D.Y.Patil Deemed to be University School of Ayurveda, Nerul Navi
Mumbai.
Syllabus of Preliminary MD

3.KRIYA SHARIR (Physiology)

Theory - 100 Marks

PART-A 50 marks

1. Theory of Loka-Purusha Samya
2. Theory of Panchamahabhuta
3. Physiological aspects of Samanya – Vishesha siddhanta
4. Concepts of Tridosha and Triguna
5. Concept of Dhatu
6. Concept of Mala
7. Description of Ojas
8. Process of Ahara Parinama including Aharaparinamakara Bhava and Asta Ahara Vidhi Visesayatana
9. Physiological importance of Agni, its classification and functions

10. Concept of koshtha

11. Dhatuposhana theories
14. Concept of Srotas

15. Applied aspect of all fundamental principles of Sharir Kriya
PART-B  

Description of essential and relevant understandings related to contemporary physiology, both general physiology and systemic physiology.

1. Essentials of cell physiology – organization of cell.


3. Homeostasis- negative and positive feedback mechanisms.


5. Essentials of cardiovascular physiology- cardiac cycle, regulation of heart rate and blood pressure.


7. Gastrointestinal physiology- various digestive juices and their actions, gastrointestinal hormones, enteric nervous system.

8. Nervous system physiology- ANS, somatic nervous system, reflexes, general and special sensations, higher mental functions, functions of brain, brainstem and spinal cord.


10. Muscle physiology: properties and mechanisms of contraction of skeletal, cardiac and smooth muscles.

11. Physiology of excretion- mechanism of urine formation, micturition.

12. Endocrine physiology: Classification of hormones, hormones secreted by pituitary, thyroid, parathyroid, adrenal glands, pineal, pancreas and their functions.

Contents:

Ayurvedic practicals
Assessment of Prakriti
Assessment of Sara
Pramana Pariksha

Hematology
Hemoglobin estimation
Total RBC count
Total WBC count
Differential leukocyte count
Packed cell volume (PCV)
ESR
Bleeding time
Clotting time
Blood grouping and Rh typing

Urine examination –

Physical examination - Specific gravity and reaction of urine

Chemical examination -
1. Albumin test
2. Sugar test
3. Ketone bodies
4. Bile salts and pigments

Distribution of marks (Practical)
Laboratory Practical - 20
Human Experiment - 15
Spotting - 15
Prakriti Saradi pariksha - 20
Practical Record - 10
Viva-voce - 20

Total marks - 100

REFERENCE BOOKS:
1. Ayurvediya Kriyasharir - Ranjit Rai Desai
2. Kayachikitsa Parichaya - C. Dwarkanath
3. Prakrit Agni Vigyan - C. Dwarkanath
4. Sharir Kriya Vigyan - Shiv Charan Dhyani
5. Abhinava Sharir Kriya Vigyana - Acharya Priyavrata Sharma
6. Dosha Dhatu Mala Vigyana - Shankar Gangadhar Vaidya
7. Prakrita Dosha Vigyana - Acharya Niranjana Dev
8. Tridosha Vigyana - Shri Upendranath Das
9. Sharira Tatva Darshana - Hirlekar Shastri
10. Prakrita Agni Vigyana - Niranjana Dev
12. Sharir Kriya Vigyana (Part 1-2) - Acharya Purnchandra Jain
13. Sharir Kriya Vigyana - Shri Moreshwar Dutta Vd.
14. Sharira Kriya Vijnana (Part 1-2) - Nandini Dhargalkar
15. Dosha Dhatu Mala Vigyana - Basant Kumar Shrimal
16. Abhinava Sharir Kriya Vigyana - Dr. Shiv Kumar Gaur
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<thead>
<tr>
<th>No.</th>
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<tr>
<td>17.</td>
<td>Pragyogik Kriya Sharir</td>
<td>Acharya P.C. Jain</td>
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<td>18.</td>
<td>Kaya Chikitsa Parichaya</td>
<td>Dr. C. Dwarkanath</td>
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<td>19.</td>
<td>Concept of Agni</td>
<td>Vd. Bhagwan Das</td>
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<td>20.</td>
<td>Purush Vichaya</td>
<td>Acharya V.J. Thakar</td>
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<td>Kriya Sharir</td>
<td>Prof. Yogesh Chandra Mishra</td>
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<td>22.</td>
<td>Sharir Kriya Vigyana</td>
<td>Prof. Jayaram Yadav &amp; Dr. Sunil Verma</td>
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<td>23.</td>
<td>Basic Principles of Kriya-Sharir</td>
<td>Dr. Srikant Kumar Panda (A treatise on Ayurvedic Physiology)</td>
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<td>24.</td>
<td>Sharir Kriya – Part I &amp; II</td>
<td>Dr. Ranade, Dr. Deshpande &amp; Dr. Chobhe</td>
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<td>25.</td>
<td>Human Physiology in Ayurveda</td>
<td>Dr. Kishor Patwardhan</td>
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<td>26.</td>
<td>Sharirkriya Vignyan Practical Hand Book</td>
<td>Dr. Ranade, Dr. Chobhe, Dr. Deshpande</td>
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<td>27.</td>
<td>Sharir Kriya Part 1 &amp; 2</td>
<td>Dr. R.R. Deshapande, Dr. Wavhal</td>
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<td>28.</td>
<td>Textbook of Physiology</td>
<td>Gyton &amp; Hall</td>
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<td>29.</td>
<td>Review of medical physiology</td>
<td>William Ganong</td>
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<td>30.</td>
<td>Essentials Of Medical Physiology</td>
<td>Sembulingam, K.</td>
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<td>31.</td>
<td>Concise Medical Physiology</td>
<td>Chaudhari, Sujit. K.</td>
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<td>32.</td>
<td>Fundamental of Anatomy &amp; Physiology</td>
<td>Martini</td>
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<td>33.</td>
<td>Principals of Anatomy &amp; Physiology</td>
<td>Tortora &amp; Grabowski</td>
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<td>34.</td>
<td>Human Physiology</td>
<td>Richards, Pocock</td>
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<td>35.</td>
<td>Samson Wrights Applied Physiology, Keele, Neil, joels</td>
<td>Steriade, Mirce</td>
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<td>36.</td>
<td>Brainstem Control of Wakefulness And Sleep</td>
<td>Steriade, Mirce</td>
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<td>An Introduction to Human Physiology</td>
<td>Green, J.h.</td>
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<td>Ancient Indian Medicine</td>
<td>Kutumbiah P.</td>
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<td>Biographical History of Indian Medicine</td>
<td>Srikanthamurthy KR</td>
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<td>Ayurveda Kriya Sharira</td>
<td>Yogesh Chandra Mishra</td>
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<td>Textbook of Medical Physiology</td>
<td>Indu Khurana</td>
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<td>Tridosha Theory</td>
<td>Subrahmanya Shastri</td>
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<td>Statistics in Medicine</td>
<td>K. Syamalan</td>
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3. KRIYA SHARIR

Additional points in existing syllabus

PART-A

10. Concept of koshtha
15. Applied aspect of all fundamental principles of Sharir Kriya

Dr. Hemangini Waghulade
Professor & HOD
Dept of Kriya Sharira