

# PARUL UNIVERSITY - FACULTY OF AYURVED

Department of Ayurved

## SYLLABUS FOR 2nd Year MS/MD PROGRAMME

Kriya Sharir - Dosa Dhatu Mala Vijnana - Paper 1 (02203201)

Type of Course: MS/MD

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme			Credit	Examination Scheme					Total
Lect Hrs/ Year	Tut Hrs/ Week	Lab Hrs/ Year		External		Internal			
				T	P	T	CE	P	
100	-	100	-	100	200	-	-	-	300

Lect - Lecture, Tut - Tutorial, Lab - Lab, T - Theory, P - Practical, CE - CE, T - Theory, P - Practical

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	<b>Basic Principles:</b> <ul style="list-style-type: none"><li>• Theory of Pancamahābhūta</li><li>• Principle of Loka-Purusa Sāmya</li><li>• Importance of Sāmānya - Viśesa principle.</li><li>• Different views on the composition of Purusa and the importance of Cikitsya Purusa.</li><li>• Importance of Gurvādi Guna in Ayurveda.</li><li>• General description of Tridosa theory</li><li>• Mutual relationship between Triguna-Tridosa-Pancamahābhūta-Indriya.</li><li>• Mutual relationship between Rtu-Dosa-Rasa-Guna.</li><li>• Biological rhythms of Tridosa on the basis of Day-Night-Age-Season and Food intake.</li><li>• Role of Dosa in the formation of Prakrti of an individual.</li><li>• Role of Dosa in maintaining health.</li></ul>	%	
2	<b>Vata Dosha:</b> General locations (Sthāna), general attributes (Guna) and general functions (Sāmānya Karma). Five subdivisions of Vāta with their specific locations, specific properties, and specific functions (Prāna, Udāna, Samāna, Vyāna, Apāna)	%	
3	<b>Pitta Dosa:</b> General locations (Sthāna), general attributes (Guna) and general functions (Sāmānya Karma). Five subdivisions of Pitta with their specific locations, specific properties, and specific functions (Pācaka, Ranjaka, Ālocaka, Bhrājaka, Sādhaka). Similarities and differences between Agni and Pitta.	%	

4	<b>Kapha Dosa:</b> General locations (Sthāna), general attributes (Guna) and general functions (Karma) of Kapha. Five subdivisions of Kapha with their specific locations, specific properties, and specific functions (Bodhaka, Avalambaka, Kledaka, Tarpaka, Ślesaka)	%	
5	<b>Applied physiology of Tridosha principle: Kriyākāla, Dosa Vrddhi-Dosa Ksaya:</b> Applied physiology of Tridosha principle: Kriyākāla, Dosa Vrddhi-Dosa Ksaya	%	
6	<b>Dhātu Posana:</b> Process of nourishment of Dhātu. Description of various theories of Dhātu Posana (Ksīra-Dadhi, Kedārī-Kulya, Khale Kapota etc)	%	
7	<b>Dhātu:</b> General introduction and definition of Dhātu. Formation, Definition (Nirukti), Distribution, Attributes, quantity, classification, Pāñcabhautika composition and Functions of all seven Dhātus in detail: Rasa, Rakta, Māmsa, Meda, Asthi, Majjā, Śukra	%	
8	<b>Applied physiology of Dhātu:</b> Manifestations of Ksaya and Vriddhi of each Dhātu. Description of Dhātu Pradosaja Vikāra.	%	
9	<b>Description of Āśraya and Āśrayī kind of relationship between Dosa and Dhātu.:</b> Description of Āśraya and Āśrayī kind of relationship between Dosa and Dhātu.	%	
10	<b>Sara and srotas:</b> Description of the characteristic features of Astavidha Sāra. Description of Rasavaha, Raktavaha, Māmsavaha, Medovaha, Asthivaha, Majjāvaha and Śukravaha Srotāmsi	%	
11	<b>Ojas:</b> Definition, locations, synonyms, Formation, Distribution, Properties, Quantity, Classification and Functions of Ojas. Description of Vyādhiksamitva. Bala Vrddhikara Bhāva. Classification of Bala. Relation between Ślesmā, Bala and Ojas	%	
12	<b>Applied physiology of ojas:</b> Etiological factors and manifestations of Ojaksaya, Visramsa and Vyāpat. Physiological and clinical significance of Ojas	%	
13	<b>Upadhatu:</b> General introduction and Definition of the term 'Upadhātu'. Formation, Nourishment, Quantity, Properties, Distribution and functions of each Upadhātu	%	

14	<b>Stanya:</b> Characteristic features and methods of assessing Śuddha and Dūṣita Stanya, Manifestations of Vrddhi and Kṣaya of Stanya	%	
15	<b>Artav:</b> Characteristic features of Śuddha and Dūṣita Ārtava. Differences between Raja and Ārtava, physiology of Ārtavavaha Srotāṃsi	%	
16	<b>Study of Tvak:</b> Study of Tvak	%	
17	<b>Physiology of Mala:</b> Definition of the term 'Mala'. Definition, Formation, Properties, Quantity and Functions of Purīṣa, Mutra. Manifestations of Vrddhi and Kṣaya of Purīṣa and Mūtra.	%	
18	<b>Sveda:</b> Definition, Formation, Properties, Quantity and Functions of Svedavaha Srotāṃsi. Formation of Sveda. Manifestations of Vrddhi and Kṣaya of Sveda	%	
19	<b>Dhatumala:</b> Definition, Formation, properties, Quantity, Classification and Functions of each Dhātumala	%	

**\*Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

**List of Practical:**

1. Ayurved Practicals
2. Hematology
3. Urine examination
4. Cardio-Vascular system
5. Respiratory system
6. Nervous System

# PARUL UNIVERSITY - FACULTY OF AYURVED

Department of Ayurved

## SYLLABUS FOR 2nd Year MS/MD PROGRAMME

Kriya Sharir - Prakrti Sattva Vijnana - Paper 2 (02203202)

Type of Course: MS/MD

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme			Credit	Examination Scheme					Total
Lect Hrs/ Year	Tut Hrs/ Week	Lab Hrs/ Year		External		Internal			
				T	P	T	CE	P	
100	-	100	-	100	-	-	-	-	100

Lect - Lecture, Tut - Tutorial, Lab - Lab, T - Theory, P - Practical, CE - CE, T - Theory, P - Practical

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	<b>Deha Prakriti:</b> Various definitions and synonyms for the term 'Prakrti'. Factors influencing the Prakrti. Classification of Deha-Prakrti. Characteristic features of the individuals belonging to each kind of Deha-Prakrti. Recent advances in understanding the Prakrti.	%	
2	<b>Pancajnanendriya:</b> Physiological description of Pancajnanendriya and physiology of perception of Śabda, Sparśa, Rūpa, Rasa, Gandha. Indriya-panca-pancaka; Physiological description of Karmendriya	%	
3	<b>Manas:</b> Definition, location (sthana), Properties, Functions and Objects of Manas	%	
4	<b>Atma:</b> Definition, Properties of Ātmā. Difference between Paramātmā and Jīvātmā; Characteristic features of Ātmā	%	
5	<b>Buddhi:</b> Location, Types, Functions of Buddhi; Physiology of Dhī, Dhrti and Smṛti	%	

6	<b>Nidrā:</b> Definition of Nidrā, Classification of Nidrā. Tandra, physiological and clinical significance of Nidra; Svapnotpatti and Svapnabheda. Physiology of special senses. Intelligence, Memory, Learning and Motivation. Physiology of sleep. Physiology of speech and articulation; Physiology of Pain and temperature	%	
---	--	---	--

**\*Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

# PARUL UNIVERSITY - FACULTY OF AYURVED

Department of Ayurved

## SYLLABUS FOR 2nd Year MS/MD PROGRAMME

Kriya Sharir - Koshthang Kriya Vijnana - Paper 3 (02203203)

Type of Course: MS/MD

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme			Credit	Examination Scheme					Total
Lect Hrs/ Year	Tut Hrs/ Week	Lab Hrs/ Year		External		Internal			
				T	P	T	CE	P	
100	-	100	-	100	-	-	-	-	100

Lect - Lecture, Tut - Tutorial, Lab - Lab, T - Theory, P - Practical, CE - CE, T - Theory, P - Practical

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	<b>Ahara:</b> Definition and significance of Āhāra. Classification of Āhāra. Āhāra-vidhi-vidhāna. Asta āhāra-vidhi viśeṣāyatana, Āhāraparināmakara bhāva	%	
2	<b>Āhārpāchana:</b> Āhāra Pāka Prakriyā, Description of Annavaha Srotās. Description of Avasthāpāka and Nishthapaka. Role of dosha in Āhārapāka. Sāra and Kitta Vibhajana. Absorption of Sāra. Utpatti and Udieeran of Vāta-Pitta-Kapha.	%	
3	<b>Kostha:</b> Definition of the term Kostha. Physiological classification of Kostha and the characteristics of each kind of Kostha	%	
4	<b>Agni:</b> Description of the importance of Agni. Classification of Agni. Locations, properties and functions of Jātharāgni, Bhūtāgni, and Dhātvaṅni	%	
5	<b>Applied physiology of Agni in Kriyā Śārīra and Cikitsā:</b> Applied physiology of Agni in Kriyā Śārīra and Cikitsā	%	
6	<b>Annavaha Srotodusti:</b> Description of the aetiology and features of Annavaha Srotodusti. Applied physiology of Annavaha Srotās: Arocaka, Ajīrna, Atīsāra, Grahanī, Chardi, Parināma Śūla Agnimāndya.	%	

7	<b>Digestion:</b> Description of the process of digestion of fats, carbohydrates and proteins in human gastrointestinal tract. Different digestive juices, their enzymes and their mechanisms of action. Functions of Salivary glands, Stomach, Pancreas, Small intestine, Liver and large intestine in the process of digestion and absorption	%	
8	<b>Neurological mechanism of digestion:</b> Movements of the gut (deglutition, peristalsis, defecation etc.) and their control. Role of neuro-endocrine mechanisms in the process of digestion and absorption. Enteric nervous system	%	
9	<b>Applied physiology of gastrointestinal tract:</b> Vomiting, Diarrhoea, Malabsorption etc. Recent understandings related to the gut microbiota and their role in health and disease.	%	
10	<b>Proteins, fats and carbohydrates:</b> Introduction to biochemical structure, properties and classification of proteins, fats and carbohydrates. Description of the processes involved in the metabolism of proteins, fats and carbohydrates.	%	
11	<b>Vitamins:</b> Sources, daily requirement and functions. Physiological basis of signs and symptoms of hypo and hyper-vitaminosis	%	

**\*Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

# PARUL UNIVERSITY - FACULTY OF AYURVED

Department of Ayurved

## SYLLABUS FOR 2nd Year MS/MD PROGRAMME

Kriya Sharir - Modern Physiology and its Applied Aspect - Paper 4 (02203204)

Type of Course: MS/MD

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme			Credit	Examination Scheme					Total
Lect Hrs/ Year	Tut Hrs/ Week	Lab Hrs/ Year		External		Internal			
				T	P	T	CE	P	
100	-	100	-	100	-	-	-	-	100

Lect - Lecture, Tut - Tutorial, Lab - Lab, T - Theory, P - Practical, CE - CE, T - Theory, P - Practical

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	<b>Physiology of Neuro-Immune-Endocrine Mechanisms:</b> <ul style="list-style-type: none"><li>• Physiology of Nervous System. General introduction to nervous system: neurons, mechanism of propagation of nerve impulse.</li><li>• Study of CNS, PNS and ANS. Sensory and motor functions of nervous system. Functions of different parts of brain and spinal cord, Hypothalamus and limbic system</li><li>• Physiology of Endocrine system. Classification and characteristics of different hormones. Description of hormones secreted by Hypothalamus, Pituitary gland, Thyroid gland, Parathyroid glands, Pancreas, Adrenal glands and their physiological effects. Effects of hypo and hyper-secretion of various hormones.</li><li>• Male and female reproductive physiology. Spermatogenesis and oogenesis. Hormonal regulation of uterine and ovarian cycles. Physiology of pregnancy and lactation. Parturition.</li><li>• Adipose tissue and its Function. Circulating lipids. Description of lipoproteins like VLDL, LDL and HDL and their composition.</li><li>• Physiology of immune system. Definition and classification of immunity: Innate, acquired and artificial. Mechanisms involved in humoral and cell mediated immunity.</li></ul>	%	

2	<b>Cardiovascular physiology, Respiratory physiology and Blood:</b> <ul style="list-style-type: none"> <li>• Physiology of Cardio-Vascular system: Functional anatomy of cardiovascular system. 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.</li> <li>• Physiology of Respiratory system: Functional anatomy of respiratory system. Ventilation. Mechanism of respiration. Exchange and transportation of gases. Neural and chemical control of respiration. Spirometry and lung function tests. Artificial respiration.</li> <li>• Functions of Haemopoietic system: Composition and functions of blood and blood cells. Haemopoiesis- (stages and development of RBCs, WBCs and platelets); Introduction to bone marrow: composition and functions of bone marrow. Structure and functions of haemoglobin, mechanism of blood clotting, study of platelets. physiological basis of blood groups. Principles of blood transfusion, plasma proteins- synthesis and functions. Applied physiology: Anaemia, Jaundice.</li> </ul>	%	
3	<b>Musculoskeletal Physiology:</b> Physiology of muscles. Classification of muscles. Electrical and mechanical properties of Cardiac, skeletal and smooth muscles	%	
4	<b>Physiology of Excretion:</b> Physiology of excretion. Functional anatomy of urinary tract. Functions of kidneys. Mechanism of formation of urine. Control of micturition. Renal function tests. Structure and functions of skin, sweat glands and sebaceous glands	%	
5	<b>Instruments:</b> Physiograph, Computerised spirometry, Biochemical Analyzer, Pulse oxymeter, Elisa Reader, Hematology Analyzer, Tread mill	%	
6	<b>Bridge areas including recent advances:</b> <ul style="list-style-type: none"> <li>• Recent studies in biorhythms.</li> <li>• Recent advances in Neuro-Immune-Endocrine physiology.</li> <li>• Recent advances in stem cell research</li> </ul>	%	

**\*Continuous Evaluation:**

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.