

Ordinance Governing

4th Professional BAMS
Bachelor of Ayurvedic Medicine
and Surgery

Syllabus/Curriculum

2017-18



Accredited 'A' Grade by NAAC
Placed in 'A' Category by GoI (MHRD)

KLE Academy of Higher Education and Research

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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 lifelong 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.



KLE ACADEMY OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956)

Accredited 'A' Grade by NAAC (2nd Cycle)

Placed in Category 'A' by MHRD (Gol)

JNMC Campus, Nehru Nagar, Belagavi - 590 010, Karnataka State, India

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Ref.No.KLEU/MF-2/18-19/D-2161

13th November 2018

NOTIFICATION

**Sub: Ordinance governing the syllabus/curriculum of 4th Year/Profession
BAMS (Revised Scheme).**

Ref: Minutes of the meeting of the Academic Council of the University held on
24th September 2018.

In exercise of the powers conferred under Rule A-04 (i) of the Memorandum of Association of the University, the Academic Council of the University in its meeting held on **24th SEPTEMBER 2018** has approved the Ordinance governing the syllabus / curriculum for **4th Professional BAMS** program of revised scheme.

The Ordinance shall be effective for the students admitted to **4th Professional BAMS** program (revised scheme) under the Faculty of Ayurveda in the constituent college of the University viz. **KAHER Shri B. M. Kankanawadi Ayurveda Mahavidyalaya, Belagavi** applicable to 2015, 2016 and 2027 batches from the academic session 2017-18.

To

The Dean
Faculty of Ayurveda,
BELAGAVI.

CCto:

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. All Officers of the KAHER, Academic Affairs / Examination Branch.
5. The Principal. KLEU. Shri.B.M.Kankanawadi Ayurveda Mahavidyalaya Belagavi.

By Order

REGISTRAR

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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 sanskrit 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 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, as per the guidelines of apex body CCIM and suggestions provided by the faculty of various sections, stake holders and strategy of University this governance is framed.

SECTION II

Goal of the Course:

To Produce a Physician of first contact and capable of functioning independently in both urban and rural environment.

SECTION III

Aims:

To produce graduates of Ayurveda with profound scholarship having deep basis with scientific knowledge in accordance with Ayurvedic fundamentals with extensive practical training who would be able to become an efficient teacher, research worker and Kaya Chikitsak (Physician) and Shalayachikitsak (Surgeon) competent to serve and render health services

Objectives:

ATTITUDE AND SKILLS:

- With competent knowledge of Ayurveda science, relevant modern subjects, common investigations and their clinical interpretation, art of diagnosis of common ailments, selection and administration of suitable Pancha karma procedures, common single and compound drug formulations, Pathyaapathya, preventive measures, Rasayana, National Health Programme.
- Able to perform Para surgical procedures.

Departmental goals and objectives:

These are given in their respective chapters.

SECTION IV

REGULATIONS GOVERNING THE 4TH BAMS COURSE

1. Course of Study:

4th Professional BAMS – It is of 1.5 year duration,

The subjects of 4th Professional BAMS are:

1. Kayachikitsa
2. Panchakarma
3. Shalaya Tantra
4. Shalakya Tantra
5. Research Methodology and Medical Statistics

There shall be university examination at the end of 3rd term of 4th Professional BAMS in all above subjects.

2. Medium of instructions:

English with use of Ayurvedic technical terms

3. Duration of the Course Study:

The duration of 4th BAMS is of 18 months

4. Attendance and Progress:

A minimum of 75% of the attendance in theory and practical separately in each subject calculated from the date of commencement of the 4th Profession to the last working day as notified by the University is 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.

A candidate must possess required attendance in all subjects as specified above to become eligible to appear University Examination.

5. Subjects taught, Number of lectures/practical and demonstrations for various subjects:

NO.	SUBJECT	Lectures (one hour each)	Practical & Demonstrations (two hours each)	Total Teaching & Training Hours	Grand Total
1	Kayachikitsa	300	200	500	1650
2	Panchakarma	100	200	300	
3	Shalya Tantra	200	200	400	
4	Shalakya Tantra	200	200	400	
5	Research Methodology and Medical Statistics	50	-	50	

6. Scheme of Examinations:

a) Internal Assessment Examination-

- 20% of the theory marks of that subject will be the IA Theory Exam marks.
- 10% of the Practical marks of that subject will be the IA Practical Exam marks.
- If total Practical marks of the subject less than 100, the IA Practical Exam marks 10 only.
- There will be three Internal assessment examinations (Theory and Practicals separately) during the course and average of best of two examination marks will be taken into consideration while calculating the marks of Internal assessment examination.
- The scores that contain decimal of 0.5 and above will be rounded off to next whole number.
- The average of best of two internal should be minimum of 35% in a particular subject of theory and practical separately in order to be eligible to appear for the University Examinations.

b) University Examination:

Subjects Taught, number of Theory Papers, Practicals & Marks Division:

NO	SUBJECT	PAPER	Theory Marks	Practical/ Viva Marks	TOTAL	Grand Total
1	Kayachikitsa	Paper - 1	100	100	300	1150
		Paper - 2	100			
2	Panchakarma	One	100	100	200	
3	Shalya Tantra	Paper - 1	100	100	300	
		Paper - 2	100			
4	Shalakya Tantra	Paper - 1	100	100	300	
		Paper - 2	100			
5	Research Methodology and Medical Statistics	One	50	-	50	

Marks division of Theory papers, Practical & Internal Assessment Examinations:

	SUBJECT	PAPER	THEORY MARKS			PRACTICAL MARKS				Grand Total
			University Examinati on	I A	Total	University Practical		I A	Total	
						Pract	VIVA			
1	Kayachikitsa	Paper - 1	80	40	200	60	30	10	100	1150
		Paper - 2	80							
2	Panchakarma	One	80	20	100	60	30	10	100	
3	Shalya Tantra	Paper - 1	80	40	200	60	30	10	100	
		Paper - 2	80							
4	Shalakya Tantra	Paper - 1	80	40	200	60	30	10	100	
		Paper - 2	80							
5	Research Methodology and Medical Statistics	One			50	-	-	-	-	

*For Research Methodology and Medical Statistics Institutional Examination will be conducted and marks will be added in the University marks card.

c) University Theory Question paper pattern:

No	Division	No of Questions	Marks Per Question	Total Marks	Grand Total
01	MCQ	20	1	20	80
02	Long Essay Questions	2	10	20	
03	Short Essay	5	5	25	
04	Short Answers	5	3	15	

- Question papers in English language only with Sanskrit terms in Devanagari skript.

Theory Question paper pattern for Research Methodology and Medical Statistics

No	Division	No of Questions	Marks Per Question	Total Marks	Grand Total
01	MCQ	10	1	10	50
02	Long Essay Questions	1	10	10	
03	Short Essay	3	5	15	
04	Short Answers	5	3	15	

d) University Practical Examination:

- 5% of the total Practical marks of that subject will be the Practical records marks
- If total Practical marks of the subject less than 100, the Practical records marks will be 5 only

e) Criteria for Pass:

For declaration of pass at the University examination, a candidate shall pass both in Theory and Practical separately in the same examination and as stipulated below:

- To declare as pass in a particular subject, which has two papers for theory, a student must secure minimum of 40% marks in the individual paper and aggregate of both should be minimum of 50%.
- To declare as pass in practical, a candidate shall secure 50% aggregate of university practical examination and internal assessment added together.
- A candidate not securing 50% marks in theory and practical examination in a subject shall be declared to have failed in that subject and is required to appear for both theory and practical again in the subsequent examination in the subject.
- Candidate's 4th professional Examination result will be declared only after passing in all the subjects of preceding profession.

f) Declaration of Class:

- Student who secures 50% to 59.9% of the marks in the aggregate of university Examination of 4th Professional BAMS will be declared as Second class, 60% to 74.9% as First Class and 75% and above as 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.
- **Supplementary Examination**
Supplementary examination will be conducted within four to six months.

7. Compulsory Internship:

Duration of Internship: 1 year

The student will join the compulsory internship program after passing the 4th Professional BAMS examination. The internship program will start after the declaration of the result of 4th Professional BAMS examination.

Internship Program and time distribution will be as follows:-

1. First three days of internship program, there will be orientation programme on Hospital Duties, Responsibilities at the workplace to get acquainted with rules & regulations of Internship training programme and hospital policies, procedures.

2. Distribution of Intern work-book to interns.
3. Provisional Registration with concerned Board/Council before starting the internship.
4. Daily working hours not less than eight hours.
5. Nine months for clinical training, three months in a Pharmacy and three months in PHS/Rural Dispensary/Hospital/PHS as detailed below.

Posting in college concerned teaching hospital or any other approved Ayurved hospital for nine months as follows:-

- | | |
|--------------------|------------|
| 1. Kayachikitsa | : 3 months |
| 2. Panchkarma | : 2 months |
| 3. Shalya Tantra | : 2 months |
| 4. Shalakya Tantra | : 2 months |

8) Migration:

The students may be allowed to take the migration to continue his/her study to another college after passing the first year examination. Failed students transfer and mid term migration will not be allowed. For migration, the students shall have to obtain the mutual consent of both colleges and universities and will be against the vacant seat after obtaining NOC from CCIM.

SECTION V- SYLLABI

KAYACHIKITSA

1. AIMS:

Providing basic methodology of Roganidana and Principles of Chikitsa with recent developments in clinical diagnostics and advanced treatment modalities like Panchkarma therapy, Rasayana and Vajikarana, bestowing complete knowledge for students about bedside clinics, developing skills of diagnosis and communication process.

2. OBJECTIVES:

By the end of 4th Year/ profession the students should be able to,

1. KNOWLEDGE:

- Understand the advanced knowledge of clinical methods and diagnostic techniques of a disease
- Describe different Avastha of disease.
- Comprehend an appropriate treatment modality for the particular Avastha of a disease.
- Explain the Importance of nidanparivarjana, shodhana and shaman chikitsa
- Classify Santarpana and Apatarpana Chikitsa
- Construct the knowledge of Concept of Doshapratyanika, Vyadhipratyanika and Ubhayapratyanika chikitsa
- Infer Daivavyapashraya, Yuktivyapashraya and Satwavajaya chikitsa
- Identify the importance of Atyayika Avastha of a disease and its chikitsa
- Appraise Rasayana and Vajikarana Chikitsa and its Application.
- Assess the basic knowledge of Vayanasara oushadha matra and vyadhyanusara oushadha sevanakala.
- Understand the advanced knowledge of clinical methods and diagnostic techniques of a disease
- Describe different Panchakarma Procedures
- Construct the knowledge of Concept of Panchakarma
- Identify the importance of Atyayika Avastha of a disease and its Panchakarma chikitsa

2. SKILLS

- Execute the practice of clinical and laboratory diagnostic methods,
- Interpret the Diseases of Rasayana Srotas, Raktavaha Srotas, Mamsavaha srotas, Medovahasrotas, Asthivaha, Majjavaha Srotas, Shukravaha srotas, Pranavahasrotas, Sanjavaha, Manovaha Srotas, Pureeshavaha Srotas, Udakavaha Srotas, Mutravaha srotas and Swedavaha srotas
- Specify, Classify and diagnose a disease as per the Vyadhyavastha

- Practice the chikitsa principles for the proper management of a disease pertaining to body, mind and soul
- Demonstrate different Shaman and Shodhana chikitsa
- Perceive the practice of efficient Rasayana and Valikarana chikitsa
- Integrate different systems of medicine like- Allopathy, Homoeopathy, Yoga, Sidha, Naturopathy, Unani, Tibba for the purpose of proper diagnosis and management of a disease
- Adapt Safety skills during the emergencies at bedside diagnostic practice
- Execute the practice of clinical and Panchakarma Procedures.
- Practice of Panchakarma principles for the proper management of a disease

3. ATTITUDE

- Develop communication skills to take the patients into confidence
- Extrapolate to take the patient into confidence for briefing proper history and to cooperate during the course of clinical examination
- Valuing high moral and ethical standards while carrying out clinical examination and history taking.

KAYACHIKITSA

THEORY: 2 Papers (100 Marks each)	Teaching Hours (Each 1 Hour): 300 Hours
PRACTICAL: 100 Marks	Practical (Each 2 Hours):100 (200 Hours)

PAPER I

50 Marks		Part - A	75 Hours
Sl.No	Topic		Hours
1	Introduction to Kayachikitsa Derivation of the terms 'Kaya', 'Chikitsa' and their definitions and synonyms. Definition of 'Kayachikitsa, Definition of 'Bheshaja'. Types and detailed description of Bheshaja and Chikitsa, Knowledge about ChikitsaChatushpada, RogiRogaParikshaSiddhantha, AstasthanPariksha.		14 Hours
2	Kriyakala- Importance of KriyaKaala according to stages of Dosha-Doshaavastha & Vyadhiavastha and their management		3 Hours
3	Dosha, Dushya and Vyadhi Chikitsa sutra and Management of vridhhi (increased) and kshaya (decreased) of Dosha, Dhatu and Mala, OjoVyapat (Kshaya, Visramsa and Vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states, Roga-AnutpattikaraChikitsa, RogaPrashamanaChikitsa (Doshapratyanika, Vyadhipratyanika, Ubhayapratynika), Doshopakrama, Chikitsa sutra and Management of SthanantaraDosha (Ashayapakarsha, Anuloma/Pratilomagati of Dosha, Vimargagamana of Dosha), Knowledge of LinaDosha& its management, Diagnosis, Chikitsa Sutra and Management of Avarana and of DhatuPradoshaja diseases, Importance of Dosha, Dushya, Bala, Kaala, Agni, Prakriti, Vaya, SattvaSatmya, Desha, Ahara and stage of diseases in treating them. Chikitsa Sutra and Management of Samanyaja and Nanatmaja diseases.		25 Hours
4	Upakrama Detailed description of Dvidividhopakrama (Santarpana and Apatarpana) and Shadavidhopakrama (Rookshana, Snehana, Swedana, Sthambhana, Langhana and Brimhana). Detailed description of Shodhana, Shamana and NidanaParivarjana. Knowledge of Aushadhamatra, Sevankaala and Anupana, Definition and Knowledge of Pathya-Apathya with examples of diseases of various systems.		13 Hours
5	Manas Derivation of the term Manas, its sthana (place), Guna (qualities) and Karma (functions). SamanyaChikitsaSiddhanta of ManasaRoga.		3 Hours
6	Kuposhanajanyavyadhis Principles & Management of Nutritional deficiency disorders.		6 Hours
7	JarajanyaVyadhis Management of Vardhakyajanitavikara, Indriyapradoshojavikara, Alzhiemer's Disease, Sleep disorders, General debility.		5 Hours
8	General introduction and principles of Management of diseases Produced by Genetic, Environmental and Iatrogenic factors. Disorders due to drug and Food allergy and their management and other allergic conditions		6 Hours

50 Marks		Part - B	75 Hours
1	Jwara Detailed description of Chikitsa Sutra and Management of Jwara and its types. Etiopathogenesis & relevant Ayurvedic and Modern management of following types of Fevers-Typhoid, Pneumonia, Pleurisy, Influenza, Mumps, Meningitis, Encephalitis, Tetanus, Yellow fever, Plague, Dengue Fever, Chikun Guniya, Leptospirosis, Viral Fever, Anthrax, Masurika (Small pox), Laghu Masurika (Chicken pox), Romantika (Measles).		20 Hours
2	Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as - Pandu, Amavata, Madatyaya, Hridroga, Hridshoola Hypotension, Hypertension, Anaemia, Rheumatoid arthritis		10 Hours
3	Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as - Raktapitta, Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plihadosh, Yakrutdosha, Haemolytic disorders, Hepatitis, Cirrhosis of Liver, Leukaemia, Kushta, Shvitra, Visarpa, Sheetapitta, Udarda, Kotha and KshudraRoga.		15 Hours
4	National Health Programmes Knowledge of National Health Programmes and the relevant Ayurvedic Management of the following diseases enlisted by World Health Organisation- Malaria, Filariasis, Kala Azar, Leprosy, Tuberculosis, AIDS.		5 Hours
5	Different systems of Medicine Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine- Yoga, Naturopathy, Unani, Siddha, Physiotherapy and Rehabilitation.		6 Hours
6	Diseases of Endocrine Glands such as Thyroid, Parathyroid, Pituitary, Pancreas and Adrenal glands and their management		5 Hours
7	General introduction, types and Management of diseases Caused by Vyadhi Kshamatwa Hinata (Immuno deficiency disorders), Auto Immune Disorders.		5 Hour
8	Description and Management of following Emergency Conditions Acute Haemorrhage, Hypertensive Emergencies, Acute abdominal pain (Renal colic, Biliary colic, Gastritis, Pancreatitis, Peritonitis and Appendicitis), Acute Abdomen, Anuria/ Oliguria, Congestive Heart Failure, Myocardial Infarction/Angina, Shock, Syncope, Convulsions, Hyperpyrexia, Hyperglycaemia, Hypoglycaemia, Status Asthmaticus, Acute Respiratory distress Syndrome, Drowning and Electric shock.		9 Hours

PAPER II

50 Marks		Part - A	75 Hours
Sl.No	Topic		Hours
1	Chikitsa sutra and Management of the diseases of Pranavaha Srotas such as - Kasa, Shwasa, Hikka, Rajayakshma, Urakshata, Parshwashoola, Bronchitis, Bronchiectasis, Emphysema and COPDs		15 Hours
2	Chikitsa sutra and Management of the diseases of Udakavaha Srotas Such as- Shotha, Jalodara, Trishna, Water & Electrolyte Imbalance.		8 Hours

3	Chikitsa sutra and Management of the diseases of AnnavaSrotas such as – Agnimandya, Aruchi, Ajirna, Anaha, Atopa, Adhmana, Alasaka, Vilambika, Visuchika, Chardi, Grahani, Amlapitta, Gulma, Shoola, Bhasmaka, Acid peptic disorders.	19 Hours
4	Principles of treatment and management of VataVyadhi such as - Pakshavadhya, Ekangavata, Sarvangavata, Ardita, Avbahuka, Kati Graha, Manyastambha, Gridhrasi, Vishwachi, Khalli, Khanja, Pangu, Padaharsha, Padadaha, Vatakantaka, Kroshtukashirsha, Udavarta, Kampavata, Dhatugata and AshayagataAvaranaVata, other VataRogas, Parkinsonism.	23 Hours
5	Nidana and Chikitsa of Urusthambha, Gullian Barrie syndrome, Muscular Dystrophy, Myasthenia Gravis, Motor Neuron Diseases and Neuralgia.	10 Hours
Part - B		
50 Marks		75 Hours
1	Chikitsa Sutra and Management of MamsavahaSrotas and MedovahaSrotas such as- Gandamala, Galaganda, Mamsashosha, Arbuda, Apachi, Prameha, Sthaulya, Karshya, Diabetes Mellitus, Dyslipidaemia.	10 Hours
2	Chikitsa Sutra and Management of Asthi and MajjavahaSrotas such as AsthimajjaVidradhi, Asthisousharya, Asthikshaya, SandhigataVata, Osteo Arthritis, Osteomyelitis, Osteoporosis, Osteopenia.	8 Hours
3	Chikitsa sutra and management of Shukravahasrotas such as Klaibya, shukralpata, shukradosha, kshinashukra, dhvajabhanga.	4 Hours
4	Chikitsa Sutra and Management of diseases of MutravahaSrotas Mutrakricha, Mutraghata, Ashmari, Cystitis, Nephritis, Nephrotic Syndrome, BPH, Renal Failure.	8 Hours
5	Chikitsa Sutra and Management of diseases of Purishavaha Srotas Atisara, Pravahika, Arsha, PurishajKrimi, IBS and Ulcerative Colitis.	7 Hours
6	Chikitsa Sutra and Management of Sexually Transmitted Diseases Phiranga, Puyameha, Upadamsha, lymphogranulomainguinale, Syphilis, Gonorrhoea	5 Hours
7	Introduction, Definition and Management of Kama, Krodha, Lobha, Moha, Mada, Matsarya, Shoka, Bhaya, Vishada, Dainya, Harsha and Pragyaparadha.	2 Hours
8	Manas and Manovahasrotas, Nidana and Chikitsa of the following disorders - Unmada-Aspasmar-Atattvabhinivesha, Chittodvega, Vishada, Anxiety disorders, Depression, Somatoform and Mood disorders, Stress induced disorders, Psychosexual Disorders. Importance of Daivavyapashraya, Sattwavajaya, Adravayabhuta Chikitsa, Medhya Rasayana in the management of Manasa Roga. Bhuta Vidya diagnosis and management of graha disorders.	7 Hours
9	Rasayana Derivation, definition and synonyms of Rasayana, importance of Rasayana and its benefits. Indications of Rasayana therapy. Classification of Rasayana. Kutipravesika and VatatapikaRasayana. Indications of VatatapikaRasayana. Knowledge of Kayakalpa, AcharaRasayana. Procedures of Kutipravesika, Poorvakarma and specific schedules to be followed after Kutipravesha, benefits of KutipravesikaRasayana, duration of process, Rasayana yoga and directions for their use. Determination of dose of Rasayana according to age. Rules and regulation after Rasayana therapy, Importance of Immunomodulators and antioxidants in Rasayana therapy.	14 Hours
10	Vajikarana	10 Hours

	Derivation, definition, synonyms, necessity, benefits, importance of fertility, Symptoms of Shûkra (Semen), VajikaranDravya and Aushadhi. Properties, doses, methods of administration, ingredients and methods of formation of Rasayana&Vajikarana formulation. Classification and importance of VajikaranaDravya	
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STRUCTURED PRACTICAL MARKS DISTRIBUTION:

SL. NO	PARTICULAR	DETAILS	MARKS DISTRIBUTION
01	Records	As per Performa 20 IPD Case sheets	10
02	Bedside Clinical case taking	Long case - 01	20
		Short Case - 01	10
03	Spotters	1. Radiological images(1) – 4Marks 2. Laboratory reports(1) – 4Marks 3. Pictures-Skin lesions/ deformities etc.(2) – 8Marks 4. ECG (1) - 4Marks (Identification with clinical importance)	20
04	Viva Voce	Paper I -15 Marks Paper II -15 Marks	30
05	Internal Assessment		10
Total			100

REFERENCE BOOKS:

Sl.No	Name of the Author / Commentators	Title of the Book	Edition	Name of the Publication
1.	KavirajAmbikaduttaShastri	Bhaishajya Ratnawali	2002	Chaukambha samskruta samsthana, Varanasi
2.	Pt. Brahma Shankar Mishra and Dr.IndradevTripathi and Daya Shankar Tripathi	Yogaratanakar	1998	Krishnadas Academy, Varanasi Chaukamba press , Varanasi
3.	Dr.NirmalSaxsena	Yogratnakar (English)	2003	Chaukamba orientalia, Varanasi
4.	Dr.Jagdishwar Prasad Tripathi	Chakradatta	1983	Chaukamba Sanskrit Series Office, Varanasi
5.	AcharyaPriyavrat Sharma	Chakradatta (English)	2002	Chaukamba Orientalia, Varanasi
6.	Vd.RajeshwarDattaShastri	Chikitsadarsh	5th.	Kashi Hindu Vishwavidhyalaya
7.	Vd.BhaskarVishwasnathGokhle	Chikitsa Pradeep	1986	Vaidyamitra Publication
8.	By Tissatacharya, Hindi and English translation by AcharyaPriyavrat Sharma	Chikitsa Kalika	2000	Chaukamba Orientalia, Varanasi

9.	Dr. Ganga Sahay Pandey	Kayachikitsa		Chaukamba Sanskrit sansthan
10.	Acharya Ramaraksha Pathak	Kayachikitsa	2003	Chaukamba Bharati Academy
11.	Vd. Hariprapanna Sharma	Rasayogasagar	2004	Chaukamba Krishnadas Academy, Varanasi
12.	Ram Krishna Bhatt	Sidha Bhesaj Manimala	1999	Krishnadas Academy
13.	VrindaMadhav	Sidhyoga	2006	Chaukamba visvabharati
14.	Madhavkar	Madhav chikitsa	2012	Chaukhamba Orientalia (2012)
15.	Vd.Gulraj Sharma Mishra	Siddha PrayogaLatika	1992	Chaukamba orientalia
16.	-Prof.RamNiwas Sharma and Dr.Surendra Sharma	Sahasrayogam (Keraliya Ayurveda Chikitsa)	2004	Chaukamba Sanskrit Pratishthan, Delhi
17.	Ballabhacharya	Vaidya Chintamani	2014	Chaukamba, orientale,Varanasi
18.	Lolimbaraja	Vaidya Jeevan	2000	Krishnadas Academy,
19.	Lolimbaraja	Chamatkar Chintamani	2001	Krishnadas Academy, Varanasi
20.	LaxmanPandit, Dr.AshaKumari, Prof.PremvatiTiwari	YogChandrika	2010	Chaukhambha Publications
21.	AcharyaMukandiLalDrivedi	Ayurvediya Panchkarma Chikitsa	2008	Chaukamba Sanskrit Pratishthan,Delhi
22.	Dr.HaridasShridharKasture	Ayurvediya Panchkarma Vijana	2014	Chaukambha Krishnadas Academy, Vasanasi
23.	Dr.T.L.Devraj	Keraliya Panchakarma	2006	Chaukamba Orientalia, Delhi
24.	Dr.T.L.Devraj	Ayurvedic Remedies for common disease		Sterling Publishers Pvt., Limited
25.	Prof. Ram Harsh Singh	Holistic Principle of Ayurvedic Medicine	1999	Chaukhamba Sanskrit Pratishthan Oriental Publishers & Distributors,IN; (Reprint) edition (31 December 1999)
26.	Dr.Balkrishna Amarji Pathak	Manas Roga Vijnana	1983	Shri Baidyanath Ayurveda Bhavan Limited, Nagpur
27.	Prof.Ram Harsh Singh	Ayurvediya Manas Vijnana	1986	Chaukamba Amarabharati Prakashan, Varanasi
28.	Dr.Satyapal Gupta	Psychopathology in Indian Medicine	2000	Chaukhambha Sanskrit Pratishthan; 2000 edition (2000)
29.	Pt. Shiv Sharma	Yoga against Spinal pain	1971	George G.Harrap & Co Ltd; First Edition edition

				(October 25, 1971)
30.	Swami Muktibodhananda	Hathayoga Pradeepika	2016	Yoga Publications Trust, Munger, Bihar, India; First digital edition 2016 edition (13 February 2016)
31.	Vd.Gulraj Sharma Mishra	Vishikhanupraves vijnana		
32.	Dr.AnantRam Sharma	Kaya chikitsasamanvaya		
33.	V.V.NatrajSharstri	Siddha Vaidyakam		
34.	Prof.RamNiwas Sharma	Tamiloka Siddha Sampradaya		
35.	Dr.R.A.Prasad and Dr.G.K.Gurjar	Panchakarma ChikitsaVijnana		
36.	Prof.DivakarOjha	Panchakarma Chikitsa		
37.	Dr.Rajendra Prasad Bhatnagar	Adhunik Manas Rog Vijnana		
38.	Dr.Kamta Prasad Shukla	Psychiatry in Brithatrayi		
39.	Prof.Ram Harsh Singh	Kayachikitsa		
40.	Dr.PriyaKumarChobe	Madak Dravyajanyarogaev amchikitsa		
41.	Vd.Goverdhan Sharma Changani	Vasava Rajiyam		
42.	VishwanathKaviraj	Pathya-Apathya-Vinirnaya		
43.	Dr.Badri Prasad Shah	Ayurvediya Pathyapathya Vijnana		
44.	Dr.Bramhadatta Sharma	AtyayikVyadhi NidanaChikitsa		
45.	Dr.AnantRam Sharma, Dr.KrishnaChandraVerma and Dr.SanjaySharma	AtyayikVyadhi Nidanaevam Pratikara		
46	Hikmat Prakash			

e- Resources:

Sl. No.	e-Books	Weblink
1.	e-caraka Samhita	niimh.nic.in/ebooks/ecaraka/index.php
2.	e-sushruta Samhita	niimh.nic.in/ebooks/esushruta/index.php
3.	e-madhava nidana	niimh.nic.in/ebooks/madhavanidana/index.php
4.	e-nighantu	niimh.nic.in/ebooks/e-Nighantu/index.php
5.	Ayush Research Portal	ayushportal.nic.in/
6.	Digital Helpline for Ayurveda Research Articles(DHARA)	www.dharaonline.org/Forms/Home.aspx
7.	e-astanga samgraha	
8.	e-astanga hrudya	
9.	e-davidson's Principles of medicine	

PANCHAKARMA

A. AIMS:

Providing basic methodology of Principles of PanchakarmaChikitsa with recent developments in advanced treatment modalities like Panchkarma therapy, bestowing complete knowledge for students about bedside clinics, developing skills of diagnosis and communication process

B. OBJECTIVES:

By the end of 4th Year/ Profession the students should be able to,

KNOWLEDGE:

- Describe different Panchakarma Procedures
- Comprehend an appropriate Panchakarma treatment modality for the particular Avastha of a disease.
- Construct the knowledge of Concept of Panchakarma
- Identify the importance of AtyayikaAvastha of a disease and its Panchakarmachikitsa

SKILLS

- Execute the practice Panchakarma procedure,
- Specify, Classify and diagnose a disease as per the Vyadhyavastha
- Execute management of Panchakarma unit,
- Practice the chikitsa principles for the proper management of a disease pertaining to body, mind and soul
- Demonstrate different Shaman and Shodhanachikitsa
- Practice of Panchakarma principles for the proper management of a disease
- Demonstrate different Shodhanachikitsa
- Hands on experience in Panchakama and Physiotherapy

ATTITUDE

- Develop communication skills to take the patients into confidence
- Valuing high moral and ethical standards while carrying out clinical examination and history taking.
- Extrapolate to take the patient into confidence for briefing proper history and to cooperate during the course of Panchakarma Procedures.

PANCHAKARMA

THEORY: 1 Paper (100 Marks)		Teaching Hours (Each 1 Hour): 100 Hours
PRACTICAL: 100 Marks		Practical (Each 2 Hours): 100 (200 Hours)
Part -A		
Marks -50		Hours -50
1	Introduction 1. Introduction to Panchakarma, Panchakarma and Shodhana, its importance for promotion of health, prevention and treatment of diseases. 2. Trividha Karma- Purva, Pradhana and Pashchat Karma in relation to Shodhana and their importance. 3. Indications of Shodhana, Shodhana according to Ritu 4. General Principles of doshagati from Koshta to Shaka and vice versa 5. General precautions (PariharyaVishaya) for Panchakarma 6. Specifications of Panchakarma theatre and necessary equipments 7. Importance of Koshta and Agni Parikshan	7 Hours
2	Snehana 1. Etymology and Definition of Sneha and Snehana 2. Snehayoni- Sthavara and Jangama: Properties of Snehadravyas, Snehopag Dravyas 3. General knowledge of Ghrita, Taila, Vasa and Majja with their specific utility and actions, Yamaka, Trivrit and MahaSneha 4. Metabolism of fat 5. Achcha and Pravicharana of Sneha 6. Snehapaka and its importance in Panchakarma 7. Types of Snehana: i) Bahya and ii) AbhyantaraSnehana i) BahyaSnehana : Methods, indications and contraindications of the following types of Bahyasnehana; Mardana, Unmardana, Padaghata, Samvahana, Karna Purana & AkshiTarpan, Lepa, Talam, MurdhniTaila: Siro-Abhyanga, ShiroSeka/dhara, SiroPichu and Siro-Basti ii) Abhyantara Snehana Three Types of AbhyantaraSnehana: Shodhanartha, Shamanartha and BrimhanarthaSnehana, Indications and contraindications for Snehana, ShodhanarthaSnehana (a) Importance and method of DeepanPachan and Rookshana in ShodhanarthaSnehana. Properties of RookshanaDravya. SamyakRookshanaLakshana (b) Consideration of Agni and Koshtha in Snehana (c) Indication of Different Matra, Various dose schedules for ShodhanarthaSnehana; Hraseeyasi, Hrasva, Madhyama and UttamaMatra, ArohanaMatra (d) Methods of ShodhanarthaSnehana, (e) Anupana of Sneha (f) Jeerna and JeeryamanLakshana (g) Samyak Yoga, Ayoga and Atiyoga of Snehana, SnehaVyapat& their	11 Hours

	<p>management according to Ayurveda & Modern Medicine</p> <p>(h) Diet and regimen during Snehana</p> <p>SadyoSneha: Method of administration, dose fixation and utility</p> <p>ShamanarthaSnehana, Method of administration, dose fixation and utility</p> <p>BronhanarthSenhana: Method of administration, dose fixation and utility</p> <p>AvapeedakSneha: Method of administration, dose fixation and utility</p> <p>8. SnehanaKarmukata (mode of action)</p> <p>9. Special Procedures</p> <p>Takradhara, Udvartanam, Putpaka, Aschotana, Anjana, Gandusha, Kavala, Dhoompana, Udvartana, Utsadana, Udgharshana, Talapothichil</p>	
3	<p>Svedana</p> <ol style="list-style-type: none"> 1. Etymology and Definition of Sveda and Svedana 2. Classifications of Sveda/Svedana 3. General Swedadravya, Properties of Swedadravyas, Swedaopagdravyas 4. Indications and contraindications of Svedana 5. Ten Types of NiragniSvedana 6. Knowledge of 13 types of SagniSvedana and C haturvidhSvedan 7. Detailed Knowledge with their Utility of the following Svedana procedures: Sankara/Pinda Sveda-Ruksha and Snigdha Sveda, Patrapinda Sveda, Jambir PindaSveda, Valuka Sveda, Churna Pinda Sveda, Kukkutand Pinda Sveda, Shashtika Shalipinda Sveda, Nadi Sveda, Bashpa Sveda, Ksheer dhooma, Ksheer Seka, Kwath Seka, Avagaha Sveda, Dhanymla Dhara Parisheka Sveda, Pizichil, Upanaha Sveda, Annalepa. 8. Local Basti such as Kati Basti, JanuBasti, GreevaBasti and Urobasti 9. General precautions during SagniSvedana and Methods to protect vital during svedana 10. Samyak Yoga, Ayoga and Atiyoga of Svedana 11. Complications of Svedana and their Management according to Ayurveda & Modern Medicine 12. Diet and management during and after Svedana 13. PariharVishaya 14. vedanaKarmukata (Mode of action) 15. 1General Knowledge about current Sudation techniques like Sauna bath, Steam bath 	9 Hours
4	Panchakarma based Marma -chikitsa	2 Hours
5	<p>Vamana Karma</p> <ol style="list-style-type: none"> 1. Etymology, definition and importance of Vamana Karma 2. Utility of Vamana Karma in health and disease 3. Indications and Contraindications for Vamana 4. Knowledge of Koshta and Agni 5. General knowledge of Vamana and Vamanopaga drugs; properties, actions, preparations, preservation with special reference to Madanphala, Kutaj, Nimba, Yashti, Vacha 6. Purva Karma of Vamana: Deepan-Pachana, AbhyantaraSnehana and diet 7. Management of one gap day-Abhyanga&Svedana, diet, special Kapha increasing diet 8. Preparation of the patient on Morning of Vamana day 	11 Hours

	<p>9. Vamaka Yoga, Anupana, fixation of dose and method of administration</p> <p>10. Administration of VamanopagaDravya such as milk, sugarcane juice, Yashtimadhu decoction</p> <p>11. Lakshana indicating Doshagati during the process</p> <p>12. Management during Vamana Karma & observations</p> <p>13. Symptoms of Samyak Yoga, Ayoga and Atiyoga of Vamana Karma</p> <p>14. Post Vamana management</p> <p>15. Types of Shuddhi-Hina, Madhya and Pravara</p> <p>16. PeyadiSamsarjanaKrama and TarpanadiKram with their specific indications</p> <p>17. Complication of Vamana and their management with Ayurveda and modern drugs</p> <p>18. PariharyaVishaya</p> <p>19. Vamana Karmukata (Mode of action).</p>	
6	<p>Virechana Karma</p> <p>1. Etymology, definition and importance of Virechana Karma</p> <p>2. Utility of Virechana Karma in health and disease</p> <p>3. Indications and C ontraindications for Virechana</p> <p>4. Knowledge of Koshta and Agni</p> <p>5. Classification of Virechana Drugs, General properties of Virchanadravya</p> <p>6. General knowledge of single and compound Virechan drugs; properties, actions, preparations, preservation with special reference to Trivrutta, Aragvadha, Eranda, Katuki, Jaipa</p> <p>7. Purva Karma of Virechana: Deepan- Pachana, AbhyantaraSnehana and diet</p> <p>8. Management of 3 gap days-Abhyanga, Svedana& diet</p> <p>9. Management on Morning of Virechana day</p> <p>10. Preparation of VirechanaKalpa, Anupana, dose and method of its administration</p> <p>11. Method of Virechana Karma and management during Virechana Karma & observations</p> <p>12. Symptoms of Samyak Yoga, Ayoga and Atiyoga of Virechana Karma</p> <p>13. Post Virechana management</p> <p>14. Types of Shuddhi-Hina, Madhya and Pravara and accordingly SamsarjanaKrama</p> <p>15. Complications of Virechana and their management with Ayurveda and modern drugs</p> <p>16. PariharyaVishaya</p> <p>17. VirechanaKarmukata (Mode of action)</p>	12 Hours

Marks -50	Part -B	Hours -50
1	<p>Basti Karma</p> <ol style="list-style-type: none"> 1. Etymology, definition and importance of Basti as Ardha-C hikitsa 2. Utility of Basti Karma in health and disease 3. BastiYantra- Putaka&Netra, Detailed study of traditional BastiYantra and their Doshas Knowledge of alternative BastiYantra - enema can, enema syringe, modified plastic/rubber bag for Putaka, modified plastic netra. 4. Classifications of Basti 5. Karma, Kala and Yoga Basti schedules along with their utility. 6. NiruhaBasti: Its etymology, synonyms, definition, classifications, sub-classifications & indications and contraindications. <ol style="list-style-type: none"> a. Dose fixation of NiruhaBasti according to age b. Contents and Method of preparation of NiruhaBastidravaya c. Diet d. Administration of NiruhaBasti e. PratyagamanaKala, Post NiruhaBasti management f. Samyak Yoga, Ayoga and Atiyoga of Niruha. g. Complication of NiruhaBasti and its management according to Ayurved and Modern Medicines h. PariharyaVishaya and kala 7. AnuvasanaBasti: Its etymology, synonyms, definition, classifications, sub-classifications & indications and contraindications. <ol style="list-style-type: none"> a. Dose fixation of NiruhaBasti according to age b. Contents and Method of preparation of NiruhaBastidravaya c. Diet d. Administration of NiruhaBasti e. PratyagamanaKala, Post NiruhaBasti management f. Samyak Yoga, Ayoga and Atiyoga of Niruha. g. Complication of NiruhaBasti and its management according to Ayurved and Modern Medicines h. PariharyaVishaya and kala 8. BastiKarmukata (Mode of action). 9. Knowledge of following types of Basti: MadhutailikaBasti, ErandmuladiBasti, YapanaBasti, PichchhaBasti, KshiraBasti, KsharaBasti, VaitaranaBasti, PanchaprasutikBasti, LekhanBasti, KrumighnaBasti, TiktashirBasti, ArdhamatrikaBasti 10. UttaraBasti,: its definition, indications and contraindications, Detailed study of traditional BastiYantra and their Doshas Knowledge of alternative BastiYantra 	20 Hours

	<ul style="list-style-type: none"> a. Preparation of patient, b. Preparation of Trolley for Uttarbasti, c. drug preparation and Fixation of dose, d. method of administration in male and females, e. observations, f. complications and their management 	
2	Nasya <ol style="list-style-type: none"> 1. Etymology, definition, Significance of Nasya Karma. 2. Classifications and sub-classifications 3. Knowledge of general Dravya used for Nasya Karma, ShirovirechanGana, Shirovirechanopagdravyas 4. Indications and contraindications of Nasya 5. Time of administration of Nasya 6. Dose fixation of different types of Nasya 7. Diet and regimen before and after Nasya Karma 8. Administration of Marsha, Pratimarsha, Avapeedaka, Dhoomapana and DhumaNasya 9. Symptoms of Samyak-yoga of Nasya, 10. Complication of Nasya and their management 11. PariharVishaya 12. NasyaKarmukata (mode of action) 	10 Hours
3	Raktamokshana <ol style="list-style-type: none"> 1. Definition, importance and Types of Raktamokshana 2. General Principles and rules of Raktamokshana 3. Classification of Raktamokshan 4. General Indication and Contra indication of Raktamokshan 5. Jalaukavacharana: Knowledge of different types of Jalauka (Leech) , Indications and contraindications of Jalaukavacharana, various types of Jalauka. Method of Application, SamyakLakshan, Complication of Jalaukavcharana and their management with Ayurveda and Modern medicines. 6. Pracchana: Indications and contraindications of Pracchana. Method of Application, SamyakLakshan, Complication of Pracchana and their management with Ayurveda and Modern medicines 7. Siravedha: Indications and contraindications of Siravedha. Method of Application, SamyakLakshan, Complication of Siravedha and their management with Ayurveda and Modern medicines 8. Knowledge of emergency management of complications such as water & electrolyte imbalance, shock, bleeding per rectal, hemetemsis, epistaxis 	6 Hours
4	Physiotherapy <ol style="list-style-type: none"> 1. Definition, Utility and Importance of Physiotherapy 2. Basic Knowledge of Static exercise, Infrared, Short wave diathermy, Electromagnetic therapy, Wax bath therapy, Ultrasonic therapy. <ul style="list-style-type: none"> • Knowledge of Accupuncture and Accupressure 	12 Hours

PRACTICALS

Content of Practicals:

Practical Hours: 200Hours

1. Observation of **OPD** patients, selection of the patients, observation of OPD base Panchakarma procedures.
2. **IPD** (Panchakarma) and Panchakarma Unit – Observation of different procedures of Panchakarma, Assistance to the procedure under guidance of Panchakarma specialist under clinical posting, each student has to study and write 10-long Cases and 10 short cases in prescribed format.
3. **Demonstartion of Long case** – of Vaman , Virechan, Niruha & Anuvasan Basti, Nasya, Raktamokshan
4. **Demonstartion of Short case**–of Pinda sweda, Shirodhara,Abhyanga, Netra Tarpan, Bahya Basti, Nadi Sweda etc.

STRUCTURED PRACTICAL MARKS DISTRIBUTION:

Sl No	Particulars	Details	Marks Distribution
01	Records	a) 10 Instruments with Diagrams b) 10 Cases with Procedural demonstration	10
02	Bedside Clinical case taking	Long Case - 01	20
03	Demonstration of Procedure	Demonstration of One Procedure- <ul style="list-style-type: none"> • Assessment of fitness • Performing skills • Taking precautions • Following SOP 	15
04	Spotters	1)Vamaka /Virechaka dravya(5marks) <ul style="list-style-type: none"> • Identify the dravya • Write formulations of dravya • Its clinical indications 2)Physiotherapy Instruments(5marks) <ul style="list-style-type: none"> • Identify the instrument • Method of applications • Its clinical indications 3) MRI / CT scan/ECG / X-Ray(5marks) <ul style="list-style-type: none"> • Identify the region • Interpret the findings 	15
05	Viva Voce	Grand Viva	30
06	Internal Assessment		10
Total			100 marks

REFERENCE BOOKS:

S. No.	Name of the Author / Commentators	Title of the Book	Edition	Name of the Publication
1.	Chakrapani datta	Charaka Samhita Commentary – Ayurveda Dipika	2011	Chukhambha publications, New Delhi
2.	Gangadhara	Charaka Samhita Commentary – Jalpakalpataru	3 rd edition, 2009	Chaukhambha Orientalia, New Delhi
3.	Dalhana	Sushruta Samhita Commentary – Nibhandha Samgraha	2012	Chukhambha publications, Varanasi
4.	Gayadasa	Sushruta Samhita Commentary –Nyaya-chandrika Panjika on Nidana Sthana	2014	Chukhambha publications, Varanasi
5.	Arundutta	Ashtanga Hridaya Commentary –Sarvanga Sundara	2017	Chukhambha publications, Varanasi
6.	Indu kurta	Ashtanga Sangraha Shashilekha Commentary	3 rd edition , 2012	Chukhambha publications, Varanasi
7.	Dr. Mukundlal Dwivedi	Ayurvediya Panchakarma Chikitsa	2 nd edition , 2008	Chaukhambha Orientalia, New Delhi
8.	Dr. Haridas Shreedhar Kasture	Ayurveda PanchakarmaVigyan	RP 2014	Shri Vaidyanath Ayurveda Bhawan, Kalcutta
9.	Dr. G. Srinivas Acharya	Illustrated Panchakarma	1 st edition, 2006	Chaukhambha Orientalia, New Delhi
10.	Dr. P.Yadaiah	Clinical Panchkarma (English)	1 st edition, 2005	Jaya Publications, Sujit Bhawan, Jethar Peeth Akola
11.	Dr. P. Yadaiah	Prayogika Panchkarma Vigyanam (Hindi)	2 nd edition, 2006	Chaukhambha Publishers, New Delhi
12.	Dr. P. Yadaiah	Vivida Vyadhiyo me Panchkarma Chikitsa (Hindi)	1 st edition	Chaukhambha Publishers, New Delhi
13.	Dr. T.L. Devaraj	The Panchkarma Treatment of Ayurveda with Kerala Speciality	4 th edition, 2006	Chaukhama Orientaila, Varanasi
14.	Dr. R.H. Singh	Panchkarma Therapy	RP 2014	Krishnadas Academy
15.	Dr. Mandip R. G. & Prof. Gurdip Singh	Ayurveda-Principles and Panchakarma Practice		
16.	Dr. Santosh N. Belavadi	Panchakarma Sara Sangraha	1 ST edition, 2010	Dr. G.B. Patil , DGM ayurvedic medical college, Gadak
17.	Dr. Pulak Kanti	Essential of	1 st edition,	Chaukhamba Sanskrit

	Kaur	Panchakarma Therapy	2013	Pratistan, Delhi
18.	Vaidya Vasant C. Patil	Principles and Practice of Panchakarma	2 nd edition, 2011	Atreya Ayurveda Publications, Ilkal
19.	Kasper, Fauci & others	Harrison's Principle of Internal Medicine	19 th edition, 2015	Harrison's Trademark of Magro Hill edu., USA
20.	John E. Hall	Guyton's Principles of Medical Physiology	13 th edition, RP 2016	Elsevier , New Delhi
21.	Colledge Walker Ralston	Davidson's Principle & Practice of Medicine	22 nd edition, 2014	Churchill Livinston , Newyork

e- Resources:

Sl. No.	e-Books	Weblink
1.	e-caraka Samhita	niimh.nic.in/ebooks/ecaraka/index.php
2.	e-sushruta Samhita	niimh.nic.in/ebooks/esushruta/index.php
3.	e-madhava nidana	niimh.nic.in/ebooks/madhavanidana/index.php
4.	e-nighantu	niimh.nic.in/ebooks/e-Nighantu/index.php
5.	Ayush Research Portal	ayushportal.nic.in/
6.	Digital Helpline for Ayurveda Research Articles(DHARA)	www.dharaonline.org/Forms/Home.aspx
7.	e-astanga samgraha	
8.	e-astanga hrudya	
9.	e-davidson's Principles of medicine	

SHALYA TANTRA

AIMS:

Providing the competent surgical and medicinal knowledge, skills for the care of patients with complex problems that difficult to diagnose and to manage, demonstrating decision making skills for treatment and referral to deliver comprehensive management for the patient.

OBJECTIVES:

By the end of 4th Year/ Profession the student should be able to,

KNOWLEDGE:

1. Possess basic and systemic knowledge on basics of medical sciences, Shalyatantra Siddhaanta, Shalyakarma, Vividha rogeshu shalyakarmayogyacha, Anushalya karma
2. Describe etiology, pathophysiology, principles of diagnosis and management of surgic problems including emergencies in adults and children
3. Define Nutritional status of the patient –indications and methods for fluid and electrolyte replacement therapy including blood, serum transfusion
4. Define asepsis disinfection and sterilization and recommended judicious use of antibiotics
5. Identify social, economic, environmental and emotional determinants of the patients and consider them in planning the treatment
6. Enumerate different types of anaesthetic agents their indication, mode of administration, contraindication and side effects
7. Present attentively for the continuing education programmes, seminars and conferences related to Shalyatantra- surgery in thus updating himself
8. Teach his/her team, colleagues and other students in seminar presentations
9. Comprehend for the use of information technology tools
10. Practice personal hygiene, infection Control, prevention of cross infection and safe disposal of waste keeping in view the risks of transmission of endemic, epidemic and infective diseases like SARS, Typhoid, Hepatitis, and HIV

SKILLS:

1. Adopt, the skills of working in a lab, operation theatre by assisting seniors as well as being assisted by seniors
2. Evaluate, the patients with Shalya, Dhanwantariadhikara problems-clinically
3. Comprehend analysis of patient systematically, investigate results, diagnose the ailments, plan the treatment communicate it with the patient and execute it.
4. Escalate the skill of emergency management in patent airway resuscitation, a critically injured patient, cardio respiratory failure, drowning case.
5. Provide a care for patients of burns.
6. Acquire the principles and hand on skills of operative surgery, including pre and postoperative care and monitoring.

7. Treat open wounds including preventive measure against tetanus and gas gangrene.
8. Diagnose neonatal and pediatric surgical emergencies and provide sound primary care before referring patient secondary or tertiary centers.
9. Detect and diagnose different types of skeletal injuries like fractures dislocations and sprains and manage uncomplicated fractures and dislocations.
10. Competent to practice in Yantra, Shashtra, Kshara and Jaloukavacharan procedures.

ATTITUDE AND COMMUNICATION ABILITIES:

1. Adopt ethical principles in all aspects of his surgical 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.
2. Develop communication skills, in particular the skill to explain various options available in management and to obtain a true informed consent from the patient.
3. Provide leadership and get the best out of his team in a congenial working atmosphere.
4. Apply high moral and ethical standards while carrying out human or animal research.
5. Be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed.
6. Respect patient's rights and privileges including patient's right to information and right to seek a second opinion

SHALYA TANTRA

THEORY: 2 Papers (100 Marks each)	Teaching Hours (Each 1 Hour): 200 Hours
PRACTICAL: 100 Marks	Practical (Each 2 Hours):100 (200 Hours)

PAPER I

Part - A		
Marks - 50		Hours -50
Sl.No	Topic	Hours
1	<p>Introduction Introduction to ShalyaTantra - Historical background and progress made, Definition of Shalya, ShalyaTantra and its importance. Unnati and avanati karanas, recent developments in shalyatantra.</p> <p>Target - Fluency in textual reading and comprehension. Preferable targets - Know recent developments and controversies.</p> <p>Description of Yantra, Shastra, Anushastra – Definition, number, types, uses, Dosha, Guna, Karma. Relevant modern instruments. Target - Basic understanding of the concepts of Yantra and Shastra. Acquaintance with commonly used surgical instruments. Knowledge of textual descriptions. Preferable targets - Knowledge about currently used surgical instruments, their specifications, procurement sources etc.</p> <p>Nirjantukarana – Sterilization – Methods, Types and O.T. fumigation and its role in surgical practice. Target - Basic surgical discipline of maintaining asepsis. Preferable targets- Knowledge of recently developed chemicals, instruments for sterilization.</p> <p>Sangyahan / Anaesthesia: Definition and Types. i. Local anaesthesia – Drugs, Techniques, Indications, Contraindications, Complications and their Management. ii. Regional and General anaesthesia- Drugs, Techniques, Indications, Contraindications, Complications and their Management. Target-Basic knowledge of the drugs and instruments of anaesthesia. To observe the process of induction, monitoring and recovery. Preferable targets- Assisting and handling anaesthesia.</p> <p>Trividha Karma – Purva Karma, Pradhana Karma and Paschat Karma with modern interpretation Target- Capability to identify conditions which can affect the outcome of surgery in pre, intra and post- operative period. Preferable targets- Experience of handling incidents.</p> <p>AshtavidhaShastra Karma - Operative procedures</p>	17 Hours

	<p>Targets- Appreciation and comprehension of concepts and indications of different procedures.</p> <p>Preferable targets –Hands on experience of surgical procedures.</p> <p>YogyaVidhi - Experimental Surgery</p> <p>Target –Appreciation and comprehension of concepts of Yogya. Idea of patient's safety in experimental training.</p> <p>Preferable targets- Hands on training on mannequins.</p> <p>Principles of Onchology – Benign and malignant tumour, Difference between benign and malignant tumour, Aetiology, types and spread</p>	
2	<p>Marma – Nirukti, types, description and importance with contemporary understanding of shock and its management</p> <p>Target –Clinical application of concepts of marma.</p> <p>Preferable targets- Study of relevance of marma in the light of current anatomical and surgical knowledge.</p>	3 Hours
3	<p>Kshara Karma Kshara and Kshara Karma – Nirukti, Pradhanyata, Guna, Dosha, Karma, Prakara, Nirmana Vidhi, Yogya, Ayogya, Vidhi and Upadrava Chikitsa. Knowledge of Kshara Varti, Taila and Pichu. Kshara Sutra – Preparation, indications, contraindications and method of application, complications and their management.</p> <p>Target – Capability to identify and practice the use of kshara, kshara sutra in common clinical conditions.</p> <p>Preferable targets – Broader knowledge of current trends and ongoing researches in kshara application.</p>	4 Hours
4	<p>Agnikarma Agnikarma - Mahatva, Upakarana, Vidhi, Akrutibheda, Yogya, Ayogya and Upadrava Chikitsa Contemporary techniques and tools of Agnikarma.</p> <p>Target - Capability to appreciate the clinical indications and comprehend Agnikarma procedure.</p> <p>Preferable targets - Hands on experience of use of cautery in surgical practice.</p>	4 Hours
5	<p>Raktamokshana Mahatva, Prakara (Siravyadha, Pracchanna, Shringa, Alabu, Jalouka vacharana) (Jaloukaparichaya) – Yogya, Ayogya, Vidhi and Upadrava Chikitsa.</p> <p>Target- Capability to appreciate and comprehend clinical indications of Jaloukavacharana and other Raktamokshana procedures.</p> <p>Preferable targets - Uses of bloodletting in current therapy.</p>	3 Hours
6	<p>Bandha Vidhi Prayojana Dravya, Yogya, Ayogya, Prakara, Mahatwa, Abandya and Upadrava. Importance of Pichu, Plota, Kavalika, Vikeshika.</p> <p>Target- Hands on experience of techniques of bandaging.</p> <p>Preferable targets - New generation of bandaging and splintage tools.</p>	2 Hours
7	<p>Sandhana Karma Karna, Nasa, Oshtha Sandhana Vidhi. Principles and procedures of reconstructive and cosmetic surgery.</p>	3 Hours
8	<p>Pranasta Shalya – types, lakshana and nirharana upaya</p> <p>Target – Importance of concepts of Sushruta in the management of Shalya and concerns of patient safety. Identification and management of foreign bodies.</p>	1 Hour

	Preferable targets - Current concepts and diagnostic tools of dealing with foreign bodies.	
9	Fluid, Electrolyte and Acid Base Balance Introduction to physiology of fluids and electrolytes. Dehydration and over hydration Specific electrolyte loss (sodium, potassium etc)- symptoms and its management Acidosis, Alkalosis and Acid base balance. Electrolyte changes in specific diseases like pyloric stenosis, intestinal obstruction and anuria. Various replacement fluids in surgery, mode of administration and complications.-Importance of colloids and crystalloids in surgery Nutrition – pre-operative, post-operative and intravenous alimentation. Target – Capability to identify and manage fluid and electrolyte imbalance. Ability to administer parenteral fluid. Preferable targets - Advanced techniques of fluid and electrolyte assessment and management.	5 Hours
10	Rakta Mahatwa, Raktasrava (Haemorrhage) - Prakara and lakshana. Raktastambhana - Haemostasis. Blood Transfusion – Blood groups, components, compatibility, indications, contraindications and complications with management.Component therapy. Target -Knowledge of achieving haemostasis in haemorrhage. Preferable targets - Detailed knowledge of blood bank techniques.	2 Hours
11	Knowledge about Vranitagara and Rakshakarma Management of Operation theatre and OT Sterilisation	1 Hour
12	Emergency drugs Knowledge of antibiotics, analgesics, anti-inflammatory and emergency drugs in surgical practice. Target – Working knowledge of commonly used drugs. Preferable targets - Advanced pharmacological study of the above drugs.	3 Hours
13	Knowledge of diagnostic techniques Importance of Imaging techniques - X-ray, Ultra Sonography, CAT scan, MRI, Biopsy/ Cytological study Target - Knowledge of proper indications for optimum investigational tools and their interpretation. Preferable targets - Capability to work independently in the field of diagnostic techniques.	2 Hours
<div> <div>Marks - 50</div> <div>Part - B</div> <div>Hours -50</div> </div>		
1	Shat KriyaKaala Knowledge and application of shatkriyakala in surgical practice with suitable examples Target - Clinical utility of the concepts. Preferable targets - Applied aspects of Kriyakalas in the light of current concepts of pathogenesis.	1 Hour
2	Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya- asadhyata, Upadrava and Chikitsa of the following disorders	8 Hours

	<p>Vranashotha-Inflammation Vidhradi – Abscess Pidika – Boils NadiVrana-Sinus Dagdha Vrana - Burns and scalds Marmaghata – Shock Kotha – Gangrene Granthi- Cysts Arbuda – Tumour</p> <p>Target-Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.</p>	
3	<p>Vrana Nirukti and Prakara Nija Vrana– Nidana, Samprapti, VranaVasthu, Prakara, Lakshana, Vrana pancha Pariksha– Sthana, Akrti, Srava, Gandha, Vedana. Vrana Avastha - Dustavrana, ShuddhaVrana, Ruhyamana Vrana, Samyak Roodha Vrana, VyadhiJanya Vrana, Vrana Sadhya Asadhyatha and Vrana Upadrava. Vrana Chikitsa – Shashti Upakrama, Pathya and apathya. Wound – types, stages of healing and its management. AgantujaVrana, Sadhyovrana (Traumatic wounds) – Nidana, Prakara, Lakshana, Upadrava and Chikitsa Management of bites and stings Wound healing stages and their management. Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.</p>	8 Hours
4	<p>Twak Vikara Nidana, Samprapti, Clinical features of Kshudra rogas ie Pramehapidaka (Diabetic Carbuncle), Chippa -Paronychia, Kadara – Corn, Vrana Granthi – Keloid Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.</p>	5 Hours
5	<p>Manya Vikara Nidana, Samprapti, Laxana of Galaganda – Goitre, Gandamala, Apachi – Lymphadenitis, Pashanagardhabha – Parotitis. Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.</p>	6 Hours
6	<p>Sira Vikara Venous disorders – Superficial and Deep venous thrombosis, Haemangioma, varicose veins, Venous Ulcers and their management Target - Clinical application of the concepts.</p>	6 Hours

	Preferable targets - Hands on experience of management of different conditions.	
7	Dhamani Vikara Arterial disorders – Aetiology, pathology, Clinical features and management of Aneurysm, Burger's disease, Raynaud's disease Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	6 Hours
8	Snayu Vikara Diseases of tendons and ligaments – Tendonitis, tenosynovitis, ganglion and their management Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	5 Hours
9	Principles of Amputation General principles and practice of amputation Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	3 Hours
10	Ethics and Surgical practice in AIDS (HIV) and Hepatitis patients. Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	2 Hours

PAPER II

Part - A		
Marks - 50		Hours -50
Sl.No	Topic	Hours
1	Asthi Bhagna Fracture: Prakara including pathological fracture, Samanya Lakshana, Upadrava and Chikitsa. Description of fracture of following bones with clinical features, diagnosis, complications and management – scapula, clavicle, humerus, radius, ulna,carpals, metacarpals, phalanges, femur, patella, tibia, fibula, Tarsals, metatarsals,vertebrae, ribs, mandible, pelvis and skull bones. Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	10 Hours
2	Sandimoksha Dislocation: Prakara, Samanyalakshana, Upadrava and Chikitsa. Dislocation of following joints with clinical features, diagnosis, complications and management of shoulder, elbow, wrist, hip, knee, ankle, mandible, vertebrae and Phalanges.	6 Hours

	Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	
3	Diseases of bone Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Congenital anomalies Osteomyelitis, cysts, tumours and tuberculosis. Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	3 Hours
4	Cranio-cerebral injuries Mechanism, Pathology, Investigations, Complications and management of cerebral concussion, Contusion and Laceration. Acute extra dural haematoma, Acute Intracerebral and Chronic Subdural Haematoma Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	3 Hours
5	Brain tumors – Types, clinical features and their management Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	1 Hours
6	Diseases of breast Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Sthan Vidradhi- Breast Abscess, Sthan Arbuda, Breast tumors and their management. Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	2 Hours
7	Chest injuries Mechanism, Pathology, Investigations, Complications and management of Pnuemo- Haemothorax, Surgical emphysema, Flail chest. Target - Clinical application of the concepts. Preferable targets - Hands on experience of management of different conditions.	1 Hour
8	Diseases of chest Aetio pathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Pleural Abscess, Pleural Effusion, Tumors, Pleurisy and their management. Target - Clinical utility of the concepts. Preferable targets - Hands on experience of management of different conditions.	2 Hours
9	Diseases of esophagus Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of - Congenital Anomalies, Oesophagitis, ulcer, Varices, Tumors and their management. Target - Clinical utility of the concepts. Preferable targets - Hands on experience of management of different conditions.	3 Hours
10	Gulma Roga Nidana, Prakara, Lakshana, Upadrava and Chikitsa.	1 Hour

11	Diseases of stomach and Duodenum Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Congenital Pyloric Stenosis, Peptic Ulcer, Tumors and their management. Target - Clinical utility of the concepts. Preferable targets - Hands on experience of management of different conditions.	3 Hours
12	Diseases of small intestine Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Mickle's Diverticulitis, Tuberculosis, Obstruction, Perforation and their management. Target - Clinical utility of the concepts. Preferable targets - Hands on experience of management of different conditions.	2 Hours
13	Diseases of large intestine Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Tuberculosis, Obstruction, Perforation, Tumor, Appendicitis, Crohn's disease, Ulcerative Colitis and their management. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	3 Hours
14	Udara Roga Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of - Jalodara - Ascities, Chidrodara - Perforation and Peritonitis, Badhagudodara - Obstruction, Yakritdalyodar - Hepatomegaly, Pleehodara - Splenomegaly and their management. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	2 Hours
15	Diseases of Rectum and Anal Canal Aetiopathogenesis, classification, Clinical Features, Diagnosis, Complications and Management of - Congenital Disorders, Arsha-Haemorrhoids, Rectal Polyp, Parikartika - Fissure in Ano, Bhagandara - Fistula-in-Ano, Guda Vidradi - Anorectal abscess, Gudabhrams - Rectal prolapse, Sannirudda guda, Anal stricture, Incontinence. Gudarbuda - tumor and their management. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	6 Hours
16	Abdominal Injuries and Management Types of injuries to abdomen, signs and management Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	1 Hour
17	Shoola vyadhi - Nidana, Prakara, Lakshana, Upadrava and Chikitsa. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	1 Hour

Part - B		
Marks - 50		Hours -50
1	Diseases of Liver Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of- Yakrit Vidhradi - Abscess, cysts, tumors, Portal hypertension Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	4 Hours
2	Diseases of Gall Bladder Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Cholecystitis, Cholelithiasis, tumors and obstructive jaundice Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	3 Hours
3	Diseases of Pancreas Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Pancreatitis, Pseudo Pancreatic Cyst, Tumors. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	3 Hours
4	Diseases of Spleen Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Spleenomegaly and Splenic rupture Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	2 Hours
5	Diseases of Kidney Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Congenital Anomalies, Polycystic Kidney, Perinephric Abscess, Hydronephrosis, Pyelonephritis, Tumor, Renal Calculus, Renal Injury. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	3 Hours
6	Diseases of Ureter Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Calculus Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	3 Hours
7	Diseases of Urinary bladder Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Congenital anomalies, Ashmari -Vesicle Calculus, Cystitis, Tumor and Injury. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	3 Hours

8	Mutrakata and Mutrakricha Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management. Retention of urine. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	4 Hours
9	Diseases of Prostate Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Prostatitis, Prostatic Abscess, Benign Prostatic Hypertrophy, Carcinoma of Prostate. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	4 Hours
10	Diseases of Urethra Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Urethritis, Stricture and Rupture Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	4 Hours
11	Diseases of Penis Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Congenital anomalies, Niruddhaprakasha -Phimosis, Parivartika, Paraphimosis, Avapatika-Prepuceal Ulcer, Arbuda-Tumor, Lingarsha-Venereal Warts. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	4 Hours
12	Diseases of Scrotum and Testis Aetiopathogenesis, classification, Clinical Features,Diagnosis, Complications and management of Mutravridhi - Hydrocele, Vrushana Shotha – epididymo orchitis, Vrushana Granthi- Epididymal cyst, Scrotal Filaria, Torsion of Testis, Ectopic Testis, undescended Testis and Tumors Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	7 Hours
13	Vridhi Roga Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	2 Hours
14	Antra Vridhi Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Hernia - Inguinal, femoral, Epigastric, Umbilical, Incisional and rare forms of Hernia. Target - Clinical utility of the concept. Preferable targets - Hands on experience of management of different conditions.	4 Hours

STRUCTURED PRACTICAL MARKS DISTRIBUTION:

Sl. No	Particular	Details	Marks Distribution
01	Records	a) 10 Instruments with Diagrams b) 10 IPD Case sheets of Shalyatantra Samanya. c) 10 OPD Case sheets of Shalyatantra Samanya.	10
02	Bedside Clinical case taking	Long case - 01	20
03	Demonstration of Procedure	Demonstration of Surgical and Para surgical Procedure	20
04	Spotters	1. Instruments(8 Marks) Yantra (3)-3Marks Shashtra (3)-3Marks Anaesthesia (2)-2Marks 2. Radiological Findings(2 Marks) X-ray/USG-(2)-2Marks (Identification of given instrument/ specimen, X-ray, etc. with its clinical importance.)	10
05	Viva Voce	Paper I -15 Marks Paper II -15 Marks	30
06	Internal Assessment		10
Total			100

PRACTICALS**Content of Practicals:**

1. Identification, uses, demonstration of surgical instruments and methods of sterilization.
2. Training of case taking, bed side clinicals and case presentation.
3. Demonstration and Practical training in Anaesthesia.
4. Training to develop skills in following Parasurgical and other procedures
 - i. Kshara Karma
 - ii. Agnikarma
 - iii. Kshara Sutra
 - iv. Raktamokshana
 - v. Application of bandages and splints
 - vi. Catheterization
 - vii. Wound management procedures like Parisheka and Patradana
 - viii. Ryle's tube aspiration
 - ix. Injections -Intramuscular / Intravenous / Subcutaneous / Intradermal
 - x. Incision and drainage of abscess
 - xi. Suturing of open wounds

5. Observation of following procedures

- i. Circumcision
- ii. Hydrocele
- iii. Hernial repair
- iv. Vasectomy
- v. Haemorrhoidectomy
- vi. Fistulectomy
- vii. Fissurectomy
- viii. Appendectomy
- ix. Cholecystectomy

6. Training of Surgical Emergencies and Management.

REFERENCE BOOKS:

Sl.No	Text Book	Author
1.	Sushruta Samhita	
2.	Ashtanga Sangraha	
3.	Ashtanga Hridaya	
4.	Charaka Samhita	
5.	The Surgical instruments of the Hindus	Girindranath Mukhopadhyaya
6.	Shalya Tantra Samuchchaya	Pandit Ramadesh Sharma
7.	Shalya Vigyan (Part 1-2)	Dr. Surendra Kumar Sharma
8.	Shalya Samanvaya (Part 1-2)	Vd. Anantaram Sharma
9.	Shalya Pradeepika	Dr. Mukund Swaroop Verma
10.	Soushruti	Dr. Ram Nath Dwivedi
11.	Clinical Shalya Vigyan	Dr. Akhilanand Sharma
12.	Bhagna Chikitsa	Dr. Prabhakar Janardhan Deshpande
13.	Kshara sutra management in anorectal ailments	Dr. S.K.Sharma, Dr. K.R.Sharma and Dr.Kulwant Singh.
14.	Anorectal diseases in Ayurveda	Dr. Sijoria and Dr. Praveen Kumar Chowdary.
15.	Adhunik Shalya Chikitsa Siddhanta	Dr. Katil Narshingham Udupa
16.	Agnikarma Technology Innovation	Dr. P.D. Gupta
17.	Shalya Tantra Ke Siddhant	Dr. K.K.Takral
18.	Recent advances in the management of Arshas / Haemorrhoids	Dr. P. Hemantha Kumar
19.	Arsha Evum Bhagander Mein sutra Avacharan	Vd. Kanak Prasad Vyas
20.	Kshara Sutra	Dr. S.N.Pathak
21.	Surgical ethics of Ayurveda	Dr. D.N. Pande
22.	Bailey and Love's Short Practice of Surgery	Norman.S. Williams, Charles.V. Mann and R.C .G. Russell
23.	Clinical methods in surgery	S. Das
24.	Textbook of Operative Surgery	S. Das
25.	Shalya Vigyan (Sachitra)	Anantram Sharma

26.	Anushastra Karma	Dr. D.N. Pande
27.	Concept of Vrana is Ayurveda	Dr. Lakshman Singh
28.	Significance for Poorva Karma in Surgical Patient	Dr. Lakshman Singh
29.	Sangyahan Prakash	Dr. D.N. Pande
30.	A concise Text Book of Surgery	S. Das
31.	A manual on Clinical Surgery	S. Das
32.	A System of Surgical Diagnosis	T.N. Patel
33.	A Practical Guide to Operative Surgery	S. Das
34.	Drugs and Equipment for Anaesthesia	Arun kumar
35.	Manual of Surgical Instruments	M.M. Kapur
36.	Ward Procedures	Patel Mansukh. B
37.	Recent trends in the management of Arshas /Haemorrhoids	Dr. P. Hemantha Kumar
38.	Primary Anaesthesia	Maurice King
39.	Synopsis of Anaesthesia	Lee
40.	Clinical Anatomy/ Surgical Anatomy	John E.Skandalakis
41.	Surgical Instruments of the Hindus	Girindharnath Mukopadyay
42.	Outline of Orthopedics	John Crawford Adams and David Hamblen. L
43.	Outline of Fracture	John Crawford Adams
44.	Recent trends in the management of Bhagandara / Fistula-in-ano	Dr. P. Hemantha Kumar
45.	Principles and Practice of Agnikarma	Dr. Anand Kumar and Dr. Kanchan Shekokar
46.	Manipal Manual of Surgery	Dr. Rajgopal Shenoy

e- Resources:

Sl. No.	e-Books	Weblink
10.	e-caraka Samhita	niimh.nic.in/ebooks/ecaraka/index.php
11.	e-sushruta Samhita	niimh.nic.in/ebooks/esushruta/index.php
12.	e-madhava nidana	niimh.nic.in/ebooks/madhavanidana/index.php
13.	e-nighantu	niimh.nic.in/ebooks/e-Nighantu/index.php
14.	Ayush Research Portal	ayushportal.nic.in/
15.	Digital Helpline for Ayurveda Research Articles(DHARA)	www.dharaonline.org/Forms/Home.aspx
16.	e-astanga samgraha	
17.	e-astanga hrudya	
18.	e-davidson's Principles of medicine	

SHALAKYA TANTRA

A. AIMS:

Providing basic classical methodology of diagnosing diseases and learning the Principles of Chikitsa in Shalakyatantra with recent developments in clinical diagnostics and advanced treatment modalities, imparting complete knowledge about bedside clinics, developing skills of diagnosis and communication with patients.

B. OBJECTIVES:

By the end of 4th Profession the students should be able to,

KNOWLEDGE

- Understand the classical and advanced knowledge of clinical methods and diagnostic techniques of a disease in Shalakyatantra
- Should have knowledge of different stages of a disease
- Understand an appropriate treatment modality for the particular stage of a disease
- Identify the importance of Atyayika Avastha of a disease and its Chikitsa in Shalakyatantra
- Assess the basic knowledge of drug dosage on the basis of various ailments and influencing factors in Shalakyatantra

SKILLS

- Execute the practice of clinical and laboratory diagnostic methods in bedside clinics
- Specify, Classify and diagnose a disease as per the stage of a disease
- To develop the skills to practice the chikitsa principles for the proper management of a disease
- Integrate different systems of medicine like- Allopathy, Yoga for the purpose of proper diagnosis and management of a disease
- Adapt Safety skills during the emergencies in day to day practice of Shalakyatantra
- Adopt EYE and ENT classical treatment modalities, Kriyakalpa in day to day practice

ATTITUDE

- Develop communication skills to take the patients into confidence
- Valuing high moral and ethical standards while history taking and carrying out clinical examinations in Shalakyatantra
- Make the patient to feel more and more comfortable in subsequent visits

SHALAKYA TANTRA

THEORY: 2 Papers (100 Marks each)	Teaching Hours (Each 1 Hour): 200 Hours
PRACTICAL: 100 Marks	Practical (Each 2 Hours):100 (200 Hours)

PAPER I

Part – A		
50 Marks		50 Hours
Sl.No	Topic	Hours
1	Introduction to Anatomy, Physiology and Examination of Eye Shalakyatantra Nirukti, Parichayam, Evam Itihasam Netra Rachana Shareearam – Modern Anatomy of the Orbit, Appendages of eye ball, Layers of Eye ball Description of layers of eye ball (Outer fibrous and middle vascular coat) Retinal layer, chambers and fluids of the eye ball Physiology of Vision Physiology of Vision and Visual Pathway Netra Vishesha Shaareera – Mandala, Patala, Sandhi, Drishti Vichara and Chakshushya Kriya Shareera – Ancient and modern view Netra Pareekshaa – History taking Examination of Anterior segment of Eye ball Functional examination of Eye Examination of Posterior segment of Eye ball Instrumental diagnosis of eye diseases Advance diagnostics in Ophthalmology Netraroga Samanya Nidana, Purva-roopa, Samprapti, Roopa Evam Samanya Chikitsa, critical analysis on netra roga samanya nidana Netraswasthya Rakshanopaya Classification of Netra-roga as per Ayurveda and Modern view point and its importance.	12 Hours
2	Netra Samanya And Vishishta Chikitsa-Kriya Kalpa Classification of Samanya and Vishesha Netrachikitsa Tarpana and Putapaka Seka and Aschyotana Anjanakarma Pindi, Bidalaka and importance of Panchakarma in Shalakyatantra Chikitsa Additional Upakarma performed in Netra Kriyakalpa – Avagunthana, Annalepa, Netra Bandhana, Netraabhyanga, Netra Sweda, Netra Vimalapana, etc Various Eye Exercises and their role in managing various eye diseases Basic fundamentals of Shalakya-Shalya Chikitsa e.g. Poorva – Pradhana – Pashchat Karma	10 Hours

	<p>Netra & Chakshu swasthya hitkara Dinacharya, Ritucharya, Aahara evam Vihara. Ama – Pachyaman – Pakva Vranashotha, Vranitopasana, Pranashtashalya and Vranabandhana</p> <p>Methods and concepts of sterilization, asepsis and antisepsis as per ancient and modern view point</p> <p>Knowledge about the eight surgical procedures i.e. Lekhana, Chedana, Bhedana, Vyadhana, etc Shalyakarma</p> <p>Para-surgical procedures – Agni, Kshara and Raktamokshana with special reference to Netrachikitsa</p> <p>Essential diagnostic and therapeutic modern pharmacological agents required in Shalakya Chikitsa</p>	
3	<p>Sandhigata Roga</p> <p>Number and classification of Sandhigata Roga. Etiology, pathology and clinical features and management of Puyalasa, Upanaha, 4 types of Srava, Parvanika, Alaji and Krimigranthi as detailed in Literature of Ayurveda</p> <p>Etiology, pathology, signs and symptoms, diagnosis, medical and surgical management of Acute and chronic Dacryocystitis and Lacrimal cyst</p> <p>Knowledge about Dacryocystectomy and Dacryocysto-rhinostomy</p> <p>Etiology, pathology, signs and symptoms and management of Epiphora and Blepharitis</p> <p>Vagbhatokta Sandhigataroga</p>	6 Hours
4	<p>Vartmagata Rogas</p> <p>Anatomy and Physiology of Eyelids</p> <p>Number and classification of Vartmagata Roga. Etiology, pathology, classification, clinical features, and management of Utsangini, Kumbika, Pothaki, Vartmasharkara, Bahalavartma, Vartmaavabhandha, Klishtavartma, Kardamavartma, Shyavavatrma as detailed in Literature of Ayurveda</p> <p>Bhedana Sadhya Vyadhis – Aetiology, pathology, clinical features and treatment of Anjananamika, Sikta vartma, Klinna vartma, Krichhronmeelana and Kukunaka</p> <p>Vartmarbuda, Utklishta vartma, Nimesh, Pakshmashata, Vartmarsha, Lagana and Bisavartma</p> <p>Chhedanasadhya Vyadhis – Aetiology, pathology, clinical features and treatment of Arshovartma, Shuskaarsha, and Vartmaarbuda</p> <p>Aushadhasadhya Vyadhis – Aetiology, pathology, clinical features and treatment of Praklinnavartma, Apraklinnavartma, Yapyavyadhi – Pakshmakopa</p> <p>Asadhya Vyadhis – Aetiology, pathology, clinical features and treatment of Vaatahatavartma, Nimesha and Shonitaarsha as detailed in the literature of Ayurveda</p> <p>Aetiology, pathology, Clinical features diagnosis, medical and surgical management of Hardeolum externum and internum Chalazion, Ptosis, Trachoma, Trichiasis, Enteropion, Ectropion, Blepharo-spasm, Lagophthalmus and Lid growths, Vagbhatokta Vartmagata Rogas</p>	14 Hours
5	Shuklagata Rogas	8

	<p>Anatomy and Physiology of Shukla Mandala – Sclera and Conjunctiva</p> <p>Number and classification of Shuklagata Roga. Aetiology, pathology, Classification, Clinical features and treatment of 5 types of Arma, Arjuna, Shuktika, Pishtaka and Balasagrathita, Sirajala and Sirajapidaka as detailed in Literature of Ayurveda,</p> <p>Aetiology, pathology, Clinical features diagnosis, medical and surgical management of Pterygium, Scleritis and Episcleritis,</p> <p>Aetiology, pathology, Clinical features and treatment of Sub-conjunctival haemorrhage and xerosis</p> <p>Vagbhatokta Shuklagata Roga</p>	Hours
Part – B		
50 Marks		50 Hours
1	<p>Krishnagata Rogas – (Diseases of Cornea and Uvea)</p> <p>Applied anatomy of cornea and iris, Classification of Krishnagatarogas(cornea & iris)- Aetiology, pathology, Clinical features diagnosis, complication, medical and surgical management of Savrana Shukla/ kshata Shukla and Avrana Shukla, Sira Shukla, Ajakajata, Akshipakatyaya as detailed in Literature of Ayurveda</p> <p>Aetiology, pathology, Clinical features diagnosis, complications medical and surgical management of Ulcerative and Non-ulcerative Keratitis, Corneal Opacity, Staphyloma, Acute Iridocyclitis, Hypopyon ulcer and Uveitis</p> <p>Vagbhatokta Krishnagata Roga</p>	6 Hours
2	<p>Sarvagata Rogas – (Diseases affecting all parts of Eye)</p> <p>(Revision of Anatomy of Conjunctiva). Anatomy and physiology of Uveal Tissue, Ciliary body and Aqueous Humor and its outflow system.</p> <p>Number and classification of Sarvagata Roga. Aetiology, pathology, Classification, Clinical features and treatment of Abhishyanda</p> <p>Abhishyanda as a cause of all eye diseases</p> <p>Aetiology, pathology, Clinical features and treatment of Adhimantha, Sashophaakshipaka, Ashophaakshipaka, Shushkaakshipaka, Sirotkata, Siraharsha, Pilla roga, Amlodyushita, Anyatovata, Vataparyaya and Hatadhimantha as detailed in Literature of Ayurveda</p> <p>Aetiology, pathology, Clinical features diagnosis, complications medical and surgical management of Conjunctivitis and Red Eye</p> <p>Aetiology, pathology, Clinical features diagnosis, complication medical and surgical management of Glaucoma, Dry Eye Syndrome, Pan-opthalmitis and Pthiasis bulbi</p> <p>Aetiology, pathology, Diagnosis, Clinical features and treatment of Aupasargika (Contagious) Netraroga</p> <p>Vagbhatokta Sarvagata Vyadhis</p>	12 Hours
3	<p>Drishtigata Roga</p> <p>Description of Drishti and classification of Drishtigataroga</p> <p>Aetiology, pathology, Clinical features and treatment of Timira, Kacha and</p>	20 Hours

	<p>Linganasha, Abhighataja lingnasha, sanimittaja & Annimittaja Lingnasha, Ushna vidagdha drishti, Pittavidagdha Pittavidagdha Drishti, Kaphavidagdha Drishti and Dhoomadarshi, Nakulaandhya, Hriswajadya, Gambhirika, Sanimitta and Animitta Linganasha as detailed in Literature of Ayurveda</p> <p>Refractive errors – Myopia, Hypermetropia, Astigmatism, Presbyopia, Anisometropia, Amblyopia</p> <p>Strabismus, Aetiology, pathology, Clinical features, differential diagnosis, complications and medical and surgical treatment of Cataract, Retinitis pigmentosa, Night Blindness, Central Serous Retinopathy, Eale's disease, Diabetic Retinopathy, Hypertensive Retinopathy, ARMD, Optic Neuritis and Optic Atrophy</p> <p>Nayanaabhighata-Ocular trauma as per ancient and modern view</p> <p>Vagbhatokta Drushtigata Vyadhis</p>	
4	<p>Miscellaneous Eye Diseases</p> <p>Xerophthalmia and other mal-nutritional Eye disorders , Vit A deficiency</p> <p>Introduction to Eye bank, Eye donation and Corneal transplantation</p> <p>Preventive and Community Ophthalmology,</p> <p>WHO and National Programme for control of blindness and role of Ayurveda in these Programmes and updates.</p>	12 Hours

PAPER II

Part – A		
50 Marks		50 Hours
Sl.No	Topic	Hours
1	<p>Samanya Chikitsa</p> <p>Instruments and technology used in the diagnosis and treatment of diseases of Shira, Karna, Nasa and Mukha (Oral Cavity)</p> <p>Study of therapeutic procedures like Sweda, Kavala, Gandusha and Dhooma, Raktamokshana, Moordhni Taila, Hanubasti, Nasya, Nasaprakshalana, Pratisarana, Karnadhupana, Avachurnana, Karnapoorana, Karnaprakshalana, Lepa and Ashtavidha shastrakarma and anushastrakarma useful in the treatment of Shira, Karna, Nasa, Danta, Dantamoola, Mukha and Kanthagatarogas, Bandha (bandages) used in urdhwa jatrugata bhaga</p>	6 Hours
2	<p>Shiroroga</p> <p>Importance and superiority of Shiras</p> <p>Generalised and specific aetio-pathology of Shiroroga</p> <p>Classification of Shira and Kapalagataroga</p> <p>Aetiology, Pathology, clinical features and management of Vataja, Pittaja, Kaphaja, Sannipataja, Raktaja, Krimija Shirashoola, Kshayaja Shirashoola, Sooryavarta, Ardhawabhedaka, Shahaka and Anantavata</p> <p>Aetiology, Pathology, clinical features and management of Shirokapalagatarogas – Upashirshaka, Indralupta, Khalitya, Paalitya, Arumshika, Darunaka, Shirogranthi, Shirovidridhi and Shiroarbuda as detailed in Literature of Ayurveda</p> <p>Headache and Migraine, its differential diagnosis and treatment along with</p>	10 Hours

	diseases of scalp	
3	Karnagata Roga Karnashareera – Anatomy and Physiology of Ear Shravanendriya in ancient and modern literature Examination of Ear along with instruments/equipments required in Ear examination Advanced diagnostic Aids like Pure tone audiometry, Bera and OAE Aetiology, Pathology, Classification, common clinical features and general management of Karnagatarogas Aetiology, Pathology, clinical features, complication, medical and surgical management of Karnashoola, Karnanada, Karnakshweda, Badhirya, Karnasrava, Pootikarna, Krimikarna, Karnapaaka, Karnavidrudhi, Karnakandu, Karnagotha, Karnarsha, Karnapratinaaha, Karnaarbuda and Karnashopha as detailed in Literature of Ayurveda Karnasandhana (Auroplasty) Fundamentals and Method and Vaikrutaapaham Aetiology, Pathology, clinical features and management of Otagia, ASOM, CSOM, wax, Deafness, Otomycosis, Otosclerosis, Vertigo, Tinnitus and Minere's disease Other surgical procedures of Ear like Tympanoplasty, Mastoidectomy, Stapedectomy, Ossiculoplasty, Cochlear implant, etc Foreign body in the ear and its management Sound pollution Vaagbhatokta Karnagata Roga	17 Hours
4	Nasagata Roga Naasa Shareera – Anatomy and Physiology of Nose Ghranendriya in ancient and modern literature Examination of Nose with instruments/equipments required in Nose Examination Classification, Etiology, pathology, common signs and symptoms and general line of management of Nasagatarogas Etiology, pathology, clinical features and management of Peenasa, Apeenasa, Nasapaka, Naasagata Raktapitta, Deepti, Naasanaaha, Pootinaasa, Nasashosha, Pooyashonita, Nasasrava, Kshwavathu, Bhramshatu, Pratishyaaya, Naasashopha, Naasarbuda and Nasaarsha as in Literature of Ayurveda Naasa Sandhana Vidhi (Fundamentals and Methods of Rhinoplasty) Etiology, pathology, clinical features and management of Rhinitis, Sinusitis, Epistaxis, DNS and Nasal polyp Etiology, pathology, clinical features and management of Nasal trauma, Tumours of nose and Nasal Foreign Body Anatomy, Physiology and Pathology of Para-nasal sinus diseases and their treatment Vaagbhatokta Naasagata Roga	17 Hours
Part-B		
50 Marks		50 Hours
1	Mukhagata Rogas (Diseases of Oral Cavity) Mukharoga Aayatana (Anatomical Sites of Diseases of Oral Cavity) Anatomical and Physiological consideration of Mukha in ancient and modern medical literature	3 Hours

	Examination of Oral Cavity with required instruments Mukha and Dantaswastha – Ancient and Modern Concept Generalised aetiology, pathology, clinical features and treatment of Mukhagataroga	
2	Oshtagata Roga (Diseases of Lips) Anatomical and Physiological consideration of Oshta in Ancient and modern medical literature, Examination of lips Aetiology, pathology, classification, clinical features and treatment of Oshtaroga – Vataja, Pittaja, Kaphaja, Raktaja, Sannipataja Oshtaprakopa, Mamsaja, Medaja and Abhighataja Khandoshtha, Jalarbuda and Gandhalaji as detailed in Literature of Ayurveda, Knowledge of cleft lip Oshtasandhana – Labioplasty, Hare lip, Retention cyst and cracked lips	4 Hours
3	Dantagata Rogas (Dental Diseases) Danta Shareera in ancient and modern literature Tooth anatomy and examination of teeth Aetiology, pathology, Classification, Clinical features and treatment of Dalana, Krimidanta, Dantaharsha, Dantasharkara, Karala, Dantabheda, Bhanjanaka, Shyavadanta, Kapaalika, Chaladanta, Adhidanta, and Hanumoksha as detailed in Literature of Ayurveda Danta-utpatana (Tooth extraction) using Jalandharabandha yoga as well as by using instruments and its modern part Dantapoorana – Ancient and modern methods, Dantarakshana Dental caries, Dental tartar – Causes and treatment	6 Hours
4	Dantamoolagata Rogas (Diseases of the Periodontia) Anatomical and Physiological consideration of Dantamoola in ancient and modern medical literature Examination of Dantamoola (Peri-odontum) Aetiology, pathology, Classification, Clinical features and treatment of Sheetada, Dantaveshtaka, Dantapupputaka, Saushira, Mahasaushira, Paridara, Upakusha, Vardhana, Dantavaidarbha, Adhimamsa and Dantanaadi as detailed in Literature of Ayurveda Gingivitis, Apical abscess, Peri-odontal abscess, Peri-odontitis and Mandibular sinus	6 Hours
5	Jivhagata Rogas (Diseases of tongue) Jivha Shareera in ancient and modern literature Examination of Tongue Aetiology, pathology, Classification Clinical features and treatment of Vataja – Pittaja – Kaphaja Jivhakantaka, Adhijihva, Alasa and Upajivhika as detailed in Literature of Ayurveda Glosittis, Tongue tie, Ranula, Benign and Malignant tumours of Tongue	5 Hours
6	Talugata Rogas (Diseases of Palate) Anatomical and Physiological consideration of Talu in ancient and modern medical literature, Examination of Palate Aetiology, pathology, classification, Clinical features and treatment of Galashundika, Tundikeri, Adrusha, Kacchapa, Mamsasanghata, Taaluarbuda, Taalupupputa, Talushosha and Taalupaaka as detailed in Literature of Ayurveda Palatitits, Cleft palate and Uvulitis Tumours of the palate	5 Hours

7	Kantha And Galagata Roga (Diseases of Pharynx and Larynx) Anatomical and Physiological consideration of Kantha and gala (Pharynx and Larynx) In ancient and Modern literature Examination of Pharynx and Larynx Enumeration of Kanthagataroga, Aetiology, pathology, Clinical features and treatment of all types of Rohini, Kanthashaluka, Adhijivhika, Valaya, Balaasa, Vrinda, Ekvrinda, Gilaayu, Galavidradhi, Galaugha, Mamsasanghata, Shataghni, Vidaari, Galagandha, Galashotha, Kantharbuda, Swaraghna and Swarabheda – altered voice quality as detailed in the literature of Ayurveda Aetiology, pathology, Clinical features and treatment of Pharyngitis, Laryngitis, Tonsillitis, Adenoids, CA of Larynx, Pharynx and Diphtheria Foreign bodies in throat, pharynx and larynx and its management	10 Hours
8	Sarvasara Mukharoga (Generalised mucosal affection of the oral cavity) Enumeration of Saravasaramukharoga, Aetiology, pathology, Classification and Clinical features and generalized mucosal diseases of the oral cavity and treatment of Vataja, Pittaja and Kaphaja Mukhapaaka as detailed in the literature of Ayurveda Aetiology, pathology, Clinical features and treatment of Stomatitis Brief Knowledge of urdhvaguda, putivaktrata, mukharbuda HIV and Herpes infections of Oral Cavity Vagbhatokta Mukharoga	6 Hours
9	Miscellaneous Diseases Anatomy and Physiology of Salivary glands, Thyroid and Parathyroid gland their diseases and treatment Dysphagia, Cervical lymphadenopathy and Manyasthambha (Sterno-cleido-mastoiditis), TMJ diseases Updates in National Programme for Prevention and Control of Deafness	5 Hours

STRUCTURED PRACTICAL MARKS DISTRIBUTION:

SL. NO	PARTICULAR	DETAILS	MARKS DISTRIBUTION
01	Records	20 OPD/IPD Case sheets of Eye diseases 20 OPD/IPD Case sheets of ear, nose, throat, head and oro - dentistry diseases.	10
02	Bedside Clinical case taking	Long case - 01	20
03	Demonstration of Procedure	Preparation and demonstration of Kriyakalpa procedure.	20
04	Spotters	1. Instruments(2)- 4Marks Identification of instrument and uses 2. X-ray /Audiogram (2)- 4Marks Findings / Readings and diagnosis 3. Drugs (2)- 2Marks Vati, Taila etc - Contents, Indications, contra-indications, Dose, Anupana etc	10
05	Viva Voce	Paper I -15 Marks	30

		Paper II -15 Marks	
06	Internal Assessment		10
Total			100

REFERENCE BOOKS:

Sl. No	Name of Author/ Commentators	Title of the book	Edition	Name of the publication
1.	Sushruta	Sushruta Samhita with Dalhana Commentary	1 st -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	3 rd -2012	Choukhambha Sanskrit Series
5.	Dr. R.C. Choudhary	Shalakya tantra	18 th 2003	Choukhambha orientala Varanasi
6.	Prof K. S. Dhiman	Shalakya Tantra KRIYAKALP VIGYAN	1 st 2013	Choukhambha Vishwabharati Varanasi
7.	Bhargav Shah	Diseases of Nose Throat and Ear	17 th 2002	Usha publications, Mumbai
8.	EB Edr.	Diseases of Nose Throat and Ear, Head and Neck	6 th Edi 2017	Paras Publication, Mumbai
9.	Scott Browns editions	A Text book of otorhinololaryngology	7 th 2008	Hoddes Stoughton
10.	Dhingra	Text book of Ear Nose Throat diseases	10 th 2010	Elsevier
11.	Mohd. Maqbool	Text book on ENT	19 th 2012	Jaypee brothers medical publications
12.	Logan Turner	Disease of Nose Throat Ear	10 th 2007	Jaypee brothers
13.	Ballenger	Disease of ENT	7 th -1 jan 2017	Elsevier
14.	Cumming's	Oto Laryngology	6 th 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	5 th edition	1 jan 2016
19.	Kurt's	Audiology		
20.	Ramanath Dwivedi - R.C. Chaudhary	Shalakya Tantra	5 th 1977	Choukhamba Sanskrit series
21.	N. Srikanth	The Actions and uses of Indigenous Ophthalmic Drugs	2009	Choukhamba Sanskrit series
22.	Agarwal and Gupta	Clinical Examination of Ophthalmic Cases	3 rd edition	CBS Publisher
23.	Cotlier, St. Louis	Alder's Physiology of the Eye and Clinical Applications	5 th Ed 2012	Willis Paschure Publication
24.	Duke Elder, St. Louis	System of Ophthalmology	1958	St. Louis Mosby publisher
25.	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
26.	Duke and Elder	Manual of Refraction	1 jan 1993	Elsevier
27.	Stallard's	Eye Surgery	5 april 1989	Butter worth Heinemann ltd
28.	Anirwan Biswas	Audiology		
29.	Parsons	Diseases of Eye	2015	Elsevier
30.	Hazarika's	Text book on ENT	30 jan 2010	C B S PUBLISHER

E Resources:

Ophthalmology

- <http://www.eophtha.com/eophtha/OTO/index.html>
- <https://timroot.com/opthobook/>
- <https://openlibrary.org/subjects/ophthalmology>
- http://www.freebookcentre.net/medical_text_books_journals/ophthalmology_ebooks_online_texts_download.html

ENT

- http://www.freebookcentre.net/medical_text_books_journals/ENT-Books.html
- <https://www.entnet.org/sites/default/files/Oto-Primary-Care-WEB.pdf>
- https://cybersight.org/library/?gclid=EAlaIQobChMInv6c0bfG3QIVhCQrCh2yfwnAEAMYASAEGIsY_D_BwE

RESEARCH METHODOLOGY AND MEDICAL STATISTICS

AIMS

Providing basic knowledge about research methodology, biostatistics and its need and importance in present trend of Ayurveda. To ignite the young minds with the research vision at primary level so that the hidden potential of Ayurveda science can be explored and put forth of present evidence based medicine era. Initiative effort to accomplish the vision of Tradition, Technology and Innovation in the field of Ayurveda.

OBJECTIVES

By the end of 4th profession the students should have basic knowledge about the methods of research and biostatistics.

Knowledge:

- The literal meaning of word research and its implication in Ayurveda
- Brief historical background of research in Ayurved and contemporary medical science
Evidences of researches in ayurvedic classics
- Types of Research
- Research process
- Research tools
- The concept and importance of ethics in research
- Concept of Evidence Based Medicine and Scientific Writing
- Importance of IT in data mining and important research data portals concerned with Ayurved and contemporary medical science
- Definition, scope and importance of the Medical statistics
- Collection and Presentation of data
- Measures of location, central tendency.
- Variability and its measurement
- Introduction to probability and test of significance Parametric tests and non-parametric tests
- Introduction to commonly used statistical soft-wares.

Skills:

- To make capable of applying different research designs for different studies
- Skill of using particular statistical test for particular data
- Journal browsing skills and keep them updated about the happenings in the field of Ayurveda
- Making eligible to read, understand and write the different articles in different journals

Attitude:

- Research oriented attitude towards the concepts of Ayurveda
- Evidence based practice
- Proper documentation and its importance
- Exploring the hidden potentials of Ayurveda through modern technology

RESEARCH METHODOLOGY

THEORY: 1 Paper (50 Mark)		Teaching Hours (Each 1 Hour): 50 Hours
Part- A		
30 Marks		30 Hours
Sl.No	Topic	Hours
1	Brief historical background of research in Ayurved and contemporary medical science Evidences of researches in ayurvedic classics	2 Hours
2	Etymology, definitions and synonyms (Anveshana, Gaveshana, Prayeshana, Anusandhan and Shodha) of the word Research	2 Hours
3	Research in Ayurved - Scope, need, importance, utility	2 Hours
4	Types of Research (familiarization of the terms) a) Pure and Applied b) Qualitative, Quantitative and Mixed Observational and interventional.	5 Hours
5	Research process (Importance of each steps in brief) a. Selection of the topic b. Review of the literature c. Formulation of Hypothesis d Aims and Objectives e. Materials and methods f. Observations and results g. Methods of communication of Research	10 Hours
6	Research tools – Role of the pramanas as research tools	2 Hours
7	The concept and importance of ethics in research	2 Hours
8	Concept of Evidence Based Medicine and Scientific Writing	2 Hours
9	Importance of IT in data mining and important research data portals concerned with Ayurved and contemporary medical science (DHARA, PubMed, Ayush Research Portal, Bioinformatics Center, Research Management Informatic System etc.)	3 Hours
MEDICAL STATISTICS		
Part- B		
20 Marks		20 Hours
1	Definition, scope and importance of the Medical statistics	1 Hour
	Common statistical terms and notations a. Population b. Sample c. Data d. Variable e. Normal distribution	1 Hour
2	Collection, Types and Presentation of data a. Tabular b. Graphical c. Diagrammatical	2 Hours
3	Measures of location a. Average	1 Hour

	b. Percentile	
4	Measures of Central Tendency a. Arithmetic mean b. Median c. Mode	2 Hours
5	Variability and its measurement a. Range b. Standard deviation c. Standard error	2 Hours
6	Introduction to probability and test of significance Parametric tests and non parametric tests	10 Hours
7	Introduction to commonly used statistical soft-wares.	1 Hour

REFERENCE BOOKS:

Research Methodology			
Sl.No	Text Book	Author	Publisher
1.	Practical Research Methods	Dawson, Catherine,	New Delhi, UBS Publishers' Distributors 2002
2.	Research Methodology-Methods and Techniques	Kothari, C .R.	New Delhi, Wiley Eastern Limited 1985.
3.	Research Methodology-A Step-by-Step Guide for Beginners	Kumar, Ranjit	(2nd.ed), Singapore, Pearson Education 2005
4.	Students guide to research methodology.- Undergraduates		Alexandria Medical Students Association.
5.	Health research methodology. A guide for training in research methods		2nd edition. Manila, World Health Organization Regional Office for the Western Pacific, 2001
Medical Statistics			
6.	Health research methodology. A guide for training in research methods.		2nd edition. Manila, World Health Organization Regional Office for the Western Pacific, 2001.
7.	Statistical methods in medical research.	P.Armitage	(Ed) Oxford Blackwell
8.	Statistical methods	Snedecor GW and Cochran, WG	
9.	.. Practical statistics for medical research	Altman, D. G.(1991)	London: Chapman Principles of Medical Statistics by A. Bradford Hill
10.	Interpretation and Uses of Medical	by Leslie E Daly,	

	Statistics	Geoffrey J Bourke, James MC Gilvray	
11.	Research in Ayurveda	M S Baghel	
12.	Research methodology in Ayurveda	V.J.Thakar	Gujarat Ayurved University
13.	Ayurveda anusandhan paddhati	P.V.Sharma	
14.	Research methodology methods and statistical techniques	Santosh Gupta. Greenhouse SW.	
15.	The growth and future of biostatistics: (A view from the 1980s). Statistics in Medicine 2003; 22:3323-3335		
16.	Clinical epidemiology and Biostatistics	Knapp GR Miller MC	NMS series
17.	Biostatistics : Principles and practice	Antonisamy B, C hristopher S Samuel PP.	
18.	An introduction to Biostatistics	Sundara Rao PSS & Richard J.	PHI
19.	Senn S (1997) Statistical Issues in Drug Development	Chichester: John Wiley Sons	
20.	Methods in Bio-statistics for Medical Students	BK Mahajan	
21.	Vaidyakeeya Sankhiki Shastra	- Dr.S.S.Savrikar	
22.	Research Methodology & Medical Biostatistics	Dr. Dhulappa Mehatre	Chaukhambha Prakashan

Sl. No	Particulars	Details	Internal distribution (Sub distribution)	Marks distribution
01	Records ***	20 & 05 Practicals conducted in CRF & Animal house. + 10 Medical Statistics related numericals.		
02	Procedure of any two practicals in CRF	Writing two procedures among given set of preparations in detail with values obtained.	10 Marks for each preparation. 10X2=20	20
03	Instruments	Identification of instruments with its uses.	10X01 regimen=10	10
04	Spotting	Specimens present in CRF	Each specimen/Model carries 02 Marks. 2X10specimen=20 Marks	20

05	Stat related problem	Selection of data and its interpretation	Any parametric/non-parametric data creation = 05 Marks, Analysing the data with proper statistical tests = 15	20
06	Viva Voce	Grand Viva	Part A -15 Marks Part B- 15 Marks	30
Total				100



**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 (2nd Cycle) || Placed under Category 'A' by MHRD
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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 7th 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.

Knoweledge

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, Sadhyasadhyata with respect to Ayurveda and the contemporary science and also timely refferal 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/ audio visual
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/ audio visual
4	Concept of Nanatmaja and Samanyaja Vikara	4	Didactic/Interactive/ audio visual
5	Clinical application of Avarana in diagnosis of various diseases	6	Didactic/Interactive/ audio visual
6	Clinical application of Shatkriyakala in diagnosis of diseases.	5	Didactic/Interactive/ audio visual

7	Clinical and applied aspects of concept of Upadrava and Arista	5	Didactic/Interactive/ audio visual
50	Part- B	Marks – 50	Hours -
1	Ayurvedic interpretation of various laboratory investigations to derive treatment principles.	10	Didactic/Interactive/ audio visual
2	Interpretation of various Rogi Bala and Roga Bala technique to plan Chikitsa Sutra	10	Didactic/Interactive/ audio visual
3	Clinical examination of Deha Bala, Roga Bala, Agnibala And Chetas Bala	6	Didactic/Interactive/ audio visual
4	Knowledge of current diagnostic tools like ECG, X-Ray, CT scan, MRI and USG	15	Didactic/Interactive/ audio visual
5	Ayurvedic interpretation of various laboratory investigations to derive treatment principles.	9	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 1st 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 st -2015	Chaukhambha Sanskrit Series Office
2.	Sushruta Samhita	Sushruta& Dalhana	RP-2019	Chaukhambha Sanskrit Series Office
3.	Ashtang sangara	Laghuvaghbata& Arunadatta& Hemadri	3 rd -2012	Chaukhambha Sanskrit Series Office
4.	Madhava Nidan part 1	Yadunandan Upadhyaya	32 nd -2002	Chaukhambha Sanskrit Series Office
5.	Madhava Nidan part 2	Yadunandan Upadhyaya	31 st -2002	Chaukhambha Sanskrit Series Office
6.	Siddhantanidanam	Gananath Sen	6 th -1966	Charuchandra Bisharada
7.	Nidan Panchakam	Kudatarkar V N	1959	VN Kudatarkar
8.	Ayurvediya Vyadhi Vijnana	Acharya Y T	2 nd -1976	Vaidyanath Ayurved Bhavan
9.	Ayurvediya Vikruti Vijnana	Shrikanthmurthy K R	6 th -1972	Karnatak University
10.	Vikruti Vijnana	Subhash Ranade;Others	1994	Anmol Prakashan
11.	Nidan Chikitsa Hastamalaka	Ranjeet Rai Desai	2 nd RP-2010	Vaidyanath Ayurved Bhavan
12.	Madhava Nidan	Shrikanthmurthy K R	7 th -2005	Chaukhamba Orientalia 1
13.	Madhava Nidan	Narendranath Shastri	1 st -1979	Motilal Banarasidas
14.	Ayurvediya Vikruti Vijnana	Vidyadhar Shukla	2003	Chaukhamba Sanskrit Pratishthan

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

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

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

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

9	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.	6	didactic lecture/ audiovisual/interactive
10	Diseases of Sukravaha srotas- Klaibya and Vandhyatva and understanding of male and female Infertility, Impotence.	6	didactic lecture/ audiovisual/interactive
11	Diseases of Mutravaha srotas -Mutrakrichha – Mutraghata, Ashmari and Ayurvedic understanding of common clinical entities like Urinary Tract Infection, Urolithiasis, Nephropathies and Renal failure.	6	didactic lecture/ audiovisual/interactive 1
12	Diseases of Swedavaha srotas-knowledge of khalitya, Palitya and Cosmetology.	6	didactic lecture/ audiovisual/interactive
13	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.	6	didactic lecture/ audiovisual/interactive
14	Indriya Pradoshaja Vikara.	5	didactic lecture/ audiovisual/interactive
15	Jara janya Vyadhi: Alzheimer's Disease	5	didactic lecture/ audiovisual/interactive
16	Concept and tools for the study of Anukta Vyadhi (Unexplained and newly emerging diseases).	6	didactic lecture/ audiovisual/interactive
17	Understanding the concept of karmaja vyadhi	6	didactic lecture/ audiovisual/interactive

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

7	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	8	didactic lecture /audio visual/ interactive
8	Ayurvedic interpretation of all relevant findings of modern clinical examinations, various Laboratory and other Diagnostic tools.	6	didactic lecture /audio visual/ interactive
9	Understanding of diagnostic procedures in medical emergencies. 10	6	didactic lecture /audio visual/ interactive
10	Concept of Good clinical practice in Ayurveda and modern medicine.	6	didactic lecture /audio visual
11	Knowledge of standard clinical laboratory set up useful for Ayurvedic practice.	6	didactic lecture /audio visual/ interactive
12	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.	6	didactic lecture /audio visual/ interactive
13	Importance of Bio markers and their utility in clinical researches .	6	didactic lecture /audio visual/ interactive
14	Update knowledge of emerging diagnostic tools and technologies.	6	didactic lecture

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

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

11	Concept of genetic diseases and its interpretation in terms of Bija dosha	8	didactic lecture /audio visual/ interactive
12	Knowledge of common Bacteria, Virus, Parasites, Fungi and their classification with their disease processes, Nutrition requirements, media and methods for culture and sensitivity	12	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 st /2013
22	Oxford H.B of clinical Examination	-	2nd /2014
23	Symptoms & Signs in clinical medicine	chamberlains	13 th /2010
24	Clinical methods	Hutchinson	23 rd /2012
25	Bedside clinics in medicine vol-I & II	Kundu	7 th /2014
26	Practical Pathology	Uma Chaturvedi	2002
27	Medical Laboratory Technology	R. Sood	6 th /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 th /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 th /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 1st 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 IInd 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. Evaluation Copy: folder is labeled with only Registration Number 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. Office Copy 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 & 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:

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



**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 (3rd Cycle) || Placed under Category 'A' by MHRD GoI
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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 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.

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">• Long case• Short case	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 st edition 2000	Chaukhambha orientalia
2	Arunadatta Hemadri tika	Ashtanga hridaya	1 st edition 2000	Chaukhambha sanskrit series (Varanasi)
3	Dalhana Author – Yadavji Trikamji	Sushruta Samhita	1 st edition 2019	Chaukhambha orientalia
4	Adhamalla dipika Kasirama's gudhartha dipika	Sharangadhara samhita	6 st edition 2005	Chaukhambha orientalia
5	Srisathyapala Bhisagacharya (vrddha jivaka)	Kashyapa samhita	9 th 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 th edition 2016	Patrick's. w . tank phd
12	Narendra Malhotra Jaideep Malhotra Richa saxena Naharika Malhotra	Jeffcoate's principles of gynaecology	9 th edition 2019	The health sciences publishers.

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

PAPER – II		Prasava – Vigyan	
Theory- 100 Marks		Hours-100	
Unit	Contents (Theory)	Hours	Teaching Methods
1.	<u>Prakrit Prasava</u> 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.	<u>Prasava vyapad</u> 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 & 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 vridhhi, 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 Adhyayana of</u></p> <p>Ashtanga Hridaya Sharira Sthana 2ndAdhyaya Garbha Vyapad</p>	10Hours	Didactic/ Interactive

Sushruta samhita Nidana Sthana 8 th Adhyaya Mudhagarbha nidana Sushruta Samhita Chikitsa Sthana 15 th Adhyaya Mudhagarbha Chikitsa		AV
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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 Nirvritti - Climacteric and menopause.</p> <p>Geriatric health care</p>	2Hours	Didactic/ Interactive /AV
8.	<p>Study of modern diagnostic techniques and Investigations.</p>	5 Hours	Didactic/ Interactive /AV
9.	<p>Important drugs used in Stree roga</p>	10 Hours	Didactic/ Interactive /AV
10.	<p>Panchakarma in Streeroga</p>	03 Hours	Didactic/ Interactive/AV
11.	<p>Vishesha Adhyayana of</p>	10 Hours	

Charaka Samhita Chikitsa Sthana -30 th 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

PAPER – IV		Prasuti Streerog Shalya Karma	
Theory- 100 Marks		100 hours	
Unit	Contents (Theory)	Hours	Teaching Methods
	General principles of Gynaecological & Obstetric surgeries Analgesia & Anaesthesia in Obstetrics & Gynaec operative procedures	05 hours	Didactic/ Interactive /AV
1.	Operative Obstetrics 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 Encircage. Instrumental delivery (Forceps, vacuum extraction) Caesarean Section Manual removal of Placenta Caesarean Hysterectomy	20 Hours	Didactic/ Interactive/AV
Unit	Operative Gynecology	Hours	Teaching Methods
Selection of cases, technique and management of complications of minor and major gynecological procedures.			
1.	Dilatation and Curretage, 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 st edition 2000	Chaukhambha orientalia
2	Arunadatta Hemadri tika	Ashtanga hridaya	1 st edition 2000	Chaukhambha sanskrit series (Varanasi)
3	Dalhana Author – Yadavji Trikamji	Sushruta Samhita	1 st 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 st edition 2019	Chaukhambha publications
12	T.W.Sadler	Langman`s medical embrology	13 th edition 2016	Patricks. w . tank phd
13	Narendra Malhotra Jaideep Malhotra Richa saxena Naharika Malhotra	Jeffcoate`s principles of gynaecology	9 th edition 2019	The health sciences publishers
14	Hiralol konar (D.C.Dutta)	Textbook of gynecology	8 th edition 2020	Jaypee brothers medical publishers
15	Hiralal konar (D.C.Dutta)	Textbook of obstretrics	9 th edition 2018	Jaypee brothers medical publishers
16	F Gary Cunnigham	Williams obstretrics	25 th edition 2018	Mc graw hill educations
17	Steven .g.Gabbe	Obstretrics normal and problem pregnancies	1 st edition 2016	elsevier

18	Ramveer sharma	Textbook of prasuti tantra (obsetretics)	1 st edition 2020	Chaukhambha orientalia
19	Ashwini gandhi	Contraception past , present and future	2 nd 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 st edition 2016	Jaypee (the health science publishers)
23	Mala Arora	Recument pregnancy loss	2 nd edition 2007	Jaypee brothers
24	David Gardner	Textbook of assisted reproductive techniques	5 th 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 th edition 2011	Elsevier INDIA
27	Liselotte Mettler	Manual of New Hysterectomy Techniques	1 st edition 2007	Jaypee brothers
28	Kenneth J Leveno	Williams Manual of Obstetrics Pregnancy Complications	23 rd edition 2012	McGraw Hill/Medical

29	Posner gd;others	Oxorn-foote Human labor & birth	6 th edition 2013	McGraw Hill Education/Medical
30	Victoria L Handa	Te Lindes Operative gynecolgy	12 th edition 2019	Wolters kluwer
31	Leon Speroff;Others	Clinical Gynecologic Endocrinology and Infertility	6 th edition 1999	Jaypee publisher
32	Victoria L Handa M D , Linda Van Le M D	Te Linde's Operative Gynaecology	12 th edition	Wolters Kluwer India Pvt .Ltd
33	Berek & Novak	Text book of Gynaecology	4 th edition	Wolters Kluwer India Pvt .Ltd
34	Cunningham Leveno Bloom Spong Dashe Hoffman Casey Sheffield	Williams Obstetrics	24 th edition	Mcgraw Hill Medical
35	Narendra Malhotra Jaideep Malhotra Richa saxena Neharika Malhotra Bora	Jaffecoate's Principles of Gynaecology	9 th 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 1st 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 st Year)	25
2.	Wound dressing	PI (under guidance of PG II)	Guide (I st Year)	25
3.	Catheterization	PI (under guidance of PG II)	Guide (I st Year)	25
4.	Blood sampling & cross matching	PI (under guidance of PG II)	Guide (I st Year)	25
5.	Per vaginal examination	PI (under guidance of PG II)	Guide (I st Year)	25
6.	Fetal monitoring / N S T operation	PI (under guidance of PG II)	Guide (I st 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 st Year)	NA
3.	Communication skills with patients, relatives, colleagues and paramedical staff	PI (under guidance of PG II)	Guide (I st 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 st Year)	NA
3.	Skin preparation – painting and draping	PI (under guidance of PG II)	Guide (I st Year)	NA
4.	Techniques of scrubbing ,donning	PI (under guidance of PG II)	Guide (I st 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 st Year	II nd Year	Minimum Number
1.	D & C	O	PI	05
2.	Cervical encircilage	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 IInd 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. Evaluation Copy: folder is labeled with only Registration Number 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. Office Copy 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 & 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