sual/int eractive
25	Concept and pathogenesis of Ama. Contemporary interpretation of Ama and its role in pathogenesis. Sama, Nirama stages of Dosha, Dhatu and Mala.	3	didactic lecture/ audiovi sual/int eractive
26	Understanding Samprapti of Santarpanotha and Apatarpanotha Vyadhi	3	didactic lecture/ audiovi sual/int eractive
27	Detailed classification of diseases as described in Ayurveda. Knowledge of ICD and DSM classification.	3	didactic lecture/ audiovi sual/int eractive
28	Detailed understanding of Nidan Panchaka with their classification and clinical importance.	3	didactic lecture/ audiovi



			sual/int eractive
29	Relation between 'Hetu & Lakshana' and 'Samprapti & Lakshna'.	3	didactic lecture/ audiovi sual/int eractive
30	Explanation and applied aspects of Kriyakala and its utility in diagnosis and treatment.	3	didactic lecture/ audiovi sual/int eractive
31	Importance of Upadrava, Arishta and Sadhyasadyata and Udarka. 1.	3	didactic lecture/ audiovi sual/int eractive
32	Natural History of the Diseases, concept of vyadhisankara in Ayurveda.	3	didactic lecture/ audiovi sual/int eractive
33	Understanding of Samprapti of diseases in Charaka Nidana Sthana in contemporary context	3	Didacti c lecture/ audiovi sual/int eractive

## **Paper II ROGA VIGYANA**

**Marks – 100**

**Hours -100**

Knowledge of classical Samprapti of following diseases with interpretation of Nidana Panchaka including Upadrava, Arishta and Sadhyasadyata and Chikitsa Sutra.  
Knowledge of commonly occurring diseases of the respective systems mentioned in contemporary medicine and their Ayurvedic interpretation.

1	Diseases of Pranavaha srotas- Kasa - Shwasa - Hikka – Urahkshata – Shosha – Rajayakshma and Ayurvedic understanding of common clinical entities like Pneumonia, Pleural effusion, Bronchitis, Bronchiectasis, Pulmonary Tuberculosis, Bronchial Asthma	6	didactic lecture/ audiovi sual/int eractive
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2	Diseases of Annavaha- Pureeshavaha Srotas- Agnimandya - Ajirna - Aruchi- Chhardi, Amlapitta- Shoola, Grahani –Gulma- Udara Roga –Vibandha, Atisara – Pravahika along PG Final Year Syllabus-33 with various clinical presentations. Ayurvedic understanding of common clinical entities like Peptic Ulcer, Irritable Bowel Syndrome, Diarrhoea, Dysentery, Constipation, ulcerative colitis.	6	didactic lecture/ audiovisual/interactive
3	Diseases of Udakavaha Srotas- Trishna, Daha and knowledge of water and electrolyte imbalance disorders	6	didactic lecture/ audiovisual/interactive
4	Diseases of Rasavaha Srotas - jwara and Ayurvedic understanding of common clinical entities like various types of Fever- Malaria, Typhoid, viral fevers. Pandu, Amavata, Hridroga, Shotha and Ayurvedic understanding of common clinical entities like Anaemia & its Classification, Rheumatic fever, Rheumatoid Arthritis, Angina, Ischaemic Heart Disease, Hypertension, Myocardial Infarction ,Congestive cardiac failure.	6	didactic lecture/ audiovisual/interactive
5	Diseases of Raktavaha Srotas- Kamala - Raktapitta - Vatarakta – Kroshtukaseersha - Shitapitta – Maha Kushta – Visarpa – Shwitra and Kshudra Kushta and Ayurvedic understanding of common clinical entities like jaundice, hepatitis, bleeding disorders, Gout, Thrombo Angitis Obliterans (TAO), Deep Vein Thrombosis (DVT), Leukaemia, Thalassemia, Sickle cell Anaemia. Introduction to Urticaria, Psoriasis, Eczema, Pemphigus, Herpes.	6	didactic lecture/ audiovisual/interactive
6	Diseases of Mamsavaha srotas- Introduction to Granthi, Arbuda, Galaganda and Arsha. Ayurvedic understanding of all types neoplasia and Thyroid diseases.	6	didactic lecture/ audiovisual/interactive
7	Diseases of Medovaha srotas- Sthoulya - Karshya – Prameha and Ayurvedic understanding of common clinical entities like Obesity and Diabetes Mellitus.	6	didactic lecture/ audiovisual/interactive
8	Diseases of Asthi - Majjavaha srotas- Sandhigatavata, Introduction to Asthimajjaparipaka, Asthigata Vidradhi and Ayurvedic understanding of common clinical entities like Osteo-Arthritis, Osteomyelitis, Osteoporosis.	6	didactic lecture/ audiovisual/interactive

<b>9</b>	Vatavyadhi-Akshepaka - Apatanaka - Ardita - Pakshaghata – Gridhrasi – Viswachi, Avabahuka, Manyasthambha – Katigraha-Pangutwa- Khanja-Khalwee and Ayurvedic understanding of common clinical entities like Hemiplegia, Parkinson's disease, Lumbago- Sciatica syndrome, Bell's Palsy, Ankylosing Spondylitis, MND and other commonly occurring neurological diseases.	<b>6</b>	didactic lecture/ audiovisual/interactive
<b>10</b>	Diseases of Sukravaha srotas- Klaibya and Vandhyatva and understanding of male and female Infertility, Impotence.	<b>6</b>	didactic lecture/ audiovisual/interactive
<b>11</b>	Diseases of Mutravaha srotas -Mutrakrichha – Mutraghata, Ashmari and Ayurvedic understanding of common clinical entities like Urinary Tract Infection, Urolithiasis, Nephropathies and Renal failure.	<b>6</b>	didactic lecture/ audiovisual/interactive 1
<b>12</b>	Diseases of Swedavaha srotas-knowledge of khalitya, Palitya and Cosmetology.	<b>6</b>	didactic lecture/ audiovisual/interactive
<b>13</b>	Diseases of Manovaha Srotas - Vishada, Udvega, Bhaya, Bhrama, Anidra, Mada, Murchha, Sanyasa, Apasmara, Unmada, Atatwabhinivesha and Ayurvedic understanding of common clinical entities like Depression, Anxiety neurosis, Phobia, Personality disorders.	<b>6</b>	didactic lecture/ audiovisual/interactive
<b>14</b>	Indriya Pradoshaja Vikara.	<b>5</b>	didactic lecture/ audiovisual/interactive
<b>15</b>	Jara janya Vyadhi: Alzheimer's Disease	<b>5</b>	didactic lecture/ audiovisual/interactive
<b>16</b>	Concept and tools for the study of Anukta Vyadhi (Unexplained and newly emerging diseases).	<b>6</b>	didactic lecture/ audiovisual/interactive
<b>17</b>	Understanding the concept of karmaja vyadhi	<b>6</b>	didactic lecture/ audiovisual/interactive

<b>PAPER- III</b>		<b>PARIKSHA VIGYANA</b>	
<b>Marks- 100</b>		<b>Hours:-100</b>	
<b>1</b>	Introduction to Clinical methods and technique for the study of clinical examination	<b>4</b>	didactic lecture /audio visual/ interactive
<b>2</b>	Importance of medical history taking and its importance in clinical medicine.	<b>8</b>	didactic lecture /audio visual/ interactive
<b>3</b>	Aims, Objectives and Methods, applied aspects and importance of various Rogi and Roga Pariksha as per classics.	<b>6</b>	didactic lecture /audio/ interactive visual
<b>4</b>	Srotas Pariksha, Shadanga Pariksha vis-à-vis general & systemic examination of patient.	<b>8</b>	didactic lecture /audio visual/ interactive
<b>5</b>	Interpretation of Charakokta trividha pramana pariksha and Sushrutokta shadvidha pariksha with clinical methods mentioned in modern medicine.	<b>6</b>	didactic lecture /audio visual/ interactive
<b>6</b>	Interpretation and use of ashtasthana nirikshana along with use of current tools as per Ayurveda. PG Final Year Syllabus-34	<b>6</b>	didactic lecture /audio visual/ interactive

<b>7</b>	Charakokta dashavidha and Sushrutokta Dwadashavidha pariksha along with the use of modern supportive tools for understanding of rogibala and roga bala concept to derive chikitsa sutra	<b>8</b>	didactic lecture /audio visual/ interactive
<b>8</b>	Ayurvedic interpretation of all relevant findings of modern clinical examinations, various Laboratory and other Diagnostic tools.	<b>6</b>	didactic lecture /audio visual/ interactive
<b>9</b>	Understanding of diagnostic procedures in medical emergencies. 10	<b>6</b>	didactic lecture /audio visual/ interactive
<b>10</b>	Concept of Good clinical practice in Ayurveda and modern medicine.	<b>6</b>	didactic lecture /audio visual
<b>11</b>	Knowledge of standard clinical laboratory set up useful for Ayurvedic practice.	<b>6</b>	didactic lecture /audio visual/ interactive
<b>12</b>	Knowledge of Ancillary common laboratory investigations for diagnosis of diseases, their methods, normal and abnormal values, factors influencing values and their Ayurvedic interpretations & clinical significance as mentioned in practical syllabus.	<b>6</b>	didactic lecture /audio visual/ interactive
<b>13</b>	Importance of Bio markers and their utility in clinical researches .	<b>6</b>	didactic lecture /audio visual/ interactive
<b>14</b>	Update knowledge of emerging diagnostic tools and technologies.	<b>6</b>	didactic lecture

			/audio visual/ interac tive
<b>15</b>	Knowledge of various Ayurvedic diagnostic softwares/programmes available.	<b>6</b>	didacti c lecture /audio visual/ interac tive
<b>16</b>	Avayava Pariksha – Radio- Imaging Techniques, Sonological Techniques, ECG, EEG etc and their clinical interpretation	<b>6</b>	didacti c lecture /audio visual/ interac tive
<b>Paper IV      VIKRITI VIGYANA AND JIVANU VIGYANA</b> <b>Marks – 100</b> <span style="float: right;"><b>Hours - 100</b></span>			
<b>1</b>	Introduction to pathology and technique for the study of pathology	<b>4</b>	didacti c lecture /audio visual/ interac tive
<b>2</b>	Cell injury and cellular adaptations	<b>8</b>	didacti c lecture /audio visual/ interac tive
<b>3</b>	Immunopathology including amyloidosis and its interpretation with the concept of Ojas vis-à-vis Bala	<b>10</b>	didacti c lecture /audio visual/ interac tive

<b>4</b>	Concept of Shotha versus Inflammation, oedema and healing Derangement of Homeostasis and Hemodynamic disorders	<b>10</b>	didactic lecture /audio visual/ interactive
<b>5</b>	General character and classification of Neoplasia	<b>6</b>	didactic lecture /audio visual/ interactive
<b>6</b>	Upasargajanya Vyadhi (Communicable diseases)- Romantika – Masurika – Upadamsha – Phirang and introduction to Syphilis, AIDS, Leprosy, Tuberculosis	<b>10</b>	didactic lecture /audio visual
<b>7</b>	Detail study of Krimi Vigyanam versus infectious and parasitic diseases along with their mode of infection and life cycle	<b>8</b>	didactic lecture /audio visual/ interactive
<b>8</b>	Concept of Snayuka, Shleepada and introduction to Filariasis and classification of common parasites.	<b>10</b>	didactic lecture /audio visual/ interactive
<b>9</b>	Concept and applied aspects of Janapadodhvamsa and Environmental diseases	<b>8</b>	didactic lecture /audio visual/ interactive
<b>10</b>	Nutritional disorders	<b>6</b>	didactic lecture /audio visual/ interactive

<b>11</b>	Concept of genetic diseases and its interpretation in terms of Bija dosha	<b>8</b>	didactic lecture /audio visual/ interactive
<b>12</b>	Knowledge of common Bacteria, Virus, Parasites, Fungi and their classification with their disease processes, Nutrition requirements, media and methods for culture and sensitivity	<b>12</b>	Didactic lecture /audio visual/ interactive



## **PRACTICAL DEMONSTRATION AND HANDS ON EXPERIENCE**

1. Regular posting in Roga Nidana O.P.D.
2. Regular posting in Roga nidana I.P.D.
3. Regular posting in Laboratories
4. Regular posting in other departmental units and Educational Tour to update current medical knowledge
5. Laboratory record – maintenance of observation diary and laboratory record book.
6. Experience in conducting following laboratory investigations for diagnosis of diseases and their methods
  - a) Hematological, Biochemical and Serological measures, Peripheral blood film examination
  - b) Rapid diagnostic techniques.
  - c) Screening test for bleeding disorders- Platelet Count, bleeding time (BT), Clotting time (CT), Prothrombin time (PT).
  - d) Blood grouping - ABO system, Rh typing (Rhesus system)
7. Urine Examination a. Ayurveda anusara mutra pariksha. PG Final Year Syllabus-35 b. Physical Examination, Chemical Examination, and Microscopic Examination c. Dip stick examination
8. Stool Examination i.e Ayurveda anusara purisha pariksha-Physical examination - Sama-Nirama Pariksha ii. Microscopic and macroscopic examination of stool
9. Sputum Examination
  - i. Ayurveda pariksha anusara sthivana.
  - ii. Physical, Chemical and Microscopic Examination of the sputum.
10. Semen examination
  - 1) Ayurvediya anusara Retas pariksha.
  - 2) Semen examination & clinical interpretation
11. Biochemical tests related to various organ panels- Liver, Kidney, Heart, Thyroid, Pituitary and Bones.
12. Knowledge of different staining techniques in microbiology.
13. Knowledge of Sero-immunological Investigations: RA, Widal test, ASLO titer, ANA, Etc
14. Physical, chemical, microscopic, biochemical and bacteriological tests for various kinds of body aspirates
15. Knowledge of histopathological techniques.

## **BEDSIDE PRACTICAL /CLINICAL METHODS**

1. Expertise in clinical methods (General and Systemic Examination).
2. Practical knowledge of examination of Roga based on Pancha Nidan.
3. Practical knowledge of instruments used for clinical examination.
4. Practical records of clinical examination of at least 30 long cases in I.P.D.
5. Practical records of clinical examination of at least 50 short cases.
6. Practical knowledge of ECG, USG and Imaging techniques and their clinical interpretation
7. Understanding of various Ayurvedic diagnostic softwares/programmes available like Ayu soft, Rudra, Ayut Nidana etc

**PATTERN OF PRACTICAL EXAMINATION MD Part-II 200 MARKS**

Sl. No	Practical	Marks	Total Marks
1	Long case/ Long Practical as the case may be	40 marks	200 marks
2	Short case/ Short Practical as the case may be	20 marks	
3	Medical Procedure/ Lab Analysis	30 marks	
4	Identification of Specimen/ Radiograph and Instruments	30 marks	
5	Thesis presentation	20 marks	
6	Micro teaching/Topic presentation	20marks	
7	Viva- voce	40 marks	
	TOTAL		200 marks

**REFERENCE BOOKS LIST**

SL.NO	TITLE	AUTHOR	EDITION
1	Charaka Samhita with Various Commentaries	Yadav Sharma	2015
2	Madhava Nidana with Various Commentaries	Acharya V.J.T	2010
3	Abhinava Vikriti Vigyana	Acharya Raghuvir Prasad	-
4	Dosha karanatwa Mimansa	P.V Sharma	2003
5	Nadi Darshan	T.S Mishra	2012
6	Nadi Vigyanam	Tika	-
7	Nadi Vigyan	Vashisht S.D	-
8	Nadi Vigyana	Gangadhar Tika	-
9	Nadi Pariksha	Athavale	2014
10	Nadi Pariksha	Upadhyay GP	
11	Rogi Pariksha Vidhi	P.V Sharma	1998
12	Roga Vigyan	Vinay Kumar	1985
13	Siddhanta Nidan	Gananath Sen	1966
14	Ayurvediya Roga Vargikaran	Ramanth VD	-
15	Ayurvediya Nidan Evum Chikitsa ke Siddhanta	Ram Harsh Singh	2015
16	Relevant Portion of Charaka Samhita, Sushruta Samhita, & Vagbhata	-	-

17	Clinical Methods in Ayurveda	KRS Murthy	1996
18	Parameswarappa's Ayurvediya Vikriti Vigyana	Byadgi PS	2018
19	Nidana Panchaka	Dhyani SC	1987
20	Samprapti Lakshana yoh Sambhandha	Sadashiv Sharma	-
21	Clinical Diagnosis in Ayurveda	Vasant Patil	1 <sup>st</sup> /2013
22	Oxford H.B of clinical Examination	-	2nd /2014
23	Symptoms & Signs in clinical medicine	chamberlains	13 <sup>th</sup> /2010
24	Clinical methods	Hutchinson	23 <sup>rd</sup> /2012
25	Bedside clinics in medicine vol-I & II	Kundu	7 <sup>th</sup> /2014
26	Practical Pathology	Uma Chaturvedi	2002
27	Medical Laboratory Technology	R. Sood	6 <sup>th</sup> /2009
28	Clinical Diagnosis and Management	Todd	2016
29	Robbins Basic Pathology	Kumar	2018
30	T.B of Pathology	Boyd's W	10/2013
31	T.B of Pathology	Harsh Mohan	8 <sup>th</sup> /2019
32	T.B of Pathology	Dey	2003
33	T.B of Parasitology	R. Sood	2019
34	Clinical Pathology & Bacteriology	S.P Gupta	-
35	A T. B of Microbiology	Ananthanarayan	11 <sup>th</sup> /2020

## **Chapter 4. Educational strategies:**

### **Contents-**

- A) Cognitive Objectives : Theoretical knowledge (Lecture)
- B) Psychomotor Objectives- Practical/clinical Skills/Competency
- C) Affective Objectives- Reflection, role models

### **A) Cognitive Objectives : Theoretical knowledge (Lecture)**

#### **Teaching and Learning Activities**

A candidate pursuing the course should work in the institution as a fulltime student. No candidate should be permitted to run a clinic/laboratory/nursing home while studying postgraduate course. 75% of attendance is must for 1<sup>st</sup> year and final year for calculating attendance.

Every student shall attend teaching and learning activities during each year as prescribed by the department and not absent himself/ herself from work without valid reasons.

A list of teaching and learning activities is designed to facilitate students to acquire essential knowledge and skills outlined are given below:

1) **Lectures:** Lectures are to be kept to a minimum. They may, however, be employed for teaching certain topics. Lectures may be didactic or integrated.

- 1) Bio-statistics
- 2) Research Methods
- 3) GCP and GLP
- 4) Medical code of conduct and medical Ethics
- 5) Communication Skills etc.

These topics may preferably taken up in the first few weeks of the 1st year (PART-I). The remaining two years (PART-II) the scholars should attend following activities:

2) **Integrated Lectures:**

- Krimi Vidnyanam with Microbiology,
- Comparison of ayurvedic concept of Mala and Shukra Parikshan with Modern Physical, chemical and Microscopic examination of Stool and Semen analysis
- Avayavika Parikshan with USG and X-ray and ECG Examination at Diagnostic wing of our Hospital.

3) **Journal Club:** Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the e-Log Book, the relevant details.

4) **Subject Seminars:** Further, every candidate must make a presentation from the allotted respective topics (both Ayurveda & Modern), Investigation seminar, Classical Text Review, Formulation seminars, selected articles and Clinical case presentations at least four every week. All the PG students are expected to attend and actively participate in discussion and enter in the Log Book, the relevant details. The presentations would be evaluated using check lists, containing names of the student and the evaluator etc.

5) **Student Symposium:** The scholar must attend minimum 2 National seminars and 2 State level seminars and Recommended to present at least two scientific papers / posters.

6) **Publications:** the scholars must publish at least 2 articles in Pubmed /Indexed journals, or UGC mandate Journals one among them should be from their dissertation.

7) **Teaching Skills:** Post graduate students must teach Under graduate students by taking Theory classes, Demonstrations, Bed side clinics, Tutorials, Lectures etc. Assessment is made using a checklist by faculty. Record of their participation be kept in Log book.

### 3. Research/Dissertation:

Every candidate pursuing MD Ayurveda degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher/ guide. The results of such a work shall be submitted in the form of a dissertation. The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, comparison of results and drawing conclusions.

Every candidate shall submit to the Registrar (Academic) of the University in the prescribed Proforma, a synopsis containing particulars of proposed dissertation work within six months from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel. Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.

The dissertation should be written under the following headings:

- i. Introduction
- ii. Aims or Objectives of study
- iii. Review of Literature- both Ayurveda and Modern science
- iv. Material and Methods
- v. Results
- vi. Discussion
- vii. Conclusion
- viii. Summary
- ix. References
- x. Tables
- xi. Annexures

The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexures. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27" x 11.69") and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.

Four copies of dissertation thus prepared shall be submitted to the Registrar (Evaluation), six months before final examination on or before the dates notified by the University.

The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

## **B) Psychomotor Objectives- Practical/clinical Skills/Essential Skills**

The Department of Roga Nidana and Vikriti Vigyana deals with the factors which are essential to understand disease process as well as the diagnosis of disease. Apart from undertaking teaching, research etc. both at UG and PG levels, this Department is also involved in conducting various laboratory diagnostic investigations, pathological tests, ECG, invasive and non-invasive radiological techniques, and mainly in interpretation of all the diagnostic modalities for patient care. The investigations are conducted in well-equipped departmental Laboratory.

**Ward Rounds:** Ward rounds may be service or teaching rounds.

- a) Service Rounds: Postgraduate students should do service rounds twice a day for the care of the patients and should be available in emergencies. Newly admitted patients should be worked up by the PGs and inform to the seniors the following day.
- b) Teaching Rounds: Every unit should have at least weekly one 'grand rounds' for teaching purpose, where in all consultants/teachers, PG scholars will discuss regarding the cases.
- c) Rotation and posting in other departments:

The scholar successfully completes the PART I exams and enters into PART-II curriculum the scholars will be sent compulsory (Mandatory) and Optional postings (Inter-departmental). In the course of the posting the scholar is supposed to record all the cases in the Log Book relevant details and get signed from the respective authority.

### **Skills may be considered under the following headings**

- a) History Taking and Clinical Examination
- b) Clinical case presentation
- c) Performance of diagnostic procedures
- d) Interpretation of diagnostic procedures
- e) Skill for differential diagnosis

- a) History Taking and Clinical Examination –

The scholars should be thorough in documenting the patient's details (rogi pareeksha) and details of the disease (roga pareeksha) and writing daily reports about the patients care.

- b) Clinical case presentation

The scholar should be able to thoroughly study the case and should be able to present the case. Each individual scholar should present at least one case per week on rotation bases.

- c) Performance of diagnostic procedures

Diagnostic procedures forms an important part of the clinical training of the Ayurvedic Physician. In addition to the routine examination of the patient with proper recording of findings, meticulous practice of the following is recommended.

- Calibrate various steps involved in performing various laboratory Investigations.
- Practice interpretation of Avayavika Pariksha like -USG, X-ray, MRI, CT, ECG etc.

The scholar should be capable enough to perform lab investigation and diagnostic techniques when posted in the respective units.

- d) Interpretation of diagnostic procedures

The scholar should be capable enough to interpret lab investigations and diagnostic technique findings.

- e) To develop the Skill for differential diagnosis.



**I. History Taking & Clinical Examination, Interpretation of Diagnostics, Differential diagnosis, Prognosis etc. (Roga pareeksha & Rogi pareeksha)**

S. No	History Taking and Clinical Examination, interpretation of diagnostics and differential diagnosis, Prognosis (Roga pareeksha & Rogi pareeksha)	Part -I	Part-II	Minimum Number
1.	Respiratory system (Pranavaha srotus)	05	05	10
2.	Neurology system (Vatavahanaadi)	05	05	10
3.	Musculoskeletal system (Majjavahasrotus)	05	05	10
4.	Skin (Raktavahasrotus)	05	05	10
5.	Gastro-enterology (Anna-Pureeshavaha srotus)	05	05	10
6.	others	02	02	04

**II. Ayurvedanusara Pareeksha krama**

S.No	Ayurvedanusara Pareeksha krama	Part -I	Part-II	Minimum Number
1	Mootra pareeksha	1	1	2
2	Mala pareeksha	1	1	2
3	Shteevana pareeksha	1	1	2
4	Reto pareeksha	1	1	2



### III. Performance and interpretation of diagnostic procedures

S. No	Biochemistry	Part -I	Part-II	Minimum Number
1	Lipid profile	1	1	2
2	Renal profile	1	1	2
3	Liver profile	1	1	2
4	Thyroid profile	1	1	2
5	Electrolytes	1	1	2
6	Others(Each)	1	1	2

### IV. Performance and interpretation of diagnostic procedures

S.No	Microbiology& Serology	Part -I	Part-II	Minimum Number
1	Staining techniques	-	5	5
2	Culture& sensitivity	-	5	5
3	Tube method (widal,RA,CRP etc) Qualitative tests each 1	- (each parameter)	1 (each parameter)	1 (each parameter)
4	Card metod (Pregnancy,Dengue etc)	1 (each parameter)	1 (each parameter)	1 (each parameter)
5	Quantitative (RA,CRP,ASL-O)	1 (each parameter)	1 (each parameter)	1 (each parameter)

## V. Radiology

S.No	Radiology	Part -I	Part-II	Minimum Number
1	Invasive techniques	-	To involve, attend and interpret maximum number of exposures	NA
2	Non-invasive techniques	-	To involve, attend and interpret maximum number of exposures	NA

### \* NOTE

1. The tables reflected above are indicative of Procedures the Scholars of Roga-Nidan Evam Vikruti vigyana need to perform to acquaint the SOPs , which help in better interpretation of the investigatory modalities with respect to faults at levels of collection of samples, type of procedure, method of procedure, calibrations at different levels, normal ranges according to the kits, clinical correlations etc.
2. The scholars are expertised in reading (ECG, Radio films), interpreting(all available Diagnostics), justifying the investigatory modalities and clinical findings, and also co-relating the Roga& Rogi pareeksha ,rather than performing the procedures/techniques.

### **Skill or Competency Objectives- simulations**

At the completion of each Phase the assessments will be conducted in the form of essay questions to assess the cognitive knowledge and practical examinations to assess psychomotor skills.

### **C) Affective Objectives-**

- Should be able to function as a part of a team, develop an attitude of cooperation with colleagues, and interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion and timely referral of the patient to the higher centre.
- Always adopt ethical principles and maintain proper etiquette in dealing with patients, attender/relatives and other health personnel, also to respect the rights of the patient including the right to information and second opinion.
- Develop communication skills to reveal the reports, obtain a proper relevant history and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and also skill for effective teaching.
- Obtain informed consent for any examination procedure and explain to the patient and attendants the disease and its prognosis with a humble and kind approach.

provide appropriate care that is ethical, compassionate, responsive and cost effective and in conformation with statutory rules

## **Chapter 5- Implementation**

### **Planning-**

#### **Essential Knowledge**

Includes anatomy , physiology and pathology as found in current text books as well as classical Ayurvedic knowledge concerned to Roga Nidana Avum Vikruti Vigyana .These topics are recommended to be studied in Roga Nidana Avum Vikruti Vigyana as much as they are applicable to the Clinical practice. The stress is on patho-physiology, diagnostic and laboratory procedures for diagnosis and management of diseases in both Ayurveda and contemporary science.

#### **Method of training**

The training of postgraduate for degree shall be residency pattern with graded responsibilities in the examination, management and treatment of patients entrusted to his/her care. The participation of the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions, grand rounds, case demonstration, clinics, journal review meetings, CCP and clinical meetings. Every candidate should be required to participate in the teaching and training program of undergraduate students. Training should include involvement in laboratory and experimental work, and research studies. Basic medical sciences students should be posted to allied and relevant clinical departments or institutions.

#### **5. Attendance, Progress and Conduct**

1. A candidate pursuing degree course should work in the concerned department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course.
2. Each year shall be taken as a unit for the purpose of calculating attendance.
3. Every student shall attend symposia, seminars, conferences, journal review meetings, grand rounds, Clinical case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons.
4. Every candidate is required to attend a minimum of 75% of the training during each academic year of the post graduate course. Provided further, leave of any kind shall

not be counted as part of academic term without prejudice to minimum 75% attendance of training period every year.

5. Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the University Examinations.

## **6. Monitoring Progress of Studies:**

*6.1 Work diary / Log Book* - Every candidate shall maintain a work diary and record of his/her participation in the training programs conducted by the department such as journal reviews, seminars, etc. (please see Annexures for model checklists). Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate. The work diary shall be scrutinized and certified by the Head of the Department in the form of Half yearly assessment.

*6.2 Periodic tests:* In case of degree courses of three years duration (MD), the concerned departments may conduct five tests, two of them be annual tests, one at the end of first year and the other in the second year. The third, and fifth test may be held one months before the final examination. fourth test will be conducted when PG scholar has completes one year of II<sup>nd</sup> Phase of MD course. The tests may include written papers, practical's / clinical and viva voce. Records and marks obtained in such tests will be maintained by the Head of the Department and sent to the University, when called for.

*6.3 Records:* Records and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University.

## **7. Dissertation**

*7.1* Every candidate pursuing MD degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.

*7.2* The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, and comparison of results and drawing conclusions.

*7.3* Every candidate shall submit to the Registrar (Academic) of the University in the prescribed preforma, a synopsis containing particulars of proposed dissertation work within eight months from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.

7.4 Such synopses will be reviewed by Institutional research committee and will be processed to Institutional Ethical clearance committee (IEC) and Institutional Animal Ethical clearance committee (IAEC) for the approval, then the dissertation topic will be registered by the University.

7.5 The dissertation should be written under the following headings:

- i. Introduction
- ii. Aims or Objectives of study
- iii. Review of Literature
- iv. Material and Methods
- v. Results
- vi. Discussion
- vii. Conclusion
- viii. Summary
- ix. References
- x. Tables
- xi. Annexures

7.6 Typing instructions: Fonts type Times New Roman and font size of 12. The size of the titles should be 14 and Bold, the size of subtitles should be 12 and bold. Print should be letter quality or laser (not dot matrix) printing with dark black characters that are consistently clear and dense. Use the same type of print and print size throughout the document.

Pagination: All the pages of the thesis to be numbered including the principal text and also all the plates, tables, diagrams, maps, and so on. Roman numerals are used on the preliminary pages(pages up to the first page of text) and Arabic numerals are used on the text pages. The numbers should be placed on the bottom center of the page and they should be consistent.

Spacing: The text matter should be double spaced and single spaced for the long quotations, footnotes, and endnotes.

Margins: For binding purpose, the left-hand margin must be 1.5". Other margins should be 1.0". Diagrams, photographs, or facsimiles in any form should be of a standard page size, or if larger, folded so that a free left-hand margin of 1.5" remains and the folded sheet is not larger than the standard page.

Photographs: Professional quality colour photographs are allowed and should indicate the arrows for changes in the photograph.

7.7 Followings documents are to be submitted by the scholar, Dissertation hard copy

- a. One soft copy of dissertation as per the university instructions (without mentioning the name of the scholar, guide, co-guide) and one soft copy with all credentials are to be submitted to the university for evaluation and approval.
- b. One soft copy of original article drawn out of dissertation and other articles published/Accepted.
- c. Candidates should strictly adhere to the timelines in submitting the dissertations to the college office.
- d. Candidates are informed not to lock the documents with any passwords; it shall be in open access form.
- e. The soft copy should contain Thesis copy in chapter wise, word documents. Photographs shall be in JPEG format only.
- f. All annexure and images shall be labeled and kept in one separate folder. Along with Thesis, Copy of the Plagiarism report is to be submitted.
- g. As per the University notification, acknowledgement copy of online article submitted copy is to be attached.

7.8 The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

**7.9 Guide:** The academic qualification and teaching experience required for recognition by this University as a guide for dissertation work is as per National Council for Indian system of medicine Minimum Qualifications for Teachers in Medical Institutions Regulations. Teachers in a medical college/institution having a total of five years teaching experience out of which at least five years teaching experience as Lecturer or Assistant Professor gained after obtaining post graduate degree shall be recognized as post graduate teachers.

A **Co-guide** may be included provided the work requires substantial contribution from a sister department of the institution.

**7.10 Change of guide:** In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the university.

### 7.11 Checklist for submission of Dissertation by the PG scholar

Name of the Scholar:

University Reg no:

Dept:

Particular	Remarks by the Guide (ensured that as per guidelines/ not ensured that as per guidelines)	Remarks by PG-coordinator (Submitted/ Not submitted as per instructions)
1. <b>Evaluation Copy:</b> folder is labeled with <b>only Registration Number</b> and not contained any Identity of the Candidate in all the certificates and only registration number is mentioned. Any certificates issued by the other Departments, the Identity of the Candidate is masked and scanned copy is attached.		
2. <b>Office Copy</b> folder is labeled with Name and Registration Number and Contained the Following : <i>Certificates of Undertaking I Copyright declaration, Declaration by-the candidate, Certificate of Guide, Co Guide, Endorsement by HOD &amp; Head of the Institution</i>		
3. The documents are not locked with any passwords; they are in open access form and not enabled 'copy protect' in PDF files.		
4. One soft copy of original article drawn out of dissertation and other articles published/Accepted is submitted		
5. Adherence of the scholar to the timelines in submitting the dissertations to the college office.		
6. Contents are in PDF documents.		
7. Photographs are in JPGE format only.		
8. Copy of the Plagiarism report is attached		
9. Acknowledgement copy of online article submitted copy is attached.		
Remarks of HOD-		
Remarks of PG Coordinator:		



## Step 6: Evaluation

### 6.1. Schedule of Examination

The examination for M.D courses shall be held at the end of Phase I and Phase II academic years.

### 6.2. Scheme of Examination

#### M.D. Degree

M.D Degree examinations in any subject shall consist of written paper (Theory), Practical/Clinical, Viva voce and evaluation of the dissertation.

6.2.1 Dissertation: Every candidate shall carryout work and submit a dissertation as indicated in SI.NO.9. Acceptance of dissertation shall be a precondition for the candidate to appear for the final examination.

6.2.2 Written Examination (Theory): A written examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks.

#### 6.2.3 Practical / Clinical Examination:

In case of practical examination, it should be aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates in accordance with OSCE for undertaking independent work as a specialist. Each candidate should examine at least one long case and **one** short case.

The total marks for practical / clinical examination shall be 200.

6.2.4 Viva Voce: Viva Voce Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills. The total marks shall be 100 and the distribution of marks shall be as under:

- |   |            |
|---|------------|
| (i) For examination of all components of syllabus | - 80 Marks |
| (ii) For Pedagogy                                 | - 20 Marks |

6.2.5 Examiners: There shall be at least four examiners in each subject. Out of them two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the National commission for Indian Medicine.

6.2.6 Criteria for declaring as pass in University Examination: A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical including clinical and viva voce examination.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Registrar (Evaluation).

6.2.7 Declaration of distinction: A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate mark is 75 percent and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

## **Annexures for evaluation**

### **Section VI**

#### **LOG BOOK:**

Every student must maintain Log Book in which every activities of teaching training evaluation programs recorded.

The log book is a record of the all the activities of the candidates during his training. Internal assessment is based on the evaluation of log book. Totally, logbooks are a tool for the evaluation of the training programme of Institution by external agencies. The record includes academic activities as well as the presentations and procedures, etc., carried out by candidate.

## CONTENT OF THE LOG BOOK:

- 1 Subject Seminar Presented
- 2 Analysis Seminar Attended.
- 3 Analysis Seminar Presented.
- 4 Animal Module Seminar Attended
- 5 Animal Module Seminar Presented
- 6 Classical Text Review Seminar Attended.
- 7 Classical Text Review Seminar Presented.
- 8 Clinical Case Presentation Attended
- 9 Clinical Case presented .
- 10 Clinical Seminar Attended
- 11 Clinical Seminar presented
- 12 Synopsis/Dissertation Activities
- 13 Formulation Seminar Attended.
- 14 Formulation Seminar Presented.
- 15 General Seminar Attended
- 16 General Seminar Presented
- 17 Guest Lectures Attended
- 18 Instrument Seminar Attended.
- 19 Instrument Seminar Presented.
- 20 Interdepartmental seminars Attended
- 21 Investigation Seminar Attended.
- 22 Investigation Seminar Presented.
- 23 Journal Article Review Attended.
- 24 Journal Article Review Presented.
- 25 Practical/Clinics Attended
- 26 Research article Published
- 27 Seminar/workshop / conference. Attended.
- 28 Shloka Seminar Presented
- 29 Shlokas Seminar Attended.
- 30 Subject Seminar Attended.
- 31 Theory Class Attended
- 32 Under Graduate Practical Classes Conducted
- 33 Under Graduate Theory Classes Conducted

## Section VII MODEL CHECK LISTS

Assessment of student's activities helps to improve their performance. Each activity shall be assessed by at least two teachers and one student from first, second and third year. All the observations summarized and suggestions are made at the end of respective presentation.

### 1. SUBJECT SEMINAR

NAME OF THE PRESENTER:

TOPIC:

No.	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of the Topic			
2	Understanding of the subject & content			
3	Organizing the matter in Logical sequences			
4	Use of specific cross references, examples to explain subject			
5	Incorporation of own Research Views			
6	Presentation skill (Body language, Language fluency, , change of pace etc.)			
7	Answering skill to the question			
8	A/V aid use			
9	Critical analysis of the subject			
10	Summarized the matter at the end			
	TOTAL			

Suggestions:

Date:

Sign & Name

### 2. SHLOKA SEMINAR

NAME OF THE PRESENTER:

Shloka:

Reference:

No.	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of Topic			
2	Breakup of shloka			
3	Use of specific cross references, examples to explain subject			
4	Collection & explanation skill of the Matter			
5	Understanding of the subject			
6	Incorporation of own research views			
7	Presentation skill ( body language, A/V aid use, change of pace, language fluency etc.)			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date:

Sign & Name

### **3. SUBJECT SEMINAR**

NAME OF THE PRESENTER:

TOPIC:

No.	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of the Topic			
2	Understanding of the subject & content			
3	Organizing the matter in Logical sequences			
4	Use of specific cross references, examples to explain subject			
5	Incorporation of own Research Views			
6	Presentation skill (Body language, Language fluency, change of pace etc.)			
7	Answering skill to the question			
8	A/V aid use			
9	Critical analysis of the subject			
10	Summarized the matter at the end			
	TOTAL			

Suggestions:

Date:

Sign & Name

### **4. SHLOKA SEMINAR**

NAME OF THE PRESENTER:

Shloka:

Reference:

No.	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of Topic			
2	Breakup of shloka			
3	Use of specific cross references, examples to explain subject			
4	Collection & explanation skill of the Matter			
5	Understanding of the subject			
6	Incorporation of own research views			
7	Presentation skill ( body language, A/V aid use, change of pace, language fluency etc.)			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date:

Sign & Name

### 5. ANALYSIS

NAME OF THE PRESENTER:

NAME OF THE TECHNIQUE:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Narration of History, types of technique			
3	Description of the technique			
4	Narration of Method of use, unit & applied aspects			
5	Narration of its limitations, precautionary measures			
6	Collection of the Matter			
7	Organizing matter in logical sequence			
8	Presentation skill (body language, A/V aid use, change of pace, Language fluency etc.)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & name

### 6. FORMULATION

NAME OF THE PRESENTER:

Formulation:

Reference:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of Topic			
2	Assessment of ingredients using cross references			
3	Assessment of Pharmacodynamics of ingredients			
4	Explanation of applied aspects			
5	Explanation of quality tests (Shastric/Lab)			
6	Explanation of related recent Research Works			
7	Incorporation of own research views			
8	Presentation skill ( body language, A/V aid use, change of pace, language fluency etc.)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & Name

### 7. INSTRUMENT

NAME OF THE PRESENTER:

NAME OF THE INSTRUMENT:

	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Narration of History, types of instruments			
3	Description of the Instrument			
4	Narration of Method of use, unit & applied aspects			
5	Narration of its limitations, precautionary measures			
6	Collection of the Matter			
7	Organizing matter in logical sequence			
8	Presentation skill (body language, A/V aid use, change of pace, Language fluency etc.)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & Name

### 8. INVESTIGATION

NAME OF THE PRESENTER:

TITLE:

	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of topic			
2	Narration of History, types of investigation & instruments / equipment's used			
3	Narration of method of Investigation			
4	Narration of method of calibration & possible errors			
5	Narration of its application & Incorporation of own research views			
6	Presentation skill ( body language, A/V aid use, change of pace Language fluency etc)			
7	Organizing matter in logical sequence			
8	Answering skill to the question			
9	Understanding of the subject			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign with name

### 9. CLASSICAL TEXT REVIEW

NAME OF THE PRESENTER:

CLASSICAL TEXT TITLE:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	About Author, commentators, publication,			
3	About content, volume, chapters,			
4	Uniqueness of the text			
5	Incorporation of own views			
6	Presentation skill ( body language, A/V aid use, change of pace etc)			
7	Language fluency			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & Name

### 10. ARTICLE PUBLISHED IN JURNAL/PERIODICAL

NAME OF THE PRESENTER:

TITLE:

JURNAL/PERIODICAL:

NO	OBSERVATIONS	Good	Average	Poor
1	Article & Journal/Text selected			
2	Narration of the OBJECTIVES of Article			
3	Understanding of the subject			
4	Use of specific cross references, examples to explain subject			
5	Incorporation of own research views			
6	Presentation skill (body language, A/V aid use, change of pace etc.)			
7	Language fluency			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & Name



## 11. CLINICAL PRESENTATION

NAME OF THE PRESENTER:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Completeness of the History			
3	Accuracy of general physical examination			
4	Incorporation of own research views			
5	Diagnosis-whether it follows logically from History & findings			
6	Organizing matter in logical sequence			
7	Investigation required, interpretation of investigations			
8	Ability to defend diagnosis & to justify differential diagnosis			
9	Justification of Line of treatment			
10	Presentation skill ( body language, A/V aid use, change of pace, Language fluency etc)			
11	Answering skill to the question			
	TOTAL			

Suggestions:

Date:-

Sign & Name

## 12. UG TEACHING SKILLS

Date:-

NAME OF THE TEACHER:

SUBJECT:

NO	SKILLS PRACTICED	YES	TO SOME EXTENT	NO
1	Raised interest in the beginning relating to topic by questing or by throwing new idea			
2	Specified the OBJECTIVES of presentation			
3	Teaching material organized in a logical sequence			
4	Used relevant content matter			
5	Changed pace of presentation			
6	Used specific examples to explain subject			
7	Used non-verbal clues, eye contact, etc,			
8	Used teaching aids effectively			
9	Allowed questions from students			
10	Asked questions to students			
11	Rewarded students answers/questions			
12	Summarized the matter at the end			

Suggestions:

Date:-

Sign & Nam

## LOG BOOK

**Table 3:**

**Departmental Theory classes/Interdepartmental classes/OPDs/IPDs/All kinds of Seminars, workshops/ Hands on training/ Any others**

**Name:**

**Admission Year:**

**College:**

<b>Date</b>	<b>Name of the duty posted/ classes/Practical/Seminars/any other</b>	<b>Attended</b>	<b>Presented</b>	<b>Remarks</b>



**ORDINANCE GOVERNING  
POST GRADUATE COURSE IN  
PRASUTI AVUM STRIROGA  
2021-22**

**Version - I**



**KLE ACADEMY OF HIGHER EDUCATION & RESEARCH  
(DEEMED-TO-BE-UNIVERSITY)**

(Re-Accredited 'A+' Grade by NAAC (3<sup>rd</sup> Cycle) || Placed under Category 'A' by MHRD GoI  
JNMC Campus, Nehru Nagar, Belagavi-590010, Karnataka, INDIA.  
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## Preamble

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

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

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

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

horizontal and vertical integration in different phases and promote research which helps to support National Health Services.

Looking in to the health services provided to the public, understanding the need of Practitioners of Ayurvedic system of medicine, need of research in contest with application of treatment modalities to present generation, to establish new formulations/medicines, to answer the problems related to the present days lifestyle disorders as per the guidelines of apex body CCIM and suggestions provided by the faculty of various sections, stake holders and strategy of University, this Post Graduate studies in Ayurveda is framed.

## **Health care problem**

Women are responsible for 70-80% of all the health care provided in India.

Female health care providers can play an important role in educating the society to recognize their health & nutritional needs.

Reproductive Health concerns now a days are Endometriosis, Uterine fibroids, PCOD ,STDs ,Uterine & Breast cancers, safe motherhood (maternal & neonatal health), family planning and adolescent health. Approximately 10-15% of couples are impacted by Infertility. The pivotal role that the life style factors are playing in development of these conditions is of concern and every effort towards disease identification, prevention and appropriate management of the condition is the need of the hour.

Hence a trained and skilled Ayurveda scholar to potentially shoulder the health care needs of a woman is the absolute necessity. Hence a planned approach in educating them is the priority.

Ayurveda believes in the principle of “Swastasya Swasthya Rakshanum and Aturasya Vikar Shamanum”. Emphasis is given for treating diseases and also prevention of the diseases in Ayurveda.

## **Current approach**

Currently challenging issues are menstrual disorders, various gynaecological disorders (yonivyapad) like endometriosis, dysmenorrhea, genital prolapse, genital infections, infertility, fibroids, malignancies , pregnancy pathologies like early pregnancy haemorrhage, various medical conditions developing during pregnancy like Anaemia, hypertension ,diabetes etc. These conditions can be effectively managed and prevented through Ayurveda or Integrative approach

Hence a teaching methodology that produces a skilled Ayurveda postgraduate in Obstetrics & Gynaecology is the prerequisite

- **Ideal approach** – Integrated treatment is the need of the hour, the Ayurvedic post graduate should have thorough theoretical knowledge of both the Sciences (Ayurveda and Allopathy), understand the limitation, understand the concepts of Ayurveda in treating the patient and practice the speciality ethically and have a conscience in referring the patients to tertiary care as and when required. Research being the integral part of medical studies, conduction and involvement of research scholars in novel topics of Ayurveda gives a concrete stand as evidence-based approach to the students and boosts their confidence in practicing their own science.

Ashtanga Ayurveda together with fundamental concepts need to be understood in contemporary ways without disturbing traditional Ayurveda's rules and values. Incorporation of innovative teaching techniques like simulation based, problem based, self-directed learning , mock drill based learning in emergency conditions etc along with assessment of measurable outcomes in the curriculum development will enhance the quality of stakeholders. It also yields the practitioners of Ayurveda who can potentially contribute to the society and health care needs of women.

### **Target need Assessment**

- **Choose targeted learners**
  - The Post graduates of Prasuti Evum Striroga Part-I and II).

- **Find out information about the targeted learners**

A post graduate of Ayurveda during his /her UG studies has basic orientation on principles of Prasuti & Striroga, mostly acts as an observer having minimum competency in diagnosing and intervening in various conditions.

Student lacks in decision-making skills and referral of patient to tertiary care centre for comprehensive management.

The postgraduates of Ayurveda should be able to treat / perform the various ward /Minor to moderate risk procedures efficiently. Enhance leadership qualities, teamwork, communication skills and attitudes which makes the students competent enough to practice Prasuti Evum Striroga

■ **Determine characteristics of the learning environment**

The scholars are the main stake holders of the learning exercise, so the curriculum should be designed as student centric with flexibility, openness and access to resources. This could be achieved with proper planning in accordance with successive feedback from stake holders (PG scholars), teachers of concerned subject, alumni and external peers periodically and also updates from contemporary science.

## **Goal, Competencies and objectives**

### **Goals**

The goals of postgraduate training course in Prasuti evum Striroga are:

- Practice principles of Prasuti evum Striroga efficiently and effectively, backed by contemporary scientific knowledge and skill as the base.
- Demonstrating decision making skills for treatment and referral to deliver comprehensive management for the patient.
- Exercise empathy and maintain high ethical standards.
- Develop an attitude and communicative skills

**Objectives:** On the completion of the post-graduate curriculum, the following objectives shall be achieved under the following sub-headings



- Knowledge (Cognitive domain)
- Skills (Psycho motor domain)
- Human values, Ethical practice and Communication abilities

***Knowledge:***

A list of objectives related to knowledge and higher cognitive abilities that are expected to be achieved during the course is given.

**At the end of the training, the candidate must be able to:**

- Describe the Nidana-aetiology, Samprapti-pathophysiology, principles of diagnosis and management of common conditions including emergencies by both Ayurveda as well as from contemporary science.
- Describe indications and methods for fluid and electrolyte replacement therapy including blood transfusion.
- Describe common benign and malignancies of women in the country and their Ayurvedic management including prevention.
- Understanding of basic sciences relevant to Obstetrics & Gynaecology
- Identify social, economic, environmental and emotional determinants in a given case and take them into account for planning therapeutic measures.
- Recognize conditions that may be other than the area of his/ her specialty /competence and to refer them to the proper specialist.
- Advice regarding the operative or non-operative management of the case and to carry it out effectively.
- Self update by attending courses, conferences and seminars relevant to speciality
- Teach and guide his team, colleagues and other students.
- Thorough knowledge about laws and acts with their provisions like MTP , PNDT etc

- Acquire Basic knowledge about laparoscopic interventions , diagnostic & therapeutic
- Undertake audit, use information technology tools and carry out research both basic and clinical with the aim of publishing ones work and presenting the work at various scientific forum.

### ***Skills***

- Take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them in both in Ayurveda and Modern medicine to come to a reasonable diagnosis
- Perform labor independently and acquire skills of various modes of assistance viz, episiotomy, forceps application , ventose
- Perform operative procedures like LSCS , tubectomy ,D & C and cervical encircilage etc operations independently with help from a senior modern surgeon.
- Provide basic and advanced life saving support services (BLS & ALS) in emergency situations.
- Develop thorough skill to monitor labour and timely appropriate intervention
- Undertake complete patient monitoring including the preoperative and post-operative care.
- Develop the skills to perform independently Uttara vasti and other gynaecological procedures

### ***Human values, Ethical practice and Communication abilities***

- Adopt ethical principles in all aspects of practice. Professional honesty and integrity are to be fostered. Surgical care is to be delivered irrespective of the social status, caste, creed or religion of the patient.

- Develop communication skills, in particular the skill to explain various options available in management (Ayurveda & Modern medicine) and to obtain an informed consent from the patient.
- Provide leadership and get the best out of his team in a congenial working atmosphere.
- Apply high moral and ethical standards while carrying out human or animal research.
- Be humble and accept the limitations in knowledge and skill and to ask for help from colleagues when needed.
- Respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

## **COMPONENTS OF THE PG CURRICULUM**

The major components of the PG curriculum shall be:

- a. Theoretical knowledge
- b. Practical/Clinical Skills
- c. Training in Dissertation.
- d. Attitudes, including communication.
- e. Training in Research methodology.

### **a) Theoretical knowledge**

Syllabus of Prasuti evum Striroga include the following:

All the candidates admitted for P.G.Degree (MS Ayurveda) are required to pursue the recommended duration of three academic years as full time candidates out of which:

- (i) Preliminary course for one year -MS Part 1 and
- (ii) Specialty course for two years -MS Part 2.

(i) Syllabus of Preliminary course for one year -MD/MS Part 1(Prasuti evum Stri roga)

Name of the Subject :Prasuti evum Stri roga - Samanya ( Obstetrics & Gynaecology )			
Theory-100 Hours		Practical-200 Hours	
Theory- 100 Marks		Practical-100 Marks	
Part- A			
Marks-50 Hours:50			
Unit	Contents (Theory)	Hours	Teaching Methods
1.	Concept of Tridosha, Dhatu, Upadhatu, Agni, Pancha Mahabhuta in relation to Prasuti and Stri Roga	05	Didactic/Interactive/AV
2.	Concept of Artava and Shukra	02	Didactic/Interactive/AV
3.	Concept of Rasa, Guna, Veerya, Vipaka and Karma of Dravya used in Prasuti and Stri Roga	05	Didactic/Interactive/AV
4.	Action and adverse drug reaction related to commonly used plants and Rasa Aushadhi in Prasuti and Stri Roga	05	Didactic/Interactive/AV
5.	Concept of Pathya- Apathya in relation to Prasuti and Stri Roga	05	Didactic/Interactive/AV
6.	Concept of Garbhadhana and Garbha	10	Didactic/Interactive/AV
7.	Concept of Vrana and Vrana dushti.	05	Didactic/Interactive/AV
8.	Concept of special therapies of Ayurved used in Prasuti and Stri Roga	08	Didactic/Interactive/AV Hands on
9.	Concept of Ashtavidha shastra karma , Yantra & Shastra used in Prasuti and Stri Roga	05	Didactic/Interactive/AV Hands on
PART -B			
1.	Applied anatomy and physiology of Genito-urinary system, abdomen, pelvis, pelvic floor, anterior	05	Didactic lecture/ AV Hands on practical anatomy

	abdominal wall, inguinal ligament, inguinal canal, vulva, rectum and anal canal.		
2.	Abnormal development, structure and function of female and male urogenital systems	03	Didactic/Interactive/AV
3.	Development, structure and function of placenta, umbilical cord and amniotic fluid.	02	Didactic/Interactive/AV
4.	Physiological and neuro-endocrinal changes during puberty, adolescence and menstruation	02	Didactic/Interactive/AV
5.	Introduction of hormones related with gynaecology and obstetrics. Ovulation, fertilization, climacteric and menopause. Biophysical and biochemical changes in uterus and cervix during pregnancy and labour	10	Didactic/Interactive/AV
6.	Pre-natal, Natal and Post natal counseling and examination	05	Didactic/Interactive/AV Demonstration
7.	Pharmacological study of drugs used in Gynaecology and Obstetrics	10	Didactic/Interactive/AV
8.	Knowledge of diagnostic techniques used in Gynaecology and Obstetrics	05	Didactic/Interactive/AV Hands on
9.	Basic Knowledge of pathological and biochemical investigation used in gynaecology and obstetrics	02	Didactic/Interactive/AV
10.	Ethics, law and Acts Related to gynaecology and obstetrics – laws of abortion and adoption	02	Didactic/Interactive/AV
11.	Knowledge of contraception and sterilization procedure	02	Didactic/Interactive/AV
12.	Pre-operative and post operative care in gynaecology and obstetrics	02	Didactic/Interactive/AV

## PRACTICAL

100 MARKS

### Content:

1. Hospital duties in OPD, IPD, OT and Casualty.
2. History taking and counseling 25 cases
3. Labor cases – Observation / Performing -10 cases
4. Knowledge of instruments required in Gynaecology & Obstetric practices
5. Ayurvedic diagnostic and therapeutic procedures
6. Fluid therapy and blood transfusion.
7. Contraception and sterilizations.
8. Pre-operative, operative and postoperative procedure
9. Practical knowledge of Gynaecological procedures

**DISTRIBUTION OF MARKS (PRACTICAL)**

SL.NO.	CONTENT	MARKS
1.	Case records of patients in detail	10
2.	Bedside clinical case taking <ul style="list-style-type: none"><li>• Long case</li><li>• Short case</li></ul>	20 10
3.	Identification of instruments / Spotters / X-ray	15
4.	Demonstration of Procedure	15
5.	Viva voce	30
	Total	100

## REFERENCE BOOKS

sl.no	Name of author / commentator	Title of book	Edition	Name of publisher
1	Chakrapani dutta commentator	Charaka Samhita by Agnivesha	1 <sup>st</sup> edition 2000	Chaukhambha orientalia
2	Arunadatta Hemadri tika	Ashtanga hridaya	1 <sup>st</sup> edition 2000	Chaukhambha sanskrit series (Varanasi)
3	Dalhana Author – Yadavji Trikamji	Sushruta Samhita	1 <sup>st</sup> edition 2019	Chaukhambha orientalia
4	Adhamalla dipika Kasirama's gudhartha dipika	Sharangadhara samhita	6 <sup>st</sup> edition 2005	Chaukhambha orientalia
5	Srisathyapala Bhisagacharya (vrddha jivaka )	Kashyapa samhita	9 <sup>th</sup> edition 2004	Chaukhambha Sanskrit samstan
6.	Prof P.V. Tewari	Ayurvediya Prasuti tantra evum Stree Roga	Single edition Reprint January 2016	Chaukhambha Publications
7.	Dr Nirmala .G.Joshi	Ayurvedic concepts in gynaecology	Single edition 2013	Chaukhamba Sanskrit pratishthan
8.	Dr Manjari Dwivedi	Abhinav prasooti tantra	Single edition Reprint 2008	Chaukhambha surbharati prakashan varanasi
9.	Prof Dr V.N.K Usha	Prasooti tantra	Single edition 2013	Chaukhamba Sanskrit pratishthan (delhi)
10.	Prof Dr V.N.K Usha	Streeroga - Vijnan	Single edition 2011	Chaukhamba Sanskrit pratishthan (delhi)
11.	T.W.Sadler	Langman's medical embrology	13 <sup>th</sup> edition 2016	Patrick's. w . tank phd
12	Narendra Malhotra Jaidēep Malhotra Richa saxena Naharika Malhotra	Jeffcoate's principles of gynaecology	9 <sup>th</sup> edition 2019	The health sciences publishers.

13	Hiralal Konar ( D.C.Dutta )	Textbook of gynecology	8 <sup>th</sup> edition 2020	Jaypee brothers medical publishers
14	Hiralal konar ( D.C.Dutta )	Textbook of obstetrics	9 <sup>th</sup> edition 2018	Jaypee brothers medical publishers
15	F Gary Cunningham	Williams obstetrics	25 <sup>th</sup> edition 2018	Mc graw hill educations
16	Steven .g.Gabbe	Obstetrics normal and problem pregnancies	1 <sup>st</sup> edition 2016	Elsevier
17	Ramveer sharma	Textbook of prasuti tantra (obstetrics)	1 <sup>st</sup> edition 2020	Chaukhambha orientalia
18	Dr Hemalata Kapoorchand	Streeroga	1 <sup>st</sup> edition 2019	Chaukhambha vishwa bharati
19	Dr Hemalata Kapoorchand	Prasuti tantra	1 <sup>st</sup> edition 2019	Chaukhambha vishwa bharati
20	Alok sharma	Third trimester of pregnancy and puerperium	1 <sup>st</sup> edition 2016	Jaypee ( the health science publishers)
21	Mala Arora	Recurrent pregnancy loss	2 <sup>nd</sup> edition 2007	Jaypee brothers
22	Robert E Svoboda	Ayurveda for Women	2002	Motilal Banarasidas publishers
23	Webster sophia ne: azzawi farook al	CHILDBIRTH & OBSTETRIC TECHNIQUES	3 <sup>rd</sup> edition 2018	Jaypee brothers
24	Rechald L Sweet;Herald C Wiesenfeld	Pelvic Implimentary Disease	2 <sup>nd</sup> 2006	Springer
25	Jonathan S Berek	Berek & Novak's Gynecology	16 <sup>th</sup> edition	Wolters Kluwer India Pvt .Ltd
26	Victoria L Handa M D , Linda Van Le M D	Te Linde's Operative Gynaecology	12 <sup>th</sup> edition	Wolters Kluwer India Pvt .Ltd



(ii) Specialty course for two years -MD/MS Part 2.

**MD/MS Part 2. (AYU) PRASUTI EVUM STRIROGA**

- Theory Papers : 04
- Theory Marks : 400 Marks (100 each)
- Practical Marks : 200 Marks
- Duration : 02 Years
- Grand Total : 600 Marks

PAPER	NAME OF PAPER	MARKS	TEACHING HOURS
PAPER I	Garbhagarbhini Vigyan	100 Marks	100 Hours
PAPER II	Prasava Vigyan	100 Marks	100 Hours
PAPER III	Streeroga	100 Marks	100 Hours
PAPER IV	Shalya karma	100 Marks	100 Hours

**Name of The Subject : PRASUTI TANTRA STREE ROGA**

**PAPER – I**

**Garbhagarbhini Vigyan**

**Theory- 100 Marks**

**Hours-100**

Unit	Content (Theory)	Hour	Teaching Methods
1.	Applied anatomy of female Genito urinary system, Pelvis and Pelvic floor. Pelvic assesment and foetal skull	10 Hours	Didactic/Interactive/AV Demonstrations
2.	Physiology, neuro endocrinology and pathology of puberty and Neuroendocrine control of menstrual cycle. Artava, Rituchakra, Streebija, Pumbija	10 Hours	Didactic/Interactive/AV
3.	Garbha sambhava samaagri, Garbhadhanam,, Pre-conceptional counseling and care, Pumsavana, Garbhasya shad dhatvatmakatva, Garbhavakranti, Matrijadi bhava, Garbha vriddhi, role of panchamahabhutas in the formation and development of foetus. Garbhasya avayavotpatti Fundamentals of reproduction – gametogenesis, Fertilization, Implantation and early development of human embryo.	08Hours	Didactic/Interactive/AV
4.	Apara, Garbhodaka, Jarayu, Nabhinadi.  Placenta, amniotic fluid, membranes and umbilical cord -their formation, structure, functions and abnormalities. Garbha-poshana, Garbha sharer kriyavaishishtyam, Garbha lingotpatti, Garbha varnotpatti, Garbhasya masanumasika vriddhi.  Foetal physiology, circulation, Foetal growth and development	10Hours	Didactic/Interactive/AV Hands on experience
5.	Bija, Bijabhaga, beeja bhaga avayava janya  Garbhanga vikruti  Genetics , Birth defects & other teratologic abnormalities	04 Hours	Didactic/Interactive/AV

6.	<p>Garbhini nidana, sapekshanidana, Garbhakaalina matrigata parivartana, lakshana, Dauhrida.</p> <p>Diagnosis and differential diagnosis of pregnancy</p> <p>Anatomical and physiological changes during pregnancy</p> <p>Endocrinology related to pregnancy</p> <p>Immunology of pregnancy</p>	08hours	Didactic/Interactive/AV
7.	<p>Garbhini paricharya</p> <p>Masanumasika pathya apathya evum garbha-upaghatakara bhava.</p> <p>Antenatal care, examination investigations and management</p>	10 hours	Didactic/Interactive/AV Hands on
8.	<p>Garbhasankhya nirnaya,</p> <p>Bahu apatyata -Multiple pregnancy</p>	02 hours	Didactic/Interactive/AV
9.	<p>Garbhavyapad causes, clinical features, complications, management and treatment of Garbhasrava and Garbhapata ; Upavishtaka, Nagodara / Upashushka, Lina garbha, Goodagarbha, Jarayu Dosha, Antarmrita garbha , Garbha shosha, Garbha kshaya, Bhutahrita garbha, Raktagulma.</p> <p>Abortions, I.U.G.R, Intrauterine Foetal death Ectopic pregnancy and gestational trophoblastic neoplasia.</p>	15 hours	Didactic/Interactive/AV Case discussion
10.	<p>Garbhini vyapad – nidana panchaka and chikitsa of garbhini vyapad.</p>	15 hours	Didactic/Interactive/AV Case discussion

	<p>Early recognition, differential diagnosis and prompt management of pregnancy complications. Emesis and Hyperemesis gravidarum,  Anaemia  Pregnancy Induced Hypertension, Pre-eclampsia, Eclampsia,  Antepartum hemorrhage  Rh- incompatibility  Management of pregnancies complicated by medical, surgical or Gynecological disorders in consultation with the concerned specialties by team approach  a. Pyrexia, Heart disease, Diabetes mellitus, Liver disorders, Respiratory diseases, Renal diseases, Epilepsy, Hypertensive disorders.  b. Fibroids, Ovarian tumors, Genital prolapse, Carcinoma Cervix.</p> <p>Infections in pregnancy: Toxoplasmosis, Viral infections, Rubella, CMV, Hepatitis-B, Herpes, Syphilis and other Sexually Transmitted Infections including HIV, Prevention of mother to child transmission of HIV infection (PMTCT).</p>		
11.	Jataharini related to Garbhini avastha	01 hour	Didactic/Interactive/AV
12.	Evaluation of Foetal and maternal health in complicated pregnancies by making use of diagnostic modalities	01hour	Didactic/Interactive/AV
13.	<p>Prenatal diagnosis of fetal abnormalities and appropriate care.</p> <p>PNDT Act and its Implications</p>	01hour	Didactic/Interactive/AV
14.	<p>Vishesh adhyayan of –</p> <p>Ashtanghriday sharira - Adhyay -1st  Garbhavkranti Sushrutasamhita sharira Adhyay-3<sup>rd</sup> Garbhavkranti</p>	05 hours	Didactic/Interactive/AV

	Charak Samhita sharira - Adhyaya - 8th Jatisutriya		
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**Name Of The Subject : PRASUTI TANTRA STREE ROGA**

<b>PAPER – II</b>		<b>Prasava – Vigyan</b>	
<b>Theory- 100 Marks</b>		<b>Hours-100</b>	
<b>Unit</b>	<b>Contents (Theory)</b>	<b>Hours</b>	<b>Teaching Methods</b>
1.	<b><u>Prakrit Prasava</u></b> 1. Prasava paribhasha, Prasav kaala, Prasava prarambha karana, Prasava kalina garbha sthiti, Avi, Sutikagara a) Initiation and onset of parturition. b) Examination and evaluation of patient in labour. c) Physiology of labour. d) Mechanism of labour. e) Selection of place of delivery and labour room. 2. Prasava avastha evum paricharya a) Stages of normal labour b) Intrapartum maternal and foetal monitoring c) Management of normal labour	30 Hours	Didactic/ Interactive AV  Hands on experience
2.	<b><u>Prasava vyapad</u></b> 1. Etiopathogenesis, clinical features, prevention and management of Garbhasanga, vilambita prasav, Mudhagarbha and Apra sanga. a) Prolonged labour b) Cephalo pelvic disproportions c) Malpresentation	25 Hours	Didactic/ Interactive AV

	<p>d) Obstructed labour</p> <p>e) Methods of Induction and Augmentation of labour</p> <p>2. Complications of different stages of labour</p> <p>3. Obstetric management of high risk Pregnancies- Pre eclamptic toxemia, Eclampsia, Diabetes, cardiac disease, asthma, Epilepsy, antepartum haemorrhage, preterm premature rupture of membranes, Preterm, Post term, Multiple pregnancy, IUGR &amp; HIV -AIDS</p> <p>4. Still birth- diagnosis, complications and management.</p>		
3.	<p><u>Jatamatra/ Navajata shishu paricharya</u></p> <p>a) Examination and management of neonate.</p> <p>b) Management of birth asphyxia.</p> <p>c) Detection of congenital malformation in newborn and timely referral for correction.</p>	5 Hours	Didactic/ Interactive AV/demonstration
4.	<p><u>Sutika vigyana</u></p> <p>1. Sutika Paribhasha, kala maryada, paricharya.</p> <p>2. Sutika vyadhi and their chikitsa.</p> <p>3. Stana sampat, Stanya utpatti, Stanya sampat, Stanya pariksha, Stanya vridhi, kshaya and dusti karana, lakshan and chikitsa, stana shotha, stana vidhradhi.</p> <p>4. Suppression of lactation</p> <p>5. Normal and abnormal puerperium.</p>	15 Hours	Didactic/ Interactive AV/ demonstration
5.	<p>Obstetric shock and management</p> <p>1.Raktadhana: blood transfusion and replacement of blood constituents.</p> <p>2.Management of fluid and electrolyte imbalance in obstetrics.</p>	05 hours	Didactic/ Interactive AV/ demonstration
6.	Drugs used in obstetric practice, indications/contra indications, doses and side effects.	10 hours	Didactic/ Interactive AV
7.	<p><u>Vishesha Adhyavana of</u></p> <p>Ashtanga Hridaya Sharira Sthana 2<sup>nd</sup> Adhyaya Garbha Vyapad</p>	10Hours	Didactic/ Interactive

Sushruta samhita Nidana Sthana 8 <sup>th</sup> Adhyaya Mudhagarbha nidana		AV
Sushruta Samhita Chikitsa Sthana 15 <sup>th</sup> Adhyaya Mudhagarbha Chikitsa		

Name Of The Subject : PRASUTI TANTRA STREE ROGA			
PAPER – III		Stree Rog vigyan	
Theory- 100 Marks		Hours-100	
Unit	Contents (Theory)	Hours	Teaching Method
1.	Disorders of menstruation and Female reproductive system. A. Congenital malformations of female genital tract B. Artav dushti, artava vridhi, artava kshaya, asrigdara, anartava, and kashtartav. C. Genital infections including sexually transmitted infections. D. Abnormal vaginal discharges. E. Arsha, Yonikanda, Gulma, Granthi, Arbuda. F. Abnormal uterine bleeding, Endometriosis, fibroid uterus, Adenomyosis, Polycystic ovarian syndrome and neoplasia of female genital organs. G. Endocrinological disorders affecting female reproductive system. H. Somarog.	20 hours	Didactic/ Interactive AV Case discussions
2.	Detailed study of yoni vyapad mentioned by different Acharyas with their commentaries and all possible correlations with modern gynecological diseases	20 Hours	Didactic/ Interactive AV Case discussions

3.	<p>Vandhyatva</p> <p>A. Hetu, Bheda, Pariksha, and Chikitsa.</p> <p>B. Detailed study of causative factors, Investigations with recent advances in management of infertility</p> <p>Adoption law</p>	10Hours	Didactic/ Interactive AV
4.	<p>Stanaroga</p> <p>Detailed study of Stanashotha, Stanakilaka and stanavidradhi, stana granthi, stanarbuda. Examination of breast, diagnosis and differential diagnosis of breast lump.</p>	05 Hours	Didactic/ Interactive AV/demonstration
5.	<p>Measures of contraception</p> <p>A. Ayurvedic view of Garbha nirodha and Garbhapatkara yogas.</p> <p>B. Temporary contraception</p> <p>C. Recent studies in the field of contraception.</p> <p>D. National Health programme to improve maternal and Child health, social obstetrics and vital statistics (maternal and perinatal mortality).</p>	05Hours	Didactic/ Interactive AV demonstrations
6.	<p>Sthanik Chikitsa</p> <p>Detailed study of Pichu, Varti, Dhupan, Dhavana, Parisheka, lepa, Kalkadharana, Uttarabasti, agnikarma and kshara karma.</p>	10 hours	Didactic/ Interactive AV demonstrations
7.	<p>Rajo Nirvriti - Climacteric and menopause.</p> <p>Geriatric health care</p>	2Hours	Didactic/ Interactive /AV
8.	Study of modern diagnostic techniques and Investigations.	5 Hours	Didactic/ Interactive /AV
9.	Important drugs used in Stree roga	10 Hours	Didactic/ Interactive /AV
10.	Panchakarma in Streeroga	03 Hours	Didactic/ Interactive/AV
11.	Vishesha Adhyayana of	10 Hours	



Charaka Samhita Chikitsa Sthana -30 <sup>th</sup> Adhyaya - Yonivyapad Chikitsa Sushruta Samhita Uttara Tantra - 38th Adhyaya – Yonivyapad Pratishedha Kashyapa Samhita Kalpa Sthana- Shatapushpa Shatavari, Lashuna kalpa Adhyaya		Didactic/ Interactive
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**Name of the Subject : PRASUTI TANTRA STREE ROGA**

<b>PAPER – IV</b>		<b>Prasuti Streerog Shalya Karma</b>	
<b>Theory- 100 Marks</b>		<b>100 hours</b>	
<b>Unit</b>	<b>Contents (Theory)</b>	<b>Hours</b>	<b>Teaching Methods</b>
	General principles of Gynaecological & Obstetric surgeries	05 hours	Didactic/ Interactive /AV
	Analgesia & Anaesthesia in Obstetrics & Gynaec operative procedures		
1.	<b>Operative Obstetrics</b> Decision making, techniques, diagnosis and management of surgical complications.	05 Hours	Didactic/ Interactive /AV
2.	Dilatation and evacuation, Hysterotomy, Provision of safe abortion services -selection of cases, technique and management of complications, septic abortion, criminal abortion, MTP Act	10 Hours	Didactic/ Interactive /AV Demonstration
3.	Cervical Encirclage Instrumental delivery (Forceps, vacuum extraction) Caesarean Section Manual removal of Placenta Caesarean Hysterectomy	20 Hours	Didactic/ Interactive/AV
<b>Unit</b>	<b>Operative Gynecology</b>	<b>Hours</b>	<b>Teaching Methods</b>
Selection of cases, technique and management of complications of minor and major gynecological procedures.			
1.	Dilatation and Curettage, Cervical cauterization	05 Hours	Didactic/Interactive /AV

2.	Polypectomy Myomectomy Cystectomy Oophorectomy	10 Hours	Didactic/ Interactive /AV
3.	Surgical sterilization procedures Hysterectomy	10 hours	Didactic / Interactive /Hands on experience
4.	Surgical procedures for genital prolapse. Surgical management of benign genital neoplasm	05 hours	Didactic/ Interactive /AV
5.	Recent advances in Gynaecology and obstetrics – Diagnostic and therapeutics	10 Hours	Didactic/ Interactive /AV
6.	Shock and its management Blood Transfusion Fluid and electrolyte imbalance Fluid therapy	10 Hours	Didactic/ Interactive /AV
7.	Record keeping, ethical and legal issues involved in obstetrics and gynaecology. Medico-legal aspects – ethics, communication and counselling in obstetrics and Gynecology	05 Hours	Didactic/ Interactive /AV
8.	Intensive care in Obstetrics and Gynecology.	05hours	Didactic/ Interactive /AV

## **PRACTICAL:**

### **Content:**

1. Practical training to conduct
  - Normal and complicated deliveries
  - Assisted / Instrumental deliveries
  - Caesarean section
  - Neonatal resuscitation
2. Practical knowledge of Garbhini paricharya , sutika paricharya and masanumasika garbha vriddhi
3. Practical training to perform Obstetrical and Gynaecological surgery
4. Practical training to provide family welfare / planning services, safe abortion methods along with surgical sterilization
5. Practical knowledge and practice of all relevant equipment , procedures , complications ,emergencies with their management
6. Practical knowledge of yogasanas and Pranayama useful in Stree roga and Prasuti tantra
7. Practical knowledge of Panchakarma and Sthanika chikitsa used in Stree Roga and Prasuti tantra
8. Practical knowledge of recent advances in Gynaecology and Obstetrics
9. Training of Obstetric & Gynaecologic casualties

P.G. Scholars shall develop the skills by observing, assisting and performing independently all procedures including minor and major surgeries related to Obstetrics & Gynaecology

**PATTERN OF PRACTICAL EXAMINATION****200 MARKS**

Sl. No	Practical	Marks	Total Marks
1	Long case/ Long Practical as the case may be	40 marks	200 marks
2	Short case/ Short Practical as the case may be	20 marks	
3	Medical Procedure/ Lab Analysis	30 marks	
4	Identification of Specimen/ Model and Instruments	30 marks	
5	Dissertation presentation	20 marks	
6	Micro teaching	20marks	
7	Viva- voce	40 marks	200 marks
	TOTAL		

**REFERENCE BOOKS**

Sl.no	Name of author / commentator	Title of book	Edition	Name of publisher
1	Chakrapani dutta commentator	Charaka Samhita by Agnivesha	1 <sup>st</sup> edition 2000	Chaukhambha orientalia
2	Arunadatta Hemadri tika	Ashtanga hridaya	1 <sup>st</sup> edition 2000	Chaukhambha sanskrit series (Varanasi)
3	Dalhana Author – Yadavji Trikamji	Sushruta Samhita	1 <sup>st</sup> edition 2019	Chaukhambha orientalia
4	Adhamalla dipika Kasirama's gudhartha dipika	Sharangadhara samhita	6st edition 2005	Chaukhambha orientalia
5	Srisathyapala Bhisagacharya (vrddha jivaka)	Kashyapa samhita	9nt edition 2004	Chaukhambha Sanskrit samstan
6	Prof P.V. Tewari	Ayurvediya Prasuti tantra evumStreRoga	Single edition	Chaukhambha

7	Dr Nirmala .G.Joshi	Ayurvedic concepts in gynaecology	No edition 2013	Chaukhamba Sanskrit pratishthan
8	Dr Manjari dwivedi	Abhinav Prasooti tantra	No edition 2008	Chaukhambha surbharati prakashan varanasi
9	Prof Dr V.N.K Usha	Prasooti tantra	No edition 2013	Chaukhamba Sanskrit pratishthan (delhi)
10	Prof Dr V.N.K Usha	Streeroga - vijnan	No edition 2011	Chaukhamba Sanskrit pratishthan (delhi)
11	Prof Pooja Bharadwaj	Ayurvedic Streeroga vijyana	1 <sup>st</sup> edition 2019	Chaukhambha publications
12	T.W.Sadler	Langman`s medical embrology	13 <sup>th</sup> edition 2016	Patricks. w . tank phd
13	Narendra Malhotra Jaideep Malhotra Richa saxena Naharika Malhotra	Jeffcoate`s principles of gynaecology	9 <sup>th</sup> edition 2019	The health sciences publishers
14	Hiralal konar ( D.C.Dutta )	Textbook of gynecology	8 <sup>th</sup> edition 2020	Jaypee brothers medical publishers
15	Hiralal konar ( D.C.Dutta )	Textbook of obstretrics	9 <sup>th</sup> edition 2018	Jaypee brothers medical publishers
16	F Gary Cunnigham	Williams obstretrics	25 <sup>th</sup> edition 2018	Mc graw hill educations
17	Steven .g.Gabbe	Obstretrics normal and problem pregnancies	1 <sup>st</sup> edition 2016	elsevier

18	Ramveer sharma	Textbook of prasuti tantra (obsetretics)	1 <sup>st</sup> edition 2020	Chaukhambha orientalia
19	Ashwini gandhi	Contraception past , present and future	2 <sup>nd</sup> edition 2016	Health science publishers
20	Dr Hemalata Kapoorchand	streeroga	No edition 2019	Chaukhambha vishwa bharati
21	Dr Hemalata Kapoorchand	Prasuti tantra	No edition 2019	Chaukhambha vishwa bharati
22	Alok sharma	Third trimester of pregnancy and puerperium	1 <sup>st</sup> edition 2016	Jaypee ( the health science publishers)
23	Mala Arora	Recument pregnancy loss	2 <sup>nd</sup> edition 2007	Jaypee brothers
24	David Gardner	Textbook of assisted reproductive techniques	5 <sup>th</sup> edition 2018	CRC press
25	Baskett Thomas F:Others	Munro Kerr"s Operative Obstetrics	2014	Elsevier INDIA
26	Marcus E Setchell	Shaws Text book of Operative Gynaecology	7 <sup>th</sup> edition 2011	Elsevier INDIA
27	Liselotte Mettler	Manual of New Hysterectomy Techniques	1 <sup>st</sup> edition 2007	Jaypee brothers
28	Kenneth J Leveno	Williams Manual of Obstetrics Pregnancy Complications	23 <sup>rd</sup> edition 2012	McGraw Hill/Medical

29	Posner gd;others	Oxorn-foote Human labor & birth	6 <sup>th</sup> edition 2013	McGraw Hill Education/Medical
30	Victoria L Handa	Te Lindes Operative gynecolgy	12 <sup>th</sup> edition 2019	Wolters kluwer
31	Leon Speroff;Others	Clinical Gynecologic Endocrinology and Infertility	6 <sup>th</sup> edition 1999	Jaypee publisher
32	Victoria L Handa M D , Linda Van Le M D	Te Linde's Operative Gynaecology	12 <sup>th</sup> edition	Wolters Kluwer India Pvt .Ltd
33	Berek & Novak	Text book of Gynaecology	4 <sup>th</sup> edition	Wolters Kluwer India Pvt .Ltd
34	Cunningham Leveno Bloom Spong Dashe Hoffman Casey Sheffield	Williams Obstetrics	24 <sup>th</sup> edition	Mcgraw Hill Medical
35	Narendra Malhotra Jaideep Malhotra Richa saxena Neharika Malhotra Bora	Jaffecoat's Principles of Gynaecology	9 <sup>th</sup> edition	Jaypee Brothers Medical Publishers

## Educational strategies

### Contents

- A) Cognitive Objectives : Theoretical knowledge (Lecture)
- B) Psychomotor Objectives- Practical/clinical Skills/Competency
- C) Affective Objectives- Reflection, role models

### A) Cognitive Objectives : Theoretical knowledge (Lecture, SDL)

#### Teaching and Learning Activities

A candidate pursuing the course should work in the institution as a fulltime student. No candidate should be permitted to run a clinic/laboratory/nursing home while studying postgraduate course. 80% of attendance is must for 1<sup>st</sup> year and final year for calculating attendance.

Every student shall attend teaching and learning activities during each year as prescribed by the department and not absent himself / her from work without valid reasons.

A list of teaching and learning activities is designed to facilitate students to acquire essential knowledge and skills outlined are given below:

- 1) **Lectures:** Lectures are to be kept to a minimum. They may, however, be employed for teaching certain topics. Lectures may be didactic or integrated.
  - 1) Bio-statistics
  - 2) Research Methods
  - 3) Medical code of Conduct and Medical Ethics
  - 4) GCP and GLP
  - 5) Communication Skills etc.
  - 6) Personality development



These contents will be preferably taken up in the first few weeks of the 1st year(PART-I). The remaining two years (PART-II) the scholars should attend following activities.

- 2) **Integrated Lectures:** These are recommended to be taken by multidisciplinary departments for selected topics, eg. Kamala (Jaundice), Madhumeha (Diabetes mellitus), Thyroid etc.
- 3) **Journal Club:** Recommended to be held once a week. All the PG students are expected to attend and actively participate in discussion and enter in the e-Log Book, the relevant details.
- 4) **Subject Seminars:** Further, every candidate must make a presentation from the allotted respective topics(both Ayurveda & Modern) , Investigation seminar, selected articles and Clinical case presentations at least four every week. All the PG students are expected to attend and actively participate in discussion and enter in the Log Book, the relevant details. The presentations would be evaluated using check lists, containing names of the student and the evaluator etc.
- 5) **Student Symposium:** The scholar must attend minimum 2 National seminars and 2 State level seminars and Recommended to present at least two seminars.
- 6) **Publications:** the scholars must publish at least 2 articles in UGC mandate Journals or Pubmed/Indexed journals, one among them should be from their dissertation.
- 7) **Teaching Skills:** Post graduate students must teach under graduate students ( Eg. medical, nursing) by taking demonstrations, bed side clinics, tutorials, lectures etc. Assessment is made using a checklist by ObGyn faculty as well students). Record of their participation be kept in Log book.

### **3. Research / Dissertation:**

Every candidate pursuing MS Ayurveda degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of a dissertation. The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, comparison of results and drawing conclusions.

Every candidate shall submit to the Registrar (Academic) of the University in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within six months from the date of commencement of the course on or before the dates notified by the University.

The synopsis shall be sent through the proper channel. Such synopsis will be reviewed and the dissertation topic will be registered by the University. No change in the dissertation topic or guide shall be made without prior approval of the University.

The dissertation should be written under the following headings:

- i. Introduction
- ii. Aims or Objectives of study
- iii. Review of Literature- both Ayurveda and Modern science
- iv. Material and Methods
- v. Results
- vi. Discussion
- vii. Conclusion
- viii. Summary
- ix. References
- x. Tables
- xi. Annexures

The written text of dissertation shall be not less than 50 pages and shall not exceed 150 pages excluding references, tables, questionnaires and other annexures. It should be neatly typed in double line spacing on one side of paper (A4 size, 8.27" x 11.69") and bound properly. Spiral binding should be avoided. The dissertation shall be certified by the guide, head of the department and head of the Institution.

Four copies of dissertation thus prepared shall be submitted to the Registrar (Evaluation), six months before final examination on or before the dates notified by the University.

The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination

## **B) Psychomotor Objectives- Practical/clinical Skills/Essential Surgical Skills**

Prasuti evum Striroga speciality is a skill and experience based discipline in Ayurveda which after necessary training is able to provide proper care in Obstetrics & Gynaecology. One can obtain such skill & training by posting PG scholars to deferrent units of the hospital (OPD,IPD,OT Causality and postings and also there is provisioin to post modern hospital for minimum period of 4 months when the scholars come to second phase (it could be optional)

by then they have knowledge to assess the patient and to understand the limitation in managing the patients. The whole skill-based training for 3-year curriculum is specified as year wise distribution of the learning skills.

**Ward Rounds:** Ward rounds may be service or teaching rounds.

- a) **Service Rounds:** Postgraduate students and Interns should do service rounds twice a day for the care of the patients. Newly admitted patients should be worked up by the PGs and inform to the seniors the following day.
- b) **Teaching Rounds:** Every unit should have at least weekly one 'Grand rounds' for teaching purpose wherein all consultants/teachers, PG scholars along with interns interact and discuss about patient care.
- c) **Rotation and posting in other departments:**

The scholar successfully completes the PART I exams and enters into PART-II curriculum the scholars will be sent compulsory (Mandatory) and Optional postings (Interdepartmental). The Prasuti Evum Striroga PG will be sent to Modern hospital (Any tertiary care hospital) for the Period of least of 4 months and maximum for the period of 5 months in order to have modern surgical skills. In the course of the posting the scholar is supposed to record all the cases in the Log Book relevant details and get signed from the modern consultant.

**Skills may be considered under the following headings**

- a) Ward procedures
- b) To conduct normal labor, LSCS, Tubectomy
- c) Preoperative workup procedures
- d) Postoperative procedures
- e) Minor procedures – D & C Therapeutic & Diagnostic
- f) Gynaecological procedures
- g) Sthanika chikitsa including Uttara vasti

**a) Ward procedures**

Ward work forms an important part of the clinical training of the Ayurvedic postgraduate. In addition to the routine examination of the patient with proper recording of findings, diligent practice of the following is recommended.

The procedures listed within the tables, indicates the surgical procedures that the scholars should, by the end of the course, be able to perform independently (PI) by himself/herself or should perform under guidance (UG) of senior postgraduate during the course. The other

categories of surgical procedures mentioned form a general guide for the procedures that the student should either have observed (O) or have assisted the operating surgeon (A). Note, for all categories, the student washes up in the operating room. The total number of procedures of each category should be accomplished in the 3 years and noted in the log book.

a) Ward procedures

S.No	Procedure	Part-I	Part-II	Minimum Number
1.	Insertion of I.V. lines	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	25
2.	Wound dressing	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	25
3.	Catheterization	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	25
4.	Blood sampling & cross matching	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	25
5.	Per vaginal examination	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	25
6.	Fetal monitoring / N S T operation	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	25
1.	Ability to teach UG's and Interns	-	PI	Minimum 10
2.	Ordering of the requisite laboratory and U S G and Interpretation of the reports in light of the clinical picture	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	NA
3.	Communication skills with patients, relatives, colleagues and paramedical staff	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	NA

b. Major Operating room techniques

S.No	Procedure	Part-I	Part-II	Minimum Number
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1.	Instrument arrangement and trolley layout	O	PI	NA
2.	Skills in Sterilization techniques, O.T.Layout and Asepsis	PI (under guidance of PG II )	Guide (I <sup>st</sup> Year)	NA
3.	Skin preparation – painting and draping	PI (under guidance of PG II )	Guide (I <sup>st</sup> Year)	NA
4.	Techniques of scrubbing ,donning	PI (under guidance of PG II)	Guide (I <sup>st</sup> Year)	NA

**c. Emergency room procedures**

S.No	Procedure	Part-I	Part-II
1.	Securing Venous Lines	O	PI
2.	Assessment and initial management of Emergency obstetric conditions	PI (under guidance of PG II)	-
3.	Cardiopulmonary Resuscitation	O	PI
4.	Management of Airway Obstruction	PI (under guidance of PG II)	PI
5.	Preliminary Management of Shock and Cardiac / Respiratory failure	O	PI
6.	Recognition, Initial management of Surgical Emergencies and Assessment for referrals	O	PI
7.	Suturing Techniques	O	PI

**d)Minor O.T. procedures**

S.No	Procedure	I <sup>st</sup> Year	II <sup>nd</sup> Year	Minimum Number
1.	D & C	O	PI	05
2.	Cervical encirclage	O	PI	05
3.	Uttara vasti	PI (under guidance of PG II)	O&G	10

4.	Copper -T insertion	O	PI	05
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**e) General Surgical Operative Procedures- Done Under the guidance of Teacher/Modern Surgeon**

S.No	Procedure	Part-I	Part-II	Minimum Number
1.	Opening and closing the abdomen	O	PI	10
2.	LSCS	O	PI	05
3.	Tubectomy	O	PI	03
4.	Hysterectomy -Abdominal	O	PI	01
5.	Hysterectomy - Vaginal	O	PI	01

**Skill or Competency Objectives- simulations**

At the completion of each Phase the assessments will be conducted in the form of essay questions to assess the cognitive knowledge and practical examinations to assess psychomotor skills.

**C) Affective Objectives-**

- Should be able to function as a part of a team, develop an attitude of cooperation with colleagues, and interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion.
- Always adopt ethical principles and maintain proper etiquette in dealings with patients, relatives and other health personnel and to respect the rights of the patient including the right to information and second opinion.
- Develop communication skills to word reports, obtain a proper relevant history and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and for effective teaching.
- Obtain informed consent for any examination/procedure and explain to the patient and attendants the disease and its prognosis with a humane approach.
- Provide appropriate care that is ethical, compassionate, responsive and cost effective and in conformation with statutory rules

**Implementation**

## **Planning-**

### **Essential Knowledge**

Include anatomy, physiology, endocrinology and pathology as found in current text books as well as classical Ayurvedic knowledge concerned to Prasuti Evum Striroga. These standard topics are recommended to be studied in as much as they are applicable to the practice of ObGyn.

### **Method of training**

The training of postgraduate for degree shall be residency pattern with graded responsibilities in the management and treatment of patients entrusted to his/her care. The participation of the students in all facets of educational process is essential. Every candidate should take part in seminars, group discussions, grand rounds, case demonstration, clinics, journal review meetings, CCP and clinical meetings. Every candidate should participate in the teaching and training program of undergraduate students. Training should include involvement in laboratory and experimental work and research studies

### **5. Attendance, Progress and Conduct**

1. A candidate pursuing degree course should work in the concerned department of the institution for the full period as a full time student. No candidate is permitted to run a clinic/laboratory/nursing home while studying postgraduate course.
2. Each year shall be taken as a unit for the purpose of calculating attendance.
3. Every student shall attend symposia, seminars, conferences, journal review meetings, grand rounds, Clinical case presentation, clinics and lectures during each year as prescribed by the department and not absent himself / herself from work without valid reasons.
4. Every candidate is required to attend a minimum of 80% of the training during each academic year of the post graduate course. Provided further, leave of any kind shall not be counted as part of academic term without prejudice to minimum 80% attendance of training period every year.
5. Any student who fails to complete the course in the manner stated above shall not be permitted to appear for the University Examinations.

### **Monitoring Progress of Studies:**



**Work diary / Log Book** - Every candidate shall maintain a work diary and record of his/her participation in the training programmes conducted by the department such as journal reviews, seminars, etc. (please see Annexures for model checklists). Special mention may be made of the presentations by the candidate as well as details of clinical or laboratory procedures, if any conducted by the candidate. The work diary shall be scrutinized and certified by the Head of the Department in the form of Half yearly assessment.

**Periodic tests:** In case of degree courses of three years duration (MS), the concerned departments may conduct five tests, two of them be annual tests, one at the end of first year and the other in the second year. The third, and fifth test may be held one months before the final examination. fourth test will be conducted when PG scholar has completes one year of II<sup>nd</sup> Phase of MS course. The tests may include written papers, practicals / clinicals and viva voce. Records and marks obtained in such tests will be maintained by the Head of the Department and sent to the University, when called for.

**Records:** Records and marks obtained in tests will be maintained by the Head of the Department and will be made available to the University.

### **Dissertation**

Every candidate pursuing MS degree course is required to carry out work on a selected research project under the guidance of a recognized post graduate teacher. The results of such a work shall be submitted in the form of a dissertation.

The dissertation is aimed to train a post graduate student in research methods and techniques. It includes identification of a problem, formulation of a hypothesis, search and review of literature, getting acquainted with recent advances, designing of a research study, collection of data, critical analysis, comparison of results and drawing conclusions.

Every candidate shall submit to the Registrar (Academic) of the University in the prescribed proforma, a synopsis containing particulars of proposed dissertation work within eight months from the date of commencement of the course on or before the dates notified by the University. The synopsis shall be sent through the proper channel.

Such synopses will be reviewed by Institutional research committee and will be processed to Institutional Ethical clearance committee(IEC) and Institutional Animal Ethical clearance committee(IAEC) for the approval, then the dissertation topic will be registered by the University.

The dissertation should be written under the following headings:

- i. Introduction
- ii. Aims or Objectives of study



- iii. Review of Literature
- iv. Material and Methods
- v. Results
- vi. Discussion
- vii. Conclusion
- viii. Summary
- ix. References
- x. Tables
- xi. Annexures

*Typing instructions:* Fonts type Times New Roman and font size of 12. The size of the titles should be 14 and Bold, the size of subtitles should be 12 and bold. Print should be letter quality or laser (not dot matrix) printing with dark black characters that are consistently clear and dense. Use the same type of print and print size throughout the document.

*Pagination:* All the pages of the thesis to be numbered including the principal text and also all the plates, tables, diagrams, maps, and so on. Roman numerals are used on the preliminary pages (pages up to the first page of text) and Arabic numerals are used on the text pages. The numbers should be placed on the bottom center of the page and they should be consistent.

*Spacing:* The text matter should be double spaced and single spaced for the long quotations, footnotes, and endnotes.

*Margins:* For binding purpose, the left-hand margin must be 1.5". Other margins should be 1.0". Diagrams, photographs, or facsimiles in any form should be of a standard page size, or if larger, folded so that a free left-hand margin of 1.5" remains and the folded sheet is not larger than the standard page.

*Photographs:* Professional quality color photographs are allowed and should indicate the arrows for changes in the photograph.

*7.7 Following documents are to be submitted by the scholar, Dissertation hard copy*

- a. One soft copy of dissertation as per the university instructions (without mentioning the name of the scholar, guide, co-guide) and one soft copy with all credentials are to be submitted to the university for evaluation and approval.
- b. One soft copy of original article drawn out of dissertation and other articles published/Accepted.

- c. Candidates should strictly adhere to the timelines in submitting the dissertations to the college office.
- d. Candidates are informed not to lock the documents with any passwords; it shall be in open access form.
- e. The soft copy should contain Thesis copy in chapter wise, word documents. Photographs shall be in JPEG format only.
- f. All annexure and images shall be labeled and kept in one separate folder. Along with Thesis, Copy of the Plagiarism report is to be submitted.
- g. As per the University notification, acknowledgement copy of online article submitted copy is to be attached.

The dissertation shall be valued by examiners appointed by the University. Approval of dissertation work is an essential precondition for a candidate to appear in the University examination.

**Guide:** The academic qualification and teaching experience required for recognition by this University as a guide for dissertation work is as per National Council for Indian system of medicine Minimum Qualifications for Teachers in Medical Institutions Regulations. Teachers in a medical college/institution having a total of five years teaching experience out of which at least five years teaching experience as Lecturer or Assistant Professor gained after obtaining post graduate degree shall be recognized as post graduate teachers.

A Co-guide may be included provided the work requires substantial contribution from a sister department of the institution.

**Change of guide:** In the event of a registered guide leaving the college for any reason or in the event of death of guide, guide may be changed with prior permission from the university.

### **Checklist for submission of Dissertation by the PG scholar**

Name of the Scholar:

University Reg no:

Dept:

Particular	Remarks by the Guide (ensured that as per guidelines/not ensuredthat as per guidelines)	Remarks by PG-coordinator(Submitt ed/ Not submitted as per instructions

1. <b>Evaluation Copy:</b> folder is labeled with <b>only Registration Number</b> and not contained any Identity of the Candidate in all the certificates and only registration number is mentioned. Any certificates issued by the other Departments, the Identity of the Candidate is masked and scanned copy is attached.		
2. <b>Office Copy</b> folder is labeled with Name and Registration Number and Contained the Following : <i>Certificate.s of Undertaking I Copyright declaration, Declaration by-the candidate, Certificate of Guide, Co Guide, Endorsement by HOD &amp; Head of the Institution</i>		
3. The documents are not locked with any passwords; they are in open access form and not enabled 'copy protect' in PDF files.		
4. One soft copy of original article drawn out of dissertation and other articles published/Accepted is Submitted		
5. Adherence of the scholar to the timelines in submitting the dissertations to the college office.		
6. Contents are in PDF documents.		
7. Photographs are in JPGE format only.		
8. Copy of the Plagiarism report is attached		
9. Acknowledgement copy of online article submitted copy is attached.		
Remarks of HOD-		
Remarks of PG Coordinator:		

## Step 6:Evaluation

### 6.1. Schedule of Examination

The examination for M.S courses shall be held at the end of Phase I and Phase II academic years.

### 6.2. Scheme of Examination

#### M.S. Degree

M.S. Degree examinations in any subject shall consist of written paper (Theory), Practical/Clinical , Viva voce and evaluation of the dissertation.

**6.2.1 Dissertation:** Every candidate shall carryout work and submit a dissertation as indicated in Sl.NO.9. Acceptance of dissertation shall be a precondition for the candidate to appear for the final examination.

**6.2.2 Written Examination (Theory):** A written examination shall consist of **four** question papers, each of **three** hours duration. Each paper shall carry 100 marks.

#### **6.2.3 Practical / Clinical Examination:**

In case of practical examination, it should be aimed at assessing competence and skills of techniques and procedures as well as testing students ability to make relevant and valid observations, interpretations and inference of laboratory or experimental work relating to his/her subject.

In case of clinical examination, it should aim at examining clinical skills and competence of candidates for undertaking independent work as a specialist. Each candidate should examine at least one long case and **one** short cases.

The total marks for practical / clinical examination shall be 200.

**6.2.4 Viva Voce:**Viva Voce Examination shall aim at assessing depth of knowledge, logical reasoning, confidence and oral communication skills

Viva voce - 40 marks

**6.2.5 Examiners:** There shall be at least four examiners in each subject. Out of them two shall be external examiners and two shall be internal examiners. The qualification and teaching experience for appointment as an examiner shall be as laid down by the National commission for Indian Medicine.

**6.2.6 Criteria for declaring as pass in University Examination:** A candidate shall secure not less than 50% marks in each head of passing which shall include (1) Theory, (2) Practical including clinical and viva voce examination.

A candidate securing less than 50% of marks as described above shall be declared to have failed in the examination. Failed candidate may appear in any subsequent examination upon payment of fresh fee to the Registrar (Evaluation).

*6.2.7 Declaration of distinction:* A successful candidate passing the University examination in first attempt will be declared to have passed the examination with distinction, if the grand total aggregate marks is 75 percent and above. Distinction will not be awarded for candidates passing the examination in more than one attempt.

## **Annexures for evaluation**

### **Section VII**

#### **LOG BOOK:**

Every student must maintain Log Book in which every activities of teaching training evaluation programmes recorded.

The log book is a record of the all the activities of the candidates during his training. Internal assessment is based on the evaluation of log book. Totally, logbooks are a tool for the evaluation of the training programme of Institution by external agencies. The record includes academic activities as well as the presentations and procedures, etc., carried out by candidate.

#### **CONTENT OF THE LOG BOOK:**

1. Subject Seminar Presented
2. Analysis Seminar Attended.
3. Analysis Seminar Presented.
4. Animal Module Seminar Attended.
5. Animal Module Seminar Presented.
6. Classical Text Review Seminar Attended.
7. Classical Text Review Seminar Presented.
8. Clinical Case Presentation Attended.
9. Clinical Case presented.
10. Clinical Seminar Attended.
11. Clinical Seminar presented.
12. Synopsis/Dissertation Activities.
13. Formulation Seminar Attended.
14. Formulation Seminar Presented.
15. General Seminar Attended.
16. General Seminar Presented.
17. Guest Lectures Attended.
18. Instrument Seminar Attended.
19. Instrument Seminar Presented.
20. Interdepartmental seminars Attended.
21. Investigation Seminar Attended.

## 1. SUBJECT SEMINAR

NAME OF THE PRESENTER:

TOPIC:

No.	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of the Topic			
2	Understanding of the subject & content			
3	Organizing the matter in Logical sequences			
4	Use of specific cross references, examples to explain subject			
5	Incorporation of own Research Views			
6	Presentation skill (Body language, Language fluency, , change of pace etc)			
7	Answering skill to the question			
8	A/V aid use			
9	Critical analysis of the subject			
10	Summarized the matter at the end			
	TOTAL			

Suggestions:

Date:

Sign & Name

## 2. SHLOKA

NAME OF THE PRESENTER:

Sloka:

Reference:

No.	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of Topic			
2	Breakup of shloka			
3	Use of specific cross references, examples to explain subject			
4	Collection & explanation skill of the Matter			
5	Understanding of the subject			
6	Incorporation of own research views			
7	Presentation skill ( body language, A/V aid use, change of pace, language fluency etc)			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date:

Sign & Name

### 3. ANALYSIS

NAME OF THE PRESENTER:

NAME OF THE TECHNIQUE:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Narration of History, types of technique			
3	Description of the technique			
4	Narration of Method of use, unit & applied aspects			
5	Narration of its limitations, precautionary measures			
6	Collection of the Matter			
7	Organizing matter in logical sequence			
8	Presentation skill (body language, A/V aid use, change of pace, Language fluency etc)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & name.

### 4. FORMULATION

NAME OF THE PRESENTER:

Formulation:

Reference:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of Topic			
2	Assessment of ingredients using cross references			
3	Assessment of Pharmacodynamics of ingredients			
4	Explanation of applied aspects			
5	Explanation of quality tests (Shastric/Lab)			
6	Explanation of related recent Research Works			
7	Incorporation of own research views			
8	Presentation skill ( body language, A/V aid use, change of pace, language fluency etc)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			



## 5 INSTRUMENT

NAME OF THE PRESENTER:

NAME OF THE INSTRUMENT:

	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Narration of History, types of instruments			
3	Description of the Instrument			
4	Narration of Method of use, unit & applied aspects			
5	Narration of its limitations, precautionary measures			
6	Collection of the Matter			
7	Organizing matter in logical sequence			
8	Presentation skill (body language, A/V aid use, change of pace, Language fluency etc)			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & name.

## 6 INVESTIGATION

NAME OF THE PRESENTER:

TITLE:

	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES of topic			
2	Narration of History, types of investigation & instruments /equipments used			
3	Narration of method of Investigation			
4	Narration of method of calibration & possible errors			
5	Narration of its application & Incorporation of own research views			
6	Presentation skill ( body language, A/V aid use, change of pace Language fluency etc)			
7	Organizing matter in logical sequence			
8	Answering skill to the question			
9	Understanding of the subject			
10	Summarizing the matter at the end			
	TOTAL			

with name.

## 7. CLASSICAL TEXT REVIEW

NAME OF THE PRESENTER:

CLASSICAL TEXT TITLE:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	About Author, commentators, publication,			
3	About content, volume, chapters,			
4	Uniqueness of the text			
5	Incorporation of own views			
6	Presentation skill ( body language, A/V aid use, change of pace etc)			
7	Language fluency			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

Suggestions:

Date-

Sign & Name.

## 8. ARTICLE PUBLISHED IN JOURNAL / PERIODICAL

NAME OF THE PRESENTER:

TITLE:

JOURNAL/PERIODICAL:

NO	OBSERVATIONS	Good	Average	Poor
1	Article & Journal/Text selected			
2	Narration of the OBJECTIVES of Article			
3	Understanding of the subject			
4	Use of specific cross references, examples to explain subject			
5	Incorporation of own research views			
6	Presentation skill ( body language, A/V aid use, change of pace etc)			
7	Language fluency			
8	Organizing matter in logical sequence			
9	Answering skill to the question			
10	Summarizing the matter at the end			
	TOTAL			

& Name.

## 9. CLINICAL PRESENTATION

NAME OF THE PRESENTER:

NO	OBSERVATIONS	Good	Average	Poor
1	Narration of the OBJECTIVES			
2	Completeness of the History			
3	Accuracy of general physical examination			
4	Incorporation of own research views			
5	Diagnosis-whether it follows logically from History & findings			
6	Organizing matter in logical sequence			
7	Investigation required, interpretation of investigations			
8	Ability to defend diagnosis & to justify differential diagnosis			
9	Justification of Line of treatment			
10	Presentation skill ( body language, A/V aid use, change of pace, Language fluency etc)			
11	Answering skill to the question			
	TOTAL			

Suggestions:

Date-

Sign & Name.

## 10. UG TEACHING SKILLS

Date-

Sign & Name.

NAME OF THE TEACHER:

SUBJECT:

NO	SKILLS PRACTICED	YES	TO SOME EXTENT	NO
1	Raised interest in the beginning relating to topic by questing or by throwing new idea			
2	Specified the OBJECTIVES of presentation			
3	Teaching material organized in a logical sequence			
4	Used relevant content matter			
5	Changed pace of presentation			
6	Used specific examples to explain subject			
7	Used non-verbal clues, eye contact, etc,			
8	Used teaching aids effectively			
9	Allowed questions from students			
10	Asked questions to students			
11	Rewarded students answers/questions			
12	Summarized the matter at the end			

& Name.

## LOG BOOK

**Table 3 : Diagnostic and Operative procedures performed**

Name:

Admission Year:

College:

Date	Name	ID No.	Procedure	Category O, A, PA, PI*

- \* Key:**
- O - Scrubbed up and observed
  - A - Assisted
  - PA - Performed procedure under the direct supervision of a senior faculty
  - PI - Performed independently