



## Kavikulaguru Kalidas Sanskrit University, Ramtek

**Name of the Program: - B.Sc. Yogic Science**  
**Choice Based Credit System (CBCS Pattern)**  
**Program Curriculum (Syllabus)**

Approved by Academic Council dt. 15-02-2020  
(2020-21 onwards) (Version-1.0)

1	Name of the Program	Bachelor of Yogic Science
2	Program Abbreviation	B.Sc. Yogic Science
3	Name of the Faculty	Faculty of Indian Philosophy, Religion and Culture
4	Name of the Board of Study	
5	Name of the Department	Department of Indian Philosophy
6	Assessment Type	University Assessment/ College Assessment
7	Examination Type & Paper Pattern	Semester/CBCS 80:20
8	Separate Passing	Yes/No
9	Program Type	Professional / Non- Professional
10	Program Duration	3 Years
11	Total Credits	144
12	Intake Capacity	60
13	Medium of Instruction	Marathi, Hindi, English
14	Medium of Examination	Sanskrit, Marathi, Hindi, English
15	External Students Admission	No
16	Age Limit (if required)	Not applicable
17	Eligibility	H.S.E. Science or Eq. or H.S.E. + One month Yoga course
18	Total Marks	3600
19	Note	

Course Code	Course Title	L/W	T/W or P/W	Internal (Pr/ Desr / Viva/ Oral/ Test/ Sessional etc.)		Theory		Other		Subject Total		No. of Credits
				A		B		C		A + B + C		
				Max	Passing	Max	Passing	Max	Passing	Max	Passing	
<b>Semester I</b>												
BSYCC101	Introduction to Sanskrit Literature	3	1	20	07	80	28			100	35	4
BSYCC102	Foundation of Yoga	3	1	20	07	80	28			100	35	4
BSYCC103	Anatomy and Physiology of a Human Body – I	3	1	20	07	80	28			100	35	4
BSYCC104	Basics of Yoga Teaching	3	1	20	07	80	28			100	35	4
BYSCP105	Yoga Practical – I	-	8	20	07			80	28	100	35	4
SECP01	Computer Lab	-	2					50	18	50	18	2
SECC01	Computer Fundamentals	1	1	15	05	35	13			50	17	2
NCC01	Constitution of India	NA										
<b>Total</b>										600	210	24
<b>Semester II</b>												
BSYCC201	Fundamentals of Sanskrit Language	3	1	20	07	80	28			100		4
BSYCC202	Human Systems according to Yoga	3	1	20	07	80	28			100		4
BSYCC203	Anatomy and Physiology of a Human Body – II	3	1	20	07	80	28			100		4
BSYCC204	Methods of Teaching Yoga	3	1	20	07	80	28			100		4
BYSCP205	Yoga Practical – II		8	20	07			80	28	100		4
BYSCP206	Yoga Practical – III		4					50	18	50	18	2
AECC01	Spoken English	1	1	15	05	35	12			50	17	2
NCC02	One SWAYAM Course	NA										
<b>Total</b>										600	210	24

**Abbreviations:**

**BSY** - Bachelor of Yogic Science    **CC** – Core Course    **CP** – Core Practical

**AECC** – Ability Enhancement Compulsory Course    **NCC** – Non-Credit Course

**SECC** – Skill Enhancement Compulsory Course

**SECP** – Skill Enhancement Compulsory Practical    **DSEC** – Discipline Specific Elective Course

Course Code	Course Title	L/W	T/W or P/W	Internal (Pr/ Desr / Viva/ Oral/ Test/ Sessional etc.)		Theory		Other		Subject Total		No. of Credits
				A		B		C		A + B + C		
				Max	Passing	Max	Passing	Max	Passing	Max	Passing	
<b>Semester III</b>												
BSYCC301	Patanjal Yogasutras	3	1	20	07	80	28			100	35	4
BSYCC302	Yoga Philosophy – I	3	1	20	07	80	28			100	35	4
BSYCC303	Introduction to Common Human Ailments	3	1	20	07	80	28			100	35	4
BSYCC304	Applied Yoga	3	1	20	07	80	28			100	35	4
BYSCP305	Yoga Practical – IV		8	20	07			80	28	100	35	4
BYSCP306	Yoga Practical – V		4					50	18	50	18	2
AECC02	Environment and Ecology	1	1	15	05	35	12			50	17	2
NCC03	Introduction to Renewable Energy Sources	NA										
<b>Total</b>										600	210	24
<b>Semester IV</b>												
BSYCC401	Hatha Yoga Texts	3	1	20	07	80	28			100	35	4
BSYCC402	Yoga Philosophy – II	3	1	20	07	80	28			100	35	4
BSYCC403	Therapeutics Yoga	3	1	20	07	80	28			100	35	4
BSYCC404	Yoga and Allied Sciences	3	1	20	07	80	28			100	35	4
BYSCP405	Yoga Practical – VI		8	20	07			80	28	100	35	4
BYSCP406	Yoga Practical – VII		4					50	18	50	18	2
SECC02	General Aptitude	1	1	15	05	35	12			50	17	2
NCC04	One SWAYAM Course	NA										
<b>Total</b>										600	210	24

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Course Code	Course Title	L/W	T/W or P/W	Internal (Pr/ Desr / Viva/ Oral/ Test/ Sessional etc.)		Theory		Other		Subject Total		No. of Credits
				A		B		C		A + B + C		
				Max	Passing	Max	Passing	Max	Passing	Max	Passing	
<b>Semester V</b>												
BSYCC501	Human Psychology	3	1	20	07	80	28			100	35	4
BSYCC502	Research Methodology	3	1	20	07	80	28			100	35	4
DSEC	Elective A1	3	1	20	07	80	28			100	35	4
DSEC	Elective A2	3	1	20	07	80	28			100	35	4
BYSCP505	Yoga Practical – VIII		8	20	07			80	28	100	35	4
BYSCP506	Yoga Practical – IX		4					50	18	50	18	2
SECP02	Internship I		1	50	17					50	17	2
NCC05	Entrepreneurship Development	NA										
<b>Total</b>										600		24
<b>Semester VI</b>												
BSYCC601	Dietetics and Nutrition	3	1	20	07	80	28			100	35	4
DSEC	Elective B1	3	1	20	07	80	28			100	35	4
DSEC	Elective B2	3	1	20	07	80	28			100	35	4
BSYCC604	Research Project			50	18			100	35	150	53	6
BYSCP605	Yoga Practical – X		8	20	07			80	28	100	35	4
SECC02	Internship II		-	50	17					50	17	2
NCC06	One SWAYAM Course	NA										
<b>Total</b>										600	210	24

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				A		B		C		A + B + C		
				Max	Passing	Max	Passing	Max	Passing	Max	Passing	
<b>List of Group 'A' Electives</b>												
DSES01	Physiological Effects of Yogic Practices			20	07	80	28			100	35	4
DSES02	Health and Yogic Hygiene			20	07	80	28			100	35	4
DSES03	Fundamentals of Ayurveda			20	07	80	28			100	35	4
DSES04	Yogic Diet			20	07	80	28			100	35	4
<b>List of Group 'B' Electives</b>												
DSES05	Yoga for Holistic Health			20	07	80	28			100	35	4
DSES06	Yoga for Mental Health			20	07	80	28			100	35	4
DSES07	Classical Meditation Techniques			20	07	80	28			100	35	4
DSES08	Fundamentals of Biochemistry			20	07	80	28			100	35	4

<b>List of Ability Enhancement Courses</b>												
AECC01	Spoken English			15	05	35	12			50	17	2
AECC02	Environment and Ecology			15	05	35	12			50	17	2
AECC03				15	05	35	12			50	17	2
AECC04				15	05	35	12			50	17	2
AECC05				15	05	35	12			50	17	2
<b>List of Skill Enhancement Courses</b>												
SECC01	Computer Fundamentals			15	05	35	12			50	17	2
SECC02	Internship II			50	17					50	17	2
SECP01	Computer Lab			15	05	35	12			50	17	2
SECP02	Internship I			50	17					50	17	2

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**BYS**- Bachelor of Yogic Science      **CC** – Core Course      **CP** – Core Practical

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**SECP** – Skill Enhancement Compulsory Practical      **DSEC** – Discipline Specific Elective Course

Question Paper Structure:

Question No.	Type of Question	Ques/Choice	Unit	Marks Distribution
<b>Semester Exam – Theory (80 Marks)</b>				
Note- All questions will carry <b>equal marks</b> . Answer <b>any5</b> out of 8 questions, carrying 16 Marks each). It is compulsory to have equal questions on every Unit.				
Question 1	Long Question/ Short Questions/ Short Notes/ Objectives/ Reference to context/ Or Any other Type	As per Examiner Choice	Unit 1, Unit 2, Unit 3 and Unit 4 (Compulsory from all the four Units)	16
Question 2				16
Question 3				16
Question 4				16
Question 5				16
Question 6				16
Question 7				16
Question 8				16
				Total = 80
<b>Semester Exam – Theory (35 Marks)</b>				
Question 1	Short Questions	Any 2 out of 4	Unit 1	$5 \times 2 = 10$
Question 2	Short Notes	Any 3 out of 5	Unit 1 and 2	$5 \times 3 = 15$
Question 3	Short Questions	Any 2 out of 4	Unit 2	$5 \times 2 = 10$
				Total = 35
<b>Semester Exam – Practical (60 Marks)</b>				
Practice No.	Practice Type		Unit	Marks Distribution
01	Randomly selected practice for each unit		Unit 1	15
02			Unit 2	15
03			Unit 3	15
04			Unit 4	15
				Total = 60
<b>Semester Exam – Practical (40 Marks)</b>				
01	Randomly selected lesson plan for each unit		Unit 1	20
02			Unit 2	20
				Total = 40

\* One question from each unit

## Semester I

Introduction to Sanskrit Literature			
Semester I		Subject Code: BSYCC101	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05= 20		

### Unit 1 – Introduction to Vedas and Upanishads [15Hrs.]

Introduction to Vedic philosophies, essence of four Vedas; yoga in Vedas;

Introduction to Upanishadic principles; classification of Upanishads; philosophical principles of Upanishads, conclusion of Upanishads; yoga in Upanishads;

### Unit 2 – Introduction to Darshanas [20 Hrs.]

Basic introduction of six aastik darshanas and three nastik darshanas; Yoga in darshanas with special emphasis on Samkhya and Yoga darshana; Introduction to Prasthanatrayi, yoga in prasthanatrayi; Introduction to Purushartha Chatushtaya, relation of Purushartha Chatustaya with yoga.

### Unit 3 – Introduction to Smritis [15 Hrs.]

Basic introduction to smirti texts with special emphasis on Manusmriti and Yajnavalkya Smriti; Introduction to Puranas, yoga in Puranas with special emphasis Bhagavat Purana; Introduction to Ramayana, yoga in Ramayana; Introduction to Mahabharata, yoga in Mahabharata;

### Unit 4 –Introduction to Tantra and Aagama [10 Hrs.]

Introduction to Tantra, yoga in tantra; Introduction to Aagama, yoga in Agama traditions.

### Recommended Readings:

1. Karambalekar V., Sanskrit Sahityacha Sopapattik Itihasa, Vidya Bharati Prakashan
2. Dixit S., Bharatiya Tatvadyan, Phadake Prakashan, Kolhapur
3. Saraswati S., Kundalini Tantra, Yoga Publication Trust, Bihar, Second Edition.
4. Upadhyaya B., Bharitya Darshan, Chaukhamba Orientalia, Delhi.

### References Books:

1. Hinze O. M., Tantra Vidya, Motilal Banarasidas, Delhi, Second Edition
2. Shastri G., A Concise History of Classical Sanskrit Literature, Motilal Banarasidas, Delhi
3. Sinha H. P., Bharitya Darshana ki Rooprekha, Motilal Banarasidas, Delhi.

Foundation of Yoga			
Semester I		Subject Code: BSYCC102	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05= 20		

### Unit 1 –History and Development of Yoga [15Hrs.]

General introduction to yoga, etymology of the word ‘Yoga’, definitions of yoga according to different texts, history of yoga, development of yogic practices from Vedic to modern period, aim and objectives of yoga, common misconceptions of yoga, importance of yoga.

### Unit 2 –Paths of Yoga; Jnana and Bhakti Yoga [10Hrs.]

Four paths of yoga with Vedanta tradition: Jnana yoga with special reference to upanishadas, bhakti yoga with special reference to Narada bhakti sutras.

### Unit 3 –Paths of Yoga; Karma and Dhyana Yoga [10 Hrs.]

Karma yoga with special reference to Bhagwat Geeta, Dhyana yoga or Raja yoga with special reference to Patanjali yoga sutras; Paths of yoga with tantric tradition: Hatha yoga, swara yoga, mantra yoga.

### Unit 4 – Contribution of Modern Yoga Thinkers [15 Hrs.]

Yoga in modern times: Yogic traditions of Shri Ramkrishna Paramahansa, Swami Vivekananda, Acharya Rajnish, Maharshi Mahesh Yogi, T. Krishnamacharya, B.K.S. Iyengar, Swami Shivananda, Swami Satyananda Saraswati, Swami Kuvalayananda, J. Krishnamurthy.

### Recommended Readings:

1. Singh S. P., History of Yoga, PHISPC, Centre for Studies in Civilization
2. Singh S. P & Yogi Mukesh: Foundation of Yoga, Standard Publication, New Delhi
3. Kumar K., Yoga Mahavigyana, Standard Publishers, New Delhi.
4. Swami Vivekananda, Raja Yoga, Ramakrishna Math.
5. Singleton M., Goldberg E., Gurus of Modern Yoga, OUP, USA

### Reference Books:

1. Swami Prabhupada, Narada Bhakti Sutras, Bhaktivedanta Book Trust.
2. Agrawal M.M., Six Systems of Indian Philosophy, Chaukhamba Vidya Bhavan, Varanasi.
3. Swami Chinmayananda, Narada Bhakti Sutras, Chinmaya Prakashana
4. Swami Satyananda S., A Systematic Course in the Ancient Tantric Techniques of Yoga and Kriya, Yoga Publication Trust, Bihar
5. Shreemad Bhagavad Geeta, Geeta Press, Gorakhpur
6. Certificate of Yoga Professionals: Guidebook, Excel Publications, Delhi
7. Swami Muktibodhananda, Swara Yoga, Yoga Publication Trust, Bihar.
8. Swami Niranjanananda S., Karma & Karma Yoga, Yoga Publication Trust, Bihar.
9. Swami Niranjanananda S., Jnana Yoga, Yoga Publication Trust. Bihar.



<b>Anatomy and Physiology of a Human Body – I</b>			
Semester I		Subject Code: BSYCC103	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05= 20		

### **Unit-1: Introduction to Human Body: Cell, Tissue, Organs and Systems [20 Hrs.]**

Cell structure - Plasma membrane and protoplasm; Cell organelles – Mitochondria, Golgi body, Endoplasmic reticulum, Lysosome, Peroxisome, Centrosome, Nucleus-Nuclear membrane, chromosome, nucleolus; movement of substances and water through the cell membrane, bio-electric potentials.

Homeostasis; Structure and function of epithelial (simple and compound); Connective tissues; Muscular-Skeletal, involuntary and cardiac; Nervous Tissues-Myelinated neuron and Non-myelinated neuron;

### **Unit 2 – Musculoskeletal System [10 Hrs.]**

**Skeleton** – Classification of bones-Axial bones and appendicular bones; names of all bones in the body; types of bones; Types of joints –Synovial joints and Fibrous joint; Structure of synovial joints; Types of synovial joints; other types of bone joints and their functions; Cartilage, tendons and ligaments;

**Muscular** – Types of muscle in the body(striated, Smooth muscle, Cardiac muscle)and their functions; Properties of muscles; mechanism of muscle contraction and relaxation; ne-uromuscular junction, sarco-tubular system.

### **Unit 3 – Digestive and Excretory System [15Hrs.]**

**Digestive system** – Mouth, buccal cavity, Pharynx, esophagus, stomach, small intestine, large intestine, anal canal; associated glands – Liver, Pancreas, salivary glands, physiology of digestion and absorption;

**Excretory system**– Kidney, ureter, urinary bladder, urethra; Renal physiology: structure of kidney, nephrons, juxta glomerular filtrate; mechanism of urine formation: ultrafiltration, selective reabsorption, tubular secretion; role of kidney in osmo-regulation.

### **Unit 4: Cardiovascular and Respiratory system [15 Hrs.]**

Blood and its functions: Plasma, Red blood cells, White blood cells and Platelets; Blood groups and their significance; functions of blood.

Anatomy of heart; Organization of systemic and pulmonary circulation; cardiac output and cardiac cycle; capillary circulation, arterial and venous blood pressure; Blood pressure and regulation of blood pressure; functions of cardiovascular system

**Respiratory system**–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); non-respiratory functions of lungs.

### **Recommended Readings:**

1. Waugh A., Grant A., Ross and Wilson Anatomy and Physiology, Elsevier Hs Publications.
2. Gore M.M., Anatomy and Physiology of Yogic practices, Kanchan Prakshan, Lonavala, 2003.
3. Mandlik V. Yoga Parichaya: Sharira Shastra, Yogachaitanya Prakashana, Nashik.
4. Shirley Telles, Nagendra H.R., A Glimpse into the human body, Swami Vivekananda Yoga Prakashana, Bangalore, 2002

**Reference Books:**

1. Sri Krishna, Notes on Structure and Functions of Human Body and Effects of Yogic practices on it, Kaivalyadhama S.M.Y.M Samiti, Lonavala, 1988.
2. Mandlik V., Yoga Parichaya, Yogachaitanya Prakashana, Nashik.
3. Evelyn, C. Pearce, Anatomy and Physiology for Nurses (Faber and Faber Ltd. London, 1968)
4. Chatterjee, C.C., Human Physiology (Vol. I & II) (Medical Allied Agency, Calcutta, 1992)

<b>Basics of Yoga Teaching</b>			
Semester I		Subject Code: BSYCC104	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

**Unit 1 – Teaching and Learning [15Hrs.]**

Concepts of teaching and learning, relationship between teaching and learning as well as teacher and students; seven principles of teaching; means and methods of teaching, factors influencing teaching method, sources of teaching methods; yogic levels of learning, Vidyarthi, Shishya and Mumukshu; Guru-Shishya parampara and its importance in yoga education; student's approach to the teacher according to Bhagwat Geeta i.e. Pranipaata, Pariprashna and Seva.

**Unit 2 – Yoga Education [15Hrs.]**

Salient features of yoga education, yoga teacher, difference between yoga trainer and yoga teacher; characteristics of ideal yoga teacher, role of yoga teachers; individual yoga teaching techniques, group yoga teaching techniques, techniques of mass instruction; organization of teaching, time management, discipline management and resource management.

**Unit 3 – Classroom Management [15Hrs.]**

Characteristics of ideal yoga classroom; essential features of yoga classroom, area, space; sitting arrangement in yoga classroom; cleanliness and maintenance of yoga classroom; illumination and lighting system, audio system and projector system in yoga classroom, selection of air-conditioning methods for yoga classroom; classroom problems and their solutions.

**Unit 4 – Yoga and value education [15Hrs.]**

Value Education, its meaning and definitions, types of values; value-oriented education, role of value oriented education; contribution of yoga towards development of values; role of yoga teacher in value-oriented education, role of yoga in development of human society.

**Recommended Readings:**

1. Gharote M. L., Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007.
2. Mandlik V., Yoga Teacher, Yoga Chaitanya Prakashana, Nashik, 2018.

**Reference Books:**

1. Shri Krishna, Notes on basic principles & methods of teaching as applied to yogic practices and a ready reckoner of yogic practices, Kaivalyadhama, Lonavala, 2009.
2. Raj Kumar, Principles & methods of Teaching, Printo graphics, Delhi.
3. Saket Raman Tiwari & others, Teaching of Yoga, DPH Publishing Corporation, Delhi, 2007.
4. Nagendra H. R., Yoga in Education, Vol I, Swami Vivekananda Yoga Prakashana, Bangalore.
5. Jayadeva Yogendra, Cyclopaedia Yoga, Vol. I & II, The Yoga Institute, Mumbai, 2006.
6. Duggal Satyapad, Teaching Yoga, The Yoga Institute, Santacruz, Bombay, 1985.
7. Kumarswamy J., Value Education with Section on Yoga, Viva Education, 2017.

<b>Yoga Practical I</b>			
Semester I		Subject Code: BYSCP105	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
		60+20=80	15+05=20

### **Unit 1 – Loosening Exercises and Yogic Sukshma Vyayamas [15 Hrs.]**

Loosening exercises: Twisting, Side bending, Forward-backward bending, Twisting and bending.

Yogic Sukshma Vyayama: Kapala shakti vikasak, karna shakti vikasaka, greeva shakti vikasaka, karatala shakti vikasaka, manibandha shakti vikasaka, poornabhooja shakti vikasaka, vakshasthala shakti vikasaka, jangha shakti vikasaka, padamoola shakti vikasaka.

### **Unit 2 – Pre-positions and Basic Asanas [20 Hrs.]**

Standing position, standing position with legs apart, relaxed standing position; sitting position, relaxed sitting position; prone position, supine position; pre-position for Surya Namaskar; switching between the positions.

Asanas in supine position: Ekapada Pavana Muktasana, Ekapada Uttana Padasana, Anantasana.

Asanas in prone position: Ardha Shalabhasana, Sahajahasta Bhujangasana;

Asanas in sitting position: Swastikasana, Vajrasana, Pada Hastasana, Hasta Shirasana, Parvatasana, Sharanagat Mudra, Vakrasana-1, Marjarasana.

Asanas in standing position: Ardha Kati Chakrasana, Hasta Padasana, Ardha Chandrasana, Trikonasana;

Relaxing Asanas: Shavasana (Supine position); Makarasana (Prone position); Tadagasana (Supine Position)

### **Unit 3 – Primary Breathing Techniques [15 Hrs.]**

Breath awareness; Controlled breathing, fast breathing (with gradually increasing and decreasing speed), sectional fast breathing; deep breathing (With 1:1, 1:1.5 and 1:2 ratio of Inhalation: Exhalation), sectional deep breathing; Pranav mudra for sectional breathing; Rabbit breathing, Dog breathing, Tiger breathing; Abdomen, thoracic and clavicular breathing.

### **Unit 4 – Meditation [10 Hrs.]**

Omkar chanting with 2:3:5 ratio of A: U: M; Gayatri Matra Chanting.

### **Recommended Readings:**

1. Dhirendra B., Yogic Sukshma Vyayama, Dhirendra Yoga Prakasha, New Delhi, 1980.
2. Swami Dhirendra Bhramhachari:Yogasana Vijnana,Dhirendra Yoga Publications, New Delhi.
- 3.Mandlik V., Yoga Sanjivan, Yogachaitanya Prakashana, Nashik.
4. Mandlik K., Yogapoint Asanas: A Comprehensive Guide, www.yogapoint.com.
5. Mandlik V., Yoga Pravesh, Yogachaitanya Prakashana, Nashik.

### **Reference Books:**

1. Swami Kuvalyananda, Asana, Kaivalyadhama, Lonavla.
2. Swami Satyananda Saraswati, Asana, Pranayama, Bandha, Mudra, Yoga Publication Trust.
3. Basavaraddi, I.V. & others, Yogic Sukshma Evam Sthula Vyayama, MDNIY, New Delhi.
4. Swami Niranjanananda S., Mantra & Yantra, Yoga Publication Trust, Bihar.

<b>Computer Lab</b>			
Semester I		Subject Code: SECP05	
Total Hrs: 30		Credits: 2	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Practical+VIVA	
		40+10=50	

#### **Unit 1 – Working with Microsoft office [15 Hrs.]**

Working with Microsoft Word, Microsoft Excel, Microsoft PowerPoint

#### **Unit 2 – Working with Computer Applications and Internet [15 Hrs.]**

Installing and uninstalling software and application; opening, closing, minimizing and expanding windows; working with multiple windows; Opening and closing of applications; Accessing the settings in windows; website surfing, content download; uploading content on Wikipedia,

#### **Recommended Readings:**

1. Jain S., Basic Computer Course Made Simple (BCC), BPB Publications, 2017.

#### **Reference Books:**

1. Price M., Computer Basics in easy steps: Windows 7 Edition, In Easy Steps Ltd, 2011.

<b>Computer Fundamentals</b>			
Semester I		Subject Code: SECC01	
Total Hrs: 30		Credits: 2	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Practical +VIVA	
35	10+05+00=15		

#### **Unit 1 – History and Development of Computer [15 Hrs.]**

Brief history of computer; Definitions of computer, Block Diagram of elements of a computer; Computer Hardware & Software, Computer generations, Types of Computers, Micro, Mini, Main-frame and super computers; Primary Memory– RAM, ROM, PROM, EPROM; Secondary storages, Magnetic Tape, Disk, Compact disks; CPU, I-O devices; Discussion on recent IT trends.

Computer Languages like machine, Assembly and Higher-Level Languages; Decimal, Binary, Octal, Hexadecimal number systems, BCD, EBCDIC, ASCII Conversions, Simple Additions, Subtractions, Multiplications, Divisions, Data and Information; Introduction to Programming, Flowcharts and Algorithms;

#### **Unit 2 – Software and Data management [15Hrs.]**

Operating System: Introduction to Operating System, Definition of OS, Functions of OS, Types of OS; Operating system applications; Introduction to Windows as OS, the User Interface, Windows Setting, Advance Windows; Windows applications; Software: Types of Softwares, System softwares, Application softwares, Firmware softwares; Stored program concept;

File management: Concept of file;Types of computer files; File organization and accessing techniques-Indexed, Line; Rules for naming files, sequential, Hashed; File handling functions;

#### **Recommended Readings:**

1. Sinha P.K., Computer Fundamentals, BPB Publications, 2017.
2. Rajaraman V., Fundamentals of Computer, Prentice Hall Ind. Pvt. Ltd., 2014.
3. Mansfield R., Working in Microsoft Office, McGraw Hill, 2008.

#### **Reference Books:**

1. Thareja R., Fundamentals of Computers, Oxford, 2014.
2. Timothy N. Trainor, Diane K, Computers, McGraw Hill, 2000

## Semester II

Fundamentals of Sanskrit Language			
Semester II		Subject Code:BSYCC201	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Practical +VIVA	
80	10+05+05=20		

### Section I – Sanskrit Grammar

#### Unit 1 – Introduction to Sanskrit language

General introduction, Importance of Sanskrit in the study of Yoga, Alphabets, Numbers (1 to 100), Shabdaroopa: Ram, Hari, Bhanu, Mala, Nadi and Dhenu; Dhaturroopa: Bhu, Gam, Nash and Katha;

#### Unit 2 – Sandhi

Sandhi, Swara Sandhi, Vyanjana Sandhi, Visarga Sandhi; Samasas, Avyayi Bhava, Karmadharaya Samasas, Tatpurusha Samasa, Bahuvrihi Samasa, Dvandva Samasa.

### Section II – Selective Sanskrit Reading

#### Unit 3 – Sanskrit Subhashitas

Selective verses from Niti Shatakam; first three paddhatis, Sujan Padhhati, Paropakara Padhhati and Dhairyia Padhhati;

#### Unit 4 – Sanskrit Recitations

Nirvanashtaka, recitation of Nirvanashtaka and its meaning; Mahavakyas from Vedas and Upanishadas.

#### Recommended readings

1. Mishra R., Niti Shatakam, Akshayvat Prakashana, Prayagraja.
2. Vedalankar V., Siddheshwar Maharaja, Niti Shatakam, Vidya Bharati Prakashana, Latur.
3. Gadge S., Sanskrit Sahityatil Subhashitanche Chikitsak Adhyayana,
4. Laghusidhanta Kaumudi, Chaukhamba Publication, Varanasi.
5. Tripathi B., Roopachandrika, Chaukhamba Publication, Varanasi.
6. Swami Tejomayananda, Nirvana Shatakam, Central Chinmaya Mission Trust.

#### Reference Books –

1. Satvalekar S. D., Sanskrit Swayam Shikshak, Rajpal and Sons.
2. Dvivedi K., Rachananuvad Kaumudi, Vishwavidyalaya Prakashan, Varanasi.
3. Gokhale H., Niti Shatakam, Kavi kulguru Sanskrit University Publication, Nagpur.
4. Niti Shatakam, Vidya Prasar Kendra, Nagpur.
5. Tripathi S., Niti Shatakam, Chaukhamba Prakashan, Varanasi.
6. Somalvar N., Karaka Prakarana.

Human Systems According Yoga			
Semester II		Subject Code:BSYCC202	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Practical +VIVA	
80	10+05+05=20		

### **Unit 1 – Human Body According to Yoga [15 Hrs.]**

Evolution of human body in Samkhya yoga; Evolution of Jnanendriyas, Karmendriyas, Mahat, Manas, Buddhi, Citta and Ahankara; Pancha Mahabhutas, Pancha Tanmatras, Pancha Tattvas; Concept of Panchikarana process; Saptadhatus.

### **Unit 2 – Pancha Koshas: The Five Sheaths of Human Body [15 Hrs.]**

Concept of Pancha Koshas; Pancha Koshas with special reference to Taittiriya Upanishad; features of Annamaya Kosha, Pranamaya Kosha, Manomaya Kosha, Vijnanamaya Kosha, Anandamaya Kosha; Products of each Kosha; Relations of Kosha with adjacent Koshas; Disturbances in Koshas.

### **Unit 3 – Introduction to Nadis, Pranas and Upa-Pranas [15 Hrs.]**

Concept of Nadis; 10 principle Nadis with special emphasis of Ida, Pingala and Sushumna; characteristics of Nadis; functions of Nadis.

Concept of Prana (Vayu); 5 principle Pranas and 5 Upa-Pranas; characteristics of Pranas and Upa-pranas; Location and function of Pranas and Upa-pranas.

### **Unit 4 – Introduction to Kundalini and Chakras [15 Hrs.]**

Concept of Kundalini; characteristics of Kundalini and its function; Concept of Chakras; number of chakras according to different texts; 8 chakras and their characteristics; Location, color, Bija mantra and number of petals of the chakras; functions of the chakras; disturbances in chakras and their effect on the respective part of a body; healing chakras; relation of Nadis and Chakras; Awakening of Chakras and Kundalini.

#### **Recommended Readings:**

1. Swami Muktibodhananda, Hatha Yoga Pradipika, Yoga Publication Trust, Bihar.
2. Nagaratna R., Nagendra H. R., Integrated Approach of Yoga Therapy for positive health, SVYP, Bangalore.
3. Swami Satyananda S., Kundalini Tantra, Yoga Publication Trust, Bihar.
4. Swami Niranjanananda, Prana and Pranayama, Yoga Publication Trust, Bihar.
5. Dixit S., Bharatiya Tattvajnana, Phadake Prakashana, Kolhapur.
6. Swami Nityamuktananda, The Five Great Elements Rediscovered, Yoga Mimansa, Lonavala.

#### **Reference Books:**

1. Kanthi G. M., A Textbook of Human Anatomy in Ayurveda, Chaukhamba Orientalia, Delhi.
2. Raju G. U., Human Anatomy in Ayurveda, Chaukhamba Sanskrit Pratishtana, Delhi, 2016.

<b>Anatomy and Physiology of Human Body II</b>			
Semester II		Subject Code:BSYCC203	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b> Assignment+Attendance+VIVA	<b>Final Exam</b>	<b>Internal Assessment</b>
		Practical +VIVA	
80	10+05+05=20		

### Unit 1: Nervous system [15 Hrs.]

Human brain: Histology, nerve, structure and properties of neurons, action potential, generation propagation; factors influencing classification of neurons and nerve fibers, neuralgia cells, receptors and reflex arcs; functional anatomy of Cerebrum, Cerebellum, spinal cord; functions and importance of the parts of the brain viz., cerebrum, pons, medulla, thalamus, hypothalamus, cerebellum and autonomic nervous system (sympathetic and parasympathetic); reflex action, mechanism of nerve conduction, synapse and synaptic transmission; sensory nervous system and motor nervous system.

### Unit 2: Endocrine and integumentary system [15 Hrs.]

Structure and function of important endocrine glands (Pituitary, Adrenal, Thyroid, Parathyroid, Pancreas, gonads); anatomy of hypothalamus and its hormones; function of gastro-intestinal tract hormones; mechanism of hormone action.

Composition and structure of skin, layers of skin, hair and hair structure; functions of integumentary system.

### Unit 3: Reproductive System [15 Hrs.]

Male reproductive system – Testis, penis, epididymis, prostate gland;

Female reproductive system – ovary, uterus, vagina, cervix, fallopian tube; Menstrual cycle; Gametogenesis, Spermatogenesis and oogenesis; Fertilization; Implantation and embryonic development; Pregnancy.

### Unit 4: Lymphatic system & Immune system [15 Hrs.]

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.

### Recommended Readings:

1. Waugh A., Grant A., Ross and Wilson Anatomy and Physiology, Elsevier Hs, 2018.
2. Gore M.M., Anatomy and Physiology of Yogic practices, Kanchan Prakshan, Lonavala, 2003.
3. Mandlik V. Yoga Parichaya: Sharira Shastra, Yogachaitanya Prakashana, Nashik.
4. Shirley Telles, Nagendra H.R., A Glimpse into the human body, Swami Vivekananda Yoga Prakashana, Bangalore, 2002

### Reference Books:

1. Sri Krishna, Notes on Structure and Functions of Human Body and Effects of Yogic practices on it, Kaivalyadhama S.M.Y.M Samiti, Lonavala, 1988
2. Charu, Supriya, Sarir Rachana evam Kriya Vigyan
3. Mandlik V., Yoga Parichaya, Yogachaitanya Prakashana, Nashik.
4. Evelyn, C. Pearce, Anatomy and Physiology for Nurses (Faber and Faber Ltd. London, 1968)
5. Chatterjee, C.C., Human Physiology (Vol. I & II) (Medical Allied Agency, Calcutta, 1992)

Methods of Teaching Yoga			
Semester II		Subject Code: BSYCC204	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment
		Practical +VIVA	
80	10+05+05=20		

### Unit 1 – Yoga teaching [15 Hrs.]

Yoga teaching for different levels (beginners, advanced, children, youth, women etc.); Objectives of teaching asanas, aspects of teaching asanas (teaching the posture, revision and correction); Objectives of teaching pranayamas, aspects of teaching pranayamas; categories of corrections, important points for effective teaching, ethical guidelines for yoga teacher.

### Unit 2 – Lesson Planning [15 Hrs.]

Salient features of lesson planning; need of lesson plan in yoga teaching; essentials of good lesson plan; lesson plan content; initial part of lesson, main content, end part of lesson; Micro lesson planning; Choosing sequence of yogic practices, prayers, loosening exercises, pre-positions, preparatory movements, revision asanas, full time revision, preparatory revision, teaching new yogic practice.

### Unit 3 – Lesson Plans for Different Levels [15 Hrs.]

Lesson plan for Beginners class and its micro lesson planning (15 days to one month course); lesson plan for advance yoga class and its micro lesson planning (15 days to one month course); lesson plan for children and its micro lesson planning (15 days to one month course)

### Unit 4 – Evaluation Methods of Yoga Class [15 Hrs.]

Evaluation of yogic practices; marks distribution: evaluation of taking and releasing the position, evaluation of ideal posture, evaluation of stability, evaluation of hold time; evaluation of Pranayama; evaluation of meditation, evaluation of cleansing techniques; evaluation by clinical trials.

#### Recommended Readings:

1. Mandlik V., Yoga Teacher, Yogachaitanya Prakashana, Nashik.
2. Gharote M. L., Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007.

#### Reference Books:

1. Shri Krishna, Notes on basic principles & methods of teaching as applied to yogic practices and a ready reckoner of yogic practices, Kaivalyadhama, Lonavala, 2009.
2. Mark Stephens, Teaching Yoga: Essential Foundations and Techniques, North Atlantic Books.
3. Mark Stephens, Yoga Sequencing: Designing Transformative Yoga Classes, North Atlantic Books, 2012.
4. Duggal, Satyapada, Teaching Yoga, The Yoga Institute, Mumbai.

Yoga Practical II			
Semester II		Subject Code: BYSCP205	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment
		Demonstration+VIVA	
		60+20=80	15+05=20



### **Unit 1 – Surya Namaskara and Asanas [20 Hrs.]**

10 steps Surya Namaskara with Surya mantra chanting and breath controls;

Asanas in supine position: Dvipada Uttana Padasana, Pavana Muktasana;

Asanas in prone positions: Adhvasana, Naukasana;

Asanas in sitting position: Padmasana, Vakrasana-2, Ardha Paschimottanasana, Vajrasana Yogamudra-1, Vajrasana Yogamudra-2, Ardha Matsyendrasana, Aakarna Dhanurasana-1, Aakarna Dhanurasana-2;

Asanas in standing position: Tadasana, Tiryak Tadasana, Veerasana, Trikonasana.

### **Unit 2 – Cleansing Techniques [10 Hrs.]**

Kapalbhati, Agnisar Dhauti

### **Unit 3 – Bandhas and HastaMudras [10 Hrs.]**

Jalandhara Bandha, Moola Bandha, Uddiyan aBandha, Tribandha; Jivha Bandha;

Dhyana Mudra, Drona Mudra, Pranava Mudra.

### **Unit 4 – Pranayamas and Meditation [20 Hrs.]**

Suryabhedan pranayama, Chandrabhedan pranayama, Anuloma-Viloma breathing without holding the breath, Anuloma-Viloma pranayama with kumbhaka (holding the breath); Pranayama practice with ratio of 1:2:2 (inhalation: hold: exhalation) with jalandhara bandha only;

Om-kara Meditation: A-kara Chanting, U-kara Chanting and M-kara Chanting, AUM chanting;

Mahamrutyunjay mantra chanting.

### **Recommended Readings:**

1. Mandlik V., Yoga Sanjivan, Yogachaitanya Prakashana, Nashik.
2. Mandlik V., Yoga Pravesh, Yogachaitanya Prakashana, Nashik.
3. Swami Niranjananda S., Prana & Pranayama, Yoga Publication Trust, Bihar.
4. Mandlik V., Pranayama, Yogachaitanya Prakashana, Nashik.

### **Reference Books:**

1. Swami Satyananda S., Surya Namaskar, Yoga Publication Trust, Bihar.
2. Mandlik K., Yogapoint Asanas: A Comprehensive Guide, www.yogapoint.com.
3. Om Swami, The Ancient Science of Mantras, Jaico Publishing House.
4. Swami Satyananda S., Asana Pranayama Mudra and Bandha, Yoga Publication Trust, Bihar.
5. Iyengar B. K. S., Light on Pranayama, Element, 2005.

<b>Yoga Practical III</b>			
Semester II		Subject Code: BYSCP206	
Total Hrs: 30		Credits: 2	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b> Assignment+Attendance+VIVA	<b>Final Exam</b>	<b>Internal Assessment</b>
		Demonstration+VIVA	

		40+10=50	
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### Unit 1 – Lesson Planning for Beginner Level and Children Classes [15 Hrs.]

Lesson planning for beginner level classes, level 1 class, level 2 class (for adults); micro lesson planning for each level including starting part, main part and end part; lesson planning for children, age group 6-9, age group 10-13, age group 14-17; micro lesson planning for each group.

### Unit 2 – Lesson Planning for Intermediate Level and Advance Level Classes [15 Hrs.]

Lesson planning for intermediate level classes, level 3 class, level 4 class (for adults); micro lesson planning for each level; lesson planning for advance level classes, level 5 class, level 6 class; micro lesson planning for each level;

#### Recommended Readings:

1. Mark Stephen, Yoga Sequencing: Designing Transformative Yoga Classes, North Atlantic Books, 2012.
2. Mandlik V., Yoga Teacher, Yogachaitanya Prakashana, Nashik.
3. Gharote M. L., Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007.

#### Reference Books:

1. Mark Stephens, Teaching Yoga: Essential Foundations and Techniques, North Atlantic Books.

Spoken English			
Semester II		Subject Code: AECC01	
Total Hrs: 30		Credits: 2	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
35	10+05+00=15		

### Unit 1 – Basics of English communication [15 Hrs.]

Introduction to communication; Basic vocabulary and sentence construction; Basic grammar: Noun, Pronoun, Adjective, Verb Tenses, Preposition, Articles, Conjunction, Punctuation; Everyday communication: Introduction, shopping, meeting friends, travelling, visiting a doctor, telephonic communication, negotiation, etc.

### Unit 2 – Public speaking and Personality Development [15 Hrs.]

Extempore and group discussion; Email correspondence; Personality development, Manners and Etiquettes, Confidence building and presentation skills, Dress code; Interview Skills; Resume writing; Interview question and answer; Mock sessions.

#### Recommended Readings:

1. Raymond Murphy, Essential English Grammar with Answers, Cambridge University Press.
2. Michael Swan, Practical English Usage, Oxford University Press, 2017.

#### Reference Books:

1. Nagaraj, Geetha, English Language Teaching. Hyderabad: Orient Longman, 2008.

## Semester III

Patanjal Yogasutras	
Semester III	Subject Code: BSYCC301
Total Hrs: 60	Credits: 4
Evaluation Scheme	
Theory	Practical/VIVA

Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment
		Demonstration+VIVA	
80	10+05+05=20		

### Unit 1 – General Introduction to Patanjala Yogasutras [10 Hrs.]

Patanjali as a ‘Sutrakara’; Prominent commentaries on Patanjala Yogasutras; Nature and structure of Patanjali’s Yoga; Aim and objective of Yoga according to Patanjali; Concept of Chitta and Chittabhumi, Chitta Vrittis, Vritti Nirodhana Upaya, Chitta Vikshepa and Chitta Prasadana Upayas;

### Unit 2 – Samadhi Pada [15 Hrs.]

Definition Samadhi; Nature of Samadhi; Types of Samadhi: Sabeja and Nirbeeja Samadhi; Dharmamegha Samadhi; Samprajnata and Asamprajnata Samadhi; Subtypes of Samprajnata Samadhi; Concept of Bhavapratyaya and Upayapratyaya; Concept of Samapatti; Concept of Ishwara and qualities of Ishwara;

### Unit 3 – Sadhana Pada [15 Hrs.]

Kriya Yoga; Pancha Kleshas; Dukha according to Patanjali, Heya, Heyahetu, Hana and Hanopaya; Drishya, Drashta and Prakriti-Purusha Samyoga; Concept of Ashtanga Yoga; Bahiranga and Antaranga Yoga; important characteristics of Yama, Niyama, Asana, Pranayama, Dharana, Dhyana and Samadhi.

### Unit 4 – Vibhuti and Kaivalya Pada [20 Hrs.]

Definitions of Dharana, Dhyana and Samadhi; Concept of Samyama; Parinamatrayas, Nirodha Parinama, Samadhi Parinama and Ekagrata Parinama; Siddhis from Samyama; Siddhis from another means; Types of Karmas, Shukla karma, Krushna karma, shukla-krushna karma and ashukla-akrushna karma; Vasana and nature of vasanas; Concept of Nirmana Chitta; Vivekakyati niripana; Kaivalya Nirvachana.

### Recommended Readings:

1. Swami Vivekananda, Raja Yoga, Advaita Ashram, Kolkata, 2000.
2. Iyengar B.K.S., Light on Yoga Sutra of Patanjali, Element, 2005.
3. Kolhatkar K.K., Bharatiya Manasashastra Athava Sartha ani Savivaran Patanjali Yogdarshan, Aditya Pratishtan.

### Reference Books:

1. Arya S., Patanjali Yoga Darshan - Philosophy of Yoga, Parimal Publications, 2017.
2. Swami Prabhavananda. Patanjali Yoga Sutras, Ramkrishna Math, Chennai
3. Iyengar B.K.S., Light on Patanjali Yoga, Schocken Books, New York, 1994.
4. Swami Satyananda S., Four Chapters on Freedom: Commentary on the Yoga Sutras of Patanjali, Bihar School of Yoga, 2006.
5. Swami Satchidananda, The Yoga Sutras of Patanjali, Integral Yoga Publications, 2012.

Yoga Philosophy – I			
Semester III		Subject Code: BSYCC302	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment
		Demonstration+VIVA	

80	10+05+05=20		
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### Unit 1 – Yoga in Selective Principle Upanishads [20 Hrs.]

Brief Introduction to principle Upanishads, their origin, principle theories and conclusion;

Ishavasya Upanishad: Essence of Ishopanishad; concept of Karmanishta; concept of Vidya and Avidya; Knowledge of Brahman and Atman;

Kena Upanishad: Self and the mind; Indwelling power; senses and inner self (Indriya and Antahkaran), intuitive realization of truth, concept of Yaksha Upakhyana;

### Unit 2 – Yoga in Selective Principle Upanishads [12 Hrs.]

Kathopanishad: Nature of aatma, definition of Yoga; Importance of Self Realization

Prashna Upanishad: Concept of Prana and rayi (creation); Pancha pranas; The five main questions;

### Unit 3 – Yoga in Selective Principle Upanishads [13 Hrs.]

Mundaka Upanishad: Brahma vidya, Para vidya and Aparavidya; The worthlessness of Selfishkarma; concept of Tapas and Gurubhakti; Brahman as a target of Meditation;

Mandukya: Four States of Consciousness and its relation to the syllables in Omkara.

### Unit 4 – Yoga in Selective Principle Upanishads [15 Hrs.]

Aitareya: Concept of Atma, Universe and Brahman;

Taittiriya Upanishad Concept of Pancha Kosha; Summary of Shiksha Valli; Ananda Valli; Bhruguvalli.

### Recommended Readings:

1. Radhakrishnan S., Principal Upanishads, Harpercollins, 2006.
2. Swami Satyananda S., Nine Principal Upanishads, Bihar School of Yoga, 2006.
3. Bapatshastri V.V., Subodha Upanishad Sangraha, Vol. I and II, Pan. D. V. Jog, 2007.

### Reference Books:

1. Bhagvat H. R., Sartha Upanishad Sangraha, Vasant Krishna Nulkar, 2012.
2. Ishadi Nau Upanishads, Gita Press, Gorakhpur.

Introduction to Common Human Ailments			
Semester III		Subject Code: BSYCC303	
Total Hrs: 60-		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
-Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment
		Demonstration+VIVA	
80	10+05+05=20		

### Unit 1 – [15 Hrs.]

Cardiovascular disorders: Hypertension: Atherosclerosis / Coronary artery disease: Ischemic Heart disease, Angina pectoris / Myocardial Infarction, Cardiac asthma;

Respiratory disorders: Allergic Rhinitis & Sinusitis; COPD: Chronic Bronchitis, Tuberculosis;

Endocrinal and Metabolic Disorder - Diabetes Mellitus, Type I and Type II; Hypo Thyroidism and Hyper Thyroidism; Obesity; Metabolic Syndrome;

### Unit 2 – [15 Hrs.]

Musculo-Skeletal Disorders: Back Pain, Lumbar Spondylosis, Intervertebral disc prolapse (IVDP), Spondylitis, Psychogenic Lumbago; Neck pain: Cervical Spondylosis; Arthritis: Rheumatoid Arthritis, Osteoarthritis;

Cancer: Types, Causes, Symptoms; Lung Cancer, Blood Cancer, Stomach Cancer, Breast Cancer, Ovarian Cancer, Prostate cancer;

**Unit 3 – [15 Hrs.]**

Gastrointestinal disorders: Acute & Chronic Gastritis, Dyspepsia, Peptic Ulcers; Constipation, Diarrhea, Irritable Bowel Syndrome, Ulcerative colitis;

Obstetrics and Gynecological Disorders: Menstrual disorders, Dysmenorrhea, Oligomenorrhea, Menorrhagia, Premenstrual Syndrome, Menopause and peri-menopausal syndrome; PCOS;

**Unit 4 – [15 Hrs.]**

Neurological Disorders: Headaches, Migraine, Tension headache; Epilepsy; Parkinson’s disease;

Psychiatric disorders: Neurosis, Anxiety disorders: Generalized anxiety disorder, Panic Anxiety, Obsessive Compulsive Disorder; Phobias: Depression, Dysthymia, Major depression; Psychosis: Schizophrenia, Bipolar affective disorder.

**Recommended Readings:**

1. Rodale J. I. & others, The Encyclopedia of Common Disease, Literary Licensing, 2011.
2. Swami Karmananda S., Yogic Management of Common Diseases, Yoga Publication Trust, Bihar, 2001.

**Reference Books:**

1. NagarthnaR. & others, Yoga for common ailments and IAYT for different diseases, Swami Vivekananda Yoga Prakashana, Bangalore, 2002.
2. Narain J. P., Kumar R., Textbook of Chronic Noncommunicable Diseases: The Health Challenge of 21st Century, Jaypee Digital.
3. Sinha P., Yogic Cure for Common Diseases, Orient Paperbacks, 2005.

Applied Yoga			
Semester III		Subject Code: BSYCC304	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

**Unit 1 – Yoga for Students [15 Hrs.]**

Yoga for primary school students: need and importance of yoga for primary school students; Yoga to reduce excessive fickleness; Yoga to improve memory and concentration; Brief introduction to developmental process of children; Psycho-Physiological changes and development of cognitive functions in School going children;

Yoga for high school students: Need and importance of yoga for high school students; yoga to improve memory and concentration of students; yoga to improve physical as well as mental health of the students; yoga to foster social values in the students; yoga for personality development of the students;

Yoga for Junior and Senior College students: Need and importance of yoga for this group; yoga to improve cognitive abilities of the students; yoga to improve and maintain memory and concentration of the students; yoga to cop up with stress built due to competitive environment; yoga for personality development.

**Unit 2 – Yoga for Women [10 Hrs.]**

Hormonal changes in young girls during puberty; physical and mental changes in this phase; mood disorders, irritation and common health problems during this time; Yoga for prevention and management of these problems; Yoga for management of menstrual related problems in young girls; yoga for married women; yoga for pregnant women; yogic intervention for positive health management during first trimester, second trimester and third trimester; Post- Natal health management through yoga; Yoga for menopause.

### **Unit 3 – Yoga for Sport persons[15 Hrs.]**

General introduction to Sports; Integration of Yoga in Sports; Yoga for physical, mental stamina in sports personnel; Nature of different sports injuries, its prevention and management through Yoga; Yoga modules for different sports – indoor sports, outdoor sports, track events, field events, single participation, group participation, intellectual games; Application of Yogic lifestyle in improving efficacy in sports personnel;

### **Unit 4 – Yoga for Senior Citizens and Corporate Yoga [20 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;

Introduction to workplace stress, its causes, symptoms and complications; Health hazards in computer professionals; application of Yoga for management of technostress; Health hazards in chemical and mining industries; yoga for prevention and management of hazards caused due to workplace; Health hazards in mechanical and civil industry, yoga for management of these hazards.

#### **Recommended Readings:**

1. Dhonde V., Sulabh Prasuti Ani Yoga, Yogachaitanya Prakashan, Nashik
2. Mandlik V., Jyeshthankarita Yogasadhana, Yogachaitanya Prakashan, Nashik.
3. Iyengar B.K.S., Yoga for Sports: A Journey Towards Health and Healing, Westland, 2015.
4. Iyengar G. S., Yoga: A Gem for Women, Allied Publishers.
5. Goel A., Yoga Education: Philosophy and Practice, Deep & Deep Publications Pvt. Ltd, 2007.

#### **Reference Books:**

1. Jayadev H. J., Growing with Yoga, The Yoga Institute, Santacruz, Mumbai, 2004.
2. Chanchani R., 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.
3. Mandlik V., Chotyankarita Yoga, Yogachaitanya Prakashan, Nashik.
4. Vad M., Yoga for Age 60+: A Guide to a New Journey of Safe Yoga Practice at Home, Om Capital Management, 2011.
5. Carson K., Relax into Yoga for Seniors: A Six-Week Program for Strength, Balance, Flexibility, and Pain Relief, New Harbinger, 2017.
6. Sparrowe, L. and others, The Woman's Book of Yoga and Health: A Lifelong Guide to Wellness.
7. 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)

<b>Yoga Practical IV</b>			
Semester III		Subject Code: BYSCP305	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>

	Assignment+Attendance+VIVA	Demonstration+VIVA	
		60+20=80	15+05=20

### Unit 1 – Asanas [20 Hrs.]

Asanas in supine positions: Ardha Chakrasana, Viprit Karani;

Asanas in prone positions: Saral hasta Bhujangasana, Poorna Shalabhasana;

Asanas in sitting position: Samasana, Sinhasana, Paschimottanasana, Padmasana Yogamudra-1, Padmasana Yogamudra-2, Baddha Padmasana, Utthit Padmasana, Padangushtasana.

Asanas in standing position: Vrikshasana, Parivarta Trikonasana, Ekpada Hastasana, Patangasana;

### Unit 2 – Cleansing Techniques [10 Hrs.]

Danta Dhauti (Danta Moola, Jivha Moola, Karna-randhra, Kapala-randhra), Vaman Dhauti, Jala Neti, Nasagra Drishti.

### Unit 3 – Mudras and Pranayamas [ 15 Hrs.]

Mahamudra, Chin Mudra, Chinmayi Mudra, Brahma Mudra;

Nadishuddhi Pranayama, Ujjayi Pranayama, Bhramar-Bhramari Pranayama; pranayama practice with inhalation: hold: exhalation ratio of 1:2:2 with Jalandhar bandha only.

### Unit 4 – Meditation and Relaxation Techniques [15 Hrs.]

Soham Meditation: so-ham chanting, ham-so chanting, so-ham and ham-so alternate chanting; Ajapa Gayatri; Yoga Nidra level-1 (BSY).

### Recommended Readings:

1. Mandlik V., Yoga Pravesh, Yogachaitanya Prakashana, Nashik.
2. Swami Niranjanananda S., Prana & Pranayama, Yoga Publication Trust, Bihar.
3. Mandlik V., Pranayama, Yogachaitanya Publication Trust, Nashik.
4. Mandlik V., Shudhikriya, Yogachaitanya Publication Trust, Nashik.
5. Swami Satyananda S., Yoga Nidra, Yoga Publication Trust, Bihar.

### Reference Books:

1. Mandlik K., Yogapoint Asanas: A Comprehensive Guide, www.yogapoint.com.
3. Om Swami, The Ancient Science of Mantras, Jaico Publishing House.
4. Swami Satyananda S., Asana Pranayama Mudra and Bandha, Yoga Publication Trust, Bihar.
5. Iyengar B. K. S., Light on Pranayama, Element, 2005.
6. Swami Niranjanananda S., Hatha Yoga: Book 3: Shatkarma, Bihar School of Yoga, Bihar, 2014.

Yoga Practical V			
Semester III		Subject Code: BYSCP306	
Total Hrs: 30		Credits: 2	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
		40+10=50	

### Unit 1 – Lesson Planning of Yoga Classes for Students [15 Hrs.]

Lesson planning for primary school students; lesson planning for high school students; lesson planning for junior college level students; lesson planning for senior college level students; lesson planning at each level with objectives to improve their academic performance and to improve values inside them; micro lesson planning at each level;

**Unit 2 – Lesson Planning of Yoga classes for Women [15 Hrs.]**

Lesson planning for teenage girls; lesson planning for young girls; lesson planning for pregnant women (prenatal yoga course, first trimester, second trimester and third trimester); postnatal yoga course; lesson planning for middle aged women; lesson planning for women with menopause; micro lesson planning for each course.

<b>Environment and Ecology</b>			
Semester III		Subject Code: AECC02	
Total Hrs: 30		Credits: 2	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
35	10+05+00=20		

**Unit 1 –Introduction to environmental studies and Ecosystem [10 Hrs.]**

Multidisciplinary nature of environmental studies; Scope and importance; Need for public awareness; Introduction to ecosystem; structure and function of ecosystem; energy flow in an ecosystem: food chains, food webs and ecological succession.

**Unit 2 –Environmental Pollution, policies & practices [20 Hrs.]**

Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution; climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture; Solid waste management: Control measures of urban and industrial waste; Environmental policies & practices; Sustainability and sustainable development; Environment Laws: environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

**Recommended Readings:**

1. Bharucha, E. 2003, Textbook for Environmental Studies, University Grants Commission, New Delhi and Bharati Vidyapeeth Institute of Environmental Education and Research, Pune. 361.
2. Carson, Rachel. 1962. Silent Spring (Boston: Houghton Mifflin, 1962), Mariner Books, 2002.
3. Gadgil, M., This fissured land: an ecological history of India. University of California Press.

**Reference Books:**

1. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.
2. Heywood V.H. & Watson, R.T. 1995. Global Biodiversity Assessment, Cambridge Uni. Press.
3. Mc Cully, P. 1996. Silenced rivers: the ecology and politics of large dams. Zed Books.

**Semester IV**

<b>Hatha Yoga Texts</b>			
Semester IV		Subject Code: BSYCC401	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		



### **Unit 1 – Brief Introduction to Hatha Yoga Tradition and Related Texts [10 Hrs.]**

Introduction to hatha yoga, history of hatha yoga tradition, Goal of Hatha Yoga, basic introduction to principle hatha yoga texts, Hatha Pradipika, Gherand Samhita, Hatha Ratnavali, Shiva Samhita, Siddha Siddhanta Paddhati; Definition of Yoga, meaning and origin; aim and objectives of yoga; Dos and Don'ts (Sadhaka and Badhaka tattvas); Ghata and Ghatashuddhi; concept of Matha, Mitahara; concept of cleansing techniques (Shuddhi Kriyas);

### **Unit 2 – Asanas and Mudras in Hathapradipika and Gheranda Samhita [20 Hrs.]**

Types and definitions of Asanas, features of Asanas in Hatha Pradipika and Gheranda Samhita; benefits, precautions and contra-indications of Asanas according to Hatha Pradipika and Gherand Samhita; Dasha Mudra, their definitions and features, benefits precautions and contra-indication of Mudras in Hatha Pradipika and Gherand Samhita;

### **Unit 3 – Pranayamas in Hathapradipika and Gheranda Samhita [15 Hrs.]**

Types and definitions of Pranayamas, features of Pranayamas in Hatha Pradipika and Gheranda Samhita; benefits, precautions and contra-indications of Pranayamas;

### **Unit 4 –Shatkarmas and other practices in Hathapradipika and Gherand Samhita [15 Hrs.]**

Types of Shuddhikriyas and their definitions according to Hatha Pradipika and Gheranda Samhita, features of Shuddhikriyas; benefits, precautions and contra-indications of Shuddhikriyas; Concept of Pratyahara, Dharana and Dhyana, features, benefits and precautions of Pratyahara, Dharana and Dhyana according to Gheranda Samhita; Concept and features of Nadanusandhana; four avasthas of Nadanusandhana; relation between Raja yoga and Hatha Yoga.

#### **Recommended Readings:**

1. Swami Niranjanananda S., Gheranda Samhita, Yoga Publication Trust, Bihar.
2. Swami Muktibodhananda S., Hatha Pradipika, Yoga Publication Trust, Bihar.
3. Swami Maheshananda, Shiva Samhita, Kaivalyadham Yoga Mandir Samiti, Lonavala.
4. Gharote M. L., Hatha Ratnavali, Motilal Banarasidas, 2003.
5. Gharote M.L., Siddha Siddhanta Paddhati, The lonavala Yoga Institute, Lonavala.

#### **Reference Books:**

1. Swami Digambarji, Gherand Samhita, Yoga Mimansa Publications, Lonavala.
2. Swami Anant B., Gheranda Samhita, Chaukhamba Orientalal, 2013.
3. Devkaule V.G., Gheranda Samhita, Adarsha Vidyarthi Prakashan.
4. Devkaule V.G., Gheranda Samhita, Adarsha Vidyarthi Prakashan.
5. Tripathi H.P., Shiva Samhita, Chaukhamba Krishnadasa Academy, Varanasi.
6. Swami Dwarikadasa S., Siddha Siddhanta Paddhati, Chaukhamba Sanskriti Prakashana, 2014.

<b>Yoga Philosophy – II</b>			
Semester IV		Subject Code: BSYCC402	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

### **Unit 1 – Essentials of Bhagavad Gita (Chapter 1-05)**

Introduction to Bhagavad Gita, Arjuna's problem of underperformance and Shri Krishna's address to him (ch. 1); Definitions of Yoga and their relevance; Atma Swarupa; Characteristics of Shtita Prajna; Concept of Karma Siddhanta, Purushartha ayogya, Ayukta and Brahmi Sthiti (ch. 2); 2 Types of Nishtha; Characteristics of Mithyachari; Layers of human body (ch. 3); Concept of Karmayoga and Karmasanyasayoga; Karma Swarupa, Yukta, Ayukta, Vashi Dehi, Prabhu and Vibhu (ch.5)

### Unit 2 – Essentials of Bhagavad Gita (Chapter 06-10)

Dhyana Yoga; Characteristics of Yogarudha and Jitatma; Significance of verse 6.13, 6.17; Concept of Sayyat Chitta; Definition of Yoga in verse 6.23; Concept of Mind; Importance of Abhyasa and Vairagya (ch. 6);

### Unit 3 – Essentials of Bhagavad Gita (Chapter 10-14)

Bhakti Yoga; Nature of Bhakti, Saguna and Nirguna bhakti; Concept of Abhyasayoga and Madayoga; Concept of Kshetraajna and Kshetra (ch.12); Concepts of Pancha Mahabhoot, Dasha Indriyas, Sanghat, Chetana, Vikara, Gunas, effects of Gunas, Karya and Karana; Three kinds of faith, Dhyana Yoga, Samkhya Yoga and Karma Yoga; Concept of Purusha; Bhakti; Paramatma (ch. 13); Concept of Trigunas; significance pf Sattva, Rajas and Tamas gunas (ch. 14);

### Unit 4 – Essentials of Bhagavad Gita (Chapter 15-18)

Concept of six Indriyas, Vaishwanar Agni and four types of digestive processes; concept of Kshara Purusha and Akshara Purusha; concept of Uttama Purusha (ch. 15); characteristics of Daivi Manushya and Asuri Manushya; gates to the hell (Naraka) (ch.16); three types of faiths; types of aharas, significance of sattvika ahara; Nirdesh of Brahma (ch. 17); Concepts of Karma Tyaga and Karmafala Tyaga; Anishta, Ishta and Mishra types of Karma Falas; concept Jnana, Jneya and Jnata; concept of Karan, Karma and Karta (ch. 18).

### Recommended Readings:

- 1.B. Swami Prabhupada, Bhagavad Geeta, Bhaktivedanta Book Trust Publications.
2. Bhagavad Geeta or The Devine Song, Gita Press, Gorakhpur.

### Reference Books:

1. Swami Gambhiranand, Bhagavadgita (with Gudharth Dipika), Ramkrishna Matha, Madras.
2. Paramahansa Yogananda, The Yoga of the Bhagavad Gita: An Introduction to India's Universal Science of God-Realization, Self-realization fellowship, USA, 2007.
3. Swami Vivekananda, Bhagavad Gita As Viewed by Swami Vivekananda, Vedanta Press, 2009
4. Swami Tapasyananda, The Holy Gita-the Science of Life, RK Mission, Chennai.
5. Acharya Shankar, Gita Bhasya, Gita Press, Gorakhpur.

Therapeutics Yoga			
Semester IV		Subject Code: BSYCC403	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

### Unit 1 – [20 Hrs.]

Holistic approach towards a therapy of a disease comprised of Yamas, Niyamas, Asanas, Hasta Mudras, Shat Karmas, Breathing Practices, Pranayamas, Dharana Abhyasa, Relaxation practices, Mantra therapy, prayers, Meditation and yogic diet.

Holistic Approach of Yoga Therapyfor: Cardiovascular Disorders; Respiratory Disorders;Skin Disorders;

**Unit 2 – [13 Hrs.]**

Holistic Approach of Yoga Therapy for: Musculoskeletal Disorders; Cancer;Endocrinal and Metabolic Disorders;

**Unit 3 – [12 Hrs.]**

Holistic Approach of Yoga Therapy for: Gastrointestinal Disorders; Obstetric Disorders; Women Disorders; Reproductive disorders;

**Unit 4 – [15 Hrs.]**

Holistic Approach of Yoga Therapy for:Neurological Disorders;Psychiatric Disorders;

**Recommended Readings:**

1. MDNIY publications: 10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi.
2. Reddy M Venkata & others: Yogic Therapy, Sri M.S.R. Memorial Yoga series, Arthamuru.
3. Ramesh B., Back to Health Through Yoga, Rupa Publications India Pvt. Ltd, 2011.
4. Mandlik V., Yogopachara, Yogachaitanya Prakashana, Nashik.
5. Swami Karmananda, Yogic Management of Common Diseases, Yoga Publication Trust, Bihar
6. Gharote M. M., Therapeutic References in Traditional Yoga Texts, Lonavala Yoga Institute.

**Reference Books:**

1. Rai, Lajpat: Discovering Human Potential energy, Anubhava Rai Publications, 1998.
2. Heriza, N., and others, Dr. Yoga: A Complete Guide to the Medical Benefits of and Yoga.
3. Sparrowe, L., Walden, P. and Lasater, J.H: The Woman's Book of Yoga and Health.
4. Clennell B., The Woman's Yoga Book, Rodell Press, 2010.
5. Nagarathna R and Nagendra H R: Yoga for Arthritis, Back pain, Diabetes, Pregnancy, Breathing Practices, Swami Vivekananda Yoga Prakasana, Bangalore, 2000.
6. Robin Monoro and others, Yoga for Common Ailments, Guia Publication, U.K.
7. Swami Satyananda S.,Yoga and Cardio Vascular Management, Yoga Publication Trust, Bihar.
8. Stephen M., Yoga Therapy: Foundations, Methods and practices, North Atlantic Books, 2017.
9. Stiles M., Ayurvedic Yoga Therapy, New Age Books, 2009.
10. Larry Payne, Yoga Therapy and Integrative Medicine: Where Ancient Science Meets Modern Medicine, Basic Health Publications, 2015.

Yoga and Allied Sciences			
Semester IV		Subject Code: BSYCC404	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment Demonstration+VIVA
80	10+05+05=20		

**Unit 1 – Yoga and Ayurveda [15 Hrs.]**

Introduction to Ayurveda; Concept of Dosha; Concept of Dhatu and Mala; Concept of Koshtha and Shakha; Concept of Ama; Concept of Prakriti; Principles of Ahara; Concept of Dinacharya and Ritucharya; Panchanidana; Chikitsa, Shodhana and Shamana Chikitsa; Yoga and Ayurveda;

**Unit 2 – Naturopathy [15 Hrs.]**

History of Naturopathy; Principles of Naturopathy; Nature Cure Therapy: Mud therapy; Massage therapy, Hydrotherapy, Diet therapy; fasting; Color therapy; Reflexology; Yoga and Naturopathy.

**Unit 3 – Acupressure and Acupuncture Therapy [15 Hrs.]**

Basic principles of acupressure; types of acupressure therapy; Principles of Acupuncture; types of acupuncture therapy,

**Unit 4 – Reiki and Pranic Healing [15 Hrs.]**

Concept of reiki; history, development and principles of reiki; reiki levels; Concept of pranic healing; practices of pranic healing; Marma Therapy, principles of Marma therapy; practices.

**Recommended Readings:**

1. Mandlik V., Nisargachi Sath, Yogachaitanya Prakashana, Nashik, 2006.
2. Bakhru H. K., The Complete Handbook of Nature Cure, Jaico Publishing House.
3. BhartiA., Vedic Vangmaya main Prakritik Chikitsa, Central Council for Research in Yoga and Naturopathy, New Delhi, 2004.
4. Frawley D., Yoga and Ayurveda: Self-Healing and Self-Realization, Motilal Banarasidas.
5. Vora D., Health in your Hands, Vol I and Vol II, Navneet Education, 2016.

**Reference Books:**

1. Taneja P., Principles and Practice of Ayurvedic Medicine, Chaukhamba Orientalal, Varanasi.
2. Dwivedi S. D., Naturopathy for Perfect health, Kalpaz Publication Delhi, 2002
3. Harry Benjamin, Everybody’s Guide to Nature Cure, Thorsons.
4. Saxena A. K., Miraculous Effects of Acupressure, Shristi Publishers, 2002.
5. Stephen Co. and others, Your Hands Can Heal You: Pranic Healing Energy Remedies to Boost Vitality and Speed Recovery from Common Health Problems, Atria Books,
6. Phull G., Clinical Approach to Marma Chikitsa, Generic, 2018.
7. Frawley D., Ayurveda and Marma Therapy: Energy Points in Yogic Healing, Lotus Press, 2003.
8. Frank A. P., The Original Reiki Handbook of Dr. Mikao Usui: The Traditional Usui Reiki Ryoho Treatment positions and Numerous Reiki Techniques for Health and Well-Being, 2016.
9. Ekbote A., Dababindu, Yogachaitanya Prakashana, Nashik.

<b>Yoga Practical VI</b>			
Semester IV		Subject Code: BYSCP405	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration/Attendance+VIVA/Report	
		60+20=80	15+05=20

**Unit 1 – Asanas and Mudra [20 Hrs.]**

Asanas in supine position: Sarvangasana, Matsyasana, Chakrasana;

Asanas in prone position: Vakrahasta Bhujangasana, Dhanurasana;

Asanas in sitting position: Siddhasana, Tolangulasana, Ekpada Hastasana, Ugrasana, Ardha Padma Bandhasana, Hansasana, Ekpada Shirasana, Gaumukhasana,

Asanas in standing position: Shirshasana, Sankatasana, Garudasana, Hatha Ugrasana;

Mudras: Mahabandha, Agochari Mudra, Kaki Mudra, Hridaya Mudra;

### Unit 2 – Cleansing Techniques [10 Hrs.]

Danda Dhauti, Danda Neti, Trataka, Laghu shankha prakshalana.

### Unit 3 – Pranayamas [20 Hrs.]

Shitali Pranayama, Sitkari Pranayama, Bhastrika Pranayama; practice of pranayama without holding the breath with ratio 1:0:2 (inhalation: hold: exhalation); pranayama practice with inhalation: hold: exhalation ratio of 1:2:2 with Jalandhara Bandha only.

### Unit 4 – Meditation and Relaxation Techniques [10 Hrs.]

Shatachakra Dhyana; Yoga Nidra level-2 (BSY)

### Internal Assessment:

[20 Marks]

### Field Visit/Study Tour

The students may be taken\* to one or more than one Yoga Institutes /Yoga Centers of repute for field visit. Students should submit a report based on field visit/study tour observations.

\*The field visit/ study tour can be arranged at the beginning of the semester or at the end of the previous semester, according to convenience of the host institute and students.

### Recommended Readings:

1. Mandlik V., Shudhikriya, Yogachaitanya Prakashana, Nashik
2. Mandlik V., Pranayama, Yogachaitanya Prakashana, Nashik
3. Swami Satyananda S., Yoga Nidra, Yoga Publication trust, Bihar.
4. Mandlik V., Yoga Parichaya: Yogasane, Yogachaitanya Prakashana, Nashik.
5. Mandlik V., Yogasane (Prabodha), Yogachaitanya Prakashana, Nashik.

### Reference Books:

1. Swami Niranjananada S., Prana and Pranayama, Yoga Publication Trust, Bihar.
2. Swami Satyananda S., Asana Pranayama Mudra Bandha, Yoga Publication Trust, Bihar.
3. Om Swami, The Ancient Science of Mantras, Jaico Publishing House, 2017.
4. Mandlik K., Yogapoint Asanas: A Comprehensive Guide, www.yogapoint.com.

Yoga Practical VII			
Semester IV		Subject Code: BYSCP406	
Total Hrs: 30		Credits: 2	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment
		Demonstration+VIVA	
		40+10=50	

### Unit 2 – Lesson planning of Yoga for Sport Persons and Senior Citizens [15 Hrs.]

Lesson planning of yoga for sport persons; lesson planning for indoor sports; lesson planning for outdoor sports; lesson planning for intellectual games; micro lesson planning for each group;

Lesson planning for senior citizens; micro lesson planning for this group;

### Unit 2 – Lesson Planning for Corporate Yoga [15 Hrs.]

Lesson planning of corporate yoga classes; lesson planning of IT industry group; lesson planning for chemical and mining industry group; lesson planning for mechanical and civil industry group; lesson planning for management level workforce; lesson planning for entertainment and media industry workforce; micro lesson planning for each course.

General Aptitude			
Semester IV		Subject Code: AECC03	
Total Hrs: 30		Credits: 2	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
35	10+05+00=15		

### Unit 1 –Logical Reasoning [15 Hrs.]

Introduction to the logic, Syllogism, Logical connectives, Relationships, Seating Arrangements, Clocks, Calendars, Direction sense test;

### Unit 2 –Mathematical Reasoning and Reading Comprehension [15 Hrs.]

Passage Reading, Letter series, number series, codes;

#### Recommended Readings:

1. Agrawal R.S., Quantitative Aptitude, S Chand Publications, 2018.
2. Agrawal R.S., A Modern Approach to Verbal and Non-Verbal Reasoning, S Chand Publications.

#### Reference Books:

1. Varghese C., CSIR-NET General Aptitude, Lilly Publications, 2018.
2. Agrawal R.S., A Modern Approach to Logical Reasoning, S Chand Publications.
3. Kumar A., General Aptitude: Theory and Practice, Pathfinder Publications, 2016.

## Semester V

Human Psychology			
Semester V		Subject Code: BSYCC501	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

### Unit 1 – Introduction to Modern Psychology [15 Hrs.]

Brief introduction to modern psychology; important theories in modern psychology: psychoanalytical/psychodynamic theory, humanistic theory, cognitive theory, behavioral theory, evolutionary theory, biological theory, cross-cultural theory;

### Unit 2 –Cognitive psychology [15 Hrs.]

Definitions and features of basic cognitive abilities, Sensation, Perception, Attention, Learning, Feeling, Memory etc.; Definitions, types and special features of Intelligence; measurement of intelligence;

**Unit 3 –Personality and Altered states of consciousness [15 Hrs.]**

Personality: Nature and types of personality; Heredity and Environment as determinants of personality; facets and stages of personality development; Personality theories of Sigmund Freud, Carl Rogers, C.G. Jung, Alfred Adler, Ernst Kretschmer;

Sleep: stages of sleep, importance of sleep, Circadian Rhythm, Dreams, Hypnosis; sleep disorders;

**Unit 4 – Behavioral psychology and counseling [15 Hrs.]**

Introduction to behavioral psychology, definitions of behavior; human behavior and psychic forces behind it; behavior and consciousness; basis of behavior;

Introduction to counseling, methods of counseling, skills required for counselor, issues and challenges in counseling, codes of ethics for counselors.

**Recommended Readings:**

1. Morgan C. and others, Introduction to Psychology, McGraw Hill Publications, 2017.
2. Mangal S. K., General Psychology, Sterling Publications, 2009.
3. GPH Panel of Experts, BPC001 General Psychology (IGNOU Help Book for BPC-001 in English Medium), Gullybaba Publishing House.

**Reference Books:**

1. S. K. Ciccarelli and others, Psychology: South Asian Edition, Pearson Education, 2010.
2. Hilgard and others, Introduction to Psychology, Oxford and IBH Publishing, New Delhi.
3. Baron R. A., Mishra G., Psychology (Adaption), Pearson Education, New Delhi, 2000.
4. Mishra B., Psychology: The study of Human Behavior, PHI Learning, 2016.
5. Morgan, C. and others, Introduction to Psychology, Tata McGraw Hill, New Delhi, 2006.
6. Passer M.W., Smith R.E., Psychology: The Science of Mind and Behavior, Tata McGraw Hill.
7. Singh A. K., Saral Samanya Manovijnana, Motilal Banarasidas Publications, Delhi, 2007.

<b>Research Methodology</b>			
Semester V		Subject Code: BSYCC502	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

**Unit 1 – Introduction to Research Methodology [15 Hrs.]**

Meaning and definitions of research; Aim and objectives of research; Significance of research; Types of research; Research Approaches; Research methods Vs. methodology; criteria of good research; important qualities of good researcher.

**Unit 2 – Research Process [15 Hrs.]**

Steps involved in research process; Identification of research problem; Review of literature; Formulation of hypotheses, types of hypotheses; Research design, types of research design; Research methodology, methods,

### Unit 3 – Introduction to Statistics [15 Hrs.]

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

### Unit 4 – Report Writing [15 Hrs.]

Need and objectives of report writing; types of reports; mechanism of report writing

#### Recommended Readings:

1. Kothari C. R., Research Methodology: Methods and Techniques. New Age International, 2009.
2. Kumar R., Research Methodology, Sage Publishing, 2014.
3. Agrawal B.L., Basic Statistics, New Age International, 2013.

#### Reference Books:

1. R. L. Bijlani. (2008). Medical Research, Jaypee Brothers Medical Publishers, New Delhi.
2. Mangal S.K., Research Methodology in Behavioral Sciences, Prentice Hall India, 2013.
3. Sarpotdar S. and others, Research Methodology and Medical Statistics, Manikarnika Publications, 2017.
4. Gupta S. C., Fundamentals of Statistics, Himalaya Publishing House, 2016.
5. Koli L. N., Research Methodology (Hindi), Y K Publishers, 2014.

Yoga Practical VIII			
Semester V		Subject Code: BYSCP505	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment
		Demonstration/Attendance+VIVA/Report	
		60+20=80	15+05=20

### Unit 1 – Asanas and Mudras [20 Hrs.]

Asanas in supine position: Ashwini Mudra, Halasana;

Asanas in prone position: Niralamba Bhujangasana, Niralamba Shalabhasana;

Asanas in sitting position: Supta Vajrasana, Shashankasana, Ushtrasana, Kukkutasana, Ekapada Shirasana, Mayurasana, Utkatasana;



Asanas in standing position: Mrudangasana, Veerbhadrasana, Vistruta Pada Shirshasana, Tiryaka Shirshasana;

Mudra: Mahavedha, Jnana Mudra, Shanmukhi Mudra, Yoni Mudra;

**Unit 2 – Cleansing Techniques [10 Hrs.]**

Vastra Dhauti; Sutra Neti; Vama Nauli, Dakshina Nauli, Madhya Nauli; Laghu shankhaprakshalana.

**Unit 3 – Pranayamas [20 Hrs.]**

Nadishuddhi pranayama, Suryabhedan pranayama, Chandrabhedana pranayama, Bhramar-Bhramari pranayama, Ujjayi pranayama; practice of pranayamas with tribandha; practice of pranayama with inhalation: hold: exhalation of 1:3:2; standard practice of 4:12:8 ratio with tribandha.

**Unit 4 – Meditation and Relaxation Techniques [10 Hrs.]**

Cyclic Meditation (SVYASA); Yoga Nidra level-3 (BSY)

**Internal Assessment:** **[20 Marks]**

**Field Visit/Study Tour**

The students may be taken\* to one or more than one Yoga Institutes /Yoga Centers of repute for field visit. Students should submit a report based on field visit/study tour observations.

\*The field visit/ study tour can be arranged at the beginning of the semester or at the end of the previous semester, according to convenience of the host institute and students.

**Recommended Readings:**

1. Mandlik V., Shudhikriya, Yogachaitanya Prakashana, Nashik
2. Mandlik V., Pranayama, Yogachaitanya Prakashana, Nashik
3. Swami Satyananda S., Yoga Nidra, Yoga Publication trust, Bihar.
4. Mandlik V., Yoga Parichaya: Yogasane, Yogachaitanya Prakashana, Nashik.
5. Mandlik V., Yogasane (Prabodha), Yogachaitanya Prakashana, Nashik.

**Reference Books:**

1. Swami Niranjananada S., Prana and Pranayama, Yoga Publication Trust, Bihar.
2. Swami Satyananda S., Asana Pranayama Mudra Bandha, Yoga Publication Trust, Bihar.
3. Om Swami, The Ancient Science of Mantras, Jaico Publishing House, 2017.
4. Mandlik K., Yogapoint Asanas: A Comprehensive Guide, www.yogapoint.com.

<b>Yoga Practical IX</b>			
Semester V		Subject Code: BYSCP506	
Total Hrs: 30		Credits: 2	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b> Assignment+Attendance+VIVA	<b>Final Exam</b>	<b>Internal Assessment</b>
		Demonstration+VIVA	
		40+10=50	

**Unit 1 – Lesson Planning of Therapeutic Yoga Classes for Common Diseases [15 Hrs.]**

Lesson planning of therapeutic Yoga classes for weight loss; for immunity related problems; for common infections; for women problems; PCOD; for back pain, lower back pain, upper back pain, spondylitis, neck pain;

## Unit 2 – Lesson Planning of Therapeutic Yoga Classes for Chronic Diseases [15 Hrs.]

Lesson planning of therapeutic Yoga classes for Diabetes; Cardiac problems, low blood pressure, high blood pressure, bypass;

<b>Internship I</b>			
Semester V		Subject Code: SECP02	
Total Hrs: 15 Hrs.		Credits: 2	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b> Assignment+Attendance+VIVA	<b>Final Exam</b>	<b>Internal Assessment</b>
		Field Work + Report	
		35 + 15 =50	

Each student is required to conduct 15 days yoga camp/session at any recognized institution or the institution directed by the department. After the completion of the session, the students are required to submit the completion certificate from the institution where he/she conducted the camp/program.

The students will conduct daily yoga program for the human resource available at the institution. They will also contribute to clear the misconceptions about yoga and make the people aware about different facets of yoga. Their presence at the institution is to ensure the propagation of yoga.

## Semester VI

<b>Dietetics and Nutrition</b>			
Semester VI		Subject Code: BSYCC601	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b> Assignment+Attendance+VIVA	<b>Final Exam</b>	<b>Internal Assessment</b>
		Demonstration+VIVA	
80	10+05+05=20		

## Unit 1 – Introduction to Dietetics and Nutrition [15 Hrs.]

Basic concepts and components of food and nutrition; Concept of food, Functions of Food; Components of Food & their Classification; Proximate principles of diet, balanced diet concept;

Carbohydrates, proteins, fats – sources, nutritive values, importance; Minerals-calcium, iron, phosphorus etc. Vitamins – sources, roles, requirements.

### Unit 2 –Nutrition Basics [15 Hrs.]

Nutrition, Human Nutritional Requirements; Macro Nutrients: Sources, Functions and Effects on the Body; Micro Nutrients: Sources, Functions and Effects on the Body; Fat Soluble Nutrients: Sources, Functions and Effects on the Body; Water soluble Nutrients: Sources, Functions and Effects on the Body; Significance of Carbohydrate, Proteins, Lipids, Vitamins, Minerals and water in the body; Antioxidants and their Role;

### Unit 3 –Food Groups [15 Hrs.]

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

### Unit 4 – Food and Metabolism [15 Hrs.]

Energy: Basic Concepts, Definitions and Components of Energy Requirement, Energy Imbalance Concept of Metabolism, Anabolism, Catabolism, Calorie Requirement; BMR, SDA, Physical Activity; Metabolism of Carbohydrates, Lipids and Protein; Factors Affecting Energy; Requirement and Expenditure.

### Recommended Readings:

1. Shirlakshmi B., Dietetics, New Age International Publication, 2014.
2. Gupta S. and others, Textbook of Nutrition and Dietetics, Elite Publication House, 2016.

### Reference Books:

1. Shirlakshmi B., Food Science, New Age International Publication, 2018.
2. Joshi S. A., Nutrition and Dietetics, McGraw Hill Education, 2017.
3. Singh J., Handbook of Nutrition and Dietetic, Lotus Press, 2008.
4. Pendharkar J., Kay Khave Kiti Khave, Jayashree Prakashan, 2012.

<b>Research Project</b>			
Semester VI		Subject Code: BSYCC604	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Project Work</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Project Report +VIVA	
		<b>80+20=100</b>	<b>30+20=50</b>

A research project is to be carried out by the students, under the guidance of lecturer. Students have to select their topics after approval by respective guides. After successful completion of the project, report is to be submitted for the final assessment. The final assessment will be based on project report and presentation of the research project followed by a VIVA.

Students are allowed to do the project individually or in a group. The group will be consisting of minimum two students to maximum 4 students, depending on the scope of selected topic.

<b>Yoga Practical X</b>			
Semester VI		Subject Code: BYSCP605	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
		60+20=80	15+05=20

### **Unit 1 – Asanas and Mudras [20 Hrs.]**

Asanas in supine position: Vistrutapada Halasana, Karnapidanasa;

Asanas in prone position: Tiryaka Bhujangasana, Katihasta Bhujangasana;

Asanas in sitting position: Parighasana, Padma Mayurasana, Malasana, Garbhasana, Shashankasana.

Asanas in standing position: Bhunamanasana, Vatayanasana, Merudandasana, Padma Shirshasana.

Mudra: Khechari Mudra, Shambhavi Mudra, Hridaya Mudra, Prana Mudra.

### **Unit 2 – Cleansing Techniques [20 Hrs.]**

Nauli Chalan; Poorna Shankha Prakshalana

### **Unit 3 – Pranayamas [10 Hrs.]**

Shitali pranayama; Sitkari pranayama; Bhastrika pranayama; practice of pranayamas with tribandha; practice of pranayama with inhalation: hold: exhalation of 1:3:2; standard practice of 4:12:8 ratio with tribandha.

### **Unit 4 – Meditation and Relaxation Techniques [10 Hrs.]**

Mind Sound Resonance Technique (SVYASA); Yoga Nidra level-4/5/6 (BSY)

### **Recommended Readings:**

1. Mandlik V., Shudhikriya, Yogachaitanya Prakashana, Nashik
2. Mandlik V., Pranayama, Yogachaitaya Prakashana, Nashik
3. Swami Satyananda S., Yoga Nidra, Yoga Publication trust, Bihar.
4. Mandlik V., Yoga Parichaya: Yogasane, Yogachaitanya Prakashana, Nashik.
5. Mandlik V., Yogasane (Prabodha), Yogachaitanya Prakashana, Nashik.

### **Reference Books:**

1. Swami Niranjananada S., Prana and Pranayama, Yoga Publication Trust, Bihar.
2. Swami Satyananda S., Asana Pranayama Mudra Bandha, Yoga Publication Trust, Bihar.
3. Om Swami, The Ancient Science of Mantras, Jaico Publishing House, 2017.
4. Mandlik K., Yogapoint Asanas: A Comprehensive Guide, www.yogapoint.com.

<b>Internship II</b>			
Semester VI		Subject Code: SECC04	
Total Hrs:		Credits: 2	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Field Work + Report	
			15+35 = 50

Each student is required to conduct 15 days yoga camp/session at any recognized institution or the institution directed by the department. After the completion of the session, the students are required

to submit the completion certificate from the institution where he/she conducted the camp/program.

The students will conduct daily yoga program for the human resource available at the institution. They will also contribute to clear the misconceptions about yoga and make the people aware about different facets of yoga. Their presence at the institution is to ensure propagation of yoga.

### Syllabus for Group 'A' Electives

Physiological Effects of Yogic Practices			
Semester V		Subject Code: DSEC01	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

**Unit 1 – Physiological effects of Asanas[15 Hrs.]**

**Unit 2 – Physiological effects of Cleansing Techniques[15 Hrs.]**

**Unit 3 – Physiological effects of Pranayamas[15 Hrs.]**

**Unit 4 – Physiological effects of meditation and relaxing techniques[15 Hrs.]**

#### Recommended Readings:

1. Shrikrishna, Notes on Structure and Function of a Human Body and Effects of Yogic Practices on it, Yoga Mimansa Publications, Lonavala.
2. Gore M. M., Anatomy and Physiology of Yogic Practices, Yoga Mimansa Publications.

#### Reference Books:

1. Swami Maheshananda, Scientific Exposition on Pranayama, Yoga Mimansa Publications.
2. Sao H. K., Psychophysiological Impact of Yoga and Yagna, Benten Books, 2011.
3. Coulter D., Anatomy of Hatha Yoga: A Manual for Students, Teachers, and Practitioners, Motilal Banarasidas, 2010.
4. Shashirekha C. K., Yoga Body Anatomy: Insights to Muscular Movements, Notion Press.
5. Oliver S. B., Applied Anatomy and Physiology of Yoga, Yoga Synergy Pvt. Ltd., 2005.
6. Kaminoff L., Yoga Anatomy, Human Kinetics Publishers, 2011.

Health and Yogic Hygiene			
Semester V		Subject Code: DSEC02	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

**Unit 1 – Introduction to Health and Hygiene [15 Hrs.]**

Concept of hygiene, personal hygiene, factors affecting personal hygiene; food habits, cleanliness, exercise and sleep; importance of water intake in daily life, impurities in the water, sources and

contamination of water and water purification including natural and machine methods; First aid and its importance in daily life; role of Yamas and Niyamas to maintain the hygiene;

### **Unit 2 –Role of Yoga in Management of Infections [15 Hrs.]**

Infections, definition and types; infective agents; infectivity period; diseases happen due to infection, types and their spread; channels of infections; Disinfectants, definition, types and methods of disinfection; role of Shudhhikriyas in prevention and cure of infections; role of pranayamas in prevention and cure of infections;

### **Unit 3 –Role of Yoga in Management of Infectious Diseases [15 Hrs.]**

Infectious diseases, types, causes, incubation period, mode of spread, signs and symptoms, prevention and control of: Diseases spread by insects, Malaria, Dengue and Swine Flu; Diseases spread by ingestion, Dysentery, Cholera, Typhoid; Diseases spread by droplet infections, chicken pox, measles, mumps; diseases spread by contact, Leprosy, STDs; role of yogic intervention in prevention and treatment of infectious diseases.

### **Unit 4 – Yoga and Immunity [15 Hrs.]**

Immunity, definition, types; immunization schedule, types; common emerging health problems due to low immunity power in children, adults and women; role of yogic practices in improvement and maintenance of immunity power.

### **Reference Books:**

1. Yogendra S., Yoga Hygiene Simplified, The Yoga Institute, 2007.
2. Bedi Y. P., Hygiene & Public Health, Anand Publishing Co., Amritsar, 1976.
2. Have V. N., You & Your Health, National Book Trust, 1975.
3. Bhatia B. L., Elementary Hygiene, Orient Longmans, Ltd. Calcutta.
4. Park J. E., Preventive & Social Medicine, Jabalpur Messer Banarsidas Bhanot.
5. Ghosh B. N., Hygiene & Public Health Calcutta Scientific Publishing Co.

<b>Fundamentals of Ayurveda</b>			
Semester V		Subject Code: DSEC02	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

### **Unit 1 – Introduction to Ayurveda [15 Hrs.]**

Introduction to Ayurveda, Definition, aim of Ayurveda, origin, history and propagation; Introduction to principle Ayurvedic texts, 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 –Basic Principle of Ayurveda [15 Hrs.]**

Tridosha, Saptadhatu, Trimala, Pancha Mahabhuta, Prakruti & Manas; Concept and importance of Swasthavrita, Dincharya, 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 –Upastambhas in Ayurveda [15 Hrs.]**

Concept of Upastambhas; Concept of Ahara, Ahara pachana, Pathya & Apathya in Ayurveda; Introduction to Shariraposhana; Concept of Oja in Ayurveda; Role of Ayurvedic diet in maintenance of health and prevention.

### **Unit 4 – Panchakarmas in Ayurveda[15 Hrs.]**

Concept of Panchakarmas, types and importance; Role of Poorva and Paschat Karma in Panchakarma; Significance of Panchakarma in Ayurveda and Shatkarma in Yoga; Approach of Ayurveda in relation to total health.

### Recommended Readings:

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

### Reference Books:

1. Dwivedi L., The Basic Principles of Ayurveda and Their Utility, Chaukhamba Krishnadas Ac.
2. Lad V., Textbook of Ayurveda, Ayurvedic Press, 2002.
3. Sharma P., Charak samhita, Chaukhambha Orientalia, Varanasi, 2008.
4. Dutta R. and others, Ashtanga Samgraha, Chaukambha Sanskrit Prathisthan, Delhi, 2003.
5. Krishnamurthy K. H., The wealth of Sushruta, International Institute of Ayurveda, 1999.

Yogic Diet			
Semester V		Subject Code: DSEC02	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment Assignment+Attendance+VIVA	Final Exam	Internal Assessment Demonstration+VIVA
80	10+05+05=20		

### Unit 1 – Introduction to Yogic Diet

Introduction to Ahara, objectives of taking ahara; concept of Mitahara; Classification of diet according to traditional yoga texts: Hatha Pradipika, Gheranda Samhita and Bhagavad Geeta; Pathya and Apathya according to these texts; Relationship of Trigunas with ahara; Importance of yogic diet for yoga practice; Role of yogic diet in healthy living;

### Unit 2 –Dietetics in Yoga

Vegetarian vs Non-vegetarian diet; classification of diet according to Triguna;Panchabhuta; relationships of Rasa,Virya and Guna;References of specific foods in yoga texts: 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; Jambu, Haritaki, Khajura, Madhu, Shunthi;

### Unit 3 –Dietetics in Ayurveda

Concept of Ahara in Ayurveda; concept of Pathya and Apathya; rules for taking solid food, rules for taking liquid diet, composition of diet, ideal timing for eating food according to Ayurveda; relationship of Doshas with diet; diet according to prakirit; wrong diet habits; imbalance of doshas due to wrong diet; importance of ahara in treatment of dosha imbalance;

### Unit 4 – Importance of Yogics Diet in Today's Life

Importance of Mitahara;role of yogic diet in proximate principle of diet; role of yogic diet in balanced diet concept; concepts of Anahara andati ahara; concept of upawasa, scientific bases of fasting, types and methods of fasting in India, benefits and contra-indications of fasting; concept of yogic diet as a natural diet; negative effects of packed food, junk food and fast food; control on

intake of harmful diet by using yogic practices; diet and its impact on personality, yogic diet for good personality.

**Recommended Readings:**

1. Thomson D., The Ayurvedic Diet, New Age International, 2001.
2. Goyal B. B., Secrets of Natural Diet, Sterling Publications, 2013.
3. Bijlani R., Eating Wisely and Well, Rupa and co., 2012.

**Reference Books:**

1. Swami Muktabodhananda, Hatha Pradipika, Yoga Publication Trust, Bihar.
2. Malhotra R., The Ayurvedic Diet, Element, 2016.
3. Stone R., The Purifying Diet, Lilawathi Bhargav Charitable Trust, Delhi.
4. Swami Gambhirananda, Bhagavatgita, Ramkrishna Matha, Madras.
5. Swami Digambar and others, Gheranda Samhita, Yoga Mimansa Publications, Lonavala.

**Syllabus for Group ‘B’ Electives**

Yoga for Holistic Health			
Semester VI		Subject Code: DSEC02	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

**Unit 1 – Introduction to the Holistic Health [15 Hrs.]**

Introduction to health, concept of good health; definition of health according to WHO, definitions of health according to Indian health systems i.e. Ayurveda and Yoga; factors affecting health, characteristics of good health; potential causes of ill health, signs and symptoms of ill health; need and importance of holistic health practices; application of yoga in promoting holistic health; concept of spiritual health; role of yoga in spiritual health;

**Unit 2 – Holistic Health Practices According to Bhagavad Geeta [15 Hrs.]**

Concept of health according to BG, definition of healthy person; diet and lifestyle for healthy living according to Lord Krishna; process of destruction of health (BG 2.62 & 2.63) and its remedy; karma yoga for holistic health; Triguna concept as given in chapter 14, three types of personality; mental afflictions and their remedies; psychoanalysis in BG;

**Unit 3 – Holistic Health According Hatha Yoga Tradition [15 Hrs.]**

Concept of health according to hatha yoga; important concepts of hatha yoga and their relationship with holistic health: tattva shuddhi and ghata shuddhi, yamas and niyamas lifestyle practices, asanas, shuddhikriyas, mudras, pranayamas, Dharana and nadanusandhan/ Dhyana; do's and don'ts (Sadhaka and Badhaka tattvas) dietary concepts in hatha yoga and their importance in obtaining holistic health; role of shuddhikriyas in preventive health practices;

**Unit 4 – Holistic Health According to Patanjali Yogasutras [15 Hrs.]**

Concept of health according to PY; constituents of body; causes of ill health, causes of afflictions and happiness; 9 obstacles in becoming in achieving bliss; remedies for mental happiness (Chittaprasadan); 5 types of kleshas and their role in mental and emotional ill health;



eight-fold system to overcome the obstacles and to achieve holistic health; Five yamas and 5 niyamas, asanas, pranayamas, pratyahara, Dharana, Dhyana. Samadhi.

**Recommended Readings:**

1. Swami Vivekananda, Raja Yoga, Ramkrishna Matha, Nagpur.
2. Iyengar B. K. S., Yoga The Path to Holistic Health: The Definitive Step-by-Step Guide, DK.
3. Khalasa S. B. S. and others, The Principles and Practice of Yoga in Health Care, Sage Publication.
4. Swami Muktabodhananda, Hatha Pradipika, Yoga Publication Trust, Bihar.
5. Swami Niranjanananda S., Gheranda Samhita, Yoga Publication Trust, Bihar.
6. Geeta Press, Bhagavad Geeta, Geeta Press, Gorakhpur.

**Reference Books:**

1. Joshi K. B., Yoga Mudras, Notion Press, 2016.
2. Swami Digambar, Gherand Samhita, Yoga Mimansa Publications, Lonavala.
3. Devkule V. G., Gherand Samhita, Adarsh Publication, Pune.
4. B. Swami Prabhupada, Bhagavad Geeta, Bhaktivedanta Book Trust Publications.

Yoga for Mental Health			
Semester VI		Subject Code: DSEC02	
Total Hrs: 60		Credits: 4	
Evaluation Scheme			
Theory		Practical/VIVA	
Final Exam	Internal Assessment	Final Exam	Internal Assessment
	Assignment+Attendance+VIVA		Demonstration+VIVA
80	10+05+05=20		

**Unit 1 – Introduction to the Mental Health [15 Hrs.]**

Concept of mental health, meaning and importance; elements of mental health, psychological, emotional and social; factors affecting mental health; signs of good mental health;

**Unit 2 – Yoga and Psychiatric Disorders [15 Hrs.]**

Introduction to psychiatric disorders, signs and symptoms of Dementia, Delirium and Amnesic Disorders; Schizophrenia and other psychotic disorders; Mood disorders; Eating disorders; Yogic intervention in treatment of Psychiatric disorders;

**Unit 3 – Yoga and Personality Disorders [15 Hrs.]**

Introduction to personality disorders, signs and symptoms of Borderline, Antisocial, Histrionic, Paranoid, Narcissistic, Obsessive-Compulsive, and Dependent disorders; Yogic intervention in treatment of Psychiatric disorders;

**Unit 4 – Yogic concepts of mental health and happy life [15 Hrs.]**

Yogic perspective of mental health; afflictions, causes of afflictions; Concept of affliction according to Patanjali, causes, types, remedies for happy mind (chitta prasadana), practices to overcome the mental afflictions; concept of mental afflictions in Bhagavad Geeta, assessment of mental disorders, practices for maintaining mental health; Yoga practices to promote good mental health, asanas, pranayamas, relaxation techniques, pratyahara, meditation and yogic life-style.

**Recommended Readings:**

1. Bhogal R.S., Yoga and Mental Health, Yoga Mimansa Publications, Lonavala.
2. Shreevani R., A Guide to Mental Health & Psychiatric Nursing, Jaypee Brothers Publishers.

3. Vivekananda R., Practical Yoga Psychology, Yoga Publication Trust, Bihar, 2006.

**Reference Books:**

1. Feuerstein G., The Psychology of Yoga, Shambala, 2014.
2. Swami Rama, Yoga and Psychotherapy, Himalayan Institute Press, 2007.
3. Mishra R. S., Textbook of Yoga Psychology, Three Rivers Space, 1987.
4. Jung C. G., The Psychology of Kundalini Yoga – Notes of the Seminar Given in 1932 (Jung Extracts, Princeton University Press.
5. Swami Om, The Wellness Sense, Element India, 2015.

<b>Classical Meditation Techniques</b>			
Semester VI		Subject Code: DSEC02	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

**Unit 1 – Meditation Techniques I [15 Hrs.]**

Omkar Meditation with concentration on every syllable of Pranava; Soham Meditation; Ajapa Dharana; Antarmauna by Bihar School of Yoga; Breath Meditation; Shatchakra Dhyana; Raja Yoga Meditation by Brahmakumaris;

**Unit 2 –Meditation Techniques II [15 Hrs.]**

Transcental Meditation by Maharshi Mahesh Yogi; Savita and Jyoti ki Dharana by DSVV; Cyclic Meditation by SVYASA; Mind Sound Resonance Technique by SVYASA;

**Unit 3 –Yogic Practices in Jainism [15 Hrs.]**

Preksha Meditation:

**Unit 4 – Yogic Practices in Buddhism [15 Hrs.]**

Vipassana meditation; Zen Meditation;

**Recommended Readings:**

1. Swami Satyananda S., Ajapa Japa and Chidakash Dharana, Yoga Publication Trust, Bihar.
2. Acharya Mahaprajna, Preksha Dhyana Combo, Jain Vishwa Bharati, 2011.
3. Maharshi Mahesha Yogi, Science of Being and Art of living, Plume, 2001.
4. Mind Sound Resonance Technique (MSRT), Swami Vivekananda Yoga Prakashan.
5. Swami Satyananda S., Antar Mouna: Inner Silence, Yoga Publication Trust, Bihar.

**Reference Books:**

1. Kumathekar U., JainDarshana, Prasad Prakashan, Pune
2. Lamba P., Vipassana: The Journey of a Thousand Steps, Hay House India.

<b>Fundamentals of Biochemistry</b>			
Semester VI		Subject Code: DSEC02	
Total Hrs: 60		Credits: 4	
<b>Evaluation Scheme</b>			
<b>Theory</b>		<b>Practical/VIVA</b>	
<b>Final Exam</b>	<b>Internal Assessment</b>	<b>Final Exam</b>	<b>Internal Assessment</b>
	Assignment+Attendance+VIVA	Demonstration+VIVA	
80	10+05+05=20		

**Unit 1 – Introduction to Biochemistry [15 Hrs.]**

Introduction to Biochemistry; 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 phosphorylation;

### **Unit 2 – Metabolism of Carbohydrates [15 Hrs.]**

Carbohydrates: Definition, classification with examples and general functions; Basics of Carbohydrate Metabolism (I): Glycolysis; Aerobic and Anaerobic, metabolism of glycogens; glycogenesis, glycogenolysis, gluconeogenesis, Regulation of glycogen metabolism; Basics of Carbohydrate Metabolism (II): Krebs'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 and proteins [15 Hrs.]**

Lipids: definition, classifications and general functions; Introduction to essential fatty acids, cholesterol, Blood lipids, brief review of lipoproteins; Basics of Lipid Metabolism - Oxidation of fatty acids, cholesterol synthesis and fatty liver; Proteins: definition, classification and Biomedical Importance, Plasma Proteins and functions; Definition, classification and nomenclature of Enzymes, basic introduction to Enzymology and regulation of Enzymatic activity;

### **Unit 4 – Functional Biochemistry [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, Quantitative and Analytical Titration; Introduction to investigations related to Hepatobiliary diseases i.e., Serumbiliru, Amino-Transferases, Alkaline Phosphatase, LDH; Basics of routine Bio-chemical tests for Kidney and related common diseases i.e., Blood Urea, Blood Urea Nitrogen (BUN), Serum Creatinine, Serum Uric Acid with estimation of Urinal Protein and Sugar.

### **Recommended Readings:**

1. Murray R. K.& others, Harper's Illustrated Bio-chemistry, 26th Edition, McGraw Hill, 2003.
2. Naik P., Biochemistry, Jaypee Brothers Medical Publishers Ltd, Delhi, 2010.
3. Malhotra K., Biochemistry for Students, Jaypee Brothers Medical Publishers Ltd, Delhi, 2012

### **Reference Books:**

1. Sawhney S. K., Introductory Practical Biochemistry, 2nd edition, Alpha Science Ltd. 2005.
2. Chawala R., Clinical Biochemistry (Methods & Interpretations), 3rd edition,
3. Ganesh M. K., Laboratory Manual of Practical Biochemistry, Jaypee Brothers Medical Pub.
4. Anthikad J., Biochemistry for Nurses, Jaypee Brothers Medical Publishers Ltd, Delhi, 2008
5. Haridas N., Biochemistry Made Easy, Jaypee Brothers Medical Publishers Ltd, Delhi, 2012
6. Yadav A. S., Comprehensive practical and Viva in Biochemistry, Jaypee Brothers Medical Pub.