

# UNIVERSITY YOG CENTRE

MOHANLAL SUKHADIA UNIVERSITY



योगश्चित्त वृत्तिनिरोधः

**SYLLABUS OF BACHELOR OF SCIENCE (B.Sc.) IN YOGIC SCIENCE**

# BACHELOR OF SCIENCE (B.Sc.) IN YOGIC SCIENCE

## Preamble

The tradition of Yoga has always been passed on individually from teacher to student through oral teaching and practical demonstration. The formal techniques that are now known as Yoga are, therefore, based on the collective experiences of many individuals over many thousands of years. The particular manner in which the techniques are taught and practiced today depends on the approach passed down in the line of teachers supporting the individual practitioner. Yoga is essentially a spiritual discipline based on an extremely subtle science, which focuses on establishing harmony between mind, body; thought and action; restraint and fulfilment; harmony between man and nature and a holistic approach to health and well-being. Yoga is not about exercise but to discover the sense of oneness with ourselves, the world and Nature. It is an art and science for healthy living.

The word "Yoga" is derived from the Sanskrit root 'yuj' meaning "to join", "to yoke" or "to unite". Therefore the aim of yoga is to unite the individual consciousness with the supreme consciousness. Yoga is a science and art of living; also it is a body of techniques that lead us to consciously connect with ourselves and with life, the experience of yoga. As yoga is an art and science, there is no dogma or belief system attached to it. Yoga tells us to do a certain practice and feel their effect following the practice, e.g. if we breath slowly in a relaxed manner we will slow our heart rate; if we focus the mind we will develop mental peace and deep insight.

In addition to this, Yoga is becoming popular day by day and has become a wave which is sweeping across the globe. In this course we introduce yoga as a science of Holistic living and not merely as yoga postures. During the course the student is taught the concepts of Yoga for the treatment and prevention of various psychosomatic ailments. This course looks at training the enthusiasts to become Yoga therapist so that they could teach yoga under the supervision of a doctor for health and healing.

### I. Title of the Programme

The programme shall be called "**Bachelor of Science in Yoga**" (BSY)

### II. Aim of the Programme

The aim of the programme is to produce "**Yoga Teacher/Therapists for a clinical set up**"

### III. Objectives of the programme

- To introduce Yoga therapy, its principles and practices of Yoga to people with various lifestyle disorders.
- To make the people aware of the therapeutic and preventive value of Yoga.
- To bring peace and harmony in the society at large by introducing the Yogic way of life. To create therapists of high calibre to make the society free free from stress and lifestyle related diseases.



#### **IV. Duration**

The minimum duration of the programme will be three years (6 semesters) and the maximum duration will be six years.

#### **V. Eligibility**

The candidate should have completed 12th Standard in any discipline from a recognized board or equivalent.

#### **VI. Pass Percentage**

Regarding Pass Percentage, the rules of university for another under graduate course of science will be equally applicable for Bachelor of Science in Yoga (BSc Yoga)

#### **Grade System**

Regarding grading system, the rule of the three years Degree course will be followed as per the University rules & regulations.

#### **VII Procedure of Admission**

The rules of university will be applicable

#### **Reservation**

Candidates belonging to S.T/S.C and OBC categories will get relaxations as per the general admission rules of the University.

#### **Medical Fitness Certificate**

The selected candidates must submit a medical fitness certificate along with academic certificates/testimonials.

#### **Seats**

There are only 40 seats for the Course. The Examination patterns of course will semester wise. The examination Fee will be charged as per the rules of the University.

#### **Attendance**

Seventy five percent attendances in theory and practical classes respectively will be necessary for a candidate to appear in the final examination.

Points, if any, not covered by the provisions of this ordinance will be subject to the existing rules and regulations of the University and the Act, the statutes and the Ordinances, of the university, as applicable from time to time.

#### **Fee**

The course fee will be charge @ Rs. 12500/- per semester.



## VIII. Scheme of Teaching and Evaluation of Examination

S.N.	Subject Code	Subject Title	Periods per week			Evaluation Scheme				Subject Total
			L	T	P	Seasonal			SEE	
						Credit	CT	TA		
<b>BSY- I Year</b>										
<b>Semester – I</b>										
1	BSY-CT101	Foundations of Yoga	6	1	-	4	10	10	80	100
2	BSY-CT102	Introduction to Hath Yoga and it's texts	6	1	-	4	10	10	80	100
3	BSY -CT103	Human Anatomy and Physiology-I	6	1	-	4	10	10	80	100
4	BSY-CT104	Introduction of ancient Yogis	6	1	-	4	10	10	80	100
5	BSY-CP105	Yoga Practicum	-	-	6	4	10	10	80	100
<b>30 Hours</b>						<b>20</b>	<b>TOTAL</b>			<b>500</b>
<b>Semester – II</b>										
1	BSY-CT201	Essence of Principal Upanishads	6	1	-	4	10	10	80	100
2	BSY-CT202	Patanjala Yoga Darshana	6	1	-	4	10	10	80	100
3	BSY-CT203	Human Anatomy & Physiology-II	6	1	-	4	10	10	80	100
4	BSY-CT204	Introduction of Great Yogis	6	1	-	4	10	10	80	100
5	BSY-CP205	Yoga Practicum	-	-	6	4	10	10	80	100
<b>30 Hours</b>						<b>20</b>	<b>TOTAL</b>			<b>500</b>
<b>BSY- II Year</b>										
<b>Semester – III</b>										
1	BSY-CT301	Essence of Bhagavad Gita for holistic living	6	1	-	4	10	10	80	100
2	BSY-CT302	Yoga and Holistic Health	6	1	-	4	10	10	80	100
3	BSY-CT303	Fundatmental of Naturopathy and Mental Health	6	1	-	4	10	10	80	100
4	BSY-CT304	AECC-3 (Basics of Samskritam)	6	1	-	4	10	10	80	100
5	BSY-CP305	Yoga Practicum	-	-	6	4	10	10	80	100
<b>30 Hrs.</b>						<b>20</b>	<b>TOTAL</b>			<b>500</b>
<b>Semester – IV</b>										
1	BSY-CT401	Four Streams of Yoga	6	1	-	4	10	10	80	100
2	BSY-CT402	Basis of Yoga Therapy	6	1	-	4	10	10	80	100
3	BSY-CT403	Fundamentals of Biochemistry	4	1	-	3	10	10	40	60
4	BSY-CT 404	AEEC-4 (Sanskrit)	6	1	-	4	10	10	80	100
5	BSY-CP405	Yoga Practicum 6	-	-	6	4	10	10	80	100
6	BSY-CP406	Biochemistry Practical	-	-	2	1	5	5	30	40
<b>30 Hrs.</b>						<b>24</b>	<b>TOTAL</b>			<b>500</b>



BSY- III Year										
Semester – V										
1	BSY-CT501	Basis of Indian Culture	6	1	-	4	10	10	80	100
2	BSY-CT502	Yoga and Human Consciousness	6	1	-	4	10	10	80	100
3	BSY-CT503	Yogic Management of Lifestyle related disorders	6	1	-	4	10	10	80	100
4	BSY-CT504	Introduction to Ayurveda & Swara Yoga	6	1	-	4	10	10	80	100
5	BSY-CP505	Yoga Practicum	-	-	6	4	10	10	80	100
						<b>30 Hrs.</b>	<b>20</b>	<b>TOTAL</b>		<b>500</b>
Semester – VI										
1	BSY-CT601	Yoga and Human Values	ee	1	-	4	10	10	80	100
2	BSY-CT602	Applied Yoga	6	1	-	4	10	10	80	100
3	BSY-CT603	Research Methodology & Statistics	6	1	-	4	10	10	80	100
4	BSY-CT604	Yogic Diet, Nutrition & Human Body	6	1	-	4	10	10	80	100
5	BSY-CP605	Yoga Practicum	-	-	6	4	10	10	80	100
						<b>30 Hrs.</b>	<b>20</b>			<b>500</b>
						<b>TOTAL CREDIT</b>	<b>120</b>			<b>3000</b>

CT- Core Theory, CP- Core Practicle

**Practical Papers will be evaluated by both External and Internal Examiners at the end of the semesters**



# Semester-I



## COURSE DETAILS

**Subject Title: Foundation of Yoga**

**Subject Code: BSY-CT101**

### Course Objectives:

The subject entitled 'Foundation of Yoga' has the following objectives

- Students of the UG course will have an understanding about origin, history and development of Yoga.
- They will have an idea about the insights of Indian philosophy and Astika & Nastika darshanas.
- Introduction about Yoga according to various yogic texts.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit-1: General introduction to yoga [15Hrs.]

Brief about origin of Yoga: Psychological aspects and Mythological concepts; History and Development of Yoga: prior to the Vedic period, Vedic period, Medieval period, modern era.

### Unit-2: Objective of Yoga [15 Hrs.]

Etymology and Definitions of Yoga, Aim and Objectives of Yoga, Misconceptions of Yoga; Brief about Streams of Yoga; Principles of Yoga, Importance of Yoga, Relationship between Yoga and Indian Philosophy

### Unit - 3: General introduction to Indian philosophy [15Hrs.]

Philosophy: meaning, definitions and scope; Indian Philosophy: Salient features, Branches (Astika and Nastika Darshanas), Distinction from Religion and Science, Brief introduction to Prasthanatrayee and Purushartha Chatushtaya;

### Unit - 4: Brief about Yoga in texts – I [15Hrs.]

Brief to Upanishads and Yoga in Principal Upanishads, Yoga in Yogopanishad; Yogic perspective of Epics: Ramayana, Adhyatma Ramayana and Mahabharata; Yogic perspective: Bhagavad Gita, Yoga Vasishtha, Narada Bhakti Sutras

### Unit-5: Brief about Yoga in texts – II [15 Hrs.]

Yogic perspective: Smritis, Puranas with emphasis to Bhagavat Purana; Yogic perspective to Shad-darshanas; Emphasis to Vedantic approach of Shankara, Ramanuja, Madhva and Vallabha; Brief: Agamas, Tantras, Shaiva Siddhanta



## TEXT BOOKS

1. Lal Basant Kumar : Contemporary Indian Philosophy, Motilal Banarsidas Publishers Pvt. Ltd, Delhi, 2013
2. Dasgupta S. N : History of Indian Philosophy, Motilal Banarsidas, Delhi, 2012
3. Singh S. P : History of Yoga, PHISPC, Centre for Studies in Civilization Ist, 2010
4. Singh S. P & Yogi Mukesh: Foundation of Yoga, Standard Publication, New Delhi, 2010
5. Vishnoi Manoj: Upnishad Saar Sangraha, 2019.

## BOOKS FOR REFERENCE

1. Agarwal M M : Six systems of Indian Philosophy, Chowkhambha Vidya Bhawan, varanai, 2010
2. Swami Bhuteshananda : Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
3. Hirianna M : Outlines of Indian Philosophy, Motilal Banarsidas, Delhi, 2009
4. Hirianna M: Essentials of Indian Philosophy, Motilal Banarsidas, Delhi, 2008
5. Radhakrishnan S: Indian Philosophy, Oxford University, UK (Vol. I & II) II Edition, 2008
6. Max Muller K. M : The six system of Indian Philosophy, Chukhambha, Sanskrit series, Varanasi, 6th Edition, 2008





## Subject Name: Introduction to Hatha Yoga & its Texts

Subject Code: BSY-CT102

### Objectives:

By introducing hatha Yoga & its texts, students shall be able to

- Have an understanding about pre-requisites, principles about Hatha yoga.
- Understand the relationship between Patanjala and Raja yoga.
- Have an understanding about the concept of yoga in other yogic texts.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit - 1: General introduction to Hatha yoga

[10 Hrs.]

Hatha Yoga: Origin, Meaning, Definition, Aim, Objectives and Misconceptions, Philosophy and Foundations; Hatha Yoga Parampara, Natha Cult Hatha Yogis and their contribution; Ghatashudhi: its importance and relevance in Hatha Yoga sadhana; Inter-relation of Hatha Yoga and Raja Yoga

### Unit - 2: Pre-requisites

[15 Hrs.]

Badhaka Tattva (Obstacles) and Sadhaka Tattva (Facilitatory factors) in Hatha Yoga; Concepts of Matha, Concept of Mitahara, Pathya (conducive) and Apathya (non-conducive), Types of aspirants; Dasha Yama and Niyama and its relevance in Hatha Yoga Sadhana; Swara, Importance of Svarodaya-jnana in Hatha Yoga Sadhana; Hatha Siddhi Lakshanam

### Unit - 3: Principles and Introduction to Hatha Yoga texts

[15 Hrs.]

Concept of Swas-prashwas, Vayu, Prana and Upaprana; Concept of Kand, Nadi, Swar, Chakra and Granthi; Kundalini prabodhan, Unmani avastha, Nadanusandhan; Concept of Samadhi;

### Unit-4: Introduction to hatha yoga texts:

[15 Hrs.]

Brief: Hatha Yogic Texts, their nature and objectives; Siddhasiddhantapaddhati, Goraksha Samhita, and Shiva Samhita; Brief: Hatha Yoga Pradeepika, Gheranda Samhita, Hatha Rathnavali

### Unit-5: Relationship between Patanjala Yoga and Hatha Yoga

[20Hrs.]

Jnana Yoga: Meaning of Jnana and Jnana-Yoga, Sadhana-chatushtaya, Means of Jñāna-Yoga; Bhakti Yoga: Meaning of Bhakti and Bhakti-Yoga, Stages of Bhakti, Types of Bhakti, Means of Bhakti-Yoga; Karma Yoga: Meaning of Karma and Karma-Yoga, Concept of Nishkama Karma, Means of Karma Yoga; Inter-relationship between Bhakti-Yoga and Karma-Yoga, Theory of Karma and Rebirth (Reincarnation); Patanjala Yoga: Philosophical Foundations of Patanjala Yoga, Ashtanga Yoga of Patanjali, Relevance of Patanjala Yoga in day-to-day life; Hatha Yoga: Philosophical Foundations of Hatha Yoga, Hatha Yoga Sadhana,



Chaduranga Yoga and Saptanga Yoga, Relevance of Hatha Yoga in day-to-day life; Inter Relationship between Patanjala Yoga and Hatha Yoga and their inter-dependance; Kundalini Yoga: Philosophical Foundations and Practices of Kundalini Yoga

#### **TEXT BOOKS**

1. Swami Muktibodhananda Saraswati Sahay G.S.: Hatha Yoga Pradeepika, Bihar school of yoga publications, Munger, 2000
2. HathaYoga Pradeepika of Svatmarama, MDNIY Publication, 2013
3. Sharma BR: Jotsna (Comentory of HathaYoga Pradeepika) Kaivalyadhama, Lonavala, 2013

#### **BOOKS FOR REFERENCE**

1. Gharote, M.M. & others: Therapeutic references in Traditional Yoga Texts, the Lonavla Institute, Lonavla, 2010.
2. Gharote ML: Hatharatnavali, The Lonavala Yoha Institute, Lonavala, Pune, IInd Edition, 2009
3. Briggs GW: Gorakhnatha and the Kanphata Yogis, 8th Edition, 2009
4. Swami Kuvalyananda & Shukla, S.A.: Gorakshasatkam, Kaivalyadhama, Lonavla, 2006
5. Gharote M.L. & Pai, G.K. (Edi): Siddhasidhantpaddhati, Kaivalyadhama, Lonavla, 2005.
6. Burley, Mikel: Hatha Yoga, Its Context Theory and Practice, M.L.B.D. Delhi, 2000.
7. Swami Digambarji & Gharote M.L.: Gheranda Samhita, Kaivalyadhama, Lonavla, 1978.
8. Swatmaramaji : Hathapradipika (Jyotsana- tika), Adyar Library, Madras.
9. Bharati, Swami Veda Reddy Venkata:Philosophy of Hatha Yoga (English), Himalayan, Pennsylvania, Hatha Ratnavali



## Subject Name: Human Anatomy and Physiology-I

Subject Code: BSY-CT103

### Objectives:

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

- To know about the structure of the body
- To know about the necessary functions of the body
- To give brief idea about the diseases related to each system
- To throw light on anatomy so that student can experience the involvement of their body parts while practicing various postures of yoga

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit-1: Cell, Tissue and Muscular – Skeletal system

[15Hrs]

Cell structure –Plasma membrane and protoplasm; Cell organelles –Mitochondria, Globiboly,Endoplasmic reticulum, Lysosome, Peroxisome, Centrosome, Nucleus-Nuclear membrane,chromosome,nucleolus; Homeostasis; Structure and function of epithelial -simple and compound; Connective -connective tissue proper, skeletal and vascular; Muscular - Skeletal ,involuntary and cardiac; Nervous tissues-Myelinated neuron and Non myelinated neuron;

### Unit-2: Skeletal system

[15Hrs]

Anatomy of the Skeleton: Classification of bones-Axial bones and appendicular bones; Types of joint –Synovial joints and Fibrous joint; Structure of synovial joints ; Types of synovial joints; Types of Muscle in the body(striated ,Smooth muscle, Cardiac muscle); Mechanism of muscle contraction

### Unit-3: Biomolecules

[15 Hrs]

Nutrition: Meaning and Objectives, Eliments of Diet: Carbohydrates; Fats; Proteins; Minerals; Vitamins (fat soluble and water soluble); Dietary fibres Balanced diet, Role of Diet for Spritual Development

### Unit-4: Digestive system and Respiratory system:

[15 Hrs]

Digestive system of human-Mouth, buccal cavity, Pharynx, oesophagus, stomach, large intestine, small intestine, anus, associated glands-Liver, Pancreas, salivary glands, physiology of digestion and absorption; Malnutrition and under nutrition; **Respiratory system** of human-Nose, nasal cavity, pharynx,Trachea,Larynx, bronchiole, lungs; Mechanism of breathing (Expiration and inspiration); Transport of respiratory; gases (transport of oxygen and transport of carbon dioxide); Common respiratory disorder



**Unit-5: Cardiovascular system****[15 Hrs]**

Composition and function of blood –Plasma ,RBC,WBC and Platelet; Blood groups and their importance; Blood clotting; Structure and working mechanism of heart; Organisation of systemic and pulmonary circulation; Cardiac output and cardiac cycle; Functional anatomy of blood ; vessels; Blood pressure and regulation of blood pressure

**TEXT BOOKS**

1. Tortora and Bryan: Anatomy and Physiology
2. Khurana: Anatomy and Physiology

**REFERENCE BOOKS:**

1. Gore M. M. (2003). Anatomy and Physiology of Yogic practices. KanchanPrakashan, Lonavla, India
2. LanPeate and MuralidharanNayar – Fundamental of Anatomy and Physiology for students nurses
3. Evelyn, C. Pearce- Anatomy and Physiology for Nurses



**Subject Name: Introduction of Ancient Yogis****Subject Code: BSY-CP 104****Objectives:**

By introducing Yogi's & their biography students shall be able to

- Have an understanding about life & life style of ancient Yogis
- Have an understanding about the concept of applied yoga in Yogis life.

<b>SCHEME OF EXAMINATION</b>			
Total Marks: 100			
<b>Theory : NA</b>		<b>Practical : 100</b>	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

**Unit- I : Characteristic of Yogis****[15 Hrs]**

Types of yogis, life style of yogis, quality of yogis, sign of yogis.

**Unit- II : Introduction of Yogis – I****[15 Hrs]**

Rishi Viswamitra, Agastya Rishi , Bhagwan shri Ram, Raja Janak, Bhakta Hanuman, Bhaktini Sabari, Maharshi Narad.

**Unit- III : Introduction of Yogis – II****[15 Hrs]**

Yogeshwar Shrikrishna, Vedvyasa, Mahatma Vidur, Maharshi Yajnavlkya, Maitryee, Muni shkdev

**Unit- IV : Introduction of Yogis – III****[15 Hrs]**

Maharsh kapil, Maharshi Patanjali, Maharshi Kanad, Maharshi Pipalad

**Unit- V : Introduction of Yogis – IV****[15 Hrs]**

Nachiketa, Satyakama Jabal, Dhruva, Gargi, Prahalada

**TEXT BOOKS**

1. Hindu Samskriti Ank : Geeta Press, Gorakhpur



## Subject Name: Yoga Practicum

### Subject Code: BSY-CP 105

#### Objectives:

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

- Make the students recite the Vedic hymns skillfully.
- Understand the concept and principles of Shatkarmas.
- Know and understand about breathing practice.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : NA		Practical : 100	
Final Exam	Internal Exam	Final Exam	Internal Exam
		80	20

#### Unit-1: Recitation of hymns & hasta mudra

[15 Hrs.]

Recitation of Pratah-smaran and Shanti Mantras; Recitation of Pranava Japa and Soham Japa; Recitation of Hymns from Upanishad & Yoga Texts; Hasta Mudra: Chin, Jnana, Hridaya, Bhairav, Yoni

#### Unit-2: Shatkarmas

[15 Hrs.]

Dhauti (Kunjali, Vamana Dhauti, Vastra Dhauti); Neti (Jalneti, Sutrneti); Kapalabhati and its variants; Agnisara

#### Unit-3: Breathing practices

[30 Hrs.] Breathing practices  
[15 Hrs.]

Abdomen+Thoracic Breathing, Abdomen + Thoracic + Clavicular Breathing; Yogic Breathing: Pause Breathing (Viloma Pranayama), Spinal Passage Breathing (Sushumna Breathing); Practice of Puraka, Rechaka & Kumbhaka (Antar & Bahya Kumbhaka)

[15 Hrs.]

#### Unit- 4: Surya namaskara

[15 Hrs.]

#### Unit-5: Yogasana (Standing Postures and body alignment)

[15 Hrs.]

Tadasana, Vrikshasana, Urdhva-Hastottanasana, Kati Chakrasana, Ardha Chakrasana, Paada Hastasana, Trikonasana, Parshva Konasana, Veerabhadrasana and its variations

#### TEXT BOOKS

1. Sri Ananda : The Complete book of Yoga, Orient Course Backs, Delhi, 2003.
2. Basavaraddi, I.V. & others : SHATKARMA: A Comprehensive description about Cleansing Process, MDNIY New Delhi, 2009
3. Joshi, K.S. : Yogic Pranayama, Oriental Paperback, New Delhi, 2009
4. Dr. Nagendra H R: Pranayama, The Art & Science, Swami Vivekananda Yoga Prakashan, Bangalore, 2005



## **BOOKS FOR REFERENCES**

1. Basavaraddi, I.V. & others : SHATKARMA: A Comprehensive description about Cleansing Process, MDNIY New Delhi, 2009
2. Joshi, K.S. : Yogic Pranayama, Oriental Paperback, New Delhi, 2009
3. Swami Kuvalyananda : Pranayama, Kaivalyadhama, Lonavla, 2010
4. Swami Rama: Science of Breath, A Practical Guide, The Himalayan International Institute, Pennselvenia, 1998
5. Swami Niranjananand Saraswati: Prana, Pranayama & Pranvidya, Yoga Publications Trust, Munger, Bihar, 2005.



## Semester-II





## Subject Name: Essence of Principal Upanishads

Subject Code: BSY-CT201

### Objectives:

Following the completion of this course, student will be able to

- Have an idea about the major principal Upanishads
- Understand the essence of each Upanishad and how to put them into practice.
- Understand each Upanishad and the role of it in our day-to-day life.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : NA	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit-1: Introduction essence of Isha and Kenopanishad [15 Hrs.]

An Introduction to Upanishadic Philosophies; Antiquity of Upanishads; Prasthanatraya; **Ishavasyopanishad:** JnanaNishtha (Ish.1), Karma Nishtha (Ish.2), All compassion Brahman (Ish.5), Nature of Sage (Ish.6, 7), Prayer of dying Man (Ish.15); **Kenopanishad:** The inscrutable being (Kena-I.2, 3 ,4,6) (Kena II.2,3), Greatness of self Knowledge (Kenall.5)

### Unit-2: Essence of Katho and Prashnapanishad [15 Hrs.]

Kathopanishad: Futility of earthly pleasure (Katha I.i.26, 27); Glory of wisdom of self (Katha I.ii.1, 5, 6, 7, 12); Atman is immortal (Katha I.ii.18); Conditions of knowing that (Katha I.ii.23,24); The Razor's edge of Jnana (Katha I.iii.14, 15); Sense knowledge is nothing (Katha II.i.1, 2); The indivisible Brahman (Katha II.i.10, 11) (Katha II.ii.2,9,11)The supreme state; Prashnapanishad: Sun, the life of creatures, The all inclusiveness of Brahman, The state of becoming the soul

### Unit-3: Essence of Mundaka, Mandukya and Taitriya [15 Hrs.]

Mundaka: The greatness of Brahavidya, The worthlessness of Selfish-karma, Tapas and Gurubhakti, The origin of creation, Brahman the target of, meditation, Know thyself, Everything is Brahman, Purity extolled, Force of Desire, State of moksha; Mandukyopanishad: All this is Brahman, The fourth state of being

### Unit- 4: Essence of Aitareya, Chandogya [15 Hrs.]

Aitareya: Everything is only that Atman, All this is Brahman only; Chandogya: The meditation on udgithaomkara, Sandilyavidya, Mystic declarations, The sacrifice of the knower, The paradox of creation, The necessity for a guru, The supreme instruction, Need for understanding, Bhumavidya, The seer's health and purity, Desires should be renounced, Know the Atman.

### Unit- 5: Essence of Brihadaranyaka [15 Hrs.]

Brihadaranyakam: A prayer of the devotee, The self is the dearest, the self is the absolute, The death of the jnana, How to know the secret Atman, The ocean of the absolute, Words are useless, The atman and its knower, The infinite Brahman, Ethics

#### Text Book

1. Upnishad Ank : Geeta Press, Gorakhpur
2. Vishnoi Manoj: Upnishad Saar Sangraha, 2019.



## Subject Name: Patanjala Yoga Darshana

### Subject Code: BSY-CT202

#### Objectives:

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

- Understand various modification of mind and the means of inhibiting them.
- Have an understanding about the essence of Samadhi and Sadhana Pada.
- Undertand the essence of Vibhuti and Kaivalya pada.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : NA	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

#### Unit - 1: Introduction to Yoga darshana of Patanjali and concept of Citta, citta bhoomis Citta vrittis and Citta vritti nirodhopaya [15 Hrs.]

Brief Introduction to Maharshi Patanjali and Patanjala Yoga Sutra (P.Y.S.), Brief Introduction to traditional commentators and commentaries of Patanjala Yoga Sutra (Vyasa Bhasya, Tatvavaisharadi, Bhoja Vritti and Yoga-vartika); Concept of Mana, Buddhi, Ahankar and Chitta; Concept of Citta Bhoomis (Kshipta, Mood, Vikshipta, Ekagra, Nirudha); Concept of Citta-Vrittis and their classification, Citta-Vritti Nirodhopaya (Abhyasa and Vairagya); Concept of Ishwar and Ishwar Pranidhana, Qualities of Ishwar, Concept of Samprajnata; Citta-Vikshepas (Antarayas), Concept of Citta-prasadanam, Relevance of Citta-prasadanam in Yoga Sadhana.

#### Unit - 2: Samadhi pada [15 Hrs.]

Concept of Yoganushasanam, Yoga Lakshanam and its results; Types of Samadhi (Samprajnatah and Asamprajnatah Samadhi); Types of Samprajnatah Samadhi (Vitarka, Vichara, Anand and Ashmita); Concept of Samapatti and kinds of Samapatti (Savitraka and Nirvitarka, Savichara and Nirvichara); Types of Asamprajnatah Samadhi (Bhavapratyaya and Upayapratyaya).

**Unit-3: Sadhana pada[15 Hrs.]** Concept of Kriya Yoga of Patanjali, theory of Kleshes (Avidya, Ashmita, Raga, Dewesh, Abhinevesh); Concept of Dukhavada (Heya, Hetu, Hana, Hanopaya) Drishta and Drisha-nirupanam (Prakriti), Drastunirupanama (Purusha), PrakritiPurushaSamYoga; Brief Introduction to Ashtanga Yoga; Concept of Asana and Pranayama and their Siddhis; Concept of Pratyahara and its Siddhis.

#### Unit - 4: Vibhuti [15 Hrs.]

Introduction of Dharana, Dhyana and Samadhi, Samyama and its Siddhis; Three types of Chitta Parinamah; Bhoota jaya, Indriya jaya and their Siddhis, Satvapurushanyatakhyati and its Siddhis; VivekJnanaNirupanam, Kaivalya Nirvachana; Role of Dharana, Dhyana, Samadhi and its application.

#### Unit - 5: Kaivalya Pada [15 Hrs.]

Five Types of Siddhis and Jatyantar Parinamh; Concept of Nirman Chitta and four types of Karmas; Concept of Vasana and concept of Bahya Pradartha (external element) and its abilities.

#### TEXT BOOKS

1. Swami Omanand Saraswati : Pantanjali Yog Pradip



## Subject Name: Human Anatomy and Physiology-II

Subject Code: BSY-CT203

### OBJECTIVES:

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

- To know about the structure of the body
- To know about the necessary functions of the body
- To give brief idea about the diseases related to each system
- To throw light on anatomy so that student can experience the involvement of their body parts while practicing various postures of yoga

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Assessment	Final Exam	Internal Exam
80	20		

### Unit -1: Nervous system and special senses

[15Hours]

Structure and function of human brain.-Fore brain, mid brain, hind brain, Structure and function of spinal cord, Cranial nerve and spinal nerve, Autonomic nervous system- Sympathetic and para sympathetic nervous system, Reflex action, Mechanism of nerve conduction, Synapse and synaptic transmission, Structure and function of eye,ear,nose,tongue and skin

### Unit -2: Endocrine system

[15Hours]

Structure and function of important of endocrine gland (Pituitary, Adrenal, Thyroid, Parathyroid, Pancreas, gonads), Function of GI tract hormones, Mechanism of hormone action

### Unit -3: Reproductive

[15 Hrs]

Male reproductive system of human.-Testis, penis, epididymis, prostate gland; Female reproductive system of human-ovary, uterus, vagina, cervix, fallopian tube; Menstrual cycle Gametogenesis-Spermatogenesis and oogenesis; Fertilization; Implantation and embryonic development; Pregnancy.

### Unit -4: Excretory system

[15 Hrs]

Excretory system of human-Kidney, ureter, urinary bladder, urethra; Mechanism of urine formation-Ultrafiltration, selective reabsorption, tubular secretion; Role of kidney in osmo-regulation

### Unit -5: Lymphatic system and immune system

[15Hrs]

Lymphoid organ-Bone marrow, Thymus, spleen ,Lymph node, Composition and function of lymph, Immunity, Types of immunity-Innate immunity and acquired immunity, Antigen and antibody, Hypersensitivity, Autoimmunity



## **TEXT BOOKS**

1. Tortora and Bryan: Anatomy and Physiology
2. Khurana: Anatomy and Physiology

## **BOOKS FOR REFERENCE**

1. Bijlani R. L.: Understanding of Human Physiology, Jaypee Brothers Medical Publishers Pvt. Ltd, New Delhi, 2011
2. Arthur C Gyton & Hall: Medical Physiology, Reed Elsevier India Pvt. Ltd, New Delhi, 2006
3. Chatterji C. C: Human Physiology Vol. I & II, Medical Allied Agency, Kolkata, 2004
4. Sharma J. P: A-Z Illustrated Encyclopaedia of Human Anatomy & Physiology, KhelSahiyta Kendra, Delhi, 2005
5. Pal G. K & others: Textbook for practical Physiology, Orient Longman Pvt. Ltd, Hyderabad, 2007



## Subject Name: Introduction of Great Yogis

Subject Code: BSY-CT204

### OBJECTIVES:

- To know about the great yogis
- To know about the yoga life of the yogis

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Assessment	Final Exam	Internal Exam
80	20		

### Unit- I : Differeat Great Masters yoga

[15 Hrs]

Gautam Buddha, Mahaveer Swami, Aadigura Shankaracharya, Kumaril Bhatta, Ramanujacharya.

### Unit- II : Hatha Yogis

[15 Hrs]

Guru Gorakhanath, Swami Swatmarama, Britahari, Yogini lalleswari, Abhinavagupta.

### Unit- III : Great Bhakta Yogis

[15 Hrs]

Surdas, Tulsidas, Sant Ravidas, Kabirdas, Meera Bai, Sant Tukaram, Karma Bai , Chaitnya Mahaprabhu, Sant Jnayaneshwar.

### Unit- IV : Modern Yogis

[15 Hrs]

Shri Aurvindo, Ramkrishna paramhansam, Maharshi Ramana, Swami Dayanda Saraswati, Swami Vivekananda, Swami Ramatirtha.

### Unit- V : Contemporary Yogis

[15 Hrs]

T. krishnmacharaya, Mahesh Yogi, BKS Iyengar, Pt. Shiram Sharma Acharya, Lahiri Mahashaya.

### Text Book

1. Hindu Samskriti Ank : Geeta Press, Gorakhpur



## Subject Name: Yoga Practicum

### Subject Code: BSY-CP 205

#### Objectives:

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

- Understand the principle and practice of Yogic practices.
- Have an understanding about the practices that help practitioners to lead to meditation.

SCHEME OF EXAMINATION			
Total Marks: <b>100</b>			
<b>Theory : nil</b>		<b>Practical : 100</b>	
Final Exam	Internal Exam	Final Exam	Internal Exam
		<b>80</b>	<b>20</b>

#### Unit-1: Shatkarma

[15 Hrs.]

Dhauti, Neti, Nauli Madhyama, Vama, Dakshina and Nauli Chalana, Trataka (Jatru and Jyoti)

#### Unit-2: Pranayama

[15 Hrs.]

Nadi Shodhana (Technique 1: Same Nostril Breathing), Nadi Shodhana (Technique 2: Alternate Nostril Breathing), Nadi Shodhana (Technique 3: Alternate Nostril Breathing + Antar kumbhak); Nadi Shodhana (Puraka + Antar Kumbhak + Rechaka + Bahya Kumbhak) (1:4:2:2); Bhramari Pranayama

#### Unit-3: Practices leading to meditation

[15 Hrs.]

Pranav and Soham Japa; Yoga Nidra (1,2,3); Antarmauna; Ajapa Dharana (Stage 1, 2, 3); Mind sound resonance technique (MSRT)

#### Unit-4: Yogasana

[15 Hrs.]

Dandasana, Swastikasana, Padmasana, Vajrasana, Supta Vajrasana; Kagasana, Utkatasana, Gomukhasana, Ushtrasana, Shashankasana; Janusirasana, Paschimottanasana, Mandukasana, Utthana Mandukasana; Vakrasana, Ardha Matsyendrasana, Marichayasana, Simhasana

#### Unit-5: Yogasana (Prone line Postures)

[15 Hours]

Makarasana, Bhujangasana, Shalabhasana, Dhanurasana, Kapotasana, Raja Kapotasana

#### TEXT BOOKS

1. Swami Niranjanananda Saraswati: Asana Pranayama Mudra Bandha; Bihar school of yoga publications; Munger, 2001
2. Swami Niranjanananda Saraswati: Dharana Darshan; Bihar school of yoga publications; Munger, 2001



## BOOKS FOR REFERENCES

1. Basavaraddi I. V. & Others : Teachers Manual for School Teachers, MDNIY, New Delhi, 2010
2. Joshi, K.S. : Yogic Pranayama, Oriental Paperback, New Delhi.
3. Swami Kuvalyananda : Pranayama, Kaivalyadhama, Lonavla, 2009
4. Iyengar, B.K.S.: Light on Pranayama, Harper Collins, Swami Vivekanand Yoga Prakashan, 2012
5. Nagendra, H.R: The Art and Science of Pranayama, Swami Vivekanand Yoga Prakashan, 2005, Bangaore.
6. Nagendra, H.R: Mind sound reasonance technique, Swami Vivekanand Yoga Prakashan, 2002, Bangaore.



# Semester-III





## Subject Name: Essence of Bhagavad Gita for holistic living

Subject Code: BSY-CT301

### Objectives:

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

- Understand the significance of Bhagavad gita and its essence.
- Understand the concept of Atman, Paramatman, Sthitaprajna.
- Have a deep understanding between the qualities of a Karma and Bhakti yogi.
- Understand the concept of Ahara its role in healthy living.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit – 1: Significance of Bhagavadgita as synthesis of yoga [15 Hrs.]

Introduction to Bhagavadgita; Bhagavadgita and traditional commentaries; Bhagavadgita: a synthesis of Yoga; Definitions of Yoga in Bhagavadgita and their relevance; Bhagavadgita and their relevance in Yoga Sadhana

### Unit-2: Concept of Atman, Parmatman and characteristic of Sthita prajna in Bhagavdgita [15 Hrs.]

Concept of Samkhya Yoga in Bhagavadgita; Concept of Sthita Prajna, stages and characteristic of it; Concept of Atman (Purusha), Jivatman; Concept of Paramatman (Parmeshwar or Purushottam) their characteristic in Bhagavadgita; Concept of Jnana and Jnana Yoga, origin of the world as described in Bhagavadgita

### Unit-3: Karma yoga in Bhagavadgita [15 Hrs.]

Concept of karma Yoga in Bhagavadgita; Dhyana Yoga together with devotion as described in Bhagavadgita and Nature of Dhyana in Bhagavadgita.

### Unit-4: Bhakti yoga in Bhagavadgita [15 Hrs.]

Concept of Bhakti, concept of Shraddha and its relevance as described in Bhagavad Gita Yoga of Bhakti and Bhakta as described in Bhagavadgita.

### Unit – 5: Concept of ahara and role of Bhagavadgita in healthy living [15 Hrs.]

Role of Bhagavadgita in day to day life; Concept and classification of Ahara as described in Bhagavadgita; Ahara and its role in Adhyatma Sadhana; Concept of Triguna in the context of Bhagavadgita; Theory of Adjustment in healthy living as described in Bhagavadgita

### TEXT BOOKS

1. Swami Gambhiranand ; Bhagavadgita (with Gudharth Dipika) Sri Ramkrishna Matha Madras



2. Swami Gambhiranand ; Bhagvatgita with the commentary of Sankaracharya, Advita Ashrama, Kolkata, 2003
3. Swami Ramsukhadas; Srimad Bhagavadgita (Sadhaka Sanjivani) Gita Press Gorakhpur
4. Swami Ranganathananda ; Bagavadgita, Advaita Ashrama Sub- Dept-5 Deli Entally Road Kolkata

#### **BOOKS FOR REFERENCE**

1. Swami Shrikantananda; Gita Darshana, Indian Institute of Human Excellence Hyderabad
2. Swami Tapasyananda ; Srimadbhgavadgita Sri Ramkrishna Matha Madras
3. Swami Abhidananda Bhagvatgita, the divine message, Ramakrishna Vedanta Matha, Kolkata, 1990
4. Swami Raghvendrananda; Universal message of the Bhagvatgita, Advita Ashrama, Kolkata, 2000



## Subject Name: Yoga and Holistic Health

Subject Code: BSY-CT302

### Objectives:

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

- Understand the concept of health and disease.
- Have understanding about yogic concepts of health and healing.
- Yogic principle and practices for healthy living.
- Understand the concept of Ahara its role in healthy living.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit - 1: CONCEPT OF BODY, HEALTH AND DISEASE

[15 Hrs.]

Definition & Importance of Health According to WHO; Dimensions of Health: Physical, Mental, Social and Spiritual; Concept of Body, Health and Disease in Yoga – Yogic concept of Body from Taittiriya Upanishad, Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi according Yoga Vasistha and remedial measures; Holistic health care through Yoga.

### Unit - 2: CONCEPT OF TRIGUNAS, PRANA

[15 Hrs.]

Concepts of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing; Concept of Pancha-koshas & Shat-chakra and their role in Health and Healing

### Unit - 3: CAUSES OF ILL HEALTH AND REMEDIAL MEASURES ACCORDING TO PATANJALI

[15 Hrs.]

Potential causes of Ill-health: Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva; Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi)

### Unit - 4: YOGIC PRINCIPLES AND PRACTICES OF HEALTHY LIVING - I

[15 Hrs.]

Dietary regulation according to Hatha yoga and Bhagavadgitha; shatkriyas and tatva shuddhi; Asana for mind body and spirit; Practice for pranamaya kosha – pranayama; Definition of Mental Health & Mental Hygiene & Total Health ; Indian approach to personality and personality integration Psycho-Social Implications of yoga; Adjustment Personal and interpersonal adjustment through yogic methods Niyamas & Yamas



## **Unit - 5: YOGIC PRINCIPLES AND PRACTICES OF HEALTHY LIVING - II**

**[15 Hrs.]**

Attitude change towards yoga through individualized counselling, Psychological & yogic method Tackling ill effects of conflict and Frustration; Yogic methods Yoga Psychology for Adjustment: Psychological, philosophical and yogic counselling; the remedial measures; Action in relaxation-the secret of Karma Yoga; Unattached action, not to the fruits of action, equanimity in success and failure.

### **TEXT BOOK**

1. Ghosh, Shyam : The Original Yoga Munshiram Manoharlal, New Delhi, 1999)
2. Jnanananda Bharati : Essence of Yoga Vasishta Pub: Sanata Books, Chennai
3. Hatha Ratnavali: Tirumala Tirupathi Devasthanana, Andhra Pradesh.

### **REFERENCE BOOKS:**

1. Gheranda Samhita: Shri Sadguru Publication, New Delhi.
2. Dr R Nagarathna and Dr H R Nagendra: Yoga and Health, Swami Vivekananda Yoga Prakashana, 2002
3. Dr R Nagarathna and Dr H R Nagendra: Yoga for Promotion of Positive Health Published by SVYP, Bangalore
4. Dr Nagendra H R : The Secret of Action - Karma Yoga, Published by SVYP, Bangalore, 2003



## Subject Name: Fundamentals of Naturopathy and Mental Health

Subject Code: BSY-CT303

### Objectives:

- Understand the principle of Naturopathy for Therapy
- Understand the cause of Mental illness and the role of yoga for its healing.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit-1: INTRODUCTION TO NATUROPATHY

[15 Hrs.]

General introduction to Naturopathy; Naturopathy – its definition, meaning, scope and limitations; History of Naturopathy – Indian and Western; Comparative study of the Naturopathy with other systems of Medicine; Catechism of Nature cure.

### Unit-2: PRINCIPLES AND CONCEPTS OF NATUROPATHY

[15 Hrs.]

Composition of the human body according to Naturopathy, Laws of Nature: Pancha-Mahabhootas, Shareera Dharmas – Ahara, Nidra, Bhaya, Maithuna; Fundamental principles of Naturopathy; Natural rejuvenation and vitality, how to acquire natural immunity; importance of Physical & Mental Hygiene and prevention of diseases.

### Unit-3: NATUROPATHY

[15 Hrs.]

Hydrotherapy : Introduction, definition, scope, history, principles; role of hydrotherapy in prevention of diseases; Upavasa (Fasting): Introduction, definition, scope, history, principles and types; its role in disease prevention, health promotion; concept of de-toxification.

### Unit-4: Concept of Diet and Massage

[15 Hrs.]

Diet: Introduction, definition, scope, types and its principles; role of Naturopathy diet in disease prevention and , health promotion; Massage: Introduction, definition, scope, history, its principles and manipulative techniques; Different types of Massages and their role in disease prevention, and health promotion.

### Unit-5: Yoga for Mental Health

[15 Hrs.]

Mental Health: Meaning and Importance; Yogic Perspective of Mental Health; Yoga nidra, Kuntha, samayojan, stress, emotions, feelings, adjustments Yogic Concepts and Techniques in Patanjala Yoga Sutra and Bhagwadgita for Promoting Mental Health; Need of Spiritual Growth for Mental Health; Specific Yogic Practices for Promotion of Mental Health: Memory ,Intelligence,Breath; Awareness, Shavasana, Yoganidra, Pranayama and Meditation; Yogic Life-style.



### **TEXT BOOKS**

1. S. D. Dwivedi : Naturopathy for perfect health, Kalpaz Publication Delhi, 2002
2. Pravesh Handa : Naturopathy and Yoga, Kalpaz Publication Delhi, 2006
3. S.J.Singh. : My Nature Cure or Practical Naturopathy
4. M.K.Gandhi : The story of my experiment with truth

### **REFERENCE BOOKS**

1. R.K.Garde : Ayurvedic for Health and Long life Harry Benjamin. : Everybody's Guide to Nature Cure
2. M.K.Gandhi. : My Nature Cure



## Subject Name: Basics of Samskritam

### Subject Code: BSY-CT304

#### Objectives:

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

- Read and understand the colloquial words of Sanskrit.
- Communicate and comprehend Sanskrit to the best of their ability.
- Write in Sanskrit and have some idea about grammar.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

#### Unit-1: संस्कृतभाषा परिचय

संस्कृतभाषा परिचय, योगशास्त्र के अध्ययन में संस्कृत का महत्व और योग एवं संस्कृत का अन्तःसम्बन्ध। माहेश्वरसूत्र। संस्कृतवर्णमाला, स्वर, व्यंजन वर्गज्ञान सहित (रोमन लिपि में लेखन एवं पठन); वर्णों के उच्चारणस्थान और प्रयत्न ज्ञान। प्रत्याहार निर्माण विधि एवं प्रत्याहार ज्ञान। कारक, विभक्ति (सुप् और लिङ्), लिङ्ग, वचन, पुरुष, लकार एवं वाक्याङ्ग परिचय। संस्कृत संख्याएं (एक से सौ तक)

#### Unit-2: शब्दरूप

अजन्ताशब्दरूप—राम, बालिका, पुस्तक, मुनि, रुचि, वारि शब्दों के रूप अर्थज्ञान सहित। अजन्तशब्दरूप—नदी, भानु, धेनु, मधु, पितृ, मातृ शब्दों के रूप अर्थज्ञान सहित। सर्वज्ञान शब्दरूप—अस्मद्, युष्मद्, तत् (तीनों लिङ्गों में), एतद् (तीनों लिङ्गों में), किम् (तीनों लिङ्गों में), भवत् (तीनों लिङ्गों में) शब्दों के रूप अर्थज्ञान सहित। हलन्तशब्दरूप—भगवत्, नामन्, जगत् शब्दों के रूप अर्थज्ञान सहित।

#### Unit-3: धातुरूप

भू, अस्, पठ्, मृद्, कृ, लिख्, नम्, दृश्, धातुओं के पांच लकारों (लट्, लृट्, लङ्, लोट्, लिङ्) में रूपज्ञान एवं वाक्य निर्माण अर्थज्ञान सहित। वृद्, गम्, स्था, पा (पिब) दा, शक्, आप्, प्रच्छ, धातुओं के पांच लकारों (लट्, लृट्, लङ्, लोट्, लिङ्) में रूपज्ञान एवं वाक्य निर्माण अर्थज्ञान सहित। ज्ञा, कथ, चिन्त्, ब्रू, श्रु, नी, याच्, खाद्, शीङ्, धातुओं के पांच लकारों (लट्, लृट्, लङ्, लोट्, लिङ्) में रूपज्ञान एवं वाक्य निर्माण अर्थज्ञान सहित। प्रथमदीक्षा के प्रथम एवं द्वितीय अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।

#### Unit-4: वाक्यनिर्माण

प्रथमदीक्षा के तृतीय अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास। प्रथमदीक्षा के चतुर्थ अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास। प्रथमदीक्षा के पंचम अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास। प्रथमदीक्षा के षष्ठ अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।

#### Unit-5: सम्भाषणम् (संस्कृत वार्तालाप)

संस्कृत में स्वपरिचय, योग—पाठ्यक्रम परिचय, नगर परिचय, प्रान्त परिचय। संस्कृत वार्तालाप — योगदिवस, योगदर्शन, गीता, हठप्रदीपिका, आसान तथा प्राणायाम।



## TEXT BOOKS

1. Moorty CLN : First Book of Sanskrita, Chaukhabha Sanskrit Series, Varanasi, 2010
2. Max Muller : A Sanskrit Grammar Parimal Publication, Delhi, 2012
3. Goldmom P R : Devavanopravesika : An introduction to the Sansrit languages, MLBD, New Delhi , 2011

## BOOKS FOR REFERENCE

1. Perry E D : A Sanskrit Primer, MLBD, New Delhi, 2004
2. Kala MR : A Higher Sasnkrit Grammer for college students, MLBD, New Delhi, 2011
3. द्विवेदी कपिल देव: प्रारम्भिक रचनानुवाद कौमुदी; विश्वविद्यालय प्रकाशन वाराणसी, 2011





## Subject Name: Yoga Practicum

### Subject Code: BSY-CP305

#### Objectives:

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

- Understand the principle and practice of each practice.
- Demonstrate each practice skillfully.
- Explain the procedure, precaution, benefits and limitations of each practice.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : NA		Practical : 100	
Final Exam	Internal Exam	Final Exam	Internal Exam
		80	20

#### Unit-1: Yogasana (Sitting Postures) [15 Hours]

Dandasana, Swastikasana, Padmasana, Vajrasana, Supta Vajrasana; Kagasana, Utkatasana, Gomukhasana, Ushtrasana, Shashankasana; Janusirasana, Paschimottanasana, Mandukasana, Utthana Mandukasana; Vakrasana, Ardha Matsyendrasana, Marichayasana, Simhasana

#### Unit-2: Yogasana (Supine lying Postures) [15 Hours]

Pavanamuktasana; Utthana-padasana, Ardha Halasana, Halasana, Setubandhasana, Sarvangasana, Matsyasana, Chakrasana, Shavasana

#### Unit-3: Yogasana (Prone line Postures) [15 Hours]

Makarasana, Bhujangasana, Shalabhasana, Dhanurasana, Kapotasana, Raja Kapotasana

#### Unit-4: Bandha & Pranayama (with Antar & Bahya Kumbhaka) [15 Hours]

Jivha Bandha, Jalandhara Bandha, Uddiyana Bandha, Mula Bandha, Maha Bandha, Tri Bandha Surya-bheda and Chandra-bheda Pranayama, Ujjayi Pranayama, Sheetal Pranayama, Shitkari Pranayama, Bhastrika Pranayama

#### Unit-5: Practices leading to Meditation [15 Hours]

Ajapa Dharana, Yoga Nidra, Practices leading to Breath Meditation, Practices leading to Om Meditation.

#### TEXT BOOKS

1. Swami Dharendra Bhrahmachari : Yogasana Vijnana, Dharendra Yoga Publications, New Delhi.
2. Swami Kuvalyananda: Asana Kaivalyadhama, Lonavla
3. Swami Satyananda Saraswati: Asana, Pranayama, Bandha, Mudra Bihar School of Yoga, Munger



## **BOOKS FOR REFERENCES**

1. Basavaraddi, I.V. & others : Yogasana: A Comprehensive description about Yogasana, MDNIY, New Delhi, 2011.
2. Iyengar, B.K.S. : Light on Yoga, Harper Collins Publishers.
3. Tiwari, O.P. : Asana Why and How? Kaivalyadhama, Lonavla.
4. Jayadev, Yogendra : Cyclopaedia Yoga (Vol. I-IV), The Yoga Institute, Santacruz, Mumbai.
5. Saraswati, Swami Satyanand : Asana, Pranayama, Bandha, Mudra Bihar School of Yoga, Munger.



## Semester-IV



## Subject Name: Four Streams of Yoga

Subject Code: **BYS-CT401**

### Objectives:

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

- Understand the four paths/streams of yoga with indepth understanding.
- Have an indepth understanding about their similarities and dsisimilarities.
- Understand the principle and conceptualize each stream

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

#### Unit-1: JnanaYoga

[15 Hrs.]

Sadhana Chatustaya, Stages of JnanaYoga practice (shravan, manana, Nidhidhyasana), States of consciousness, The concepts of ida, pingla and thesushumna the central channel of energy running along the spine.

#### Unit-2: Bhakti Yoga

[15 Hrs.]

Navavidha Bhakti, Qualities of a bhakta, The pronunciation, chanting, knowledge, benefits of Sanskrit chants, hymns, bhajans, Satsang and the uplifting meaning of the chants helping to thin the activities of the mind, Mantra chanting, and their effect on the nadi and the chakras, Demonstrated ability to create a bhakti bhava during the chanting and singing

#### Unit-3: Karma Yoga

[15 Hrs.]

The concept and meaning of karma Yoga, Concept of Nishkama Karma, Prerequisites for a sthitaprajna, Sthitaprajnalakshana, The law of karma

#### Unit-4: Raja Yoga

[15 Hrs.]

Concepts and principles of PatanjalaYoga; Karma Shuddhi (Yama, Niyama); Snayu Shuddhi (Asana); Prana Shuddhi (Pranayama); Indriya and Mano Shuddhi (Pratyahara); Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi)

#### Unit-5: Mantra Yoga

[15 Hrs.]

Concepts and principles of Mantra & Japa.

### TEXT BOOKS

1. Swami Bhuteshananda : Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
2. Swami Vivekananda :J nana Yoga, Bhakti Yoga, Karma Yoga, Raja Yoga. Advaita Ashrama, Calcutta, 2000



**Subject Name: Basis of Yoga Therapy****Subject Code: BSY-CT402****Objectives:**

- To impared knowledge about various disease and their treatment through yogic processes

<b>SCHEME OF EXAMINATION</b>			
Total Marks: 100			
<b>Theory : 100</b>		<b>Practical : Nil</b>	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

**Unit-1: Yogic concepts of health and disease****[15 Hrs.]**

Definition & Importance of Health According to WHO; Dimensions of Health: Physical, Mental, Social and Spiritual; Concept of Health and Disease in Indian Systems of Medicine i.e. Ayurveda, Naturopathy and Siddha Systems of Medicine, Utility and Limitations of these systems in health and healing; Yogic Concept of Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi, Yogic concept of Health and Disease, role of Yoga in preventive health care – Heyam dukham anagamam; Potential causes of Ill-health: Tapatrayas and Kleshas, Physical and Physiological manifestation of Disease: Vyadhi, Alasya, Angamejayatva and Svasa-prashvasa.

**Unit-2: Yogic concepts of Mental and Emotional Health****[15 Hrs.]**

Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavasthitatva; Shuddhi Prakriyas in Yoga : Role of Shuddhi Prakriyas in preventive and curative Health, Karma Shuddhi (Yama, Niyama), Ghata Shuddhi (Shat-karma), Snayu Shuddhi (Asana), Prana Shuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Mana, Buddhi, Ahamkar and Chitta Shuddhi (Dharana, Dhyana and Samadhi)

**Unit-3: Yogic concepts for health and healing****[15 Hrs.]**

Concepts of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing; Cocept of Pancha-koshas & Shat-chakra and their role in Health and Healing; Concept of Abhyas and Vairagya, Chitta and Chitta Prasadana, Kriya-yoga, Ashtanga Yoga of Patanjali for Health and Healing; Concept of Cleansing (Shuddi), its role and importance in Health and Healing; Concept of Swara Yoga and its efficacy in Health and Healing

**Unit-4: Yogic principles and practices of healthy living****[15 Hrs.]**

Yogic Principles of Healthy Living: Aahara, Vihara, Aachara and Vichara; Role of Yogic Positive Attitudes (Maitri, Karuna, Mudita and Upeksha) for Healthy Living, Concept of Bhavas and Bhavanas with its relevance in Health and well-being; Yogic principles of Lifestyle



management and its role in prevention of disease and health promotion; Yogic Principles of Diet and its role in Healthy living; Yogic Practices of Healthy living : i.e. Yama, Niyama, Shat-karma, Asana, Mudra & Bandha Pranayama, Pratyahara, Dharna and Dhyana, and their role in Healthy living.

**Unit-5: Health benefits of yogic practices**

**[15 Hrs.]**

Psycho-physiological effects and health benefits of Yogasana , Pranayama, Shatkarma, Bandha and Mudra, and Meditation

**TEXT BOOKS**

1. Preeti Goel and Rita Jain : Spectrum of Health (Sports Publications, New Delhi, 2003)
2. M. M. Gore : Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008)
3. Dr. K. Krishna Bhat: The power of Yoga

**BOOKS FOR REFERENCE**

1. Dr. R. S. Bhogal : Yoga Psychology, Kaivalyadhama Publication
2. Dr. Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
3. T.S. Rukmani: Patanjala Yoga Sutra
4. Sahay, G. S.: Hatha Yoga Pradeepika, MDNIY Publication, 2013
5. Kdham : Gheranda Samhita, Kaivalyadhama, Lonavla,



## Subject Name: Fundamentals of Biochemistry

Subject Code: BSY-CT403

### Objectives:

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

- Understand the biomolecules and their role in our body.
- Have an understanding about the protein, carbohydrate, lipid metabolism.
- Understand the role of Biochemistry and its test as the indicators to know about the progress of a disease.

SCHEME OF EXAMINATION			
<b>Total Marks: 100</b>			
<b>Theory : 60</b>		<b>Practical : 40</b>	
Final Exam	Internal Exam	Final Exam	Internal Exam
<b>40</b>	<b>20</b>	<b>30</b>	<b>10</b>

### Unit - 1: Introduction to Bio-chemistry

[15 Hrs.]

Introduction to Bio-chemistry; chief intracellular components; Introduction to chemical receptors/co-receptors, cell to cell communication, channels & transportation; Definition and classification of Vitamins and their Clinical importance; Basics of Molecular mechanism of O<sub>2</sub> transport and storage, classification and bio-chemical structure of immunoglobulins with functions; Fundamentals of Bio-Energetics: Biological Oxidation, General Concept of oxidation, features of cellular Oxidations-respiratory chain oxidative phosphorylations

### Unit – 2: Metabolism of carbohydrates

[15 Hrs.]

Carbohydrates: Definition, classification with examples and general functions; Basics of Carbohydrate Metabolism (I) - Glycolysis; Aerobic and Anerobic, metabolism of glycogens; glycogenesis, glycogenolysis, glyconeogenesis, Regulation of glycogen metabolism; Basics of Carbohydrate Metabolism (II) - Kreb's Cycle (T.C.A), Regulation of Blood glucose, Hexose Mono Phosphate (HMP Shunt); Concept of isomerism, types & mode of action; Integration of metabolism and catabolism

### Unit-3: Metabolism of lipids

[15 Hrs.]

Lipids: definition, classifications and general functions; Intoduction to essential fatty acids, cholesterol, Blood lipids, brief review of lipoproteins; Basics of Lipid Metabolism - Oxidation of fatty acids, cholesterol synthesis and fatty liver.

### Unit-4: Metabolism of proteins

[15 Hrs.]

Proteins: definition, classification and Bio-medical Importance, Plasma Proteins and functions; Definition, classification and nomenclature of Enzymes, basic introduction to Enzymology and regulation of Enzymatic activity



**Unit- 5: Functional Bio-chemistry****[15 Hrs.]**

Introduction to hormones, molecular basis of hormonal action; Introduction to common metabolic disorders; Basic techniques for estimation of different Bio-chemical markers i.e., diffusion, Osmosis, Electro-phoresis, Quantative and Analytical Titration; Introduction to investigations related to Hepatobiliary diseases i.e., Serumbiliru, Amino-Transferases, Alkiline Phosphatase, LDH; Basics of routine Bio-chemical tests for Kidney and related common diseases i.e., Blood Urea, Blood Urea Nitrogen (BUN), Serum Createnin, Serum Uric Acid with estimation of Urinal Protien and Sugar.

**TEXT BOOKS**

1. Pankaja Naik: Bio-chemistry, Jaypee Brothers Medical Publishers Ltd, Delhi, 2010
2. Jacob Anthikad:Bio-chemistry for Nurses, Jaypee Brothers Medical Publishers Ltd, Delhi, 2008
3. K. Malhotra:Bio-chemistry for Students, Jaypee Brothers Medical Publishers Ltd, Delhi, 2012
4. N. Haridas:Bio-chemistry made easy:A Problem (Solving ) based approach, Jaypee Brothers Medical Publishers Ltd, Delhi, 2012
5. Arvind S Yadav:Comprehensive practical and Viva in Bio-chemistry, Jaypee Brothers Medical Publishers Ltd, Delhi, 2004

**BOOKS FOR REFERENCE**

1. Robert K Murray & others:Harper's Illustrated Bio-chemistry, 26th Edition, 2003, McGraw Hill, US Shankara, Shivaraja,
2. M. K. Ganesh :Laboratory Manual of Practical Biochemistry, Jaypee Brothers Medical Publishers Ltd, Delhi, 2008
3. S. K. Sawhney & Randhir Singh:Introductory Practical Biochemistry, 2nd edition, Alpha Science International Ltd. 2005
4. Chawala Ranjana:Clinical Biochemistry (Methods & Interpretations), 3rd edition, Jaypee Brothers medical Publishers Ltd. 2006
5. Rajesh Karajgaonkar:Clinical Biochemistry, Jaypee, 2008





**Subject Name: Sanskrit****Subject Code: BSY-CT404 Objectives:**

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

- Read and understand the colloquial words of Sanskrit.
- Communicate and comprehend Sanskrit to the best of their ability.
- Write Sanskrit with better grammatical skill.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

**Unit-1: संस्कृत भाषा परिचय****[15 Hrs.]**

पठ् एवं कृ धातु का कर्मवाच्यरूप ज्ञान पांच लकारों (लट्, लृट्, लङ्, लोट्, लिङ्) में एवं वाक्य निर्माण अर्थज्ञान सहित। अस् एवं भू धातु का भाववाच्यरूप ज्ञान पांच लकारों (लट्, लृट्, लङ्, लोट्, लिङ्) में एक वाक्य निर्माण अर्थज्ञान सहित। कर्तृवाच्य एवं कर्मवाच्य का परिचय वाक्यरचना, वाक्यरूपान्तरण एवं अनुवाद। कर्तृवाच्य का परिचय वाक्यरचना, वाक्यरूपान्तरण एवं अनुवाद।

**Unit-2: कृदन्त****[15 Hrs.]**

शतृ एवं शानच् प्रत्ययों से शब्दनिर्माण, वाक्यरचना और अनुवाद। क्त्वा, ल्यप्, प्रत्ययों से शब्दनिर्माण, वाक्यरचना और अनुवाद। क्त एवं क्तवतु प्रत्ययों से शब्दनिर्माण, वाक्यरचना और अनुवाद। तव्यत् अनीयर एवं यत् प्रत्ययों से शब्दनिर्माण, वाक्यरचना और अनुवाद।

**Unit-3: सन्धि एवं भाषाभ्यास****[15 Hrs.]**

अच्, हल् एवं विसर्ग सन्धियों का ज्ञान एवं सन्धि विच्छेद का अभ्यास। भगवद् गीता के द्वितीय अध्याय क प्रथम 20 श्लोकों में कारक एवं क्रियापदों का अनुसन्धान एवं सस्वर श्लोकपाठ। संस्कृत से हिन्दी/अंग्रेजी में अनुवाद। संस्कृत में परस्पर वार्तालात एवं मौखिक व्याख्यान का अभ्यास।



**Unit-4: भाषादक्षता****[15 Hrs.]**

द्वितीयदीक्षा के प्रथम एवं द्वितीय अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास। द्वितीयदीक्षा के तृतीय अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास। द्वितीयदीक्षा के चतुर्थ अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास। द्वितीयदीक्षा के पंचम एवं षष्ठ अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।

**Unit-5: संस्कृत में भाषण तथा लेखन :****[15 Hrs.]**

संस्कृत में स्वपरिचय, योग-पाठ्यक्रम परिचय, नगर परिचय, प्रान्त परिचय। संस्कृत वार्तालाप – योगदिवस, योगदर्शन, गीता, हठप्रदीपिका, आसन तथा प्राणायाम।

**TEXT BOOKS**

1. DEAVANIPRAVESIKA- : Robert p. goldman: MLBD-NEWDELHI.
2. प्रारम्भिक रचनानुवाद कौमुदी : कपिल देव द्विवेदी; विश्वविद्यालय प्रकाशन वाराणसी।
3. रचनानुवादकौमुदी: कपिल देव द्विवेदी; विश्वविद्यालय प्रकाशन वाराणसी।

**BOOKS FOR REFERENCE**

1. प्रौढ़-रचनानुवादी: कपिल देव द्विवेदी;; विश्वविद्यालय प्रकाशन वाराणसी।
2. प्रथमदीक्षा – राष्ट्रिय संस्कृत संस्थान नई दिल्ली।
3. द्वितीयदीक्षा – राष्ट्रिय संस्कृत संस्थान नई दिल्ली।



## Subject Name: Yoga Practicum

### Subject Code: BYC-CP405

### Objectives

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

- Understand the principle and practice of each practice.
- Demonstrate each practice skillfully.
- Explain the procedure, precaution, benefits and limitations of each practice.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : NA		Practical : 100	
Final Exam	Internal Exam	Final Exam	Internal Exam
		80	20

#### Unit-1: Shatkarmas

[15 Hrs.]

Vastra Dhauti, Sutra Neti, Kapalbhathi, Nauli Chalana, Jyoti Trataka, Agnisara

#### Unit-2: Yogasanas -I

[15 Hrs.]

Tadasana, Vrikshasana, Urdhva-Hastottanasana, Kati Chakrasana ; Ardha Chakrasana, Pada Hastasana; Trikonasana, Parshva Konasana; Veerabhadrasana; Bhunamanasana, Hanumanasana; Dandasana, Swastikasana, Sidhasana, Bhadrasana, Padmasana, Vajrasana; Kagasana, Utkatasana, Gomukhasana, Ushtrasana, Shashankasana, Kurmasana, Navasana, Baddha Padmasana, Uttitha Padmasana; Janusirasana, Paschimottanasana, Supta Vajrasana; Mandukasana, Utthana Mandukasana; Vakrasana, Ardha Matsyendrasana , Marichayasana, Simhasana

#### Unit-3: Yogasanas -I

[15 Hrs.]

Pavanamuktasana, Utthana-padasana, Ardha Halasana, Setubandhasana, Halasana, Karna Peedasana, Sarvangasana, Matsyasana , Chakrasana, Shavasana, Makarasana, Bhujangasana , Shalabhasana, Dhanurasana, Kapotasana , Raja Kapotasana, Bakasana, Kukkutasana, Garbhasana, Matsyendrasana, Marjariasana, Padangusthasana, Hastapadangusthasana, Garudasana, Vatayanasana, Natarajasana, Mayurasana, Sirshasana; Ekapada and Dwipada Kandarasana

#### Unit-4: Bandha and Mudras

[15 Hours]

Jivha Bandha, Jalandhara Bandha, Uddiyana Bandha, Mula Bandha, Maha Bandha, Tri Bandha Yoga Mudra, Maha Mudra, Shanmukhi Mudra, Shambhavi Mudra, Kaki Mudra, Tadagi Mudra, Vipareet Karni Mudra, Simha Mudra

#### Unit-5: Pranayama & meditation

[15 Hours]

Nadi Shodhana pranayama, Bhramari Pranayama, Suryabhedana and Chandrabhedana Pranayama , Ujjayi Pranayama, Sheetali Pranayama, Shitkari Pranayama, Bhastrika Pranayama, Pranava and Soham Japa, Antar mouna, Dharana, Pracice of Dhyana, Breath Meditation, Om Meditation Vipassana Meditation , Preksha Meditation



### **TEXT BOOKS**

1. Swami Dharendra Bhramhachari :Yogic Sukshma Vyayama, Dharendra Yoga Publications, New Delhi, 1980
2. Swami Dharendra Bhramhachari:Yogasana Vijnana,Dharendra Yoga Publications, New Delhi, 1966
3. Swami Kuvalyananda:Asana, Kaivalyadhama, Lonavla, 1983
4. Swami Satyananda Saraswati:Asana, Pranayama, Bandha, Mudra,Bihar School of Yoga, Munger, 2005-06

### **BOOKS FOR REFERENCES**

1. Basavaraddi, I.V. & others:Yogasana: A Comprehensive description about Yogasana, MDNIY, New Delhi, 2011.
2. Basavaraddi, I.V. & others:Yogic Sukshma Evam Sthula Vyayama, mDNIY, New Delhi, 2011.
3. Iyengar, B.K.S.:Light on Yoga,Harper Collins Publishers, 2009
4. Sen Gupta Ranjana:B.K.S. Iyengar Yoga, A Dorling Kindersley Limited, 2001
5. Saraswati, Swami Satyananda:Surya Namaskar, Yoga Publication Trust, Munger, 2004
6. Tiwari, O.P.:Asana Why and How? Kaivalyadhama, Lonavla, 2011



## Subject Name: Biochemistry Practical

Subject Code: BSY-CP406

### Objectives

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

- Understand the principle and procedure of each experiment.
- Demonstrate each experiment skillfully.
- Interpret the result during experiment.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 60		Practical : 40	
Final Exam	Internal Exam	Final Exam	Internal Exam
		<b>30</b>	<b>10</b>

#### Unit-1: Demonstration

Identification and Analysis of Constituents in Normal Urine –Urea-Uric acid – creatinine – Calcium and Phosphorous – Sulphate Ammonia – Chloride; Identification and Analysis of Constituents in Abnormal Urine – Protein, blood, bile pigments – bile salts, sugar, Ketone bodies;

#### Unit-2: Demonstration

Identification and Analysis of glucose, fructose, lactose, maltose, sucrose; Identification and Analysis of Albumin, Casein, gelatin.

#### Unit-3: Demonstration

Identification and Analysis of Blood glucose; Identification and Analysis of Blood Urea; Identification and Analysis of Urinary creatinine.

#### Unit-4: Demonstration

Identification and Analysis of Gastric juice; Identification and Analysis of Urinal Chlorides.

**Unit-5: Writing of Procedure and repetition of all the above mentioned biochemical tests**

#### TEXT BOOKS

1. Keith Wilson & John Walker :Principles & Techniques of Practical Biochemistry, 5th edition
2. V.K.Malhotra :Practical Biochemistry for students, 4th edition, 2008, 12th edition 2012, Jaypee Brothers medical Publishers Ltd.



## REFERENCE BOOKS

1. ShrutiMohanty&Aparna B. Varma:Practical Clinical Biochemistry, Jaypee Brothers medical Publishers Ltd. 2013
2. D.M. Vasudewan&Subir Kumar Das :Practical Textbook of Biochemistry for medical students, Jaypee Brothers medical Publishers Ltd. 2013

# Semester-V



## Subject Name: Basis of Indian Culture

Subject Code: BSY- CT501

### objectives:

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

- Understand meaning and process of culture with respect to the settlement of human in India.
- Have an understanding about the religious movements and cultural configuration in India.
- Understand the development and progress of India during Guptas and their legacies.
- Understand the Indoislamic architecture and change in the trend during that time.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit- 1 : Meaning & process of culture and early human settlements in India [15 Hrs.]

Meaning and process of culture; Sources – Archaeology, Literature, Foreign accounts; Pre and Proto historic cultures; Indus Civilization – Origin extent, date, art, architecture, religion, society, economy; Changes in the later Vedic period.

### Unit - 2: Religious movements and cultural configurations in India [15 Hrs.]

Religious movements in the sixth and fifth centuries BC with special reference to Buddhism and Jainism; Social and economic changes; Impact of Persian and Greek invasions; Role of Mauryan empire in Indian cultural unification; Asoka – his edicts and Dhamma; Mauryan art, polity and economy; Sangam age – Society and economy; Cultural configurations during the Sunga – Satavahana – Kushana era – New trends in art, literature and religion; Stupa and rock – cut architecture, sculpture; Dharmashastra, Natyashastra, Kamasutra, Panchatantra, Ayurveda; Religious sects and schools – Hindu, Buddhist and Jain.

### Unit - 3 : Developments during the Gupta and legacies [15 Hrs.]

Developments during the Gupta – Vakataka – Pallava age – Literature; Education, science, religion, society, polity, economy, architecture, sculpture, painting; Cultural contacts with outside world; Legacies of classical ideas and patterns and development of new trends in Indian society and thought during the early medieval times; Vedanta – Sankara, Ramanjua; Bhakti, Tantra, Alavars, Nayanars; Temple styles Nagara, Vesara, Dravida; Literature, society, polity feudalism; Efflorescence of Indian cultural contacts; Islam in India; Alberuni on India.





#### **Unit-4: Indo-Islamic architecture and new cultural trends in Mughal India [15 Hrs.]**

Indo-Islamic architecture during the Sultanate period; regional styles; Religious and philosophical developments – Bhakti and acharya traditions; Sufism in India; Islamic influences on Indian society and culture; Muslim interest in Indian classics; Literary developments, Sanskrit, Persian and regional languages; Cultural contributions of Vijayanagara empire; New cultural trends in Mughal India; Religious liberalism – Akbar, Abul Fazl, Dara Shikoh; Growth of Vaishnava Bhakti; Foundation of Sikhism to the institution of Khalsa; Mughal architecture and painting, regional styles; Classical Indian music including pre – Mughal antecedents; Development of Hindi and Urdu literature; Sawai Jai Singh's astronomical contributions; Arrival and spread of Christianity; European studies of India-William Jones and Fort William College, Asiatic Society of Bengal, influence of Christian Missionaries.

#### **Unit – 5 : Western ideas relationship with ancillary disciplines [15 Hrs.]**

Influx of Western ideas and Indian response; English education and press; Bengal renaissance; Reform movements in Bengal and other regions, Administrative Measures for Social Reforms ( 1828 – 1857 ), Indian reformers – Raja Ram Mohan Roy, Ishwar Chandra Vidyasagar, Keshav Chandra Sen, Mahagovinda Ranade, Jyotiba Phule, Dayanand Saraswati, Vivekananda, Syed .Ahmad Khan; Indian nationalism-Rise, salient features and its cultural expressions in literature, art and education, Gandhian ideas – tradition and modernity; Indian Classics, Indian culture studies, Objectivity and bias; Relationship with ancillary disciplines; Scope of research; Primary and Secondary sources; Heritage of India; World's debt to Indian culture.

#### **TEXT BOOKS**

1. Ramshankar Tripathy; History ancient India, Motilal Banarsidass, Motilal Banarsidass Publication, Tenth edition, 1987

#### **REFERENCE BOOKS**

1. R.S. Sharma; India's ancient past, Oxford publication, 2006



## Subject Name: Yoga and Human Consciousness

Subject Code: BSY- CT502

### Objectives

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

- Understand the necessity and significance of psychology.
- Have an understanding about utility of psychology in the society.
- Understand human behavior with regard to therapy.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit- 1: Psychology: a science of behaviour

[15 Hrs.]

Psychology: Definition of Psychology; Psychology as a Science of Behaviour; Definition of Behaviour and its Cognitive, Cognitive and Affective Aspects; Scope and Utility of Psychology; Concept of Human Psyche; Human Psyche and Consciousness; Sigmund Freud's Model of Human Psyche; Methods of Psychology: Introspection, Observation, Experimental Method, Interview, Psychological Testing; Physiological Basis of Behaviour: Central Nervous System and Autonomic Nervous System

### Unit- 2: Domains and dynamics of behaviour – I

[15 Hrs.]

Attention: Nature, Determinants of Attention, Division and Span of Attention; Sensation: Nature and Attributes of Sensation; Perception: Nature; Gestalt theory of Perception; Illusion; Learning: Nature; Theories: Learning by Trial and Error, Learning by Insight, Classical and Instrumental Conditioning; Motivation: Nature; Types of Motives: Biological Motives, Social and Psychological Motives; Maslow's Theory of Motivation

### Unit- 3: Domains and dynamics of behaviour – II

[15 Hrs.]

Intelligence: Nature; Measurement of Intelligence: Concepts of Mental Age and Intelligence Quotient, Verbal and Non-verbal Intelligence Tests; Emotion: Nature; Physiological Basis of Emotion; Theories: James-Lange Theory, Cannon-Bard Theory; Emotional Intelligence (EI): Nature, Goleman's Model of EI; Spiritual Intelligence: Nature; Memory: Meaning; Systems of Memory: Sensory Register, Short-Term Memory and Long-Term Memory; Thinking: Meaning and Definition; Distorted Thinking (Delusion), Thinking and Reasoning.

### Unit- 4: Personality and its development

[15 Hrs.]

Personality: Nature and Types of Personality; Determinants of Personality: Heredity and Environment; Facets and Stages of Personality Development; Personality Theories of Sigmund Freud, Alfred Adler and C.G. Jung, Carl Rogers; Assessment of Personality: Personality Inventories, Projective Techniques, Case History Method; Yoga and Personality: Yogic View of Personality; Personality Development with special emphasis on Panchakosha and Ashtanga Yoga



## Unit-5: Yoga for mental health

[15 Hrs.]

Psychotherapy: Nature and Process of Psychotherapy, Ethics in Psychotherapy; Approaches to Psychotherapy -I: psychodynamic Therapy, Behaviour Therapy: Aversive Conditioning, Systematic Desensitization, Token Economy, Conditioned Reflex Therapy; Approaches to Psychotherapy - II: Client-centred Therapy, Rational Emotive Behavioural Therapy (REBT) by Elbert Ellis, Gestalt Therapy; Yogic Concepts and Techniques in *Patanjala Yoga Sutra* and *Bhagwadgita* for Promoting Mental Health; Need of Spiritual Growth for Mental Health; Specific Yogic Practices for Promotion of Mental Health: Breath Awareness, *Shavasana*, *Yoganidra*, *Pranayama* and Meditation; Yogic Life-style

### TEXT BOOKS

1. Bhatia, Hans Raj:General Psychology. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd, 2005
2. Ciccarelli,S. K., Meyer, G. E. & Misra, G.:Psychology: South Asian Edition. New Delhi: Pearson Education, 2010
3. Hilgard, Ernest R., Atkinson, Richard C. & Atkinson, R.L.: Introduction to Psychology. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.

### BOOKS FOR REFERENCE

1. Basavaraddi, I.V.:Yoga Teacher's Manual for School Teachers. New Delhi: Morarji Desai National Institute of Yoga, 2010
2. Morgan, C. T., King, R.A., Weisz J. R. & Schopler J.:Introduction to Psychology. New Delhi: Tata McGraw Hill Publishing Co. Ltd, 2006
3. Passer, M.W. & Smith, R.E.:Psychology: The Science of Mind and Behaviour. New Delhi: Tata McGraw-Hill, 2010
4. Singh, A. K.:SaraI Samanya Manovijnana. Delhi: Motilal Banarasidas Publications, 2007
5. Srivastava, D.N.:General Psychology. Agra: Vinod Pustak Mandir, 2007



## Subject Name: Yogic Management of Lifestyle related Disorders

Subject code: BSY-CT503

### Objectives:

- Following the completion of the course, students shall be able to
- Understand the principle of yoga therapy for each disease
- Write standard yoga therapy protocol for each disease.
- Understand the causes of disease and the role of yoga for its healing.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit -1: Introduction to common ailments and Respiratory disorders [15 Hrs.]

Introduction to stress and stress related disorders; Introduction to Yoga therapy– AdhijaVyadhi concept, IAYT; **Respiratory Disorders:** Introduction to Respiratory disorders, Brief classification – Obstructive / Restrictive, infectious, Bronchial Asthma: Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic Management; Allergic Rhinitis & Sinusitis: Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic Management; COPD: Chronic Bronchitis, Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic Management; Emphysema: Definition, Classification, Clinical Features, Medical and Yogic Management; Infectious Disorders; Tuberculosis: Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic Management

### Unit -2: Cardiovascular disorder [15 Hrs.]

Introduction to Cardiovascular disorders, Hypertension: Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic management, Atherosclerosis / Coronary artery disease: Definition, Etiopathogenesis, Classification, Clinical Features , Medical and Yogic management; Ischemic Heart disease – Angina pectoris / Myocardial Infarction/ Post CABG rehabilitation: Definition, Etiopathogenesis, Classification, Clinical Features , Medical and Yogic management, Congestive Cardiac failure, Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic management, Cardiac asthma: Definition, Etiopathogenesis, classification, Clinical Features, Medical and Yogic management

### Unit -3: Obstetrics [15 Hrs.]

Menstrual disorders: Dysmenorrhea, Oligomenorrhea, Menorrhagia: Definitions, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic management;

### Unit -4: Gynecological Disorders [15 Hrs.]

Premenstrual Syndrome: Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic management; Menopause and peri-menopausal syndrome: Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic management; Yoga for



Pregnancy and Childbirth: Introduction to pregnancy, Complicated pregnancies: PIH, Gestational DM, Ante-natal care, Post-natal care; PCOS: Definition, Etiopathogenesis, Classification, Clinical Features, Medical and Yogic management

#### **Unit- 5: Psychiatric disorders**

**[15 Hrs.]**

Introduction to psychiatric disorders, classification – Neurosis, Psychosis: Neurosis: Anxiety disorders: Generalised anxiety disorder, Panic Anxiety, Obsessive Compulsive Disorder, Phobias: Medical and Yogic management; Depression: Dysthymia, Major depression, Medical and Yogic management; Psychosis: Schizophrenia, Bipolar affective disorder, Medical and Yogic management

#### **TEXT BOOKS**

1. Ramesh Bijlan : Back to Health Through Yoga, Rupa Publications India Pvt. Ltd, 2011
2. MDNIY publications : 10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi, 2009
3. Reddy M Venkata & others: Yogic Therapy, Sri M.S.R. Memorial Yoga series, Arthamuru A.P., 2005
4. Rai, Lajpat: Discovering Human Potential energy: A Physiological Approach to Yoga, Anubhava Rai Publications, 1998

#### **BOOKS FOR REFERENCE**

1. Swami Satyananda Saraswati : Yoga and Cardio Vascular Management, Yoga Publication Trust, Munger, 2005
2. Heriza, N., Ornish, D. Merz, C.N.B. : Dr. Yoga: A Complete Guide to the Medical Benefits of and Yoga (Yoga for Health) by (Paperback - Sep 9, 2004) Sparrowe, L., Walden, P. and Lasater, J.H: The Woman's Book of Yoga and Health: A Lifelong Guide to Wellness (Paperback - Dec 3, 2002) - Dec 23,2003)
3. Clennell, B and Iyengar, G.S. : The Woman's Yoga Book: Asana and Pranayama for All Phases of the Menstrual Cycle, Menstrual Disorders (The Experience of Illness) (Paperback - Dec 3, 1992)
4. Nagarathna R and Nagendra H R: Yoga for Arthritis, Back pain, Diabetes, Pregnancy, Breathing Practices, Swami Vivekananda Yoga Prakasana, Bangalore, 2000
5. Robin Monoro, Nagarathna R and Nagendra, H.R.: Yoga for Common Ailments, Guia Publication, U.K., 1990



## Subject Name: Introduction to Ayurveda and swara yoga

Subject Code: BSY-CT504

### Objective :

- Understand the necessity and significance of Ayurveda.
- Have an Understanding about utility of Ayurveda and swara yoga in the society.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

### Unit-1: GENERAL INTRODUCTION TO AYURVEDA

[15 Hrs.]

General introduction to Ayurveda; Definition, aim of Ayurveda, its origin, history and propagation; Basic introduction to main Ayurvedic texts like Charaka Samhita, Sushruta Samhita and Ashtanga Samghra; Ashtanga Ayurveda and its significance; Concept of Health according to Ayurveda and its utility in health promotion and prevention

### Unit-2: SWASTHAVRITTA, DINACHARYA, RITUCHARYA, RATRICHARYA, SADVRITTA & ACAHARARASAYANA

[15 Hrs.]

Basic principles of Ayurveda – Tridosha, Saptadhatu, Trimala, Pancha Mahabhuta, Prakruti & Manas; Concept and importance of Swasthavrita, Dinacharya, Ritucharya; Concept of Sadvrita and Achara Rasayana; Concept of Agni, Srotas and Ama, Concept of Dharniya and Adharniya Vega in Ayurveda; Introduction to Dravya, Guna, Karma, Virya, Vipaka and Prabhava

### Unit-3: UPASTHAMBAS WITH SPECIAL EMPHASIS ON AHARA

[15 Hrs.]

Concept of Upasthambha; Concept of Ahara, Ahara pachana, Pathya & Apathya in Ayurveda; Introduction to Shariraposhana (nourishment); Concept of Oja in Ayurveda; Role of Ayurvedic diet in health and prevention

### Unit-4: INTRODUCTION TO PANCHAKARMA

[15 Hrs.]

Role of Poorva and Paschat Karma in Panchakarma; Significance of Panchakarma in Ayurveda and Shatkarma in Yoga; Approach of Ayurveda and Yoga as whole in relation to total health

### Unit-5: SWARA YOGA

[15 Hrs.]

Concept of Väyus, type, their names and function; Concept of Nänés, their characteristics and name of 10 major Nänés and their functions; Difference between Inä, Piigalä and Sushumnä; Effects of Svarayoga as explained in the Haöha yogic texts, Relevance of Svara-vijnäna in day-today life and the importance of Svarodaya in health and disease.



## TEXT BOOKS

1. Dr. Priyavrata Sharma : Charak samhita, Chaukhambha Orientalal, Varanasi, Edition of 2008
2. Dr. Ravi dutta Tripathi Dr. Brahmanand Tripathi : Ashtanga Samgraha, Chaukambha Sanskrit
3. Prathishthan, Delhi, Reprint edition of 2003
4. Dr. K. H. Krishnamurthy : The wealth of Susruta, International Institute of Ayurveda, Coimbatore, 1999

## REFERENCE BOOKS

1. Dr. P. H. Kulkarni : Ayurvedic Philosophy, Academia Publishers, 2011
2. Dr. V. B. Athavale : Basic Principles of Ayurveda, Chaukambha Sanskrit Prathisthan, Delhi, 2004
3. Dr. L. P. Gupta : Essentials of Ayurveda, Chaukambha Sanskrit Prathisthan, Delhi, 2006
4. Dr. G. Srinivas Acharya : Panchakarma illustrated, Chaukambha Sanskrit Prathisthan, Delhi, 2009



## Subject Name: Yoga Practicum

### Subject Code: BSY-CP505

#### Objectives:

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

- Understand the principle and practice of each practice.
- Demonstrate each practice skillfully.
- Explain the procedure, precaution, benefits and limitations of each practice.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : NA		Practical : 100	
Final Exam	Internal Exam	Final Exam	Internal Exam
		80	20

#### Unit-1: Yogasana (Sitting Postures) [15 Hours]

Dandasana, Swastikasana, Padmasana, Vajrasana, Supta Vajrasana; Kagasana, Utkatasana, Gomukhasana, Ushtrasana, Shashankasana; Janusirasana, Paschimottanasana, Mandukasana, Utthana Mandukasana; Vakrasana, Ardha Matsyendrasana, Marichayasana, Simhasana

#### Unit-2: Yogasana (Supine lying Postures) [15 Hours]

Pavanamuktasana; Utthana-padasana, Ardha Halasana, Halasana, Setubandhasana, Sarvangasana, Matsyasana, Chakrasana, Shavasana

#### Unit-3: Yogasana (Prone line Postures) [15 Hours]

Makarasana, Bhujangasana, Shalabhasana, Dhanurasana, Kapotasana, Raja Kapotasana

#### Unit-4: Bandha & Pranayama (with Antar & Bahya Kumbhaka) [15 Hours]

Jivha Bandha, Jalandhara Bandha, Uddiyana Bandha, Mula Bandha, Maha Bandha, Tri Bandha Surya-bheda and Chandra-bheda Pranayama, Ujjayi Pranayama, Sheetal Pranayama, Shitkari Pranayama, Bhastrika Pranayama

#### Unit-5: Practices leading to Meditation [15 Hours]

Ajapa Dharana, Yoga Nidra, Practices leading to Breath Meditation, Practices leading to Om Meditation.

#### TEXT BOOKS

1. Swami Dharendra Bhrahmachari : Yogasana Vijnana, Dharendra Yoga Publications, New Delhi.
2. Swami Kuvalyananda: Asana Kaivalyadhama, Lonavla
3. Swami Satyananda Saraswati: Asana, Pranayama, Bandha, Mudra Bihar School of Yoga, Munger





## **BOOKS FOR REFERENCES**

1. Basavaraddi, I.V. & others : Yogasana: A Comprehensive description about Yogasana, MDNIY, New Delhi, 2011.
2. Iyengar, B.K.S. : Light on Yoga, Harper Collins Publishers.
3. Tiwari, O.P. : Asana Why and How? Kaivalyadhama, Lonavla.
4. Jayadev, Yogendra : Cyclopaedia Yoga (Vol. I-IV), The Yoga Institute, Santacruz, Mumbai.
5. Saraswati, Swami Satyanand : Asana, Pranayama, Bandha, Mudra Bihar School of Yoga, Munger.



# Semester-VI



## Subject Name: Yoga and Human Values

Subject Code: BSY-CT601

### Objectives

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

- Understand the concept of harmony in human being, family and society.
- Understand the concept of human values.
- Have an understanding about our social responsibility.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

#### Unit-1: Harmony in Human Being and in Myself

[15 Hrs.]

Concept of Human Being as 'I' & Body; Characteristics & activities of 'I' & Harmony in 'I'; Understanding the Harmony of 'I' with the Body: Sanyam and Swasthya, correct appraisal of body needs and meaning of prosperity in detail; Role of Yoga in developing Harmony within the self; Understanding the body as an instrument of 'I'

#### Unit -2: Harmony in Family and Society

[15 Hrs.]

Values in Family, Harmony in family; the basic unit of human interaction; Values in Human; Human relationship, Yogic concept of Human relationship – Maitri, Karuna, Mudita and Upeksha.

#### Unit -3: Harmony in Human – Human relationship

[15 Hrs.]

Harmony in the Society – Concept of Vasudaiva Kutumbakam; Concept of Universal Harmonious order in society; undivided society (Akhand Samaj), Universal order (Sarvabhaum Vyawastha); Concept of Samman (Respect), difference between respect and differentiation, the other silent values in relationships

#### Unit -4: Concept of Human values: Moral Education

[15 Hrs.]

Definition and types of moral education, meaning and scope of morality; Role of Yoga in development of ethics and ethical decision making; Values, Yoga, Reality & their inter-relationship; Relevance of ethics and values in Yoga, Qualities of teacher and students; Ethics in Professional Practices, methods of teaching human values, Student – teacher relationship

#### Unit -5: Social Responsibility and Yoga

[15 Hrs.]

Moral Principles of SR; overview of SR; SR & health maintenance of employees through Yoga; Challenges of Environment; Principles of Environmental Ethics; Concepts of Civil Society and its types; Relationship between Democracy, Civil Society and Social Capital; Efficient use of Yoga in them



## **TEXT BOOKS**

1. Singh M S : Value Education, Adhyayan Publishers & Distributors, New Delhi, 2007
2. Chand Jagdish : Value Education, Anshah Publishing House, Delhi, 2007
3. Gawande E N : Value Oriented Education: Vision for better living, Sarup & Sons Publishers, New Delhi, 2008
4. Panda Sanjay Kumar: Corporate Social Responsibility in India: Past, Present & Future, The ICFAI University press, Hyderabad, 2008

## **BOOKS FOR REFERENCE**

1. Kesari Vedanta : Values: The Key to a meaningful life; Sri Ramakrishna Math, Chennai, 2005
2. Prasad Rajendra : Varnadharmā, Niskhāna Karma & Practical Morality: A Critical essay on applied ethics, DK Print world Pvt. Ltd, Delhi, 1999
3. Radhakrishnan S: Indian Philosophy, Vol. 2, Oxford University, Delhi, 2008
4. Swami Ranganathananda: The Message of Upanishad, Bhartiya Vidya Bhawan, Delhi, 2001



**Subject Name: Applied Yoga**

**Subject Code: BSY-CT602**

### **Objectives**

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

- Understand the applied value of yoga in different domain.
- Have an idea about the role of yoga for school, sports, technostress and geriatric care.

<b>SCHEME OF EXAMINATION</b>			
Total Marks: 100			
<b>Theory : 100</b>		<b>Practical : Nil</b>	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

#### **Unit -1: Yogic Health for school**

**[15 Hrs.]**

General Introduction to School Health, components of school health; Parent-Teacher-Student relationship in a School Health; Role of social interaction in a School Health; Brief introduction to developmental process of children; Psycho-Physiological changes and development of cognitive functions in School going children; Role of Yoga in establishment of values in School going children; Personality Development: New Dimensions of Personality through Yoga

#### **Unit -2: Yoga in Physical Education, Sports Sciences**

**[15 Hrs.]**

General introduction to Physical Education and Sports; Difference between Physical Education & Sports; Relevance of Integration of Yoga in Physical Education & Sports; Yoga for Physical, Mental Stamina and other faculties / skills in a sports Personnel; Nature of different sports injuries, its prevention and management through Yoga; Yoga modules for different sports – track events, field events, single participation, group participation; Application of Yogic lifestyle in improving efficacy in sports personnels; Relationship between Yoga and sports activities; Research reviews on Yoga and Sports

#### **Unit -3: Yoga for technostress**

**[15 Hrs.]**

Introduction to Technostress, its cause, symptoms and complications; Health Hazards in computer professionals; Role of Yoga in the promotion of skills; Application of Yoga for management of Technostress; Research reviews on effect of Yoga on Technostress

#### **Unit -4: Yoga for geriatric care**

**[15 Hrs.]**

General introduction to Geriatric Care; Ageing: Causes and features, Premature ageing; Common Geriatric problems; Application of Yoga in common Geriatric problems and their prevention & management; Research reviews on Yoga & Geriatric care

#### **Unit -5: Yoga for happiness**

**[15 Hrs.]**



### **TEXT BOOKS**

1. Jayadev H J : Growing with Yoga, The Yoga Institute, Santacruz, Mumbai, 2004
2. Liz Lark : Yoga for Kids, Carlton Books Ltd., London, 2003
3. Swati & Rajiv Chanchani : Yoga for Children: A complete illustrated guide to Yoga, UBS Publishes Distributors Pvt. Ltd, 2008
4. Iyenger B K S : The Path to Holistic Health, A Dorling Kindersley Book, Great Britain, 2001
5. Dr. Goel Aruna : Yoga Education: Philosophy and Practice, Deep & Deep Publications Pvt. Ltd, 2007

### **BOOKS FOR REFERENCE**

1. Basavaraddi I V : Yoga: Teachers manual for school children, MDNIY New Delhi , 2010
2. Basavaraddi I V : Yoga in School Health, MDNIY New Delhi, 2009 Iyenger B K S : Astadala Yogamala 1 to 7 volumes, Allied Publishers Pvt. Ltd, 2009
3. Basavaraddi I V : Yoga for Technostress, MDNIY, New Delhi, 2010
4. Dr. H Kumar Kaul : Yoga and Healthy Ageing, BR Publishing Corporation, Delhi, 2006
5. Basavaraddi I V : Yogic Management of Geriatric Disorders, MDNIY, New Delhi, 2009



## Subject Name: Research Methodology & Statistics

Subject code: BSYCT603

### Objectives

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

- Understand the concept of research and its methodology for carrying minor and major research.
- Feed and analyze the data.
- Organize the data and represent the data.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam	Internal Exam
80	20		

#### Unit- 1: Introduction to research methodology [15 Hrs.]

Definition of research; Importance of Studying Research Methods: Evaluating Research Reports; Conducting Research, Thinking Critically About Research; Types of research Applied Research & Basic Research; Goals of Research: description, explanation, prediction, and control of behavior; Ethics of research: Informed consent, Anonymity, Confidentiality, Plagiarism

#### Unit- 2: Introduction to Research Process [15 Hrs.]

Research questions; Literature review; Different Sources of Information: Primary, Secondary, Tertiary source; Electronic Databases: Google Scholar, Pubmed & PsycINFO; Hypothesis Operational definition; Sampling and Generalization - Population and Sample; Probability Sampling: Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling; Sampling Bias and Nonprobability Sampling: snowball sampling, convenience. Types of Biological data (Scales of measurement) – nominal, ordinal, interval, ratio; Types of variables – Independent, dependent, confounding variable; Reliability & Validity

#### Unit-3: Introduction to Research Design [15 Hrs.]

Cross-sectional studies and its advantages and disadvantages; Cohort studies and its advantages and disadvantages; Randomized controlled trials and its advantages and disadvantages; Factors need to be considered when designing a study: Availability of data, Sampling methods, Data collection, Cost of the design, time implications and loss to follow-up, Controls, Ethical issues, Issues of bias and confounding

#### Unit-4: Statistics [15 Hrs.]

Normal distribution – Skewness and kurtosis; Frequency distribution; Measures of central tendency – mean, median, mode; Measures of dispersion – range, variance and standard deviation; Graphical presentation of data – Bar graphs, Pie chart, line diagram, scatter plot; Paired samples t test; Percentage change



**Unit-5: Reporting Research****[15 Hrs. ]**

Parts and Order of Dissertation, Title Page, Abstract, Introduction, Method Section, Results Section, Discussion Section, Reference Section

**TEXT BOOKS:**

1. R. L. Bijlani. (2008). Medical Research: All You Wanted to Know But Did Not Know Who to Ask. Jaypee Brothers Medical Publishers Pvt. Ltd. New delhi

**REFERENCE BOOKS:**

1. C R Kothari. (2009). Research Methodology: Methods and Techniques. New Age International (P) Ltd. New delhi.
2. Zar, J. H., & Zar. (1999). Biostatistical Analysis. Pearson Education. New Delhi





## Subject Name: Yogic Diet, Nutrition and Human Body

### Subject Code: BSY-DSET604

#### Course Objective:

- Understand the concept of Yogic Diet, Nutrition and Human Body
- Yogic Diet and Nutrition for healthy living.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : 100		Practical : Nil	
Final Exam	Internal Exam	Final Exam (SEE)	Internal Exam
80	20		

#### Unit – 1: YOGIC CONCEPT OF DIET & NUTRITION

[15 Hrs.]

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; Pathya and Apathya in diet according to Yogic texts; Guna and Ahara; Importance of Yogic Diet in Yog Sadhana; Yogic Diet and its role in healthy living

#### Unit –2: DIETETICS IN YOGA

[15 Hrs.]

Classification according to triguna- vegetarian vs non-vegetarian, panchabhuta; relationships, rasa virya, Guna, Vipaka of shali, Yava, Godhuma, Mugda, Masha, Chanaka, patola; Surana, Mana, Kakkola, Shukashuka, Karkat, rambha, Balaramba, Mulak, Vartaki, Ridhi; Kalashaka, Vatraka, Himocika; Navanita, Ghrta, Kshira, Sita, Aikshwam, Gudum, Pakvaramba; Varikellalm, Draksham, Lawali, Dhatri, Ela, Jati, Lavanga, Panasa; Madhu, Shunthi.

#### Unit-3: BIOMOLECULES

[15 Hrs.]

Significance of Carbohydrate, Proteins, Lipids, Vitamins, Minerals and water in the body

#### Unit-4: NUTRITION-BASICS

[15 Hrs.]

Nutrients, proximate principles of diet, balanced diet concept; Carbohydrates, proteins, fats – sources, nutritive values, importance; Minerals-calcium, iron, phosphorus etc. Vitamins – sources, roles, requirements

#### Unit-5: HUMAN BODY

[15 Hrs.]

According to Ayurveda.

#### TEXT BOOKS:

1. Ramesh Bijlani : Eating Wisely and Well, Rupa Publication India Pvt. Ltd, 2012
2. Stanley Davidson & others : Human Nutrition & Dietetics , The English Language Book Society & Churchill Livings, Revised Edition



3. Dennis Thompson : The Ayurvedic Diet, New age books, New Delhi, 2001
4. Randolph Stone : A Purifying Diet, Lilawati Bhargav Charitable Trust, Delhi, Revised Edition

#### **REFERENCE BOOKS**

1. Swami Digamber Ji & Others: Gheranda Samhita, Lonavala Institute, 1978
2. Gharote M L & others : Hatha Pradipika, The Lonavala Yoga Institute, Lonavala, 2006
3. Swami Mangalteertham : Synthetic approach to Diet & Nutrition, Deogarh Nutan Publication, Deogarh, 2005
4. Swami Gambhirananda : Bhagvatgita, Shri Ramkrishna Math, Madras  
Swami Maheshananda & Others : Vasishta Samhita



## Subject Name: Yoga Practicum

### Subject Code: BYC-CP605

### Objectives

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

- Understand the principle and practice of each practice.
- Demonstrate each practice skillfully.
- Explain the procedure, precaution, benefits and limitations of each practice.

SCHEME OF EXAMINATION			
Total Marks: 100			
Theory : NA		Practical : 100	
Final Exam	Internal Exam	Final Exam	Internal Exam
		80	20

#### Unit-1: Shatkarmas

[15 Hrs.]

Vastra Dhauti, Sutra Neti, Kapalbhati, Nauli Chalana, Jyoti Trataka, Agnisara

#### Unit-2: Yogasanas –I

[15 Hrs.]

Tadasana, Vrikshasana, Urdhva-Hastottanasana, Kati Chakrasana ; Ardha Chakrasana, Paada Hastasana; Trikonasana, Parshva Konasana; Veerabhadrasana; Bhunamanasana, Hanumanasana; Dandasana, Swastikasana, Sidhasana, Bhadrasana, Padmasana, Vajrasana; Kagasana, Utkatasana, Gomukhasana, Ushtrasana, Shashankasana, Kurmasana, Navasana, Baddha Padmasana, Uttitha Padmasana; Janusirasana, Paschimottanasana, Supta Vajrasana; Mandukasana, Utthana Mandukasana; Vakrasana, Ardha Matsyendrasana , Marichayasana, Simhasana

#### Unit-3: Yogasanas -I

[15 Hrs.]

Pavanamuktasana, Utthana-padasana, Ardha Halasana, Setubandhasana, Halasana, Karna Peedasana, Sarvangasana, Matsyasana , Chakrasana, Shavasana, Makarasana, Bhujangasana , Shalabhasana, Dhanurasana, Kapotasana , Raja Kapotasana, Bakasana, Kukkutasana, Garbhasana, Matsyendrasana, Marjariasana, Padangusthasana, Hastapadangusthasana, Garudasana, Vatayanasana, Natarajasana, Mayurasana, Sirshasana; Ekapada and Dwipada Kandasana

#### Unit-4: Bandha and Mudras

[15 Hours]

Jivha Bandha, Jalandhara Bandha, Uddiyana Bandha, Mula Bandha, Maha Bandha, Tri Bandha Yoga Mudra, Maha Mudra, Shanmukhi Mudra, Shambhavi Mudra, Kaki Mudra, Tadagi Mudra, Vipareet Karni Mudra, Simha Mudra

#### Unit-5: Pranayama & meditation

[15 Hours]

Nadi Shodhana pranayama, Bhramari Pranayama, Suryabhedana and Chandrabhedana Pranayama , Ujjayi Pranayama, Sheetali Pranayama, Shitkari Pranayama, Bhastrika Pranayama, Pranava and Soham Japa, Antar mouna, Dharana, Practice of Dhyana, Breath Meditation, Om Meditation Vipassana Meditation , Preksha Meditation



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