### Datta Meghe Institute of Medical Sciences (Deemed To Be University)

## Mahatma Gandhi Ayurved College, Hospital and Research Centre

Sawangi (Meghe), Wardha

#### **UNDERGRADUATE CURRICULUM 2019-20**

#### **DEPARTMENT OF RACHANA SHARIR**

#### PAPER I

	Course Outcome			Prog	ram Out	come		
RS1.1	Shariropkramaniya Shaarira and Paribhasha Shaarira	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.1.1	Define Sharir and describe Shadang Sharir and Significance of Sharir and sharir	3	2	3	3	2	2	1
RS1.1.2	Describe the criteria for selection of cadaver for mrutsarankshan with dead body preservation & dissection method according to Acharya Sushrut and Modern science and describe about Dehadan and its significance.	3	3	3	2	3	1	1
RS1.1.3	Describe various Paribhsha ie kurcha, Kandara, Jal, Sevani, , Snayu, Rajju, Asthisanghat & seemanta Dashpranayatan, Dwadash pran	3	2	2	1	1	1	1
RS1.1.4	Define Purush, Karmapurush and its attributes and explain the constitution of Purush according to the composition of dhatus.  Explain the Pancabhautikatva & Trigunatmakatvam  Tridoshmayatvam of sharir	3	3	2	3	2	2	2
RS1.2	Garbha Sharira	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.2.1	Define Garbha, Describe Garbhotpatti Samagri ,Garbhotpadak and Garbha Vruddhikar bhava	3	3	3	3	2	2	1
RS1.2.2	Describe Masanumasik garbhavriddhi kram of each month Garbha poshan, apara nirman, Garbha nadi nirman, Anga pratyanga Uttpti and role of tridosh and panchamahabhoot in fetal development	3	3	3	3	2	2	1
RS1.2.3	Describe Bija-Bija bhaga & Bija	3	3	3	3	1	1	0

	bhaga avayava, Describe Linga vinishchaya, Lingbheda, sex							
	determination							
RS1.3	Pramana Sharir	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.3.1	Describe Anguli, Anjali praman in detail	3	3	2	2	2	2	2
RS1.4	Asthi Sharira	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.4.1	Define Ashti and describe its	101	102	100	101	103	100	107
101	number Swarup, Types and describe vasa, majja and med	3	3	3	3	2	1	1
RS1.5	Sandhi Sharira	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.5.1	Define sandhi and describes its types and numbers	3	3	3	3	2	1	1
RS1.6	Sira-Dhamani-Strotas Sharira	PO-1	PO-2	PO-3	PO-4	PO-5	<b>PO-6</b>	PO-7
RS1.6.1	Define of Sira and Dhamani and state its numbers and types and describe Hridaya as per ayurveda	3	3	3	3	2	1	1
RS1.6.2	Define srotas, describe the types of Srotas, Strotas moolasthan and Srotodustri lakshna according to Sushrut and Charaka,	3	3	3	3	3	2	2
RS1.7	Peshi Sharira	PO-1	PO-2	PO-3	PO-4	PO-5	<b>PO-6</b>	PO-7
RS1.7.1	Define Peshi as per ayurveda, describe its types, structure,	3	3	3	3	2	1	1
DC1 0	numbers and importance	DO 4	DO A	DO 2	DO 4	DO -	DO (	DO -
RS1.8	Koshtha evam Ashaya Sharira	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.8.1	Define Koshtha and Aashya, describe numbers of Koshtanga							
	according to Charaka and Sushruta and Enumerate 'Aashaya' according to Acharya Sushrut & Sharangdhar	3	3	3	3	2	1	1
RS1.9	according to Charaka and Sushruta and Enumerate 'Aashaya' according to Acharya	3 PO-1	3 PO-2	3 PO-3	3 PO-4	2 PO-5	1 PO-6	1 PO-7
RS1.9 RS1.9.1	according to Charaka and Sushruta and Enumerate 'Aashaya' according to Acharya Sushrut & Sharangdhar							
	according to Charaka and Sushruta and Enumerate 'Aashaya' according to Acharya Sushrut & Sharangdhar  Kalaa Sharira  Define Kala and describe Sapta	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.9.1	according to Charaka and Sushruta and Enumerate 'Aashaya' according to Acharya Sushrut & Sharangdhar  Kalaa Sharira  Define Kala and describe Sapta Kala According to Sushruta.	<b>PO-1</b> 3	<b>PO-2</b> 3	<b>PO-3</b>	<b>PO-4</b> 3	<b>PO-5</b>	<b>PO-6</b>	<b>PO-7</b>
RS1.9.1 RS1.10 RS1.10.	according to Charaka and Sushruta and Enumerate 'Aashaya' according to Acharya Sushrut & Sharangdhar  Kalaa Sharira  Define Kala and describe Sapta Kala According to Sushruta.  Uttamangiya Sharira  Define Chakra.Enlist Chakra, Describe all six chakras and Ida, Pingala & Sushumna Nadi in	PO-1 3 PO-1	PO-2 3 PO-2	PO-3 3 PO-3	PO-4 3 PO-4	PO-5 2 PO-5	PO-6 1 PO-6	PO-7 1 PO-7
RS1.9.1 RS1.10 RS1.10. 1 RS1.11 RS1.11.	according to Charaka and Sushruta and Enumerate 'Aashaya' according to Acharya Sushrut & Sharangdhar  Kalaa Sharira  Define Kala and describe Sapta Kala According to Sushruta.  Uttamangiya Sharira  Define Chakra.Enlist Chakra, Describe all six chakras and Ida, Pingala & Sushumna Nadi in detail  Marma Sharira  Define Marma, Describe the classification of marma and Describe trimarma and clinical importance of marmas with viddha lakshana	PO-1 3 PO-1 3	PO-2 3 PO-2 3	PO-3 3 PO-3 3	PO-4 3 PO-4 3	PO-5 2 PO-5 3	PO-6 1 PO-6 2	PO-7  1  PO-7  0  PO-7
RS1.9.1 RS1.10 RS1.10. 1 RS1.11 RS1.11.	according to Charaka and Sushruta and Enumerate 'Aashaya' according to Acharya Sushrut & Sharangdhar  Kalaa Sharira  Define Kala and describe Sapta Kala According to Sushruta.  Uttamangiya Sharira  Define Chakra.Enlist Chakra, Describe all six chakras and Ida, Pingala & Sushumna Nadi in detail  Marma Sharira  Define Marma, Describe the classification of marma and Describe trimarma and clinical importance of marmas with	PO-1 3 PO-1 3	PO-2 3 PO-2 3 PO-2	PO-3 3 PO-3 PO-3	PO-4 3 PO-4 3 PO-4	PO-5 2 PO-5 2 PO-5	PO-6 1 PO-6 0 PO-6	PO-7 1 PO-7 0 PO-7

1	Ekadash Indriya,							
RS1.13	<b>Definition and branches of</b>	PO-1	PO-2	PO-3	PO-4	PO-5	<b>PO-6</b>	PO-7
	Anatomy, Preservation							
	methods							
RS1.13.	Enlist the branches of anatomy							
1	and Describe preservation	3	3	2	2	1	0	0
	methods of cadaver as per	3	3	2	2	1	U	U
	modern science							
RS1.14	Anatomical terminologies	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.14.	Explain the Anatomical position							
1	and planes, Explain the							
	anatomical terms related to skin.							
	Fascia, bones, joints & their	3	3	3	3	2	2	1
	common movements, muscles,							
	ligaments, tendons, blood							
	vessels, and nerves							
RS1.15	Embryology	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.15.	Define embryology and							
1	Describe the structure of							
	Spermatozoon and the structure	3	3	3	2	2	1	0
	of Ovum. with the stages of							
	Fertilization							
RS1.15.	Describe the various formation							
2	during the process of fetal							
	development in month wise	3	3	3	2	2	1	0
	manner along with fetal							
	circulation and Laws of heredity							
RS1.16	Osteology	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS1.16.	Describe the types, side							
1	determination, structure, muscles							
	attachment, ossification and	3	3	3	2	2	1	1
	clinical significance of all the	3	3	3	2	2	1	1
	bones of appendicular and axial							
	Skeleton							
RS1.17	Arthrology	PO-1	PO-2	PO-3	PO-4	PO-5	<b>PO-6</b>	PO-7
RS1.17.	Describe the types, Articular							
1	Surface, ligaments, movements,							
	relations blood supply, nerve	3	3	3	3	2	1	1
	supply and Clinical Anatomy of							
	the joint							
RS1.18	Cardiovascular system	PO-1	PO-2	PO-3	PO-4	PO-5	<b>PO-6</b>	PO-7
RS1.18.	Describe external features							
1	chambers, valves, auscultatory							
	areas, blood supply and venous	3	2	2	2	2	1	1
	drainage, lymphatics and nerve							
	supply, clinical anatomy of heart							
RS1.18.	Define arteries and veins and	3	1	1	1	0	0	0
2	distinguish between them	3	1	1	1	U	<u> </u>	<u> </u>
RS1.18.	Describe pericardium with its							
RS1.18.	types, sinuses, arterial supply	3	2	1	1	1	0	0
		3	2	1	1	1	0	0

	anatomy							
RS1.19	Lymphatic system	PO-1	PO-2	PO-3	PO-4	PO-5	<b>PO-6</b>	PO-7
RS1.19.	Define lymph glands, and							
1	describe types, structure of	2	2	2	2	2	0	0
	lymph gland with its applied	3	2	3	2	3	U	U
	aspect							
RS1.20	Myology	PO-1	PO-2	PO-3	PO-4	PO-5	<b>PO-6</b>	PO-7
RS1.20.	Describe structure, types,							
1	insertion, origin, action, nerve	2	2	2	2	2	1	0
	supply, clinical anatomy of	2	2		2	2	1	U
	muscles of body							

# Paper II

RS2.1	Respiratory system	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS2.1.1	Describe the structure of larynx with dimension, situation & extent, cartilages, relations, blood supply & applied anatomy	3	2	2	2	2	1	0
RS2.1.2	Describe the situation, extent & dimensions, parts, boundaries, relations, muscles, arterial supply, venous drainage, lymphatics & nerve supply, and the applied anatomy of the pharynx	3	2	2	2	2	1	0
RS2.1.3	Describe the structure, relations, blood supply & applied anatomy of tracheae with bronchial tree	3	3	3	3	3	2	1
RS2.1.5	Describe the structure of pleura, Costo-diaphragmatic & Costo- mediastenal recesses, blood supply & nerve supply of pleura and its clinical anatomy	3	3	2	2	2	2	0
RS2.1.5	Describe the external features of lungs with its applied anatomy	3	3	3	3	3	2	1
RS2.2	Digestive system	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS2.2.1	Describe the extent & dimensions, curvatures, constrictions, three parts along with their relations, arterial supply & venous drainage, the lymphatic & nerve supply, clinical anatomy of Oesophagus.	3	2	2	2	2	2	1
RS2.2.2	Describe peritoneum and Nine parts of abdomen	3	2	2	2	2	1	0
RS2.2.3	Describe the dimension & capacity, parts, surfaces &	3	3	3	3	2	2	1

	borders of stomach, stomach bed, the interior, blood supply & nerve supply, applied anatomy, histology of the stomach.							
RS2.2.4	State the parts, extent, location & dimension, arterial supply, venous & lymphatic drainage, nerve supply, clinical anatomy and histology of duodenum.	3	3	3	3	2	1	0
RS2.2.5	State the parts, arterial supply, venous & lymphatic drainage, nerve supply, clinical anatomy of Large intestine	3	3	3	3	2	1	0
RS2.2.6	Describe the course, dimensions, curvatures, Peritoneal & visceral relations, mucosal folds, supports, arterial supply & venous drainage, applied anatomy of the rectum.	3	3	3	3	2	1	0
RS2.2.7	Describe the dimension, relation, internal structure, blood, nerve supply, venous drainage, applied anatomy of anal canal.	3	3	3	3	2	1	1
RS2.2.8	Describe the dimension, Parts, location, Pancreatic ducts, the arterial supply, venous & lymphatic drainage & nerve supply, applied anatomy, histology of endocrine & exocrine part of pancreas	3	3	3	3	2	2	1
RS2.2.9	Describe external features, relations, blood supply, nerve supply, lymphatic, Drainage, functions, histology and clinical anatomy of Liver	3	3	3	3	2	2	1
RS2.2.1 0	Describe the external features, Situation & dimension, peritoneal & visceral relations arterial supply & venous drainage, functions, applied anatomy of the spleen.	3	3	3	3	2	2	1
RS2.2.1	Enlist the salivary glands and describe the anatomy of parotid gland, submandibular gland and sublingual gland with its blood supply & Clinical anatomy	3	3	3	3	2	1	0
RS2.3	Urinary system	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS2.3.1	State the dimensions of the kidney and describe Location & extent, external features, relations of the right & left	3	3	3	3	2	2	1

	kidney, covering of kidney, internal structure, blood supply, histology of kidney along with nephron							
RS2.3.2	Describe the structure ureter with its applied anatomy	3	3	2	2	1	0	0
RS2.3.3	Describe the position & shape, external features, true & false ligaments, interior, capacity, blood supply & nerve supply, applied anatomy of the urinary bladder.	3	3	3	2	1	1	0
RS2.3.4	Describe male and female	2	2	2	2	1	0	0
RS2.4	urethra with its clinical anatomy		PO-2			DO 5	DO 6	DO 7
RS2.4.1	Reproductive system  Describe the organs of Male	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
K52.4.1	reproductive system with its applied anatomy	2	2	2	2	1	0	0
RS2.4.2	Describe the organs of External genital organ of female reproductive system with its applied anatomy	2	2	2	2	1	0	0
RS2.4.3	Describe the structures of Uterus, Ovary, and fallopian tubes with its applied anatomy	2	2	2	2	1	0	0
RS2.5	Endocrinology	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS2.5.1	Describe the situation, dimension & structure of both the lobes of pitutary along with relations, histology of anterior and posterior lobe, hormones secreted & functions associated with lobes, applied anatomy of the pitutary gland.	2	2	2	2	1	0	0
RS2.5.2	Describe the situation, dimension & parts, structure of both the lobes & the isthmus, histology & hormones secreted, applied anatomy of the Thyroid gland	2	2	2	2	1	0	0
RS2.5.3	Describe the situation ,dimension & structure of superior & inferior parathyroid gland, secretion & function, vascular supply, nerve supply & lymphatic drainage, applied anatomy of parathyroid gland.	2	2	2	2	1	0	0
RS2.5.4	Describe the situation & dimension of the suprarenal glands, structure of the Right &	2	2	2	2	1	0	0

	supply, nerve supply &							
	lymphatic drainage and its							
	applied anatomy.							
RS2.5.5	Describe the structure, situation							
	& dimension, vascular supply,							
	nerve supply & lymphatic	2	2	2	2	1	0	0
	drainage, functions, applied							
	anatomy of the Thymus gland.							
RS2.6	Nervous system	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS2.6.1	Classification of nervous							
	system, describe neurons and	2	2	2	2	1	0	0
	ganglion, types of neuron,							
RS2.6.2	neurotransmitters							
KS2.6.2	Describe lobes of the Brain,							
	Primary functions of the Lobes the Cerebral Cortex, and the	2	2	2	2	1	0	0
	Cortical Regions of the Brain	2	2	2	2	1	U	U
	and its major regions/divisions							
RS2.6.3	Describe general structure of the							
	Cerebrum, Cerebral Cortex and	2	2	2	2	1	0	0
	cerebellum							
RS2.6.4	Describe the extent &							
	dimensions, gross anatomy,	2	2	2	2	1	0	0
	internal structure, nuclei of the	2	2	2	2	1	U	U
	spinal cord.							
RS2.6.5	Enlist cranial nerves and							
	describe functional components,	2	2	2	2	1	0	0
	classification of cranial nerves							
RS2.6.6	and Describes spinal nerve Describe spinal nerves and their							
K32.0.0	functional component.	2	2	2	2	1	0	0
RS2.6.7	Describe cervical, brachial,							
102.0.7	lumber, sacral plexus	2	2	2	2	1	0	0
RS2.6.8	Describe the ventricular system							
	of brain formation and	2	2	2	2	1	0	0
	circulation of C.S.F.							
RS2.6.9	Describe Autonomus nervous							
	system, its classification, and	2	2	2	2	1	0	0
	describe Neurons and Ganglion					1		U
	with their functions							
RS2.6.1	Describe circle of Willis and	2	2	2	2	1	0	0
0	ventricular basilar system							
RS2.7 1	Sensory organs	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS2.7.1	Describe the Panchabhautikatva & dosh relation of							
	Chakshurendriya, Describe the							
	Structures of the Eye with the	3	3	2	2	1	1	1
	layers of the wall of eyeball and	3	3			1	1	1
	retina, aqueous humour, vitreous							
	body and lens, important nerves							
L	J , , , , , , , , ,	l	l	l	l .		l	

		I	I					
	of eye, extrinsic Eye Muscles and clinical anatomy							
RS2.7.2	Describe the Panchabhautikatva of Strotrendriya and the parts of ear, structure of external ear, tympanic membrane, functions, blood, nerve supply & applied anatomy.	3	3	2	2	1	0	0
RS2.7.3	Enlist the synonyms & state the predominant mahabhut & dosha of Rasanendriya and external features, papillaes, muscles, blood supply & nerve supply, applied anatomy of tongue.	3	3	2	2	1	0	0
RS2.7.4	Describe mulsthan of Pranvah strotas and describe nose with external structure, nasal cavity & lateral wall of nose with applied anatomy	3	3	2	2	1	0	0
RS2.7.5	Describe the origin (uttpati) of Twacha and enlist the layers of Twacha according to Acharya Charak and Acharya Sushrut, correlate the layers of twachaas per Ayurved & modern aspect.	3	3	2	2	1	0	0
RS2.8	Surface and radiological Anatomy	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7
RS2.8.1	Describe radio-imaging of limbs, abdomen, pelvis and vertebral column	2	1	1	1	0	0	0
RS2.8.2	Describe surface anatomy of heart and lungs, Stomach, Liver, Spleen, Appendix, Kidney, (Pleura, PericardiumTrachea, Blood vessels of Heart & Lungs) and abdominal viscera (Pancreas, Small & Large intestine, Major Blood vessels	3	2	2	2	1	0	0
RS2.8.3	Describe basics of MRI- CT scan and clinical anatomy	2	1	1	1	0	0	0