

# Dr. D. Y. Patil College of Ayurved & Research Centre

Pimpri, Pune 411018

# Dr. D. Y. Patil Vidyapeeth, Pune

(Deemed to be University)

# Accredited by NAAC with 'A' Grade | Hospital Accredited by NABH

### Syllabus for UG Second Year of Ayurved

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#### TITLE OF THE COURSE: CHARAK SAMHITA (Purvardha)

**COURSE CODE: - AA201** 

MARKS: Theory -100 Practical - 50

#### **GOAL-**

- To explore the profound knowledge & basic principles from Charaka Samhitas.
- To propagate & to advocate the fundamental principles and techniques of Ayurveda for healthy & unhealthy conditions of human body.

#### LEARNING OBJECTIVE

- Health and lifestyle management through Dinacharya, Rutucharya, Sadvrutta etc.
- Demonstration of Ayurvedic fundamentals of Nidana (Diagnosis) with the help of complete and thorough knowledge.

#### LEARNING OUTCOME

At the end of the course, student will be able to comprehend both prakruti & vikruti with the help of siddhantas, dosha sthiti and vyadhi avastha in every individual.

#### • COGNITIVE DOMAIN

Thorough Knowledge of Ayurvedic concepts like strotasa, vaadamarga pada, pramanas etc mentioned in Charak Samhita.

#### • PSYCHOMOTOR DOMAIN

- 1. .Knowledge about preparation of kashaya kalpanas and various formulations.
- 2. Assessment of vikruti using nidan panchaka

#### • AFFECTIVE DOMAIN

To enable a student to practice pure Ayurvedic treatment.

#### COURSE DESCRIPTION

Sr. No	Topics	Sthana	Description	No of Lectures (Hrs)	Weightage (Marks)
1	Charak Samhita	Sutra sthana -1-15	Adhyaya – 1,5,7,9,10,11,12,13,14 Adhyaya – 2,3,4,6,8,15	40	20
	1 <sup>st</sup> term	Nidana sthana -1-4	Adhyaya – 1-4	17	8
		Vimansthana -1-4	Adhyaya – 1-4	18	8
		Sharir sthana -1-4	Adhyaya – 1	10	5
			Adhyaya – 2,3,4		
		Indriyasthana -1-6	Adhyaya – 1,5		
			Adhyaya – 2,3,4,6	5	3
		Practical	Clinical case study	10	10
2	Charak Samhita 2 <sup>nd</sup> term	Sutra sthana -16-30	Adhyaya – 16,17,21,22,23,24,25,26,28  Adhyaya – 18,19,20,27,29,30	45	15
		Nidana sthana -5-8	Adhyaya – 5-8	20	7
		Vimansthana -5-8	Adhyaya – 5-8	20	7

Sharir sthana -5-8	Adhyaya – 5,6 Adhyaya – 7,8	10	5
Indriyasthana -7-12	Adhyaya – 7,12 Adhyaya – 8.9.10.11	5	3
Practical	Clinical case study	10	10

Student has to take minimum 10 cases from IPD of institute. Special case Proforma will be provided by department Practical examination: 50marks

Sr.No.	Oral	Shlokawali	Compilation	Samhita	based	Case	Internal	Total
				taking			Assessment	
1	15 Marks	5 marks	10 marks	10 Marks			10 Marks	50 marks

### **Reference books:**

Sr.No.	Book	Author/Editor	Publication	
1	Charak Samhita dyotini tika -hindi	Kashinath Shastri	Chaukhamba Bharti Acedemy, Varanasi 1992	
2	Charak Samhita- English	P.V.Sharma	Chaukhamba orientalia Varanasi 2008 4 <sup>th</sup> edition	
3	Charak Samhita- hindi	Kashinath Shastri/ Gorakhnath Chaturvedi	Chaukhamba Bharti Acedemy, Varanasi	
4	The legacy of Charak- English	M.S.Valiathan	Oriented Longman Pvt. Ltd. Chennai-02 2003	
5	Sanshipta Charak Samhita- hindi	Anantram Sharma	Chaukhamba Barti Prakashan, Varanasi 2005 1 <sup>st</sup> edition	
6	Drusthartha Charak chintamani-Marathi	P.G.Aathavle	Dhanvantari books & stores, nandanvan, Nagpur. 2007 reprint	
7	Charak Samhita-Sanskrit	Kaviraj Yogindranath Sen	Chaukhamba Vidyabhavan Varanasi	
8	Charak Samhita- Hindi	Laxmidhar Dvivedi	Chaukhamba Krushnadas Acedemy, Varanasi, 2013 Reprint	
9	Charak Samhita-hindi	Vd.Harishchandra Singh Kushvaha	Chaukhamba orientalia Varanasi 2012 Reprint	
10	Charak Samhita with Commentary byChakrapani	Yadavaji Trikamaji Acharya	Chaukhamba Surbharati Prakashan, Varanasi, Edi. 2015	

# TITLE OF THE COURSE: - AYURVED RASASHASTRA & BHAISHJYA KALPNA (Iatrochemistry and Ayurvedic Pharmaceutics)

**COURSE CODE: - AA202** 

MARKS: Theory(I & II Papers) 200 Marks + Practical (I & II Papers) 200 Marks = 400 Marks

#### **GOALS**

• To make student competent in Preparation of Herbo- mineral medicines & Therapeutic uses.

#### LEARNING OBJECTIVE

- 1. To acquire the theoretical knowledge & principles related to Rasashastra & Bhaishjya kalpna.
- 2. To know the standard operating procedure for Ayurved dosage forms..
- 3. To develop and modify classical formulations adopting modern technology.
- 4. To know rules & acts related to manufacture Ayurved medicines.
- 5. To identify & knowledge of Modern instruments related to preparation & standardization.

#### LEARNING OUTCOME

Student should be able to:

- 1. Acquire the theoretical knowledge & principles.
- 2. Know the standard operating procedure for Ayurved dosage forms.
- 3. Know standardization parameter for raw drugs & Ayurved dosage forms theoretically & practically.
- 4. Identify & know Modern instruments for preparation & standardization.
- 5. Therapeutic application in Clinical practices like Kayachikitsa, Panchakarma, Streerog- Prasuti Tantra, Kaumarbhritya, Shalyatantra, Shalakyatantra, etc.

#### • COGNITIVE DOMAIN

At the end of the training students should be able to-

- 1. Be a Competent theoretically on ayurvedic Iatrochemistry
- 2. Be a competent knowledge of Formulation, various dosage forms, therapeutic uses of formulations, standardization, Modern instruments.

#### • PSYCHOMOTOR DOMAIN

At the end of the training students should be able to-

- 1. Identify various minerals & metals on Ayurved parameter.
- 2. Demonstration & Standardization of ayurvedic dosage forms as per Ayurved Pharmacopeia of India & WHO guidelines.
- 3. Preparation of different dosage forms as per Ayurved formulary of India.Minimum 60 practicals to be performed.
- 4. Educational visits to minimum 3 (three) GMP approved Ayurvedic pharmacies.
- 5. Preparation of projects

#### • AFFECTIVE DOMAIN

At the end of the training students should be able to-

- 1. Utilize Rasashastra & Bhaishjya kalpna formulation & therapeutic uses in clinical practices.
- 2. To comprehend the acquaintance of identification, Manufacturing & Standardization of Ayurvedic Formulations.
- 3. Utilize scientific methods for new inventions in Rasashastra & Bhaishjya kalpna.
- 4. Be a competent Ayurvedic physician to treat patient.

# Paper 1: Rasashastra

# First Term 50 marks

# Part A

Sr. No	No of Lectures	Description	No of Lectures (Hrs)	Weightage (Marks)
1.	History of Rasashastra Raseshwar Darshana	Definition and etymology of Rasa, History of Rasashastra, Importance of Rasaushadhi, Concept of Rasa-Rasayana, Concept of Raseshwar Darshana. Concept of Rasashala and Rasamandap.	2	5
2.	<u>Paribhasha</u>	Brief Description and Application of Technical terminologies (Paribhasha): Avapa, Nirvapa, Dhalana, Bhavana, Jarana, Murchana, Shodhana, Marana, Amrutikarana, Lohitikarana, MrutaLoha, SatwaPatana, Druti, Apunarbhava, Niruttha, Rekhapurna, Varitara.	2	6
3.	Paribhasha of dravya	DravyaVarga: Amlavarga, Panchamrittika, Panchagavya, Panchamrita, Ksharashtaka, Dravakagana, Mitrapanchaka, Raktavarga, Lavanapanchaka.	2	6
4.	Yantra	Brief description of Yantras and their application UlukhalaYantra, KhalwaYantra, KachhapaYantra, DamaruYantra - VidhyadharaYantra- Urdhwapatan, Addhapatan&TiryakpatanaYantra, JaranarthaTulayantra, Dolayantra, Patalayantra, PalikaYantra, BalukaYantra, BhudharaYantra, SthaliYantra, SwedanaYantra.	4	15
5.	Musha	Brief description & application of Musha (Crucible): SamanyaMusha, Gostanimusha, VajraMusha, Mahamusha, Yoga musha, VrintakaMusha, Malla / Pakwamusha. Different types of crucibles e.g. Silica crucible, platinum crucible, Mudra and SandhiBandhana.	3	10
6.	Koshti	OBrief description & applications of Chullika, SatwapatanaKoshthi, PatalaKosthi, GaraKoshthi, Angarakoshthi and knowledge of various heating appliances viz. Gas stove, Hot plate, Heating mantle, Induction Stove, Hot Air Oven, Blower.	3	5
7.	Puta	Concept, definition and types of Puta: Suryaputa, Chandraputa, Gomayaputa, Lawakaputa, Kukkutaputa, Kapotaputa, Varahaputa, Gajaputa, Mahaputa, Kumbhaputa, Valukaputa, Bhudharaputa, Applications of Electric muffle furnace and fuel (diesel) dependent furnace. Brief introduction to thermocouple and pyrometer.	4	15
8.	Parada	Parada: Synonyms, Knowledge Occurrence, natural and artificial sources of Parada, Hingulottha parada, Types of Parada, Parada Dosha: Naisargika, Yougika, Aupadhika	12	20

Sr. No	No of Lectures	Description	No of Lectures (Hrs)	Weightage (Marks)
		(Kanchuka). Grahya-Agrahya Parada, Paradagati, Paradabandha, Shodhana of Parada. Paradasanskara and brief description of Ashtasamskara.		
9.	Rasa vignaniyam	Concept of Murchhana and Jarana of Parada, Preparation of Kajjali, Classification of Rasaushadhi: Khalvi rasa e.g. TribhuvanaKeerti Rasa, Parpati Rasa- Rasa Parpati, Kupipakva Rasa- Rasa sindur, Pottali rasa - Hemagarbhapottali. Rasa sevanavidhi and pathya and apathya	13	20
10	standardization and GMP of Rasaoushadhies.	Brief introduction of quality control, standardization and GMP of Rasaoushadhies.	5	15
Part F	2	Second Term		50Mark
1	Maharasa	Occurrence, Synonyms, Minerological identification, Sources, Types, Grahya and Agrahyata, Shodhana, Marana and other processing techniques. Properties, dose, anupan and therapeutic uses, pathya – apathya and ashuddha, apakwa and avidheesevanjanya dosha and its management, important formulations of the following:  1. Maharasa – Abhraka (Biotite Mica), Vaikrantha, Makshika (Chalco-pyrite), Vimala (Iron Pyrite), Shilajatu, Sasyaka (Peacock ore), Chapala and Rasaka (Sphalerite)	6	15
2	Uparasa	Uparasa – Gandhaka (Sulfur), Gairika (Red Ochre), Kasisa (Green Vitriol), Kankshi (Alum), Haratala (Orpiment), Manahshila (Realgar), Anjana and Kankustha.	6	15
3	Sadharana Rasa	Sadharana Rasa – Kampillaka, Gauripashana (Arsenic oxide), Navasadara (Ammonium chloride), Kaparda (Cowry), Agnijara, GiriSindura (Red oxide of Hg), Hingula (Red Cinnabar) and Mriddarashringa (Litharge)	6	15
4	Dhatu	Dhatu -Swarna (Gold), Rajata (Silver), Tamra (Copper), Loha (Iron), Vanga (Tin), Naga (Lead), Yashada (Zinc), Kamsya (Bronze), Pittala (Brass), Vartaloha. Dhatu - grahasambandha.	6	20
5	Ratna	Ratna - Manikya (Ruby), Mukta (Pearl), Pravala (Coral), Tarkshya (Emerald), Pushparaga (Topaz), Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamone stone), Vaidurya (Cats eye). Ratnapariksha, Ratnadosha, Ratnagrahasambandha.	4	15
6	Uparatna	Uparatna- Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis lazuli), Perojaka (Turquise),	2	5

Sr. No	No of Lectures	Description	No of Lectures (Hrs)	Weightage (Marks)
		Sphatikamani (Quartz), Trinakanta, Palanka, Putika, Rudhir.	· /	
7	Sudhavarga	Sudhavarga – Sudha (Lime stone), Kaparda (Cowries), Shukti (Oyster Shell), ShankhConch Shell), Mrigashringa (Stag horn), Khatika, Godanti(Gypsum) and Samudraphena (Cattle Fish bone), Kukkutandatwak (Hen's Egg Shell).	3	15
8	Sikatavarga	Sikatavarga - Sikata (Silica), Dugdhapashana (Talc), Nagapashana / Jaharmohara (Serpentine), Badarshama (silicate of lime), Vyomashma (Sangeyashab - Jade), Kousheyashma (Asbestos) and Akika (Agate).	2	3
9	Ksharavarga	Ksharavarga - Sarjakshara (Sodium bicarbonate), Yavakshara, Tankanakshara (Borax), Surya Kshara (Potassium Nitrate).	2	3
10	Miscellaneous	Miscellaneous- Mandura, Bola, Dam-ul Akhawayan (Raktabandhini), Kasturi, Bhoonag, Mayurpiccha, Sarjarasa, Madhoocchishta, Updhatu.	1	3
11	Visha and Upavisha	Visha and Upavisha-Introduction, collection and storage, classification, synonyms, shodhana, antidote, therapeutic and toxic doses, anupan, therapeutic uses, and formulations of following Visha and Upavisha-Vatsanabha, Kuchala, Jayapala, Dhattura, Bhanga, Bhallataka, Gunja, Arka, Snuhi. Langali, Karaveera, Ahiphena and Chitrakmool.	3	15
12	Aushadhi Yoga Gyanam	Aushadhi Yoga Gyanam- ingredients, manufacturing process, and bheshajprayogvidhi. ArogyaVardhiniGutika, Kasturibhairava Rasa, Kumara Kalyana Rasa, Garbhapala Rasa, ChandraprabhaVati, Chandramrita Rasa, Pratapalankeshwara Rasa, Pravalapanchamrita Rasa, Anandbhairava Rasa, Yogendra Rasa, Laxmivilas Rasa, Vasanta kusumakara, Vasantamalati Rasa, BrihatVataChintamani Rasa, Shankhavati, Shwaskuthara Rasa, Hinguleswara Rasa, Hemagarbha pottali, Hridyarnava Rasa, Swarnavanga, Makaradhwaja, PutapakwavaishamJwarantakaLoha, Vatvidhvamsan Rasa, Kamadugha Rasa, Laghusutshekhar Rasa, NavayasaLoha, Saptamrita Loha, TamraParpati, Panchamrita Parpati, SvetaParpati.	7	20
13	pharamcovigilance	Introduction to pharamcovigilance and its status in India, with reference to Ayurvedicdrugs	2	5
		Total Hrs	50	

# **Rasashastra Practicals**

100 Marks

**Minimum Thirty Practicals to be performed (Minimum one from each group)** 

Group No.	Name of Group	Name of the Practical
1	Rasa [Parada]	SamanyaShodhana of Parada Kajjali
2	Maharasavarga	Shodhana of Abhraka
		Dhanyabhrakanirmana
		Shodhana of Makshika
		Shodhana of Shilajatu
		Shodhana of Sasyaka,
		Shodhana of Rasak
3	Uparasavarga	Shodhana of Gandhaka
		Shodhana of Gairika
		Shodhana of Kasisa
		Shodhana of Kankshi
		Shodhana of Haratala
		Rasa manikyanirman Shodana of Manashila
4	Sadharana raga yarga	
7	Sadharana rasa varga	Shodhana of Hingula
		Shodhana of Navasadar
		Shodhana of Kapardika
		Shodhana of Kampillak
5	SudhaVarga	Shodhana of Shankha
		Shodhana of Shukti
		Shodhana of Pravalamula
		Shodhana of Godanti
6	Dhatuvarga	SamanyaShodhana of Lauha
	Diatavarga	SamanyaShodhana of Tamra
		Vishesh Shodhana of Tamra
		Shodhana of Naga
		Shodhana of Vanga
		Shodhana of Yashada
7	KsharaVarga	Shodhana of Tankana
8	Parpati	Preparation of Rasaparpati
	_	Bola Parpati
		Swetaparpati
9	Vishavarga	Shodhana of Vatsanabha
	v Isliavai ga	
		Bhallataka Shodhana
		Kupilu Shodhana
		Dhatturabeeja Shodhana

	Jayapala Shodhana
	Gunja Shodhana
	Chitrakamoola Shodhana

#### Minimum 11 PRACTICAL FOR DEMONSTRATION / GROUP PRACTICALS

- 1. Hinguladrasakrishti (Hingulottha Parada).
- **2.**Bhasma: 4 (One from each group)
- i. Abhrakabhasma, SwarnaMakshikabhasma, Tamrabhasma ii.Vangabhasma, Naga bhasma, Yashadabhasma iii.Mandurabhasma, Kasisabhasma iv.Shankhabhasma, Kapardikabhasma, Godantibhasma.
- **3.**Pishti :(Minimum 0ne)1 Pravalapishti, Jaharmohara / Akikapishti, Trina kanthamanipishti, Muktapishti.
- 4.Druti: 1 Gandhakadruti.
- 5. Formulations 4 (one from each group)i.Rasasindura, Swarnavanga, Sameer pannaga rasa
- ii. Saptamrutalauha, Punarnavamandura, Navayasalauha
- iii. Agnitundivati, Tribhuvanakirti rasa, Sootshekhara rasa, Laghusutashekhara Rasa iv.Arogyavardhinivati, Laghumalinivasanta rasa, Hinguleshwar rasa, Anandbhairav rasa, Rajapravartinivati

# Paper 2: Bhaishajya kalpana

# First Term 50 marks

# Part A

Sr. No	Topics	Description	No of Lectures (Hrs)	Weightage (Marks)
1.	History of Bhaishajya kalpana	History and Chronological (kramikavikasa) development of Bhaishajyakalpana. Concept of Aushadha and Bheshaja.	3	5
2.	Fundamental principles of BhaishajyaKalpana	Fundamental principles of BhaishajyaKalpana	3	15
3.	Maana' (Units of measurement),	Study of Ancient and Contemporary systems of 'Maana' (Units of measurement), Shushka -ardra –drava-dravyagrahanniyam (Rules of measures of dry, fresh, liquid drugs); Grahyagrahyatva, Nava Purandravyagrahanniyam.	3	10
4.	preservation of Aushadhidravya. Concept of Saviryatavadhi (shelf life)	Guidelines and Methods of collection, storage, preservation of Aushadhidravya. Concept of Saviryatavadhi (shelf life) and stability in ancient and contemporary science.	3	10
5.	Bheshajprayogavidhi (Posology).	Bheshajprayogavidhi :AushadhaMatra, Anupana and sahapan and Aushadhsevankaala. (Posology).	3	10
6.	Panchavidhakashaya kalpana and Upakalpana	Panchavidhakashayakalpana and Other kalpana: Kashaya Yoni, Swarasa, Kalka, Kwatha, Hima and Phanta, Pramathya, Aushadha siddha paniya, Tandulodaka, Laksha rasa, Mantha, Panaka, Arka, Churna, Rasakriya, Ghana, Phanita, Avaleha, Prasha, Gudapaka, Sharkara, Syrups, Ksheerapaka, Satva, Guggulu kalpana, Vati, Guti, Pinda, Modaka, Varti Preparation of Tablets, pills, capsule and Suppositories. Masikalpana, Lavanakalpana, Ksharakalpana and Kshara sutra	14	30
7.	Instruments/ Equipments	Introduction and general knowledge of useful instruments/ Equipments - Disintegrator, Mixer, Grinder, End Runner, Edge Runner, Sieve-Shaker, Granulator, Tableting machine, Pill making machines, coating and polishing pan, capsule filling machine, sieves and mesh.	6	10

Sr. No	Topics	Description	No of Lectures (Hrs)	Weightage (Marks)
8.	Snehakalpana	Snehakalpana: Sneha yoni, Types of Sneha, Snehamurchanavidhi, Snehapakavidhi, patrapaka, types and their use. Sneha siddhi lakshana, dose, Preparation and uses of Triphala Ghrita, Bramhighrita, Narayanataila, Anutaila.	6	15
9.	Sandhana Kalpana	Sandhana Kalpana and its types: MadyaKalpana, Asava, Arishta, Sura (Prasanna -Kadambari - Medaka - Jagala - Bakkasa), Maireya, Surasava, Shukta, Kanjika, Sauviraka, Tushodaka, Sidhukalpana their methods of preparation, siddhi lakshana, properties, uses, doses. Takrarishta, Draksharishta, Ashokarishta, Dashamoolarishta, Kumaryasava, Chandanasava.	5	15
10.	Kritanna and Aushadhisiddhaanna Kalpana	Kritanna and Aushadhisiddhaanna Kalpana: : Definition of Kritanna, Concept of Pathya and Apathya, Yavagu—typesof yavagu, Manda, Peya, Vilepi, Anna, Bhakta, Odan, Yushtypes, Krishara, Mansa rasa, Vesavara, KhadKamblika, Raga, Shadava, Dadhi and TakraVarga-Takra, Udasvita, Katvar, Mathita, Chhachika.	4	15
		Total Hrs	50	

# Second Term Part B 50 marks

1	Bahyopachararthakalpana	Bahyopachararthakalpana (External	7	
		Applications)-Lepa -Types of Lepa,		
		methods of preparation and mode of		
		application. Udvartan and Avachurnan,		
		Method of preparation of SikthaTaila,		
		Malahara -SarjarasaMalahara,		20
		GandhakMalahara, Upanaha,		
		Atasiupanaha,Shatadhouta and		
		SahastradhoutaGhrita. Brief introduction		
		of semi solid dosage formsOintments,		
		Creams, Emulsions, Gels, Lotions.		
2	2.1 Netraupacharartha	Principles and precautions for preparation	5	
	kalpana	of formulations of		15
		Netraupachararthakalpana (Opthalmic		15
		preparations) – Seka, Drava, Pindi, Anjana		

Sr. No	Topics	Description	No of Lectures (Hrs)	Weightage (Marks)
		- Ashchyotana - Tarpana - Putapaka and Vidalaka, Methods of preparation of eye drops, eye ointments.		
	2.2 Nasyopachararth Kalpana	Principles and precautions for preparation of formulations Of Nasyopachararth Kalpana - Classification of Nasya, Navana, Avapidana, Pradhaman, Marsha and Pratimarshanasya.	5	15
	2.3 dhumpaan	Principles and precautions for preparation of formulations of Classification of dhumpaan, Method of preparation of dhumvarti and it's therapeutic uses.  Dhupan: Vranadhupan, arshodhupan.	4	10
	2.4 Gandoosha - Kavala	Principles and precautions for preparation of formulations of Gandoosha - Kavala - Pratisaran, Tooth paste, Tooth powders and Mouth wash.	3	5
	2.5 Bastikalpana	Principles and precautions for preparation of formulations of Bastikalpana classification, Method of preparation of Niruha and Anuvasana, Basti Therapeutic properties and uses of Basti.	4	15
3		Brief knowledge of Standardization of Ayurvedic formulations- Kasthaushadhi.	2	5
4		Brief introduction of Drug and Cosmetics Act 1940 and Rules 1945	4	15
5		Concept of, AushadhiNirmanshala, with respect to Good Manufacturing Practices (GMP) in accordance to Schedule	6	15
		Total Hrs 51		

# Following practicals to be performed- (Minimum one from each category)

Method of preparation, therapeutic uses, dose and anupana of the following

Grou p No.	Name of Group	Name of the Practical
1	Swarasa	Ardrakaswarasa
		Tulasiswarasa
		KumariSwarasa
		Vasa putapakaswarasa
2	Kalka	Nimbakalka
		Rasonakalka
3	Kwatha	Punarnavasthakakwatha
		RasnaSapthakakwatha
		Triphala kwath
4	Hima	Dhanyakahima
		Sarivadi hima
5	Phanta	Panchakolaphanta
		Yastimadhu Phanta
6	Pramathya	Mustadipramathya
7	Mantha	Kharjuradimantha
8	Aushadh siddha paniya	Shadangapaniya
9	Laksha Rasa	
10	Arka	Yavaniarka
		Gulabarka
		Misreyaarka
11	Sharkara	Banapshasharkara
		Nimbusarkara
12	Churna	SitopaladiChurna
		Hinguwashtaka Churna
		Talisadi Churna
		Lavanbhaskar
13	Gutika	ChitrakadiGutika
		SanjivaniVati
		Lavangadi Vati
		Lashunadi Vati
14	Guggulu	Triphala Guggulu
		KaishoraGuggulu
		Sihnad Guggulu
15	Avaleha	Chyavanaprashavaleha
		Vasavaleha
		VyaghriHaritakiavaleha
		Manibadraavaleha

		Kushmandavleha
16	Rasa kriya -	Darvi Rasakriya
		Guduchi Ghana
		Kutaja Ghana
17	Khanda	Haridrakhanda
		Narikelakhanda,.
		Sowbhagyashuntipaka
		Shatavari Kalpa
18	Satva	Amrutasatva
	Varti	Phalavarti
		Chandrodayavarthi
19	Lavana	Arkal avana
		Narikelalavana
20	Masi	Triphalamasi
		MayurpicchaMasi
21	Ksheerapaka	Arjunaksheerapaka
		Rasonaksheerapaka
		ShunthiKsheerpaka
22	Kshara	Apamargakshara
		Snuhikshara
		Yavakshar
		Ksharasutra
23	Kritanna Varga	Manda
		Peya
		Vilepi
		Yavagu
		Krishra
		Vesavara
24	Yusha	Mudgayusha
		Saptamushtikayusha
25	Aristha	Kutajarishta
		Takrarishta
26	Asava	Kumaryasava
		Draksharishta
		Ashokarishta
		Kanakasava
27	Suktakalpana	Kanji
28	Udaka	Tandulodaka
29	Upanaha	AtasiUpanaha
30	SikthaTailaNirmaan	
31	Malahara	Sarjarasamalahara,
		Gandakamalahara
		Cream

		Emulsion
32	SnehaKalpana – Sneha Murchhana	GhritaMurchana
		TailaMoorchhana
33	Ghritakalpana:	Jatyadighrita
		Triphalaghrita
		ksheerashatphalaghrita
34	Taila kalpana-	Panchaguna taila
		Arka <b>t</b> aila
		Balataila
		Jatyaditaila
		Nimb Tail
35	Tailapatana	Bhallatakatailapatana,
		Jayapalatailapatana
36	Shodhana	Guggulu
		Hingu

### Visit of minimum three GMP approved Ayurvedic manufacturing units

Pharmacy visit report should include following points.

- 1. Name
- 2. Address
- **3.** Date of Visit
- 4. Area
- 5. Number of employee
- 6. Drugs –
- 7. Turnover
- 8. Sections
  - i. Raw material
  - ii. Pharmcognosy Unit
  - iii. Grinding Unit
  - iv. Tablet Making/ Capsule/ granulating unit
  - v. Taila/ Ghruta/ Kwatha/ Syrup/Asava-Arishta/Avaleha
  - vi. Quality control
  - vii. Packaging Unit
  - viii. Finished product s storage
    - ix. Dispatch Unit

### **University Practical Examination Pattern**

Spotting	Rasa Practical	Bhaishjya Practical	Viva	Journal	Formulations*	Total marks
20	25 Marks	25 Marks	50	20 marks	20 Marks	160
marks			marks			Marks

<sup>\*</sup>Indicate two formulations one formulation from Rasashastra and one from BhaishjyaKalpana

#### Drug Formulation Report should include following points.

- I. Importance of Title,
- II. Ingredients,
- III. Equipments,
- IV. method of preparation,
- V. modification if any,
- VI. uses with pharmacological action,
- VII. precaution, any observations,
- VIII. conclusions,
  - IX. textual reference with short bibliography,
  - X. in process photographs.

#### Internal Assessment Practical Examination Pattern

Spotting	Rasa Practical	Bhaishajya Kalpana Practical	Viva OSPE Structured- Oral	Journal	Total marks
10 marks	15 Marks	15 Marks	30 marks	10 marks	80 marks

# **Reference Books:**

Sr No	Book Name Author Publication		Publication	Edition
1)	Adyatan Rasa Shastra	R.K. Goyal	Chaukhamba Surbharati publication, varanasi	1 <sup>st</sup> edition 1988
2)	Abhinav Rasa Shastra	VaidyaSomadev Sharma		
3)	AsavaArishtaVigyanam	Dr. Pakshdhar Jha	Chaukhamba Bharati Academy, varanasi	3 <sup>rd</sup> edition 1997
4)	Ayurvediya Rasa Shastra (Sachitra)	Chandrabhusan Jha	Chaukhamba Surbharati publication, varanasi	Reprint 2000
5)	Ayurvediya RasaShastra	BadrinarayanPandey	Chaukhamba Surbharati publication, varanasi	3 <sup>rd</sup> edition 1995
6)	Rasa Bhaishajya Paribhasa	SureshanandaThapaliyal		
7)	Ayurvediya Rasa Shastra	Prof. Siddhi Nandan Mishra	Chaukhamba Orientalia publication, varanasi	12 <sup>th</sup> edition 2002
8)	AyurvedPrakash	VaidyaGulraj Sharma Mishra	Chaukhamba Bharati Academy, varanasi	Reprint 1999
9)	Drugs and Cosmetic Act – 1940	TTISHIU	ricademy, varanasi	
10		Dr. IndradevTripathi	Chaukhamba Sanskrit Sansthan, varanasi	2 <sup>nd</sup> edition 1983
11	The Paka-darpana of King Nala	Dr. Madhulika critical study		
12	ParadaVigyaniyam	Vasudev M. Dwivedi	Sharma Ayurved Mandir,	3 <sup>Rd</sup> Edition 1997
13	PratyakshaAushadhNirmanam	AcharyaVishwanathDwiv dei		
14	BhaishjyakalpanaVigyanam	Dr. Agnihotri	Chaukhamba publication, varanasi	Reprint 1999
15	Rasa Tarangini	Aacharya Sadanand Sharma	Motilal Banarasidas ,Varanasi	Reprint 2000
16	Rasa Darpan	Prof. Bhajan Das Swami	Nath Pustak Bhandar, rohtak	3 <sup>Rd</sup> Edition 1998
17	Rasa Bindu	Dr. Sanjay Sharma	Nath Pustak Bhandar, rohtak	1 <sup>st</sup> Edition 1978
18	Rasa Bhaishajya KalpanaVigyan	Vaidya Santosh Kumar Khandal	Publication Scheme, Jaipur	7 <sup>th</sup> Edition 2014
19	Rasa Mitra	Dr. TryambakNath Sharma		
20)	Rasa RatnaSamuchchaya (Hindi)	DattattreyaAnantaKulkarn i.	Meherchand Lachhamanchand publication, New Delhi	Reprint 1998
21	Rasaratnasamuchchaya	Ambikadattashastri		
22	Rasaratnasamuchchaya	Damodar Joshi		
23	Rasa Shastra Prayogiki	Srivastava, Yadav and Prof. Ramesh Saxena		
24	Rasamritam	VaidyaYadavjiTirkramjiA charya	Chaukhamba Sanskrit Sansthan, varanasi	Reprint 2007

25)	Rasayan Sara	VaidyaShyamSunderachar ya	Krishnadas Academy	6 <sup>th</sup> Edition 1997
		Vaishya		
26]	RasendraSampradaya	VaidyaHajariLalSukul		
27)	Rasendra Sara Sangraha	VaidyaGopal Krishna Bhatt (narendranath mishra)	Motilal Banarasidas	Reprint 1999
28)	VaidyakParibhashaPradeep (Hindi Translation)	Dr. IndradevTripathi		
29]	SharangadharaSamhita	Dr. RadhakrishnaParashar		
30)	BharatiyaBhaishajyaKalpanaVigy ana	GananathVishwanathDwi vedi		
31)	BhaishajyaKalpanaVijnanam	Dr. K Ramachandra Reddy	Chaukhamba Sanskrit Bhavan, varanasi	3 <sup>Rd</sup> Edition 2004
32)	Rasa Shastra (English)	Prof. Damodar Joshi	Chaukhamba Orientalia publication, varanasi	Reprint 2013
33)	Rasa RatnaSamuchchaya (English)	Prof. Damodar Joshi		
34]	RasendraChintamani (Hindi)	Aacharya Dhundhuknath (Prof. Siddhinandan Mishra)	Chaukhamba ,Varanasi	1 <sup>st</sup> edition, 2000
35)	Ayurvedic formulary of India	,	Govt. of India, Minnistry of Healt, & Family Welfare, Dept. of Ayush, New Delhi	
36	AyurvedicPharmacopiea of India , CCRAS		Govt. of India, Minnistry of Healt, & Family Welfare, Dept. of Ayush, New Delhi	edition 2008
37)	BhaishjyaKalpanaVigya	Siddhi Nandan Mishra	Chaukhamba Surbharati publication, varanasi	Reprint 2004
38)	Textbook of Rasashasra .	Dr. K Ramachandra Reddy		
39	AshadhayogaVigyanam	Dr. K. Ramachandrareddy		
40]		Dr. K. Ramachndra Reddy		
	(Enlgish Translation)	& Dr. P. Suresh		
41)	VaidyakaParibhashaPradipa	Dr. Indradev Tripathi	Chaukhamba, Varanasi	1 <sup>st</sup> edition, 1982
42]	Relevant parts of Brihatrayee			
43)	Text book of BhaishjyaKalpana -	DrShobha G Hiremath	IBH publication, Bangalore	1 <sup>st</sup> edition, 2000
44)	Text Book of Rasa Shastra	Dr P H C Murthy	Chaukhamba Sanskrit Series, varanasi	1 <sup>st</sup> edition, 2008
45)	Rasa Chandashu	Prof S SSavirkar (CCRAS Publication)		
46)	Yoga Ratnakara	Vd Shri Laxmipati Shastri	Varanasi,Chaukhamba Prakashan	Reprint 2012
47)	Bhaishajya Ratnavali,	Prof Siddhi nanndann Mishra	Chaukhamba, Varanasi	1 <sup>st</sup> edition2005

# TITLE OF THE COURSE : DRAVYAGUNA VIDNYAN (PHARMACOLOGY & MATERIA MEDICA)

COURSE CODE : AA203

MARKS: Theory (Paper I) 100 + (Paper II) 100 = 200 Marks Toatl Marks: 400 Marks

Practical/Viva voce – 200 Marks

#### **GOAL**

• To make knowledgeable students of basic fundamentals of Dravya guna, Medicinal Plants, their identifications, properties, action and therapeutic uses.

#### LEARNING OBJECTIVE

- Knowledge of basic fundamentals of Dravyaguna.
- Knowledge of Medicinal Plants (Herbs), their identifications, properties, action and therapeutic uses.
- Knowledge of basic fundamentals of modern Pharmacology & brief knowledge of pharmacokinetics, pharmacodynamics of modern drugs
- To aware pharmacovigilance.

#### LEARNING OUTCOME- Student should able to -

- Demonstrate basic fundamentals of Dravya guna
- Demonstrate identification of herbal drugs, their properties & therapeutic uses.

#### COGNITIVE DOMAIN

Comprehend the knowledge of Basic Fundamentals of Dravyaguna vidnyan,& various aspects of medicinal plants like their identifications, properties, action and their therapeutic uses .

- Knowledge of quality standard of plant originated drugs for safe use .
- Knowledge of Identification of such medicinal plants which have still controversy with the help of manuscripts.

#### PSYCHOMOTOR DOMAIN

At the end of the training students should be able to-

- 1. Demonstrate and dissect various useful parts of medicinal plants by its macroscopic and microscopic examination
- 2. Analysis of synonyms related to external morphology of medicinal plants
- 3. Demonstrate Classification of crude drugs by its morphological ,microscopically and taxonomical basis
- 4. Field identification of medicinal plants and preparation of herbarium sheets during field visit

- 5. Prepare and deliver seminar on various topics of Dravyaguna vidnyan using audio visual aids.
- 6. Identify various E-leaning resources related to Dravyaguna vidnyan and inculcate them for self learning.

## • AFFECTIVE DOMAIN

At the end of the training students should be able to-

- 1) Application of knowledge of medicinal plants properties in all clinical subjects .
- 2) Competent Ayurvedic pharmacologist
- 3) TO perform the almost possible ethical practice in the society .

PAPE	R I PART -	- <b>A</b>		
S.No.	Topic and Description	No.Of Lectures Hrs	Weightage - Marks	Term
1	Dravyaguna Shastra Paribhasa- Lakshana of Sapta Padartha of Dravyaguna Vidyana viz Dravya- , Rasa-Guna- Virya- Vipaka- Prabhava and Karma	2	5	1 <sup>ST</sup> TERM
2	- Dravya: Etymological derivation, definition, panchbhoutikatwa. Classification of Dravya according to Samhitas and Nighantus Taxonomical classification	6	15	1 <sup>ST</sup> TERM
3	Guna: Etymological derivation, definition and Classification of Guna. Detailed knowledge of Gurvadi Guna & Paradi gunas.	5	15	1 <sup>ST</sup> TERM
4	Rasa: Etymological derivation, definition, Meaning of "Rasa" in various contexts. Shad Rasas (Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik constitution of Rasas, Nirvrittiviseshakrama (manifestation in general and particular), Ritu and shad rasa Rasanurasayoh bheda (Difference between rasa and anurasa), Lakshana (characteristics),Guna and Karma of shad Rasas, Kopana and Shamana of Dosha and dushya by Shad rasas. Effects of excess usage of Rasa,Rasoplabdhi,Rasaskandha	5	15	1 <sup>ST</sup> TERM
5	- Vipaka: Etymological derivation and definition, difference between Avasthapaka and Vipaka, Types of	4	15	1 <sup>ST</sup> TERM

	Vipaka, (Dvividha-Trividha,Panchavidha) Guna and karma of Vipaka. Grades of Vipaka (taratamya), Vipakopalabdhi hetu (Factors to determineVipaka). :			
6	- Veerya: Etymological derivation, definition and Swarupa of Virya, Number of Virya. (Dwividha & Ashtavidha), Panchabhauthikatva Virya karmani (Effects of Virya), General principles in determination of virya along with exceptions	2	15	1 <sup>ST</sup> TERM
7	Prabhava: Definition, Effects of Prabhava Samanapratyayarabdha and Vichitrapratyayarabdha dravyas	2	10	1 <sup>ST</sup> TERM
8	- Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength (balabal nirupana).	2	10	1 <sup>ST</sup> TERM
9	Karma: Lakshana, swaroopa and bheda of karma (Definition, nature and types of action). Explanation of the following Karmas with examples: 1. Deepana 2. Pachana 3. Samshodhana 4. Samshamana 5. Anulomana 6. Sransana 7. Bhedana 8. Rechana 9. Chhedana 10. Lekhana 11. Grahi 12. Sthambhana 13. Madakari 14. Pramathi 15. Abhishyandi 16. Vyavayi 17. Vikashi 18. Rasayana 19. Vajeekarana 20. Jeevaneeya 21. Balya 22. Brimhana 23. Langhana 24. Medhya	5	15	2 <sup>ND</sup> TERM
10	Brief information on Karmas of dashemani gana of Charak Samhita	10	10	2 <sup>ND</sup> TERM

11	- Mishraka Gana: 11a)- Audbhida Gana (Vegetable origin) Brihatpanchamoola, Laghupanchamoola, Vallipanchamoola, Kantakapanchamoola, Trinapanchamoola,Madhyamapanchamoola, Jeevaneeya panchamoola, Panchapallava, Panchavalakala, Triphala, Trikatu,Trimada, Chaturusana, Panchakola, Shadusana, Chaturbeeja, Jeevaniya gana, Ashtavarga, Trijataka, Chaturajataka, Katuchaturjataka Panchatikta, Amlapanchaka, Chaturbhadra,Trikarshika, Swalpatriphala, Madhuratriphala, Mahavisha, Upavisha, Agrya aushadh varga- Knowledge of Agrayaaushadha Varga with example. 11 b)- Jangama Gana (Animal origin)- Ksheerashtaka, Mutrashtaka, Pitta panchaka. 11 c)- Parthiva Gana (Mineral origin) - Lavana Panchaka, Kshara dvaya, Kshara Ashtaka.	4	15	2 <sup>ND</sup> TERM
12	Basis of nomenclature: Basis of nomenclature of dravya, Basis and Derivation of synonyms.	2	5	2 <sup>ND</sup> TERM
13	. Bheashaja Pariksha vidhi (as described in Charaka samhita vimana sthana 8), Dravya Sangrahana (collection of dravya)- Ecology- Classification of desha (geographical area) and bhumi (soil), swarupa of sangrahaniya dravya of (Nature and quality of drug to be collected). Sangrahana vidhi (Method of collection) -Vegetable and Animal origin drugs according to part used. Period of collection according to virya, samrakshana vidhi (preservation of collected dravyas), bheshajagara (Storehouse), study on different prayojyanga (useful plant parts).	4	10	2 <sup>ND</sup> TERM

Paper I Part B

14	14a) Concept of dravya shodhan (purification of dravya).			1 <sup>ST</sup> TERM
	14 b) Brief knowledge of Apamishran	4	10	
	(adulterants)	4	10	
	c) Concept of Abhava pratinidhi dravya (substitutes			
15	Prashasta bheshaja (ideal drug), plant extracts. Concept of			1 <sup>ST</sup> TERM
	viruddha Dravya (incompatibility of the dravya). Anupan	5	10	
	Matra vichar, Aushadha sevan kala			
16	- Introduction to Nighantu Vigyan - Dhanwantari	5	10	
	Nighantu, Bhavaprakashanighantu, Rajanighantu	3	10	
17	Brief knowledge of cultivation, conservation of medicinal	2	5	2 <sup>ND</sup> TERM
	plants and information about endangered species.	2	3	

10				
18	(II) 30 Marks	30	30	
	- Introduction, Definition & scope of Pharmacology and Principles of general Pharmacology. Brief Knowledge about pharmacology of the following - Anaesthetics, CNS depressants, Sedatives, Hypnotics, Tranquilisers, Antipyretics, Analgesics, Antiepileptics, Antihypertensive, Antianginal, Antiplatelet, Hypolipidaemic, Haemopoetic, Coagulants, Bronchodialators, Aerosols/ Inhalants, Expectorants, Digestants, Carminatives, Antacids, Antiulcer, Laxatives, Antidiarrhoeals, Antiemetic, Hepatoprotective, Diuretic, Antidiuretic, Lithotriptic, Antiinflammatory,			1 <sup>ST</sup> TERM UPTO ANTIINFLA METRY
	Hormonal therapy, Antiobesity, Antidiabetic, Antithyroid, Oxytocic. Galactagogues, Contraceptives, Styptics, Antihistamines, Antimicrobial, Antibiotics, Antimalarial, Amoebicidal, Antifilarial, Anthelmentic, Antifungal, Vitamins, Minerals, Water imbalance and IV fluids, Vaccines, antivenom, antirabbies serum, Local anti septics, drugs in ophthalmic practice, Anti cancer drugs			2 <sup>ND</sup> TERM UPTO ANTICANC ER DRUGS
	D W 100 M I			
	Paper II 100 Marks Subject Code- AA203-2 Part A		50	
	Detailed Knowledge of following drugs with respect to Basonym of drug, Main Synonyms, Regional Name, Botanical Name, Family, Classification of Dravya (Gana) as described in Charak and Sushrut, External morphology, Useful parts, Important phytoconstituents, Rasa panchaka, Action on Dosha, Dhatu, Mala, Prayogarha vyadhi (therapeutic indications), Amayikaprayoga and Matra(Therapeutic administration and Dose), Vishishta yoga (names of important formulations), Vishakta Lakshan (adverse effects), Chikitsopachara (remedial measures) and Shodhana (as required [Alphabetical order and Botanical names to all the drugs are to be added]	50	50	

 Agaru	Guggulu	Palasha			1 <sup>ST</sup> TERM
Agnimantha	Haridradvaya	Parpata			Aguru to
	Haritaki	Pashanabheda			Kutaki
Ahiphena Amalaki		Patala			Kutaki
	Hingu Jambu				
Apamarga		Pippali-			
Aragvadha	Jatamansi	Pippalimula			
Ardraka-Sunti	Jatiphal	Prishniparni			
Arjuna	Jeerakadvaya	Punarnava			
Arkadvaya	Jyotishmati	Pushkarmoola			and .
Ashvagandha	Kalamegha	Rasna			2 <sup>nd</sup> term
Asoka	Kampillaka	Rasona			Karpura to
Ativisha	Kanchanara	Rohitaka			Yavani
Bakuchi	Kantakari	Saireyaka			
Baladvayam i	Kapikacchu	Sarivadvaya			
Bhallataka	Karkatakshringi	Sarpagandha			
Bharangi	. Katuki	Shalaparni			
Bhrungaraj	Karpura	Shallaki			
Bibhitakaa	Khadira	Shalmali			
Bijak/ Vijaysar	Kiratatikta	Shatavari			
Kupilu Bilva	Kumari	Shankhapushpi			
Brahmi	Kumkum	Shatavari			
Bruhati	Kesara	Shigru			
Chandanadvaya,	Kupilu	Shirisha			
Chitraka	Kutaja	Shyonaka			
Dadima	Lavanga	Talisa Patra			
Devadaru	Lodhra	Tila			
Dhataki	Madanaphala	Trivrut			
Durva	Mandukaparni.	Tulasi			
Eladvayam	Manjishtha	Tvak			
Eranda	Maricha	Ushira			
Gambhari	Musta	Vacha			
Gokshura	Nagakeshara	Vasa			
Guduchi <b>Dhattur</b>	Nimba	Varahi			
,Dhanyak ,Narikel,	Nirgundi	Varuna			
Kusmand, Karanj	Tiliguilai	Vatsanabha			
Sharpunkha		Vatsanaona Vidari			
Sharpunkha		Vidanga			
		Yastimadhu			
		Yavani			
		i avam			
Part B-			50 marks		
II- Brief Knowledge o					
Sanskrit Name, Botani					
(Samanya Swarupa), P	Parts Used and Indicate				
Agastya	Japa	Padmaka			1 <sup>st</sup> term
Ajamoda	Jati	Palandu			Agastya to
	T 1	וי ת	25	20	Lata kasturi
Akarkarabh	Jayapala	Parasika	25	30	Lata Kastuii
	• •	Parasika Parijata	25	30	Lata Kasturi

(Drugs of Animal Or 1. Kasturi 2. Gorocha					
Jantava Dravya		C	2	10	2 <sup>ND</sup> TERM
IIIIntroduction, Gu	ina, Karma and Use	es of following			
		viuunauaru			
		Vruksnamia Vrudhadaru			
	Nili	Vamsha Vrukshamla			
Isvari	Narikela	Vata			
Ishvaku	Nala	Vatada			
Irimeda	Nagabala	Urana			
Ingudi	Murva	Udumbara			
Indravaruni	Mulaka	Tuvaraka			
Ikshu	Mudgaparni	Teja Patra			
Hrutpatri	Methika	Tavakshira			
Hribera	Meshashrungi	Taruni			
Hinstra	Mayaphala	Talmuli			
Hinsapa	Matulunga	Tailaparni			
Gunja	Mashaparni	Tagara			
Gorakshaganja	Masha	Svarnakshiri			
Gojihva,	Markandika	Sringataka			
Garjara	Mandukaparni	Snuhi			
Gandhaprasarini	Mahanimba	Shati			
Dronapushpi	Madayantika	Shatahwa			
Draksha	Latakasturi	Sharapunkha			
Dhanvayasa	Latakaranja	Shara			
Darbha	Langali	Shala			
Danti	Lajjalu	Sarja			
Chopachini	Kusmanda	Saral			
Chirbilva	Kusha	Saptaparna			
Chavya	Kumuda	Saptachakra			
Changeri	Kulatha	Rohitaka			
Chandrashura	Koshataki	Sarshapa			
Champaka	Kokilaksha	Rajika/			
Chakramarda	Kitmari	Putranjivaka			
Bola	Kharjura	Putiha			
Bijapoora	Kebuka	Puga			
Bhumyamalki	Katphala	Priyangu			
Bakula	Kataka	Priyala			
Badara	Kasni	Prasarani			
Babbula	Kasha	Plaksha			
Avartani	Kasamarda	Pilu			
Avartaki	Karpasa	Patranga			vruddhadaru
Atasi	Karavira	Patola			to
Asthishrunkhala	Karavellak	Patha			Madyantika
Ashvattha	Kankola	Patalagarudi			2 <sup>nd</sup> term
Ashvagol	Kamala	Parushaka			
Aparajita	KakamachI	Parpataka			
Ankola	Kaidarya	Parnayavani			
Amragandhiharidra	Kadamba	Parnabija			

IV- Introductory Knowledge of Following Annapana Varga:			2 <sup>ND</sup> TERM
1. Jala Varga 2. Dugdha Varga 3. Madhu Varga 4. Taila Varga 5. Sukadhanya Varga 6.Shamidhanya Varga 7. Phala Varga 8. Shaka Varga 9. Mansa Varga 10. Aharayogi	4	10	

#### **PRACTICALS**

1.. Study of Macroscopic, Microscopic characters and Demonstration of organoleptic characteristics and grahyaagrahyatva (20 Marks)

Sr.	Part use	Dravya	Term	No. of Hrs
No				
1	Stem	Guduchi, or Asthishrunkhala	1 <sup>st</sup> term	2
2	Leaves	Kumari or Vasa	1 <sup>st</sup> term	2
3	Flower & its part	Japa,or Dhataki	1 <sup>st</sup> term	2
4	Fruits	Marich or Madanphal or Vidang	1 <sup>st</sup> term	2
5	Seed	Kapikachhu or Erand	1 <sup>st</sup> term	2
6	Bark	Kutaj or Arjun or Ashwatha	1 <sup>st</sup> term	2
7	Root	Ashwagandha or Punarnava	2 <sup>nd</sup> term	2
8	Niryas (exudates)	Guggul ,Hingu or Mochras	2 <sup>nd</sup> term	2
9	Jangam dravya	Madhu	2 <sup>nd</sup> term	2
10	Bhaumic	Ardrak or Haridra	2 <sup>nd</sup> term	2
	kand(Rhizome)			

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

## Compilation

Practical pt. No-2	Name of practical
1 <sup>st</sup> term	Identification of Dravyas – Local flora, Herbarium
	Collection, Study Tour in State
2 <sup>nd</sup> term	Completion of Journals and Herbarium Record
	,Compilation

# Practical Exam Pattern for Internal Assessment & University Exam (160 Marks)

Spotting- Raw/	Spotting-			Practical		
Crude	Fresh			Record		Total
Drugs	Drugs	Practical	Viva	&Compilation	Herbarium	marks
20 marks	20 Marks	20 Marks	60 Marks	20 Marks	20	160 Marks
10 spot	10 spot for	One	Includes Internal	10 marks	Fifty	
for	2 marks	Practical	And External	for	Herbarium	
2 marks	Each		Marks Combined	Practical	Sheets	
Each			As Both examiner	Journal &		
			has to take exam	10 marks for		
			together	Compilation		

# Reference book list

Sr No	BOOK NAME	AUTHOR	<b>EDITION</b>	PUBLICATION
1	Abhinav Buti Darpan (Vol.1-2)	Vd Roop Lal Vaishya, KAVIRAJ GANPATI SINGH VERMA	2	Choukhamba Bharati academy
2	Aushadha Vigyna Shastra	Acharya Pt. Vishvanatha Acharya Pt. Vishvanath		
3	. Bedi Vanaspati Kosha Vol 1-6 Prof.:	Ramesh Bedi:i		Kitabghar Prakashan,2006
4	Bhaishajyaguna Vigyana	Dr. Alakhnarayan Singh		
5	Bhav Prakash Nigantu (English) Shreekanthamurti	Shreekanthamurti		
6	Ayurvediya Aushadnkarma Vigyna	Bhav Prakash Nighantu Acharya V.J. Thakur		
7	Bhav Prakash Nighantu	Vd. Krishna Chandra Chunekar commentary),Choukhamb a Sanskrit pratishthan, 2013	2013	chaukhambha Sanskrit pratishthan,
8	. Bhrinad dravyagunadarsha Yogaratnakara	Mahendra Ku.mar Shastri		

Sr No	BOOK NAME	AUTHOR	EDITION	PUBLICATION
9	Classical Uses of	Acharya Priyavrata	1996	chaukhambha
	Medicinal Plants	Sharma	1770	Publication
10	Controversial Medicinal Plants i	Vd. G. Bapa Lal	2005	Choukhamba oriantalia
	Shastra Dalhana	-		oriantana
11	Ka Dravyaguna Ke Kshetra Me	Vd. Shiv Kumar Vyas		
12	Yogadana Dravyaguna Kosha	Acharya Priyavrata Sharma	2012	Choukhamba oriantalia
13	Dravyaguna Sutram	Acharya Priyavrata Sharma		
14	Dravyaguna Vigyana	Dr. Gyanendra Pandey	edition 3, 2005	chaukhambha Publication
15	. Dravyaguna Vigyana(Vol. 1-2)	Acharya Yadavji Tikramji	2015	chaukhambha Publication
16	. Dravyaguna Vigyana	Vd.V.M.Gogate	, 4 <sup>th</sup> edition, 2017	, Vidyarthimitra prakshana
17	. Dravyaguna Vigyana(Vol. 1-5)	Acharya Priyavrata Sharma	2014	Choukhamba Bharati academy
18	Dravyaguna Shastrum	Vaidya G.A. Phadake		
19	Dravyagunavijnana basic Principles	Prof.D.S.Lucas	2 edition (2012)	, chaukhambha visvabharati
20	. Dravyaguna Vijyana	Dr. A.P. Deshpande	2006	, Proficient, Reprint
21	Forgotten Healers (Indian Medicinal Plants)	Dr. Prakash Pranjape	2012	Choukhamba Sanskrit Pratisthan
22	Glossry of Vegetable Drugs in Bhrittrayis	Thakur Balwant Singh, Vd. Krishna Chandra Chunekar	1ST edition (2015)	Chaukhamba Amarbharti Prakashan;
23	Introduction to Dravyaguna Acharya Priyavrata Sharma	Priyavrata Sharma	1 <sup>st</sup> edition, 1976	Chaukhamba
24	Materia Medica	Acharya Ghosh,		popular prakashan
25	. Kriyatamka Aushadi Parichaya Acharya Pt. Vishvanath	Acharya Pt. Vishvanath Dwivedi		
26	Nighantu Adarsh (Vol. 1-2) Vd.	Bapa Lal	edition (2016)	Chaukhambha Bharati Academy;
27	Pharmacological basis of Medical Practice	Goodman & Gillman		
28	. Pharmacology and	Satoskar Bhandarkar & Ainapure	24 edition (20 July	Elsevier Health INR

Sr No	BOOK NAME	AUTHOR	EDITION	PUBLICATION
	Pharmacotherapeut		2015)	
	ics			
29	Prayogatamaka Dravyaguna Vigyana Dr. Maya Ram Uniyal	Dr.Maya Ram Uniyal	1 <sup>st</sup> edition2009	Choukhamba oriantalia Varanasi
30	. Priya nighantu Acharya Priyavrata Sharma CHAUKHAMBA (2004	Acharya Priyavrata Sharma	2004	CHAUKHAMBA
31	Raspanchaka/Drav yaguna Siddhanta	Prof. Shivcharan Dhyani		
32	System of Plant Nomenclature in Ayurveda	Dr. Gyanendra Panday	1 <sup>st</sup> edition1997	ChoukhambasanskritV aranasi
33	Text Book of Pharmaconogy	Trees & Valis	2nd edition, 2005	CBS publisher,
34	Textbook of Dravyaguna;	Dr.K.Nishteswar	2015 edition	Chaukhamba Surbharati Prakashan;
35	. Unani Dravyaguna Vigyana	Vigyana Hakim Daljeet Singh,	2010, 12 <sup>th</sup> edition	Baidyanath publication
36	Useful parts of Charaka, Sushurut, and Vagbhata			
37	Uttarakand Ki Vanaspatiya	Dr. Gyanendra Pandey		
38	. Vanoaushadi Darshika Thakur Balwant Singh	Thakur Balwant Singh		
39	Vanoaushadi Nidarshika	Dr. Ram Sushil Singh		
40	Vedic	Dr. Dinesh Chandra		
41	Vanaspatiyan . Indian Pharmacopeia, 4 volumes	Sharma	, 8 <sup>th</sup> edition	The Indian pharmacopeia commission 2017
42	Database on medicinal plants all the volums	all the volums of CCRAS	2000	CCRAS publication
43	Aurveda formulary of India – all the volums		2003	Gov. Of India
44	. Shodhal Nighantu,	, Gyanedra pandey	1 <sup>st</sup> edition 2009	Choukhamba Krushndas academy
45	. Madanpal Nighantu, khemraj	khemraj shrikrishna das, 2008	2008	,

Sr No	BOOK NAME	AUTHOR	<b>EDITION</b>	PUBLICATION
	shrikrishna das,			
	2008			
	Shaligram			
46	Nighantu,	Das,kshemraj Shrikrishan,	1923	
40	Das,kshemraj	1923	1923	
	Shrikrishan, 1923			
47	. Raj Nighantu,	Satishchandra,	(2012	CHAUKHAMBHA
48	Kaideva Nighantu,		1 <sup>st</sup> edition,	, choukhmba oriantalia
			1979	,
49	Dhanvantari	, Dr Amrit Pal singh	2008	Chaukhamba
.,	Nighantu,	, Di i i i i i i i i i i i i i i i i i i	2000	Orientalia
	Ayurvedic			by
	Pharmacopeia of			PHARMACOPOEIA
	India, Published			COMMISSION FOR
50	by		2016	INDIAN MEDICINE
30	PHARMACOPOE		2010	& HOMOEOPATHY
	IA			GHAZIABAD ,
	IA			Government of India
				Ministry of AYUSH

#### TITLE OF THE COURSE: - ROGA NIDAN AVUM VIKRUTI VIDNYAN

**COURSE CODE: - AA204** 

MARKS: - Theory -Paper I & II (100 marks each) - 200, Practical-100 Total 300 marks

#### **Introduction:**

Ayurveda is a system of medicine in the conservative sense of curing disease and it is also the science of life concerned with prevention and cure of diseases. Hence "Nidan Parivarjana" is the primary step for prevention. The study of Nidan should be precise. Now a day, the life style has changed significantly as compared to the ancient times, this promotes turbulence in physical and mental health. So it is necessary to verify the etiological factors of the various new diseases as compared to the Nidan. Current modalities like lab investigation are confirming the diagnosis.

#### **LEARNING OBJECTIVE:**

- 1. To provide UG students comprehensive Knowledge of principles of Ayurvedic diagnosis at clinical and laboratory.
- 2. Students should gain the knowledge in the subject like unique Ayurvedic ashtavidha examinations in a period of one year.
- 3. To enhance the knowledge acquisition process for UG's in Ayurvedic diagnosis along with modern scientific methods.

#### Goal:

At the end of the course the U.G student will get thorough knowledge of Basic Principles of Roga Nidan and Vikruti Vidnyan along with clinical diagnosis and investigations.

#### **LEARNING OUTCOME:**

#### **COGNITIVE DOMAIN**

- 1. At the end of the course the candidate should acquire a high standard of theoretical knowledge in nidan panchak, rog and rogi pariksha.
- 2. The candidate should also gain adequate and up-to-date knowledge of following topics
  - a. The importance of Dosha Dooshyadi Vigyanam,
  - b. fundamentals of Vikruti Vidnyan
  - c. Rognidan, Pariksha Vidhana.
  - d. Vyadhi Vidnyanam.
  - e. Concept of Ashta Mahagada and importance of Rogamarga
- 3. At the end of the course the candidate should acquire a high standard of theoretical Knowledge in basic pathology, immunology and infectious diseases.

#### **PSYCHOMOTOR DOMAIN**

- 1. Execute the practice of Pareeksha Vidnyan
- 2. Interpret the Diseases of various Srotas
- 3. Demonstrate Upasargajanya Vyadhi (Communicable diseases)
- 4. Perform bedside physical examination and history taking by regular observation of the demonstrations and practice on the patients
- 5. Calibrate various steps involved in performing various laboratory Investigations.

#### **AFFECTIVE DOMAIN**

- 1. Develop communication skills to take the patients into confidence.
- 2. Extrapolate to take the patient into confidence for briefing proper history.
- 3. Valuing high moral and ethical standards while carrying out clinical examination .

#### **COURSE DESCRIPTION**

Term I - PAPER- I	PART A – 5	50 marks				
First Topic - Dosha Dushyadi Vigyana						
Description	No of Lectures	Weightage				
	(Hrs)	(Marks)				
Definition and importance of Roganidana.	1	3				
2. Samanya Nidana and Samanya Lakshana of Dosha	1	3				
Vriddhi, Kshaya and Prakopa.	1	3				
3. Dosha Dhatu Ashraya Ashrayi Bhava.	1	3				
4. Dhatu Kshaya Vriddhi Lakshana.	2	5				
5. Mala Kshaya Vriddhi Lakshana.	2	5				
6. Hetu, Bheda and Lakshana of Agni Dushti.	5	10				
7. Definitions and Samanya Lakshana of Ama.	5	10				
8. Sama and nirama Dosha, Dushya Lakshana.	1	5				
9. Dosha Paka and Dhatu Paka Lakshana.	1	3				
10. Concept, classification, diagnosis and general	2	5				
complications of Avarana.	Δ	3				
11. Doshagati and Rogmarga.	2	5				
12. Detailed study of Srotomoola and Srotodushti Samanya						
and Vishishta Hetu Lakshana of						
all Srotas. Differences between Sroto Dushti and	5	10				
Kha Vaigunya.						

Term II - Second Topic- VyadhiVigyana		
Description	No of Lectures ( Hrs)	Weightage (Marks)
Definition, synonyms and classification of     Vyadhi & Vyadhi Ghatak.	3	10
2. Criteria for nomenclature of Diseases in Ayurveda (Vyadhinamakarana).	1	3
3. Bija, Bija Bhaga and Bija Bhaga Avayava Dushti.	2	3
4. Basic knowledge of Hereditary, Congenital, Acquired, Multifactorial, Traumatic and Environmental disorders.	1	5
5. Introduction to ICD Classification of Diseases of WHO and DSM classification.	1	3
6. Samanyaja and NanatmajaVikara. NidanarthakaraVyadhi, Hetu Sankara, Lingasankara, Vyadhisankara, Vyadhi Awastha.	2	5
7. Dhatu, Updhatu, Mala and Indriya Pradoshaj Vikara.	2	5
8. Concept of AshtaMahagada .	4	10
9. Introduction to Ashta Nindita.	3	10
10.Definition and classification of Vyadhikshamatva.	4	10
11.Ojas – types of Ojo Dushti- Visrimsa- Vyapad & Kshaya & It's Diseases.	4	10
Term II - Third Topic - Basic Pathology		
	T	1
Description	No of Lectures ( Hrs)	
	( Hrs)	(Marks)
Introduction to pathology and its sub-divisions.	( Hrs) 2	
	( Hrs)	(Marks)
<ol> <li>Introduction to pathology and its sub-divisions.</li> <li>Introduction to Cell Injury and Cellular adaptations.</li> <li>Definition and brief description of inflammation –</li> </ol>	( Hrs) 2 1	(Marks) 5 5
<ol> <li>Introduction to pathology and its sub-divisions.</li> <li>Introduction to Cell Injury and Cellular adaptations.</li> <li>Definition and brief description of inflammation – Healing/repair.</li> <li>Definition and brief description of edema – shock –</li> </ol>	( Hrs) 2 1	5 5 3
1. Introduction to pathology and its sub-divisions. 2. Introduction to Cell Injury and Cellular adaptations. 3. Definition and brief description of inflammation – Healing/repair. 4. Definition and brief description of edema – shock – hemorrhage, Thrombosis, embolism, Ischemia and Infarction. 5. Types of Immunity – different types of immune responses in the body – Basic knowledge of auto immune diseases, Acquired	( Hrs) 2 1 1 4	(Marks) 5 5 3
1. Introduction to pathology and its sub-divisions. 2. Introduction to Cell Injury and Cellular adaptations. 3. Definition and brief description of inflammation — Healing/repair. 4. Definition and brief description of edema — shock — hemorrhage, Thrombosis, embolism, Ischemia and Infarction. 5. Types of Immunity — different types of immune responses in the body — Basic knowledge of auto immune diseases, Acquired immune deficiency disease and hypersensitivity. 6. Nomenclature and classification of tumors - difference	( Hrs) 2 1 1 4 3	(Marks) 5 5 3 10
<ol> <li>Introduction to pathology and its sub-divisions.</li> <li>Introduction to Cell Injury and Cellular adaptations.</li> <li>Definition and brief description of inflammation – Healing/repair.</li> <li>Definition and brief description of edema – shock – hemorrhage, Thrombosis, embolism, Ischemia and Infarction.</li> <li>Types of Immunity – different types of immune responses in the body – Basic knowledge of auto immune diseases, Acquired immune deficiency disease and hypersensitivity.</li> <li>Nomenclature and classification of tumors - difference between benign and malignant tumors.</li> <li>Introduction to Nutritional disorders – disorders of macro and</li> </ol>	( Hrs) 2 1 1 4 3	(Marks) 5 5 3 10 5 5
<ol> <li>Introduction to pathology and its sub-divisions.</li> <li>Introduction to Cell Injury and Cellular adaptations.</li> <li>Definition and brief description of inflammation –         Healing/repair.</li> <li>Definition and brief description of edema – shock –         hemorrhage, Thrombosis, embolism, Ischemia and Infarction.</li> <li>Types of Immunity – different types of immune responses in         the body – Basic knowledge of auto immune diseases, Acquired         immune deficiency disease and hypersensitivity.</li> <li>Nomenclature and classification of tumors - difference         between benign and malignant tumors.</li> <li>Introduction to Nutritional disorders – disorders of macro and         micro nutrients.</li> </ol>	( Hrs) 2 1 1 4 3 1 3	(Marks) 5 5 3 10 10 5 10

Term I - PAPER- I PART B – 50 marks					
First Topic - Nidana Panchaka Vigyan  Description	No of Lectures ( Hrs)	Weightage (Marks)			
Difference between Roga and Rogi Pariksha.	2	5			
2. Importance of Nidan Panchaka.	2	10			
3. Hetu - Definition, Synonyms and Classification.	1	5			
4. Purva Rupa – Definition, Synonyms, Samanya and Vishishta Purvarupa.	1	5			
5. Rupa - Definition, Synonyms, Samanya and Pratyatma Lakshana. Difference between Vyadhi and Lakshana	2	5			
6 Upashaya / Anupashaya – Definition, Types and its importance in diagnosis.	2	5			
7. Samprapti – Definition, Synonyms and Type and Samprapti Ghataka.	3	10			
8. Shat Kriyakaala. Relationship between Nidana Panchaka and Shat Kriyakaala	3	10			
9 Upadrava and Udarka.	1	5			
10. ArishtaVigyan – Definition, Types and its importance.	1	3			
11. Sadhyasadhyatwa – Types, their parameters and importance	1	3			
12. General diagnostic principles of AnuktaVyadhi (Ch. Vi. 4).	1	3			
Term II - Second Topic - Pariksha Vigya	ana	l			
Description	No of Lectures ( Hrs)	Weightage (Marks)			
Importance and knowledge of Aptopadeshadi &     Darshanadi Trividha, Chaturvidha, and Shadvidha     Pariksha	2	10			
2. Importance and Knowledge of Ashtasthana Pariksha.	2	10			
3. Importance and Knowledge of Karanadi Dashavidha Parikshya Bhava.	2	10			
4. Importance and Knowledge of Dashavidha Pariksha.	2	10			
5. Basic knowledge of ECG, USG, X Ray,CT Scan,MRI.	2	5			
6. Importance and knowledge of modern case taking performa	2	5			
7. Importance and knowledge of Reflexes, cranial nerve tests, detail joint examination	2	5			

# Term I - PAPER- II PART A - 50 marks

Systematic study of Nidana Panchaka of following diseases (Including Upadrava, Arishta and Sadhyasadhyata).

Description	No of Lectures ( Hrs)	Weightage (Marks)
Diseases of Rasavaha Srotas	( 1115)	
Jwara(Jwarabheda-Ama, Pachyamana and Nirama Jwara, Agantukajwara, Punaravartaka Jwara, Vishama Jwara, Dhatugata Jwara, Charakokta Sannipata Jwara.	4	10
2. General mechanism of Fever, Introduction to the Aetiopathogenesis of Malaria, Typhoid, Dengue fever, Influenza and Chikungunya, <b>Swine flu</b>	2	5
3. Pandu, Amavata, Hridroga, Shotha	4	10
4. Introduction to Anaemia & its Classification, Rheumatic fever, Rheumatoid Arthritis, Hypertension, Angina, Ischaemic Heart Disease, Myocardial Infarction and CCF.	3	10
Diseases of Raktavaha Srotas	<u> </u>	
Kamala - Raktapitta - Vatarakta – Kroshtuksheersha - Shitapitta –  Maha Kushtha – Visarpa – Shwitra and Introduction to Kshudra Kushtha.	6	10
2. Introduction to Hepatomegaly, Spleenomegaly, Leukaemia, Thalessemia, Sickle cell Anaemia, <b>Hepatatitis A and B</b>	2	5
3. Introduction to Urticaria, Psoriasis, Eczema, Pemphigus, <b>Different types of Herpes, Fungal infections</b>	6	10
Description	No of Lectures ( Hrs)	Weightage (Marks)
Diseases of Mamsavaha Srotas	Τ	1
1. Galganda	1	3
2. Introduction to Thyroid disorders	1	5

Diseases of Medovaha Srotas			
1. Sthoulya - Karshya – Prameha.	_		
	3	10	
2. Introduction to Obesity and Diabetes Mellitus.	2	5	
Diseases of Asthi – Majjavaha Srotas			
1. Vatavyadhi - Akshepaka - Apatanaka - Ardita - Pakshaghata —			
Gridhrasi –Vishwachi, Avabahuka, - Manyasthambha	6	15	
,Katigraha,Pangutwa			
2. Sandhigatavata, Asthi-Majjagata vata.	2	10	
3. Introduction to Osteo- Arthritis, Osteoporosis.	2	5	
4. Introduction to Parkinson's disease, Stroke, Lumbago- Sciatica	2	10	
syndrome, Bell's Palsy, Cervical- Lumber & Ankylosing Spondylitis,			
Psoriatic Arthropathy			
Diseases of Shukravaha Srotas			
1. Introduction to Klaibya and Vandhyatva.	1	10	
2. Introduction to male and female infertility.	2	5	
Term II PAPER- II	PART B – 50 marks		
Systematic study of Nidana Panchaka of following diseases (Includand Sadhyasadhyata).	ing Upadrav	a, Arishta	
Description	No of	Weightage	
•	Lectures	(Marks)	
	(Hrs)		
Diseases of Pranavaha Srotas	-		
1. Kasa - Shwasa - Hikka — Urahkshata — Shosha — Rajayakshma.			
i de la companya de	3	10	
2. Introduction to the aetiopathogenesis of Pneumonia, Pleural	3	10	
2. Introduction to the aetiopathogenesis of Pneumonia, Pleural effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.	2		
effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.	2 3		
	2 3		
effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.	2 3		
effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.  Diseases of Annavaha- PureeshavahaSrota	2 3		
effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.  Diseases of Annavaha- PureeshavahaSrota  1. Agnimandya - Ajirna - Aruchi- Chhardi - Amlapitta- Shoola –	2 3 ss	5	
Diseases of Annavaha- PureeshavahaSrota  1. Agnimandya - Ajirna - Aruchi- Chhardi - Amlapitta- Shoola — Parinama Shoola — AnnadravaShoola- Atisara — Pravahika - Grahani —Gulma- Udara Roga.  2. Introduction to Anaha, Adhmana, Atopa, Visuchika Alasaka,	2 3 ss	5	
Diseases of Annavaha- PureeshavahaSrota  1. Agnimandya - Ajirna - Aruchi- Chhardi - Amlapitta- Shoola — Parinama Shoola — AnnadravaShoola- Atisara — Pravahika - Grahani —Gulma- Udara Roga.  2. Introduction to Anaha, Adhmana, Atopa, Visuchika Alasaka, Vilambika.	2 3 ss	10	
Diseases of Annavaha- PureeshavahaSrota  1. Agnimandya - Ajirna - Aruchi- Chhardi - Amlapitta- Shoola — Parinama Shoola — AnnadravaShoola- Atisara — Pravahika - Grahani —Gulma- Udara Roga.  2. Introduction to Anaha, Adhmana, Atopa, Visuchika Alasaka,	2 3 ss	10	

Description	No of Lectures ( Hrs)	Weightage (Marks)
Diseases of Udakavaha Srotas	(/	-
1. Introduction to Trishna, Daha.	2	5
2. Introduction to water and electrolyte imbalance disorders.	2	5
Diseases of Mutravaha Srotas		
1. Mutrakrichha – Mutraghata.	2	10
2. Introduction to Urinary Tract Infection, Nephropathies,	2	5
3. Introduction and knowledge of Different types of Renal	2	5
stone		
Diseases of Manovaha Srotas		1
1.Apasmara, Unmada, Atatwabhinivesha-Vishada, Anidra, Mada, Murchha, Sanyasa.	3	10
2. Introduction to Epilepsy, Depression, Anxiety neurosis.	2	5
Upasargajanya Vyadhi (Communicable dis	eases)	
1 Romantika – Masurika – Upadamsha – Phiranga.	3	5
2 Introduction to Measels, Chickenpox, Leprosy, Tuberculosis and AIDS.	2	10
Krimi Vigyana		•
1. Definition, classification of Krimi and features of Krimiroga	3	10
2. Snayuka, Shleepada	1	5
3. Introduction of Filariasis and classification of common parasites.	1	5

# PRACTICAL IN ROGNIDAN AVUM VIKRUTI VIDNYAN

**MARKS: 100** 

LIST OF EXPERIMENT:- Term I

Sr. No	Topics	Description	Weightage
			(Marks)
1.	Fundamental Principles of Laboratory Tests	Introduction to laboratory, Sterilization, glass wares, solutions reagents and safety procedures, Disposal of biomedical wastes.	5
2.	Haematology	Haemoglobin estimation.  2 Blood cells counting - WBC, RBC, platelets.  3 Hematocrit /Packed cell volume (PCV).  4 Erythrocyte indices - MCV, MCH, MCHC.  5 Peripheral blood smear, staining technique	40

Sr. No	Topics	Description	Weightage (Marks)
		and differential leucocyte count.	,
		6 Peripheral blood film examination in Anemia,	
		Leukemia, Malaria, Filaria (Demonstration).	
		7 ESR.	
		8 Screening test for bleeding disorders-	
		bleeding time (BT), Clotting time (CT),	
		Demonstration of Prothrombin time (PT).	
		9 Blood grouping - ABO system, Rh typing	
		(Rhesus system).	
3.	Urine Examination	1. Ayurveda anusara mutrapariksha.	
		2. Physical Examination - Volume, Reaction	
		(Ph) & Specific Gravity.	
		3. Chemical Examination for - Proteins,	20
		Glucose, Phosphate, Ketone, Bile salts, Bile	20
		pigment.	
		4. Dipstick examination	
		5. Demonstration of Microscopic Examination	
4.	Stool Examination	1 Ayurveda anusara purishapariksha.	
		2 Physical examination, Sama-Nirama	
		Pariksha.	10
		3 Microscopic examination of ova & cyst	10
		(Demonstration)	
		4 Occult Blood Test.	
	1	Term II	
5.	Demonstration of	1 Ayurveda anusara sthivanapariksha.	
	Sputum Examination	2 Physical, Chemical and Microscopic	
		Examination of the sputum.	5
		3 Sample collection and Demonstration of	
		AFB.	
6.	Demonstration of	1 Ayurveda anusara Retaspariksha.	5
	Semen examination	2 Semen examination	J
7.	Biochemical	Blood Glucose, Serum Bilirubin, Blood Urea,	
	Examination –	Lipid Profile, Serum Creatinine, Serum Uric	5
	(Demonstration)	acid	J
		etc.	
8.	Demonstration of diffe	rent staining techniques in microbiology	5
9.	Demonstration of Sero	-immunological Investigations: RA and Widal.	5

**Laboratory record** – maintenance of laboratory record book.

#### **Bed side Practical (Clinical Methods)**

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

### **UNIVERSITY EXAMINATION** (Practical)

Laboratory Practical	Long Case	Short Case	Indentification of Instruments	Practical Record	Viva- voce	Internal Assessment	Total
20	20	10	10	10	10	20	100

#### **REFERENCE BOOKS:-**

Sr.No	<b>Books</b> Auther		Edition
1.	Madhava Nidanam-1 Upadhaya Y		31 <sup>st</sup>
2.	Madhava Nidanam-2	Upadhaya Y	31 <sup>st</sup>
3.	Doshakaranatwa Mimansa	Sharma P.V	31 <sup>st</sup>
4.	Nadi Darshan	Vaidya ,Tarashankar	$2^{\text{nd}}$
5.	Nadi Tatva Darshanam	Vasishthya, Satyadevo	3 <sup>rd</sup>
6.	Ayurvediya Nidan Evam Chikitsa Ke	Ramharsha Singh	
7.	Tb Of Pathology	Harsh Mohan	$4^{th}$
8.	T,B.Of Pathology	Dey, N.C.	5 <sup>th</sup>
9.	T.B.Of Medical Parasitology	Panikar,J	4 <sup>th</sup>
10.	Ayurvediy Rog Vijan & Vikruti Vijan-1	Dr.b.s. Byadgi	6 <sup>th</sup>
11.	Symptons & Signs Of Cli. Medicine	Chamberlain, E.Noble	$1^{st}$
12.	Clinical Medicine	Hutchinson	12 <sup>th</sup>
13.	Bedside Clinics In Medicine - II	Kundu Arup	23th
14.	Comman Medical Symptoms	Mehta,P.G.	4 <sup>th</sup>
15.	Clinical Examination	Douglas Graham	6 <sup>th</sup>
16.	Medical Laboratory Techonology-II	Sood Ramnik	11 <sup>th</sup>
17.	Principals Of Practical Of Medicine	Davidson's	6 <sup>th</sup>
18.	Clinical Diagnosis & Mgt. By Laboratory Methods	Richard, M.C/Curran,	22th
19.	Robbins Basic Pathology	Kumar Abbas	$28^{th}$