	Dr.Jodhe (1-20)		**Dr. Naik (21-30)**		**Dr. Jadhav (31-50)**
1	Jeevaniya	21	Snehopaga	31	Purishasangrahaniya
2	Brimhaniya	22	Swedopaga	32	Purishavirajaniya
3	Lekhaniya	23	Vamanopaga	33	Mutrasangrahaniya
4	Bhedaniya	24	Virechanopaga	34	Mutravirajaniya
5	Sandhaniya	25	Asthapanopaga	35	Mutravirechaniya
6	Deepaniya	26	Anuvasanopaga	36	Kasahara
7	Balya	27	Shirovirechanopaga	37	Shwasahara
8	Varnya	28	Chardinigrahana	38	Shothahara
9	Kanthya	29	Trishnanigrahana	39	Jwarahara
10	Hridya	30	Hikkanigrahana	40	Shramahara
11	Truptighna			41	Dahaprashamaniya
12	Arshoghna			42	Sheetaprashamaniya
13	Kushthaghna			43	Udardaprashamaniya
14	Kandughna			44	Angamardaprashamaniya
15	Krimighna			45	Shoolaprashamaniya
16	Vishaghna			46	Shonitasthapana
17	Stanyajanana			47	Vedanasthapana
18	Stanyashodhana			48	Sangyasthapana
19	Shukrajanana			49	Prajasthapana
20	Shukrashodhana			50	Vayasthapana

LIST OF NON LECTURE: Ist Term

PRACTICALS(Marks-100)				
Sr.No.	**List of Topics**	**Term**	**Hours**	**175 H**
1	1.AssessmentandUnderstandingtherelationbetweenParthivatwa&subjective/objectiveparametrictests	1	10	87 HRS
2	2.AssessmentofobjectiveparametricmeasuresofGuna	1	12	
3	3.AssessmentofRasa	1	6	
4	4. Comparativeorganolepticandmacroscopicexamination	1	23	
5	5.MicroscopicIdentificationofgenuineandadulterateddrug	1	4	
6	6.Demonstrationofskillstoidentifythemedicinalplantsinthecollegegarden.	1	10	
7	7.Outcampusvisit(Cultivatedgardens,Tissueculturelab,Herbaria,Pharmacognosylab,QualitycontrollabandForestplantdemonstration)	1	10	
8	8.EkalaDravyaprayoga	1	12	
9	9.Physico-chemicalstudy	2	8	50
10	10.Phytochemical	2	4	
11	11.ThinLayerChromatography(TLC)technique	2	2	
12	12.Demonstrationofskillstoidentifythemedicinalplantsinthecollegegarden	2	10	
13	13.Outcampusvisit(cultivatedgardens&In-situplantdemonstration)	2	10	
14	14.Ekaladravyaprayoga	2	10	
15	15.DifferentCultivationtechniqueincludingmethodsmentionedinVrikshayurveda	2	6	
16	16.ExerciseonNetworkpharmacology	3	6	38
17	17.Preparationsofdigitalherbarium	3	2	
18	18.Demonstrationofskillstoidentifythemedicinalplantsinthecollegegarden	3	10	
19	19.Outcampusvisit(cultivatedgardens&In-situplantdemonstration)	3	10	
20	20.Ekaladravyaprayoga	3	10	

1st Term Activity = 25hrs

	Topic name	Activity Details	Hours	Name of the staff
CO1,CO3	**Dravyaguna Vigyana.**	**Group activity –** Assignments are to be given to the students to prepare 2-3 flash cards on importance of Dravyaguna Vigyana in clinical practice.	**1**	**Dr. Jadhav**
CO1,CO5, CO8	**Dravya**	**Segregation of dry drugs based on** Panchabhoutika characteristics. Various Dravyas are given to the students for segregation of dravyas according to Panchabhoutik constitution Classify live plants based on Panchabhoutika characteristics in garden. (Details mentioned in Rasavaisheshik Sutra 2 chapter 101-111) **Quiz –** based on classifications of dravyas **Brain storming - Activity** should be assigned to the students to search in samhitas related to classification of dravyas as Prayogabheda,Doshaghnabheda and Karmbheda.Prepare the list of specific assigned classification for group of students.	**4**	**Dr.Jadhav**
CO1,CO2, CO3	**GunaPanchabhoutikatva, characteristics and classification.**	**Matching of Gurvadiguna** with its karma **Animated Power point Presentation** **Brain storming -** To search in Chikitsasthana of samhitas regarding clinical application of Gurvadiguna and Paradiguna	**2**	**Dr. Naik**
CO1,CO2, CO3	**Rasa**	**Game based activity** by closing the eyes they should ask to identify the taste **Activity based learning** enlisting the dravyas of specific taste **Matching activity -**Matching of specific Rasas with their Guna& Karma **Making of Flash cards-** Cards with information regarding different concepts of Rasas	**4**	**Dr. Jodhe**
CO1,CO2, CO3	**Vipak**	**Flash cards -** Preparing flash cards containing pictures of dravya to identify dravya and its vipaka **Preparing charts of 20 dravyas** with	**1**	**Dr. Jodhe**

		ayatharthavipaka and yatharthvipaka		

S.No	Name of Practical	Activity	Pract. Hr	Learning Objective	T-Lmethod	Domain	Name of Staff
CO1,CO2, CO3	**Virya**	**Talk and chalk activity** by students on Dwividhavirya and ashtavidhavirya. **Making charts of dravyas** from Bhavaprakashnighantu regarding Dwividhavirya- 25 SheetaVirya dravyas & 25 UshnaVirya Dravyas.			**2**		**Dr. Jadhav**
CO1,CO2, CO3	**Prabhav**	**Puzzle –** Segregating the dravyas based on Samanpratyayarabdha, Vichtrapratyayarabdha and Prabhava.			**1**		**Dr. Naik**
CO1	**Interrelation of Rasa-Gun a-Virya-Vipaka-Prabhava with respect to strength – P.dynamics**	**Making flow charts** regarding the rules explained in relation with concepts of dravyaguna **Group Discussion -** Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength - Pharmacodynamics			**2**		**Dr. Jadhav**
CO1,CO2, CO3,CO4, CO5	**Karma**	**Case base learning-** Taking different clinical conditions & selecting appropriate karma **Think, Pair and share based activity-** Specific problem has to be given, Student should be allowed to think and discuss about appropriate karmas**Gamification- P**airing Karma with the drugs. **Role play for identification of specific karma-** Asking one student to enact & others to find out Karma **Presentation-** On concept of Karma, types of karma & Individual Karma. **Enlisting specific karma-**In relation to dravyas from Bruhatrayee&Sharangdharasamhita			**5**		**Dr.Jodhe** **Dr. Jadhav** **Dr. Naik**
CO1,CO8	**Karmas of Dashemani**	**Cramming –**Memorizing the dravyas from specific ganas **Fish bowl activity** written chits of drugs picked by students and should say the name of the Gana **Shloka recitation-** Shlokas of DashemaniGana (Ch. Su. 4) **Symposia-** Short discussion on various clinical applications of DashemaniGana			**3**		**Dr. Jodhe (1-20)** **Dr. Jadhav (21-40)** **Dr. Naik (41-50)**

1	**Dravya** Assessment and Understanding the relation between Parthivatwa& subjective/ objective parametric tests	**1.1 Assessment and Understanding the relationbetween Parthivatwa& subjective/ objective parametrictests** Density (bulk) Specific gravity (solid) **Drugs to study** for e.g.- Asthishrnkhala, Sariva, Vidari, Maricha, Shatavari, Jambu,Godhuma&Ushira	10hrs	Experimental Observation and perform	PT, DL (Demonstration)	PSY GUD (Journal)	**Dr.Jadhav**
		1.2 Assessment andUnderstanding the relationbetween Jaliyatwa& subjective/objective parametric tests Viscosity Specific gravity Moisture content **Drugs to study** for e.g.- Kumari,Vidari, Sariva, Shunthi, Ikshu, Usheera, Kamala &Apamarga		Experimental Observation Perform follow	PT, DL (Demonstration)		**Dr. Jadhav**
		1.3 Assessment andUnderstanding the relationbetween Aagneyatwa&subjective/ objective parametrictests pH Moisture content **Drugs to study** for e.g.: Shunthi,Shatavari, Maricha, Dhataki, Chitraka, Gokhura, Hingu&Chandana		Experimental Observation Describe Perform	PT, DL (Demonstration)		**Dr.Jodhe**
		1.4 Assessment andUnderstanding the relationbetween Vayaviytwa&subjective / objective parametrictests Fat content Specific gravity Density (bulk) **Drugs to study** for e.g. : Usheera,Ashwagandha, Nimba, Vidari,Khadira, Tila, Jambu&Kapikacchu		Experimental Observation Answer to method Perform	PT, DL (Demonstration)		**Dr. Jodhe**

		1.5 Assessment and Understanding the relation between Aakashiyatwa&subject ive/ objective parametrictests Density (Bulk) **Drugs to study for e.g.:** Usheera, Kumari, Apamarga, Jeeraka&Jatamansi		Experiment al Observatio n Follow	PT (Practical)		**Dr. Naik**
2	Assessment of Objective parametricmeasures of Guna	**2.1 Assessment of objectiveparametric measures Guru &LaghuGuna** Density (bulk) Specific gravity (Liquid and solid) Drugs to study for e.g. : **Guru:** Shatavari, Bala; **Laghu:**Yava, Dhanyaka	12hrs	Experiment al Observatio n Demonstrat ion Perform	PT, DL	PSY GUD (Journal)	**Dr. Jadhav**
		2.2 Assessment of objectiveparametric measures of Snigdhaand Rukshaguna drugs Total fat content Moisture content Swelling index **Drugs to study** for e.g. **:** **Snigdha:** Tila, Eranda; **Ruksha:** Kullatha, Vidanga		Experiment al Observatio n Demonstrat ion Perform	PT, DL		**Dr. Naik**
3	Assessment of Rasa	**Assessment of Rasa based on classicalSymptoms for each rasa dravyas.** One Example For each rasa Perform the assessment of Rasa based on classical symptoms foreach rasa dravyas.	6hrs	Perform	PT, DL	PSY ADT (Journal)	**Dr. Jodhe**
4	Comparative organoleptic and macroscopic examination	**Comparative organoleptic(Taste, Color, Smell, Sound,Touch) and macroscopicexaminatio n (Size, Shape,Fracture, External markings likeLenticels, ridges, nodes, furrows,cracks, etc)of the following**	23hrs	Perform	L_VC, PT,D_L BS,	PSY ADT (Journal)	**Dr. Jodhe**

		groupof drugs. **a. Root:** Aswagandha, Chitraka,Manjistha, Musta, Shatavari, Vatsanabha, Yashtimadhu.					
		b. Rhizome/Stolon: Haridra,Katuki, Shunthi, Vacha.					**Dr. Naik**
		c. Stem: Asthishrinkhala, Guduchi.					**Dr. Jadhav**
		d. Bark: Arjuna, Ashoka, Kutaja,Nimba, Twak.					**Dr. Jodhe**
		e. Heart wood: Beejaka,Chandana, Khadira.					**Dr. Naik**
		f. Leaf: Kumari, Meshashringi,Vasa.					**Dr. Jadhav**
		g. Flower: Dhataki, Kunkum(kesara), Lavanga.					**Dr. Jodhe**
		h. Fruit: Amalaki, Aragavadha,Bhallataka, Bibhitaki, Gokshura,Haritaki, Madanphala, Maricha,Pippali, Vidanga.					**Dr. Naik**
		i. Phalaraja: Kampillaka					**Dr. Jadhav**
		j. Seed: Bakuchi, Ela, Eranda,Jyotishmati, Kapikacchu					**Dr. Jodhe**
		k. Unorganized drugs: Guggulu,Hingu, Mocharasa					**Dr. Naik**
		l. Whole plant: Apamarga,Bhrungaraja, Bhumyamalaki, Brahmi, Kalmegha,Mandukaparni.					**Dr. Jadhav**
		m. Galls: Karkatshrungi					**Dr. Jodhe**
5	Microscopic Identification of genuineand adulterated drug	**Microscopic identification ofgenuine and adulterated drug,minimum 2 samples fromRoot/stem/leaf /bark/fruits.**(E.g. Sariva/Vidanga/Maricha/ Nagkeshar/	4hrs	Perform	TUT,PT, D_L	PSY, ADT (Journal)	**Root**- Dr. Jodhe **Leaf**- Dr. Jadhav **Stem**- Dr. Naik **Bark**- Dr. Jodhe **Fruit**- Dr.

		Chandan/Kampillak/Kumkum) **Root**- Chitraka, Manjishtha **Stem**- Asthishrinkhala, Guduchi **Leaf**- Kumari, Vasa **Bark**- Arjuna, Kutaja **Fruit**- Pippali, Madanphala					Jadhav
6	Demonstration of skills to identify the medicinal plants in the college garden.	Demonstrate identification features of college garden medicinalplants for their morphology, taxonomical keys, and regional florawith therapeutic uses. Participate actively in Identification of Medicinal plants.	10hrs	Demonstration	L_VC,ML,SDL,DG,FV	PSY, ADT (Journal)	3hrs Dr. Naik and Dr. Jadhav 4hrs Dr. Jodhe
7	Out campus visit (Cultivated gardens,Tissue culture lab,Herbaria, Pharmacognosy lab, Quality control lab and Forest plant demonstration)	Visit to observe the identification features of medicinal plantswhich are from cultivated or natural habitat / forest plant.	10hrs	Visit	L_VC,PT,D_L	PSY, ADT	Dr. Naik , Dr. Jadhav, Dr. Jodhe