## CENTRAL COUNCIL OF INDIAN MEDICINE
## NEW DELHI

SYLLABUS OF AYURVEDACHARYA (BAMS) COURSE

### 1ST PROFESSIONAL

| 1.1 PADARTHA VIGYAN AND AYURVED ITIHAS | 2-6 |
| 1.2 SANSKRIT                        | 7-8 |
| 1.3 KRIYA SHARIR                   | 9-14 |
| 1.4 RACHANA SHARIR                 | 15-18 |
| 1.5 MAULIK SIDDHANT AVUM ASTANG HRIDYA | 19 |
1.1 **PADARTHA VIGYAN EVUM AYURVEDA ITIHAS**  
(Philosophy and History of Ayurveda)

Theory - Two papers - 200 marks (100 each paper)  
Total teaching hours: 150 hours

**PAPER-I**  
Padartha Vigyanam  
100 marks

**PART A**  
50 marks

1. **Ayurveda Nirupana**  
1.1 Lakshana of Ayu, composition of Ayu.  
1.2 Lakshana of Ayurveda.  
1.3 Lakshana and classification of Siddhanta.  
1.4 Introduction to basic principles of Ayurveda and their significance.

2. **Ayurveda Darshana Nirupana**  
2.1 Philosophical background of fundamentals of Ayurveda.  
2.2 Etymological derivation of the word "Darshana". Classification and general introduction to schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya and Yoga.  
2.3 Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda).  
2.4 Padartha: Lakshana, enumeration and classification, Bhava and Abhava padartha, Padartha according to Charaka (Karana-Padartha).

3. **Dravya Vigyaniyam**

3.1 **Dravya**: Lakshana, classification and enumeration.  
3.2 **Panchabhuta**: Various theories regarding the creation (theories of Taittiriyaopanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Susruta), Lakshana and qualities of each Bhoota.  
3.3 **Kaala**: Etymological derivation, Lakshana and division / units, significance in Ayurveda.  
3.4 **Dik**: Lakshana and division, significance in Ayurveda.  
3.5 **Atma**: Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (*atmanah jnasya pravrittih*).  
3.6 **Purusha**: as mentioned in Ayurveda - Ativahikapurusha/ Sukshmarshirira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha.  
3.7 **Manas**: Lakshana, synonyms, qualities, objects, functions, dual nature of mind (*ubhayaatmakatvam*), as a substratum of diseases, penta-elemental nature (*panchabhutatmakatvam*).  
3.8 Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively.  
3.9 Tamas as the tenth Dravya.  
3.10 Practical study/application in Ayurveda.
PART B  

50 marks

4. Guna Vigyanayam
   4.1 Etymological derivation, classification and enumeration according to Nyaya-Vaisheshika and Charaka, Artha, Gurdiguna, Paradiguna, Adhyatmaguna.
   4.2 Lakshana and classification of all the 41 gunas.
   4.3 Practical / clinical application in Ayurveda.

5. Karma Vigyanayam
   5.1 Lakshana, classification in Nyaya.
   5.2 Description according to Ayurveda.
   5.3 Practical study/ application in Ayurveda.

6. Samanya Vigyanayam
   6.1 Lakshana, classification.
   6.2 Practical study/ application with reference to Dravya, Guna and Karma.

7. Vishesha Vigyanayam
   7.1 Lakshana, classification.
   7.2 Practical study/ application with reference to Dravya, Guna and Karma.
   7.3 Significance of the statement “Pravrittirubhayasya tu”.

8. Samavaya Vigyanayam
   8.1 Lakshana
   8.2 Practical study /clinical application in Ayurveda.

9. Abhava Vigyanayam
   9.1 Lakshana, classification
   9.2 Clinical significances in Ayurveda.

PAPER II  

Padartha Vigyan and Ayurveda Itihas  

100 marks

PART A - Pramana/ Pariksha- Vigyanayam  

75 marks

1. Pariksha
   1.1. Definition, significance, necessity and use of Pariksha.
   1.2. Definition of Prama, Prameya, Pramata, Pramana.
   1.3. Significance and importance of Pramana, Enumeration of Pramana according to different schools of philosophy.
   1.4. Four types of methods for examination in Ayurveda (Chaturvidha-Parikshavidhi), Pramana in Ayurveda.
   1.5. Subsudation of different Pramanas under three Pramanas.
   1.6. Practical application of methods of examination (Parikshavidhi) in treatment (Chikitsa).

2. Atpopdesha Pariksha/ Pramana
   2.1. Lakshana of Atpopdesha, Lakshana of Apta.
   2.2. Lakshana of Shabda, and its types.
   2.4. Vaakya: Characteristics, Vaakyarthagyanyahetu- Aakanksha, Yogyata, Sannidhi.
3. **Pratyaksha Pariksha/ Pramana**
   3.1. Lakshana of Pratyaksha, types of Pratyaksha- Nirvikalpaka- Savikalpaka with description, description of Laukika and Alaukika types and their further classification.
   3.2. Indriya-prapylanitva, six types of Sannikarsha.
   3.3. Indriyaman lakshanam, classification and enumeration of Indriya. Description of Panchapanchaka, Penta-elemental nature of Indriya by Panchamahabhuta (Panchabhahtukatwa of Indriya) and similarity in sources (Tulyayonitva) of Indriya.
   3.4. Trayodasha Karana, dominance of Antahkaran.
   3.5. Hindrances in direct perception (pratyaksha-anupalabdha karan), enhancement of direct perception (Pratyaksha) by various instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha.
   3.6. Practical study/ application of Pratyaksha in physiological, diagnostic, therapeutics and research grounds.

4. **Anumanaparakshas/Pramana**
   4.2. Characteristic and types of Vyapti.
   4.3. Lakshana and types of Hetu, description of Ahetu and Hetwabhasa.
   4.4. Characteristic and significance of Tarka.
   4.5. Practical study/ application of Anumanapramana in physiological, diagnostic, therapeutics and research.

5. **Yukti Prarikshas/ Pramana**
   5.1. Lakshana and discussion.
   5.2. Importance in Ayurveda.
   5.3. Practical study and utility in therapeutics and research.

6. **Upamana Pramana**
   6.1. Lakshana.
   6.2. Application in therapeutics and research.

7. **Karya- Karana Siddhanta (Cause and Effect Theory)**
   7.1. Lakshana of Karya and Karana. Types of Karana.
   7.2. Significance of Karya and Karana in Ayurveda.
   7.3. Different opinions regarding the manifestation of Karya from Karana:

PART B - Ayurved Itihas 25 marks

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

2. Introduction to the authors of classical texts during Samhitakaaal and their contribution: Atreya, Dhanwantari, Kashyapa, Agnivesha, Sushruta, Bhela, Harita, Charaka,

4. **Introduction to the authors of compendiums (Granthasamgrahakaala)** – Bhavmishra, Sharangadhar, Vrinda, Madhavakara, Shodhala, Govinda Das (Author of Bhaishajyaratnawali), Basavraja.

5. **Introduction to the authors of Modern era** – Gana Nath Sen, Yamini Bhushan Rai, Shankar Dajishastri Pade, Swami Lakshmiram, Yadavji Tikramji, Dr. P. M. Mehta, Ghanekar, Damodar Sharma Gaur, Priyavrat Sharma.


7. a) Developmental activities in Ayurveda in the post-independence period, development in educational trends.
   b) Establishment of different committees, their recommendations.
   c) Introduction to and activities of the following Organizations :- Department of AYUSH, Central Council of Indian Medicine, Central Council for Research in Ayurvedic Sciences, Ayurvedic Pharmacopeia commission, National Medicinal Plants Board, Traditional Knowledge Digital Library (TKDL)
   d) Introduction to the following National Institutions :
      - National Institute of Ayurved, Jaipur.
      - IPGT&RA, Gujrat Ayurved University, Jamnagar.
      - Faculty of Ayurved, BHU, Varanasi.
      - Rashtriya Ayurveda Vidyapeetha, New Delhi.

8. Introduction to national & international popular journals of Ayurveda.

9. Introduction to activities of WHO in the promotion of Ayurved.

**Reference Books:**

**A). Padartha Vigyan:**

1. Padarthavigyan
   - Padarthavigyan
   - Vaidya Ranjit Rai Desai
2. Ayurvediya Padartha Vigyan
   - Ayurveda Rajkumar Jain
3. Ayurved Darshana
   - Kashikar
4. Padartha Vigyan
   - Balwant Shastri
5. Padartha Vigyan
   - GajananS hastri
6. Sankhyatantwa Kaumadi
   - Dr. S.P. Gupta
7. Psycho Pathology in Indian Medicine
   - Jyotirmitra Acharya
8. Charak Evum Sushrut ke Darshanik Vishay ka Adhyayan
   - Dr. Ayodhya Prasad Achal
9. Ayurvediya Padartha Vigyan
   - Dr. Vidyadhar Shukla
10. Padartha Vigyan
    - Dr. Ravidutta Tripathi
11. Padartha Vigyan
    - Vaidya Ramkrishna Sharma Dhand
12. Ayurvediya Padartha Vigyan
    - Vaidya Banwarilal Gaur
13. Ayurvediya Padartha Vigyan Parichaya
    - Pandit Shivhare
15. Scientific Exposition of Ayurveda  
   Dr. Sudhir Kumar

16. Relevant portions of Charakasamhita, Sushrutasamhita.

**B) History of Ayurveda:**

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

2. Upodghata of Rasa Yogasagar  
   Vaidy Hariprapanna Sharma

3. Ayurveda Ka Itihas  
   KaviraSuram Chand

4. Ayurveda Sutra  
   Rajvaidya Ram Prasad Sharma

5. History of Indian Medicine (1-3 part)  
   Dr. GirindrNath Mukhopadhyaya
   Short history of Aryan Medical Science

6. History of Indian Medicine  
   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  
    AcharyaPriyavrata Sharma

11. Indian Medicine (Osteology)  
    Dr. Harnley

12. Ancient Indian Medicine  
    Dr. P. Kutumbia

13. Madhava Nidan and its Chief  
    Dr. G.J. Mulenbelt
   Commentaries (Chapters highlighting history)

14. Ayurveda Ka BrihatItihasa  
    Vaidya Atridev Vidyalankara

15. Ayurveda Ka VaigyanikaItihasa  
    Acharya Priyavrata Sharma

16. Ayurveda Ka PramanikaItihasa  
    Prof. Bhagwat Ram Gupta

17. History of Medicine in India  
    Acharya Priyavrata Sharma

18. Vedomein Ayurveda  
    Vaidya Ram GopalS hastri

19. Vedomein Ayurveda  
    Dr. Kapil Dev Dwivedi

20. Science and Philosophy of Indian Medicine  
    Dr. K.N. Udupa

21. History of Indian Medicine from  
    Dr. Jyotirmitra
   Pre-Mauryan to Kushana Period

22. An Appraisal of Ayurvedic Material in  
    Dr. Jyotirmitra
   Buddhist literature

23. Mahayana Granthon mein nihita  
    Dr. RavindraNathTripathi
   Ayurvediya Samagri

24. Jain Ayurveda Sahitya Ka Itihasa  
    Dr. Rajendra Prakash Bhatnagar

25. Ayurveda- Prabhashaka Jainacharya  
    Acharya Raj Kumar Jain

26. CharakaChintana  
    Acharya Priyavrata Sharma

27. Vagbhata Vivechana  
    Acharya Priyavrata Sharma

28. Atharvaveda and Ayurveda  
    Dr. Kambelkara

29. Ayurvedic Medicine Past and Present  
    Pt. Shiv Sharma

30. Ancient Scientist  
    Dr. O.P. Jaggi

31. Luminaries of Indian Medicine  
    Dr. K.R. Shrikanta Murthy

32. Ayurveda Ke Itihasa Ka Parichaya  
    Dr. RaviduttaTripathi

33. Ayurveda Ke Pranacharya  
    Ratnakara Shastri

34. Ayurveda Itihasa Parichaya  
    Prof. Banwari Lal Gaur

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PART-A

संस्कृतव्याकरणाद्ययनम्

1. संज्ञाप्रकरणम्
2. विभक्त्यथां:
3. सन्धिप्रकरणम् (सन्धिविच्छेदं, सन्धिकरणम्)
4. षड्लिंगप्रकरणम् (षब्दरूपांण्येव)
5. धातुप्रकरणम् (धातुरूपांण्येव)
(भाविगणीय धातूनां प० च लद्दोटलडीट्विभिलिङ्करेणु रूपाणि)
6. वाच्यप्रयोगः (कर्तिरिक कर्मणि भाववाच्यप्रयोगः)
7. समासप्रकरणम्
8. प्रत्ययः:
(पिच्, त्, क्रवत्, शत्, शानच्, तुमुन्, तव्यत्, तृच्, क्तच्, ल्यप्, ल्युट्, अनीयर, मतुप, इनि, तन्, इतच्, अण्, इज्, इक्, ल्य, ता, षन्, इम्, निच्, त्, त्र, दा, धा, तरप्, तमप्, टाप्, डाप्"
9. अनुवादः:

A) From English / Hindi / regional language to Sanskrit
B) From Sanskrit to English / Hindi / regional language
C) Identification and correction of grammatical errors in the given sentences

The sentences for translation should be selected from the under mentioned reference books-

1) Laghusiddhanta Kaumudi- Acharya Varadaraja (Commentary by Shri Dhananand Shastry)
2) Brihattrayee- (Charaka Samhita, Sushruta Samhita, Ashtanga Hridayam)
3) Anuvada Chandrika-Chakradhara Hansa Nautiyal
4) Sanskruta Ayurved Sudha- Dr. Banwari Lal Gaur
5) Rachananuvada Kaumudi- Dr. Kapildev Dwivedi
6) Bhasha Sopanam- Published by Rashtreeya Sanskruta Samsthanam, New Delhi
PART- B

भाषाध्ययनम्

1- आयुर्वेदार्थार्थार्थायायनम्—Stepwise method of study of Ayurveda Arsha Granthas (Sushruta Samhita, Shareera Sthanam, Chapter-4)
1/2

2- वैद्यकीय—सुभाषितसाहित्यम् (अध्याया: 1—10)
1/2

3- पौराणिक—अपरीक्षितकारकम् (क्षणिक कथात्: शून्याशून्यताकथापर्यंतम्)
1/2

REFERENCE BOOKS-

1.) Sushruta Samhita, Shareera Sthanam, Chapter-4
2.) Prabhashanam Work Book, Su.sam.chap.4
   Published by-AYURVEDA ACADEMY® BANGALORE;
   Email-ayuacademy@gmail.com
3.) Vaidyakeeya Subhashita Sahityam - Dr. Bhaskara Govinda Ghanekar
4.) Panchatantra-(Apareekshitakarakam) -Pt. Vishnu Sharma

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1.3 KRIYA SHARIR 
(PHYSIOLOGY)

Theory-Two Papers-200 Marks (100 marks each)
Teaching hours-180 hours

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. Description of basics of Srotas.


3. Dosha- General description of Tridosha. Inter relationship between Ritu-Dosha-Rasa-Guna. Biological rhythms of Tridosha on the basis of day-night-age-season and food intake. Role of Dosha in the formation of Prakriti of an individual and in maintaining of health. Prakrita and Vaikrita Dosha.

4. Vata Dosha: Vyutpatti (derivation), Nirukti (etymology) of the term Vata, general locations, general properties and general functions of Vata, five types of Vata (Prana, Udana, Samana, Vyana, Apana) with their specific locations, specific properties, and specific functions. Respiratory Physiology in Ayurveda, Physiology of speech in Ayurveda.

5. Pitta Dosha: Vyutpatti, Niruki of the term Pitta, general locations, general properties and general functions of Pitta, five types of Pitta (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka) with their specific locations, specific properties, and specific functions. Similarities and differences between Agni and Pitta.

6. Kapha Dosha: Vyutpatti, Niruki of the term Kapha, general locations, general properties and general functions of Kapha, five types of Kapha (Bodhaka, Avalambaka, Kledaka, Tarpaka, Śleshaka ) with their specific locations, specific properties, and specific functions.

7. Etiological factors responsible for Dosha Vridhhi, Dosha Kshaya and their manifestations.

8. Concept of Kriyakala.

9. Prakriti:
   a) Deha- Prakriti: Vyutpatti, Niruki, various definitions and synonyms for the term ‘Prakriti’. Intra-uterine and extra-uterine factors influencing Deha-Prakriti, classification and characteristic features of each kind of Deha-Prakriti.
b) Manasa- Prakriti: Introduction and types of Manasa- Prakriti.


13. Agni – Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.

PART- B

50 marks

Modern Physiology


b) Resting membrane potential and action potential.


d) Physiology of Nervous System: General introduction to nervous system, neurons, mechanism of propagation of nerve impulse, physiology of CNS, PNS, ANS; physiology of sensory and motor nervous system, Functions of different parts of brain and physiology of special senses, intelligence, memory, learning and motivation. Physiology of sleep and dreams, EEG. Physiology of speech and articulation. Physiology of temperature regulation.

e) Functional anatomy of gastro-intestinal tract, mechanism of secretion and composition of different digestive juices. Functions of salivary glands, stomach, liver, pancreas, small intestine and large intestine in the process of digestion and absorption. Movements of the gut (deglutition, peristalsis, defecation) and their control. Enteric nervous system.


PAPER- II

100 marks

PART- A
50 marks

1. Dhatu: Etymology, derivation, definition, general introduction of term Dhatu, different theories related to Dhatuposhana (Dhatuposhana Nyaya)

2. Rasa Dhatu:
Etymology, derivation, location, properties, functions and Praman of Rasa-dhatu. Physiology of Rasavaha Srotas, Formation of Rasa Dhatu from Aahara Rasa, circulation of Rasa (Rasa-Samvahana), role of Vyana Vayu and Samana Vayu in Rasa Samvahana. Description of functioning of Hridaya. Ashtavidha Sara (8 types of Sara), characteristics of Tvakasara Purusha, conceptual study of mutual interdependence (Aashraya-Aashravai Bhaava) and its relation to Rasa and Kapha. Manifestations of kshaya and Vriddhi of Rasa.

3. Rakta Dhatu:
Etymology, derivation, synonyms, location, properties, functions and Praman 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 of Rakta and Pitta.

4. Mamsa Dhatu:
Etymology, derivation, synonyms, location, properties and functions of Mamsa Dhatu, physiology of Mamsavaha Srotas, formation of Mamsa Dhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsa Dhatu. Concept of Peshi.

5. Meda Dhatu:
Etymology, derivation, location, properties, functions and Praman of Meda Dhatu, physiology of Medovaha Srotas, formation of Medo Dhatu, characteristics of Medasara Purusha and manifestations of Kshaya and Vriddhi of Meda.

6. Asthi Dhatu:
Etymology, derivation, synonyms, location, properties, functions of Asthi Dhatu. Number of Asthi. 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.

7. Majja Dhatu:
Etymology, derivation, types, location, properties, functions and Praman of Majjaa Dhatu, physiology of Majjavaha Srotas, formation of Majja Dhatu, characteristics of Majja Sara Purusha, relation of Kapha, Pitta, Rakta and Majja, manifestations of Kshaya and Vriddhi of Majja Dhatu.

8. Shukra Dhatu:
Etymology, derivation, location, properties, functions and Praman of Shukra Dhatu, physiology of Shukraravaha Srotas and formation of Shukra Dhatu. Features of Shuddha Shukra, characteristics of Shukra-Sara Purusha, manifestations of Kshaya and Vriddhi of Shukra Dhatu.

9. Concept of Ashraya-Ashrayi bhava i.e. inter-relationship among Dosha, Dhatu Mala and Srotas.

10. Ojas: Etymological derivation, definition, formation, location, properties, Praman, classification and functions of Ojas. Description of Vyadhikshamatva.

11. Upadhatu: General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu.
   a) Stanya: Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya.
   b) Artava: Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavaha Srotas.
   c) Tvak: classification, thickness of each layer and functions.

   a) Purisha: Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshaya of Purisha.
   b) Mutra: Etymological derivation, definition, formation, properties, quantity and functions of Mutra. Physiology of Mutravaha Srotas, physiology of urine formation in Ayurveda, manifestations of Vriddhi and Kshaya of Mutra.
   d) Dhatumala: Brief description of each type of Dhatumala.


14. Manas: Etymological derivation, definition, synonyms, location, properties, functions and objects of Manas. Physiology of Manovaha Srotas.

15. Atma: Etymological derivation, definition, properties of Atma. Difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body.

16. Nidra: Nidrotpati, types of Nidra, physiological and clinical significance of Nidra; Svapnotpati and types of S vapna.

PART –B 50 marks

Modern Physiology
1. Haemopoetic system – composition, functions of blood and blood cells, Haemopoiesis (stages and development of RBCs, and WBCs and platelets), composition and functions of bone marrow, structure, types and functions of haemoglobin, mechanism of blood clotting, anticoagulants, physiological basis of blood groups, plasma proteins, introduction to anaemia and jaundice.
2. Immunity, classification of immunity: Innate, acquired and artificial. Different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity. Hypersensitivity.
3. Muscle physiology – comparison of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.
5. Adipose tissue, lipoproteins like VLDL, LDL and HDL triglycerides.
6. Functions of skin, sweat glands and sebaceous glands.
7. Physiology of male and female reproductive systems. Description of ovulation, spermatogenesis, oogenesis, menstrual cycle.
9. Endocrine glands – General introduction to endocrine system, classification and characteristics of hormones, physiology of all endocrine glands, their functions and their effects.

**PRACTICAL**

**100 marks**

**Teaching hours-180**

**Ayurvedic practical**
1. Assessment of Prakriti
2. Assessment of Dosha (Features of Vriddhi- Kshaya )
3. Assessment of Dhatu (Features of Vriddhi- Kshaya)
4. Assessment of Agni
5. Assessment of Koshtha
6. Assessment of Sara
7. Nadi pariksha

**Modern physiology practical**
1. Introduction to laboratory instruments- Simple & Compound Microscope, Scalp vein set, bulbs for blood collection, Sahli’s Haemometer, Haemocytometer, pipettes, Urinometer, Albuminometer, Stethoscope, B.P. Apparatus, Harpenden’s caliper, Clinical Hammer, Tuning Fork, Stop Watch, Thermometer, Centrifuge machine, ECG Machine
2. Collection of blood sample – prick, vene-puncture method, use of anticoagulants
3. Preparation of blood smear and staining
4. Estimation of Hemoglobin
5. Microscopic examination of blood
   a. Total RBC count
   b. Total WBC count
   c. Differential leucocyte count
6. Packed cell volume (PCV) demonstration
7. ESR demonstration
8. Bleeding time, Clotting time
9. Blood grouping and Rh typing
10. Examination of Cardio-Vascular system
    a. Pulse examination
    b. Arterial blood pressure measurement
    c. Examination of heart sounds
    d. ECG demonstration
11. Examination of Respiratory system
   a. Respiratory rate
   b. Breath sounds
   c. Spirometry

12. Examination of Nervous System - Sensory & Motor.


**Distribution of Practical marks**

1. Laboratory Practical  - 20
2. Human Experiment  - 15
3. Spotting  - 15
4. Prakriti Saradi pariksha  - 20
5. Practical Record  - 10
6. Viva- voce  - 20

**REFERENCE BOOKS:-**

- Ayurvediya Kriyasharir - Ranjit Rai Desai
- Kayachikitsa Parichaya - C. Dwarkanath
- Prakrit Agni Vigyan - C. Dwarkanath
- Sharir Kriya Vigyan - Shiv Charan Dhyani
- Abhinava Sharir Kriya Vigyana - Acharya Priyavrata Sharma
- Dosha Dhatu Mala Vigyana - Shankar Gangadhar Vaidya
- Prakrita Dosa Vigyana - Acharya Niranjana Dev
- Tridosha Vigyana - Shri Upendranath Das
- Sharira Tatva Darshana - Hirlekar Shastri
- Prakrita Agni Vigyana - Niranjana Dev
- Deha Dhatvagni Vigyana - Vd. Pt. Haridatt Shastri
- Sharir Kriya Vigyana (Part 1-2) - Acharya Purnchandra Jain
- Sharir Kriya Vigyana - Shri Moreshwar Dutt. Vd.
- Sharira Kriya Vijnana (Part 1 and 2) – Nandini Dhargalkar
- Dosha Dhatu Mala Vigyana - Basant Kumar Shrimalk
- Abhinava Sharir Kriya Vigyana - Dr. Shiv Kumar Gaur
- Pragyogik Kriya Sharir - Acharya P.C. Jain
- Kaya Chikitsa Parichaya - Dr. C. Dwarkanath
- Concept of Agni - Vd. Bhagwan Das
- Purush Vichaya - Acharya V.J. Thakar
- Kriya Sharir - Prof. Yogesh Chandra Mishra
- Sharir Kriya Vigyana - Prof. Jayaram Yadav &Dr. Sunil Verma.
- Basic Principles of Kriya-Sharir (A treatise on Ayurvedic Physiology ) by Dr. Srikant Kumar Panda
- Sharir Kriya – Part I & Part II – Dr. Ranade, Dr. Deshpande & Dr. Chobhe
- Human Physiology in Ayurveda - Dr Kishor Patwardhan
- Sharirkriya Vignyan Practical Hand Book– Dr.Ranade, Dr.Chobhe, Dr. Deshpande
- Sharir Kriya Part 1 – Dr.R.R.Deshapande, Dr.Wavhal
- Sharir Kriya Part 2 – Dr. R.R.Deshapande, Dr.Wavhal
- Ayurveda Kriya Sharira- Yogesh Chandra Mishra
- Textbook of Physiology - Gyton & Hall
- A Textbook of Human Physiology – A.K.Jain
- Essentials of Medical Physiology - Sembulingam, K.
1.4 RACHNA SHARIR
(ANATOMY)

Theory- Two Papers-200 Marks–(100 marks each)
Teaching Hours-180 hours

PAPER-I 100 marks

PART-A 50 marks

1. Shariropkramaniya Shaarira
Sharira and shaarira vyakhya (definitions of sharira and shaarira), shadangatvam (six regions of the body), anga pratyanga vibhaga (sub divisions). Mrita sharir samshodhan. Shaarira shastra vibhaga, shaarira shastra vibhaga . Constitution of purusha according to dhatubheda, panchabhautikatvatvam, trignatmakatvam, tridoshayatvam, karma purusha, and doshadhatumala-mulakatvam.

2. Paribhasha Shaarira
Kurcha, kandara, jala, asthisanghat, seemanta, seevani, rajju, snayu and lasika.

3. Garbha Shaarira


5. Asthi Shaarira
Asthi vyakhya, number, types, asthi swaroopa, vasa, meda and majja.

6. Sandhi Shaarira
Sandhi vyakhya, numbers, types of asthi sandhi.

7. Sira, Dhamani, Srotas Shaarira
a) Definition, types and number of sira and dhamani.
b) Description of Hridaya.
c) Sroto shaarira: Definition, types of srotas and srotomula.

8. Peshi Shaarira
a) Peshi vyakhya, structure, types, number and importance.
b) Description of Peshi.

9. Koshtha Evam Ashaya Shaarira
a) Definition of koshtha and number of koshthanga.
b) Types and description of ashaya.
10. Kalaa Shaarira
Kalaa: definition and types.

11. Uttamangiya Shaarira
Shatchakra, ida, pingala and sushumna nadi - brief description.

12. Marma Shaarira
Marma: definition, number, location, classification, clinical importance with viddha lakshana. Explanation of trimarmas. Detail description of marmas.

13. Indriya Shaarira
Definition of indriya, indriya artha and indriya adhisthan, their number and importance. Description of gyanendria, karmendriya and ubhayendriya (manas).

PART-B

1. Definition and branches of anatomy. Preservation methods of the cadaver.

2. Anatomical Terminologies
Anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves.

3. Embryology

4. Osteology
Bone: Definition, ossification, structure and types. Description of bones with clinical anatomy.

5. Arthrology
Joints: Definition, structure types and movements. Description of joints of extremities, vertebral joints and temporomandibular joint with their clinical anatomy.

6. Cardiovascular system
   a. Definition, types and structure of arteries and veins.
   b. Description of heart and blood vessels with their course and branches.
   c. Pericardium with applied aspect.

7. Lymphatic system
Definition, types and structure of lymph vessels, lymph glands with their clinical aspect.

8. Myology
   a) Structure and types of muscles.
   b) Description of muscles; their origin, insertion, actions, nerve supply and clinical anatomy.

Paper II

Part A

1. Respiratory System
a. Bronchial tree and lungs with their clinical aspects.
b. Respiratory tract: nasal cavity, pharynx, larynx, trachea, bronchial tree.
c. Pleura with its clinical aspects.
d. Diaphragm.

2. Digestive system
a. Organs of digestive tract (alimentary tract) with their clinical aspects.
b. Digestive glands: liver, spleen and pancreas.
c. Description of peritoneum with its clinical aspects.

3. Urinary System
Urinary tract: kidney, ureter, urinary bladder and urethra with their clinical aspects.

4. Reproductive system
a. Male Reproductive system: reproductive organs, tract and glands (prostate and seminal vesicles) with their clinical aspects.
b. Female reproductive system: reproductive organs, tract and glands with their clinical aspects.

5. Endocrinology
Definition, classification & description of endocrine glands (pituitary, thyroid, parathyroid, thymus and suprarenal glands) with clinical aspects.

PART B

6. Nervous System
Nervous system: definition, classification and its importance. Description of brain and spinal cord.
Description of peripheral nervous system: cranial and spinal nerves, nerve plexuses, and autonomic nervous system, formation and circulation of cerebrospinal fluid and blood supply of brain and spinal cord.

7. Sensory organs
Description of structures of eye, ear, nose, tongue and skin with their clinical aspects.

8. Surface and radiological anatomy
a. Study of radio-imaging of limbs, abdomen, pelvis and vertebral column with its clinical application.
b. Surface anatomy of thoracic and abdominal viscera.

PRACTICAL

Content of practical
1. Practical study of bones
2. Practical study of organs
3. Practical study of surface and radiological anatomy.
4. Shava vichhedana – detailed dissection of the whole body.
5. Practical study of location of marma
6. Demonstration of histology slides (10 slides)

Distribution of marks
1. Spotting - 20 marks
2. Dissected organs and histology slides - 20 Marks

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3. Bones, joints, marma - 20 Marks
4. Surface & radiological anatomy - 10 Marks
5. Practical records - 10 Marks
6. Viva-Voce - 20 Marks

Total 100 Marks

Reference Books :-

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<th>S. No.</th>
<th>Name of Book</th>
<th>Author</th>
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<tbody>
<tr>
<td>1.</td>
<td>Brihat Shariram Vaidyaratna-</td>
<td>P.S. Varrier</td>
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<td>2.</td>
<td>Abhinava Shariram-</td>
<td>Acharya Damodar Sharma Gaur</td>
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<td>3.</td>
<td>Manava Sharir (Revised Edition)-</td>
<td>Prof. Dinkar Govind Thatte</td>
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<td>4.</td>
<td>Manava Bhruna Vigyana-</td>
<td>Prof. Dinkar Govind Thatte</td>
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<td>5.</td>
<td>Manava Anga Rekhankan Vikrian -</td>
<td>Prof. Dinkar Govind Thatte</td>
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<td>6.</td>
<td>Sharir Rachana Vigyan (English)-</td>
<td>Vaidya P.G. Athawale</td>
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<td>8.</td>
<td>Clinical Anatomy in Ayurveda -</td>
<td>Prof. D.G. Thatte &amp; Prof. Suresh Chandra</td>
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<td>9.</td>
<td>Sharir Rachna Vigyan (English)-</td>
<td>Prof. D.G. Thatte</td>
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<td>10.</td>
<td>Ayurvedic Human Anatomy -</td>
<td>Prof. Dr. Giridhar M. Kanthi</td>
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<td>11.</td>
<td>Regional Anatomy -</td>
<td>B. D. Chaurasia</td>
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<td>12.</td>
<td>Rachana Sharir Vigyana -</td>
<td>Dr. Mahendra Sing</td>
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<td>13.</td>
<td>relevant chapters of Brihtrayee and Laghuthrayee</td>
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<td>14.</td>
<td>Gray's Anatomy</td>
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<td>15.</td>
<td>Text Book of Human Anatomy-</td>
<td>Inderbir Singh</td>
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<td>17.</td>
<td>Fundamentals of Human Anatomoy-</td>
<td>Dr. Chakraborty</td>
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<td>18.</td>
<td>Human Osteology -</td>
<td>Poddar</td>
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1.5 Maulik Siddhant avum Ashtang Hridaya
(Basic Principles and Ashtang Hridaya- An ancient text of Ayurveda)

Theory- One Paper– 100 marks
Teaching Hours -120 hours

Part A

Ashtang Hridaya Sutrasthana Adhyaya 1 to 15

Part B

1. Ashtang Hridaya Sutrasthana Adhyaya 16 to 30
2. Description of Ashta Prakriti
3. Shastra Lakshan (Tantra), Tantraguna, Tantradosha, Tachitalya, Arthasraya, Kalpana

Reference Books:

1. Astang Hridaya : Hindi commentary by Lalchanda Vaidya
2. Astang Hridaya : Hindi commentary by Vd. B.L. Gaur
3. Astang Hridaya : English commentary by Dr. T. Sreekumar
4. Astang Hridaya : English commentary by Dr. Vishwvasu Gaur
5. Astang Hridaya : Sanskrit commentary by Hemadri
6. Astang Hridaya : Sanskrit commentary by Arunadatta

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