2.3 DRAVYAGUN VIGYAN

Theory Two Papers – 100 Marks Each

Practical/Viva voice – 200 Marks

Lectures – 180

Practicals and Demonstration – 90

Paper I 100 Marks

Part A 50 Marks

1. DravyagunaShastra Lakshana and fundamental principles of Dravyaguna Shastra, General Introduction of Saptapadartha – (Dravya, Rasa, Guna, Virya, Vipaka, Prabhava and Karma.) Panchapadartha (Rasa, Guna, Virya, Vipaka, Prabhava),

2. Dravya Lakshana of Dravya, Panchabhaautikatwa, Aushadhatva, Dravya Pradhanyeye yuktyah (arguments for importance of dravya). Classification of Dravya , according to Chetan-achetan (living – Non Living), karya-karan, Utpatti (Origin), Yoni (Mode of Origin), Rasa, Virya, Vipaka, Prayoga (Use), Dosha karma (Action on Dosha), method of Dravya classification according to Brhatrayi and according to Taxonomy.


4. Rasa Etymological Derivation, definition, Meaning of “Rasa” in various contexts, 6 Rasas (Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhaautikatva origin of Rasa, Nirvrittiviseshakramh (manifestation in general and particular), Ritu prabhava(effect of season ),Rasanurasayo bheda(Difference between rasa and anurasas) Lakshana (characteristics),Guna and Karma of 6 Rasa., Kopana and shamana of Dosha and dushya by 6 rasa, Rasaskandha, Effects of excess usage of Rasa. Perception of Rasa.(Rasopalabdhi), Presentational use of Rasa in diet and medicine (Rasa seven Kramah).

5. Vipaka Etymological derivation and definition, difference between Avasthapaka and Vipaka, Types of Vipaka, (Dvividha-Trividha,Panchavidha) Guna and karma of Vipaka, Grades of Vipaka(taratamya), Vipakupalabdhi hetu (Knowledge/Understanding of Vipaka). Differences between Rasa and Vipaka.

6. Virya Etymological derivation, definition and Nature of Virya, Numbers of Virya. (Dvividha &Ashtavidha), Panchabhauthikatva, Virya karmani,
(Effects of Virya) General principles in determination of virya along with exceptions. Arguments for importance of virya along with exceptions

7. **Prabhava** Etymology and definition, Effects of Prabhava, Samanyapratyarabdha, Vichitrapratyarabdha, Arguments for Predominance of prabhava.

8. Interrelation of Rasa-Guna-Vipaka-Virya-prabhava with respect to their strength (balabal nirupana).

9. **Karma** Nirukti lakshana swaroopa and bheda of karma (Etymological derivation, definition, nature and types of action). Karma according to ancient and modern views. Define with mode of action of the following karmas with examples –

31.Vedanasthapana 32.Prajasthapana 33.Sonithasthapana
34.Raktaprasadana 35.Shukrala 36.Sukravanana
37.Sukrarechaka 38.Sukrasasthambhaka 39.Sukrashodhana
40.Stanyajanana 41.Stanyashodhana 42.Mutravirechaniya
43.Mutravirajaniya 44.Pureeshavirajaneeya 45.Pureeshhasangrahaneeya
46.Swedasangrahaka 47.Swedana 48.Swedopaga
49.snehana 50.Snehopaga 51.Vamana
52.Vamanopaga 53.Virechana 54.Virechanopaga
55.Sirovirechanopaga 56.Asthanopaga 57.Anuvasanopaga
58.Hikkaniyana 59.Trishnanigrahana 60.Chhardinigrahana
61.Dahaprabhasana 62.Shitaprabhasana 63.Angamardaprasamana
64.Jvarahara 65.Shramahara 66.Shothahara
67.Swashara 68.Kasahara 69.Shoolaprabhasana
70.Truptighna 71.Kandugna 72.Kushtagna
73.Krumighna 74.Arshoghna 75.Vishaghna
76.Sandhaniya 77.Vranaropana 78.Ashmaribhedhana
10. Description of the following classes (Ganas) of Dravyas depending upon their similarity, morphology, properties, action, class, and effects:

a) Audbhida Ganas (Vegetable origin)

b) Jangama Ganas (Animal origin)
   - Ksheerashtaka, Mutrashtaka, Pitta panchaka.

c) Parthiva Ganas (Mineral origin)
   - Lavana Panchaka, Kshara dvaya, Kshara Ashtaka.

11. Basis of nomenclature of dravya, Basis and Derivation of synonyms.
   Ecology- Classification of geographical area (desha) and soil (bhumi), collection of dravya, Nature and quality of drug to be collected (swarupa of sangrahya dravya), Method of collection (Sangrahana vidhi), -Vegetable and Animal drugs according to part used. Period of collection according to virya, preservation of collected dravyas, Storehouse (bhesajagara).

12. Various impurities of dravya, their purification, Brief knowledge of, adulterants, Artificial/synthetic drugs, concept of Substitution (abhavapratinidhi dravya).

13. Brief knowledge of plant extracts, additives, excipients, preservative, food Colours.

14. Ideal drug (Prashasta bhesajha), Use of different part of medicinal plants (bhesajha prayoga, prayojyanga), Incompatibility (knowledge of viruddhatwa), principles of preparation of Aushadha yoga, Consideration of vaya, bala, linga, agni, dosa, dushya, vyadhi, koshta, deha prakriti, Abhyasa, satwa, desha kala and kalpana for deciding dosage of drugs (Matranishchiti). Anupana vyavastha, time of administration (bhaisajya sevana kala), routes of drug administration (bhaisajaya prayoga marga) Prescription writing.

15. Brief information about 6 Nighantus (Dhanwantari Nighantu, Shodala Nighantu, Kaiyyadeva Nighantu, Madanapala Nighantu, Bhavaprakasha Nighantu, Raja Nighantu,)
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 Charaka, Sushruta and Bhavaprakasha.

Habit and habitat/verities
External morphology
Useful parts
Important phytoconstituents
Rasa panchaka
Action on Dosha, Dhatu, Mala
Therapeutic indications-
Amaikaprayoga and Matra (Therapeutic administration and Dose)
Name of important formulations
Adverse effects and remedial measures
Shodhana (as required)

1. Ahiphena  2. Agnimantha  3. Agaru
25. Citraka  26. Dadima  27. Danti,
31. Draksha  32. Durva  33. Ela
34. Eranda  35. Gambhari  36. Gokshura
40. Haritaki  41. Hingu  42. Jambu,
43. Jatamamsi  44. Jatiphal  45. Jeerakdvaya
58. Kupilu  59. Kumkum kesara  60. Kushmanda
2. Brief knowledge of following drugs with respect to Sanskrit Name

<table>
<thead>
<tr>
<th>Sanskrit Name</th>
<th>Botanical Name</th>
<th>Family</th>
<th>Habit (Samanya swaroopa)</th>
<th>Part used</th>
<th>Rasapanchaka</th>
<th>Indications</th>
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<tbody>
<tr>
<td>1. Agastya</td>
<td>2. Akarakarabha</td>
<td>3. Ajamoda</td>
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<td>4. Amra</td>
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<td>24. Dattura</td>
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<td>33. Hismra</td>
<td>34. Hrutpatri</td>
<td>35. Indravaruni</td>
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</table>
36. Ingudi 37. Irmeda 38. Isvari
42. Jeevanti 43. Kadali, 44. Kadamba
45. Kaidarya 46. Kamala 47. Kankola
51. Kasha 52. Karvira 53. Karavella
63. Kusha 64. Lajjalu 65. Langali
66. Latakanraja 67. Latakasthurii 68. Madayantika
69. Mahanimba 70. Mandukaparni 71. Mashaparni
72. Mayaphala 73. Methika 74. Meshashrungi
75. Mudgaparni 76. Mulaka 77. Nagabala
81. Padmaka 82. Parushaka 83. Parasika yavani,
84. Parijata 85. Parisha 86. Parnabija
87. Parnayavani 88. Parpataka 89. Patalagauri
90. Patha 91. Patranga 92. Pilu
93. Plaksha, 94. Priyala 95. Prishniparni
96. Priyangu, 97. Puga, 98. Putiha,
102. Rohitaka, 103. Sala 104. Saptachakra
105. Sarala, 106. Sarja 107. Satapa
111. Shinsapa 112. Snuhi 113. Sringataka
114. Surana, 115. Svarnakshiri 116. Tagara
117. Tailaparni 118. Talmuli 119. Taruni
120. Tavakshira 121. Tuvaraka 122. Upakunchika
123. Udumbara, 124. Vamsha, 125. Vata

Part B 50 Marks

3. Introduction, Guna, Karma and uses of following Jantava dravya (drugs of animal origin).

4. Introduction, knowledge of guna-karma of following groups of Annapana varga:-

1. Jala Varga  
2. Dugdha Varga  
3. Madhu Varga  
4. Ikshu Varga  
5. Taila Varga  
6. Madya Varga  
7. Mutra Varga  
8. Sūkadhanya Varga  
9. Simbidhanya Varga  
10. Phala Varga  
11. Shaka Varga  
12. Mansa Varga  
13. Lavana Varga  
14. Kritannavarga(Processed food)

5. Introduction, Definition & scope of Pharmacology.

   Principles of general Pharmacology.

   Brief Knowledge of following

   Anaesthetics, CNS depressants, Sedatives, Hypnotics, Tranquilisers,  
   Antipyretics, Analgesics, Antiepileptics, Antihypertensive, Antianginal,  
   Antiplatelet, Hypolipidaemic, Haemopoetic, Coagulants, Bronchodilators,  
   Aerosols/Inhalants, Expectorants, Digestants, Carminatives, Antacids,  
   Antiulcer, Laxatives, Antidiarrhoeals, Antiinflammatory, Hormonal therapy,  
   Antidiabetic, Antithyroids, Oxytocic. Galactagogues, Contraceptives, Styptics,  
   Antihistamins, Antimicrobial, Antibiotics, Antimalarial, Amoebicidal,  
   Antifilarial, Anthelmentic, Antifungal, Vitamins, Minerals, Water imbalance and IV  
   fluids, Vaccines, antivenom, antirabies serum, Local anti septs, drugs in  
   ophthalmic practice, Anti cancer drugs and immunomodulators etc.

6. Brief knowledge about WHOs “Essential Drug List”

7. Brief knowledge of Cultivation, Conservation of Medicinal plants and  
   information about endangered species.

PRACTICAL

1. Detailed knowledge of identification of following drugs: -

   (i) Kanda (stem) - Guduchi  
   (ii) Patra (leaves) - Swarnapatri, Vasa, Kumari  
   (iii) Pushpa (flower and Parts of flower)- Lavanga, Nagapuspa, Japa  
   (iv) Phala (fruit) - Pippali, Madanaphala, Vidanga  
   (v) Beeja (seeds) – Eranda, Kapikacchu, Vidanga  
   (vi) Twaka (bark) –Kutaja, Arjuna,  
   (vii) Moola (Root)- Punarnava, Aswagandha  
   (viii) Niryasa (exudate) - Hingu, Guggulu, Mocharasa
Jangama dravya (animal origin) - Madhu.Ghrita

1. Collection of minimum 50 herbarium specimen from field visit.
2. Compilation of a drug not less than 25 pages
3. Concept based clinical study on single drugs (Minimum 5 from detailed and non-detailed list of drugs) in patients.

**PRACTICAL MARKS DIVISION**

1. Compilation/Essay 10 Marks
2. Herbarium 10 Marks
3. Single drug therapy 10 Marks
4. Pharmacognocy record in Laboratory 10 Marks
5. Drug identification 80 Marks
6. Oral/(Viva-Voce) 80 Marks

**Reference Books**

1. Abhinav Buti Darpan (Vol.1-2) - Vd. Roop Lal Vaishya
2. Aushadna Vigya Shastra - Acharya Pt. Vishvanatha Dwivedi
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) - Shrekanthamurti
7. Bhav Prakash Nighantu - With Vd. Krishna Chandra Chunekar commentary
8. Bhrinad dravyagunanadarsha - 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
<table>
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<tr>
<th>No.</th>
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<tbody>
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<td>22.</td>
<td>Glossry of Vegetable Drugs in Bhrirtrayis</td>
<td>Thakur Balwant Singh &amp; Vd. Krishna Chandra Chunekar</td>
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<td>23.</td>
<td>Introduction to Dravyaguna</td>
<td>Acharya Priyavrata Sharma</td>
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<td>Kriyatamka Aushadi Parichaya</td>
<td>Acharya Pt. Vishvanath Dwivedi</td>
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<td>Materia Medica</td>
<td>Acharya Ghosh</td>
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<td>27.</td>
<td>Pharmacological basis of Medical Practice</td>
<td>Goodman &amp; Gillman</td>
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<td>Pharmacology and Pharmacotherapeutics</td>
<td>Satoskar Bhandarkar &amp; Ainapure</td>
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<td>Prayogatamaka Dravyaguna Vigyana</td>
<td>Dr. Maya Ram Uniyal</td>
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<td>Priya nighantu</td>
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<td>Raspanchaka/Dravyaguna Siddhanta</td>
<td>Prof. Shivcharan Dhyani</td>
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<td>32.</td>
<td>System of Plant Nomenclature in Ayurveda</td>
<td>Dr. Gyanendra Panday</td>
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<td>33.</td>
<td>Text Book of Pharmacology</td>
<td>Trees &amp; Valis</td>
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<td>34.</td>
<td>Textbook of Dravyaguna</td>
<td>Dr.K.Nishteswar</td>
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<td>35.</td>
<td>Unani Dravyaguna Vigyana</td>
<td>Hakim Daljeet Singh</td>
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<td>36.</td>
<td>Useful parts of Charaka, Sushrut, and Vagbhata.</td>
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<td>Uttarakand Ki Vanaspatiya</td>
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