

**Department of Dravyaguna Vijnana
(Pharmacology and Materia Medica)**

Paper I – Part A

Unit No	Topic	Domain	Time (Hours)
1.	<u>Dravyaguna Shastra Paribhasa-</u> Lakshana of Sapta Padartha of Dravyaguna Vijnana viz 1.Dravya 2..Rasa 3.Guna 4. Virya 5.Vipaka 6.Prabhava and 7.Karma.	Must Know	2
2.	<u>Dravya:</u> 1.Etymological derivation, definition, panchbhoutikatwa. 2.Classification of Dravya according to Samhitas and Nighantus Taxonomical classification.	Must Know	3
3.	<u>Guna:</u> Etymological derivation, definition and Classification of Guna. Detailed knowledge of 1.Gurvadi Guna 2.Paradi gunas.	Must Know	2
4.	<u>Rasa:</u> 1.Etymological derivation, definition, Meaning of “Rasa” in various contexts. 2.Shad Rasas (Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik constitution of Rasas, 3.Nirvrittivisheshakrama (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. 4.Effects of excess usage of Rasa. Rasopalabdhi, Rasaskandha.	Must Know	4
5.	<u>Vipaka:</u> 1.Etymological derivation and definition, difference between Avasthapaka and Vipaka, 2.Types of Vipaka, (Dvidvidha- Trividha,Panchavidha) Guna and karma of	Must Know	3

	Vipaka. 3.Grades of Vipaka (taratamya), Vipakopalabdhi hetu (Factors to determine Vipaka).		
6.	Veerya: 1.Etymological derivation, definition and Swarupa of Virya, 2.Number of Virya. (Dwividha & Ashtavidha) Panchabhauthikatva 3.Virya karmani (Effects of Virya), General principles in determination of virya along With exceptions.	Must Know	2
7	Prabhava: 1.Definition, Effects of Prabhava.	Must Know	2
8.	1.Interrelation of Rasa-Guna-Virya-Vipaka- Prabhava with respect to their strength (balabal nirupana). 2.Samanapratyayarabdha and Vichitrapratyayarabdha dravyas.	Nice to Know	1
9.	Karma: 1.Lakshana, swaroopa and bheda of karma (Definition, nature and types of action). 2.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	Must Know	6
10.	.1.Brief information on Karmas of dashemani gana of Charak Samhita.	Must Know	10
11	Mishraka Gana: 11a) - Audbhida Gana (Vegetable origin) Brihatpanchamoola, Laghupanchamoola, Vallipanchamoola, Kantakapanchamoola, Trinapanchamoola, Madhyamapanchamo ola, Jeevaneeya panchamoola, Panchapallava, Panchavalakala, Triphala, Trikatu, Trimada, Chaturusana, Panchakola, Shadusana, Chaturbeeja, Jeevaniya gana, Ashtavarga, Trijataka, Chaturajataka, Katuchaturjataka Panchatikta, Amlapanchaka, Chaturbhadra, Trikarshika, Swalpatriphala, Madhuratriphala,	Must Know	10

	<p>Mahavisha, Upavisha, Agrya aushadh varga- Knowledge of Agrayaaushadha Varga with example.</p> <p>11 b.Jangama Gana (Animal origin) - Ksheerashtaka, Mutrashtaka, Pitta panchaka.</p> <p>11c .Parthiva Gana (Mineral origin) - Lavana Panchaka, Kshara dvaya, Kshara Ashtaka.</p>		
12	<p><u>Basis of nomenclature:</u> Basis of nomenclature of dravya, Basis and Derivation of synonyms.</p>	Nice to Know	1
13.	<p>Bheashaja Pariksha vidhi (as described in Charaka samhita vimana sthana 8), Dravya Sangrahana (collection of dravya)- Ecology- 1.Classification of desha (geographical area) and bhumi (soil), swarupa of sangrahaniya dravya of (Nature and quality of drug to be collected). 2.Sangrahana vidhi (Method of collection) - Vegetable and Animal origin drugs according to part used. 3.Period of collection according to virya, samrakshana vidhi (preservation of collected dravyas), bheshajagara (Storehouse), study on different prayojyanga (useful plant parts).</p>	Must Know	4
14	<p>a.Concept of dravya shodhan (purification of dravya), b.Brief knowledge of Apamishran (adulterants) c.Concept of Abhava pratinidhi dravya (substitutes)</p>	Must Know	4
15.	<p>1.Prashasta bheshaja (ideal drug), plant extracts. 2. Concept of viruddha Dravya (incompatibility of the dravya).</p>	Nice to Know	3
16.	<p>Introduction to Nighantu Vigyan - 1.Dhanwantari Nighantu, 2.Bhavaprakashanighantu, 3.Rajanighantu.</p>	Must Know	6
17	<p>Brief knowledge of cultivation, conservation of medicinal plants and information about endangered species.</p>	Nice to Know	3
18.	<p>Introduction, Definition & scope of Pharmacology and Principles of general Pharmacology. Brief Knowledge about pharmacology of the</p>	Nice to Know	34

	<p>following – 1.Anaesthetics, CNS depressants, 2.Antipyretics, Analgesics, 3.Antiplatelet, Hypolipidaemic, 4.Digestants, Carminatives, Laxatives, 5.Hepatoprotective, Antiinflammatory, 6.Antiobesity, Antidiabetic, Styptics, 7.Antihistamines, Antimicrobial, 8.Minerals,Water imbalance and IV fluids, 9.Sedatives, Hypnotics, Tranquilisers, 10Antihypertensive, 11.Haemopoetic, Coagulants, 12.Aerosols/ Inhalants, Expectorants 13.Antacids, Antiulcer, 14.Antidiarrhoeals, Antiemetic, 15.Diuretic, Antidiuretic, 16.Hormonal therapy 17.Antithyroid, Oxytocic. 18Contraceptives, 19.Galactagogues, Antibiotics, 20.Amoebicidal, Antifilarial, 21.Anthelmentic, Antifungal, 22.Vaccines, 23.Antivenom, antirabbies serum, 24.Anti cancer drugs 25.Immunomodulators. 26.Local anti septics, Antiepileptics, 27.Vitamins, Bronchodialators, 28.Drugs in ophthalmic practice, 29.Antianginal, Lithotriptic, 30.Antimalarial,</p>		
19	<p>Detailed Knowledge of Following Dravya – 1- 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)</p> <ol style="list-style-type: none"> 1. Agaru, 2. Haridradvaya, 1. Patala, 2. Pippali-Pippalimula, 3. Amalaki, 4. Jambu, 	Must Know	60

	<ol style="list-style-type: none">5. Pushkarmoola,6. Aragvadha,7. Jeerakadvaya,8. Saireyaka,9. Arjuna,10. Arkadvaya,11. Kantakari,12. Shalaparni,13. Shallaki,14. Bakuchi,15. Karpura,16. Katuki,17. Shigru,18. Bharangi,19. Bhrungaraj,20. Kumkum Kesara,21. Talisa Patra,22. Tila, Bilva,23. Brahmi,24. Lavanga,25. Tvak,26. Ushira,27. Chitraka,28. Dadima,29. Manjishtha,30. Varahi,31. Varuna,32. Durva,33. Nagakeshara,34. Nimba,35. Vidari,36. Gokshura,37. Guduchi,38. Parpata,39. Pashanabheda,40. Agnimantha,41. Haritaki42. Hingu,43. Punarnava,44. Jatiphal,45. Rasona,46. Ardraka-Sunti47. Arjuna48. Kalamegha49. Kampillaka,50. Sarivadvaya51. Sarpagandha,52. Asoka,53. Karkatakshringi,54. Shankhapushpi,55. Bhallataka,56. Kiratatikta,		
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	57. Shyonaka, 58. Bibhitaka 59. Bijak/ Vijaysar, 60. Kushta 61. Trivrut 62. Tulasi, 63. Bruhati 64. Chandanadvaya, 65. Lodhra 66. Madanaphala, 67. Vacha 68. Varahi, 69. Dhataki, 70. Maricha 71. Musta, 72. Vasa 73. Vatsanabha, 74. Eranda 75. Gambhari, 76. Nirgundi 77. Palasha, 78. Yastimadhu 79. Jatamansi, 80. Yavani 81. Guggulu, 82. Ahiphena, 83. Aragvadha, 84. Rohitaka, 85. Kanchanara, 86. Ativisha, 87. Shatavari, 88. Kumari, 89. Kutaja, 90. Eladvayam, 91. Vidanga, 92. Prishniparni, 93. Apamarga, 94. .Kapikacchu, 95. Shalmali 96. Baladvayam, 97. Khadira 98. Ashvagandha 99. Shirisha 100. Mandukaparni, 101. Rasna 102. Devadaru 103. Kupilu		
20	Brief Knowledge of following dravyas with Respect to Sanskrit Name, Botanical Name, Family, Habit (Samanya Swarupa), Parts Used and Indications. 1. Agastya,	Must to Know	35

	<ol style="list-style-type: none">2. Jati,3. Jayapala,4. Parasika5. Parijata,6. Amlavetasa,7. Amra,8. Kadamba,9. Kaidarya,10. Parnayavani,11. Parpataka,12. Aparajita,13. Ashvagol,14. Kankola,15. Karanja,16. Patha,17. Patola,18. Atasi,19. Avartaki,20. Karira,21. Pilu,22. Karpasa,23. Plaksha,24. Babbula,25. Prasarani,26. Badara,27. Kasha,28. Bakula,29. Kasni,30. Priyangu,31. Kataka,32. Puga,33. Bijapoorra,34. Putiha,35. Bola,36. Kebuka,37. Chakramarda,38. Kharjura,39. Rajika/Sarshapa40. Kitmari,41. Rohitaka,42. Chandrashura43. Saptachakra,44. Changeri,45. Koshataki,46. Chavya,47. Kulatha,48. Saral,49. Kumuda,50. Sarja,51. Chopachini,52. Shala,53. Danti,		
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	<p>54. Kusmanda, 55. Darbha, 56. Lajjalu, 57. Sharapunkha, 58. Langali, 59. Shatahwa 60. , Dhanvayasa, 61. Shati, 62. Dhanyaka, 63. Latakasturi, 64. Draksha, 65. Madayantika, 66. Sringataka, 67. Mahanimba, 68. Svarnakshiri, 69. Gandhaprasarini 70. Tagara, 71. Garjara, 72. Markandika, 73. Gojihva, 74. Masha, 75. Talmuli, 76. Mashaparni, 77. Taruni, 78. Gunja, 79. Tavakshira, 80. Hinsapa, 81. Mayaphala, 82. Hinstra, 83. Meshashrungi, 84. Tuvataka, 85. Methika, 86. Udumbara, 87. Hrutpatri, 88. Urana, 89. Ikshu, 90. Mulaka, 91. Indravaruni, 92. Murva, 93. Vata, 94. Nagabala, 95. Vatada, 96. Irimeda, 97. Vrudhadaru, 98. Ishvaku, 99. Narikela, 100. Nili, 101. Japa, 102. Ajamoda 103. , Kakamachi, 104. Parushaka 105. Jeevanti,</p>		
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	106. Parisha, 107. Amragandhiharidra 108. Ashvattha, 109. Karavellaka, 110. Patranga 111. Avartani, 112. Priyala, 113. Kasamarda 114. Bhumyamalki, 115. Katphala, 116. Putranjivaka 117. Champaka, 118. Kokilaksha, 119. Saptaparna 120. Chirbilva, 121. Shara, 122. Kusha 123. Dattura, 124. Latakaranja, 125. Snuhi 126. Dronapushpi, 127. Mandukaparni, 128. Tailaparni 129. Gorakshaganja, 130. Teja Patra, 131. Matulunga 132. Hribera, 133. Mudgaparni, 134. Vamsha 135. Ingudi, 136. Nala, 137. Vrukshamla 138. Padmaka 139. Palandu, 140. Akarkarabh, 141. Yavani, 142. Kadali, 143. Parnabija, 144. Ankola, 145. Kamala, 146. Patalagarudi, 147. Karavira, 148. Asthishrunkhala, 149. Isvari,		
21	Introduction, Guna, Karma and Uses of following Jantava Dravya (Drugs of Animal Origin). 1. Kasturi 2. Gorochana 3. Mrigasringa	Must Know	2
22	Introductory Knowledge of Following Annapana Varga:	Nice to Know	3

	<p>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. Mamsa Varga 10. Aharayogi</p>		
			200
23.	<p>A Study of Macroscopic characters of following plants and their useful parts.</p> <p>i. Kand (Stem) –Guduchi or Ashtishrinkhala ii. Patra (Leaves) – Vasa or Kumari iii. Pushpa (Flowers and its parts) iv. Phala (Fruit) – Maricha or madanaphala or vidanga v. Beeja (Seeds)- Eranda or Kapicchhu vi. Twak (Bark) – Kutaja or Arjuna or Ashwatta vii. Moola (Root) – Punarnava or chitraka. viii. Niryasa (Exudate) – Guggulu or Mocharasa. ix. Jangama dravya – Madhu or gritha</p>	Must Know	80
24	<p>A Study of Microscopic characters of following plants and their useful parts.</p> <p>i. Kand (Stem) –Guduchi or Ashtishrinkhala ii. Patra (Leaves) – Vasa or Kumari iii. Pushpa (Flowers and its parts) iv. Phala (Fruit) – Maricha or madanaphala or vidanga v. Beeja (Seeds)- Eranda or Kapicchhu vi. Twak (Bark) – Kutaja or Arjuna or Ashwatta vii. Moola (Root) – Punarnava or chitraka. viii. Niryasa (Exudate) – Guggulu or Mocharasa. Ix. Jangama dravya – Madhu or gritha</p>	Nice to Know	50
25	<p>A Study of Demonstration of organoleptic characteristics and grahya - Agrahyata of following plants and their useful parts.</p> <p>i. Kand (Stem) –Guduchi or Ashtishrinkhala ii. Patra (Leaves) – Vasa or Kumari iii. Pushpa (Flowers and its parts) iv. Phala (Fruit) – Maricha or madanaphala or vidanga v. Beeja (Seeds)- Eranda or Kapicchhu vi. Twak (Bark) – Kutaja or Arjuna or Ashwatta vii. Moola (Root) – Punarnava or chitraka. viii. Niryasa (Exudate) – Guggulu or</p>	Must Know	25

	Mocharasa. ix. Jangama dravya – Madhu or gritha		
26	1. Records of herbarium sheets of 50 medicinal plants . 2. Compulsory study tour other state for field knowledge and procurement of plant species	Must Know	20 25
			200

CURRICULUM PLANNING

Unit No	Topic	Learning Objectives (At the end of the session the students should be able to)	Teaching Guidelines	Methodology	Time (Hours)
1.	<u>Dravyaguna Shastra Paribhasa-</u> Lakshana of Sapta Padartha of Dravyaguna Vijnana viz 1.Dravya 2.Rasa 3.Guna 4. Virya 5.Vipaka 6.Prabhava and 7.Karma.	Enumerate the sapta padartha	To cover the introductory part of sapta padarthas as per different acharayas	1.Didactic 2. SIS	2
2.	<u>Dravya:</u> 1.Etymological derivation, definition, panchbhoutikatwa. 2.Classification of Dravya according to Samhitas and Nighantus Taxonomical classification.	Describe the dravya lakshans, as wel as aahara dravya and aushadhi dravya	To cover the concept of Dravya about the panchabhoutikat awa for its tara tama prayoga.	1.Didactic 2. SIS	3
3.	<u>Guna:</u> Etymological derivation, definition and Classification of Guna. Detailed knowledge of 1.Gurvadi Guna 2.Paradi gunas.	Explain the lakshana of guna ,vargas,superiority,an d their clinical applications	To cover the the properties, types ,importance in the clinical aspect as wel as in the swasthya condition.	1.Didactic 2. SIS 3.Role Play	2

4.	<p><u>Rasa:</u> 1.Etymological derivation, definition, Meaning of “Rasa” in various contexts. 2.Shad Rasas (Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik constitution of Rasas, 3.Nirvritivishakrama (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. 4.Effects of excess usage of Rasa. Rasopalabdhi, Rasaskandha.</p>	Describe the various number of tastes as per different acharyas their properties on swasthya condition,as per ritus as well as in rogavastha. About taste threshold.	To cover the sadrasa properties, its effects on dosa,dhatu, mala and its applicability in the clinical aspect. along with their advantage and its disadvantages.	1.Didactic 2. SIS 3.Group Discussion	4
5.	<p><u>Vipaka:</u> 1.Etymological derivation and definition, difference between Avasthapaka and Vipaka, 2.Types of Vipaka, (Dvidha-Trividha,Panchavidha) Guna and karma of Vipaka. 3.Grades of Vipaka (taratamya), Vipakopalabdhi hetu (Factors to determineVipaka).</p>	Explain the digestion, the process of avasthapaka and vipaka.its types how the dosha , dushya and mala are formed	To cover the act of digestion .if the in particular avastha the concerned vipaka will not be formed then the suspected diseases.and to over come the particular disease the line of treatment	1.Didactic 2. SIS 3. Group Discussion	3
6.	<p><u>Veerya:</u> 1.Etymological derivation, definition and Swarupa of Virya, 2.Number of Virya. (Dvidha & Ashtavidha) Panchabhauthikatva 3.Virya karmani (Effects of Virya), General principles in determination of virya along With exceptions.</p>	Describe about the formation of virya upon the particular drugs.and their properties .and to balance the health the knowledge about the usage of same or opposite vriya dravya .	To cover the potency of the drugs which will be suitable of the particular diseases	1.Didactic 2. SIS 3. Group Discussion	2
7	<p><u>Prabhava:</u> 1.Definition, Effects of</p>	Describe the special effects of the	To cover the properties of	1.Didactic 2. SIS	2

	Prabhava.	particular drugs and its properties on the roga and rogi	prabhava which will be not related with the rasa panchaka.and its effect on roga and rogi.	3.Group Discussion	
8.	1.Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength (balabal nirupana). 2.Samanapratyayarabdha and Vichitrapratyayarabdha dravyas.	Explain the relation between dravya,guna,rasa, virya,vipaka and prabhava along with comprasion and its effect on the body	To cover how all the saptapadarathas are inter related along with prabhava .and effects on roga and rogi.	1.Didactic 2. SIS 3.Group Discussion	1
9.	Karma: 1.Lakshana, swaroota and bheda of karma (Definition, nature and types of action). 2.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.Vikasi 18. Rasayana 19. Vajeekarana 20. Jeevaneeya 21. Balya 22. Brimhana 23. Langhana 24. Medhya	Explain the swaroota, bedha and their karma with the drugs which helps to enhance or decrease the particular effect.	To cover the meaning of each karma,its physiology.and the drugs which enhances or decreases the particular karma.	1.Didactic 2. SIS 3. Group Discussion/ student seminar	6
10.	.1.Brief information on Karmas of dashemani gana of Charak Samhita.	Explain the individual dashemani and the drugs mentioned in each dashemani	To cover the need of mentioning the particular drug in the particular	1.Didactic 2. SIS 3.Group Discussion 4Discussion /student	10

			gana with their properties	seminar/field visit	
11	<p>Mishraka Gana: 11a)- Aubhida 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 Agrayaushadha Varga with example.</p> <p>11 b.Jangama Gana (Animal origin) - Ksheerashtaka, Mutrashtaka, Pitta panchaka.</p> <p>11c .Parthiva Gana (Mineral origin) - Lavana Panchaka, Kshara dvaya, Kshara Ashtaka.</p>	Mention the gana and the individual drugs in the gana and their properties and indications	To cover the ganas and indications of particular ganas in the relevant conditions.	1. Didactic 2. PPT 3. Group 4. Discussion/ student seminar/ field visit	10
12	<p><u>Basis of nomenclature:</u> Basis of nomenclature of dravya, Basis and Derivation of synonyms.</p>	Mention the nomenclature of the dravyas	About nomenclature, synonyms of the particular drugs and its importance	1. Didactic 2. SIS 3. PPT	1

13.	<p>Bheashaja Pariksha vidhi (as described in Charaka samhita vimana sthana 8), Dravya Sangrahana (collection of dravya)- Ecology-</p> <p>1.Classification of desha (geographical area) and bhumi (soil), swarupa of sangrahaniya dravya of (Nature and quality of drug to be collected).</p> <p>2.Sangrahana vidhi (Method of collection) - Vegetable and Animal origin drugs according to part used.</p> <p>3.Period of collection according to virya, samrakshana vidhi (preservation of collected dravyas), bheshajagara (Storehouse), study on different prayojyanga (useful plant parts).</p>	<p>Explain the nature of soil , dravya ,collection of particular dravya in the particular time, area.</p>	<p>To cover the importance of soil, dravya , to collect in the particular area, time ,how to collect, its preservation and its importance.</p>	<p>1.Didactic 2. SIS 3.PPT 4.student 5.seminar field visit</p>	4
14	<p>a.Concept of dravya shodhan (purification of dravya), b.Brief knowledge of Apamishran (adulterants) c.Concept of Abhava pratinidhi dravya (substitutes)</p>	<p>Have the practical Knowledge of shodana karma of the required drugs. and identification of original drug,their substitutes and adultrants.</p>	<p>To cover the procedures of shodana ,need of shodana karma. identification of substitutes and adultrants . and their properties and their adverse effect.</p>	<p>PPt Field Visits Industrial Visits</p>	4
15.	<p>1.Prashasta bheshaja (ideal drug), plant extracts. 2. Concept of viruddha Dravya (incompatibility of the dravya).</p>	<p>To describe the prashasta bheshaja.what is incompatibility and incompatibility will be formed and what are its effects on the body.</p>	<p>To cover the need of prashasta bheshaja.its identification.for mation of incompatibility by the dravyas and its adverse effect on the body and its line of treatment.</p>	<p>PPt Field Visits group discussion</p>	3
16.	<p>Introduction to Nighantu Vigyan – 1.Dhanwantari Nighantu, 2.Bhavaprakashanighantu, 3.Rajanighantu.</p>	<p>Describe the Defination of Nighatu. Period of each Nighantu and particular nighantu in detail.</p>	<p>To cover the importance of Nighantu individually.the way of drugs mentioned in the</p>	<p>Didactic Group Discussion</p>	6

			each Nighantu.		
17	Brief knowledge of cultivation, conservation of medicinal plants and information about endangered species.	Explain the method of cultivation, along with flowering seasons, fruiting etc. what are endangered species.	To cover the good yield of the plants, about the manure to be used .conservation of the plants and their species. how the plants get extinct and how to conserve such plants	Didactic /PPT	3
18.	Introduction, Definition & scope of Pharmacology and Principles of general Pharmacology. Brief Knowledge about pharmacology of the following – 1. Anaesthetics, CNS depressants, 2. Antipyretics, Analgesics, 3. Antiplatelet, Hypolipidaemic, 4. Digestants, Carminatives, Laxatives, 5. Hepatoprotective, Antiinflammatory, 6. Antiobesity, Antidiabetic, Styptics, 7. Antihistamines, Antimicrobial, 8. Minerals, Water imbalance and IV fluids, 9. Sedatives, Hypnotics, Tranquilisers, 10. Antihypertensive, 11. Haemopoetic, Coagulants, 12. Aerosols/ Inhalants, Expectorants 13. Antacids, Antiulcer, 14. Antidiarrhoeals, Antiemetic, 15. Diuretic, Antidiuretic, 16. Hormonal therapy 17. Antithyroid, Oxytocic. 18. Contraceptives, 19. Galactagogues, Antibiotics, 20. Amoebicidal, Antifilarial, 21. Anthelmintic,	Describe the general pharmacology. Of the points as mentioned.	To cover the definition of each modern points and its description to correlate with the Ayurvedic Pharmacology and its clinical applications.	Didactic PPT SIS Poster presentation	34

	<p>Antifungal, 22.Vaccines, 23.Antivenom, antirabbies serum, 24.Anti cancer drugs 25.Immunomodulators. 26.Local anti septics, Antiepileptics, 27.Vitamins, Bronchodialators, 28.Drugs in ophthalmic practice, 29.Antianginal, Lithotriptic, 30.Antimalarial,</p>				
19	<p>Detailed Knowledge of Following Dravya with respect to</p> <ol style="list-style-type: none"> 1. Basonym of drug, 2. Main Synonyms, 3. Regional Name, 4. Botanical Name, 5. Family, 6. Classification of Dravya (Gana) as described in Charak and Sushrut, 7. External morphology, Useful parts, 8. Important phytoconstituents, Rasa panchaka, 9. Action on Dosha, Dhatu, Mala, 10. Prayogarha vyadhi (therapeutic indications), Amayikaprayoga and Matra (Therapeutic administration and Dose), 11. Vishishta yoga (names of important formulations), Vishakta Lakshan (adverse effects), 12. Chikitsopachara (remedial measures) and 	<p>Identify ,mention and describe the Basonym of drug, Main Synonyms Regional Name Botanical Name Family Classification of Dravya Morphology Useful parts Phytoconstituents Rasa panchaka Action on Dosha,Dhatu, Mala, Prayogarha vyadhi Amayikaprayoga and Matra Vishishta yoga, Vishakta Lakshan Chikitsopachara and Shodhana if required of all the drugs as mentioned in the list.</p>	<p>Identification of each drug and to cover the importance of Basonym Synonyms Regional Name Botanical name Its morphology for its identification. Collection of the useful part, its action on the roga and rogi .In visha dravyas their shodana, its matra and toxicity of the particular drugs.And their clinical applications.</p>	<p>PPT Role model Posters Field visit Students seminar group discussion</p>	60

<p>13. Shodhana (as required)</p> <ol style="list-style-type: none">1. Agar, 2. Haridradvaya, Patala, 3. Pippali-Pippalimula, 4. Amalaki, Jambu, 5. Pushkarmoola, 6. Aragvadh, Jeerakadvaya, 7. Saireyaka, Arjuna, 8. Arkadvaya, 9. Kantakari, Shalaparni, 10. Shallaki, 11. Bakuchi, Karpura, 12. Katuki, 13. Shigru, Bharangi, 14. Bhrungaraj, 15. Kumkum Kesara, Talisa Patra, 16. Tila, Bilva, 17. Brahmi, 18. Lavanga, Tvak, 19. Ushira, Chitraka, 20. Dadima, 21. Manjishtha, Varahi, 22. Varuna, Durva, 23. Nagakeshara, 24. Nimba, 25. Vidari, Gokshura, 26. Guduchi, Parpata, 27. Pashanabheda, 28. Agnimantha, Haritaki 29. Hingu, 30. Punarnava, 31. Jatiphal, 32. Rasona, Ardraka-Sunti 33. Arjuna, Kalamegha 34. Kampillaka, Sarivadvaya 35. Sarpagandha, 36. Asoka, 37. Karkatakshringi, 38. Shankhapushpi, 39. Bhallataka, 40. Kiratatikta, 41. Shyonaka, Bibhitaka 42. Bijak/ Vijaysar, 43. Kushta, Trivrut 44. Tulasi, Bruhati 45. Chandanadvaya, Lodhra 46. Madanaphala, Vacha 47. Varahi,				
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	<p>48.Dhataki, Maricha 49.Musta, Vasa 50.Vatsanabha, Eranda 51.Gambhari, Nirgundi 52.Palasha, Yastimadhu 53.Jatamansi, Yavani 54.Guggulu, Ahiphena, 55.Aragvadha, Rohitaka, 56.Kanchanara, Ativisha, 57.Shatavari, Kumari, 58.Kutaja, 59.Eladvayam, Vidanga, 60.Prishniparni, Apamarga, 61.Kapikacchu, Shalmali 62.Baladvayam, Khadira 63.Ashvagandha 64.Shirisha 65.Mandukaparni, 66.Rasna 67.Devadaru 68.Kupilu</p>				
20	<p>Brief Knowledge of following dravyas with Respect to</p> <ul style="list-style-type: none"> • Sanskrit Name • Botanical Name • Family, • Habit (Samanya Swarupa) • Parts Used and Indications <ol style="list-style-type: none"> 1. Agastya, Jati, 2. Jayapala, Parasika 3. Parijata, Amlavetasa, 4. Amra, Kadamba, 5. Kaidarya, Parnayavani, 6. Parpataka, Aparajita, 7. Ashvagol, Kankola, 8. Karanja, Patha, 9. Patola, Atasi, 10. Avartaki, Karira, Pilu, 11. Karpasa, Plaksha, Babbula, 12. Prasarani, Badara, Kasha, 13. Bakula, Kasni, 	<p>Identify, mention with their Sanskrit Name, Botanical Name, Family, Samanya Swarupa Parts Used and Indications</p>	<p>Identification and to cover the clinical application of the particular drug along with its merits and demerits.</p>	<p>Ppt role modle posters Field visit Students seminar group discussion</p>	35

<p>Priyangu, 14. Kataka, Puga, Bijapooru, 15. Putiha, Bola, Kebuka, 16. Chakramarda, Kharjura, Rajika/Sarshapa 17. Kitmari, Rohitaka, Chandrashura 18. Saptachakra, Changeri, Koshataki, 19. Chavya, Kulatha, Saral, 20. Kumuda, Sarja, Chopachini, 21. Shala, Danti, Kusmanda, 22. Darbha, Lajjalu, Sharapunkha, 23. Langali, Shatahwa, Dhanvayasa, 24. Shati, Dhanyaka, Latakasturi, 25. Draksha, Madayantika, Sringataka, 26. Mahanimba, Svarnakshiri, Gandhaprasarini 27. Tagara, Garjara, Markandika, 28. Gojihva, Masha, Talmuli, 29. Mashaparni, Taruni, Gunja, 30. Tavakshira, Hinsapa, Mayaphala, 31. Hinstra, Meshashrunji, Tugaraka, 32. Methika, Udumbara, Hrutpatri, 33. Urana, Ikshu, Mulaka, 34. Indrararuni, Murva, Vata, 35. Nagabala, Vatada, Irimeda,</p>				
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	<p>36. Vrudhadaru, Ishvaku, Narikela, 37. Isvari, Nili, Japa, 38. Ajamoda, Kakamachi, Parushaka 39. Jeevanti, Parisha, Amragandhiharidra 40. Ashvattha, Karavellaka, Patranga 41. Avartani, Priyala, Kasamarda 42. Bhumyamalki, Katphala, Putranjivaka 43. Champaka, Kokilaksha, Saptaparna 44. Chirbilva, Shara, Kusha 45. Dattura, Latakaranja, Snuhi 46. Dronapushpi, Mandukaparni, Tailaparni 47. Gorakshaganja, Teja Patra, Matulunga 48. Hribera, Mudgaparni, Vamsha 49. Ingudi, Nala, Vrukshamla 50. Padmaka 51. Palandu, Akarkarabh, 52. Yavani, Kadali, 53. Parnabija, Ankola, 54. Kamala, Patalagarudi, 55. Karavira, Asthishrunkhala,</p>				
21	<p>Introduction, Guna, Karma and Uses of following Jantava Dravya (Drugs of Animal Origin). 1. Kasturi 2. Gorochana 3. Mrigasringa</p>	<p>Identify, their morphology Collection Preservation Rasa panchaka Uses.</p>	<p>Identification Mode of Collection Uses Clinical applications</p>	<p>PPT Poster presentation role modle</p>	2
22	<p>Introductory Knowledge of Following Annapana</p>	<p>Explain each varga. Their properties,</p>	<p>To Cover the properties and</p>	<p>PPT industrial visit</p>	3

	<p>Varga:</p> <ol style="list-style-type: none"> 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. Mamsa Varga 10. Aharayogi 	<p>Effects on Dosha, Dhatu and Mala with their clinical uses.</p>	<p>uses of each varga and their clinical applicability along with their merits and demerits.</p>		
23	<p>A Study of</p> <ol style="list-style-type: none"> a. Macroscopic characters b. Microscopic characters c. Organoleptic characteristics d. Grahya - Agrahyata and e. Useful parts of following plants and their useful parts. <ol style="list-style-type: none"> i. Kand (Stem) – Guduchi or Ashtishrinkhala ii. Patra (Leaves) – Vasa or Kumari iii. Pushpa (Flowers and its parts) iv. Phala (Fruit) – Maricha or madanaphala or vidanga v. Beeja (Seeds)- Eranda or Kapicchhu vi. Twak (Bark) – Kutaja or Arjuna or Ashwatta vii. Moola (Root) – Punarnava or chitraka. viii. Niryasa (Exudate) – Guggulu or Mocharasa. ix. Jangama dravya – Madhu or gritha 	<p>Explain the external features, transverse and longitudinal sections, identification of each drug by panchendriya along with their chemical constituents.</p>	<p>To overcome the substitutes and adulterants with identifying the genuine drug and to know about the standardization of the drug as per the guidelines.</p>	<p>SIS Field visit Group discussion Student seminar (Identification of drugs available dry/wet drugs)</p>	80

Reference Books

1. Abhinav Buti Darpan (Vol.1-2) - Vd. Roop Lal Vaishya
2. Aushadna Vigyana Shastra - Acharya Pt. Vishvanatha Dwidevi
3. Ayurvediya Aushadnkarma vigyana - Acharya V.J. Thakur
4. Bedi Vanaspati Kosha - Prof. Ramesh Bedi

5. Bhaishajyaguna Vigyana - Dr. Alakhnarayan Singh
6. Bhav Prakash Nigantu (English) - Shreekanthamurti
7. Bhav Prakash Nighantu - With Vd. Krishna Chandra Chunekar commentary
8. Bhrinad dravyagunadarsha - Mahendra Kumar Shastri
9. Classical Uses of Medicinal Plants - Acharya Priyavrata Sharma
10. Controversial Medicinal Plants - Vd. G. Bapa Lal
11. Dalhana Ka Dravyaguna Shastra Ke Kshetra Me Yogadana - Vd. Shiv Kumar Vyas
12. Dravyaguna Kosha - Acharya Priyavrata Sharma
13. Dravyaguna Sutram - Acharya Priyavrata Sharma
14. Dravyaguna Vigyana - Dr. Gyanendra Pandey
15. Dravyaguna Vigyana (Vol. 1-2) - Acharya Yadavji Tikram Ji
16. Dravyaguna Vijyana - Dr. V.M. Gogate
17. Dravyaguna Vigyana (Vol. 1-5) - Acharya Priyavrata Sharma
18. Dravyaguna Shastrum - Vaidya G.A. Phadake
19. Dravyaguna Vijyana - Dr. A.P. Deshpande
20. Dravyagunavijnana basic Principles - Prof.D.S.Lucas
21. Forgotten Healers (Indian Medicinal Plants) - Dr. Prakash Pranjape
22. Glossary of Vegetable Drugs in Bhrittrayis - Thakur Balwant Singh & Vd. Krishna Chandra Chunekar
23. Introduction to Dravyaguna - Acharya Priyavrata Sharma
24. Kriyatamka Aushadi Parichaya - Acharya Pt. Vishvanath Dwidevi
25. Materia Medica - Acharya Ghosh
26. Nighantu Adarsh (Vol. 1-2) - Vd. Bapa Lal
27. Pharmacological basis of Medical Practice - Goodman & Gillman
28. Pharmacology and Pharmacotherapeutics - Satoskar Bhandarkar & Ainapure
29. Prayogatamaka Dravyaguna Vigyana - Dr. Maya Ram Uniyal
30. Priya nighantu - Acharya Priyavrata Sharma
31. Raspanchaka/Dravyaguna Siddhanta - Prof. Shivcharan Dhyani
32. System of Plant Nomenclature in Ayurveda - Dr. Gyanendra Panday
33. Text Book of Pharmacognosy - Trees & Valis
34. Textbook of Dravyaguna - Dr.K.Nishteswar
35. Unani Dravyaguna Vigyana - Hakim Daljeet Singh

Note:

Theory Two papers- 100 marks each

Lectures-200 hrs

Practicals-200 hrs

Practical/Viva voce – 200 marks

Total marks - 400

Paper I

Part A – Sl No:- 1-13

Part B – Sl No:- 14-18

Paper II

Sl No:- 19-22

Practicals - Sl No:- 23-26

