CENTRAL COUNCIL OF INDIAN MEDICINE
NEW DELHI
SYLLABUS OF AYURVEDACHARYA (BAMS) COURSE

INDEX

1ST PROFESSIONAL

1.1. SANSKRIT 2-3
1.2. PADARTHAA VIGYAN 4-8
1.3. AYURVEDA ITIHAS 9-11
1.4. ASHTANG HRIDAYAM (SUTRASTHAN) 12-13
1.5. RACHANA SHARIR 14-18
1.6. KRIYA SHARIR 19-26

2ND PROFESSIONAL

2.1. CHARAK SAMHITA (PURVARDHA) 27-28
2.2. SWASTHAVRITTA 29-39
2.3. DHARMAYUGA VIGYAN 40-48
2.4. RASA SHASTRA & BHAISHAJYA KALPANA 49-58
2.5. ROGA VIGYAN EVUM VIKRITI VIGYAN 59-65
2.6. AGADA TANTRA, VYAVHAR AYURVED EVUM VIDHI VAIDYAK 66-69

3RD PROFESSIONAL

3.1. CHARAK SAMHITA (UTTARARDHA) 70-71
3.2. KAYACHIKITSA 72-78
3.3. SHALAKYA 79-84
3.4. SHALYA 85-91
3.5. PRASUTI TANTRA EVUM STRI ROGA 92-96
3.6. KAUMARBHRITYA 97-100
3.7. PANCHKARMA 101-105

1 final UG syllabus 2010
1.1 Sanskrit

Theory - Two Papers – 100 Marks Each
Practical / Viva voce – 50 Marks
Lectures - 150

Paper I

1. Vyakaranam
Karma-Kartru, lakarartha prakriya, Kridanta prakarana (Kritya prakriya), Purvakridantam, Unadaya, Uttar-kridanta, Vibhaktyartha prakaran, Samasa prakaran (Kevala samas, Avayibhavah, Tatpurush, Bahuvihi, Dvandva, samasanta), Tadhita prakarnani, Streepratyaya Prakaranam.

Text Book - Laghu Siddhanta Kaumudi

2. Translation

(i) Translation from English / Hindi / Regional language into Sanskrit
   Or Essay in Sanskrit related to Ayurveda

(ii) Translation from Sanskrit to English, Hindi and Regional languages (Any desired official language)

Reference Books

(i) Anuvada Chandrika- Chakradhara Hansa Nautiyal
(ii) Sanskrita Ayurveda Sudha- Dr B. L. Gaur
(iii) Praudh Rachananuvada Kaumudi- Dr Kapil Dev Dwivedi
(iv) Ayurvedic Classical Texts be used as Exercise Material for Translation.

3. Identification of grammatical errors from the given excerpt and writing the grammatically corrected version - Material/ excerpt should be selected from the above reference books.
Paper II 100 Marks

1. **Vaidya Sadvrittam**
   **Pescribed Books :**
   
   (i)  Vaidyakiya Subhashitani (1-20 chapters)
   By Dr. Bhaskar Govinda Ghanekar
   
   (ii) Ayurvediya Hitopdesha
   By Vaidya Ranjit Rai Desai
   
   (iii) Panchatantram- Aprikshitkarkam
   
   Or
   
   Verses from classics (Brihatrayi) related to Vaidya Sadvrita

2. **Order of reading classics** (Grantha-adhyayan krama parichaya)
   Pathana Krama / sampradana parichaya, padavibhaga, arthanvaya krama, anvyartha, bhvartha, dhvanitartadi-prabhasana Karma parichaya Samastapada sarthak-vigraha, dhatu-dhatvartha, pratyaya-pratyayartha, subanta-tigantadi bhedana padakritya (anvayartha samarthanam) Nirupanam.

   Material for practice (Exercise Material)
   
   Sushrut Samhita-Sharir Sthana-Chapter-4 (Garbhavyakarana Shariram).

**PRACTICAL**

Viva-voce 50 Marks

3 final UG syllabus 2010
1.2. PADARTHA VIGYANAM

Theory- Two Papers– 100 Marks Each
Practical/ Viva voce – 50 Marks
Lectures - 150
Practicals and Demonstration - 30

Paper I

100 Marks

Padartha Vigyanam

1.1 Ayurveda Nirupana

Definition and lakshana of Ayu, composition of Ayu, definition and lakshana of Ayurveda, definition and types of siddhanta, Introduction to basic principles of Ayurveda and their significance.

1.2 Ayurveda Darshana Nirupana

Philosophical background of fundamentals of Ayurveda, Meaning of the word “Darshana” and its omnipresence, evolution of Darshana, their numbers and classification, general introduction of schools for Indian Philosophy with an emphasis on Nyaya, Vaisheshik and Sankhya Darshana. Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda), definition of Padartha, Lakshana of Padartha. Division and number of Padartha, Bhava and Abhava Padartha; Charak’s opinion regarding this; introduction & description of Karana-Padartha mentioned by Charak.

2. Dravya Vigyaniyam

Definition, lakshana and number of Dravya, Panchabhuta; origin of Panchamahabhuta, Parasparanupravesha (mutual conglomeration), types of panchikaran, Lakshana and types of Prithvi, Lakshana and types of Tejas, Lakshana and types of Jala, Lakshana and types of Vayu, lakshana of Akasha and its Aupadhika types, Kaala Nirupana, etymological derivation, definition and lakshana of the word ‘Kaala’, aupadhik types of Kaala, significance of Kaala in Ayurveda, Dik-nirupanam, significance of Dik and Aupadhik types, lakshana of Atma, description of Purusha mentioned in Ayurveda - Ativahika Purusha/ Sukshma Sharir/ Rashi Purusha/ Chikitsiya Purusha/ Karma Purusha/ Shaddhatvatmak Purusha, initiation of Atma towards perception of knowledge (Atmanah gyana Pravritti). Mano Nirupanam, Lakshana, synonyms of Manas, Mana as substratum of diseases (Manasah Vyadhyashryatram), Guna (qualities), Vishaya (subject), Karma (function), Ubhayaindriyatva and seat of Mana; contribution of Panchamahabhuta and Triguna in physical constitution (Dehaprakriti) and mental faculty; disapproval of dravyatva of Tamas, practical study/application of Dravya in Ayurveda.

4 final UG syllabus 2010
3. **Guna Vigyaniyam**

   Etymological derivation, definition and number of Guna, Vaishesika guna, Saartha-Shabda, Sparsha, Rupa, Rasa, Gandha, Adhyatma guna- Buddhi, Sukha, Dwesha, Ichha, Dwesa, Prayatna; Paradi Guna, Gurvadi guna- their introduction and clinical application.

4. **Karma Vigyaniyam**

   Definition, lakshana and types of Karma, types of Karma mentioned in Nyaya, Description of Karma in Ayurveda, practical study/ application of Karma in Ayurveda.

5. **Samanya Vigyaniyam**

   Definition, Lakshana, types of Samanya, practical study/ application of Samanya in reference to Dravya, Guna and Karma.

6. **Vishesha Vigyaniyam**

   Definition, lakshana and types of Vishesa, detailed description of the verse “Pravrittrubhayasyatu”, practical study of Vishesa for clinical application in Ayurveda.

7. **Samavaya Vigyaniyam**

   Definition and Lakshana of Samavaya, practical study of Samavaya for clinical application in Ayurveda.

8. **Abhava Vigyaniyam**

   Definition and lakshana of Abhava Padartha, classification of Abhava- description of Pragabhava, Pradhwansabhava, Atyantabhava, Anyonyabahv and clinical significance of Abhava in Ayurveda.
Pramana/ Pariksha Vigyaniyam (Epistemology)

1. **Pariksha Nirupana (means of getting knowledge)**
   Definition, significance and necessity of pariksha, Two types of anubhava-prama and aprama, Lakshana and types of prama and prameya, Lakshana, causes and types of Smriti (memory), Significance and importance of pramana. Enumeration of pramana according to different schools of philosophy, Four type of methods for examination in Ayurveda (chaturvidha pariksha vidhi), Pramana in Ayurveda, Incorporation of different pramana into three pramana, Use of word pariksha in reference to pramana in classics of Ayurveda and Practical application of methods of examination (pariksha vidhi) in treatment (chikitsa).

2. **Aptopdesha Pariksha/ Pramana Nirupana (Authoritative instruction/ Spiritual testimony)**
   Definition of aptopdesha, lakshana of apta, lakshana of sabda, and its types, shabdavritti - abhidha, lakshana, vyanjana, tatparyakhya; shaktigraha hetu, vakya Characteristic; Vakyarthya gypahhetu- akanksha, yogyata, sannidhi.

3. **Pratyaksha Pariksha/ Pramana Nirupana (direct observation or perception)**
   Definition and lakshana of pratyaksha, Types of origin of pratyaksha jnana, Types of pratyaksha- nirvikalpaka- savikalpaka with description, Description of laukika and alaukika types and their further classification, Sannikarsha Characteristic, six types of sannikarsha, characteristics of sense organs (Indriyanam lakshanam), Classification of Indriya and enumeration. Description of panchapanchaka, establishment of origin of Indriya by panchamahabhuta (bhattikatwa of Indriya) and similarity in sources (tulyayonitva) of Indriya. Dominance of antahkaran, Hindrances in direct perception (pratyaksha anupalabdhikaran), Detailed description of direct perception (pratyaksha) by various instruments/equipments, necessity of other pramana in addition to pratyaksha, Practical study/ application of pratyaksha in physiological, diagnostic, therapeutics and research grounds.

4. **Anumana Pariksha/Pramana Nirupanam (Inference)**
   Definition and lakshana of Anuman. Introduction of anumiti, paramarsha, vyapti, hetu, sadhya, paksha, dristanta etc. Types of anuman mentioned by Charak Samhita & Nyaya Darshana. Characteristic and types of vyapti, Characteristic and types of hetu, description of ahetu and hetwabhasa. Characteristic and significance of tarka. Practical study/ application of anumana pramana in physiological, diagnostic, therapeutics and research grounds.
5. **Yukti Pariksha/ Pramana (Epistemology of reasoning)**
Definition and lakshana of yukti pariksha, discussion on yukti pramana. Importance & characteristic of yukti pariksha in Ayurveda. Practical study and utility of yukti pariksha in therapeutics and research.

6. **Upamana Pramana Nirupanam (Analogy)**
Definition and lakshana of upamana. Application of upamana in therapeutics and research.

7. **Karya- Karana Siddhanta Nirupanam (Cause and Effect Theory)**
Definition and lakshana of karya and karana. Types of karana. Significance of karya and karana in Ayurveda. Different opinions regarding manifestation of karya from karana - satkaryavada, asatkaryavada, parinamvada, arambhavada, paramanuvada, vivartavada, kshanabhangaurvada, pilupa, pitharpaka, anekantavada, swabhavoparamvada.

8. **Srishti-Nirupanam**
Srishti-laya nirupanam (evolution and devastation of universe), Description of tatvotpatti, Tatva-nirupanam, classification of tata. Evolution of universe (life) according to Charak, Sushruta (Srishti-Vikskrama); Ashtaprapriti, Shodashhavikara and their description. Similarity and dissimilarity between kshetra-kshetragya, vyakta-avyakta, prakriti-purusha. Triguna nirupanam, Description of theories of rebirth and salvation (punarjanma & moksha)

9. **Shastrartha Bodhaka**
Shastra Lakshana, tantra guna, tantra dosha, detailed description of tantryuykti, Brief description of tachhilya and arthashraya.

**PRACTICAL**

**Content of Practical**

1. Panchabhaautika nirupanam of Karya dravya and their introduction.

2. Examination of Bhautika / Samanya guna and introduction.

3. Examination of physical (Panchabhaautika Prakriti and Deha prakriti) and Mental temperament composed by triguna (Trigunatmaka Manas prakriti).

4. Exposition or display of process of Indriyartha Sannikarsha in establishment of dravya and roga (dravya and rogavinishchaya).

5. Importance / significance of pariksha / pramana in examination of dravya, roga and rogi. (disease and patient).

6. Allotment of practical work according to syllabus.
Distribution of Marks

1. Assignment 10 - Marks
2. Spotting 10 - Marks
3. Viva voice 30 - Marks
Total 50 Marks

Reference Books

1. Padartha Vigyan Acharya Ramraksha Pathak
2. Ayurvediya Padartha Vigyana Vaidya Ranjit Rai
3. Ayurved Darshana Acharya Rajkumar Jain
4. Padartha Vigyana Kashikar
5. Padartha Vigyana Balwant Shastri
6. Sankhya Tantra Kaumadi Gajanan Shastri
7. Psycho Pathology in Indian Medicine Dr. S.P. Gupta
8. Charak Evum Sushrut ke Darshanik Vishay ka Adhyayan Prof. Jyotirma Acharya
9. Ayurvediya Padartha Vigyana Dr. Ayodhya Prasad Achal
10. Padartha Vigyana Dr. Vidyadhar Shukla
11. Padartha Vigyana Dr. Ravidutta Tripathi
12. Ayurvediya Padartha Vigyana Vaidya Ramkrishna Sharma Dhandha
14. Ayurvediya Padartha Darshan Pandit Shivhare
15. Padhartha Vigyan Dr Shailaja Srivastava
16. Useful Parts of Charak, Sushrut and Vagbhata
1.3 AYURVED ITIHAS (History of Ayurveda)

Theory - One Paper - 100 Marks

Lectures - 60

1. Etymological derivation (Vyutpatti), syntactical derivation (Niruktti) and definition of the word Itihas, necessity of knowledge of history, its significance and utility, means and method of gaining knowledge viz. historical person (Vyakti), subject (Vishaya), time period (Kaal), happening (Ghatna) and their impact on Ayurveda.

2. Descent of Ayurveda, chronology of Ayurveda according to different Schools, introduction to eight branches of Ayurveda and concerned renowned texts. Introduction of the authors of these texts.

3. Eternity of Ayurveda (Shashvatvam and Anaditvam).


8. Introduction and time period of authors of compendium (Granthasamgraha kaala) – Acharya Bhavmishra, Sharangadhara, Vrinda, Madhavakara, Shodhala, Govind Das (Author of Bhaishajya Ratnawali), Basavraja etc.


11. Introduction of authors of Modern era – Gan Nath Sen, Yamini Bhushan, Yadavji Tikramji Acharya, Ghanekar, Damodar Sharma Gaur, Priyavrat Sharma, Swami Laksmiram, Dr. P. M. Mehta, Daji Shastri Pade etc.

13. Impact of Ayurveda on Hippocrates (Father of Allopathy), Invitation to Indian physicians by Yavans and translation of Ayurvedic text into Arabian language. Visit to Greece by Indian scholars, relation between Greece and India in ancient period (made by Alexandar) and expansion of Ashvavaidyaka in Greece.

14. Developmental actions for Ayurveda in post-independence period, development in educational trends, establishment of different committees, their recommendations, Central Council of Indian Medicine, Central Council for Research in Ayurveda and Siddha, foundation of department of AYUSH, its introduction and activities, Drug and Cosmetic Act, Ayurvedic Pharmacopeia Committees formation and activities of organisations and institutions like Rashtriya Ayurveda Vidyapeeta etc. Activities in field of Research in Ayurveda according to different subjects. Initiation for writing down a text, different councils of vaidya and their activities.


Reference Books

1. Upodghata of Kashyapa Samhita  
   Paragraph of acceptance of Indian medicine  
   Rajguru Hem Raj Sharma

2. Upodghata of Rasa Yogasagar  
   Vaidya Hariprapanna Sharma

3. Ayurveda Ka Itihas  
   Kaviraj Suram Chand

4. Ayurveda Sutra  
   Rajvaidya Ram Prasad Sharma

5. History of Indian Medicine (1-3 part)  
   Dr. Girindra Nath Mukhopadhyaya

6. A Short history of Aryan Medical Science  
   Bhagwat Singh

7. History of Indian Medicine  
   J. Jolly

8. Hindu Medicine  
   Zimer

9. Classical Doctrine of Indian Medicine  
   Filiyosa

10. Indian Medicine in the classical age  
    Acharya Priyavrata Sharma

11. Indian Medicine (Osteology)  
    Dr. Harnley

10 final UG syllabus 2010
<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Author</th>
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</thead>
<tbody>
<tr>
<td>12.</td>
<td>Ancient Indian Medicine</td>
<td>Dr. P. Kutumbia</td>
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<tr>
<td>13.</td>
<td>Madhava Nidan and its Chief Commentaries (Chapters highlighting history)</td>
<td>Dr. G.J. Mulenbelt</td>
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<td>14.</td>
<td>Ayurveda Ka Brihat Itihasa</td>
<td>Vaidya Atridev Vidyalankara</td>
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<td>15.</td>
<td>Ayurveda Ka Vaigyanika Itihasa</td>
<td>Acharya Priyavrata Sharma</td>
</tr>
<tr>
<td>16.</td>
<td>Ayurveda Ka Pramanika Itihasa</td>
<td>Prof. Bhagwat Ram Gupta</td>
</tr>
<tr>
<td>17.</td>
<td>History of Medicine in India</td>
<td>Acharya Priyavrata Sharma</td>
</tr>
<tr>
<td>18.</td>
<td>Vedomein Ayurveda</td>
<td>Vaidya Ram Gopal Shastri</td>
</tr>
<tr>
<td>19.</td>
<td>Vedomein Ayurveda</td>
<td>Dr. Kapil Dev Dwivedi</td>
</tr>
<tr>
<td>20.</td>
<td>Science and Philosophy of Indian Medicine</td>
<td>Dr. K.N. Udupa</td>
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<tr>
<td>21.</td>
<td>History of Indian Medicine from Premoryana to Kushana Period</td>
<td>Dr. Jyotirmitra</td>
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<tr>
<td>22.</td>
<td>An Appraisal of Ayurvedic Material in Buddhist literature</td>
<td>Dr. Jyotirmitra</td>
</tr>
<tr>
<td>23.</td>
<td>Mahayana Granthon mein nihita Ayurvediya Samagri</td>
<td>Dr. Ravindra Nath Tripathi</td>
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<tr>
<td>24.</td>
<td>Jain Ayurveda Sahity Ka Itihasa</td>
<td>Dr. Rajendra Prakash Bhatnagar</td>
</tr>
<tr>
<td>25.</td>
<td>Ayurveda- Prabhashaka Jainacharya</td>
<td>Acharya Raj Kumar Jain</td>
</tr>
<tr>
<td>26.</td>
<td>Charaka Chintana</td>
<td>Acharya Priyavrata Sharma</td>
</tr>
<tr>
<td>27.</td>
<td>Vagbhata Vivechana</td>
<td>Acharya Priyavrata Sharma</td>
</tr>
<tr>
<td>28.</td>
<td>Atharvaveda and Ayurveda</td>
<td>Dr. Karambelkara</td>
</tr>
<tr>
<td>29.</td>
<td>Ayurvedic Medicine Past and Present</td>
<td>Pt. Shiv Sharma</td>
</tr>
<tr>
<td>30.</td>
<td>Ancient Scientist</td>
<td>Dr. O.P. Jaggi</td>
</tr>
<tr>
<td>31.</td>
<td>Luminaries of Indian Medicine</td>
<td>Dr. K.R. Shrikantamurthy</td>
</tr>
<tr>
<td>32.</td>
<td>Ayurveda Ke Itihasa Ka Parichaya</td>
<td>Dr. Ravidutta Tripathi</td>
</tr>
<tr>
<td>33.</td>
<td>Ayurveda Ke Pranacharya</td>
<td>Ratnakara Shastri</td>
</tr>
<tr>
<td>34.</td>
<td>Ayurveda Itihasa Parichaya</td>
<td>Prof. Banwari Lal Gaur</td>
</tr>
</tbody>
</table>
1.4. ASHTANGA HRIDAYA (SUTRASTHAN)

Theory- One Paper – 100 Marks
Practical/ Viva voce – 50 Marks
Lectures - 60

For the convenience of learning, allotted marks for Sutrasthan of Ashtanga Hridaya has been divided into following two groups:

1) **Chapters specified for thorough study with Marks**
   - Chapter First to Tenth and Fourteenth (1-10 & 14) 44 Marks
   - Chapter eleventh to thirteenth (11-13) 15 Marks
   - Chapter Sixteen to Twenty (16-20) 20 Marks
   - Twenty-seventh (27) and Thirtieth (30) chapters 7 Marks

2) **Chapters specified for Introductory study with Marks**
   - Chapter Fifteenth (15) 04 Marks
   - Chapter Twenty two to Twenty six, Twenty eight & Twenty nine (22 – 26, 28 & 29) 10 Marks

**PRACTICAL**

**Topic of chart preparation**

Ayurvedavatarana according to Ashtanga Hridaya, Ashtanga of Ayurveda, Agni, Prakriti, Koshta, Tridosha, Rasa-guna-virya-vipaka and prabhava of dravya, Ritucharya, Dinacharya, Vega-udirana and vidharana, Chatushpada of Chikitsa, Sadhyasadhyata, different classification of dravya- toya, kshira, ikshu, etc. shooka, shimbi, mamsa, shaka, phala etc. Dosha samshodhana kaala, vridhhi- kshaya lakshana of Dosha, Dhatu and Mala, Dosha prakopa according to Ritu, Viruddhahara, Traya Upastambha.

**Parameters for Internal Assessment.**

Memorizing and describing two shlokas weekly, discipline, oral and written presentation and other activities.

Parameters for internal Assessment (15 Marks) Memorizing and describing two shlokas weekly, discipline, oral and written presentation and other activities.
Distribution of Marks

1) For chart framing / Compilation 10 Marks
2) Recitation & writing of minimum ten shlokas among memorized shlokas (The shloka should be memorized along with Padavibhaga, Anvaya, Bhavartha and practical applicability.) 10 Marks
3) Viva-voce 15 Marks
4) Internal assessment (15 marks)
   (a) Memorizing two shlokas weekly 5 Marks
       (At least 40 shlokas should be memorized as discussed above in a span of one year and six months)
   (b) Passage writing 5 Marks
   (c) Speech on any one topic related to Ashtanga Hridaya 5 Marks

Total 50 Marks

Reference Books

Ashtanga Hridayam Hindi Commentary by Lalchanda Vaidya
Ashtanga Hridayam English Commentary by K.R. Srikantamurhy
Ashtanga Hridayam Prof. Banwari lal Gaur.
Ashtanga Hridayam by Vagbhata Dr Vishwavasu Gaur.
Ashtanga Hridayam by Vagbhata Dr. Bulusu Sitaram.
Ashtanga Hridayam by Vagbhata Dr. T. Sreekumar
1.5 RACHANA SHARIR

Theory- Two Papers– 100 Marks Each

Practical/ Viva voce – 200 Marks

Lectures (1 hour) - 210

Practicals /Demonstration (1 ½ hour) - 210

Paper I 100 Marks

Part A 50 Marks

1. Detailed description of principles of ‘Sharir’ and their co-relation with modern medical science.

2. Shariropkrama
   Description of Shaarir and Sharir, knowledge and importance of Shaarir and Sharir, ‘Shadangatva’ of Sharir, Anga pratyanga vibhaga, Preservation and Dissection Method of dead body, Divisions of Sharir.

3. Knowledge of terminologies used in Sharir
   Detail knowledge of terms, position, and Planes e.g. Urdhva (Superior), Adhah (Inferior), Nikatastha (Proximal) and Doorastha (Distal), Agrima (Anterior or Ventral), Abhi prishha or Paschima (Posterior), Madhyanuga (Median), Parshva (Laterolateral). Abhimadhyama (Medial) and Uttana (Superficial) and Gambhira (Deep) section, Anuprastha (Vertical) and Agra paschedasa (Horizontal), Tiryaka (Oblique) sections, Mamsa peshi (Muscles), Sira, Dhamani, Tantrika, Snayu (Ligaments), Kurcha, Kandra (Tendon), Jala (Plexuses), Asthi Sanghat (Complex Joints), Seemanta (Sutures of Skull), Rajju (Cords) and Sevani.

4. Abhinivriti Sharir
   Vyakta and Aayakta, Kshetra and Kshetrajna, Constitution of ‘Purusha’ according to dhatu bheda, Panchabhouhotikatva and Sukshamatva of body, Karma Purusha, Trigunatamakatva, Tridoshmayatva, Doshadhatumalamulakatva of Sharir.

5. Garbha Sharir (Embryology)
   Definition of ‘garbha’ (embryo), ‘Garbhotpadakbhava’, Sukshma garbha sharir, micro anatomical description of ‘Dhatu and Avayava’ ‘Shukra’ Artava, Antahpushpa, Garbhadhana (fertilization) and Kosha vibhajana (Cell division), along with role of Tridosha and Panch mahahbhuta in fetal development, ‘Bija’-(sperm and ovum), Bijabhaga, Bijabhagayava and Genetics in Ayurveda. Anuvamshika Siddhanta (principles of Hereditary), Linga bheda (Sex determination), Masanumasika Garbha Vridhi Krama (month wise development of Fetus), Garbhavridhikara bhava (factors affecting development and growth of embryo), Deha prakriti, Satwa prakriti etc., Garbha poshana, Apara nirmana (formation of placenta), Nabhinati nirmana (formation of umbilical cord), Ulva, Jarayu, Akritikara bhava, Matrapartantrata of garbha, Bhuta vyapara, formation of Stanya, Angaprayananga nirmana, Development of various systems, Developmental anomalies and their causes (Ayurveda and Modern Views).
6. **Pramana Sharir:**
   Anthropometric - Values of body parts.
   Anguli, anjali, pramana and Sankhya Sharir.

**Part B 50 Marks**

7. **Asthi Sharir (Osteology)**
   Number of bones (Charak, Sushrut and Modern Concept), Asthi swaroopa and Asthi rachana (Structure and texture of bone), Detailed description of each bone - Ossification of bones, applied anatomy of each bone.

8. **Sandhi Sharir (Arthrology)**
   Definition of Sandhi (joints), Types, structure of each Asthi sandhi (joint), specific description of ‘Hanu’ (temporomandibular) and Shakha sandhi (joints of extremities), vertebral joints, Definition of Asthi Sanghat, number and their applied value. Sevani (Sutural Joints), Snayu (Ligaments), movements of Joints and Clinical importance of the Sandhi (joints).

9. **Sira, Dhamani, Srotas Sharir (Angiology)**
   (a) Sira-Dhamani Importance of Raktavaha Sansthan (cardiovascular system), Hridaya (Heart), Sira, Dhamani, Srotas. Definition of Sira, Dhamani, their course, branches, Description of Arteries and capillary, Accessory veins and Principle veins.
   (b) Srotas Sharir: Definition, types, their moola and Srotodusti.

10. **Lasika Sansthan (Lymphatic system)**
    Introduction and study of Lasika pranali (Lymphatic channels), Lasika granthi (Lymphatic glands), Rasa kulya (thoracic duct), Payasvini (lacteals) and Courses of Lasika Vahini (Lymphatic Ducts).

11. **Peshi Sharir (Myology)**
    Introduction and detail structure, shape, size, types and Importance of Peshi (muscles) - their attachments and origin, insertion, actions, nerve supply and its clinical application.
Paper II 100 Marks

Part A 50 Marks

1. Koshta
Defining the terms like – Koshta, Ashaya and Koshtanga, their names and location, Koshtanga of Urah Pradesh (thoracic cavity organs), Udar Pradesh, Koshtanga (organs of abdominal cavity), Description of digestive organs and accessory digestive organs. Organs of Shwasa, Prashwasa (Respiratory system), Organs of Mutravaha Sansthan (Urinary system), Description of male and female prajananang (reproductive organs) and their details.

2. Granthi Sharir
Description of the structure of Bahya Srotas (Exocrine) and Nisrotasa granthi, detail study of granthi Sharir.

3. Kala Sharir
Definition of Kala, structural pattern and detail study of each Kala, study of Vishista Kala like Hridyavarana (Pericardium), Puppusavarana Kala (Pleura), Mastiskavarana Kala (Meninges), Udaravarana Kala (Peritoneum).

4. Twak Sharir (Dermatology)
Definition of Twak (Skin), its swaroopa (structure), types and prayojana.

Part B 50 Marks

5. Uttamangiya Tantrika Sansthan Sharir (Nervous System)
Introduction, Definition, classification and importance of Mastishka (Brain)-
1. Brihatamastishka (Cerebrum), 2. Laghumastishka (Cerebellum), 3. Madhyamastishka (Mid brain), 4. Usnishaka (Pons), 5. Sushumna Shirsha (medulla oblongata), Sushumna Kanda (Spinal cord), Sheershanya tantrika (Cranial Nerves) and Sushmaniya Tantrika (Spinal Nerves), Parisarniya Tantrika (Peripheral nervous system). Description of Swatantra Nadi Samsthan (Autonomic nervous system), Anukampiya and Paranukampiya (Sympathetic and parasympathetic nervous system and nerve plexuses).

6. Tantra Sharir (Neuro Anatomy)
Shatchakra, Ida, Pingala, Saraswati etc.

7. Marma Sharir
Description of the term Marma, their numbers, locations, different types and their terminological values. Importance of trimarma, Charak & Sushrut concept.

8. Anga Rekhankana Sharir - (Surface, Radiological and Imaging Anatomy)
Anga Rekhankana (Surface marking), Vikirana Rachana Sharir (Radiological Anatomy).

16 final UG syllabus 2010
9. **Indriya Sharir: (Sensory organs)**
   Derivation of the word Indriya, its number, Description of Panch Gyanendriya, Panch Karmendriya and Udbhayendriya (Mana). Description of the Eye, Ear, Nose, tongue, Skin and Indriya Adhisthan.

**PRACTICAL**

**Content of Practical**

1. Shava Samskarana and Mruta Shodhana (Dead Body Preservation and Dissection).
2. Shavachedana - Dissection of the whole body.
3. Sampurna Asthi Pradarshana - Demonstration of all bones, Practical demonstration of Komala Avayava (Macro and Microscopic structures of organs) and Koshtanga (Abdominal organs).
4. Practical knowledge of Anga Rekhankana, Surface Anatomy, Sharir Vikirana Radiography.

**Distribution of Marks**

1. Knowledge of the dissected organs. 25 Marks
2. Knowledge of the delicate organs. 25 Marks
3. Knowledge of bones. 25 Marks
4. Knowledge of Marma. 25 Marks
5. Surface Anatomy, Diagrams and Practical records. 25 Marks
6. Daily dissection Log Book 25 Marks
7. Spotting 25 Marks
8. Viva-Voce 25 Marks

**Total** 200 Marks
Reference Books

1. Brihat Shariram
   Vaidyaratna P.S. Varrier

2. Abhinava Shariram
   Acharya Damodar Sharma Gaur

3. Manava Sharir
   (Revised Edition)
   Prof. Dinkar Govind Thatte

4. Manava Bhruna Vidyana
   Prof. Dinkar Govind Thatte

5. Manava Anga Rekhankan
   Vikrian Evum Chayankan
   Sharir Vikiran
   Prof. Dinkar Govind Thatte

6. Sharir Rachana Vigyan
   (English)
   Vaidya P.G. Athawale

7. Manual of Practical Anatomy
   Cunnigham Practical Manual
   Vol-1, Vol-2, Vol-3

8. Clinical Anatomy in Ayurveda
   Prof. D.G. Thatte and
   Prof. Suresh Chandra

9. Sharir Rachna Vigyan (English)
   Prof. D.G. Thatte

10. Ayurvedic Human Anatomy
    Prof. Dr. Giridhar M. Kanthi

11. Regional Anatomy
    B. D. Chaurasia

12. Rachana Sharir Vidyana
    Dr. Mahendra Sing

13. Chapters of Charak,
    Sushrut and Vagbhata
    Sharir Sthana

14. Gray's Anatomy

18 final UG syllabus 2010
1.6. KRIYA SHARIR

Theory- Two Papers – 100 Marks Each

Practical/ Viva voce – 100 Marks

Lectures (1 hour) - 210

Practicals and Demonstration (1 ½ hour) - 90

Paper I 100 Marks

Part A 50 Marks

1. Conceptual study of fundamental principles of Ayurvediya Kriya Sharir e.g. Panchamahabhuta, Tridosha, Triguna, Loka-Purusha Samya, Samanya Vishesha, Rasa-Virya-Vipaka etc. Description of Basics of Srotas.

2. Definitions and Synonyms of term ‘Sharir’, Definitions and Synonyms of term ‘Kriya’, Srishti Utpatti and its adaptation in generation of Sharir, Factors responsible for Srishti Utpatti, Difference and similarities between Prakriti and Purusha, Study of components of Purusha and in context to numerical variations (Purushabheda), Role of Shatdhatupurusha in Kriya Sharir and Chikitsa

   a. Vata Dosha – Vyutpatti (derivation), Utpatti, Nirukti (etymology) of term ‘Vata’, General locations, general properties and general functions of Vata, Five types of Vata with their specific locations, specific properties and specific functions (Prana, Udana, Samana, Vyana, Apana)
   b. Pitta Dosha – Vyutpatti, Utpatti, Nirukti of term ‘Pitta’, General locations, general properties and general functions of Pitta, Five types of Pitta with their specific locations, specific properties and specific functions (Pachaka, Ranjaka, Alohaka, Bhrajaka, Sadhaka); Similarities and differences between Agni and Pitta
   c. Kapha Dosha- Vyutpatti, Utpatti, Nirukti of term ‘Kapha’, General locations, general properties and general functions of Kapha, Five types of Kapha with their specific locations, specific properties and specific functions (Bodhaka, Avalambaka, Kledaka, Tarpaka, Shleshaka)
   d. Etiological factors responsible for Vriddhi-Kshaya of each Dosha and manifestations of Vriddhi-Kshaya of each Dosha.

19 final UG syllabus 2010
e. Kriyakaala of Dosha in view point of Charak, Sushrut and Vagbhata and its clinical importance.

4. Prakriti
   a. Deha-Prakriti – Vyutpatti, Utpatti, Nirukti, various definitions and synonyms for term 'Prakriti', intra-uterine factors responsible for genesis of Prakriti, extra-uterine factors influencing Deha-Prakriti, classification of Deha-Prakriti, characteristics of each kind of Deha-Prakriti, clinical significance of Deha-Prakriti, Anukatva
   b. Manasa-Prakriti – classification, characteristics and clinical significance.

5. Modern Physiology
   b. Definition and mechanisms of maintenance of Homeostasis, Cell Physiology, Membrane Physiology, Resting membrane potential and action potential.
   c. Physiology of Respiratory system: Functional anatomy of respiratory system, Definition of ventilation, Mechanism of respiration, Exchange and transportation of gases, Neural and chemical control of respiration, Spirometry and lung function tests, Artificial respiration.
   d. Physiology of Cardio-Vascular system: Functional anatomy of cardiovascular system. Properties of cardiac muscles. Cardiac cycle, Heart sounds, Regulation of cardiac output and venous return, Physiological basis of ECG. Heart-rate and its regulation, Arterial pulse, Systemic arterial blood pressure and its control, Regional circulations, Physiology of lymphatic circulation.
   e. Modern view of somato-types, biological personality and psychological traits of an individual.

Part B 50 Marks

1. Sharir-Poshana
c. Ahara-paka-prakriya – physiology of related organs (Maha-srotas), avasthapaka, nishthapaka, Maha-srotas-pachana kriya, sara-kitta vibhajana, saranushoshana and genesis of Vatadi Dosha during ahara-pachana

d. Definition of term ‘Koshta’, criteria of classification of Koshta and characteristics of each kind of Koshta

2. Modern physiology

Functional anatomy of gastro-intestinal tract. Descriptive physiology of digestion and absorption in gastro-intestinal tract. Mechanism of secretion and composition of different digestive juices.

Paper II 100 Marks

Part A 50 Marks

1. Dhatu

   General introduction, definition and criteria of Dhatu, Utpatti (during garbhavastha and janmottara kaala), Vyutpatti, Nirukti of term ‘Dhatu’; different theories related to Dhatuposhana, (dhatuposhana nyaya)


   ii) Raktadhatu Vyutpatti, Nirukti, synonyms, Sthana, Guna, Karma and Pramana of Rakta Dhatu; Panchabhautikatva of Rakta Dhatu, physiology of Raktavaha Srotas, Formation of Raktadhatu, Ranjana of Rasa by Ranjaka Pitta, Features of Shuddha Rakta, Specific functions of Rakta, characteristics of Raktasara Purusha; manifestations of Kshaya and Vriddhi of Raktadhatu, Mutual interdependence between Rakta and Pitta.

   iii) Mamsadhatu Vyutpatti, Nirukti, synonyms, Sthana, Guna, Karma and Pramana of Mamsa Dhatu, Physiology of Mamsavaha Srotas, Formation of Mamsadhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsadhatu.

   iv) Medo Dhatu Vyutpatti, Nirukti, synonyms, Sthana, Guna, Karma and Pramana of Medodhatu, physiology of Medovaha Srotas, formation of Medo dhatu, characteristics of Medosara Purusha and manifestation of Kshaya and Vriddhi of Meda.

   v) Asthi Dhatu Vyutpatti, Nirukti, synonyms, Sthana, Guna, Karma of Asthi Dhatu; Physiology of Asthivaha Srotas and formation of Asthi Dhatu, characteristics of Asthisara Purusha, Mutual interdependence of Vata and Asthi Dhatu, manifestations of Kshaya and Vriddhi of Asthi Dhatu.
vi) Majja Dhatu Vyutpatti, Nirukti, types, Sthana, Guna, Karma and Pramana of Majja Dhatu, physiology of Majjavaha Srotas, formation of Majja dhatu, characteristics of Majja Sara Purusha, Rakta-Pitta-Majja relation, manifestations of Kshaya and Vriddhi of Majja dhatu.

vii) Shukra Dhatu Vyutpatti, Nirukti, Sthana, Guna, Karma and Pramana of Shukra Dhatu, physiology of Shukravaha srotas and formation of Shukra dhatu; features of Shuddha and Dushita Shukra, characteristics of Shukrasara Purusha, manifestations of Kshaya and Vriddhi of Shukra dhatu.

2. Ojas
Vyutpatti, Nirukti, synonyms, definition, Utpatti Sthana, Guna, Karma and Pramana of Ojas, classification of Oja (Ojobheda), conceptual study of Vyadhikshamatva; Bala Vrudhikara Bhava, Balabhedha, Relation between Shleshma, Bala and Ojas; Etiological factors and manifestations of Oja kshaya, Visramsa and Vyapat; physiological and clinical significance of Ojo Vayasthapana.

3. Upadhatu
b. Stanya – Nirukti, definition, utpatti guna karma, praman of Stanya; characteristics and assessment of shuddha and dushita Stanya, manifestations of Vriddhi and kshaya of Stanya
c. Artava – Nirukti, definition, Utpatti, Guna Karma of Artava, characteristics of shuddha and dushita Artava, difference between Raja and Artava, physiology of Artavavaha srotas and Artavachakra
d. Tvak – Utpatti, Nirukti, Guna, Pramana, Karma and Bheda. Layer wise diseases of Tvak.

4. Modern physiology
b. Muscle physiology – comparative study of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.
c. Physiology of adipose tissue, lipo proteins like VLDL, LDL and HDL etc.
e. Structure and functions of skin, sweat glands and sebaceous glands.
<table>
<thead>
<tr>
<th>Part B</th>
<th>50 Marks</th>
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<tbody>
<tr>
<td>1. <strong>Mala</strong> - Vyutpatti, Niruki of term 'Mala'; General introduction of Mala, Utpatti (during Garbhavastha and Jamottara Kaala),</td>
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| 2. **Aharamala** – Enumeration and formation of Aharamala.  
  a. Mutra – Vyutpatti, Niruki, Pramana, Sthana, Guna, Karma, and physiology of Mutratva srotas; formation of Mutra, manifestations of Vriddhi and Kshaya of Mutra  
  b. Purisha – Vyutpatti, Niruki, Pramana, Sthana, Guna, Karma, and physiology of Purishavaha Srotas; formation of Purisha, manifestations of Vriddhi and Kshaya of Purisha. |
| 3. **Sweda** – Vyutpatti, Niruki, Pramana, Sthana, Guna, Karma, and physiology of Swedavaha Srotas; formation of Sweda, manifestations of Vriddhi and Kshaya of Sweda. |
| 4. **Dhatu mala** – Utpatti, Niruki, Sthana, Guna Karma, Samkhya, Pramana of each Dhatu Mala; etiological factors and clinical manifestations of each Dhatu Mala. |
| 5. **Panchagyanendriya** – Physiological study of Panchagyanendriya, and physiology of Shabda, Sparsha, Roopa, Rasa, Gandha. Process of Dnyana-grahana; Indriya-Pancha-Panchaka; Physiological study of Karmendriya. |
| 6. **Manas** – Utpatti, Vyutpatti, Niruki, Synonyms, Swaroopa, Sthana, Guna, Vishaya, Karma of Manas and physiology of Manovaha srotas; physiological and clinical significance of Manas. |
| 7. **Atma** – Niruki, Definition, Sthana, Guna, Karma and difference between Paramatma and Jeevatma; Characteristics of existence of Atma. |
| 8. **Buddhi** – Sthana, Prakara, Karma of Buddhi; Physiology of Dhee, Dhriti and Smriti. |
| 9. **Nidra** – Nidrotpatti, Nidrabheda, physiological and clinical significance of Nidra; Swapnotpatti and Swapnabheda. |
10. Modern physiology
   a. General introduction to nervous system – neurons, mechanism of propagation of nerve impulse, physiological study of CNS, PNS, ANS; physiological study of sensory and motor functions of nervous system. Functions of different parts of brain - Cerebral Cortex, Hypothalamus, Limbic system, Midbrain, Pons, Medulla and Cerebellum. Physiology of special senses, Intelligence, Memory, Learning and Motivation, Physiology of sleep and dreams, Physiology of speech and articulation; EEG, Physiology of temperature regulation.
   b. Endocrine glands – General introduction to endocrine system, classification and characteristics of hormones, physiological study of all endocrine glands and their hormones.

PRACTICAL

Content of Practical

A) Ayurvedic Practicals
1. Assessment of Dosha (Vriddhi Kshaya Lakshana)
2. Assessment of Dhatu – a. Sharir Bala
   b. Manasa Bala
3. Assessment of Mala –
   a. Examination of Mala by Shabda, Sparsha, Roopa Rasa and Gandha
   b. Mutra (Taila Bindu pariksha)
   c. Purisha (Jale Nimajjati pariksha)
4. Assessment of Vaya
5. Anguli Pariksha
6. Assessment of Ayu in Charak-Samhita
7. Assessment of Agni
8. Assessment of Koshta
9. Assessment of Prakriti
10. Assessment of Sara
11. Satmya Pariksha
12. Nadi pariksha
13. Stanya pariksha
B) Modern Practicals

1. Use and care of compound microscope
2. Types, uses and care of balances
3. Collection of blood sample – prick, venepuncture method and bulbs, apparatus for collection
4. Preparation of blood film and staining
5. Estimation of Hemoglobin
6. Microscopic examination of blood
   a. RBC count
   b. WBC count
   c. Differential leucocyte count
7. Packed cell volume (PCV) demonstration
8. ESR demonstration
9. Bleeding time
10. Clotting time
11. Blood grouping and Rh typing
12. Examination of Cardio-Vascular system
    a. Pulse examination
    b. Arterial blood pressure measurement
    c. Examination of heart sounds
    d. ECG demonstration
13. Examination of Respiratory system
    a. Respiratory rate
    b. Vital capacity of Lungs
    c. Spirometry
14. Examination of CNS – Reflexes
15. Urine examination – Collection of urine, physical examination, chemical examination and microscopic examination.
    Test for normal constituents of urine
    Following chemical examinations for abnormal constituents:
    a. Albumin test
    b. Sugar test
    c. Acetone bodies
    d. Bile salts and bile pigments
    e. Occult blood
16. Stool examination – Collection of stool, physical examination, chemical examination and microscopic examination
17. Semen Analysis
18. Measurement of body temperature
19. Study of instruments related to physiology practicals.

Distribution of Marks

1. Record Book / Practical Book 10 Marks
2. Experiment 30 Marks
3. Spotting 20 Marks
4. Viva - voce 40 Marks
Total 100 Marks
## Reference Books

1. Ayurveda Kriya Sharir  
   Vd. Ranjeet Roy
2. Abhinava Sharir Kriya Vigyana  
   Acharya Priyavrata Sharma
3. Dosha Dhatu Mala Vigyana  
   Shankar Gangadhar Vaidya
4. Prakrita Dosha Vigyana  
   Acharya Niranjana Dev
5. Tridosha Vigyana  
   Shri Upendranath Das
6. Sharira Tatva Darshana  
   Hirlekar Shastri
7. Prakrita Agni Vigyana  
   Niranjana Dev
8. Deha Dhatvagni Vigyana  
   Vd. Pt. Haridutt Shastri
9. Sharir Kriya Vigyana (Part 1-2)  
   Acharya Purnchandra Jain
10. Sharir Kriya Vigyana  
    Shri Moreshwar Dutt. Vd.
11. Dosha Dhatu Mala Vigyana  
    Basant Kumar Shrimal
12. Abhinava Sharir Kriya Vigyana  
    Dr. Shiv Kumar Gaur
13. Pragyogik Kriya Sharir  
    Acharya P.C. Jain
14. Physiology  
    Gyton
15. Kaya Chikitsa Parichaya  
    Dr. C. Dwarkanath
16. Concept of Agni  
    Vd. Bhagwan Das
17. Physiology  
    Chatterjee
18. Purush Vichaya  
    Acharya V.J. Thakar
19. Kriya Sharir  
    Prof. Yogesh Chandra Mishra
20. Sharir Kriya Vigyana  
    Prof. Jayaram Yadav & Dr. Sunil Verma.
2.1. CHARAK SAMHITA

(Purvardha: Sutra - Nidana - Vimana - Sharir - Indriya Sthana)

Theory- One Paper– 100 Marks
Practical/ Viva voce – 50 Marks
Lectures - 100

Charaka Purvardha Distribution of theory marks according to Sthana

1. Sutra Sthana 40 Marks
2. Nidana Sthana 15 Marks
3. Vimana Sthana 20 Marks
4. Sharir Sthana 15 Marks
5. Indriya Sthana 10 Marks

PRACTICAL
Parameter for Internal assessment
Memorizing and describing two shloka weekly, discipline, oral and written presentation and other activities.

Other activities include the following:

1. Memorizing two shloka weekly, (Monthly Ten shloka in professional year of 1 year and 6 months. A log book of memorized shloka, corrected and signed by the class teacher is to be submitted at the time of examination. (The shloka should be memorized as discussed above in span of one year and six months)
2. Passage writing
3. Speech related to Charak

Distribution of Marks

1. Table (Chart) preparation / Compilation
2. Presentation of any 10 Shlokas out of total memorized Shlokas (Written & Oral)
3. Analysis of Srotas, Discussion about Dhatu and their vriddhi and kshaya (Phenomenon of their increase and decrease). Ten proforma/case sheets should be filled from IPD/OPD.
4. Assessment of Arishtta. (Five proforma/case sheets should be filled from IPD/OPD.)
5. Viva Voce
6. Internal Assessment

Total 50 Marks

27 final UG syllabus 2010
REFERENCE BOOKS

1. Charak Samhita - Chakrapani Tika (Sanskrit Commentary)

2. Charak Samhita (Hindi Commentary):
   Vaidya Jayadev Vidyalankar or Vd. Atridev Vidyalankar or
   Prof. Gorakha Nath Chaturvedi & Kashinath Shastri or
   Dr. Brahmanand Tripathy or
   Dr. Ravi Dutta Tripathy

3. Charak Samhita (English Commentary): Dr. Ram Karan Sharma & Vd. Bhagwan Dash
   or Acharya Priyavrata Sharma.
2.2 SWASTHAVRITTA

Theory - Two Papers – 100 Marks Each
Practical/ Viva voce – 100 Marks
Lectures - 180
Practicals and Demonstration 50 Hrs

Paper I 100 Marks
Part A 50 Marks

Vaiyuktika Swasthavrittam (Personal Hygiene)

1. Introduction
   i. Definition of Swastha & Swasthya
   ii. Arogyalingani (Signs of Health)
   iii. Definition of Swasthavritta
   iv. Swasthavritta prayojanam (Objectives & Importance of Swasthavritta)
   v. WHO Definition of Health

2. Dinacharya
   i. Definition of Dinacharya
   ii. Aims and importance of dinacharya.
   iii. Brahma Muhurta evum Utthishta
   iv. Ushna Jalapana
   v. Sarirachinta
   vi. Malatyaga
   vii. Mukha prakshalana
   viii. Dantadhavana
   ix. Preparation of Ayurvedic powder and paste
   x. Jihvanirlekhana vidhi (Tongue cleaning)
   xi. Anjana
   xii. Pratimarsa Nasya
   xiii. Gandusha
   xiv. Kavaladharana
   xv. Dhoomapana
   xvi. Abhyangam
   xvii. Udvartanam
   xviii. Utsadana
   xix. Vayama
   xx. Chankramana - Benefits of Walking,
   xx. Jogging, Swimming, Gymnastics,
   xxii. Anulepanam
   xxiii. Vastradharanam
   xxiv. Tambulasevanam

3. Ratricharya
   i. Sandhyacharya
   ii. Ratribhojana vidhi
   iii. Shayanavidhi

29 final UG syllabus 2010
4. Ritucharya

i. Importance of Ritucharya
ii. Ritu as per different acharyas
iii. Adana kaal & Visarga Kaal
iv. Sanchaya, Prakopa- Prashamana of Dosha and their Utpatti in Ritu
v. Doshashodhana in samanya ritu
vi. Relation of Agni bala and ritu
vii. Ahara-Vihara, Pathya- Apathya
viii. a) Ritusandhi
     b) Yamadamshtra different ritu
     c) Rituharitaki
     d) Rituviparyaya

5. Sadvritta

i. Description of Sadvritta and Achara Rasayana - their role in Prevention of psycho-somatic disorders
ii. Social aspect of Psychology according to Ayurveda
iii. Concept of Mental Health according to Ayurveda and Modern medicine

6. Trayopastambha (Three pillars of health)

i) Ahara Nirukti, Swarupa, Pramukhatvam, Ahara dravya Vargikanam, Aharavidhi Vidhana, Dwadasha Ashanapravicharanam, Ashaharvidhi visheshayatanani, Aharaparinamakara bhava, Pathyahara, Apathyahara, Samasana, Adhyasana, Vishamasana, Bhojanapachana avadhi,, Aharadushparinama, tajjanya vyadhaya, Santaranajanya vyadhidi, Apataranjanya vyadhidi, Viruddhahara and its effects, Proximate principles of Food, Nutritional requirements, Balance diet for (a) Workers –Sedentary /Moderate / Hard (b) Pregnant and lactating women (c) Children (d) Infants, Sources and deficiency diseases of Protein, Carbohydrate, Fat, Minerals and Vitamins, Shadrasabhojansasya mahatwam, Dietetic standards, National Nutritional programmes, Social aspects of nutrition, Food groups -Dhanya varga (Cereals and millets), Saka and Harita varga (Leafy and Non leafy vegetables), Kanda varga (roots and tubers), Phala varga (Fruits), Taila varga (Fats &Oils), Ikshu varga (Jaggery, sugar, honey ), Jala varga & Madhya varga (Beverages), Dugdha varga (Milk and Milk products), Masala and vyanjana dravyas (Spices & Condiments), Kritanna varga (Prepared Food), Mamsa varga (Meat types), Food hygiene, Milk hygiene, Milk composition, Source of infection (for Milk), Milk borne diseases, Clean and safe milk, Pasteurization of milk, Meat hygiene, Meat inspection, Slaughter house, Freshness of fish and egg, Fruits and Vegetable hygiene, Sanitation of eating places, Preservation of food, Food handlers, Food borne diseases, Balanced diet, Food fortification, Food toxicansts, Properties of Vegetarian and Non-vegetarian diet, Effects of Spices and condiments, Consumption of Alcohol and its effects and Ayurvedic diet in life style disorders-Diabetes, Hypertension, Obesity and Coronary heart Disease.

ii). Nidra - Nirukti and Utpatti, Types of Nidra (sleep), Yogya nidra vidhi, Nidra – Swasthya sambandha, Duration of sleep according to age, Sleep in healthy and diseased persons, Properties of Yukta Nidra, Effects of Ratri Jagarana, Diwaskpna, Anidra, Atinidra, Ahara and Vihara causing disturbed sleep, Ahara and Vihara causing sound sleep

iii) Brahmacharya - Brahmacharya vyakhyya and Abrahmacharya vyakhyya, Importance of
Brahmacharya and Abrahmacharya, Vyavaya sambandhi niyama, Effects of Ativyavaya, Veeryotpatti, Methods of Vrya Raksha, Suresaspra (Libido) through Vajikarana, Viryanasa phala and Menstrual Hygiene

7. Roganutpadaniya - Concept of vega- Adharaniya Vega and Dharonneeya Vega, Diseases due to vegadharana and their chikitsa, Upavasa, Rasayana for Swastha, Prajnaparadham, Sharir rakshanatmaka karyani and Sharir ahithakara karyani, Sharir Sodhanam

Part B 50 Marks

Sarvajanika- Samajika Swasthavrittam (Public Health)

1. Janapadodhwamsa
   i. Causes
   ii. Manifestations and control measures
   iii. Importance of Panchakarma and Rasayana
   iv. Vyadhikshamatva and the role of Rasayana

2. Vayu (Air)
   i. Vayu guna, Vayu swasthya sambandha
   ii. Composition
   iii. Air of occupied room
   iv. Discomfort and comfortable zone (Disinfection of air)
   v. Air movement
   vi. Air pollution – health and social aspects
   vii. Prevention and control of air pollution
   viii. Ventilation and its types
   ix. Vayu shuddhi prakara

3. Jala (Water)
   i. Jala mahatva – biological importance of water
   ii. Safe and wholesome water
   iii. Requirement and uses
   iv. Properties of water
   v. Types of water
   vi. Water sources
   vii. Water pollution
   viii. Water related diseases
   ix. Purification of Water (Jalasuddhi upayas)
   x. Hardness of Water
   xi. Water examination.
   xii. Shad jala dosha
   xiii. Water problems in India
   xiv. Rain Water Harvesting and water recycling

4. Bhumi (Land & Housing)
   i. Types of soil
   ii. Soil & Health
   iii. Bhumi shodhana
   iv. Nivasayogya bhumi
   v. Social goals of housing
   vi. Housing standards
   vii. Rural housing
   viii. Housing and health
   ix. Over crowding
   x. Pasu sala (Cattle shed)

5. Prakasha (Lighting)
i. Requirements of good lighting
ii. Natural Lighting
iii. Artificial Lighting
iv. Biological effects of lighting

6. **Dhwani pradushana (Noise)** – Sources, Effects & control

7. **Vikirana (radiation)**- Sources, Effects & control

8. **Apadravya nirmulana** (Disposal of solid waste)
   i. Different types of solid waste
   ii. Storage and collection of refuse
   iii. Methods of disposal of solid waste (Rural & Urban)
   iv. Bio- Medical waste management

9. **Malanishkasana vyavastha** (Excreta disposal)
   i. Unsewered area
   ii. Sewered area
   iii. Latrines for camps, fairs and festivals.

10. **Disaster Management**

11. **Occupational Health**
    i. Occupational Hazards
    ii. Occupational Diseases
    iii. Prevention of Occupational Diseases
    iv. ESI Act and factories Act.
    v. Offensive trades – Effects on health and precaution measures

12. **School Health Services**
    i. Health Problems of School Children
    ii. Aspects of School Health services
    iii. Duties of School Medical Officer
    iv. Maintenance of healthy environment.

13. **Epidemiology**
    i. Concept of Epidemiology transmission
    ii. Concept of disease
    iii. Concept of causation
    iv. Epidemiological triad
    v. Natural history of disease
    vi. Risk factors
    vii. Concept of control
    viii. Concept of prevention
    ix. Modes of intervention
    x. Incidence and prevalence
    xi. Dynamics of Disease
    xii. Mode of transmission
    xiii. Susceptible host
    xiv. Host defences
    xv. Immunizing Agents
    xvi. Disease prevention and control
    xvii. Disinfection
    xviii. Epidemiology of Communicable Diseases

   a) Measles  
   b) Diphtheria  
   c) Pertusis
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<td>xix.</td>
<td>Kuprasangaja vyadhi (STDs)</td>
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<td>a)</td>
<td>AIDS</td>
<td>b) Syphilis</td>
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<td>c)</td>
<td>Gonorrhoea</td>
<td>d) Chancroid</td>
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<td>xx.</td>
<td>Ayurvedic paribhasha of sankramika roga</td>
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<tr>
<td>a)</td>
<td>Diabetes</td>
<td>b) Obesity</td>
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<td>d)</td>
<td>Coronary Heart Disease</td>
<td>e) Rheumatic Heart disease</td>
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<td>f)</td>
<td>Cancer</td>
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14. Disposal of Dead body

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<td>a)</td>
<td>Burning</td>
<td>b) Burial</td>
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<td>c)</td>
<td>Electric cremation</td>
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15. Chikitsalaya Bhavana (Hospital Building)

16. Meteorology (Ritu evum vatavarana Jnana)

Yoga & Nisargopachara

Paper II 100 Marks

Part A 50 marks

Yoga

1. Etymology

2. Definitions

3. Development of Yoga (From ancient time to present time)

4. Different Streams of Yoga

5. Eight Branches of Yoga
   i) Yama
   ii) Niyama
   iii) Asana and its importance
   a) Suryanamaskara

33 final UG syllabus 2010
b) Standing postures
   i. Ardhatichakrasana
   ii. Padahasthasana
   iii. Ardha chakrasana
   iv. Trikonasana

c) Sitting Postures-
   i. Padmasana
   ii. Vajrasana
   iii. Bhadrasana
   iv. Sasankasana
   v. Ushtrasana
   vi. Paschimottanasana
   vii. Suptavajrasana
   viii. Gomukhasana
   ix. Ardhamatsyendrasana
   x. Sidhasana

d) Supine postures-
   i. Pavanamuktasana
   ii. Sarvangasana
   iii. Matsyasana
   iv. Halasana
   v. Chakrasana
   vi. Savasana

e) Prone postures-
   1. Bhujangasana
   2. Salabhasana
   3. Dhanurasana
   4. Makarasana
   5. Sidhasana

f) Concept of Mitahara & Pathyahara

v) Pranayama
   a) Benefits of Pranayama
   b) Nadi shudhi pranayama
   c) Time of practice - Avara-Pravara-
      Madhya lakshanam
   d) Pathyapathyahara during pranayama
   e) Yuktayukta lakshanam
   f) Nadi Shudhi lakshanam
   g) Kumbhakabheda :
      i) Suryabhedana
      ii) Ujjayi
      iii) Shitali
      iv) Bhastrika
      v) Bhramari
      vi) Murcha
      vii) Plavani
   h) Shad chakra, ida, pingala and sushumna
   i) Shadkarmani
   j) Bandha and Mudras
      Pratyahara
      Dharana
      Dhyana
      Samadhi

6. Description of Yoga in Ayurveda
   i. Manodosha chikitsa
   ii. Sukha dukha nivrutti
   iii. Yoga and moksha
   iv. Mokshasyalakshana
   v. Ashta Aiswarya
   vi. Satyabudhhi
   vii. Muktatma lakshana

7. Panchakosha theory
   i) Annamayakosha
   ii) Pranamayakosha
   iii) Manomayakosha
   iv) Vigyanamayakosha
   v) Anandamayakosha

8. Integrated Approach of Yoga therapy

9. Yoga package for LBA, Obesity, Asthma, Diabetes Mellitus.

10. Effect of Yoga practice on physical and mental dosha.
Nisargopachara

1. Prakritika Chikitsa (Nature Cure)
   i. Definition & History
   ii. Aims and objectives
   iii. Relation of Ayurveda and naturopathy
   iv. Schools of Naturopathy – Western School
   v. Schools of Naturopathy – Indian School (Pancha bhutopasana)
   vi. Importance in present era

2. Jala Chikitsa
   i. Hot water treatment
   ii. Cold water treatment
   iii. Foot bath
   iv. Hand bath
   v. Spinal bath
   vi. Hip bath
   vii. Abdomen wet pack
   viii. Steam bath
   ix. Enema
   x. Whirlpool bath

3. Mrittika Chikitsa (Mud Therapy)
   i. Types of soil or mud
   ii. Doctrine of mud selection
   iii. Mud bath

4. Surya Kirana sevana (Sun bath-Haelio therapy & Chromotherapy)

5. Mardana (Massage) - Different methods of Mardana

6. Diet - Types
   i) Soothing
   ii) Eliminative
   iii) Constructive diets.
   iv) Positive
   v) Negative

7. Upvasa Chikitsa (Fasting)
   i. Importance
   ii. Types
   iii. Therapeutic effect

Part B 50 Marks

Community Health Care

1. Prathamika Swasthya Samrakshana (Primary Health Care)
   i. Definition
   ii. Principle
   iii. Elements
iv. Structure – at Village level, Sub centre level, PHC level, CHC level, Hospitals, Health Insurance, Private agencies, AYUSH, Voluntary health agencies in India and N.G.Os.

v. Role of Ayurveda in Primary Health Care in India

2. Parivara Kalyana Karyakrama (Family Welfare Programmes)
   i. Demography
   ii. Demographic Cycle
   iii. Life Expectancy
   iv. Family Planning
   v. Methods of Family Planning.

3. Rasthriya Karyakrama (National Programmes)
   i. Tuberculosis (RNTCP)
   ii. Leprosy (NLEP)
   iii. AIDS (NACP)
   iv. Blindness (NPCB)
   v. Polio (PPI)
   vi. Diabetes (NDCP)
   vii. Cancer (NCCP)
   viii. National Rural Health Mission (NRHM)
   ix. National Anti Malaria Programme
   x. National Filariasis Control Programme
   xi. UIP (Universal Immunisation Programme)
   xii. RCH (Reproductive and Child Health programme)
   xiii. National water supply and sanitation programme
   xiv. Minimum needs programme
   xv. All emerging National Health Programmes.

4. Matru- Shishu Kalyana Karyakrama (Mother and Child Welfare Programme)
   i. Ante natal care
   ii. Post natal care
   iii. Neo natal care
   iv. Child health problems
   v. Indicators of MCH care

5. Preventive Geriatrics.

6. International Health
   i. Vishwa Swasthya Sangathana (World Health Organization)
   ii. Objectives, Structure and function of WHO
   iii. Alma- Ata declaration
iv. National Health Policy and Importance of Ayurveda in it.
v. United Nations agencies.
vi. Health work of bilateral agencies

7. **Swasthya Prashasana (Health Systems in India)**
   i. Central level
   ii. State level
   iii. District level
   iv. AYUSH

8. **Health statistics**
   i. Definition of statistics/health statistics/vital statistics
   ii. Sources and uses of health statistics.
   iii. Data Collection, classification and Presentation
   iv. Mean
   v. Median
   vi. Mode
   vii. Health survey
   viii. Mortality rates, Morbidity rates and Fertility rates

**PRACTICAL**

**Content of Practical**
1. Vyaktigata swasthya-
   i) Pratimarsa Nasya
   ii) Anjana
   iii) Dhumapana
   iv) Kavala
   v) Gandusha
   vi) Udvartanam
   vii) Abhyangam

2. Aharadravya parichaya
3. Immunizing agents
4. Disinfectants
5. Family Planning appliances
6. Yogic kriya
   i) Yamana Dhauti
   ii) Jala Neti
   iii) Sutraneti
   iv) Kapalabhati
7. Yogasana- Demonstration of 24 Asana explained in syllabus.
8. Pranayama & Meditation
   i) Nadisuddhi
   ii) Ujjayi
   iii) Suryahedana
   iv) Sitali
   v) Siktari
   vi) Bhastrika
   vii) Bhramari
9. Naturopathy Practical
   i) Baths  
   ii) Mud therapy  
   iii) Sunbath  
   iv) Fasting

10. Observe the functioning of
   i) Water purification plant  
   ii) Sewage treatment plant  
   iii) Pasteurization unit  
   iv) Leprosy sanitorium  
   v) Industrial unit

Lecture – Cum – Demonstration at
   i) Rural Ayurvedic Dispensary  
   ii) Primary Health Centre  
   iii) Maternity and Child Hospital

11. Health survey

12. There should be 5 case sheets of Pathyapathy, Yoga and Naturopathy together for Swastha persons and 5 case sheets of Communicable diseases.

**Distribution of Marks**

1. Personal Hygiene  20 Marks
2. Public and social health  20 Marks
3. Demonstration of Yoga  10 Marks
4. Naturopathy  10 Marks
5. Daily work  10 Marks
6. Viva – Voce  30 Marks

**Total**  100 Marks

**Reference Book**

Relevant portions of Charak, Sushrut, Vagbhata, Sharangadhara, Bhavaprakasha, Madhava Nidana, Yogaratnakara & Bhela Samhita.

Swasthvritta Samucchya  Pt. Rajeshwardutt Shastri
Swasthya Vigyan  Dr. Bhaskar Govind Ghanekar
Swasthya Vigyan  Dr. Mukund Swaroop Verma
Ayurvediya Hitopdesa  Vd. Ranjeet Rai Desai
Yoga and Ayurveda  Dr. Ramkumar Jain
Swasthvritta Vigyan  Dr. Ram Harsh Singh
Swasthuvritam  Dr. Brahmanand Tripathi
Ayurvediya Swasthvritta  Jahulkar
Hathayoga Pradipika  Swatmaram Yogendra

38 final UG syllabus 2010
Yogic Yoga Paddhati
Yogic Chikitsa
Prakritik Chikitsa Vidhi
Prakritik Chikitsa Vigyan
Jansanakhya Shiksha Siddhant
Health Administration in India
Swasthavrittam
Health and Family Welfare
Sachitra Yogasan Darshika
Preventive & Social Medicine
Yogadeepika
Swasthavritta
Positive Health
Biogenic Secrets of Food in Ayurveda
Yoga & Yogic Chikitsa
Smritigranthon mein nihita
Swasthaparaka Samagri
The Foundations of Contemporary Yoga
Yoga Siddhant Evum Sadhana
Dr. Reddy’s Comprehensive
guide to Swathavrittha
Comprehensive guide on
Pathyapathyam

Bhartiya Prakatika Chikitsa Parishad
Shri Kedar Nath Gupta
Sharda Prasad
Verma
Dr. Nirmal Sahani Updeysa
S.C. Seel
Dr. Shiv Kumar Gaur
T.L. Devraj
Dr.- Indra Mohan Jha
J.K. Park
Shri Ayyangar
Vaidya Sakad
Dr. L.P. Gupta
Dr. L.P. Gupta
Ram Harsh Singh
Dr. Smt. Nigam Sharma
R.H. Singh
Harikrishna Shastri Datar
Dr. P. Sudhakar Reddy
Dr. Bhajandas Swami
2.3 DRAVYAGUNA VIGYAN

Theory Two Papers– 100 Marks Each
Practical/Viva voce – 200 Marks
Lectures - 180
Practicals and Demonstration – 90

Paper I 100 Marks
Part A 50 Marks


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

3. **Guna**: Etymological derivation, definition and Classification of Guna. Detailed knowledge of Gurvadi and Paradi Guna.

4. **Rasa**: Etymological Derivation, definition, Meaning of “Rasa” in various contexts. Six Rasa (Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik origin of Rasa, Nirvrittivisheshakrama (manifestation in general and particular), Ritu prabhava (effect of season ), Rasanurasayoh bheda (Difference between rasa and anurasa) Lakshana (characteristics),Guna and Karma of Six Rasa., Kopana and Shamana of Dosha and dushya by Six rasa, Rasaskandha, Effects of excess usage of Rasa. Perception of Rasa (Rasopalabdhi), Presentational use of Rasa in diet and medicine (Rasa sevan 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), Vipakopalabdhi hetu (Knowledge/Understanding of Vipaka). Differences between Rasa and Vipaka.

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

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7. **Prabhava** : Etymology and definition, Effects of Prabhava, Samanya-pratyarabdha, Vichitr-pratyarabdha, Arguments for predominance of prabhava.

8. Interrelation of Rasa-Guna-Virya-Vipaka-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 karma with examples –

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<td>32. Prajasthapana</td>
<td>33. Shonithasthapana</td>
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<td>34. Raktaprasadana</td>
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<td>74. Arshoghna</td>
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41 final UG syllabus 2010
Part B  

10. Description of the following classes (Gana) of Dravya depending upon their similarity, morphology, properties, action, class, and effects: -

   a) Audbhida Gana (Vegetable origin)
      Brihapanchamoola, Laghupanchamoola, Vallipanchamoola, Kantakapanchamoola, 
      Trinapanchamoola, Madhyapanchamoola, Jeevaneeya panchamoola, Panchapallava, 
      Panchavalakala, Triphala, Trikatu, Trimada, Chaturusana, Panchakola, Shadusana, 
      Chaturbeesta, Jeevaniya gana, Ashtavarga, Trijataka, Chaturajataka, Katuchaturjataka 
      Panchatikta, Amlapanchaka, Chaturbhadra, Trikarshika, Swalipatriphala, Madhiratriphala, 
      Mahavisha, Upavisha, Knowledge of Agraushadha Varga with example.

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

   c) Parthiva Gana (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 (bhum), 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 parts of medicinal plants (bhesajha 
    prayoga, prayojyanga), Incompatibility (knowledge of viruddhatwa), principles of preparation 
    of Aushadha yoga, Consideration of vaya, bala, linga, agni, dosha, dushya, vyadhi, 
    koshta, deha prakriti, Abhyasa, satwa, desha kaal and kalpana for deciding dosage of 
    drugs (Matranishchiti).
    Anupana vyavastha, time of administration (Bhesajha sevana kaal), routes of drug 
    administration (Bhesajha prayoga marga) Prescription writing.

15. Brief information about 6 Nighantu (Dhanwantari Nighantu, Shodala Nighantu, Kailyyadeva 
    Nighantu, Madanapala Nighantu, Bhavaprakasha Nighantu, Raja Nighantu)

42 final UG syllabus 2010
A. 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, Sushrut and Bhavaprakasha i.e. Habit and habitat/varieties, External morphology, Useful parts, Important phytoconstituents, Rasa panchaka, Action on Dosha, Dhatu, Mala, Therapeutic indications, Amayikaprayoga and Matra (Therapeutic administration and Dose), Name of important formulations, Adverse effects, remedial measures and Shodhana (as required)

<p>| 1.   | Ahiphena   | 2. | Agnimantha | 3. | Agaru   |
| 31.  | Draksha    | 32. | Durva      | 33. | Ela     |
| 34.  | Eranda     | 35. | Gambhari   | 36. | Gokshura|
| 40.  | Haritaki   | 41. | Hingu      | 42. | Jambu   |
| 43.  | Jatamamsi  | 44. | Jatiphala  | 45. | Jeerakadvaya |
| 58.  | Kupilu     | 59. | Kumkum kesara | 60. | Kushmanda |
| 61.  | Lavanga    | 62. | Kutaja     | 63. | Lodhra  |
| 64.  | Madanaphala | 65. | Manjishtha | 66. | Maricha |</p>
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<td>Vata</td>
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**B. Brief knowledge of following drugs with respect to Sanskrit Name, Botanical Name, Family, Habit (Samanya swarupa), Parts used, Rasapanchaka and Indications**

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44 final UG syllabus 2010
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<td>Vruddadaru</td>
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</table>

**Part B 50 Marks**

**C.** Introduction, Guna, Karma and uses of following jantava dravya (drugs of animal origin).

1. Kasturi  
2. Gorochana  
3. Gandhamarjaravirya
4. Mrigasringa  
5. Bhunaga  
6. Mukta
7. Pravala  
8. Shankha  
9. Shukti
10. Shambuka  
11. Varatika  
12. Indragopa

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

1. Jala Varga  
2. Dugdha Varga  
3. Madhu Varga
4. Ikshu Varga  
5. Tala Varga  
6. Madya Varga

45 final UG syllabus 2010

E. Introduction, Definition & scope of Pharmacology and Principles of general Pharmacology.

F. Brief knowledge about WHO’s “Essential Drug List”

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

PRACTICAL

Content of 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) Twak (bark) – Kutaja, Arjuna,
   (vii) Moola (Root) - Punarnava, Aswagandha
   (viii) Niryasa (exudate) - Hingu, Guggulu, Mocharasa
   (ix) Jangama dravya (animal origin) - Madhu, Ghrita

2. Collection of minimum 50 herbarium specimen from field visit.

3. Compilation of a drug not less than 25 pages

4. Concept based clinical study on single drugs (Minimum 5 from detailed and non-detailed list of drugs) in patients.

46 final UG syllabus 2010
Distribution of Marks

1. Compilation/Essay 10 Marks
2. Herbarium 10 Marks
3. Single drug therapy 10 Marks
4. Pharmacognosy record in Laboratory 10 Marks
5. Drug identification 80 Marks
6. Oral/(Viva-Voce) 80 Marks
Total Mark 200 Marks

Reference Books

1. Abhinav Buti Darpan (Vol.1-2) Vd. Roop Lal Vaishya
2. Aushadna Vigyana Shastra Acharya Pt. Vishvanatha Dwivedi
3. Ayurvediya Aushadkarma vigyana Acharya V.J. Thakur
4. Bedi Vanaspati Kosha Prof. Ramesh Bedi
5. Bhaishajyaguna Vigyana Dr. Alakhnarayan Singh
6. Bhav Prakash Nigantu (English) Dr. K. R. Shreekanthamurthy
7. Bhav Prakash Nighantu With Vd. Krishna Chandra Chunekar commentary
8. Bhrihad dravyagunadarshana 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 Vigyana Dr. V.M. Gogate
17. Dravyaguna Vigyana (Vol. 1-5) Acharya Priyavrata Sharma
18. Dravyaguna Shastram Vaidya G.A. Phadake
19. Dravyaguna Vigyana Dr. A.P. Deshpande
20. Dravyaguna Vigyana basic Principles Prof.D.S.Lucas
21. Forgotten Healers (Indian Medicinal Plants) Dr. Prakash Paranjape

47 final UG syllabus 2010
<table>
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<th>No.</th>
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<tr>
<td>23.</td>
<td>Introduction to Dravyaguna</td>
<td>Acharya Priyavrata Sharma</td>
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<td>Kriyatamaka 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>28.</td>
<td>Pharmacology and Pharmacotherapeutics</td>
<td>Satoskar Bhandarkar &amp; Ainapure</td>
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<td>29.</td>
<td>Prayogatamaka Dravyaguna Vidyana</td>
<td>Dr. Maya Ram Uniyal</td>
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<td>Priya nighantu</td>
<td>Acharya Priyavrata Sharma</td>
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<td>31.</td>
<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 Pharmacognosy</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 Vidyana</td>
<td>Hakim Daljeet Singh</td>
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<td>36.</td>
<td>Uttarakand Ki Vanaspatiyaa</td>
<td>Dr. Gyanendra Pandey</td>
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<td>Vanoaushadi Darshika</td>
<td>Thakur Balwant Singh</td>
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<td>Vanoaushadi Nidarshika</td>
<td>Dr. Ram Sushil Singh</td>
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<td>39.</td>
<td>Vedic Vanaspatiyan</td>
<td>Dr. Dinesh Chandra Sharma</td>
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<td>40.</td>
<td>Dravyaguna Vidyana (Vol I-II)</td>
<td>Prof. D. S. Lucas.</td>
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<td>41.</td>
<td>Useful parts of Charak, Sushrut, and Vagbhata.</td>
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48 final UG syllabus 2010
2.4 RASA SHAstra AND BHAISHAJYA KALPAna

Theory Two Papers – 100 Marks Each
Practical/Viva voce – 100 Marks
Lectures - 180
Practicals and Demonstration – 90

Paper 1

Rasa-Shastra

Part A

1. Definition and etymology of Rasa, History of Rasa Shastra, Rasa Shala, concept of Rasa Mandap, Importance of Rasaushadhi, Concept of Rasa-Rasayana, Concept of Rasa Darshan.

2. Brief Description and Application of Technical terminologies (Paribhasha prakarana) : Avapa, Nirvapa, Dhalana, Bhavana, Jarana, Murchana, Shodhana, Marana, Amrutikaran, Lohitikarana, Mruta Loha, Satwa Patana, Shuddhavarta, Beejavarta, Druti, Rudra bhaga and Dhanvantari bhaga, Apunarbhava, Niruttha, Rekhapurna, Varitara.


5. Brief description & application of Musha (Crucible) : Samanya Musha, Gostanimusha, Vajramusha, Mahamusha, Yoga musha, Vrintak Musha, Malla/ Pakwa musha. Different types of crucibles.

49 final UG syllabus 2010

7. Definition and Types of Puta: Surya puta, Chandra puta, Govara puta, Lawakaputa, Kukkutaputa, Kapota puta, Varahaputa, Gajaputa, Mahaputa, Kumbhaputa, Balukaputa, Bhudharaputa, Laghu Puta, Baluka Puta.

8. Applications of Electric muffle furnace and fuel (diesel) dependent furnace.


10. Murchhana and Jarana of Parada, Preparation of Kajjali, Types of Rasaushadhi, Khalvi rasa e.g. Tribhuvana keerthi rasa, Sootshekhar rasa, Parpati kalpa, Rasa parpati, Tamra Parpati, Gagan Parpati, Kupipakva Rasa- Rasa karpura, Rasa sindhura, Sameerapannaga Rasa, Pottali kalpa - Hemagarbha pottali.

Part B 50 Marks

Occurrence, Synonyms, Minerological identification, Natural and artificial sources, Types-Grahya and Agrahyata, shodhana, marana and other processing techniques. Properties, dose, therapeutic uses of commonly used single and compound formulations of dravya classified as under

   Uparasa - Gandhaka, Gairika, Kasisa, Kankshi, Haratala, Manahshila, Anjana and Kankustha
   Sadharana Rasa - Kampillaka, Gauri pashana, Navasadara, Mriddara shringa, Kaparda, Giri Sindura, Agnijara & Hingula.

2. Dhatu
   Shuddha lauha- Swarna (Gold), Rajata (Silver), Tamra (Copper), Loha (Iron) and Mandura Putilauha - Vanga (Tin), Naga (Lead), Yashada (Zinc).
   Mishra lauha- Kamsya (Bronze), Pittala (Brass) and Vartha Loha (Bell Metal).

3. Ratna - Manikya (Ruby), Mukta (Pearl), Pravalika (Coral), Tarkshya (Emerald), Pushaparaga (Topaz), Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamone stone), Vaidurya (Cats eye)

50 final UG syllabus 2010
Uparatna- Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis Lazuli), Parojaka (Turquaise), Sphatikamani, Trinakanta (Amber), and Palanka, Putika, Rudhir, Kamch (Glass).

4. Sudha varga – Sudha (Lime), Kaparda (Cowries), Sukti (Oyster Shell), Shankh (Conch Shell), Badarashma (Silicate of Lime), Mriga shringa (Stag horn), Khatika, Godanti (Gypsum) and Samudraphena (Cattle Fish bone), Kukkutand twak (Hen’s Egg Shell).

5. Siktha varga- Siktha (Silica), Dugdhapashana (Talc), Nagapashana/ Jaharmohara (Serpentine), Vyomashma, Sange Yeshab (Jade), Kousheyashm (Asbestos) and Akika (Agate).

6. Kshara varga - Sarja kshara (Sodium bicarbonate), Yava kshara, Tankana kshara (Borax), Surya kshara (Potassium Nitrate).


10. Brief knowledge of Standardization of Rasaupashadhi.

11. Concept of pharamcogivlance and its status in India, knowledge about Pharamcogivlance of Ayurvedic drugs.
### Practical Rasashastra

**50 Marks**

**Minimum Fifty practicals to be performed**

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*52 final UG syllabus 2010*
7. **Kshara Varga**
   Shodhana of Tankana

8. **Parpati**
   Preparation of Rasaparpati, Bola
   Parpati, Preparation of Swetaparpati

9. **Visha varga**
   Shodhana of Vatsanabha, Bhallataka,
   Kupilu, Dhatura beeja, Jayapala,
   Gunja, Chitrakamoola.

**PRACTICAL FOR DEMONSTRATION**

1. **Bhasma**
   Abhraka bhasma
   Swarna makshika bhasma
   Tamra bhasma
   Vanga bhasma,
   Mandura bhasma
   Kasisa bhasma
   Shankha bhasma
   Kapardika bhasma, Godanti Bhasma
   Kukkutanda Twak Bhasma

2. **Pishti**
   Pravala pishti
   Jaharmohara / Akika pishti
   Trina kantha mani pishti
   Mukta pishti

3. **Druti**
   Gandhaka druti

4. **Formulations**
   Rasasindura, Swarna Vanga.
   Saptamrutha lauha
   Navayas lauha
   Chandanadi Louha
   Sarvajwarhara Louha
   Agnitundi vati
   Tribhuvana Kirti Rasa
   Punamava Mandura
   Sootshekhara Rasa
   Arogyavardhini vati
   Laghusutashekhara Rasa
   Laghumalini Vasanta Rasa
   Sameer Pannaga Rasa
Bhaishajya Kalpana

Paper II 100 Marks

Part A 50 Marks

1. Derivation, History and Chronological (kramika vikasa) development of Bhaishjyakalpana. Concept of Aushadha and Bheshaja.

2. Fundamental principles of Bhaishajya Kalpana.

3. Aushada nirmana shala according to directions mentioned in Aushadha evum Prasadhana Adhiniyama (Drug and Cosmetic act 1940 and Rules 1945).

4. Introduction and general knowledge of useful instruments- Disintegrator, Pulveriser, Micropulveriser, Ball mill, End Runner, Edge Runner, Sieve-Shaker, Polishing pan, Granulator, Mixer, Grinder, Tablet making machine, Strip packing machine, Pouch packing machine, Pill making machine, Pill cutter.

5. Comparative study of "Mana" (measurements) as per Ancient and Metric system of measurements, Rules of taking fresh and dry drugs, Grahyatva and Agrahyatva of plant material, Collection, storage and preservation methods of different Aushadhi dravyas, Examination methods, Preservation and Saviryata avadhi (potency period) of different Aushadhi kalpana, Concept of stability and shelf life in contemporary science.

6. Aushadha Matra, Anupana and Aushadh sevan kaala.


8. Introduction, Definition, Preparation methods, doses and detailed description of uses and Anupana of following Yoga

54 final UG syllabus 2010
PART B


5. Netrakalpa (Ophthalmic preparations) – Seka, Drava, Anjana –Pindi, Ashchyonina - Vidalaka - Tarpana - Putapaka etc.


9. Basti kalpana: Classification, Method of preparation of Basti yantra and Basti dravya, Types of Basti, Therapeutic properties and uses of Basti kalpana.


11. Brief knowledge of Standardization of Ayurvedic formulations.

Practical Bhaisajya Kalpana  50 Marks

Following practicals to be performed-

I. **Formulations**- Method of preparation, therapeutic uses, dose and anupana of the following

1. Swarasa- Ardra swarasa, Tulasi swarasa, Kumari Swarasa, Vasa putapaka swarasa
2. Kalka- Nimba kalka, Rasona kalka.
4. Hima- Dhanyaka hima, Sarivadi hima
5. Phanta- Panchakola phanta, Yastimadhu Phanta.
6. Pramathya- Mustadi pramathya
7. Mantha- Khajuradi mantha
8. Aushadh siddha paniya- Shadanga paniya
9. Laksha Rasa
10. Arka - Yavani arka, Gulab arka, Misreya arka
11. Panaka- Chincha panaka, Chandan panaka,
13. Churna- Siptopaladi Churna, Hinguwashtaka Churna
14. Gutika- Chittrakadi Gutika, Sanjivani Vati
18. Khand- Haridra khand, Narikela khanda, Sowbhagya shunti paka
19. Satva-Amruta satva, Ardraka satva
20. Varti- Phala varti, Chandrodaya varthi
21. Lavana- Arka lavana, Narikela lavana
22. Masi- Triphala masi
23. Ksheerapaka-Arjuna ksheerapaka, Rasona ksheerapaka
24. Kshara- Ahamarga kshara, Snuhi kshara, Ksharasutra.
25. Manda – Ashtaguna manda, Laja manda
26. Peya, Vilepi, Yavagu, Krishna, Vesavara
27. Yusha - Mudga yusha, Saptamushtika yusha, Kulattha yusha
28. Takra varga – Takra, Udavita, katvar, Mathita, Chhacchiha, Dadhi
29. Aristha- Kutajarisha, Takrarishta
30. Asava- Kumaryasava, Kanakasava
31. Sukta kalpana- Kanji
32. Udaka- Tandulodaka
33. Upanaha- Atasi Upanaha
34. Bahya kalpana- Sarjarasa malahara, Gandaka malahara, Sikta taila nirmana, Dashanga lepa, Doshagna lepa.
35. Mamsarasa, Laksharasara
36. Sneha Kalpana Sneha Murchhana- Ghrita Murchana, Taila Moorchohna, Ghrita kalpana- Jatyadi, Triphala, ksheerashatphala ghrita- Taila kalpana-Panchaguna taila, Arka taila, Ksheerabala taila, Anu taila
37. Taila patana- Bhallatalaka taila patana, Jayapala taila patana
38. Dhupa- Dashanga dhupa, Arshogna dhupa
39. Modaka- Talisadi modaka, Abhayadi
40. Shodana- Guggulu, Hingu, Chitrak mool, Vriddha daru beeja
41. Kritrima Lavan nirman – Vida Lavan, Souvarchala lavan

56 final UG syllabus 2010
II. Visit of minimum three GMP approved Ayurvedic manufacturing units.

**Distribution of Marks**

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**Reference Books**

1. Adyatan Rasa Shastra | R.K. Goyal
2. Abhinav Rasa Shastra | Vaidya Somadev Sharma
3. Asava Arishta Vigyanam | Dr. Pakshdhar Jha
4. Ayurvediya Rasa Shastra (Sachitra) | Chandrabhusan Jha
5. Ayurvediya Rasa Shastra | Badrinarayan Pandey
6. Rasa Bhaishajya Paribhasa | Sureshananda Thapaliyal
7. Ayurvediya Rasa Shastra | Prof. Siddhi Nandan Mishra
8. Ayurved Prakash | Vaidya Gujrat Mishra
9. Drugs and Cosmetic Act |   
10. Paka Darpana | Dr. Indradev Tripathi
11. The Paka-darpana of King Nala | Dr. Madhulika critical study
12. Parada Vigyanidam | Vasudev M. Dwivedi
13. Pratyaksha Aushadh Nirmanam | Acharya Vishwanath Dwivedi
14. Bhaishjyakalpana Vigyanam | Dr. Ambikadatta Shastri
15. Rasa Tarangini | Sadanand Sharma
16. Rasa Darpan | Prof. Bhajan Das Swami
17. Rasa Bindu | Dr. Sanjay Sharma
18. Rasa Hridaya Tantra (Hindi) | Rameshwar Dayal Bajpai
19. Rasa Hridaya Tantra (English) | Prof. Harishankar Sharma
20. Rasa Bhaishajya Kalpana Vigyan | Vaidya Santosh Kumar Khandal
21. Rasa Mitra | Dr. Tryambak Nath Sharma
22. Rasa Ratna Samuchchaya | Dattatreya Ananta Kulkarni
23. Rasa Shastra Prayogiki | Krit Hindi Vyakhya.
24. Rasamritam | Vaidya Yadavji Tirkaramji Acharya
25. Rasayan Sara | Vaidya Shyam
26. Rasendra Sampradaya | Sunderacharya Vaishya
27. Rasendra Sara Sangraha | Vaidya Hajari Lal Sukul
28. Rasendra Sara Sangraha | Vaidya Gopal Krishna
29. Vaidyak Paribhasha Pradeep (Hindi) | Dr. Indradev Tripathi

57 final UG syllabus 2010
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<td>Sharangdhar Samhita</td>
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<td>Bharatiya Bhaishajya Kalpana Vigyan</td>
<td>Vishwanath, Gananath Dwivedi</td>
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<td>32</td>
<td>Bhaishajya Kalpana Vijnanam</td>
<td>Dr. K Ramachandra Reddy</td>
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<td>33</td>
<td>Rasa Shastra (English)</td>
<td>Prof. Damodar Joshi</td>
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<td>34</td>
<td>Rasa Ratna Samuchchaya (English)</td>
<td>Prof. Damodar Joshi</td>
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<td>35</td>
<td>Rasendra Chintamani</td>
<td>Publication of Govt. of India.</td>
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<td>Useful parts of Charaka, Sushruta and Vagbhata</td>
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<td>37</td>
<td>Ayurvedic formulary of India</td>
<td>Part I and II</td>
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<td>38</td>
<td>Pharmacopic standards for Ayurvedic formulation published by CCRAS</td>
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<td>Bhaishjya Kalpana Vigyan</td>
<td>Siddhi Nandan Mishra</td>
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<td>Textbook of Rasashasra</td>
<td>Dr. K Ramachandra Reddy</td>
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<td>41</td>
<td>Ashadhayoga Vigyanan</td>
<td>Dr. K. Ramachandra reddy (English Translation)</td>
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<td>42</td>
<td>Vaidyaka Paribhasha Pradipa</td>
<td>Dr. K. Ramachandra Reddy</td>
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<td>Dr. P. Suresh</td>
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2.5 ROGA VIGYAN EVUM VIKRITI VIGYAN

Theory Two Papers – 100 Marks Each
Practical/Viva voce – 100 Marks
Lectures - 180
Practicals – 90

Paper I 100 Marks
Part A 50 Marks

I. Dosha Dooshyadi Vigyanam
1. Definition and importance of Roganidana
2. Samanya Nidana and Samanya Lakshana of Dosha Prakopa and Dosha Kshaya.
3. Vikriti Vigyan of Pancha vidha Dosha Bheda.
4. Dosha Dhatu Ashraya Ashrayee Bhava.
5. Dhatu Kshaya Vridhdhi Lakshana and Pradoshaja Vikara
7. Mala Kshaya Vridhdhi Lakshana and Pradoshaja Vikara.
8. Indriya Pradoshaja Vikara.
9. Hetu, Bheda and Lakshana of Agni Dushti.
10. Definitions and Samanya Lakshana of Ama
11. Sama and nirama Dosha, Dushya Lakshana.
12. Dosha Paka and Dhatu Paka Lakshana.
13. Concept, classification, diagnosis and general complications of Avarana
15. Detailed study of Srotomoola and Srotodushti Samanya and Vishishta Hetu Lakshana and Viddha Lakshana of all Srotas. Differences between Sroto Dushti and Kha Vaigunya.

II. Vyadhi Vigyanam
1. Definition, synonyms and classification of Vyadhi
2. Criteria for nomenclature of Diseases in Ayurveda (Vyadhinamakarana).
3. Bija, Bija Bhaga and Bija Bhaga Avayava Dushti.
5. Introduction to ICD Classification of Diseases of WHO and DSM classification.
7. Concept of Ashta Mahagada and introduction to Ashta Nindita.
8. Importance and knowledge of Rogamarga.
10. Concept of Satmya, Asatmya and Viruddha ahara.

59 final UG syllabus 2010
III. **Basic Pathology**
1. Introduction to pathology and its sub-divisions. Introduction to Cell Injury and Cellular adaptations.
2. Definition and brief description of inflammation – Healing/repair.
4. Immunity – types – different types of immune responses in the body – Basic knowledge of auto immune diseases, Acquired immune deficiency disease and hypersensitivity.
5. Nomenclature and classification of tumors - difference between benign and malignant tumors.
6. Introduction to Nutritional disorders – disorders of macro and micro nutrients.
7. Introduction to infectious diseases
8. Introduction and classification of microorganisms such as virus-bacteria-fungus.

**Part B 50 Marks**

IV. **Nidana Panchaka Vigyanam**
1. Difference between Roga and Rogi Pariksha.
2. Importance of Nidan Panchaka.
3. Hetu - Definition, Synonyms and Classification.
6. Samprapti – Definition, Synonyms and Types
7. Samprapti Ghataka.
8. Shat Kriyakaala.
9. Relationship between Nidana Panchaka and Shat Kriyakaala.
10. Upashaya – Definition, Types and its importance in diagnosis.
11. Upadrava
13. Sadhyasadhyatwa – Types, their parameters and importance.
14. General diagnostic principles of Anukta Vyadhi (Cha - Viman IV)

V **Pariksha Vigyanam**
1. Importance and knowledge of Aptopadeshadi, Darshanadi Trividha, Chaturvidha, and Shadvidha Pariksha.
2. Importance and Knowledge of Ashtasthana Pariksha.
3. Importance and Knowledge of Karanadi Dashavidha Parikshya Bhava.
4. Importance and Knowledge of Dashavidha Pariksha.
5. Importance and methods of history taking, clinical examination and knowledge of Ancillary investigations.
7. Basic Knowledge of Laboratory Investigations pertaining to Metabolic and Endocrine disorders.

60 final UG syllabus 2010
Systematic study of Nidana Panchaka of following diseases (Including Upadrava, Arishta and Sadhyasadhyata)

I. Diseases of Rasavaha Srotas
   iii) Pandu, Amavata, Hridroga, Shotha
   iv) Introduction to Anaemia & its Classification, Rheumatic fever, Rheumatoid Arthritis, Angina, Ischaemic Heart Disease, Hypertension, Myocardial Infarction

II. Diseases of Raktavaha Srotas
   i) Kamala - Raktapitta - Vatarakta - Shitapitta – Maha Kushta – Visarpa – Shwitra and Introduction to Kshudra Kushta
   ii) Introduction to Hepatomegaly, Spleenomegaly, Leukaemia, Thalessemia, Sickle cell Anaemia.
   iii) Introduction to Urticaria, Psoriasis, Eczema, Pemphigus

III. Diseases of Mamsavaha srotas
   a) Introduction to Granthi, Arbuda and Arsha.

IV. Diseases of Medovaha srotas
   Sthoulya - Karshya – Prameha
   i) Introduction to Obesity and Diabetes Mellitus.

V. Diseases of Asthi - Majjavaha srotas
   1) Sandhigatavata, Introduction to Asthi-majjaparipaka, Asthigata Vidradhi
   2) Introduction to Osteo- Arthritis, Osteomyelitis, Osteoporosis.
   3) Vatavyadhi
   5) Introduction to Parkinson’s disease, Stroke, Lumbago- Sciatica syndrome, Bell’s Palsy, Ankylosing Spondylitis

VI. Diseases of Sukravaha srotas
   1) Introduction to Klaibya and Vandhyatva.
   2) Introduction to male and female infertility.
Part B 50 Marks

VII. Diseases of Pranavaha srotas
2) Introduction to the aetiopathogenesis of Pneumonia, Pleural effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.

VIII. Diseases of Annavaha-Pureeshavaha Srotas
1) Agnimandya - Ajirna - Aruchi- Chhardi - Visuchika , Amlapitta- Shoola - Parinama Shoola – Annadrava Shoola- Grahani – Gulma- Udara Roga – Atisara - Pravahika
2) Introduction to Anaha, Adhmana, Atopa, Alasaka, Vilambika
3) Introduction to Peptic Ulcer, Irritable Bowel Syndrome, Diarrhoea, Dysentry, Constipation, Inflammatory Bowel Syndrome.

IX. Diseases of Udakavaha Srotas
1) Introduction to Trishna, Daha.
2) Introduction to water and electrolyte imbalance disorders

X. Diseases of Mutravaha srotas
1) Mutrakrichha – Mutraghata.
2) Introduction to Urinary Tract Infection, Urolithiasis, Nephropathies and Renal failure.

XI. Diseases of Swedavaha srotas
1) Introduction to Khalitya, Palitya and Cosmetology.

XII. Diseases of Manovaha Srotas/ Sanjnavaha Srotas
1) Introduction to Vishada, Udvega, Bhaya, Bhrama, Anidra, Mada, Murchha, Sanyasa, Apasmara, Unmada, Atatwabhinivesha
2) Introduction to Depression, Anxiety neurosis, Phobia, Personality disorders.

XIII. Upasargajanya Vyadhi (Communicable diseases)
2) Introduction to Leprosy, Tuberculosis and AIDS.

XIV. Krimi Vigyanam
1) Definition, classification of Krimi and features of Krimiroga.
2) Snayuka, Shleepada.
3) Introduction of Filariasis and classification of common parasites.
PRACTICAL

Content of Laboratory Practical

i Fundamental Principles of Laboratory Tests

Introduction to laboratory, Sterilization, glass wares, solutions reagents and safety procedures.

ii Haematology

1) Hb% 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 and differential leucocyte count.
6) Peripheral blood film examination in Anemia, Leukemia, Malaria, Filaria (Demonstration)
7) ESR.
8) Introduction to rapid diagnostics of hematology.
9) Screening test for bleeding disorders- bleeding time (BT), Clotting time (CT), Prothrombin time (PT).
10) Blood grouping - ABO system, Rh typing (Rhesus system)

iii Urine Examination

1) Ayurveda anusara mutra pariksha.
2) Physical Examination - Volume, Reaction (PH) & Specific Gravity
3) Chemical Examination for
   - Proteins, Glucose, Phosphate, Ketone, Bile salts, Bile pigment
4) Microscopic Examination

iv Stool Examination

1) Ayurveda anusara purisha pariksha
2) Physical examination - Sama-Nirama Pariksha
3) Microscopic examination of ova & cyst etc.
4) Occult Blood Test

v Sputum Examination

1) Ayurveda anusara sthivana pariksha.
2) Physical, Chemical and Microscopic Examination of the sputum.
3) Sample collection and Demonstration of AFB.

vi Semen examination

1) Ayurvediya anusara Retas pariksha.
2) semen examination & Demonstration of semen, sperms.

vii Biochemical Examination – (Demonstration)

Serum Glucose, Serum Bilirubin, Serum Urea, Lipid Profile, Serum Creatinine.

viii Demonstration of different staining techniques in microbiology.

ix Demonstration of Sero-immunological Investigations: RA and Widal.

x Demonstration of Aspiration techniques.
xi Laboratory record – maintenance of observation Diary and laboratory record book.

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

Distribution of Marks

1. Daily Record 10 Marks
2. Identification of Instruments 10 Marks
3. Laboratory Experiments 20 Marks
4. Short Case 10 Marks
5. Long Case 20 Marks
6. Viva - Voce 30 Marks
Total 100 Marks

Reference Books

1 Madhav Nidan (Madhukosha Commentary) Part 1 – 2 Pt. Yadunandan Upadhyay
2 Doshakaranatwa Mimamsa Acharya P.V. Sharma
3 Nadi Darshan Vd. Tara Shankar Mishra
4 Nadi Vigyanam Vidyotini Hindi Tika
5 Nadi Vigyan Shri Satya Dev Vashisht
6 Nadi Vigyan Gangadhar Tika
7 Rogi Pariksha vidhi Acharya Priyavrata Sharma
8 Ayurvediya Roga Vargikaran Vd. Ramanath Dwivedi & Vd. Gurdip Singh
9 Ayurvediya Nidan Evum Chikitsa Ke Siddhanta Prof. Ram Harsh Singh
10 Relevant portions of Charak Samhita, Sushrut Samhita and Vagbhata

64 final UG syllabus 2010
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<td>Text Book of Pathology</td>
<td>William Boyds.</td>
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<td>Text Book of Pathology</td>
<td>Harsh Mohan</td>
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<td>Dey and Dey</td>
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<td>Text Book of Parasitology</td>
<td>Ramnik Sood</td>
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<td>15</td>
<td>Clinical Pathology and Bacteriology</td>
<td>S.P. Gupta</td>
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<td>16</td>
<td>Clinical methods in Ayurveda</td>
<td>K. R. S. Murthy</td>
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<td>17</td>
<td>Parameswarappa’s Ayurvediya Vikriti</td>
<td>Dr. P.S. Byadgi.</td>
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<td>18</td>
<td>Oxford Handbook of Clinical Examination and Practical Skills</td>
<td>Oxford Handbooks</td>
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<td>Advanced Clinical Evaluation System</td>
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<td>20</td>
<td>Symptoms &amp; Signs in Clinical Medicine</td>
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<td>Clinical Methods</td>
<td>Hutchison’s</td>
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<td>Bedside Clinics in Medicine Part- I &amp; II</td>
<td>Kundu</td>
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<td>Common Medical Symptoms</td>
<td>Mehta</td>
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<td>24</td>
<td>Advances in Pathology &amp; Lab Med-</td>
<td>Weimstean, Gralem, Anderson, Cortan, Wick, Zumwelt</td>
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<td>25</td>
<td>Clinical Laboratory Medicine</td>
<td>Edited by Kenneth D Mc. Chately</td>
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<td>26</td>
<td>General Pathology</td>
<td>Walter &amp; Israel Churchill Living stone</td>
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<td>27</td>
<td>A Comprehensive Dictionary of Pathology</td>
<td>Chris Newann</td>
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<td>28</td>
<td>Practical Pathology</td>
<td>Dr. K. Uma Chaturvedi</td>
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<td>29</td>
<td>Clinical examination</td>
<td>Douglas/Macleod’s</td>
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<td>30</td>
<td>Pathology Practical book for undergraduates</td>
<td>Harsh Mohan</td>
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<td>31</td>
<td>Medical Laboratory Technology</td>
<td>R. Sood</td>
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<td>32</td>
<td>Clinical Diagnosis and Management by Laboratory methods</td>
<td>Todd, Sanford and Davidson</td>
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<td>33</td>
<td>Clinical Hematology In Medical Practice</td>
<td>Degruchy’s</td>
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<td>Robbins Basic Pathology</td>
<td>Kumar, Abbas, Fausto at al</td>
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2.6 AGADATANTRA, VYAVHARAYURVED EVUM VIDHIVAIKYAK

Theory One Paper – 100 Marks
Practical/Viva voce -100 Marks
Lectures - 100
Practicals / Demonstrations – 50

Paper I

100 Marks

Part A

AGADATANTRA– VISHA CHIKITSA

(AYURVEDIC & CONTEMPORARY TOXICOLOGY)


2. Origin and Classification of Visha:- Its sources, Difference between Visha, Madya and Oja guna, Visha Upadrava and Visha Mukta Lakshana.

3. Tests for detection of Visha, Visha Data Lakshana, Visha Peeta Lakshana, Signs and symptoms of Visha afflicted organs and personal effects. (Poisoning with Anjana, Lepa paduka, Abharana etc. - contact poisons).

4. Contamination of air, water, soil etc. (Visha mishrita – Vayu, Jala, Desha, Kaala and their management), their contemporary significance. Samuhika Vishaprayoga-Effects of chemical and Nuclear warfare.


7. Study of Chaturvimshatayupakrama of Charak.

8. Jangama Visha (Animal poisoning and zoonotic diseases) – Detailed study of Sarpa, Keeta, Lootha, Vrischika, Mooshika, Alarka – Visha; Lakshana, Bheda, Chikitsa and their Sadhyasadhyata (contemporary and classical views), Signs and symptoms,

66 final UG syllabus 2010
classification, management, prognosis and medico legal importance Visha Sankata, Shanka Visha

9 Acids and Alkalis – Fatal Dose, Fatal period, signs and symptoms, cause of death, treatment, medico legal importance and postmortem appearance of – Sulphuric acid, Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carbolic acid, Formic acid and alkalis in general, treatment and safety measures.

10 Asphyxiants – Carbon monoxide, Carbon dioxide, Hydrogen sulphide; Stimulants – Antihistamines, Cocaine
   Hallucinogens – LSD
   Sedatives and Hypnotics – Barbiturates
   Petroleum – Kerosene Poisoning
   Organo phosphorus compounds - Aluminium phosphate, Zinc phosphide

11 Definition of Toxicology, classification of poisons, their actions and routes of administration, absorption, excretion, metabolism, diagnosis and general principles of treatment, duties of a medical practitioner in case of suspected poisoning.

12 Metallic and Nonmetallic poisoning General characters, Signs and symptoms, Fatal dose, Fatal period, Treatment, Medico Legal Importance and Postmortem Appearance of
   i) Nonmetallic poisons – Phosphorous, iodine
   ii) Metallic poisoning – Arsenic, Mercury, Lead, Copper, Zinc, Tin and Radiation metals.

13 Madya Visha and Madatyaya; Alcohol poisoning (Ethanol and Methanol)

INTRODUCTION

VYAVAHAR AYURVED EVUM VIDHIVAIKYAK
(FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)

1. Introduction, Definition and concise history of Forensic medicine (Vyavahara Ayurveda) and Medical jurisprudence (Vidhivaidyaka), Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.


3. Death and its Medico Legal Aspects.

4. Medico Legal autopsy and exhumation.

5. Injuries and wounds and its medico Legal aspects.

6. Dowry deaths, their Medico Legal importance and laws in relation to it.

7. Asphyxial deaths and its Medico Legal importance.

8. Death due to heat, cold and starvation.


10. Sexual offences, Sexual perversions and their Medico Legal aspects.

11. Forensic psychiatry.


68 final UG syllabus 2010
PRACTICAL

Practical Training period 50 Hours

1. Post Mortem examination 10 Hours
2. Evidence in the court 10 Hours
3. Demonstrations in the Toxicology museum 10 Hours
4. Clinical postings 20 Hours

Distribution of Practical Marks

1. Daily activities (Presented as Clinical Record/ Herbarium) 10 Marks
2. Post Mortem examination - Record 10 Marks
3. Compilation Work 10 Marks
4. Identification (spotting) and clinical case presentation 40 Marks
5. Viva – voce 30 Marks

Total 100 Marks

Reference Books

1. Topics related to Agada Tantra from Charak Samhita, Sushrut Samhita, Ashtanga Hridaya, Ashtanga Samgraha, Kasyapa Samhitha, Yogaratnakara, Bhavaprapasha and Madhava Nidana.
2. Vidhivaidyaka (Vyavahar Ayurveda Vijnan) Dr.Charuchandra Pathak
3. Medical Jurisprudence and Toxicology Modi
4. Basavarajeeeyam Edited by Vd.Govardhan
5. Agada Tantra Sh. Ramanath Dwivedi
6. Text book of Agada Tantra Edited by Dr Huparikar
7. Agad Tantra Dr. Shekher Namboodri
8. Agadatantra ki patyakram Edited By Dr Huparikar
9. Vishachikitsa Vaidya Balakrishnan Nair, Kerala
10. Medical Ethics and Medical Laws in India Dr. H.S. Mehta
11. Toxicology Ayurvedic Perspective VPSV Ayurveda college Kottakkal
12. Kautilya Arthashastra (English) Prof. Kangle
13. Kautilya Arthashastra (Hindi) Dr. Raghunath Singh
14. Vyavahar Ayurveda Dr. Ayodhya Prasad Achal
15. Visha Chikitsa Dr. Balakrishna Nair.
16. Relevant topics from Manu Smriti

69 final UG syllabus 2010
3.1. CHARAK SAMHITA

(Uttarardha: Chikitsa – Kalpa - Siddhi Sthana)

Theory One Paper – 100 Marks
Practical/Viva voce – 50 Marks
Lectures - 100

The marks of theory examination are distributed as follows

1. Chikitsa sthana 60 Marks
2. Kalpa sthana 15 Marks
3. Siddhi sthana 25 Marks

PRACTICALS

Parameters for internal Assessment

Memorizing and describing two shloka weekly, discipline, oral and written presentation and other activities.

Other activities include following:

(1) Memorizing two shloka weekly

(The shloka should be memorized along with Padvibhaga, Anvaya, Bhavartha and practical applicability. log book of memorized shloka, corrected and signed by the class teacher is to be submitted at time of examination.)

(2) Passage writing

(3) Speech related to Charak

Distribution of marks

1. Chart preparation / Compilation
2. Case sheet writing regarding treatment
3. Prescription writing by examining the patients in OPD & IPD in hospital. 40 Marks
4. Oral presentation (Presentation of 10 Shloka, orally and in writing related with Samprapti and Chikitsa Sutra)
5. Viva - Voce
6. Internal Assessment 10 Marks

Total 50 Marks

70 final UG syllabus 2010
Reference Books

1. Charak Samhita - Chakrapani Tika (Sanskrit Commentary)
2. Charak Samhita (Hindi Commentary)
   Vd. Jayadev Vidyalankar or Vd. Atridev Vidyalankar or Prof. Gorakh Nath Chaturvedi & Kashinath Shastri or Dr. Brahmanand Tripathy or Dr. Ravidutta Tripathy
3. Charak Samhita (English Commentary):
   Dr. Ram Karan Sharma & Vd. Bhagwan Dash or Acharya Priyavrata Sharma.
3.2. KAYACHIKITSA

Theory Three Papers – 100 Marks Each
Practical/Viva voce – 150 Marks
Lectures - 300
Hospital Training - 9 Months

Note: Common to all papers of Kayachikitsa – Wherever the phrase “Management of diseases” occurs in the syllabus, it invariably should include different classical preparations which should include relevant Vati, Gutika, Bhasma/Pishti, Kupi Pakwa Rasayana, Ghrita, Taila, Avaleha, Churna, Kashaya and Lepa along with appropriate dose, time of administration, duration of treatment required and relevant Pathyapathy and post therapeutic advices.

Paper I 100 Marks
Part A 50 Marks


2. Importance of Kriya Kaala according to stages of Dosha and their management.

3. Chikitsa sutra and Management of vridhhi (increased) and kshaya (decreased) of Dosha, Dhatu and Mala, Ojo Vyapat (Kshaya, Visrmasa and Vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states, Chikitsa Sutra and Management of ‘Samanyaja and Nanatmaja’ diseases, Roga-Anupattikara Chikitsa, Roga Prashamana Chikitsa (Doshapratyaynika, Vyadhipratyanika, Ubhayapratynika), Doshopakrama, Chikitsa sutra and Management of Sthanartara Dosha (Ashayapakarsha, Anuloma/Pratilioma gati of Dosha, Vimarga gamana of Dosha), Knowledge of Lina Dosha & its management, Diagnosis, Chikitsa Sutra and Management of Avarana and of Dhatu Pradoshaja diseases, Importance of Dosha, Dushya, Bala, Kaala, Agni, Prakriti, Vaya, Sattva Satmya, Desha, Ahara and stage of diseases in treating them.

4. Detailed description of Dvividhopakrama (Santarpana and Apatarpana) and Shadavidhopakrama (Rookshana, Snehana, Swedana, Sthambhana, Langhana and Brihana). Detailed description of Shodhana, Shamana and Nidana Parivarjana. Knowledge of Aushadha matra, Sevan kaala and Anupana, Definition and Knowledge of Pathya-Apathya with examples of diseases of various systems.
Part B


6. Relevant Ayurvedic management according to Samprapti ghataka of following types of Fevers-Typhoid, Pneumonia, Pleurisy, Influenza, Mumps, Meningitis, Encephalitis, Tetanus, Yellow fever, Plague, Dengue Fever, Chikun Guniya, Leptospirosis, Viral Fever, Anthrax, Masurika (Small pox), Laghu Masurika (Chicken pox). and Romantika (Measles).

7. Knowledge of National Health programmes and the relevant Ayurvedic management of the following diseases enlisted by World Health Organisation- Malaria, Filaria, Kala Azar, Leprosy, Tuberculosis, AIDS.

8. Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine- Yoga, Naturopathy, Unani, Siddha Homeopathy, Accupuncture, Accupressure, Modern medicine, Physiotherapy and Rehabilitation.

Paper II

Part A

1. Chikitsa sutra and Management of the diseases of Pranavaha Srotas such as - Kasa, Shwasa, Hikka, Rajayakshma, Urakshata, Parshwashoola, Bronchitis, Bronchiectasis, Emphysema and COPDs.

2. Chikitsa sutra and Management of the diseases of Udaka vaha Srotas such as- Shotha, Jalodara, Trishna, Acid - Base & Electrolyte Imbalance.

3. Chikitsa sutra and Management of the diseases of Annavaha Srotas such as – Agnimandya, Aruchi, Ajima, Anaha, Atopa, Adhmana, Alasaka, Vilambika, Visuchika, Chardi, Grahani, Amlapitta, Gulma, Shoola, Bhasmaka and Acid peptic disorders.

4. Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as - Pandu, Amavata, Madatyaya, Hridroga, Hridshoola, Hypotension, Hypertension.

5. Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as - Raklapitta, Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plhadosha, Yakrut, Hepatitis, Cirrhosis of Liver, Leukaemia, Kushta Kilasa, Visarpa, Sheetapitta, Udarada, Kotha and medically manageable Kshudra Roga.

73 final UG syllabus 2010
Part B 50 Marks

6. Chikitsa Sutra and Management of Mamsavaha Srotas and Medovaha Srotas such as-Gandamala, Mamsashosha, Arbuda, Apachi, Prameha, Sthoulya, Karshya, Diabetes Mellitus and Dyslipidaemia.

7. Chikitsa Sutra and Management of Asthi and Majjavaha Srotas such as Osteomyelitis (Asthimaja Vidradhi), Osteoporosis (Asthisoushirya), Sandhigata Vata (Osteo Arthritis).

8. Chikitsa Sutra and Management of diseases of Mutravaha Srotas such as-Mutrakricha, Mutraghata, Ashmari, Cystitis, Nephritis. Nephrotic Syndrome, Renal Failure.


10. Chikitsa Sutra and Management of Sexually Transmitted Diseases, such as - Phiranga (Syphilis), Puyameha (Gonorrhoea), Upadamsha (Chanchroid).

PAPER III 100 Marks

Part A 50 Marks

1. Principles of treatment and management of Vata Vyadhi such as - Pakshavadha, Ekangavata, Sarvangavata, Ardita, Avbahuka, Kati Graha, Manyastambha, Gridhrasi, Vishwachi, Khalli, Khanja, Pangu, Padaharsha, Padadaha, Vatakantaka, Kroshtukashirsha and Types of Udavarta. Parkinsonism (Kampavata), Gatavata (Dhatu gata and Ashayagata), Avarana Vata.

2. Nidana and Chiktsa of Urusthambha, Gullian Barrie syndrome, Muscular Dystrophy, Myasthenia Gravis, Motor Neurone Diseases and Neuralgia.

3. Diseases of different Endocrine Gland -such as Thyroid, Parathyroid, Pituitary and Adrenal Glands and their Ayurvedic management.


5. Treatment of Motion Sickness. General introduction, types and Management of diseases caused by Vyadhi Kshamatwa Hinata (Immuno deficiency disorders and Auto Immune Disorders).
Part B

50 Marks


8. Management of Vardhakyajanita vikara, Indriyapradoshjoa vikara, Vibandha, Kandu, Alzimers Disease, Sleep disorders, General debility.

9. Etiopathogenesis and Modern management of following diseases – Anthrax, Chicken Pox, Chikunguniya, Dengue Fever, Encephalitis, Influenza, Leptospirosis, Measles, Meningitis, Mumps, Plague, Pleurisy, Pneumonia, Small pox, Swineflu, Tetanus, Typhoid, Viral Fever, Yellow fever.

10. Nutritional deficiency disorders, Acid - Base & Electrolyte Imbalance and related clinical conditions.


13. Vajikarana - Derivation, definition, synonyms, necessity, benefits, Historical importance and indications of Vajikarana. Appreciation of females, Criticism of childless men, Symptoms of good Shûkra (Semen), Vajikaran Dravya and Aushadhi.


15. Classification and importance of Vajikarana Dravya.
### Hospital Training Period

<table>
<thead>
<tr>
<th>9 Months</th>
<th>5 Months</th>
<th>15 Days</th>
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<th>1 Month</th>
<th>2 Months</th>
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<td>General patient training</td>
<td>Department of Manas roga</td>
<td>Department of Communicable diseases</td>
<td>Department of X-Ray and Laboratory</td>
<td>Emergency Services in Kayachikitsa</td>
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### Distribution of Practical Marks

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<th>150 Marks</th>
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<td>Daily routine work</td>
<td>Compilation/Project Report</td>
<td>Patient examination</td>
<td>Viva-voice</td>
<td></td>
</tr>
</tbody>
</table>

### Reference Books

1. Bhaishajya Ratnawali by Kaviraj Ambikadutta Shastri
2. Yogaratnakar by Pt. Brahma Shankar Mishra & Dr. Indradev Tripathi
3. Yogratnakar (English) by Dr. Nirmal Saxsena
4. Chakradutta by Dr. Jagdishwar Prasad Tripathi
5. Chakradutta (English) by Acharya Priyavrat Sharma
6. Chikitsadarsh by Vd. Rajeshwar Dutta Shastri
7. Chikitsa Pradip by Vd. Bhaskar Viswasnath Gokhle
8. Chikitsa Kalika by Tissatacharya, Hindi and English translation by Acharya Priyavrat Sharma
9. Kayachikitsa by Dr. Ganga Sahay Pandey
10. Kayachikitsa by Acharya Ramraksh Pathak
11. Kayachikitsa by Prof. Banwari Lal Gaur
12. Kayachikitsa by Prof. Shiv Charan Dhyani
13. Kayachikitsa  Vd. Tara Shankar Mishra
14. Rasayogasagar  Vd. Hariprapanna Sharma
15. Siddha Bhaishaiya Manimala  Ram Krishna Bhatt
16. Siddhayoga  Vrinda Madhav
17. Madhavchikitsa  Madhavkar
20. Kaya Chikitsa Samanvaya  Dr. Anant Ram Sharma
21. Siddha Vaidyakam  V.V. Natraj Shastri
22. Tamilo ka Siddha Sampradaya  Prof. Ram Niwas Sharma
23. Sahasrayogam  Prof. Ram Niwas Sharma &
(Keraliya Ayurveda Chikitsa)  Dr. Surendra Sharma
24. Vaidya Chintamani  Ballabhacharya
25. Vaidya Jeevan  Lolimbaraja
26. Chamatkar Chintamani  Lolimbaraja
27. Pathya-Apathya-Vinirmaya  Vishwanath Kaviraj
28. Ayurvediya Pathyapathya Vigyan  Dr. Badri Prasad Shah
29. Yoga Chandrika  Laxman Pandit, Dr. Asha Kumari, Prof. Premvati Tiwari
30. Atyayik Vyadhi Nidana Chikitsa  Dr. Bramhadutt Sharma
31. Atyayik Vyadhi Nidana evum Pratikara  Dr. Anant Ram Sharma, Dr. Krishna Chandra Verma & Dr. Sanjay Sharma
32. Ayurvediya Panchkarma Chikitsa  Acharya Mukandi Lal Dwivedi
33. Ayurvediya Panchkarma Vigyan  Dr. Haridas Shridhar Kasture
34. Keraliya Panchakarma  Dr. T.L. Devraaj
35. Ayurvedic Remedies for common disease  Dr. T.L. Devraaj
36. Panchakarma Chikitsa Vigyan  Dr. R.A. Prasad & Dr. G.K. Gurjar
37. Panchakarma Chikitsa  Prof. Divakar Ojha
38. Holistic Principle of Ayurvedic Medicine  Prof. Ram Harsh Singh
39. Kayachikitsa  Prof. Ram Harsh Singh
40. Madak Dravyajanya roga evum unki Chikitsa  Dr. Priya Kumar Chobe
<table>
<thead>
<tr>
<th></th>
<th>Course Title</th>
<th>Instructor/Author</th>
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<tbody>
<tr>
<td>41</td>
<td>Vasava Rajiyam</td>
<td>Vd. Goverdhan Sharma Changani</td>
</tr>
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<td>42</td>
<td>Manas Roga Vigyan</td>
<td>Dr. Balkrishna Amar Ji Pathak</td>
</tr>
<tr>
<td>43</td>
<td>Ayurvediya Manas Vigyan</td>
<td>Prof. Ram Harsh Singh</td>
</tr>
<tr>
<td>44</td>
<td>Adhunik Manas Rog Vigyan</td>
<td>Dr. Rajendra Prasad Bhatnagar</td>
</tr>
<tr>
<td>45</td>
<td>Psychiatry in Brihatrayee</td>
<td>Dr. Kanta Prasad Shukla</td>
</tr>
<tr>
<td>46</td>
<td>Psychopathology in Indian Medicine</td>
<td>Dr. Satyapal Gupt</td>
</tr>
<tr>
<td>47</td>
<td>Yoga against Spinal pain</td>
<td>Pt. Shiv Sharma</td>
</tr>
<tr>
<td>48</td>
<td>Hathayoga Pradipika</td>
<td></td>
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<tr>
<td>49</td>
<td>Hikmat Prakash</td>
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</tr>
<tr>
<td>50</td>
<td>Prakritika Chikitsa</td>
<td>Sh. Vithal Das Modi</td>
</tr>
<tr>
<td>51</td>
<td>Rasayan and Vajikarana</td>
<td>Vd. Mohan Lal Pathak</td>
</tr>
<tr>
<td>52</td>
<td>Rasayan and Vajikarana</td>
<td>Vd. Upadhyaya (Jaipur)</td>
</tr>
<tr>
<td>53</td>
<td>Science of Longevity by Ayurveda</td>
<td>Prof. Subhash Ranade</td>
</tr>
<tr>
<td>54</td>
<td>Adhunik Chikitsa Shastra</td>
<td>Dharmdatta Vaidya</td>
</tr>
<tr>
<td>55</td>
<td>Chikitsa Tatva Deepika</td>
<td>Acharya Mahaveer Prasad Pandey</td>
</tr>
<tr>
<td>56</td>
<td>Kayachikitsa</td>
<td>Prof. Ajay Kumar Sharma</td>
</tr>
<tr>
<td>57</td>
<td>Useful parts of Charak, Sushrut and Vagbhatta</td>
<td></td>
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3.3 SHALAKYA TANTRA

Theory Two Papers – 100 Marks Each

Practical/Viva voce – 100 Marks

Lectures - 210

Hospital Training – 4 Months

Paper I 100 Marks

I. Introduction

a) Shalakyatantra nirukti, Parichayam, Ithihasam
b) Netra rachana shariram (Mandala, Patala, Sandhi, Drushti Vichara) and Netra & Chakshu Kriya Sharir ancient and modern view. Netraparaksha, Netraparikshanopayogi Yantra Shastradi gyanam.
c) Nettarogananm – Samanya Hetu (Nija and agantuja), Purvarupa, Samprapti, Rupa and chikitsa.
d) Classification of Netraroga as per Ayurvedic and Modern view point and its importance.

II. Netra Samanya and Vishesht Chikitsa - Kriya Kalpa

a) Seka, Aschotana, Pindi, Vidalaka Tarpana, Putapaka, Anjana and importance of Panchkarma in Shalakya Chikitsa.
b) Basic fundamentals of Shalakya Shalya Chikitsa e.g. Purva-Pradhana- Paschat karma, Ama-Pachyaman-Pakva Vrana shotha, Vranitopasana, Pranashtashalya, & Vranbhandhana. Methods and concepts of sterilization, asepsis and antisepsis as per ancient and modern view point.
c) Knowledge about the eight surgical procedures i.e. Lekhana, Chedana, Bhedana, Vyadhana etc. Shalya karma;
d) Parasurgical procedures - Agni, Kshara and Raktamokshana with special reference to Netra Chikitsa.
e) Essential diagnostic and therapeutic modern pharmacological agents required in Shalakya Chikitsa

III. Sandhigata Roga

Etiology, pathology, classification, clinical features and management of diseases of Sandhigata roga ( junctional areas of the eye) as detailed in literature of Ayurveda. Acute and Chronic Dacryocystitis, Epiphora, Blepharitis, Lacrimal cyst – aetiology, pathology, signs & symptoms and management. Knowledge about Dacryocystectomy and Dacryocystorhinostomy
IV. Vartmagata Roga
Etiology, Pathology, Classification, Clinical features and Management of diseases of Vartma (lids disorders) of the eye as detailed in literature of Ayurveda. Hordeolum Externum, Chalazion, Ptosis, Trachoma, Trichiasis, Entropion, Ectropion, Lagophthalmus, Blepharospasm and Lid growth – Etiology, signs and symptoms and management.

V. Suklagata Roga
a) Etiology, pathology, Classification, Clinical features and Management of diseases of Shuklagata Mandala (Sclera and Conjunctiva) of the eye as detailed in literature of Ayurveda.
b) Conjunctival degenerative disorders like Pterygium, Scleritis, Episcleritis Sub-Conjunctival Hemorrhage, Xerosis their etiology, signs & symptoms and management.

VI. Krishnagata Roga
a) Etiology, Pathology, Classification, Clinical features and Management of diseases of Krishnagata Mandala (Cornea and Iris) as detailed in literature of Ayurveda.
b) Ulcerative and Non Ulcerative Keratitis, Corneal Opacity, Staphyloma, Hypophion Ulcer & Uveitis, their aetiology, pathology, symptoms and management.

VII. Sarvagata Roga
a) Etiology, Pathology, Classification, Clinical features and Management of Sarvagata Roga (diseases affecting all parts of the eye) as detailed in literature of Ayurveda.
b) Abhishyanda as a cause of all eye diseases. Conjunctivitis, Glaucoma, Dry Eye Syndrome, Panophthalmitis, Etiology, Pathology, Signs & Symptoms and management.
c) Aupasargika (contagious) Netra Roga:- Etiology, signs and symptoms, diagnosis and treatment.

VII. Drishtigata Roga
a) Etiology, pathology, classification, clinical features and management of diseases of drishtigata roga (vision / visual apparatus) as detailed in literature of Ayurveda along with exogenous diseases like Sanimittaja and Animittaja Linga nasha.
b) Refractive errors, Strabismus, Cataract, Retinitis pigmentosa, Amblyopia, Central serous retinopathy, Eale’s disease, Hypertensive & Diabetic Retinopathies, Age related Macular degeneration, Optic Neuritis and Optic atrophy, – Etiology, pathology, signs and symptoms and management, Nayanabhighata- ocular trauma as per ancient and modern view point.
VIII. Miscellaneous Diseases
   a) Xerophthalmia and other malnutritional eye disorders.
   b) Introduction to Eye bank, Eye donation, Corneal Transplantation.
   c) Netraswasthyarakshanopaya- Preventive Ophthalmology and Community Ophthalmology.

PAPER II 100 Marks

I Samanya Chikitsa
   a) Instruments and technology used in the diagnosis and treatment of diseases of Shira, Ear, Nose & Oral cavity
   b) Study of therapeutic procedures like Sveda, Kavala, Gandusa, Dhuma, Rakta Mokshana, Murdhn Taila, Nasya, Pratisarana, Karna Purana, Mukha Lepa used in the treatment of Shira, Ear, Nose, Dental, Periodontal, Oral cavity and Throat diseases.

II Shiro Roga
   a) Importance and Superiority of Shira.
   b) Generalised and specific etiology, pathology, classification, clinical features and management of diseases of Shira and Kapala (Intracranial and Extracranial) as detailed in literature of Ayurveda.
   c) Headache, its differential diagnosis and treatment along with diseases of Scalp.

III Karna Roga
   a) Anatomical and Physiological considerations of Karna (Ear) & Shravanendriya in Ancient and Modern Medical literature, Examination of Ear.
   b) Generalised and specific etiology, pathology, classification, clinical features and management of diseases of Karna as detailed in literature of Ayurveda.
   c) Karna sandhana(Auroplasty), fundamentals, method and Vaikritpaham.
   d) Otalgia, ASOM, CSOM, Deafness, Otomycosis, Tinnitus, Meniere’s disease, Foreign body in ear and Sound pollution, Etiology, pathology, Clinical features and management Tympanoplasty.

IV Nasa Roga
   a) Anatomical and Physiological considerations of Nasa (Nose) & Ghranendriya in Ancient and Modern Medical literature. Examination of Nose.
   b) Generalised and specific etiology, pathology, classification, clinical features and management of diseases of Nasa (Nose) as detailed in literature of Ayurveda.
   c) Nasa Sandhana (Fundamentals and methods of Rhinoplasty).
   d) Rhinitis, Epistaxis, Nasal Polyp, DNS, Nasal trauma, foreign body in the nose Etiology, pathology, clinical features and management

V Mukha Roga (Diseases of Oral Cavity)
   a) Mukha roga- ayatana- Anatomical sites of diseases of Oral cavity
   b) Anatomical and Physiological considerations of Mukha (Oral cavity) in Ancient and
Modern Medical literature, Examination of Oral cavity.

c) Mukha and Danta Swasthya ancient and modern concepts.
d) Generalised Etiology, Pathology, Clinical picture and Treatment of Mukharoga (Diseases of oral cavity)

VI Oshtha Roga (Diseases of Lips)
a) Anatomical and Physiological considerations of Oshtha (Lips) in Ancient and Modern Medical literature. Examination of Lips.
b) Etiology, pathology, classification, clinical features and management of diseases of Oshtha (Lips) as detailed in literature of Ayurveda.
c) Oshtha sandhana- Labioplasty, Hare lip, Retention cyst, Cracked lips.

VII Danta Roga (Dental Diseases)
a) Anatomical and Physiological considerations of Danta (Tooth) in Ancient and Modern Medical literature. Examination of Teeth.
b) Etiology, pathology, classification, clinical features and management of diseases of Danta (Teeth) as detailed in literature of Ayurveda.
c) Danta Utpatana- Tooth extraction using Jalandhara Bandha Yoga as well as by using instruments. Danta purana ancient and modern methods. Danta rakshana.
d) Dental Caries, Dental Tartar, causes and treatment.

VIII Dant Mula Gata Roga (Diseases of Periodontia)
a) Anatomical and Physiological considerations of Dantamula (Periodontia) in Ancient and Modern Medical literature. Examination of Dantamula- Periodontium.
b) Etiology, pathology, classification, clinical features and management of diseases of Dantamula (Periodontia) as detailed in literature of Ayurveda.
c) Gingivitis, Apical abscess, Periodontitis (Pyorrhoea), Periodontial abscess and Mandibular sinus

IX Jihwa Gara Roga (Diseases of Tongue)
a) Anatomical and Physiological considerations of Jihva (Tongue) in Ancient and Modern Medical literature, Examination of Tongue.
b) Etiology, pathology, classification, clinical features and management of diseases of Jihwa (Tongue) as detailed in literature of Ayurveda.
c) Glossitis, Tongue Tie, Ranula, Benign and Malignant Tumors of tongue

X Talu Roga (Diseases of Palate)
a) Anatomical and Physiological considerations of Talu (Palate) in Ancient and Modern Medical literature. Examination of Palate.
b) Etiology, pathology, classification, clinical features and management of diseases of Talu (Palate) as detailed in literature of Ayurveda.
c) Palatitis, Cleft palate, Uvulitis and Tumors of the palate.

XI Kantha And Gala Gata Roga (Diseases of Pharynx & Larynx)
a) Anatomical and Physiological considerations of Kantha and Gala (Pharynx and Larynx) in Ancient and Modern Medical literature. Examination of pharynx and Larynx.
b) Etiology, pathology, classification, clinical features and management of diseases of Kantha and Gala (Pharynx and Larynx) along with swara bheda - (altered voice

82 final UG syllabus 2010
quality) as detailed in literature of Ayurveda.

c) Pharyngitis, Laryngitis, Tonsillitis, Carcinoma of Larynx, Pharynx, Diphtheria, Adenoiditis, foreign body in the throat- etiology, pathology and treatment of these diseases.

XII Sarvasara Mukha Roga (Generalised mucosal affections of the oral cavity)
Etiology, pathology, Classification, Clinical features and Management of diseases of Generalised mucosa of the oral cavity as detailed in literature of Ayurveda.
Stomatitis, HIV and Herpes infection of oral cavity

XIII Miscellaneous Diseases
Anatomy and physiology of Salivary, Thyroid and Para thyroid glands, their diseases and treatment. Dysphagia, Cervical lymphadenopathy, Manyastambha (Sternocleidomastoiditis).

PRACTICAL

Content of Practical

Identification, Uses, Demonstration of surgical instruments and method of sterilization.
Training of case taking, bedside clinics and case presentation.
Training in para- surgical procedures-
1) Kshara karma
2) Agnikarma
3) Raktamokshana
5) Training of minor procedures
   a) Incision and drainage  b) Excision  c) Sutures
6) Observation of surgical procedures
   a) Pterygium  b) Cataract  c) Cyst removal

Hospital Training Period 4 Months
1) OPD & IPD  1½ Months
2) Operation Theatre  1½ Months
3) Kriyakalpa  1 Month

Distribution of marks
1) Daily Record  10 Marks
2) Identification of Instruments  20 Marks
3) Short Case  10 Marks
4) Long Case  20 Marks
5) Viva - voce  40 Marks

Total  100 Marks
Reference Books

1. Shalakya Tantra                          Dr. Rama Nath Dwivedi
2. Shalakya Vigyan                          Dr. Ravindra Chandra Choudhary
3. Abhinava Netra Chikitsa                  Acharya Vishva Nath Dwivedi
4. Netra Chikitsa Vigyan                   Dr. Ravindra Chandra Choudhary
5. Netra Roga Chikitsa                     Dr. Munje
6. Netra Roga Vigyan                       Dr. Hans Raj
7. Parson’s Diseases of Eye
8. Diseases of ENT Log and Turner
9. Shalakya Tantra                          Shiv Nath Khanna
10. Useful portions of Charak, Sushrut, Vagbhata etc.
3.4 SHALYA

Theory Two Papers – 100 Marks Each
Practical- Viva voce – 100 Marks
Theory Lectures - 210
Hospital Training - 6 Months

Paper I

PART A

1. Introduction to Shalya Tantra - Historical background and progress made.
2. Definition of Shalya, Shalya Tantra and its importance.
4. Nirjantukarana – Sterilization – Methods, Types and O.T. fumigation
5. Sangyaharana– Anaesthesia - Definition, Types, anaesthetic agents, indications, contraindications, procedures, complications and management.
7. Ashtavidha Shastra Karma - Operative procedures
8. Yogya Vidhi - Experimental Surgery.
17. Fluid, electrolyte and Acid Base Balance, Nutrition –
   i) Introduction to physiology of fluids and electrolytes
   ii) Dehydration and over hydration,
iii) Specific electrolyte loss and symptomatology and management of Acidosis, Alkalosis and Acid balance.
iv) Electrolyte changes in specific diseases like pyloric stenosis, intestinal obstruction and anuria.
v) Various replacement fluids in surgery, mode of administration and complications.
vi) Nutrition – pre-operative, post-operative and intravenous alimentation.

20. Knowledge about Vranitagara and Rakshakarma.

Part B 50 Marks

24. Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa of the following disorders.
   i) Vranashotha - Inflammation
   ii) Vidhradi – Abscess
   iii) Pidika – Boils
   iv) Nadi Vrana - Sinus
   v) Dagdha Vrana - Burns and scalds
   vi) Marmaghata - Shock
   vii) Kotha – Gangrene
   viii) Granthi- Cyst.
   ix) Arbuda – Tumour.
25. Vrana – Nirukti and Prakara
   ii) Vrana Chikitsa – Pathya-apathy and Shashti Upakrama.
   iii) Ulcer types and their management
   iv) Wound healing stages and management.
      ii) Management of bites and stings

86 final UG syllabus 2010


30. **Snayu Vikara** - Diseases of tendons and ligaments – Tendonitis, tenosynovitis, ganglion and their management.


32. Surgical practice in AIDS - HIV and hepatitis patients.

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**Paper II 100 Marks**

**Part A 50 Marks**


3. **Diseases of bone** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Congenital anamolies Osteomyelitis, cysts, tumours and tuberculosis.


5. Brain tumors and their management.

6. **Diseases of breast** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Sthan Vidradhi- Breast Abscess, Sthan Arbuda-Breast tumors and their management.

7. **Diseases of chest** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Pleural Abscess, Pleural Effusion, Tumors, Pleurisy and their management.

8. **Diseases of esophagus** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of - Congenital Anamolies, Oesophagitis, ulcer, Varices, Tumors and their management.


10. **Diseases of stomach and duodenum** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Congenital Pyloric Stenosis, Peptic Ulcer, Tumors and their management.

11. **Diseases of small intestine** - Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of - Mickel’s Diverticulitis, Tuberculosis, Obstruction, Perforation and their management.
12. **Diseases of large intestine** - Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of – Tuberculosis, Obstruction, Perforation, Tumor, Appendicitis, Crohn’s disease, Ulcerative Colitis and their management.


15. **Abdominal Injuries and management**

**Part B 50 Marks**

1. **Diseases of Liver** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of Abscess, cysts, tumors, Obstructive Jaundice and Yakritdalyodar –Hepatomegaly.

2. **Diseases of Gall Bladder** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Cholecystitis, Choledithiasis, tumors.

3. **Diseases of Pancreas** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Pancreatitis, Pseudo Pancreatic Cyst, Tumors.

4. **Diseases of Spleen** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Pleehodara – Spleenomegaly, Spleenic rupture.


6. **Diseases of Ureter** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Calculus, Obstruction.

7. **Diseases of Urinary bladder** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Congenital anomalies, Ashmari -Vesicle Calculus, Cystitis, Tumor and Injury.

8. **Mutragata & Mutrakricha**- Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management. Retention of urine.

9. **Diseases of Prostate** - Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Prostatitis, Prostatic abscess, Benign Prostatic Hypertrophy, Carcinoma of Prostate.
10. **Diseases of Urethra** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Urethritis, Stricture and Rupture.

11. **Diseases of Penis** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Niruddhaprakasha -Phimosis, Parivartika - Paraphimosis, Avapati - Prepuceal Ulcer, Arbuda- Tumor, Lingarsha -Venereal Warts.


13. **Vriddhi Roga** – Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management.


**PRACTICAL**

**Content of Practical**

1. Identification, uses, demonstration of surgical instruments and method of sterilization.
2. Training of case taking, bed side clinics and case presentation.
3. Demonstration and Practical training in Anaesthesia.
4. Training of following Parasurgical procedures
   1. Kshara Karma
   2. Agnikarma
   3. Kshara Sutra
   4. Raktamokshana
5. Training of following ward procedures
   1. Application of bandages and splints
   2. Catheterization
   3. Wound management
   4. Ryle’s tube aspiration
   5. Injections - Intramuscular / Intravenous / Subcutaneous / Intradermal
6. Training / Practice of following procedures
   1. Incision and drainage of abscess
   2. Excision
   3. Sutures
   4. Circumcision
   5. Hydrocele
   6. Hernial repair
   7. Haemorrhoidectomy
   8. Fistulectomy
   9. Fissurectomy
   10. Exploratory Laparotomy
7. Training of surgical emergencies and management.
Hospital Training Period

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<th>Training Period</th>
<th>Duration</th>
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<td>4 Months</td>
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<tr>
<td>2. Operation theatre</td>
<td>1 Month</td>
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<td>3. Emergency casualty</td>
<td>1 Month</td>
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Distribution of Marks

1) Daily records 10 Marks
2) Instruments 20 Marks
3) Short case 10 Marks
4) Long case 20 Marks
5) Viva - voce 40 Marks

Total 100 Marks

Reference Books

1. Sushrut Samhita
2. Ashtang Sangraha
3. Ashtanga Hridaya.
4. Charak Samhita
5. The Surgical instruments of the Hindus Girindranath Mukhopadhyaya
6. Shalya Tantra Samuchchaya Pandit Ramadesh Sharma
7. Shalya Vigyan (Part 1-2) Dr. Surendra Kumar Sharma
8. Shalya Samanvaya (Part 1-2) Vd. Anantaram Sharma
9. Shalya Pradeepika Dr. Mukund Swaroop Verma
10. Soushruti Dr. Ram Nath Dwivedi
11. Clinical Shalya Vigyan Dr. Akhilanand Sharma
12. Bhagna Chikitsa Dr. Prabhakar Janardhan Deshpande
13. Kshara sutra management in anoectal ailments Dr. S.K. Sharma, Dr. K.R. Sharma and Dr. Kulwant singh.
14. Anorectal diseases in Ayurveda Dr. Sizoria & Dr. Praveen Kumar Chowdary.
15. Adhunik Shalya Chikitsa Siddanta Dr. Katil Narshingham Udupa
16. Agnikarma Technology Innovation Dr. P.D. Gupta
17. Shalya tantra Ke Siddhant Dr. K.K. Takral
18. Recent advances in the mangement of Arshas / Haemorrhoids Dr. P. Hemantha Kumar

90 final UG syllabus 2010
19. Arsha Evum Bhagander Mein sutra Avacharan  
   Vd. Kanak Prasad Vyas
20. Kshara Sutra  
   Dr. S.N. Pathak.
21. Surgical ethics of Ayurveda  
   Dr. S. Sankaran
22. Shalya Vigyan (Sachitra)  
   Anantram Sharma
23. Anushastra Karma  
   Dr. D.N. Pande
24. Concept of Vrana is Ayurveda  
   Dr. Lakshman Singh
25. Significance for Poorva Karma in Surgical Patient  
   Dr. Lakshman Singh
26. Sangyaharan Prakash  
   Dr. D.N. Pande
27. Short Practice of Surgery  
   Bailey and Love’s Surgery
28. A concise Text Book of Surgery  
   S. Das
29. A manual on Clinical Surgery  
   S. Das
30. A System of Surgical Diagnosis  
   Prof. Tribhuvan. N. Patel
31. A Practical Guide to Operative Surgery  
   S. Das
32. Drugs and Equipment for Anesthesia  
   Arun Pal
33. Manual of Surgical Instruments  
   M. M. Kapur and Procedures
34. Ward Procedures  
   Mansukh B. Patel and Yogesh P. Upadhyay
35. Primary Anesthesia  
   Maurice king
36. Synopsis of Anesthesia  
   Lee
37. Clinical Anatomy/ Surgical Anatomy  
   Snell
38. Surgical Instruments  
   V.G.Kale
39. Outline of Orthopedics  
   J.C. Adams
40. Outline of Fracture  
   J.C. Adam
41. Undergraduates’ Surgery  
   A.K. Nan
42. Text book of Surgery  
   Surgeons Association of India
43. Principles & Practice of Agnikarma  
   Dr. Anandkumar & Dr. Kanchan Shekokar
3.5. PRASUTI TANTRA EVUM STRI ROGA

Theory Two Papers – 100 Marks Each

Practical- Viva Voce – 100 Marks

Theory Lectures - 150

Hospital Training – 3 Months

<table>
<thead>
<tr>
<th>Paper I</th>
<th>Prasuti Tantra</th>
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<tr>
<td>Part A</td>
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<td>50 Marks</td>
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Introduction and scope of Prasuti Tantra (obstetrics).

Stri Sharir Vigyan

Etymological origin of the word Stri, Vayobhedena Stri sangnya. (Nomenclature of Stri according to age). Normal and abnormal conditions of Asthisandhi peshi Sahita Stri Shroni (Soft & Bony Pelvis) and its obstetrical importance, Shroni mapana (pelvic assessment) – Artavvaha and Stanyavaha strotamsi. Tryavarta yoni (Female internal and external genitalia). Stri Vishishta Peshi Marmani.

Rajo Vigyan


Garbha Vigyan

i) Garbhasya paribhasha, Garbhadhanavidhi, Garbhavakranti, Garbha Sambhava samagri (factors essential for conception), Garbhakara bhava, Panchabhautika composition of Garbha, Garbhalingotpatti, Garbhasya Avayavotpatti, Masanumasika Vridhi of Garbha (Monthwise development of foetus), Garbha Varnotpatti (Origin of complexion in foetus), Garbha Poshana (Nutrition of Garbha), Garbhangasamstithi (attitude), Garbhastithi, Asana, Uday (lie, position, presentation), fetal skull, Garbha Vikriti.

Garbhinivigyan

i) Lakshana of Sadhyograhita Garbha, Lakshana of Vyakta Garbha, Garbhini Nidana (Diagnosis of Pregnancy), Pumsavana vidhi,


Garbhini Vyapad / Garbha Vyapad

i) Garbhini - Alpabala vyadhaya (Minor ailments of Pregnancy) – Hrillasa (Nausea), Chhardi (emesis), Aruchi, Atisara (Diarrhoea), Vibandha (Constipation), Arsha, Udavarta, Pada Shotha, Parikartika, Vaivarnya (Discoloration), Kikkisa etc.


Part B 50 Marks

Prasava Vigyan (Parturition)


Prasava Vyapad (Disorders of Labour)

Akaala Prasava (Preterm labour), Kalatita Prasava (post term labour), Vilambita Prasava (prolonged labour) Induction and augmentation of labour Yoni Samvarana, Cervical Dystocia, Cephalo Pelvic Disproportion, Fetal Distress. Mudagarbha; - Definition, Etiopathology, Clinical features, Types, Prognosis (Sadhyasadhyta), Treatment Aushadhi, Mantra, Shastra, Yantrachikitsa Garbha stithi parivartana (version), Forceps Delivery, Ventouse Delivery. Muladharachhedan (Episiotomy), Udarapatanapurvaka garbha Nirharana, Ceasarean Section. Aparasanga (Retention of Placenta), Prasavottara Raktsrava (PPH), Its causes, clinical features and treatment, Maternal distress, Prasavajanya Janananga Abhighata, Uterine Inversion, Amniotic Fluid Embolism etc.
Sutika Vigyan – Sutika Paribhasha, Sutika Kaal, Changes during Sutika avastha (Sharirika and Manasika), Sutika paricharya.

Sutika Roga – Number of Sutika Roga, Causes, Clinical features, Prognosis and treatment of Sutika Jwara, Shotha and Makkala and other complications.


Atyayika Chikitsa in Prasuti (Emergency care in Obstetrics) Pharmacotherapuetics of the drugs used in Obstetric emergencies, PNDT Act, MTP Act.

**Paper II STRI ROGA 100 Marks**

**Part A 50 Marks**

Congenital malformations of female genital tract.

**Artava vyapad**

Artava Vridhhi, Kshaya, Ashta Artava Dushti, Asrigdara, Abnormal Uterine Bleeding, Anartava (Amenorrhoea), Alpartava (hypo and Oligomenorrhoea).

**Yoni vyapadani** – Sankhya, Nidana, Lakshana, Upadrava evam Chikitsa with all possible modern correlations.

**Shukra vigyana**

Description of Shukra, Shukra Vridhhi, Kshaya, Shukra Dusti their Hetu, Lakshana and its Chikitsa, Normal Semenogram.

**Vandhyatva** (Infertility – Causes, Types, Investigations and Management) Yoni Kanda, Yoni Arsha, Granthi and Arbuda of Yoni (Benign and Malignant tumours of Genital Tract) Pelvic Infections including Sexually Transmitted Infections and their Management, Rajonivrutti

**Part B 50 Marks**

**Stanaroga**

Stanagranthi, Stanavidradhi (Abscess), Stanashopha (Mastitis) their Etiopathology, Clinical features, Diagnosis, Prognosis, Treatment and Complications.

**Sthanik Chikitsa**-

i) Snehana, Svedana, Uttarabasti, Pichu, Varti, Lepana, Dhapana, Dhavana, Dahana, Ksharakarma etc. Practical knowledge of all these procedures along with indications, complications and management.

ii) Importance of Panchakarma in Stri Roga.

94 final UG syllabus 2010
Shastra Karma

i) Surgical procedures their Indications, Contraindications, Purvakarma (Pre-Operative), Pradhanakarma (Operative), Paschatakarma (Post-operative), Complications and Management.

ii) Garbhashayamukha Vistrutikarana (Cervical Dilatation) & Garbhashaya Lekhana (Curettage), Garbhashaya Mukhadahana (Cauterization of Cervix), Swasthane Garbhashaya Sthapana (Repair of Genital Prolapse), Arshanirharana (Excision of Polyp), Granthi evum Garbhashaya Nirharanasya Samanya Gyana (Hysterectomy), Female Surgical Sterilization.

iii) Removal of different type of Cysts, Marsupilisation, PAP smear, Endometrial and Cervical Biopsy.


Basic knowledge of Laproscopy, Hysteroscopy, Hysterosalpingography, USG, X-RAY, Colposcopy. Garbhanirodhaka Upaya.

Parivar Niyojana, Reproductive and Child Health Care. AIDS/HIV control programme and importance of current National Programme.

PRACTICAL

Content of Practical

1. History taking and examination of antenatal and gynecological cases.
2. Observation of 10 labour cases.
3. Practical knowledge of performing Sthanika Chikitsa
4. Observation of surgical procedures mentioned above.
5. Identification, uses, demonstration of surgical instruments and method of Sterilization.

Distribution of Marks

1. Case Record 10 Marks
2. Case Taking (2 Cases) 30 Marks
3. Identification of drugs and models 20 Marks
4. Viva - voce 40 Marks
5. Total 100 Marks
Reference Books

1. Abhinava Prasuti Tantra Vd. Damodar Sharma Gaur
2. Prasuti Vigyan Acharya Ramanath Dwivedi
3. Prasuti Vigyan Dr. Mrinmayi Mukharjee
4. Prasuti Vigyan Dr. Alakh Narayan Singh
5. Prasuti Vigyan Manjari Dwivedi
6. Prasuti Vigyan Vaidya Nirmala Tai Rajwade
7. Prasuti Tantra & Stri Roga Dr. Premvati Tiwari
8. Abhinava Prasuti Vigyan Ayodhya Prasad Achal
9. Stri Roga Vigyan Vd. Ramanath Dwivedi
10. Abhinava Striroga Vigyan Dr. Rajendra Bhatnagar
11. Abhinava Striroga Vigyan Ayodhya Prasad Achal
12. Stri Roga Chikitsa J.S. Chauhan
13. Janasankhya Siddhanta aur Upadeyata Dr. Nirmal Sahani
15. Text Book of Gynaecology C.S. Dawn
17. Ayurvedic Concepts in Gynaecology Vaidya Nirmala Joshi
18. Navya Prasuti Vigyanam Dr. Pooja Bharadwaj
3.6. KAUMARBHRITYA

Theory One Paper – 100 Marks
Practical Viva Voce 100 Marks
Lectures - 90
Hospital Training – 1 Month

Paper I 100 Marks

Kaumarbhritya Parichaya Evum Balaka Paricharya
(Introduction to Ayurvedic Pediatrics and Child Care)

Part A 50 Marks


2. Vayobheda (Classification of age): Garbha, Bala, Kumara; Kshirada, Kshirannada & Annada etc.

3. Importance of Kashyapa Samhita in Kaumarbhritya.

4. Navajata Shishu Paricharya (Neonatal Care): Care of the Samaya-purvajata Shishu (Preterm), Purnakalika Shishu (Full term), and Samaya-Paschatajata Shishu (Post term neonate), Nabhinala Chhedana (Cutting of umbilical cord), Complications of improper cutting of umbilical cord and its treatment, Rakshoghna Karma (Protective measures).


6. Navajata Shishu Parikshana (Examination of new born): Ayu Parikshana (including Lakshanadhyaya) Modern approach of Neonatal Examination including gestational age assessment


8. Navajat Shishu Poshana (Nutritional aspects including neonatal feeding): Specific feeding schedule as per Ayurvedic texts and modern concept; Stana Sampat (Characteristics of normal breast), Stanya Sampat (Properties of normal breast milk) Stanyotpatti and Prasuti (Physiology of lactation), Stanya Sangathana (Composition of breast milk), Stanya Parikshana (Examination of breast milk), Stanya-Piyusha (Colostrum); Stanya-Pana-Vidhi (Method for breast feeding), Stanyakshaya-Stanyanasha (Inadequate production and absence of breast milk), Stanyabhave Pathya Vyavastha (Alternative feeding in the absence of breast milk), Various other feeding methods.

9. Stanyadosha (Vitiation of Breast milk), Stanya Shodhana (Purification of breast milk), Stanya Janana and Vardhanopakrama (Methods to enhance breast milk formation).
10. Dhatri (Wet nurse): Dhatri Guna and Dosha (Characteristics of wet nurse), Concept of human milk banking

11. Garbha Vridhi Vikasa Krama: Samanya Parichaya (General introduction to normal fetal growth from conception to full term maturity), Sharirika Vridhi, Mansika evum Samajika Vikas (Physical, mental and social growth & development of child), Important mile stones during infancy and early childhood with special reference to gross & fine motor, language and personal – social development., Anthropometry-measurement and their interpretation.

12. Importance of Kreedabhum (play ground) and Kreedanaka (toys), Kumaradhara (child care taker)

13. Poshana (Nutrition): Normal requirements of nutrients for newborn, infant and children, common food sources, Satmya and Asatmya Ahara (Compatible and incompatible diet)


15. Dantotpatti evum Danta Raksha Vidhi (Dentition and dental care): Dantasampat (Characteristics of healthy teeth), Danta Nisheka evum Dantodbheda (Eruption of teeth), Dantodbhdjanya Vikara (Dentition disorders).

16. Vyadhitram: General concepts of Bala (Immunity) and methods of Bala Vridhi.

17. Lehana (Electuries): Importance, uses and various types of Lehana.

18. Knowledge of National Programs related to Child Health Care: Reproductive and Child Health (RCH) Program, Community Child Health Programs, Nutritional Programs, National Immunization Program and other programs incorporated by Govt of India from time to time.

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**Part B** 50 Marks

**Samanya Chikitsa Siddhanta and Balaroga**
(General Principles of Treatment and Management of Pediatric Disorders)

1. Balaroga Samanya Chikitsa Siddhanta (General principles of treatment in children), Balaroga Parikshavidhi-Shadvidha, Ashtavidha, Dashavidha Pariksha evum Shishu Vedana Parigyan (Examination of diseased child and Diagnostic methods-Ayurvedic and modern).

2. Aushadhi Matra Nirdharana- According to Vaya, Bhara evum Aushadhi Kalpana (drug doses according to age, weight and drug preparations)

3. Specific therapeutic procedures in children: Panchkarma procedures specific to pediatric age group.

5. Sahajavyadhi - (Congenital disorders): Sahaja Hridaya Vikara (Congenital Cardiac Disorders) Jalashirshaka (Hydrocephalus), Khandaoushtha (cleft lip), Khanda-Talu (cleft palate), Sanniruddha Guda (Anal stricture / imperforated anus), Pada-Vikriti (Talipes equanovarus and valgus), Tracheoesophageal Fistula (TOF), Spina bifida, Meningocele, Meningomyelocele, Pyloric Stenosis.


7. Prasavottara Vyadhi (Neonatal disorders): Navajata Kamala (Neonatal Jaundice), Navajata Netrabhirshyanda (Neonatal conjunctivitis), Nabhiroga (Umbilical disorders), Mastishkaghata (Cerebral Palsy), Rakta Vishamayata (Neonatal Septicaemia), Rakta Vaishamyata (Rh-Incompatability), Raktasravi Vikara (Haemorrhagic Disorders), Ulvaka Roga.

8. Dushta Stanyapanajanya Vyadhi (Disorders due to Vitiated Milk): Cow’s Milk Allergy, Charmadala (Infantile atopic dermatitis), Kshiralasaka, Kukunaka (Conjuctivitis), Ahiputana (Napkin Rashes).


10. Aupasargika Vyadhi (Infectious Diseases): Karnamula Shotha (Mumps), Romantika (Measles), Rubella, Masurika (Chicken Pox), Rohini (Diphtheria), Kukkura-Kasa (Whooping Cough), Dhanurvata (Tetanus), Krimiroga (Worm Infestations), Antrika Jwara (Typhoid), Mastisakavarnashotha (Meningitis), AIDS, Dengue, Malaria, Poliomyelitis, Rajayakshma (Tuberculosis), Jivwanujanya Yakrit Shotha (Hepatitis).

11. Srotas Vikara:
   a. Pranavaha Srotas: Pratishyaya (common cold), Kasa (Cough), Shwasa (Respiratory distress syndrome), Tamaka Shwasa (Bronchial Asthma), Utphullika, Swasanaka Jwara (Pneumonia/Pneumonitis, Bronchiolitis), Gala shotha (Pharyngitis, Laryngitis), Talukantaka (Tonsillitis).
   b. Annavaha Srotas: Ajima (Indigestion), Atisara (Diarrhoea), Chhardi (Vomiting), Vibandha (Constipation), Mukhapaka (Stomatitis), Gudapaka (Proctitis), Parikartika (Anal fissure), Udarshula (Infantile Colic), Pravahika (Dysentery), Gudabhransa (Rectal Prolapse).
   c. Rasavaha Srotas: Jwara (Fever), Pandu (Anemia), Mridbhakshanajanya Pandu (Anaemia associated with clay eating/ Pica).
   d. Raktavaha Srotas: Kamala (Jaundice), Raktapitta (Haemorrhagic disorders), Krimija Hridroga (Infectious cardiac diseases including Rheumatic Heart Disease), Uchcha-Raktachapa (Hypertension), Yakridpleehodara (Hepatospleenomegaly).
   e. Mamsa-Medovaha Srotas: Apachi (Lymphadenitis), Galaganda (Goitre), Gandamala (Cervical Lymphadenopathy), Sthaulya (Obesity).
   f. Mutravaha Srotas: Mutraghata (Anuria), Mutrasanga (Retention of urine) Mutrakriccha (Dysuria), Vrikkashotha (Glomerulonephritis and Nephrotic syndrome).

12. Anya Bala Vikara (Miscellaneous Pediatric Disorders)
   Pangutwa (Locomotor disorders), Vamanatwa (Dwarfism), Jadatwa (Mental disorders),

99 final UG syllabus 2010
A Epilepsy), Unamada, Akshepa (Convulsions), Nirudhaprakasha (Phimosis), Kushta (Skin disorders), Madhya Karna Shotha (Otitis media), Karnasrava (Otorrhoea)

13. Behavioral Disorders of Children, their management and counseling: Breath holding spell, Shayyamutra (Bed wetting), Autism, ADHD (Attention Deficit and Hyperactive Disorders)


15. Balagraha: General description, types, clinical features and management

16. Various Ayurvedic & modern procedures and investigations in pediatric practice

PRACTICAL

Content of Practical

1. Clinical training of above mentioned disorders of children.
2. Navajata Shishu Paricharya (Care of the newborn)
3. Pranapratyagamana Vidhi (Ressuscitation procedure of new born)
4. Vaccination
5. Panchakarma Vidhi (Panchakarma procedures)
6. Knowledge of various equipments such as phototherapy unit, overhead radiant warmer, special resuscitation equipments, Panchakarma and their application
7. Knowledge of IV fluid administration, blood sampling
8. Breast feeding technique

Distribution of Marks

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Reference Books

1. Kashyapa Samhita Complete Hindi translation by Satyapal Vidhyalankara English translation by Prof. Premvati Tiwari
2. Essential Paediatrics O.P. Ghai
3. Text Book of Paediatrics Nelsan
4. Care of New Born Meharban Singh
5. Clinical Methods in Paediatrics Meharban Singh
6. Paediatric Emergencies Meharban Singh
7. Diseases of New Born Scheffers
8. Kaumarbhritya related references from Charak Samhita, Sushrut Samhita Vagbhata etc.
3.7. PANCHAKARMA

Theory One Paper – 100 Marks
Practical Viva-voce – 50 Marks
Lectures - 100
Hospital Training – 3 Months

Paper I 100 Marks
Part A 50 Marks

I. Introduction

1) Introduction to Panchakarma, their importance and utility in the treatment.
2) Relation of Panchakarma with Shodhana therapy (Purification therapy).
3) Threefold Karma :-
   i) Poornva Karma (Pre operative procedure):- General knowledge, importance and utility of Poornva karma (Pachana, Deepana, Snehana & Swedana)
   ii) Pradhana Karma (Operative Procedure)
   iii) Pashchat Karma (Post Operative Procedure)
4) Usefulness of Shodhana (Purification Therapy) according to the seasons.
5) General precautions (Pariharya Vishaya) during Panchakarma.
6) Relevance of Panchakarma in present era.
7) Specifications of Panchakarma theatre and necessary equipments

II. Snehana

1) Etymology and Definition of Sneha and Snehana (Oleation therapy)
2) Types of Sneha, Qualitative utility of Sarpi, Taila, Vasa and Majja
3) Different categories of Snehayoni (sources).
4) Need of Rukshana before Snehana and Samyak Rukshana Lakshana.
5) Types of Snehana – Bahya and Abhyantara (external and internal oleation therapy), Snehapaka.
6) Knowledge of Yamaka Sneha, Trivrit Sneha, Maha Sneha, Panchaprasrutiki Sneha, Achcha Sneha, Pravicharahana Sneha, Sadya Sneha, Avapidaka Sneha, Shodhana, Shamana and Brimhana Sneha, Hrasiyasi, Hrasva, Madhyama and Uttama Sneha
7) Indications and contraindications for Snehana.
8) Snehaha Procedures:
   Abhyantara Shodhananga Sneha Vidhi:
   **Purvakarma**: Roga and rogi pariksha, including relevant diagnostic techniques, Koshta pariksha and Agni nirmaya, preparation of the rogi & fixation of dose.

101 final UG syllabus 2010
Pradhana karma: Administration of Sneha & Anupana, Observation-Jeeryamana/Jeema/Ajeerna/Asnigdha Lakshana, Samyak Yoga, Ayoga/Atiyoga Lakshana, Vyapat & their management according to Ayurveda & Modern System of Medicines.


9) Diet and regimen during Snehana
10) Detailed knowledge about procedure and utility of following Bahyasnehana (External oleation therapy) – Abhyanga, Samvahana, Mardana, Unmardana, Utsadana, Padaghata, Murdhni Taila, Pichu, Karna Poorana & Akshi Tarpana
11) Snehana Karmukata.
12) Digestion and Metabolism of Fat.

III. Swedana

1) Etymology and Definition of Sweda and Swedana (Sudation).
2) Swedana dravya and their properties.
3) Methods to protect the vital organs (varjya anga) during Swedana Procedure. Ten Types of Niragni Sweda, Different types of Sagni Sweda
4) Knowledge of Shodhananga and Shamana Sweda.
5) Indication and contra- indications of Swedana.
7) Features of Samyak Yoga (Proper Sudation), Atiyoga (Excessive Sudation), Heenayoga (Inadequate Sudation) and Vyapat of Swedana and their Management.
8) Diet and regimen during and after Swedana.
9) Swedana Karmukata (Mode of action of Swedana Chikitsa).
10) Introduction to Bahirparimarjana Chikitsa: Lepa, Gandusha, Kaavala, Shiro Lepa (Tala potichil), Talam, Udvardana, Takra Dhara, Kati, Basti, Janu, Basti, Gheevea and Urobasti (Tarpana)
11) General Knowledge about current Sudation techniques (Sauna bath, Steam bath, Infrared therapy).

IV. Vamana

1) Etymology, Definition and Introduction of Vamanakarma
2) Importance and Utility of Vamana Karma
3) Koshta Nirmaya and Agni pariksha in Vamana Karma.
4) Indications and Contraindications for Vamana.
5) General properties of Yamaka Dravya
6) Preservation and Knowledge of Yamaka and Vamanopaga dravya.

102 final UG syllabus 2010
7) Detailed study of Madana Phala, Kutaja, Yashti, Vacha and Nimba.

**Purva karma:** Snehana & Swedana, Diet & regimen prior to Vamana Karma Preparation of formulation for Vamana Karma Dose & Method of Administration.

**Pradhana karma:** Administration of Drugs and Observation, and Assistance of Vega, Upavega and Matra. Knowledge of Laingiki, Antiki and Maniki Shuddhi, Features of Samyak yoga (Proper Shuddhi), Atiyoga (Excessive Shuddhi), Ayoga (Inadequate Shuddhi) and their management.

**Pashchat Karma:** Samsarjana (Peyadi, Tarpana and Rasa Samsarjana Krama) Pariharya Vishaya & Parihara Kaal Vyapat & their management according to Ayurveda & Modern System of Medicine

8) Vamana Karmukata (Mode of action of Vamana).

V. **Virechana Karma**

1) Etymology, Definition, Introduction, Importance, Utility & Classification of Virechana Karma.

2) Knowledge of Anulomana, Sramsana, Bhedana, Rechana, Karma with examples.

3) General properties of Virechana Dravya.

4) Detailed study of following Virechana drugs Trivrut, Eranda, Aragvadha, Katuki and Jayapala

5) Knowledge of Virechana kalpanas, their properties, dose, anupana and method of administration.

6) Knowledge of Koshta Nirmaya and Agni Vivechana.

7) Indications & Contra-indications for Virechana

8) Significance of Vamana before Virechana.

9) Virechana Vidhi (Procedure for Virechana)

**Purva karma:** Snehana & Swedana Diet & regimen prior to Virechan Karma.

**Pradhana karma:** Administration of drugs and Anupana, Observation, Assessment of Vegas, Upavegas and Matra. Knowledge of Laingiki, Antiki and Maniki Shuddhi, Features of Samyak yoga (Proper Shuddhi), Atiyoga (Excessive Shuddhi), Heenayoga (Inadequate Shuddhi) and their management.

**Pashchat Karma:** Samsarjana (Peyadi, Tarpana and Rasa Samsarjana Krama) Pariharya Vishaya & Parihara Kaal Vyapat & their management according to Ayurveda & Modern Systems of Medicine.

10) Virechana Karmukata (Mode of action of Virechana).

VI. **Basti**

1) Etymology, Definition, Introduction, Utility, and Importance of Basti Karma.

2) Types of Basti based on Karma, Sankhya, Adhisthan & Matra.

3) Knowledge of different Basti yantra, their significance and utility.

4) Indications & Contra-indications for Anuvasana Basti and Asthapana Basti.

5) Knowledge of Anuvasanopayogi and Asthapanopayogi dravya.

6) Administration of Basti:

**Purva Karma** Preparation of Basti dravya, Fixation of dose, Preparation of Patient.

**Pradhana Karma:** Basti Pranidhana Vidhi (Administration of Asthapana, Anuvasana
and Matra Basti) Observation of Basti Pratyagamana, Samyakyoga, Atiyoga, Heenayoga lakshana and their management.

**Paschat Karma :** Pariharya vishaya, Parihara Kaal Diet and regimen after Basti.

7) Detailed Knowledge of Basti Vyapat and their management.


10) Detailed knowledge of administration of Uttara Basti into mutrashaya (Intra Vesical) and Garbhashaya (intra uterine).

11) Basti karmukata (Mode of action of Basti).

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**VII. Nasya**

1) Etymology, definition, introduction & Significance of Nasya Karma.
2) Knowledge about dravya (Medicines) used for Nasya karma,
3) Classification of Nasya in detail
4) Indications and contraindications of Nasya
5) Knowledge of dosage of Dravya (Medicines) and time of administration in different type of Nasya.
6) Nasya Procedure
   **Purva Karma :** Preparation of Patient.
   **Pradhanaka Karma :** Administration of Nasya.
   **Paschat Karma :** Parihara Kaal, Diet and regimen after Nasya.

7) Detailed Knowledge of features of Samyakyoga (Proper), Ayoga (Inadequate), Atiyoga (Excessive) of Nasya and their management.
8) Pathya-Apathya during Nasya karma
9) Administration of Navana, Marsha, Pratimarsha, Avapeedaka, Dhmapana and Dhuma Nasya
10) Nasya Karmukata (Mode of action of Nasya Therapy)

**VIII. Rakta Mokshana and Vyayamopachara**

1) Definition, Utility and Significance of Rakta mokshana, Knowledge of different Techniques of Rakta mokshana
2) Indications and contraindications for Rakta mokshana
3) Rakta mokshana Karmukata (Mode of Rakta mokshana)
4) Basic Knowledge of Physiotherapy
5) Knowledge of emergency management in complications such as Water & Electrolyte imbalance, hypo- volaemic shock, Haematemesis, Epistaxis, Bleeding per Rectum, Acute abdomen etc.
Distribution of Marks

1. Practical Record Book 10 Marks
2. Procedure 15 Marks
3. Viva-voce 25 Marks
Total 50 Marks

Reference books

1. Charak Samhita with Commentary of Ayurveda Dipika by Chakrapanidatta & Jalpakalpataru by Gangadhara
2. Sushrut Samhita with the Nibhandha Samgraha Commentary of Dalhana & Nyayachandrika Panjika of Gayadasa on Nidana Sthana
3. Ashtanga Hridaya with Sarvanga Sundara & Ayurveda Rasayana Commentaries
4. Ayurvediya Panchakarma Chikitsa
5. Panchakarma Vigyan
6. Illustrated Panchakarma
7. Clinical Panchkarma (English)
8. Prayogika Panchkarma (Hindi)
9. Vivida Vyadhiyome Panchkarma (Hindi)
10. The Panchkarma Treatment of Ayurveda with Kerala Specialties
11. Panchkarma Therapy
12. Principles and Practice of Basti
13. Clayton’s Physiotherapy
14. Teddy’s Physiotherapy
15. Harrison’s Principle of Internal Medicine
16. Guyton’s Physiology
17. Principles & Practice of Basti

Dr. P. Yadaiah

Dr. M.R.V. Nampoothri.

105 final UG syllabus 2010
### CENTRAL COUNCIL OF INDIAN MEDICINE
NEW DELHI

List of Experts Participated in the National Workshop To Review the Syllabus of UG & PG Held on 77 to 20 Feb. 2009 at Bangalore

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<td>Dr. Kradlaskar Bharti, B Bharti</td>
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| 182. | Dr. P. Hemant Kumar  
SDM Coll. of Ayurveda HASSAN | KAUMAR BHRITYA |
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Gopabandhu AMC, PURI |
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Bharti Vidyapeeth Uni, Pune | Prof. Shailaja Rao.  
SDM, HASSAN |
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Govtment Ay. College Bellary | Dr. B. M. Singh  
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NIA, JAIPUR |
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Shri Jagadguru, KOPPAL | Dr. R. Appaji Rao  
Dr.NRS Govt.AMC, Vijayawada |
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Ashwini AMC, Davangare | Dr. Manoj Vitthal Gaikawad  
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BHU, Varanasi | Prof. U. Shreekanth  
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Govt. Ay. College Bangalore |
| 193. | Prof. Ved Prakash Sharma.  
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| 194. | Prof. Sujata Kadam  
Tilak Ayurved Maha., PUNE | Dr. G. Vinod Kumar  
Govt. AMC, Thiruvanathapuram |
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Shri DM Coll. of Ay., UDUPI | Dr. H.M. Shukla  
Govt. Ayurved College, RAIPUR |
| 196. | Prof. K.B. Mahapatra  
Gopabandhu Ay. Coll. PURI | Dr. Radhey Shyam Sharma  
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| 197. | Dr. J.C. Pawse  
Seth C.MA, AMC Satara | Dr. Ramanathan Devraj  
Poothole TRISSUR Kerala |
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Ashtang Ay. Maha, PUNE | Dr A I Sanakal  
Ayurved Maha., OLD HUBLI |
| 199. | Vd. M.S.Ghorpade  
Sumati BS Ay. M. Hadapsar | FINAL WORK OUT BY THE FOLLOWING EXPERTS |
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NIA, JAIPUR | Dr. Vaishali Mali  
Ayurved Expert in CCIM Office New Delhi |
| 201. | Prof M Ramesh  
Govt. Ay. College, Bangalore | Dr. Richa Sharma  
Ayurved Expert in CCIM Office New Delhi |
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Bharti Vidyapeeth’s, Pune | Dr. Kamini Kaushal  
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| 203. | Dr. Neeta Mhaisekar  
CSMA, AMC, Aurangabad | Dr. Pradnya Sinalkar  
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Ayurved Expert in CCIM Office New Delhi |
| 205. | Dr.V.M.Hiremath  
SS Ay. Med. Coll. HAVERI | Dr. Aarti Mal  
Ayurved Expert in CCIM Office New Delhi |
| 206. | DR. Kamini Dhiman  
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Ayurved Expert in CCIM Office New Delhi |