

Datta Meghe Institute Of Medical Sciences (Deemed To Be University)  
Mahatma Gandhi Ayurved College, College,  
Sawangi (Meghe), Wardha

UNDERGRADUATE CURRICULUM  
2019-20

**DEPARTMENT OF KRIYASHARIR**

**PAPER I**

Course Outcome	Program Outcome						
Topic- Shaarir and Introduction to Kriya Sharir	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Ayu and Shaarir, Srishti Utpatti, Difference and similarities between Prakriti and Purusha, the concept of Purush in Ayurved.	3	1	1	3	2	3	3
CO-2: Describe types of Purush according to Dhatubhed , Role of Shaddhatuj Purusha in Kriya Sharir and Chikitsa.	3	1	1	3	3	2	3
Principles of Ayurved Kriya Sharir	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Tridosh sidhanta, Panchamahabhut sidhanta, Triguna sidhanta, Lok-Purush samya sidhanta, Samanya - Vishesh sidhanta, Roga Arogya Karanam Siddhanta, Rasa-Viry-Vipak Siddhanta.	3	3	3	3	3	3	3
CO-2: Describe and interpret Applicability of all principles.	3	3	3	3	3	2	3
CO-3: Describe concept of Srotas.	3	1	1	3	3	3	3
Dosha Vigyaniya	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Dosha, it's Classification, types of dosha, Vyutpatti, Utpatti, Nirukti, swaroop, general properties, general sthan and Karma , Kshaya - Vriddhi Lakshanani of Vata, Pitta and Kapha	3	3	3	3	3	3	3
CO-2: Describe Similarities and	3	1	2	3	3	3	3

differences between Agni and Pitta							
CO-3: Describe Nirukti, Utpatti, Sthan, Karma, of each doshabheda	3	2	2	3	3	3	3
CO-4: Describe Vata, Pitta, Kapha Kshaya & Vriddhi – Prakopa hetu and Prakopa Lakshanani	3	3	3	3	3	3	3
<b>Shatkriyakaal</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Define and Describe Shatkriyakala, it's features of Manifestation, View point of Charak, Sushrut and Vagbhat, Clinical Importance	3	3	3	3	3	3	3
<b>Deh &amp; Manas Prakriti</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Describe Vyutpatti, Utpatti, Nirukti, various definitions and synonyms of ' prakriti	3	3	3	3	3	3	3
CO-2: Describe process of Deh – Prakriti nirmanam, intra uterine factors responsible for genesis and extra uterine factors influencing Prakriti	3	3	3	3	3	3	3
CO-3: Describe Prakriti bhed, their characteristics and it's Clinical importance.	3	3	3	3	3	3	3
<b>Sharir Poshan</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Define Ahar and Describe Panchbhautik Composition, Classification, Significance and Ahar Vidhi Vidhan	3	3	3	3	3	3	3
CO-2: Describe Aaharvidhivisheshayatanan and Aaharparinamkar Bhav	3	3	3	3	3	3	3
<b>Agni &amp; Pachan</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Define Agni and Describe Vyutpatti, Nirukti, synonyms, Types, Location, Properties and functions of Agni	3	1	1	3	3	3	3
CO-2: Interpret Role of Agni in Kriya Sharir and Chikitsa	3	3	3	3	2	3	3
CO-3: Describe Aaharpaak, Avasthapaak, Vipak, Saar Kitta Vibhajana, Saar Butansh Shoshan, the genesis of Vaatadi Dosha during ahar-pachan	3	2	2	3	3	3	3

<b>Homeostasis</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Define and Describe Homeostasis and feedback systems	3	2	2	3	3	3	3
CO-2: Describe Membrane Physiology	2	0	0	3	3	3	3
CO-3: Define and Describe Resting membrane Potential and action potential	2	0	0	3	3	3	3
CO-4: Describe Adaptation and Acclimatization	3	2	2	3	3	3	3
<b>Respiratory System</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Define and Describe ventilation, Gaseous exchange	2	1	1	3	3	3	3
CO-2: Describe Mechanism of respiration and its Neural and chemical control.	3	1	1	3	3	3	3
CO-3: Understand Spirometry and lungs function tests.	3	3	3	3	3	1	2
CO-4: Describe asphyxia, hypoxia and artificial respiration.	3	3	3	3	3	3	3
CO-5: Describe Physiology of Pranayam , Its effects on different systems, Components & their duration, Significance in enhancement of health	3	3	3	3	3	3	3
<b>Nervous System</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Describe Neurons, mechanism of propagation of nerve impulse, Functions of different parts of brain	3	3	3	3	3	3	3
CO-2: Describe Physiological study of CNS, PNS, ANS, sensory and motor functions, Limbic System, Cranial Nerves, Spinal nerves, EEG Physiology of temperature regulation. Blood Brain Barrier	3	2	2	3	3	3	3
CO-3: Describe Physiology of special senses, Intelligence, Memory, Learning and motivation	3	2	2	3	3	3	3
CO-4: Describe Physiology of temperature regulation.	3	2	2	3	3	3	3

<b>Classification of Food</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Describe basic components of Food.	3	3	3	3	3	3	3
CO-2: Describe Vitamins & minerals, their Sources, daily requirement, functions, manifestations of hypo and hyper vitaminosis, Toxicity symptoms.	3	3	3	3	3	3	3
CO-3: Define and Describe enzymes, electrolytes, Acid-Base Balance	3	3	3	3	3	3	3
CO-4: Describe Biochemical structure of proteins, fats and carbohydrates	2	0	1	3	3	1	1
CO-5: Describe properties and classification of proteins, fats and carbohydrates	2	1	1	3	3	2	2
<b>Digestion</b>	<b>PO-1</b>	<b>PO-2</b>	<b>PO-3</b>	<b>PO-4</b>	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
CO-1: Describe physiology of digestion in oral cavity, stomach, small intestine and large intestine.	3	3	3	3	3	3	3
CO-2: Describe mechanism of secretion and composition of different digestive juices & Digestion & metabolism of Proteins, Carbohydrates and fats.	3	2	2	3	3	3	3
CO-3: Describe Absorption and Assimilation of food in GIT. Defecation Process	3	2	2	3	3	3	3
CO-4: Interpret the functions of Liver, Portal vein, Pancreas and Spleen.	3	2	2	3	3	3	3



CO-6: Describe Vyutpatti, Nirukti, Synonyms, Process of formation,( Parinati) , Parinatikala, Sthan, Guna (Qualities), Pramana (Quantity), Panchabhautikatwa, Srotas, Upadhatu, Mala, Functions, Kshaya & Vriddhi Lakshanani and dhatusarata of Asthidhatu.	3	3	3	3	3	3	3
CO-7: Describe Vyutpatti, Nirukti, Synonyms, Process of formation,( Parinati) , Parinatikala, Sthan, Guna (Qualities), Pramana (Quantity), Panchabhautikatwa, Srotas, Upadhatu, Mala, Functions, Kshaya & Vriddhi Lakshanani and dhatusarata of Majjadhatu.	3	3	3	3	3	3	3
CO-8: Describe Vyutpatti, Nirukti, Synonyms, Process of formation,( Parinati) , Parinatikala, Sthan, Guna (Qualities), Pramana (Quantity), Panchabhautikatwa, Srotas, Upadhatu, Mala, Functions, Kshaya & Vriddhi Lakshanani and dhatusarata of Shukradhatu.	3	3	3	3	3	3	3
<b>Oja</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Vyutpatti, Nirukti, Synonyms, Utpatti Sthan, Guna, functions, Praman and Classification of oja ( ojobheda), Relation between Shleshma, Oja and bala	3	2	2	3	1	1	2
CO-2: Describe Disorders of Oja, Etiological factors and manifestations of Oja kshaya, Visrsmsa and Vyapat, Physiological and clinical significance of Oja Vayasthan	3	3	3	3	2	3	3
CO-3: Describe Vyadhishamatva; Bala Vriddhikara Bhava, Balabheda	3	3	3	3	2	3	3
<b>Upadhatu Vigyan</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Vyutpatti and Nirukti, Utpatti, Poshan, Samkhya, Praman, Guna, Sthan and Karma of	3	2	2	3	1	2	1

Upadhatu.. Differentiate between Dhatu and Updhatu.							
CO-2: Define and Describe Nirukti, formation, qualities, quantity, functions, Manifestation of Vriddhi and kshaya of Stanya. Assessment of Shuddha and dushit Stanya.	3	2	1	3	2	2	2
CO-3: Define and Describe Nirukti, Utpatti, guna , Karma, Srotas, Characteristics of Shuddha and dushit Artav, Artavchakraprakriya, Puberty Menstruation and it's hormonal control, Differentiate between Raja and Artav .	3	3	3	3	1	3	3
CO-4: Describe Utpatti, Nirukti, guna, Praman, Karma and Bheda, Layer wise diseases and Functions of Twacha, Structure and functions of Skin, Sweat glands and Sebaceous glands.	3	2	3	3	3	1	2
<b>Mala Vigyan</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Vytpatti, Nirukti, Utpatti ( during garbhavastha and janmottar kala) of 'Mala'and Define and Describe Nirukti, uttpatti, sthan, guna, Karma, Sankhya, Praman, functions, etiological factors and clinical manifestation of each Dhatumala.	3	2	2	3	2	2	2
CO-2: Describe Vyutpatti, Nirukti, Utpatti, Praman, Sthan, Guna, Karma, Srotas, Manifestation of Vriddhi and kshaya of Mutra.	3	3	3	3	2	3	3
CO-3: Describe Vyutpatti, Nirukti, Utpatti, Praman, Sthan, Guna, Karma, Srotas, Manifestation of Vriddhi and kshaya of Purisha.	3	3	3	3	2	3	3
CO-4: Describe Vyutpatti, Nirukti, Utpatti, Praman, Sthan, Guna, Karma, Srotas, Manifestation of Vriddhi and kshaya of Sweda.	3	3	3	3	2	3	3
<b>Manas</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7

CO-1: Describe, Vyutpatti, Nirukti, Utpatti, Synonyms, Swaroop, sthan, guna, vishaya, Karma of Manas.	3	2	2	2	3	2	1
<b>Atma (Soul),Buddhi, Nidra&amp; Swpna</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Nirukti, Sthan, Guna, Karma, Characteristics of existence of Atma and difference between Parmatma and Jeevatma.	1	1	1	2	2	1	1
CO-2: Describe Sthan, Prakar, Karma of Buddhi and Physiology of dheer, dhriti and smriti.	2	1	1	2	0	3	3
CO-3: Describe Utpatti, bheda of Nidra & Swapna, Physiological and clinical significance of Nidra.	3	1	1	2	1	3	3
<b>Haemopoetic system</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Haemopoiesis.	3	1	1	3	0	3	3
CO-2: Define and Describe Haemostasis.	3	2	2	3	0	3	3
CO-3: Define and Describe Blood Groups & Principles of Blood Transfusion.	3	3	3	3	3	3	3
<b>Immunity and Classification of Immunity</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Define and Describe Basics, Classification and mechanisms of Immunity.	3	2	2	3	2	2	2
<b>Muscle Physiology</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Describe Structure, Comparative study of physiology of different types of muscles and Muscle excitation - contraction coupling mechanism.	3	1	1	3	0	3	3
<b>Cardiovascular System</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Describe Properties of cardiac muscles.	3	0	0	2	0	3	3
CO-2: Describe General principles of circulation, Regulation of cardiac output and venous return.	3	3	3	3	3	3	3
CO-3: Define and Describe Cardiac Cycle, Heart valves and sounds, murmurs, Heart Rate and its Control.	3	3	3	3	1	3	3



CO-4: Describe Physiology of lymphatic circulation and Foetal Circulation.	3	3	2	3	3	3	3
<b>Endocrine glands</b>	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
CO-1: Describe Classification , Hypothalamus- Pituitary axis and Synthesis of Hormones	3	0	0	1	0	3	3
CO-2: Describe Location, Secretions, and Physical and Psychological effects, features of alteration in their activity of Pituitary gland.	3	2	2	2	1	3	3
CO-3: Describe Location, Secretions, and Physical and Psychological effects, features of alteration in their activity of Thyroid gland.	3	2	2	2	1	3	3
CO-4: Describe Location, Secretions, and Physical and Psychological effects, features of alteration in their activity of Parathyroid & Thymus Gland.	3	2	2	2	1	3	3
CO-5: Describe Location, Secretions, and Physical and Psychological effects, features of alteration in their activity of Pancreas.	3	2	2	2	1	3	3
CO-6: Describe Location, Secretions, Physical and Psychological effects, features of alteration in their activity of Ovaries & Testies.	3	2	2	2	1	3	3
CO-7: Describe Location, Secretions, and Physical and Psychological effects, features of alteration in their activity of Adrenal Gland.	3	2	2	2	1	3	3