

# POST GRADUATE DIPLOMA IN AYURVEDA AND YOGA

UNIVERSITY OF PATANJALI HARIDWAR

**Post Graduate Diploma in Ayurveda and Yoga  
2021-22**

**Preamble**

*Ayurveda* and *Yoga* are indispensable components of the *Vedic* tradition. Incorporating *Ayurveda* in our daily activities heals body and mind and body whereas *Yoga* unleashes ones' superior mental faculties. These two sciences are interconnected through the vital energy called *Prana*: of which *Yoga* is for higher evolutionary transformations, and *Ayurveda* is its healing power. Together they form a common system of self-improvement, self-control, and self-rejuvenation.

Both *Yoga* and *Ayurveda* are based on the principles of *Trigunas* (*Sattva, Rajas and Tamas*) and the five basic elements, *Panchamahabhuthas* (Earth, Air, Fire, Water, Space). They comprehend how the human body works (*Doshas-Dhatu-Mala* / humor-tissue-waste material theory) i.e. human physiology, and how food and medicine have effect on the body. Both acknowledge that a healthy body is vital for fulfilling the four aims of life: *Dharma* (duty), *Artha* (wealth), *Kama* (desire) and *Moksha* (liberation).

**I. Title of the Program The program shall be called Post Graduate Diploma in Yoga Science& Ayurveda”**

**II. Aim of the Program The aim of the program is to produce Yoga professionals with adequate knowledge of Ayurveda for academic & therapeutic fields**

**III. Objectives of the programme**

1. Deeper Understanding of Yoga& Ayurveda: To make students understand the classical nature of Yoga & Ayurveda giving them the in-depth knowledge of their various components.
2. Prevention: To introduce yoga as therapy, its principles and practices of yoga for prevention of various lifestyles, non-communicable and psychosomatic disorders. In addition, the knowledge of Ayurveda gives the healing touch and can prevent the various life-threatening diseases.
3. Promotion of positive health: To prepare them for giving talks and offer techniques to promote healthy yogic life style with healing touch.

**IV. Duration**

**Duration of the course will be 1 year (2 semesters)**

## Structure of Post graduate diploma of Yoga and Ayurveda

### Scheme of Teaching & Examination

S.N.	Subject Code	Subject Title	Periods per week			Evaluation Scheme				Subject Total
						Seasonal			SEE	
			L	T	P	Credit	CT	TA		
<b>I Year</b>										
<b>Semester I</b>										
1	PGDYA-CT-101	Basics of Yoga	3	1	0	4	20	10	70	100
2	PGDYA-CT-102	Principles of Ayurveda	3	1	0	4	20	10	70	100
3	PGDYA-CT-103	Human Biology	3	1	0	4	20	10	70	100
4	PGDYA-CT-104	Pharmacotherapeutical Science	3	1	0	4	20	10	70	100
5	PGDYA-CT-105	Diet and nutrition	3	1	0	4	20	10	70	100
6	PGDYA-CT-106	Yoga Practicum	0	0	8	4	20	10	70	100
7	PGDYA-CT-107	Ayurveda Practicum	0	0	4	2	10	05	35	50
<b>32Hrs</b>						<b>26</b>	<b>Total</b>			<b>650</b>
<b>Semester II</b>										
1	PGDYA-CT-201	Yoga & Nature Cure	3	1	0	4	20	10	70	100
2	PGDYA-CT-202	Complementary & Alternative Therapy (CAT)	3	1	0	4	20	10	70	100
3	PGDYA-CT-203	Important Medicinal herbs	3	1	0	4	20	10	70	100
4	PGDYA-CT-204	Basics of Healthy Living	3	1	0	4	20	10	70	100
	PGDYA-CT-205	Disease specific pathology	3	1	0	4	20	10	70	100
5	PGDYA-CT-206	Yoga Practicum	0	0	8	4	20	10	70	100
6	PGDYA-CT-207	Pathology Practicum	0	0	4	2	10	5	35	50
7	PGDYA-CT-208	Project work	0	0	4	2	10	5	35	50
<b>36hrs</b>						<b>28</b>	<b>Total</b>			<b>700</b>

<b>Total number of Credits</b>	<b>54</b>	<b>Total Marks</b>	<b>1350</b>
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## **COURSE DETAILS**

**SUBJECT TITLE: Basics of Yoga**

**SUBJECT CODE: - PGDYA-CT 101**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

### **Course objectives:**

The teaching-learning of this paper will enable learner to-

1. Deeper Understanding of Yoga: To make students understand the classical nature of Yoga & giving them the in-depth knowledge of its various components.
2. Prevention: To introduce yoga as therapy, its principles and practices of yoga for prevention of various lifestyles, non-communicable and psychosomatic disorders.
3. Promotion of positive health: To prepare them for giving talks and offer techniques to promote healthy yogic life style.

### **Course Outcomes:**

**CO1** The students will well understand the various concept of yoga in day to day life using various asanas, kriyas and pranayama.

**CO2** Students will understand the Vedic concept of the yoga and learn the various concept written in ancient books like Vedas and Upanishads, Yoga in Pre-Vedic period, Yoga in Vedic period, Yoga in Ayurveda. In addition, they will get the knowledge of YogainYogapanishad and Bhagavad-Gita.

**CO3.** The students will develop the concept of yoga to deal with the various life threatening diseases.

**CO4** Students will get training in wellness center and will directly interact with patients and develop the skill to treat them with yogic concept.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hts/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

### **UNIT1:GeneralIntroductiontoYoga[12Hrs.]**

BriefintroductiontooriginofYogaPsychological aspectsleadingtoorigin ofYoga,History andDevelopmentofYoga;Etymologyand DefinitionsofYoga.Aim andObjectivesofYoga, MisconceptionsaboutYoga,TrueNatureofYoga;GeneralLntroduction.toSchools(Streams) of Yoga, Principles ofYogaand Yogicpractices forhealthy living.

## UNIT2:FoundationsofYogaandYogaTraditions[15H\_rs.]

General introductiontoVedasand Upanishads, YogainPre-vedicperiod, YogainVedic period, YogainAyurveda. YogainPrincipleUpanishads, YogainYogopanishad;General introductiontoBhagavadgita, YogainBhagavadgita;IntroductiontoSmritisand Yogain Smritis.IntroductiontoPuranas,NatureofYogainBhagavatPurana;YogainYogaVasishtha, YogainNaradaBhaktiSutra, YogainMedival Literature, Bhakti YogaofMedival Saints.

## Unit3:GeneralintroductiontoIndianphilosophy [12Hrs.]

Philosophy: meaning, definitions and scope; Indian Philosophy: Salient features, Branches (AstikaandNastikaDarshanas),DistinctionfromReligion andScience,Briefintroduction to Prasthanatrayeeand PurusharthaChatushtaya;Relationship between Yoga and Indian Philosophy.

## Unit4:GeneralintroductionofPatanjaliYogaSutraandHatbaYoga[15Hrs.]

Concept ofCitta, CittaBhoomi, CittaVritti, Nidodhupaya(Abhayas&Vairagya), Concept of Ishwar, CinaVikshepas, Types ofSamadhi, PanchaKlesh, Dukhavada, KriyaYoga, AshtangaYoga,TypesofKarma,VivekJnanaNirupanam,KaivalyaNirvachana;Meaning andDefinition of Hatha yoga, Tradition of Hatha Yoga, Purpose of Hath yoga, Qualities of Hatha Siddhi, Sadhak- Badhaktattva, Concept of Mitahara, Concept of Yogic Diet, Seasonal Description, Shatkanna, Asana and Pranayam.

## Unit5:ConceptandImplicationsofImportantYogicStreams[6Hrs.]

JnanaYoga,BhaktiYoga, KarmaYoga,HathaYoga,Raj Yoga.

### Text Books

1. Dasgupta S.N: History of Indian Philosophy, Motilal Banarsidas, Delhi, 2012.
2. Sharma, Chandradhar: A Critical Survey of Indian Philosophy. Motilal Banarasi das, Delhi, 2013.
3. Swami Satyananda Saraswati: Gheranda Samhita, Pub: BSY Mungher.
4. Swami Kulvyananda: Hath Pradipika, Pub: Kaivalyadhama, Lonawala.
5. Yoga Darshan: Swami Ramdeva, Pub: Divya Prakashan, Haridwar.
6. Patanjali Yoga Darshan: Geeta Press.
7. Swami Ramdev: Shrimad Bhagavadgita: Geeta mrit, Pub: Divya Prakashan.
8. Shrimad Bhagavadgita: Geeta Press.

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**COURSE DETAILS**

**SUBJECT TITLE: Principles of Ayurveda**

**SUBJECT CODE: - PGDYA-CT 102**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course objectives:**

The teaching-learning of this paper will enable learner to-

- 1) State concept, prevalence, objectives, types, applications and limitations of various ayurvedic concepts.
- 2) Have knowledge of Ayurveda to treat various diseases such as diabetes, blood pressure, cancer, skin disorders etc. and also develop the concept of Pancamahabhuta too.
3. Students will also learn the various concept of Ashtanga Ayurveda, Pancamahabhuta, Tridosha and various another concept of Ayurveda.

**Course Outcomes:**

CO1. The students will well understand the various concept of ayurveda in day to day life get learn the how to deal with various diseases using ayurveda.

CO2. The students will develop basic understanding of ayurveda and its practical application too.

CO3. Students will get hand on training in wellness center and directly interact with patients and develop the skill of it and can open their own center.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>Hts/Week</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>	

**Unit1: Fundamentals of Ayurveda[20Hrs.]**

Introduction of Ayurveda: Ayurveda and its Diversified Areas, Astanga Ayurveda: The Eight Branches of

Ayurveda Basic principal: Pancamahabhuta (The Five Basic Elements), The Principle of Tridosha: The Three Biological Humors, Traiyopastambha: Three Supporting Pillars of the Body, Saptadhatu: The Seven Fundamental Tissues, Ojas: The Vital Essence, Upadhatu: Sub-Tissues, Tridana: The Three Dimensions of Life -Body, Mind (Psyche) and

Soul, Panca Pancaka: The Five Pentads, Mala: Digestion and Metabolism, Prakriti, Srotas: Body Channels

Unit 2: Sareer Rachana (Anatomy) and Sareer Kriya (Physiology) Vigyan [10 hour]

Unit 3: Dravyaguna Vigyan [20 hour]

Rasa: Taste: Rasa (taste) and the five elements, *Rasa* and *Dosa*, *Rasa* and *Dhatu*, *Rasa* and *Mala*, Identifying *grasa* and their *guna-karma* (qualities and actions), *Guna*: Attributes, *Virya*: Potency *Vipaka*: Post-Digestive Effect, *Prabhava*: Specific Action

### **Text Books**

1. Acharya, B. (2004). *Ausadh Darshan*. Haridwar, India: Divya Prakashan.
2. Acharya, B. (2005). *Ayurveda Jadi-buti Rahasya*. Haridwar, India: Divya Prakashan.

### **Books of References**

1. Holford, P. & Burne, J. (2007). *Food is better medicine than drugs*. Great Britain: Piatkus.
2. Holford, P. (2014). *Good Medicine*. Great Britain: Piatkus.
3. Mohan, H. (2010). *Textbook of pathology (6th ed.)*. New Delhi, India; JAY PEE BROTHERS MEDICAL PUBLISHERS (P) LTD.
4. Sharma, S. (2013). *Chikitsa Upchar Ke Vividh Ayam (2nd ed.)*. Mathura, India: Akhand Jyoti Samsthan.
5. Sharma, S. (2013). *Nirog Jeevan Ke Mahatopurna Sutra (2nd ed.)*. Mathura, India: Akhand Jyoti Samsthan.

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**COURSE DETAILS**

**SUBJECT TITLE: Human Biology**

**SUBJECT CODE: - PGDYA-CT 103**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course objectives:**

The teaching-learning of this paper will enable learner to-

1. Discuss & introduce main human body systems.
2. Discuss anatomical & physiological effects of selected yoga practices on human body systems in evidence-based way.

**Course Outcomes:**

- CO1. The students will well understand the various concepts of Anatomy and physiology.  
 CO2. The students will understand the functioning of various body systems and related diseases.  
 CO3. Students will get training in wellness center and will directly interact with patients and understand about various disease related to human systems and learn their treatment using yoga and Ayurveda.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>Hts/Week</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>	

**Unit 1: Cell and Tissue, MusculoSkeletal and Digestive system [20Hrs.]**

Cell: Structure & Functions, different cell organelles and their functions; Tissues and Organization of human system; Musculo-Skeletal System: The Skeletal System: Skeleton, Functions of skeleton, Classification of bones and joints; The Muscular System: structure and functions of different types of



muscles; Digestive system: Mouth, Oral cavity, Pharynx, esophagus, Stomach, Large & small intestine, anus; Associated glands- Liver, Pancreas, salivary glands, Basic physiology of different stages of digestion, absorption and assimilation.

**Unit 2:** Excretory, Respiratory and Cardiovascular System [15 Hrs]

Excretory System: Function and structure of Kidney, Urinary bladder and urethra;

Respiratory System: Anatomy of the respiratory passages Nose, nasal cavity, pharynx, Trachea, Larynx bronchi, lung · process of Respiration, Lung volumes & capacities, basic mechanics of breathing and exchange of gases in alveoli;

Cardiovascular system: Structure of heart, its chamber, valves, function of arteries, vein and capillaries. Systemic and pulmonary circulation; Blood: Composition and Functions. Blood pressure.

**Unit 3:** Neuro Endocrine System and Reproductive System

Nervous system: Structure and function of human brain and spinal autonomic nervous system [sympathetic and parasympathetic]; Structure and function: eye, ear, nose, tongue and skin; Basic understanding about the functions of various endocrine glands- pineal, pituitary, thyroid, parathyroid, thymus, pancreas, adrenal, ovary and testes. Reproductive System: functional anatomy of male reproductive system and female reproductive system.

**Unit 4:** Lymphatic and Immune System

Lymphoid organ: Bone marrow, Thymus, Spleen, Lymph node, Composition and function of lymph; Immunity in brief, Types of immunity: Innate immunity and acquired immunity.

**Text Books**

1. Tortora, G.J. & Derrickson, B.N. (2009). Principles of anatomy and Physiology-(14th ed.). Hoboken, NJ: Wiley.
2. Guyton, A.C. & Hall, J.E. (2006). Text book of medical physiology (11th ed.). Pennsylvania: Elsevier.
3. Ross and Wilson: Anatomy and Physiology in Health and Illness (11th ed.). London: Elsevier.
4. Principles of anatomy and physiology-II (14th ed.). Hoboken, NJ: Wiley. Udupa, K.N. (2007).

**Reference Books**

1. Balkrishna, A. (2007). Yoga in synergy with medical science. Haridwar, India: Divya Prakashan Books.

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**COURSE DETAILS**

**SUBJECT TITLE: Pharmacotherapeutic Science**

**SUBJECT CODE: - PGDYA-CT 104**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course objectives:**

The teaching-learning of this paper will enable learner to-

- 1) the students will learn about basic elements of pharmacokinetics their Model of distribution and develop the understanding about their chronic administration.
- 2) Have knowledge of modeling concepts in relation to pharmacokinetics.
3. Students will also learn the concept of pharmacotherapeutic.

**Course Outcomes:**

CO1. The students will well understand the various concept of pharmacokinetics.

CO2. The students will develop the concept of pharmacodynamics.

CO3. Students will learn about the drug delivery system.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>Hts/Week</b>	<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>

Unit 1: Introducing pharmacokinetic and pharmacodynamic concept [12Hr.]

Basic elements of pharmacokinetics, Model of distribution, Chronic administration: Constant-rate infusion, Multiple dosing, Additional considerations: Transporters, Absorption, Displacement, Additional complexities, and Pharmacodynamic considerations.

Unit 2 Modelling concepts in relation to pharmacokinetics [13Hrs.]

Solutions of system for a given initial injection, repeated medication, truncated infusion

Solution for special cases: Single compartment, two compartment: clinical bromosulphalein test, repeated penicillin application, compartment model for diabetes mellitus.

Unit 3 Pharmacotherapeutic concept [35 Hrs]

Respiratory infections, urinary tract infection, Gastrointestinal infection, Diabetes mellitus, Leukemia, Rheumatoid arthritis, Glaucoma, Drug-induced skin disorders, Constipation and diarrhoea and Pain.

### **Text Books**

1. Clinical Pharmacy and Therapeutics - Roger and Walker Churchill Livingstone publication.
2. Mathematical models in Biology and Medicine, J.N. Kapur, East-West Press Private Limited.
3. Essentials of Medical Pharmacology, K.D. Tripathi, Jaypee Brothers Medical Publishers (P) Limited.
4. Drug-Drug Interactions, A. David Rodrigues, Informa Healthcare USA Inc. *Yogain synergy with medical sciences, Acharya Balkrishna, D*

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**COURSE DETAILS**

**SUBJECT TITLE: Diet and Nutrition**

**SUBJECT CODE: - PGDYA-CT 105**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course objectives:**

Following the completion of this course, students shall be able to

1. Understand the concept of diet and the medical value of nutrition.
2. Advise appropriate diet to different age groups.
3. Know the benefits and caloric value of various food groups.
4. Understand and practice daily regimen, night regimen and seasonal regimen for health promotion, disease prevention and age reversal.

**Course Outcomes:**

CO1. The students will well understand the various diets and their used in day to day life using ayurveda and modern science.

CO2. The students will develop the concept of Yogic diet and concepts of diet according to Gheranda Samhita, Hatha Pradeepika and Bhagavad-Gita-Rajasic, Tamasic and Sattvic food.

CO3. Students will get training in wellness center and will directly interact with patients and develop the skill to treat them with proper die using yogic and ayurvedic concept.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	-	-
<b>Hts/Week</b>		<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	-	-	

**Unit1: Basic understanding offoodanditsimportanceintermo.fnutrition[ 10Hr .]**

BasicconceptsandcomponentsoffoodandnutritionUnderstandingNutrition Basic

Terminology in Relation to Nutrition Requirement, Human Nutritional Requirements; Concept of food, Acceptance of Food, Functions of Food; Components of Food & their Classification.

**Unit 2:** basic understanding of different nutrients and its importance [12 hrs]

Macro Nutrients- sources, functions and effects on the body; Micro Nutrients – sources, function and effect on the body; Fats soluble nutrients- sources, functions and effect on the body; Water soluble nutrients – sources, Functions and effects on the body.

**Unit 3:** Basic idea of different groups of foods available in relation to nutrients [14 hrs]

Food groups, Cereals & Millets- Selection, Preparation and Nutritive Value; Pulses, Nuts and Oil- Seeds- Selection, Preparation and Nutritive Value; Milk and Milk Products- Selection, Preparation and Nutritive Value; Vegetables and Fruits- Selection, Preparation and Nutritive Value, Fats, Oils and Sugar, Jaggery- Selection, Preparation and Nutritive Value.

**Unit 4:** Basic ideology of yoga as recommended for yoga practitioners (14 Hrs.)

Yogic concept of diet & nutrition General Introduction of Ahara (Diet), concept of Mitahara; Definition and Classification in Yogic diet according to traditional Yoga texts; Concepts of Diet according to Gheranda Samhita, Hatha Pradeepika and Bhagavadgeeta- Rajasic, Tamasic and Sattvic food; Pathya and Apathya in diet according to Yogic texts; Importance of Yogic Diet in Yog Sadhana; Yogic Diet and its role in healthy living.

**UNIT 5:** Classification of diet as recommended from two different schools of thought traditional as well as modern (10 Hrs.)

Ancient & Modern classification, Quality of diet & its relation with Agni, Ayurvedic Concept of Diet: Diet according to the body constitution (Prakriti)- Vata, Pitta and Kapha, Pathya Ahara- Vihar, Virudha Ahara and Hitkari Samyoga, Anupan, Types of Rasa, Characteristics of Rasa, Aama Rasa.

### **Text Books**

1. Stanley Davidson & others: Human Nutrition & Dietetics, The English Language Book Society & Churchill Livingstone, Revised Edition.
  2. Dennis Thompson: The Ayurvedic Diet, New Age Books, New Delhi, 2001.
- Randolph Stone: A Purifying Diet, Lilawati Bhargava Charitable Trust, Delhi, Revised Edition.

3. WorldHealthOrganisation/WorldEconomicForum.(2008).Preventing NoncommunicableDiseasesintheWorkplacethroughDietandPhysicalActivity WHO/WorldEconomicForumReportofaJoint Event.WorldHealthOrganisation/WorldEconomicForum,52.doi:ISBN9789241596329

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**COURSE DETAILS**

**SUBJECT TITLE: Yoga Practicum**

**SUBJECT CODE: - PGDYA-CT 106**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course objectives:**

The teaching-learning of this paper will enable learner to-

1. Understand the benefits, contraindications and procedure of all practices.
2. Demonstrate each practice with confidence and skill.
3. Explain the procedure and subtle points involved.
4. Teach the yoga practices to any given group.

**Course Outcomes:**

CO1 The students will well understand the various concept of asanas and their practical's aspects

CO 2 The students will develop the confidence to perform various postures.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		-	2	-
<b>Hts/Week</b>		-	2	-
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	-	-	

Unit 1: Yogic Sthulavyayama

12stepsofYogicJoggingandaseriesof12YogicPostures:MandukAsana-Variations 1&2, Shashakasana, Bakrasana, Gomukh Asana, Makarasana:- Variations 1 & 2, Bhujanga Asana

Variations 1,2&3,Shalabhasana-Variations 1,2&3,Markatasana-Variations 1, 2&3,Pawanmuktasana-Variations 1,2&3,ArdhaHalasana,PadvirritaAsana- Variations 1& 2and Dwichakrikasana- Variations 1 &2; as recommended by Swami Ramdev.Suryanamaskara.

Unit 2: Yogasana [30 hrs]

Tadasana, Vrikshasana, Urdhva-Hastottanasana, Kati *Chakrasana*, ArdhaChakrasana, PaadaHastasana, TrikonasanaParshvaKonasanaVeerabhadrasana,Dandasana,Swastikasana, Padmasana,ajrasana,SuptaVajrasana,Kagasana, Utkalasana,Gomukhasana, UshtrasanaShashankasana,Janusirasana, Paschimottanasana,Bhramacharyasana, Mandukasana, UtthanaMandukasana,Vakrasana,ArdhaMatsyendrasana, Marichayasana,Simhasana, Pavanamuktasana,Utlhana-padasana,ArdhaHalasana,Halasana, Setubalidhasana, Sarvangasana,Matsyasana,ChakmsanaShavasana,Makarasana,Bhujangasana,Shalabhasana, Dhanurasana.

### **UNIT3:Shatkarmas [10hrs.]**

Dhauti(KunjalDhauti);Neti(Jalneti,Sutraneti);Kapalbhatianditsvariants;Agnisara.

### **UNIT4:Pranayama[10Hrs.]**

Bhastrika,Kapalbhati,Bahya,Ujjyai,Anulomvilom,Bhramari,Udgeethand*Pranavas* recommendedbySwamiRamdev.

### **TEXTBOOKS**

1. SwamiDhirendraBhramhachari:YogicSukshmaVyayama,DhirendraYogaPublications, New Delhi, 1980
2. SwamiDhirendraBhramhachari:YogasanaVijnana,DhirendraYogaPublications,New Delhi,I966.

### **REFERENCEBOOKS**

1. Swami*Kuvalyananda*:Asana, Kaivalyadhama, Lonavla,1993.
2. Swam,SatyanandaSaraswati:Asana,Pranayama,Bandha,Mudra,Bihar Schoolof Yoga, Munger,2006.
3. Basavaraddi,I.V.&others:YOGASANA:AComprehensivedescriptionaboutYogasana, MDNIY,NewDelhi,2011.
4. Basavaraddi,I.V.&others:YogicSukshmaEvamSthulaVyayama,MDNIY, New Delhi,

2011.

**University of Patanjali, Haridwar**  
**Structure of Post graduate diploma of yoga and Ayurveda**

**COURSE DETAILS**

**SUBJECT TITLE: Ayurveda Practicum**

**SUBJECT CODE: - PGDYA-CT 107**

**SEMESTER – I, TOTAL HOURS: 30 CREDITS: 2**

**Course objectives:**

The teaching-learning of this paper will enable learner to-

1. The students will learn all the practical aspect of Shirodhara, Shiroabhyanga, Abhyanga, Udhvaetanam.

2. Have knowledge of Janubasti, Kati basti, Nasya, Karpooran, Nabhipooran

3. The students will also learn the concept of Shirobasti, Anuvasanabasti, Niruhabasti, Dhumrapana, Akshitarpan.

**Course Outcomes:**

CO1. The students will well understand the various concept of Ayurveda in day to day life using ayurvedicpractice and modern day.

CO2. The students will develop the concept of Ayurveda as well as modern science.

CO3. Students will get training in wellness center and will directly interact with patients and develop the skill to treat them with ayurvedictreatments.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		-	2	-
<b>Hts/Week</b>		-	2	-
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>		<b>Practical:NA</b>		
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
		<b>35</b>	<b>15</b>	

Unit 1



Shirodhara, Shiroabhyanga, Abhyanga, Udhvaetanam,

Unit 2

Janubasti, Kati basti, Nasya, Karpooran, Nabhipooran,

Unit 3

Shirobasti, Anuvasanabasti, Niruhabasti, Dhumrapana, Akshitarpan.

Unit 4

Each Student has to prepare an assignment on any one of these above mention topic.

**Text books**

1. Ayurvediyapanchakarmavigyan by vaidyaShridharHaridasKaustura.
2. Principles and practice of panchakarma by Dr. PulakKantiKar.
3. Golden words on Tridosha by Dr. L Mahadevan
4. Principle and practice of basti karma by vaidyaVasant C patil.

# **SEMESTER - II**

**University of Patanjali, Haridwar**  
**Structure of B.Sc. (Hons) Biological Science under CBCS**  
**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: Yoga and nature cure**

**SUBJECT CODE: PGDYA-CT 201**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

1. A PG student, at the end of this theory teaching will be able to understand the etio-pathogenesis of diseases and the concept and the Pathological effect of various non-communicable diseases and the body's capacity for healing.
2. Have an understanding of the common hematological disorders and the steps necessary to understand them.
3. Understand the pathogenesis of gastrointestinal disorders.

**Course Outcomes**

CO1. The students will well understand the various concept of Pathology.

CO2. The students will develop the understanding of hematology and gastrointestinal pathology.

CO3. Students will learn the various prospects of pathology and related disease.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>Hts/Week</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	

70	30	-	-
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### **Unit 1: INTRODUCTION TO YOGA THERAPY & NATUROPATHY**

General introduction to Yoga therapy and Naturopathy; their definition, meaning, scope and limitations; Comparative study of the Naturopathy & Yoga therapy with other systems of Medicine. [10 hours]

### **Unit 2: PRINCIPLES AND CONCEPTS OF YOGA THERAPY & NATUROPATHY**

Concept of Health According to WHO and Indian Systems of Medicines i.e. Ayurveda, Yoga, Naturopathy and Siddha Systems of Medicine; Utility and Limitations of these systems in health and healing. Fundamental principles of Naturopathy and Yoga Therapy [15 hours]

### **Unit 3: NATUROPATHY**

Laws of Nature: Pancha- Mahabhootas; Introduction, definition, scope, history, principles of therapies based on 5 elements: Mud therapy, Hydrotherapy, Sun therapy, diet, massage, Upavasa (Fasting) and their role in health promotion and prevention of diseases. [10 hours]

### **Unit 4 YOGA THERAPY**

Concepts of trigunas, pancha-mahabhutas, panchakoshas, pancha-prana, nadis, chakras, and their role in health and healing. Shuddhiprakriyas in yoga: role of shuddhiprakriyas in preventive and curative health, karma shuddhi (yama, niyama), ghatashuddhi (shatkarma), snayushuddhi (asana), pranashuddhi (pranayama), indriya and manoshuddhi (pratyahara), mana, buddhi, ahankara and chittashuddhi (dharana, dhyana and samadhi).

Therapeutic benefits of yogic shatkarma, asanas, pranayama, mudras, bandhas, pranayamas, and meditation techniques. [35 hours]

### **Text Books**

1. Patanjali Research Foundation. (2015). Research Publications. Haridwar, India: DivyaPrakashan.
2. Ramdev, S. (2006). Yoga Sadhana and Yoga Chikitsa Rahasya. Haridwar, India: DivyaPrakashan.
3. Ramdev, S. (2009). Pranayam Rahasya. Haridwar, India: DivyaPrakashan.
4. Balkrishna, A. (2007). Yoga in synergy with medical science. Haridwar, India: DivyaPrakashan Books.
4. Balkrishna, A. (2017). Yoga Vigyanam. Haridwar, India: DivyaPrakashan.
5. Preeti Goel & Rita Jain: Spectrum of Health (Sports Publications, New Delhi, 2003)
6. M. M. Gore: Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008)
7. Saraswati, S. S. (1995). Asana, Pranayama, Mudra and Bandha. Munger, India: Bihar School of Yoga.
8. S. D. Dwivedi : Naturopathy for perfect health, Kalpaz Publication Delhi, 2002 Pravesh Handa : Naturopathy and Yoga, Kalpaz Publication Delhi, 2006
9. S.J. Singh. : My Nature Cure or Practical Naturopathy
10. M.K. Gandhi : The story of my experiment with truth
11. R.K. Garde : Ayurvedic for Health and Long life Harry Benjamin. : Everybody's Guide to

Nature Cure.

12. Malshe, P. C. (2012). A Medical Understanding of Yoga (2nd ed.). Haridwar, India: AntarPrakash Center for Yoga.

13. Coulter, H. D. (2006). Anatomy of Hatha Yoga. Delhi, India: MotilalBanarasidas.

Robin, Mel. (2009). A Handbook for Yogasana Teachers. Arizona: Wheatmark.

**University of Patanjali, Haridwar**  
**Structure of B.Sc. (Hons) Biological Science under CBCS**  
**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: Complementary & Alternative Therapy**

**SUBJECT CODE: PGDYA-CT 202**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives**

The teaching-learning of this paper will enable learner to-

1. State concept, prevalence, objectives, types, applications and limitations of CAT.
2. Have knowledge & skills of therapeutics related to acupressure, pranic healing, and dietary supplements for managing some of the common health problems and rejuvenation.

**Course Outcomes**

CO1. The students will well understand the various concept of complementary & alternative Therapy.

CO2. The students will develop the skill of various naturopathy therapies like acupressure, hydrotherapy and other diseases related to health.

CO3. Students will get training in wellness center and will directly interact with patients and develop the skill to treat them with various therapies.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>Hts/Week</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>		<b>Practical:50</b>		
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>	

## **UNIT 1**

CAT: History, Meaning, Definition, Objectives, Types, Prevalence, Contemporary Need, Applications and Limitations. Mind-Body Therapy: Origin, Meaning, Definition, Aims, Principles, Factors, Impacts, Prevalence, Applications, and Limitations. [10 hours]

## **UNIT 2**

Manipulative-Body Based Therapy (MBT): Meaning, Definition, Aims, Principles, Types, Impacts, Prevalence, Applications, and Limitations. Acupressure: Origin, Meaning, Definition, Principles, Five Elements Theory, Chi Clock Cycle, Meridian Systems and Locating Acupoints on 12 Major Meridians and Reflexology. [10 hours]

## **UNIT 3**

Energy Medicine: History, Meaning, Definition, Types, Principles, Applications and Limitations. Pranic Healing: Origin, History, Meaning and Sources of Prana; Principles, Law of Action, & Types (Basic, Advanced, and Psychotherapy); Bio-plasmic body/Aura: structure, types and size; Energy Centers (EC): Meaning, Types (Major, Minor and Mini), Sizes, Colors, Functions and Consequences of their Dysfunctions; Ahartic Yoga & Twin Meditation, Scanning Auras or Chakras, Sweeping and Energizing Procedures. [14 hours]

## **UNIT 4**

Acupressure & Pranic Therapeutics: Low Back Pain, Arthritis, Obesity, Diabetes, Hypertension/Hypotension, Hyper/Hypo Thyroidism, Liver Problem, Allergy, CAD, Anemia, Hyperacidity, Irritable Bowel Syndrome, Colitis, Piles, Migraine, Insomnia, Depression, Chronic Fatigue Syndrome, Epilepsy, Anxiety, Obsessive Compulsive Disorder, Leucorrhoea, Menstrual Disorders, Impotency, Infertility, CSF, Asthma, Pneumonia, Renal Problem, Varicose Veins, Distress, and Myopias. [14 hours]

## **UNIT 5**

Biologically Based Products (Dietary Supplements & Herbal Remedies) Probiotics and Prebiotics, Antioxidants, Glucosamine Sulfate, Gultamine, Selenium, Curcumin, Multi-vitamins and their Natural Sources, Omega-3 Fatty Acid and Tryptophan; their Functions and natural Sources; Rejuvenating & De-stressing Herbs: Basil, Allovera, Awala, Giloya, Tea, Mint, Peppermint, Ashwagandha, Satabari, KaunchBeej, Brahmi, Sankhapuspi, Jatamasi, MithiBuch and; their usages. [12 hours]

## **Text Books**

1. Acharya, B. (2004). AusadhDarshan. Haridwar, India: DivyaPrakashan.
2. Acharya, B. (2005). Ayurveda Jadi-butiRahasya. Haridwar, India: DivyaPrakashan.
3. Brahmabarchas. (2003). NidanChikitsa. Haridwar, India: Ved Mata Gayatri Trust.
4. N. R., Walker, B. R. & Ralston, S. H. (2010). Davidson's Principles & Practice of Medicine (21st ed.). China: CHURCHILL LIVINGSTONE, ELSEVIER.
5. Holford, P. & Burne, J. (2007). Food is better medicine than drugs. Great Britain: Piatkus.
6. Holford, P. (2014). Good Medicine. Great Britain: Piatkus.
7. Joshi, S. A. (2011). Nutrition and dietetics with Indian case studies. New Delhi, India: Tata McGraw-Hill.
8. Lian, Yu-Lin; Chen, Chun-Yan; Hammes, M. & Kolster, B. C. (2005). Pictorial atlas of

acupuncture: An illustrated manual of acupuncture points.

9. Solvenia: h. f. ullmann. Micozzi, M. S. (2015). Fundamentals of complementary and alternative medicine (5th ed.). China. ELSEVIER SAUNDERS.

10. Patanjali Research Foundation.(2015). Research Publications.Haridwar, India: DivyaPrakashan.

11. Peeters, J. (2008). Reflexology. Bath BAIHE, UK: Paragon.

12. Ramdev, S. (2006). Yoga Sadhana and Yoga ChikitsaRahasya.Haridwar, India: DivyaPrakashan.

13. Ramdev, S. (2009). PranayamRahasya.Haridwar, India: DivyaPrakashan.

14. Sah, R. L., Joshi, B., & Joshi, G. (2002). Vedic health care system. New Delhi, India: New Age Books.

15. Sharma, S. (1998). JivemSaradmSatam. Mathura, India: AkhandJyotiSamsthan.

16. Sharma, S. (2010). GayatriMahavijyan (Combined and revised ed.). Mathura, India: YugNirmanYojanaBistar Trust.

17. Sui, M. C. K. (2002). Miracle through pranic healing (3rd ed.). New Delhi, India: All India Pranic Healing Foundation.

18. Sui, M. C. K. (2005). Advanced pranic healing.Banglore, India: World India Pranic Healing Foundation-India.

19.Sui, M. C. K. (2005). Pranic Psychotherapy (2nd ed.). Banglore, India: World India Pranic Healing Foundation-India.

20. Yogananda, P. (2011). Journey to self-realization. Kolkata, India: YogodaSatsang Society of India.

21. Mohan, H. (2010). Textbook of pathology (6th ed.). New Delhi, India: JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD.

22. Sharma, S. (2013). ChikitsaUpcharKeVividhAyam (2nd ed.). Mathura, India: AkhandJyotiSamsthan.

23. Sharma, S. (2013). NirogJeevanKeMahatopurna Sutra (2nd ed.). Mathura, India: AkhandJyotiSamsthan.

24. Sharma, S. (2013). PranChikitsa (2nd ed.). Mathura, India: AkhandJyotiSamsthan.

25. Sharma, S. (2006). Diagnose, cure and empower yourself by the currents of breath. Haridwar, India: ShriVedmataGayatri Trust.

26. Yuan, Chun-Su., &Bieber, E. J. (2003). Textbook of complementary and alternative medicine. New York, NY: The Parthenon Publishing Group.

**University of Patanjali, Haridwar**  
**Structure of PostGraduate Diploma in Yoga and Ayurveda**  
**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: Important Indian Medicinal Herbs**

**SUBJECT CODE: - PGDYA-CT 203**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

1. This paper will provide knowledge and skills about various herbs
2. They will learn to identification the plants and their medicinal properties.
3. Students will also learn the physical, chemical properties of Indianherbs.
4. Students will learn the role of medicinal plants in ayurveda.

**Course Outcomes**

CO1. The students will well understand the various concept of herbal medicine.

CO2. The students will understand the concept of Ayurveda and role herbs in traditional medicine system.

CO3. Students will get training in PHRD center and will directly interact with researcher's and develop the skill for the use of herbs.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>Hts/Week</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>	

**Unit-1**

The Physical, chemical and medicinal properties of the following herbal plants

Amla



Ashwagandha  
Brahmi  
Giloye

**Unit-2**

The Physical, chemical and medicinal properties of the following herbal plants

GoharuChota

GwarpathaGhritkumari (Aloevera)

Isabgol

Harad (Haritaki)

**Unit -3**

The Physical, chemical and medicinal properties of the following herbal plants

Neem-nimb

Nirgundi

Shankhapushpi

**Unit-4**

The Physical, chemical and medicinal properties of the following herbal plants

Shatavar

Triphla

Tulsi

**Text Book:**

1. Secrets of Indian Herbs for Good Health, AcharyaBalkrishna, DivyaPrakashan.
2. VanaspatiAushadhVighyan (A Complete Book of Indian Medicinal Herbs) (Hindi), Ramesh Kumar Bhutya (2007).

**University of Patanjali, Haridwar**  
**Structure of Post graduate diploma of yoga and Ayurveda**

**COURSE DETAILS**

**SUBJECT TITLE: Basics of Healthy Living**

**SUBJECT CODE: - PGDYA-CT 204**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course Objectives:**

The teaching-learning of this paper will enable learner to-

1. State concept, prevalence, objectives, types, applications and limitations of various hygiene concepts.
2. Have knowledge of infection and related diseases such as Malaria, Dengue, Dysentery, cholera, typhoid and Chicken pox, measles, mumps etc and also develop the concept of Immunity too.
3. Students will also learn the concept of ayurveda such as Swasthavritta, Dincharya (Daily regimen) & Ratricharya, Ritucharya and Aggravation and Pacification of three Humors (vata, pitta, kapha).

**Course Outcomes**

CO1. The students will well understand the various concept of hygiene in day to day life using ayurveda and modern science.

CO2. The students will develop the concept of Ayurveda as well as modern science.

CO3. Students will get training in wellness center and will directly interact with patients and develop the skill to treat them with proper hygiene and ayurvedic concept.

<b>Total Number of Hrs. : 60</b>	<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>	<b>4</b>	-	-
<b>Hts/Week</b>	<b>4</b>	-	-
<b>SCHEME OF EXAMINATION</b>			
<b>Total marks: 100</b>			
<b>Theory:100</b>		<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>
<b>70</b>	<b>30</b>	-	-

**Unit : 1 INTRODUCTION TO HEALTH AND HYGIENE**

Personal hygiene, Definition of health and factors; affecting it- food habits, cleanliness, exercise and sleep; Water – Importance of water, impurities present in water, sources of contamination of water and water purification (Household and natural methods); First aid: meaning, importance in daily life.

**Unit: 2 INFECTION AND DISINFECTANTS**

Infection – Definitions of Infection, Infective agents, Period of infectivity; Types of diseases and their modes of spread; Channels of infection; disinfectants – Definition, types and methods of disinfection.

**Unit: 3 INFECTIOUS DISEASES**

Infectious diseases - Causes, incubation period, mode of spread, symptoms, prevention & control of the following diseases); Diseases spread by insects -Malaria, Dengue; Diseases spread by ingestion - Dysentery, cholera, typhoid; Diseases spread by droplet infection - Chicken pox, measles, mumps; Disease spread by Contact - Leprosy, AIDS. Immunity - Definition, types of immunity & immunization schedule Common emerging health problems among women: Cancer of Breast and Cervical.

**Unit:4 Health and hygiene in Ayurveda**

Swasthavritta: Meaning, Definition, Aims and Aspects; Wellness: Meaning, Definition, Indicators and dimensions; Dincharya (Daily regimen) & Ratricharya (Night Regimen): Meaning, Definition and sequential elements with their practical applications; Ritucharya (Seasonal Regimen): Meaning, Definition, Types with their salient features, Seasonwise Accumulation, Aggravation and Pacification of three Humors (vata, pitta, kapha); Seasonwise Do's and Don'ts; Application of Dincharya, Ratricharya and Ritucharya for health promotion, rejuvenation, disease prevention and age reversal. A General Introduction of treatments methods used in Ayurveda

**TEXT BOOKS**

1. Yash pal Bedi (1976) Hygiene & Public Health. Anand Publishing Co., gali No. 1, Nawankot Amritsar.
2. V. N. Hhave, (1975) You & Your Health.. National Book Trust
3. Bihari Lal Bhatia, (1961) Elementary. Hygiene, Orient Longmans, Ltd. Calcutta -13
4. J.E. Park, (1983) Preventive & Social Medicine, Jabalpur Messrs Banaridas Bhanot
5. Birendra Nath Ghosh, (1969) Hygiene & Public Health Calcutta Scientific Publishing Co.
6. Secrets of health and longevity. Dr. Omkar Nath

**University of Patanjali, Haridwar**  
**Structure of B.Sc. (Hons) Biological Science under CBCS**  
**Core Course**

**COURSE DETAILS**

**SUBJECT TITLE: Disease specific Pathology**

**SUBJECT CODE: PGDYA-CT 205**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Objectives:**

1. A PG student, at the end of this theory teaching will be able to understand the etio-pathogenesis of diseases and the concept and the Pathological effect of various non-communicable diseases and the body's capacity for healing.
2. Have an understanding of the common haematological disorders and the steps necessary to understand them.
3. Understand the pathogenesis of gastrointestinal disorders.

**Course Outcomes**

CO1. The students will well understand the various concept of Pathology.

CO2. The students will develop the understanding of hematology and gastrointestinal pathology.

CO3. Students will learn the various prospects of pathology and related disease.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>Hts/Week</b>		<b>4</b>	<b>-</b>	<b>-</b>
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical:50</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	<b>-</b>	<b>-</b>	

**Unit-1: Introduction to pathology [10Hours]**

Importance of the study of pathology; Definition of terms; Methods and techniques; Cellular and Tissue changes; Infiltration and regeneration; Inflammations and Infections; Wound healing; Vascular changes; Cellular growth, Neoplasms; Normal and Cancer cell; Benign and Malignant growths; Carcinoma Disturbances of fluid and electrolyte imbalance.

### **Unit-2: Hemodynamics changes [15 Hours]**

**Oedema**, Shock, Thrombosis, Embolism, Infarction; Neoplasia: Cell cycle, Hyperplasia, Metaplasia, Hypertrophy, Atrophy, Nomenclature (classification of tumours), Differences between benign and malignant tumours, Aetiopathogenesis of neoplasia (cancer), Signs of malignancy, Chemical and physical carcinogens, Biological carcinogens (RNA & DNA viruses), Spread of tumours (Metastasis), Dysplasia (Carcinoma in-situ), Lab diagnosis of cancer.

### **Unit-3: Haematology [20Hours]**

Normal Haematopoiesis, Bone marrow examination, Anaemia (Classification of anaemia); 2.Iron deficiency anaemia, Vitamin B12 deficiency anaemia (megaloblastic anaemia), Pernicious anaemia, Haemolytic anaemia (inherited disorders & acquired), Hereditary Spherocytosis, Hereditary Elliptocytosis, Immune Haemolytic anaemia, Thalassemia, Sickle cell anaemia, Aplastic anaemia, Polycythemia; Agranulocytosis, Leucocytosis — Leukopenia, Leukemoid, Reaction; Leukaemia Lymphomas (Hodgkin's & non-type Hodgkin's; Normal Coagulation mechanism; Thrombocytopenia (ITP); Haemophilia; Christmas Disease—Haemophilia B; Von-willebrand's disease; DIC (Disseminated Intravascular Regulation), Rh Incompatibility

### **Unit-4:Gastrointestinal pathology [15 Hours]**

Typhoid, Tuberculosis, Crohn's disease, Appendicitis; Inflammatory diseases of appendix and large Intestine: colitis, Bacillary dysentery; Ulcerative Colitis; Ischemic and pseudomembranous enterocolitis, diverticulosis; Malabsorption: Celiac disease, Tropical and other causes; Jaundice Types, Pathogenesis and Differentiation; Hepatitis: Acute and Chronic Etiology, Pathogenesis and pathology; Cirrhosis: Aetiology, Post necrotic, Alcoholic, Metabolic, Pathology, Morphology ((Macronodular, Micronodular, Mixed), complications; Portal Hypertension: Types including non-cirrhotic portal fibrosis and manifestations.

### **Text Books**

1. Pathologic basics of disease- Kumar, Cortan-Saunders Collins
2. Basic Pathology- Kumar, Cortan-Saunders

3. Text book of Pathology-Andersons-C.V. Mosby Volume I & II Company
4. General Pathology- Walter & Israel
5. Clinical Laboratory Methods-RAmniksood-Jaypee
6. G.C.DeGruchy Clinical-David Penington-CBS Publishers & Haematology in medical
7. Bryan Rush Distributors Peter Castaldi
8. Illustrated Pathology-Govans-ELBS Edition 1992

**University of Patanjali, Haridwar**  
**Structure of Post graduate diploma of yoga and Ayurveda**

**COURSE DETAILS**

**SUBJECT TITLE: Yoga Practicum-II**

**SUBJECT CODE: - PGDYA-CT 206**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course objectives:**

Following the completion of the course, students shall be able to:

1. State techniques, health benefits, applications, precautions and contraindications of under mentioned yogic practices.
2. To demonstrate and instruct under mentioned yogic practices.

**Course Outcomes:**

CO1. The students will well understand the various concept of yoga in day to day life using various asanas.

CO2. The students will develop the concept of yoga and their postures.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		-	2	-
<b>Hts/Week</b>		-	2	-
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>			<b>Practical:NA</b>	
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	-	-	

**UNIT1:Shatkarmas(10Hrs.)**

Dhauti(Kunjali), Vastradhauti, Dandadhauti,

Laghooand Poornasankhaprakshalana, Neti(Sutra and Jala), Kapalbhathi, Agnisara,

Nauli

## **UNIT2:Warmupyogicexercises[10Hrs.]**

YogicJogging,12HealthpromotingposturesasrecommendedbySwamiRamdev,  
Suryanamaskarpracticeclassicallyandinvaried formsforpreventionandtherapy.

## **Unit 3: Asanas Yogic Postures [30 hrs.]**

**Standing Postures:**ArdhakatichakrasnaHastapadasana, Ardchakrasana,  
Trikonasana, katichakrasnaPariivrittalrikonasana, Parsvakanasana, Veersana,

### **Sitting**

**Postures:**Paschimottanasana,suptavajrasana,ardhamatsyendrasana,vakrasana,  
marichasana,malāsana, mandukasana, vakrasana, badhakanasana,  
merudandasana, akamadhanurasana, gumukhasana,Chakkiasana.

**PronePosture :** Bhujangasana,sarpasana, naukaasana,Salabhasana,Ohanurasana,  
Urdhvamukhosvanasana, Makarasana,

**SupinePostures:** Halāsana,Chakrasana, Sarvangasana, Matsyasana,Shavasana,  
Setubandhasana,pad vritta asana, cycling.

**Balancing Postures:**Vrikshasana, vakasana, Garudasana, Namaskarasana,Tittibhasana,  
Natrajasana

## **UNIT4:Pranayama(10Hrs.)**

Breathawareness,Diaphragmatic breathing,Abdominalbreathing,Bhastrika,Kapalbhati, Anulom-  
vilom,Nadisodhan,Bahya, Ujjyai,Bhramari, Udgeeth,Ujjai,Sitali,Sitkari, Suryabhedi.

### **TEXTBOOKS:**

1. Balkrishna,A.(2007).Yogainsynergywith medicalscience.Haridwar,India: DivyaPrakashan Books
2. Balkrishna,A.(2017).YogaVigyanam.Haridwar,India:OivyaPrakashan.
3. PatanjaliResearchFoundation.(2015).ResearchPublications.Haridwar,India:Divya
4. PrakashanRamdev,S.(2006).YogaSadhanaandYogaChikitsaRahasya.Haridwar,I

ndia: DivyaPrakashan.

5. Ramdev,S.(2009).PranayamRahasya.Haridwar,India:DivyaPrakashan.

6. YogaforPromotionofPositiveHealth,byDrRNagarathna, DrHRNagendra  
Published by SVYP, 2002

**University of Patanjali, Haridwar**  
**Structure of Post graduate diploma of yoga and Ayurveda**

**COURSE DETAILS**

**SUBJECT TITLE: Pathology Practicum**

**SUBJECT CODE: - PGDYA-CT 207**

**SEMESTER – I, TOTAL HOURS: 60 CREDITS: 4**

**Course objectives:**

The teaching-learning of this paper will enable learner to-

- 1) Students will understand the concept of Blood groups (ABO system); Estimation of hemoglobin; Enumeration of RBCs (RBC count); Total leucocyte count (Total count);.
- 2) Have knowledge of Differential leucocyte count (DC); Peripheral smear staining and reporting; Absolute eosinophil count.
3. Students will also learn the concept of Anemia: Hemograms in anemia, Iron deficiency anemia, Macrocytic anemia, Microcytic anemia, Hemolytic anemia

**Course Outcomes:**

CO1. The students will well understand the various practical concept of Pathology.

CO2. Students will get training in the Ayurveda college pathology lab and will directly get the lab practices.

<b>Total Number of Hrs. : 60</b>		<b>Theory</b>	<b>Practical</b>	<b>Tutorial</b>
<b>Credits</b>		-	2	-
<b>Hts/Week</b>		-	2	-
<b>SCHEME OF EXAMINATION</b>				
<b>Total marks: 100</b>				
<b>Theory:100</b>		<b>Practical:NA</b>		
<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA)</b>	<b>Final Exam (SEE)</b>	<b>Internal Assessment (CT+TA/PR)</b>	
<b>70</b>	<b>30</b>	-	-	

UNIT 1: Hematology –I [15 Hrs] Blood groups (ABO system); Estimation of hemoglobin; Enumeration of RBCs (RBC count); Total leucocyte count (Total count);

UNIT 2: Hematology-II [15 Hrs.] Differential leucocyte count (DC); Peripheral smear staining and reporting; Absolute eosinophil count



UNIT 3: Anemia-I [15 Hrs.] Anemia: Hemograms in anemia, Iron deficiency anemia, Macrocytic anemia, Microcytic anemia, Hemolytic anemia

UNIT 4: Demonstration [15 Hrs.] All candidates are expected to demonstrate the Unit-I experiments and explain the same in the practical records.

Text Books:

Practical Manual by Harsh Mohan Medical Laboratory Technology– Ramnik Sood