Guru Gobind Singh Indraprastha University

Sector 16-C, Dwarka, Delhi. (India)

Scheme of Examination, Evaluation and Syllabus for

BACHELOR OF SCIENCE (YOGA SCIENCE)

B.Sc. (Yoga Science)

3 years duration

(6 semesters)

w.e.f. Academic Year 2019-20

Under



GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY



MORARJI DESAI NATIONAL INSTITUTE OF YOGA

MINISTRY OF AYUSH, GOVT. OF INDIA

68, Ashoka Road, Near Gole Dak Khana, New Delhi-110001 E-Mail: mdniy@yahoo.co.in Website: www.Yogamdniy.nic.in

BACHELOR OF SCIENCE (YOGA SCIENCE) B.Sc. (Yoga Science)

COURSE STRUCTURE, SCHEME OF EXAMINATION & EVALUATION

Preamble

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

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

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

1. Title of the Course -

The Course shall be called "Bachelor of Science (Yoga Science)" / B.Sc. (Yoga Science)

2. Aim of the Course

The course will aim to impart the fundamental knowledge and Skills about Yoga, its basis and applications.

3. Objectives of the Course -

- a. Promoting the awareness for positive health and personality development in the student through Yoga.
- b. Instilling and inculcating the general interest and inquisitive knowledge about Yoga for Health, personality development and spiritual evolution.
- c. To produce manpower to give Yoga training and Yoga Therapy at all levels.
- d. To assist physicians/ consultants to give Yoga Training and Therapy at hospitals.
- e. To prepare the graduates in Yoga Science to study the higher aspects of Yoga Education, Therapy and Research at the post-graduate level.
- f. To generate manpower to assist in Yoga Research Projects.
- g. To encourage the pupil to be a global citizen, serving the human beings at large through the noble profession of Yoga.

4. Scope of the Course-

- h. The scope of this programme is to make the B.Sc. (Yoga Science) degree holders work as a Yoga Teacher/ Yoga Instructor in Schools, Colleges, Universities and organizations.
- i. They may also work as a Yoga Therapist under Physicians/ Consultants.
- j. They may also work as a research assistant in Yoga research projects.

5. Duration of the Course -

The course will be of three academic years (six semesters) duration.

The classes will be conducted 5 days in a week. There will be minimum 6 hours of instructions every day and in addition, there will be extra hours for Library/ Tutorials/ Personal-Practice etc. every day. Special classes may also be conducted on Saturdays/ Holidays (if necessary).

6. Eligibility -

The candidate should have completed 12th Standard of 10+2 pattern of CBSE or equivalent in any Science stream with minimum aggregate of 50% marks in best four subjects.

A candidate should be medically fit. A Medical Fitness Certificate in this regard issued from the Medical Officer shall be produced in prescribed format. Candidates suffering from any chronic disease are advised not to seek admission to this course. Format of medical certificate is enclosed herewith.

7. Syllabus -

The syllabus is designed to fulfill aforesaid objectives containing theory subjects, practical/laboratory work, Dissertation and field training in Yoga education, Yoga therapy and self development through assignments etc.

8. Medium of Instructions: English/Hindi

9. Hours of Instructions: There shall be minimum six hrs. of teaching every day at least five days in a week. In addition, there will be extra hours for Library/ Tutorials/ Personal-Practice etc., every day. Special classes may also be conducted on Saturdays/ Holidays (if necessary).

10 Scheme of Examination and Evaluation

- **I.** An academic year shall be apportioned into two semesters. There shall be semester-end examination after completion of each semester which will be notified by the University.
- **II.** The overall weightage of a course in the Syllabi and Scheme of Teaching and examination shall be determined in terms of credits assigned to the course.
- **III.** The evaluation of the students in a course shall have two components in the scheme of teaching and examination and syllabi.
 - (i) Evaluation through a semester-end examination
 - (ii) Continuous evaluation by the teacher(s) of the course.
- IV. There shall be six semester-end examinations. First/odd semester-end examination will be held preferably in the month of November December and second/even semester-end examination will be held preferably in the month of May June. Semester-end examinations will be comprised of both theory and practical papers.
- a. All semester-end examinations will be held as per University schedule and will be conducted by the Controller of Examination.
- b. Candidates are allowed to write the said examinations either in English or in Hindi
- c. The duration of each theory paper in semester end examinations shall be 3.00 hours.
- d. Each theory paper is of 70 marks and shall comprise of questions from all the units with internal choices, covering the entire syllabus.
- **V.** Apart from the Semester-end examinations there shall be **one** Class Test/Assignment etc. in each Semester as part of **Teacher/s Continuous evaluation of the Course**.
 - a. The date/s, timings and the scheme of question papers etc. for these class tests/ assignments shall be prepared by the concerned subject teachers in consultation with the Director of the Institute. The results of these unit tests shall be displayed on the notice board of the institute for the information of the students.
- VI. The distribution of weightage for various components of evaluation shall be as below:

A. THEORY COURSES

	(i) Semester-end examination		70%
	(ii)	Continuous evaluation by the teachers	30%
B.	PRAC'	TICAL/LABORATORY COURSES	

(i) Semester-end examination 70%(ii) Continuous evaluation by the teachers 30%

VII. THEORY COURSES

A.1 Semester-end examination Total Marks: 70

Q. I. Multiple Choice/ Answer in a sentence or two/ Objectivetype questions
(Questions from all the Units and all are compulsory)

Q.II. Short Note type questions
(One question from each unit with a choice)

Q.III. Long Answer/ Essay Short Essay type questions
(One question from each unit with a choice)

(1 Mark Each)
6x5 = 30 Marks
(10 Marks Each)
10x3=30Marks

Note: The format of the Semester-end Examination for Theory Courses has given herein

Total marks: 30

Total marks: 70

Total marks: 30

A.2. Continuous evaluation by the teachers:

(i) One class test* 20 marks (ii) Attendance: 06 marks

(90% & above 06 marks

80% and above 04 marks 70% and above 02 marks Below 70% 00 marks

(iii) Participation in socio-cultural activities, monthly lectures, workshops, Sports, discipline etc. 04 marks

The format of the Class Test for Theory Courses has given herein.

VIII. PRACTICAL COURSES

A.1. Semester-end Examination

There shall be Semester-end examinations of each practical course and distribution of marks shall be as per the marks mentioned in each syllabus.

A.2. Continuous evaluation by the teachers

A.2.1. The teachers Continuation evaluation shall be based on:

^{*}The class test shall ordinarily be held after 8 weeks of teaching.

(i)	Performance in the One practical class test	20 marks
(ii)	Punctuality and practical performance in	
	the regular practical classes/Laboratory work	05 marks
(iii)	Subjective experience and Self assessment	
	Reports/Lab works etc. by the students	05marks

A.2.2. FIELD WORK/

(')	D	101.
(i)	Preparation for Yoga camp/	10 marks
	(Selection of Yoga camp and participants)	
(i)	Design of Yoga protocol and its implementation	10 marks
(ii)	Feed back by the participants/organizers/documentations etc.	10 marks
(iii)	Field work report	40 marks

Total marks: 70

Total marks: 70

A.2.3. Project Work

(i)	Selection of Topic/Case	10 marks
(ii)	Project Work report	60 marks

The Field Work Report, Project Work Report and Assignments etc. shall be evaluated by the concerned in-charge Teacher/s and will be as per university rules and regulations.

The Course Coordinator shall verify the marks and submit them to the Head of the Institute.

C. In case of any problem in smoothly conducting the examinations, the decision of the Board of Examination/ University will be final.

IX. Marks and Gradation - As per the University Rules. The 'final result' will comprise of the total marks obtained in all the Semesters and the passing percentage is 40% marks.

FORMAT OF QUESTION PAPER

(For All Unit Tests)

Theory Courses

	Max.	Duration: 1 Hr.	
		Note: Answer all the Questions.	
Q.I	Answe	r the following in a sentence or two.	Marks: 1 x 5= 5
	1.		
	2.		
	3.		
	4.		
	5.		
Q. II.	Writ	e short notes on the following.	Marks: 3X 2= 6
	1	/OR	
	2	/OR	
Q.III.	Ansv	ver the following in detail	Marks: 1 X9= 9
	1	/OR	

(Note: Assignments may also be given to the students instead of Class Test/s as desired by the class teacher)

FORMAT OF QUESTION PAPER

(For All Semester End Examinations)

Theory Courses

	Max.	Duration: 3 hours	
		PAPER:	
		Note: Answer all the Questions.	
Q.I	Answer	the following in a sentence or two / Objective Type	Marks: 1 x 10 = 10
	1.		
	2.		
	3.		
	4.		
	5.		
	6.		
	7.		
	8.		
	9.		
	10.		
Q. II.	Write	short notes on the following	Marks: 5 X 6=30
	1	/OR	
		/OR	
	3	/OR	
		/OR	
		/OR	
	6	/OR	
Q.III.	Answ	er the following in detail	Marks: 10X3=30
	1	/OR	
	2	/OR	
	3	/OR	

PROFORMA FOR MEDICAL EXAMINATION

1.	Name of the Student	
2.	Age/Sex	
3.	Father's/Husband's Name	
4.	Address with contact No.	
5.	Date of Birth	
Μe	edical Examination:-	
	A. General Examination	
	- Built	
	- Height	
	- Weight	
	- Pulse	
	- B.P.	
	B. Systemic Examination	
	- Chest	
	- CVS	R
	- CNS	Vision
	- Abdomen	L
	- ENT	R
	- EYE	Colour Vision
		L
	Recommendation of the Senio	or Medical Officer: FIT/UNFIT.
	Date:	MEDICAL OFFICER

B.Sc. (Yoga Science)

3 years (6 semesters)

Under



GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY

SCHEME OF COURSES

MORARJI DESAI NATIONAL INSTITUTE OF YOGA

MINISTRY OF AYUSH, GOVT, OF INDIA

68, Ashoka Road, Near Gole Dak Khana, New Delhi-110001 E-Mail: mdniy@yahoo.co.in Website: www.Yogamdniy.nic.in

Scheme of Teaching and Examination

				iods p	or	Evaluation Scheme				
S.N.	Subject Code	Subject Title		ious p :k	eı	Sessional			SE E	Subject Total
			L	T	P	Credit	СТ	TA		
		BS- I	Year							
Sem	ester – I									
1	BS-CT101	Foundations of Yoga	3	1	-	4	20	10	70	100
2	BS-CT102	Foundations and Practices of Hath Yoga	3	1	-	4	20	10	70	100
3	BS -CT103	Human Anatomy and Physiology-I	3	1	-	4	20	10	70	100
4	BS -CT104	Fundamentals of Biochemistry	3	1	-	4	20	10	70	100
5	BS -CT105	Basics of Sanskrit language-I	3	1	-	4	20	10	70	100
6	BS-CP106	Yoga Practicum-I	-	-	6	3	20	10	70	100
7	BS-CP107	Human Anatomy and Physiology Practicum-I	-	-	4	2	20	10	70	100
8	BS-CP108	Biochemistry Practicum-I	-	-	4	2	20	10	70	100
			30+ Hours			27 TOTAL			Ĺ	800
Sem	ester – II									
1	BS-CT201	Yoga in Principal Upanishads and Yogopanishads	3	1	-	4	20	10	70	100
2	BS-CT202	Hath Yoga Texts-I	3	1	-	4	20	10	70	100
3	BS-CT203	Human Anatomy & Physiology-II	3	1	-	4	20	10	70	100
4	BS-CT204	Applied Biochemistry	3	1	-	4	20	10	70	100
5	BS-CT205	Basics of Sanskrit language-II	3	1	-	4	20	10	70	100
6	BS-CP206	Yoga Practicum-II	-	-	6	3	20	10	70	100
7	BS-CP207	Human Anatomy and Physiology Practicum-II	-	-	4	2	20	10	70	100
8	BS-CP208	Biochemistry Practicum-II	-	-	4	2	20	10	70	100
	30+ Hours 27 TOTAL 800							800		

CT- Core Theory, CP- Core Practical, FW - Field Work,PW- Project Work L - Lecture, T-Tutorial, P-Practical (practice/field), CT- Cumulative Tests, TA - Teachers Assessment, SEE – Semester End Examination, PR- Practical Record.

Scheme of Teaching and Examination

S.N.	Subject	Subject Title		Periods per			Evaluation Scheme			
ı	Code		week			Sessional			SE E	t Total
ı			L	T	P	Credit	СТ	TA		
İ										
		BS- II	Year							
Semo	ester – III									
1	BS-CT301	Patanjala Yoga Darshana-I	3	1	-	4	20	10	70	100
2	BS-CT302	Hath Yoga Texts-II	3	1	-	4	20	10	70	100
3	BS-CT303	Impact of Yogic Practices on Human Body	3	1	-	4	20	10	70	100
4	BS-CT304	Fundamentals of Psychology	3	1	-	4	20	10	70	100
5	BS-CT305(H) OR BS-CT305(E)	Functional Hindi-I OR Functional English-I		1	-	4	20	10	70	100
6	BS-CP306	Yoga Practicum-III	-	-	6	3	20	10	70	100
7	BS-CP307	Practicum- Practice of Teaching Yoga-I		-	4	2	20	10	70	100
8	BS-CP308	Psychology practicum	-	-	4	2	20	10	70	100
		,	30+ Hrs. 2			27 TOTAL				800
Seme	ester – IV									
1	BS-CT401	Patanjala Yoga Darshana-II	3	1	-	4	20	10	70	100
2	BS-CT402	Hath Yoga Texts-III	3	1	-	4	20	10	70	100
3	BS-CT403	Yoga and Health	3	1	-	4	20	10	70	100
4	BS-CT404	Introduction to Common Ailments	3	1	-	4	20	10	70	100
5	BS-CT405(H) OR BS-CT405(E)	Functional Hindi-II / OR Functional English-II		1	-	4	20	10	70	100
6	BS-CP406	Yoga Practicum IV		-	6	3	20	10	70	100
7	BS-CP407	Practicum- Practice of Teaching Yoga-II		-	4	2	20	10	70	100
8	BS-FW408	Field Work	-	-	-	4	20	10	70	100
				30+	Hrs.	29	7	ГОТАІ	,	800

CT- Core Theory, CP- Core Practical, FW - Field Work,PW- Project Work L - Lecture, T-Tutorial, P-Practical (practice/field), CT- Cumulative Tests, TA - Teachers Assessment, SEE – Semester End Examination, PR- Practical Record.

Scheme of Teaching and Examination

S.N.	Subject	Subject Title	Periods per			Evaluation Scheme				Subject
	Code		week		week Sessional		SE E	Total		
			L	T	P	Credi	CT	TA		
						t				
		BS- III	Year		<u> </u>					
Seme	ster – V									
1	BS-CT501	Four Streams of Yoga	3	1	-	4	20	10	70	100
2	BS-CT502	Yogic Management of common Disorders	3	1	-	4	20	10	70	100
3	BS-CT503	Research Methodology	3	1	-	4	20	10	70	100
4	BS-CT504	Fundamentals of Ayurveda	3	1	-	4	20	10	70	100
5	BS-CT505	Computer Applications	3	1	-	4	20	10	70	100
6	BS-CP506	Yoga Practicum-V	-	-	6	3	20	10	70	100
7	BS-CP507	Yoga Therapy Practicum-I	-	-	4	2	20	10	70	100
8	BS-CP508	Computer practical	-	-	4	2	20	10	70	100
				30+	Hrs.	27	-	ГОТА	L	800
Seme	ster – VI									
1	BS-CT601	Yoga and Human Consciousness	3	1	-	4	20	10	70	100
2	BS-CT602	Yogic Management of Non communicable Diseaes	3	1	-	4	20	10	70	100
3	BS-CT603	Yoga Protocols for Spacial Targeted Groups	3	1	-	4	20	10	70	100
4	BS-CT604	Fundamentals of Counseling	3	1	-	4	20	10	70	100
5	BS-CT605	Fundamentals of Naturopathy	3	1	-	4	20	10	70	100
6	BS-CP606	Yoga Practicum-VI	-	-	6	3	20	10	70	100
7	BS-CP607	Yoga Therapy Practicum-II	-	-	4	2	20	10	70	100
8	BS-PW608	Project Work	-	-	-	4	20	10	70	100
				30+	Hrs.	29				800
			TOT	AL CR	EDIT	166				4800

CT- Core Theory, CP- Core Practical, FW - Field Work, PW- Project Work L - Lecture, T-Tutorial, P-Practical (practice/field), CT- Cumulative Tests, TA - Teachers Assessment, SEE – Semester End Examination, PR- Practical Record.

COURSE DETAILS

Subject Name: Foundations of Yoga

Subject Code: BS-CT101

Course Objectives:

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

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

• Introduction about Yoga according to various yogic texts.

Total Number o	of Hours: 45	Theory	Tutorial	Practical		
Credits		3	1	0		
Hours/ week		3	1	0		
	SCHEME OF E	XAMINATION	I			
Total Marks: 100						
7	Theory : 100	Practical : Nil				
Final Exam	Internal Assessment	Final Exam		Internal		
(SEE)	(CT+TA)	(SEE)		Assessment		
				(CT+TA/PR)		
70	30					

UNIT - I: INTRODUCTION TO YOGA AND BHARATIYA DARSHANA [15 Hrs.]

- 1.1 Etymology and definitions of Yoga, Aim, objectives and misconceptions about Yoga, True nature of Yoga and Principles of Yoga.
- 1.2 Brief introduction to origin of Yoga, Psychological aspects leading to origin of Yoga, Brief history and development of Yoga (Pre-vedic period to contemporary times), Schools of Yoga.
- 1.3 Darshana: Its meaning, definitions and objectives, Salient features of Bharatiya Darshana (Indian Philosophy), Philosophy; its meaning, definitions and scope, Main branches of Philosophy, Distinction between Indian Philosophy and Western Philosophy.
- 1.4 Branches of BharatiyaDarshana (Astika and NastikaDarshanas), General introduction to Shad-darshana, with special emphasis on Samkhya ,Yoga and Vedanta Darshanas, General introduction to Nastika Darshan.
- 1.5 General introduction to Vedas, Upanishads, Prasthanatrayee and Purushartha Chatushtaya, Goal of human life.

UNIT - II: BRIEF SURVEY OF YOGIC TRADITIONS [15 Hrs.]

- 2.1 **Elements of Yoga in Vedic Traditions**: Brief introduction to the nature of Yoga in Vedas and Upanishads, Concept of Pancha-kosha, Nature of Yoga in Darshanas, Nature of Yoga in Epics (Ramayana and Mahabharata), Nature of Yoga in Smritis, Puranas ,Aagamas, and Tantras, Concepts of Nadi, Prana, and Kundalini in Tantra, Elements of Yoga in Narada Bhakti Sutra, Nature of Yoga in Ayurveda.
- 2.2 **Yoga in Jain and BuddhistTraditions:** Syadvada (Theory of Sevenfold Predications (Sapta-bhangi)Concept of Ratnatraya,Concept of Kayotsarga / Preksha-dhyana.Concept of Arya-satyas (Four Noble Truths), Concepts of Arya-ashtangika-margaandVipassana (Insight Meditation).
- 2.3 **Yoga in Middle Ages**: Elements of Tantric Yoga, Roots of Hatha Yoga, Natha Parampara, Bhakti Yoga of Medival Saints, Elements of Yoga in Sufism, Sufi Meditation Techniques, Elements of Yoga in Sikhism, The path of Sahaja Yoga or Nama Yoga of Guru Nanak.
- 2.4 **Yoga in Modern Times:** Yoga Traditions of Sri Ramakrishna and Swami Vivekananda, Yoga of Maharishi Raman, Integral Yoga of Shri Aurobindo.
- 2.5 **Yoga in Contemporary Times:** Brief Introduction to some important Yoga Paramparas (lineages) of contemporary times; Yoga Parampara of Yogacharya Sri T. Krishnamacharya, Swami ShivanadaSaraswati, ParamahamsaMadhavadas,Swami Rama of Himalayas, Maharshi Mahesh Yogi, Swami DhirendraBrahmachari and their contributions for the development and promotion of Yoga.

UNIT-III:INTRODUCTION TO SCHOOLS (STREAMS)OF YOGA[15 Hrs.]

- 3.1 **General Introduction to Schools of Yoga:**Briefintroduction to Schools (Streams)of Yoga; Yoga Schools with Vedanta Tradition (Jnana, Bhakti,Karma and Dhyana), Yoga Schools with Samkhya Yoga Tradition (AshtangaYoga of MaharshiPatanjali),Some Yogic Schools of Tantric Tradition (Hatha Yoga, Swara Yoga and Mantra Yoga) and Yoga Schools with Non Vedic Traditions(Bauddha Yoga).
- 3.2 **Jnana Yoga:** Meaning of Jñāna and Jñāna-Yoga, Sadhana-chatushtaya, Means of Jñāna-Yoga.
- 3.3 **Bhakti Yoga and Karma Yoga:** Meaning of Bhakti and Bhakti Yoga, Stages of Bhakti, Types of Bhakti, Means of Bhakti Yoga; Meaning of Karma and Karma Yoga, Concept of Nishkama Karma, Means of Nishkama Karma, Inter relationship between Bhakti-Yoga and Karma-Yoga,
- 3.4 **Patanjala Yoga and Bouddha Yoga:** Brief introduction to Ashtanga Yoga of Patanjali and Arya-ashtangika-marga (Noble-eight-fold-path of Buddha (Bauddha Yoga).
- 3.5 **Hatha Yoga:**Hatha Yoga Practices (Sadhanas),Relevance of Hatha Yoga sadhanain day-to-day life.

BOOKS FOR REFERENCE

>	David Frawley	:	Vedic Yoga , MLBD,New Delhi, 2015
>	Karel Werner	:	Yoga and Indian Philosophy, MLBD, New Delhi, 1977.
>	Radhakrishnana, S	:	Indian Philosophy, (Vol. I &II) George Allen & Unwin, London, 1971.
>	Kunhan Raja	:	Some Fundamental Problems in Indian Philosophy, MLBD, New Delhi, 1960.
>	Joshi, K.S. Ganesh Shankar	:	Yoga Ke Siddhant Evam Abhyas, MadhyaPradeshHindiGranthAcademy, Bhopal.
>	Swami Prabhavananda	:	Spiritual Heritage of India, Genesis publishing Pvt. Ltd., New Delhi, 2003.
>	Sinha, Harendra Prasad	:	Bhartiya Darshan ki Ruprekha, MLBD, New Delhi, 1963.
>	Swami Vivekananda	:	The Four Yogas of Swami Vivekananda, Ramakrishna Vedanta Centre Advaita Ashrama, 1996.
>	Feuerstein, George	:	The Yoga Tradition: It's History, Literature, Philosophy practice, Arizona: Hohn&Press,2001
>	Singh, S.P.&Chattopadhyaya, D.P.	:	History of Yoga, MLBD, New Delhi, 2010.
>	Singh, S.P. & Yogi Mukesh	:	Foundations of Yoga, Standard Publishers, India, 2010.
>	Sir James Mallinson and Mark Singleton	:	Roots of Yoga, Penguin Classics,2017
>	Dasgupta, S.N.	:	Yoga Philosophy,MLBD, Varanasi, 1974.
>	Pandey, Rajkumari	:	Bhartiya Yoga parampara ke vividh aayam, Radha Publication, new Delhi, 2008.
>	Singh, S.P. & Yogi Mukesh	:	Yoga from Confusion to Clarity(Vol.1-5) Standard Publishers, India, 2010.
>	Singh, Lalan Prasad	:	Tantra, Its Mystic and Scientific Bases, Concept Publishing Company, Delhi, 1976.
>	Saraswati, Swami Satyananda	:	Kundalini Yoga, Yoga Publication Trust,Munger, 2005.
>	Whincher, Ian	:	The Integrity of the Yoga Darshan, D.K. Printworld, New Delhi, 2000.
>	Kalyan	:	Upanihads, (23 rd year special), Gita Press, Gorakhpur.
>	Eliade, Mircea	:	Yoga Immortality & freedom, Princeton University Press, USA 1969.
>	Avalon, Arthur	:	The Serpent Power, Shivalik Prakashan, Delhi, 2005.
>	Saraswati, Swami Divyananda	:	Vedon me Yogavidhya, Yogic Shodha Sansthan, Haridwar, 1999.
>	Gharote, M.M.	:	Traditional theory of Evolution and its Application in Yoga, Lonavla Yoga Institute Lonavla, 2008.

Subject Name: Foundations and Practices of Hath Yoga

Subject Code: BS-CT102

Objectives:

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

- Have an understanding about pre-requisites, principles about Hatha Yoga.
- Understand the relationship between Hatha and Raja Yoga.
- Have an understanding about the concept of HathaYoga in Classical texts.

Total Number of Hours: 45		Theory	Tutorial	Practical
Credits		3	1	0
Hours/ week		3	1	0
SCHEME OF EXA	MINATION			
Total Marks: 100				
Theory: 100 Practical: Nil				
Final Exam	Internal Assessment	Final Exam	l	Internal
(SEE)	(CT+TA)	(SEE)		Assessment
				(CT+TA/PR)
70	30			

UNIT - I: GENERAL INTRODUCTION TO HATHA YOGA [15 Hrs.]

- 1.1 Hatha Yoga: Origin, Meaning, Definition, Aim, Objectives and Misconceptions
- 1.2 Hatha Yoga: Its Philosophy and Foundations, Hatha Yoga Parampara,
- 1.3 Brief Introduction to eminent Hatha Yogis of Natha Cult and their contributions for the development of Yoga
- 1.4 Asanas: Concept, Etymology, definition and principles of Asanas, Relevance and importance of asanas in Hatha Yoga Sadhana
- 1.5 Shatkarma: Introduction to Shatkarma and their relevance in Hatha Yoga Sadhana, Shatkarmas as mentioned in different Hatha Yogic Texts,

UNIT - II: INTRODUCTION TO HATHAYOGA TEXTS, PRANAYAMA, PRE-REQUISITES

[15 Hrs.]

- 2.1 General Introduction to Hatha Yoga Text; Siddhasiddhantpaddhati, Hathapradipika, Gorkshashatkam, Hatharatnavali and Gheranda Samhita with reference to their author, nature and practices.
- 2.2 Pranayama: Concept, Etymology and definitions of Prana and Pranayama in Hatha Yogic texts, Relevance and Importance of Pranayama in Hatha Yoga Sadhana,
- 2.3 Bandhas: Etymology, relevance and importance of bandhas in HathaYoga Sadhana
- 2.4 Mudras: Concept, Etymology, Importance and their relevance in HathaYoga Sadhana, Mudras as mentioned in HathaYogic texts
- 2.5 Rules and regulations to be followed by Hatha Yoga practitioners (Do's and Don'ts), Ten, Yama and Niyama and their relevance in Hatha Yoga Sadhana

UNIT - III: HATHA YOGA PRINCIPLES

[15 Hrs.]

- 3.1 Introduction to Tantra Yoga and its relationship with Hatha Yoga
- 3.2 Concept of Swas-prashwas, Vayu, Prana and Upaprana
- 3.3 Concept of Kand, Nadi, Swar, Chakra and Granthi
- 3.4 Concept of Kundalini & Kundalini prabodhan, Unmani avastha, Nadanusandhan
- 3.5 Swara, Importance of Svarodaya-Jnana in Hatha Yoga Sadhana.

BOOKS FOR REFERENCE

- 1. Sahay G.S.: HathaYoga Pradeepika by Svatmarama, MDNIY Publication, 2013
- 2. Sharma BR: Jotsna (Comentory of HathaYoga Pradeepika) Kaivalyadhama, Lonavala, 2013
- 3. Gharote ML: Hatharatnavali, The Lonavala Yoha Institute, Lonavala, Pune, IInd Edition, 2009
- 4. Swami Kuvalyananda & Shukla, S.A.: Gorakshasatkam, Kaivalyadhama, Lonavla, 2006
- 5. Gharote M.L. & Pai, G.K. (Edi): Siddhasidhantpaddhati, Kaivalyadhama, Lonavla, 2005.
- 6. PLRD: Vasistha Samhita, Kaivalyadhama Samiti, Lonavla, 2005.
- 7. Korpal, Nitin & Shankar, Ganesh: HathaYoga and Human Health, Satyam Publishing House, New Delhi, 2005.
- 8. Swami Digambarji & Gharote M.L.: Gheranda Samhita, Kaivalyadhama, Lonavla, 1978.
- 9. Swatmaramaji: Hathapradipika (Jyotsana-tika), Adyar Library, Madras.
- 10. Bharati, Swami Veda Reddy Venkata: Philosophy of Hatha Yoga (English) Himalayan, Pennsylvania.
- 11. Swami Muktibodhananda: Swara Yoga: Yoga Publication Trust, Munger, India

Subject Name: Human Anatomy and Physiology-I

Subject Code: BS-CT103

Objectives:

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

• To know about the structure of the body

- To know about the necessary functions of the body
- To give brief idea about the diseases related to each system

Total Number of Hours: 45		Theory	Tutorial	Practical
Credits	3	1	0	
Hours/ week		3	1	0
	SCHEME OF E	XAMINATIO	V	
Total Marks: 100				
The	Practical : Nil			
Final Exam (SEE)	Internal Assessment (CT+TA)	Assessme		Internal Assessment (CT+TA/PR)
70	30			

Unit-1: General Physiology Skeletal system and Nerve – muscle physiology [9 Hrs.]

- 1.1 Electron microscopic structure of organelles of eukaryotic cells. Structure of membrane. Membrane transport. Functions of organelles of eukaryotic cells.
- 1.2. Histological structure, classification, distribution and function of different tissues. Organization of cells into tissue to organs and systems of human body.
- 1.3 Definition of Human Anatomy and Human Physiology. Terms frequently used in Anatomy and Physiology. Planes of body. Homeostasis. Mechanisms to maintain milieu environment
- 1.4 Skeletal system: structure and functions of bone, Classification of bone. Classification of skeleton. Joints. Types of joints their structure and function.
- 1.5 Neurons, Nerve fibre. Synapse. Neurotransmitter, Reflex action, Mechanism of nerve conduction, Synapse and synaptic transmission,
- 1.6 Types of Muscle in the body. Structure of skeletal, cardiac and smooth muscle. Properties of muscle. Mechanism of muscle contraction. Types of muscular contraction. Neuro muscular junction.

Unit-2: Hematology, Lymphoid organ and Immunity [9 Hrs.]

- 2.1 Haematology: Blood Volume. Composition and function of blood. Haemoglobin and anaemia. Blood clotting. Blood groups and their importance.
- 2.2 Lymphoid organs Thymus, spleen, Lymph node, Composition and function of lymph.

2.3 Immunity, Types of immunity, Antigen and antibody, Hypersensitivity reaction, Autoimmunity

Unit-3: Biomolecules, and Digestive system

[9 Hrs.]

- 3.1 Biomolecules: Carbohydrates, Fats, Proteins, Minerals, Vitamins, Dietary fibres balanced diet.
- 3.2 Structure and anatomical position of primary and secondary digestive organ.
- 3.3 Functions of digestive system. Physiology of digestion and absorption. Movements of GI tract. Malnutrition and over nutrition. GI hormones and Endocrine function of Pancreas.

Unit-4: Respiratory system

[9 Hrs.]

- 4.1 Structure of tracheobronchial tree and respiratory unit. Anatomical position of lungs.
- 4.2 Mechanism of breathing (Expiration and inspiration); Exchange and transport of respiratory gases (oxygen and carbon dioxide). Lung function test.
- 4.3 Exercise adaptation of respiratory system

Unit-5: Cardiovascular system

[9Hrs.]

- 5.1 Structure of heart. Anatomical position of heart in thoracic cage.
- 5.2 Cardiac output and cardiac cycle. Pumping of heart. Heart rate. Blood pressure and regulation of blood pressure. Electrocardiography.
- 5.3 Functional anatomy of blood vessels.
- 5.4 Organisation of systemic and pulmonary circulation.
- 5.5 Exercise adaptation of cardiovascular system.

REFERENCE BOOKS:

- 1. Jain AK: Text Book of Physiology (Volume I and II), Avichal publishing company **REFERENCE BOOKS:**
 - 1. Singh, Inderbir: Anatomy and Physiology for nurses, Jaypee Brothers, New Delhi.
 - 2. Raju SM; Madala, Bindu: Anatomy and Physiology for general nursing.
 - 3. Guyton and Hall: Text book of Medical Physiology
 - 4. Chaurasia, BD: Human Anatomy
 - 5. Jain AK: Text Book of Physiology (Volume I and II), Avichal publishing company
 - 6. Sembulingam K; Sembulingam P: Essentials of Physiology for Dental students.
 - 7. Bijlani R. L.:Understanding of Human Physiology, Jaypee Brothers Medical Publishers Pvt. Ltd, New Delhi, 2011
 - 8. Pal G. K & others: Textbook for practical Physiology, Orient Longman Pvt. Ltd, Hyderabad, 2007
 - 9. Mahapatra A.B.S.: Essential of medical Physiology, Current book Int.
 - 10. Khurana I: Text book of Medical Physiology

Subject Name: Biochemistry-I

Subject Code: BS-CT104

Objectives:

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

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

Total Number of Hours: 45		Theory	Tutorial	Practical
Credits		3 1 0		0
Hours/ week		3 1 0		
SCHEME OF EXAMINATION				
Total Marks: 100				
T	heory : 100		Practical:	Nil
Final Exam	Internal Assessment	Final Exam		Internal
(SEE)	(CT+TA)	(SEE) Assessment		
				(CT+TA/PR)
70	30			

Unit - 1: Introduction to Bio-chemistry

[15 Hrs.]

- 1.1 Introduction of Biochemistry, Aim and scope, Biochemical composition of living organism, Elemental and chemical composition.
- 1.2 Introduction of solvents, water as biological solvent, concentration units, osmolarity
- 1.3 pH and buffers, weak acids and bases, Handerson-Hasselbalch equation, physiological buffers, isoelectric pH
- 1.4 Biological oxidation-reduction reactions, redox potentials, relation between standard reduction potentials
- 1.5 Concept of free energy, High energy phosphate compounds introduction, phosphate group transfer, and free energy of hydrolysis of ATP and sugar phosphates.

Unit – 2: Biomolecules: Carbohydrates, Lipid and Proteins [15 Hrs.]

- 2.1 Carbohydrates Definition, classification and biological importance, stereo isomerism, structure and functions of Monosaccharides, Disaccharides, oligosaccharides and Polysaccharides.
- 2.2 Lipids Definition, classification and biological importance. Simple lipids: Composition of Triglycerol, Waxes. Compound Lipids: Function of Phospholipids, spongiolipids, & glycolipids. Derived lipids: Functions of fatty acids, Lipid Metabolism,

- 2.3 Amino acids classification of amino-acids, structure, properties and side chains of amino acids.
- 2.4 Proteins Definition, Biological importance, classification and properties, Secondary, Tertiary and quaternary structure, coagulation and denaturation
- 2.5 Enzymes -nomenclature, IUB classification, Holoenzyme, apoenzyme, prosthetic groups, cofactors, activators, inhibitors, metalloenzymes, isozymes and multienzyme complexes, Basics of enzyme kinetics.

Unit- 3: Nucleic Acids, Vitamins and Minerals [15 Hrs.]

- 3.1 Nucleic acids –Nucleosides, Nucleotides, Primary, secondary and tertiary Structure of DNA, types of RNA, function of DNA & RNA, DNA forms and conformation, Denaturation of DNA.
- 3.2 Vitamins Definition, classification, structure, biochemical function and deficiency diseases. Vitamin antagonists, Hypervitaminosis
- 3.3 Minerals Calcium, Phosphorous, iron, copper, zinc, magnesium, manganese, lead, mercury, arsenic, metal toxicity, fluorine and iodine.
- 3.4 Coenzymes and Cofactors Role and mechanism of action of NAD+ /NADP+, FAD, lipoic acid, thiamine pyrophosphate, tetrahydrofolate, biotin, pyridoxal phosphate, B12 coenzymes and metal ions with specific examples.
- 3.5 Intermediary Metabolism Approaches for studying metabolism

REFERENCE BOOKS

- 1. .Biochemistry By U. S. Satyanarayana
- 2. T. Palmer, P. Bonner. 2007. Enzymes: Biochemistry, Biotechnology, Clinical Chemistry (2nd Ed.), Woodhead Publishing House, Chichester, England.
- 3. Harper's review of physiological chemistry by Harper.
- 4. D.L. Nelson, M.M. Cox. 2008. Lehninger Principles of Biochemistry, W.H. Freeman and Company, New York, USA.
- 5. J.M. Berg, J.L. Tymoczko, L. Stryer. 2008. Biochemistry, W.H. Freeman and Company, New York.
- 6. G. Zubey. 1993. Biochemistry, Wm. C. Brown Publishers, Oxford. U.K.

7.

Subject Name: Basics of Sanskrit Language-I

Subject Code: BS-CT105

Objectives:

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

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

Total Number o	Total Number of Hours: 45 Theory Tutorial Practic		Practical		
Credits		3 1 0			
Hours/ week		3 1 0			
	SCHEME OF EXAMINATION				
Total Marks: 100)				
7	Theory : 100		Practical:	Nil	
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
				(CT+TA/PR)	
70	30				

Unit-I: संस्कृतभाषा परिचय।

[15 Hrs.]

- 1.1 संस्कृतभाषा परिचय,योगशास्त्र के अध्ययन में संस्कृत का महत्त्व और योग एवं संस्कृत का अन्तःसम्बन्ध।
- 1.2 माहेश्वरसूत्र। संस्कृतवर्णमाला, स्वर, व्यंजन वर्गज्ञान सहित (रोमन लिपि में लेखन एवं पठन)।
- 1.3 वर्णों के उच्चारणस्थान और प्रयत्न ज्ञान।प्रत्याहार निर्माण विधि एवं प्रत्याहार ज्ञान।
- 1.4 वाक्याङ्ग, कारक, विभक्ति (सुपु और तिङ्), लिङ्ग,वचन, पुरुष, लकार।
- 1.5 अव्यय परिचय और संस्कृत संख्याएं (एक से सौ तक)।

Unit-II: शब्दरूप व धातुरूप।

[15 Hrs.]

- 2.1-अजन्तशब्दरूप-राम (बालक), बालिका, पुस्तक, मुनि, रुचि, शब्दों के रूप अर्थज्ञान व वाक्य प्रयोग सहित।
- 2.2 अजन्तशब्दरूप वारि, नदी भानु, धेनु, मधु शब्दों के रूप अर्थज्ञान व वाक्य प्रयोग सहित।
- 2.3 सर्वनाम शब्दरूप- अस्मद्, युष्मद्, तत्(तीनो लिङ्गों में), एतद्(तीनो लिङ्गों में), किम्(तीनो लिङ्गों में सर्व(तीनो लिङ्गों में), भवत्(तीनो लिङ्गों में)), भवत्(तीनो लिङ्गों में)।
- 2.4- पठ्, लिख् , वद्,गम्,नम् , दृश्, भू.अस् धातुओं के पांच लकारों(लट्,लृट्,लङ्,लोट्,लिङ्) में रूपज्ञान एवं वाक्य निर्माण व अर्थज्ञान सहित।
- 2.5-याच्,खाद् कथ्,चिन्त् नी स्था,पा(पिब्)दा, धातुओं के पांच लकारों(लट्,लृट्,लङ्,लोट्,लिङ्) में रूपज्ञान एवं वाक्य निर्माण व अर्थज्ञान सहित।

Unit-III: वाक्यनिर्माणव सन्धि ।[15 Hrs.]

- 3.1- सन्धि की परिभाषा व प्रकार(अच्, हल् एवं विसर्ग) एवं अच् (स्वर) (दीर्घ, यण्,गुण्,वृद्धि, अयादि, पूर्वरूप) सन्धियों का ज्ञान एवं सन्धि विच्छेद का अभ्यास।
- 3.2-हल्(व्यञ्जन) (श्चुत्व ष्टुत्व, चर्, जश्, अनुस्वार,परसवर्ण, अनुनासिक,षत्व,णत्व)एवं विसर्ग (सत्व, रत्व, उत्व(ओत्व), लोप) सन्धियों का ज्ञान एवं सन्धि विच्छेद का अभ्यास।
- 3.3- प्रथमा दीक्षा के प्रथमएवंद्वितीय अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।
- 3.4 प्रथमा दीक्षा के तृतीयएवं चतुर्थ अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।
- 3.5- प्रथमा दीक्षा केपंचम एवं षष्ठ अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।

BOOKS FOR REFERENCE

- 1. Perry E D: A Sanskrit Primer, MLBD, New Delhi, 2004
- 2. Kala MR: A Higher Sanskrit Grammar for college students, MLBD, New Delhi, 2011
- 3. DEVAVANIPRAVESIKA-: Robert p. Goldman: MLBD-NEWDELHI.
- 4. प्रथमा दीक्षा- राष्ट्रिय संस्कृत संस्थान नईदिल्ली।
- 5. प्रारम्भिकरचनानुवादकौमुदी: कपिलदेवद्विवेदी;विश्वविद्यालयप्रकाशनवाराणसी।
- 6. रचनानुवादकौमुदी: कपिलदेवद्विवेदी;विश्वविद्यालयप्रकाशनवाराणसी।
- 7. प्रौढ-रचनानुवादकौमुदी: कपिलदेवद्विवेदी;विश्वविद्यालयप्रकाशनवाराणसी।

Subject Name: Yoga Practicum-I

Subject Name: BS-CP106

Objectives:

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

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

Total Number of Hours: 60		Theory	Tutorial	Practical	
Credits 0 0 3		3			
Hours/ week	Hours/ week			6	
	SCHEME OF EXAMINATION				
Total Marks: 100					
7	Practical: 100				
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
1	l I			COM MA (DD)	
				(CT+TA/PR)	

Practice of the following Yogic practices with brief theoretical knowledge about their importance of name, the technique, salient points, Do's & Don't, precautions to be taken and benefits of each of the following Yogic practices.

UNIT-1: HYMNS AND MUDRA

A. RECITATION OF HYMNS

[15 Hrs.]

- 1.1.1 Concept and Recitation of Pranava
- 1.1.2 Recitation of Pratah-smaran and Shanti Mantras
- 1.1.3 Recitation of Hymns from Upanishad & Yoga Texts

B. HASTA MUDRA

1.2.1 Chin, Jnana, Hridaya, Bhairay, Yoni

UNIT-2: SHATKARMA AND BREATHING PRACTICES

[15 Hrs.]

A. SHATKARMAS

- 2.1.1 Dhauti (Vamana)
- 2.1.2 Neti (Jala)
- 2.1.3 Kapalbhati (Vatakrama)

B. BREATHING PRACTICES

2.2.1 Breath Awareness: Shwas-prashwas samyama

- 2.2.2 Sectional Breathing (Abdominal, thoracic and clavicular)
- 2.2.3 Yogic Deep Breathing

UNIT-3: YOGIC SUKSHMA AND STHULA VYAYAMA

[20 Hrs.]

A. YOGIC SUKSHMA VYAYAMA

- 3.1.1 Uccharana-sthala tatha Vishudha-chakra-shuddhi (for throat and voice)
- 3.1.2 Prarthana (Prayer)
- 3.1.3 Buddhi-tatha-Dhriti shakti-vikasaka (for developing will power)
- 3.1.4 Smarana shakti-vikasaka (for improving the memory)
- 3.1.5 Medha shakti-vikasaka (for improving the intellect)
- 3.1.6 Netra shakti-vikasaka (for the eyes)
- 3.1.7 Kapola shakti-vardhaka (for the cheeks)
- 3.1.8 Karna shakti-vardhaka (for the ears)
- 3.1.9 Griva shakti-vikasaka (for the Neck) (1) (A & B)
- 3.1.10 Griva shakti-vikasaka (for the Neck) (2) (A & B)
- 3.1.11 Griva shakti-vikasaka (for the Neck) (3)
- 3.1.12 Skandha-tatha-bahu-mula shakti-vikasaka (for the shoulders)
- 3.1.13 Bhuja-bandha shakti-vikasaka
 - i) Bhuja-bandha shakti-vikasaka (for the upper arms)
 - ii) Bhuja-bandha shakti-vikasaka (for the upper arms)
- 3.1.14 Kohani shakti-vikasaka
 - i) Kohani shakti-vikasaka (for the elbows) -(A & B)
 - ii) Kohani shakti-vikasaka (for the elbows) -(A & B)
- 3.1.15 Bhuja-balli shakti-vikasaka
 - i) Bhuja-balli shakti-vikasaka (for the fore-arms) -(A & B)
 - ii) Bhuja-balli shakti-vikasaka (for the fore-arms)
- 3.1.16 Purna-bhuja shakti-vikasaka (for the arms)
 - i) Purna-bhuja shakti-vikasaka (for the hole arm) (First) (A to D)
 - ii) Purna-bhuja shakti-vikasaka (for the hole arm)-(Second) (E & F)
- 3.1.17 Mani-bandha shakti-vikasaka
 - i) Mani-bandha shakti-vikasaka (for the wrists) (First) (A&B)
 - ii) Mani-bandha shakti-vikasaka (for the wrists) (Second) (A&B)
- 3.1.18 Kara-prstha shakti-vikasaka
 - i) Kara-prstha shakti-vikasaka (for the back of hands) (First) (A&B)
 - ii) Kara-prstha shakti-vikasaka (for the back of hands) (Second) (A&B)
- 3.1.19 Kara-tala shakti-vikasaka
 - i) Kara tala shakti-vikasaka (for the palms) -(First) (A&B)
 - ii) Kara-tala shakti-vikasaka (for the palms) (Second) (A&B)
- 3.1.20 Anguli-mula shakti-vikasaka (for the root of the fingers) (A & B)
- 3.1.21 Anguli- shakti-vikasaka (for the fingers) (A & B)
- 3.1.22 Vaksha-sthala shakti-vikasaka (for the chest) (1)
- 3.1.23 Vaksha-sthala shakti-vikasaka (for the chest) (2)
- 3.1.24 Udara shakti-vikasaka (for the abdomen) (1)

- 3.1.25 Udara shakti-vikasaka (for the abdomen) (2)
- 3.1.26 Udara sakti-vikasaka (for the abdomen) (3)
- 3.1.27 Udara shakti-vikasaka (for the abdomen) (4)
- 3.1.28 Udara shakti-vikasaka (for the abdomen) (5)
- 3.1.29 Udara shakti-vikasaka (for the abdomen) (6)
- 3.1.30 Udara shakti-vikasaka (for the abdomen) (7)
- 3.1.31 Udara shakti-vikasaka (for the abdomen) (8)
- 3.1.32 Udara shakti-vikasaka (for the abdomen) (9)
- 3.1.33 Udara shakti-vikasaka (for the abdomen) (10) (A, B & C)
- 3.1.34 i) Kati shakti-vikasaka (for the waist) (1)
 - ii) Kati shakti-vikasaka (for the waist)
- 3.1.35 i) Kati shakti-vikasaka (for the waist) (2)
 - ii) Kati shakti-vikasaka (for the waist)
- 3.1.36 i) Kati shakti-vikasaka (for the waist) (3)
 - ii) Kati shakti-vikasaka (for the waist)
- 3.1.37 i) Kati shakti-vikasaka (for the waist) (4)
 - ii) Kati shakti-vikasaka (for the waist)
- 3.1.38 Kati shakti-vikasaka (for the waist) (5)
- 3.1.39 Muladhara-chakra-suddhi (for the rectum)
- 3.1.40 Upastha tatha-svadhisthana-chakra-suddhi (for the genital organs)
- 3.1.41 Kundalini shakti-vikasaka (for the kundalini)
- 3.1.42 Jangha shakti-vikasaka (for the thighs) (1) (A & B)
- 3.1.43 Jangha shakti-vikasaka (for the thighs) (2) (A & B)
- 3.1.44 Janu shakti-vikasaka (for the knees)
- 3.1.45 Pindali shakti-vikasaka (for the calves)
- 3.1.46 Pada-mula shakti-vikasaka (A & B)
- 3.1.47 Gulpha-pada-pristha-pada-tala-shakti-vikasaka (for the ankles and the feet)
- 3.1.48 Padanguli shakti-vikasaka (for the toes)

B. YOGIC STHULA VYAYAMA

- 3.2.1 Rekha-gati (Walking in a Straight line),
- 3.2.2 Hrid-gati (Injanadaur the Locomotive Exercise),
- 3.2.3 Utkurdana (Jumping Exercise),
- 3.2.4 Urdhva-gati (Upward Movement),
- 3.2.5 Sarvanga-pusti (Developing the Entire body)

UNIT-4:CONTINUOUS EVALUATION BY THE TEACHERS [10 Hrs.]

BOOKS FOR REFERENCES

- 1. Basavaraddi, I.V. & others: Prataha Smarana, MDNIY New Delhi.
- 2. Basavaraddi, I.V. & others :Shatkarma: A Comprehensive description about Cleansing Process, MDNIY New Delhi, 2009
- 3. Swami Dhirendra Bhramhachari: Yogic Sukshma Vyayama, Dhirendra Yoga Publications, New Delhi, 1980
- 4. Basavaraddi, I.V. & others: Yogic Sukshma Evam Sthula Vyayama, MDNIY, New Delhi, 2011.

- 5. Joshi, K.S.: Yogic Pranayama, Oriental Paperback, New Delhi, 2009
- 6. Swami Kuvalyananda: Pranayama, Kaivalyadhama, Lonavla, 2010
- 7. Swami Rama: Science of Breath, A Practical Guide, The Himalayan International Institute, Pennselvenia, 1998
- 8. Swami Niranjananand Saraswati: Prana, Pranayama & Pranvidya, Yoga Publications Trust, Munger, Bihar, 2005.
- 9. Dr. Nagendra H R : Pranayama, The Art & Science, Swami Vivekananda Yoga Prakashan, Bangalore, 2005
- 10. Sri Ananda: The Complete book of Yoga, Orient Course Backs, Delhi, 2003.

Subject Name: Human Anatomy and Physiology Practicum-I

Subject Code: BS-CP107

Objectives:

The objectives behind teaching Anatomy and Physiology is to

- Understand the principles and procedure of every experiment.
- Demonstarate an experiment with the interpretation of the results.
- Explain the procedure of each step of an experiment skillfully.
- Make students familiar with the systems of the body using models, charts and pictures.

Total Number of Hours: 30		Theory	Tutorial	Practical
Credits 0 0			0	2
Hours/ week	0	0	4	
	SCHEME OF E	XAMINATIO	N	
Total Marks: 100				
Theory: NA Practical: 100			100	
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE)		Internal Assessment (CT+TA/PR)
		70		30

Unit-1: Hematology, osteology and myology [15 Hrs.]

- 1.1 Hemoglobin estimation. Recording bleeding time, Recording Clotting time, ABO Blood grouping.
- 1.2 Total Red Blood Cell Count. Total White Blood Cell Count. Differential WBC Count.
- 1.3 Localization of bones and muscles using charts, models.

Unit-2: Human Physiological experiment [15 Hrs.]

- 2.1 Measurements of Weight, stature, Body Mass Index, Body Surface Area.
- 2.2 Recording of Blood Pressure and pulse rate.
- 2.3 Vitalography. Effects of posture on vitalography.

PRACTICAL GUIDE

1. Jain AK: Manual of Practical Physiology for BDS, Arya Publications

Subject Name: Biochemistry Practicum-I

Subject Code: BS-CP108

Objectives:

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

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

Total Number of Hours: 30		Theory	Tutorial	Practical	
Credits		0	0	2	
Hours/ week		0	0	4	
	SCHEME OF EXAMINATION				
Total Marks: 100	Total Marks: 100				
Theory: NA Practical: 100			100		
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE) Assessment			
				(CT+TA/PR)	
0	0	70		30	

I. Practical - 20 MARKS

II. Viva Voce - 15 MARKS

III. Continuous evaluation by the Teachers - 15 MARKS
TOTAL MARKS
50 MARKS

Unit-I [15 Hrs.]

- Biochemical calculations molarity, molality of solutions
- Concept of pH and buffers
- Normal constituents of urine.
- Analysis of abnormal urine.
- Normal constitution of plasma and serum

Unit-II [15 Hrs.]

- Demonstration of: a) Blood sugar b) Blood urea c) Total serum protein d) Total serum calcium e) Total serum cholesterol f) Total serum bilirubin
- Demonstration of principles of: a) Colorimetry and colorimeter b) Paper chromatography

Viva-Voce

Note: Demonstration of practical shall be conducted by teaching staff as a part of demonstration / seminar in the laboratory.

TEXT BOOKS:

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

REFERENCE BOOKS

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

Semester-II

Subject Name: Yoga in Principal Upanishads and Yogopanishads

Sbuject Code: BS-CT201

Objectives:

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

• Have an idea about the major principal Upanishads

- Understand the essence of each Upanishad and how to put them into practice.
- Understand each Upanishad and the role of it in our day to day life.

Total Number of Hours: 45		Theory	Tutorial	Practical	
Credits		3 1 0			
Hours/ week		3 1 0			
	SCHEME OF E	XAMINATION			
Total Marks: 100	Total Marks: 100				
Т	heory : 100		Practical:	Nil	
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
				(CT+TA/PR)	
70	30				

Unit -I: Introduction to Upanishads

[10 Hrs.]

- 1.1 Etymology and Meaning of Upanishad, subject matters of Upanishads, Number of Upanishads.
- 1.2 Brief Introduction to Principal Upanishads- Isha, Kena, Katha, Prashna, Mundaka, Mandukya.
- 1.3 Brief Introduction to Principal Upanishads- Aitreya, Taittiriya, Brihadaranyak & Chhandogya Upanishad.
- 1.4 Brief Introduction to Yogopanishads.
- 1.5 An Introduction to Upanishadic Philosophies; Antiquity of Upanishads; Prasthanatraya.

Unit-II: Essence of Principal Upanishads

[20 Hrs.]

- **2.1 Ishavasyopanishad:** The nature of Brahman, importance of karma and jnana in Sadhna, prayer for meditation and liberation. **Kenopanishad:** Brahman as the regulator of mind and senses, incomprehensibility of Brahman.
- **2.2 Kathopanishad**: Nature of Jivatman(soul), Bondage and liberation, means of attainments of Brahman. **Prashnapanishad**: Creation of the universe, Prana and its functions, states of dream and deep sleep, Para and Apara Brahman.
- **2.3 Mundaka**: Para and Apara Vidya, nature of Brahman, Jiva and Moksha. **Mandukyopanishad**: Nature and significance of OM(AUM), The fourth states of being, Jiva and Moksha.

- **2.4 Aitareya**: Creation of Universe, nature of Atman, Brahman as Prajnana. **Chandogya**: Nature of Brahman(Prana as Brahman), Nature of Jivatman, Sat as the cause of Universe, Meditation(Samvarg Vidya, Shodhshkala brahma Vidya, Upakoshala Vidya) Archiradi Marga.
- **2.5 Brihadaranyakam**: Two form of Brahman, Teaching of Yajnvalkya, Brahman and Universe, theory of Atman as Svayamjyoti, nature of Self in different states, The ways and Means of realising Brahman. **Taitriya**: Definition and nature of Brahman, Evolution of Universe, the concept of Panchkosh.

Unit-III: Yogatattvas in Shvetashvataropanishad and Yogopanishads [15 Hrs.]

- 3.2 Brief Introduction of **Shvetashvataropanishad**, theory of Sankhya and Yoga, The concept of Yogasadhana, the concept of Paramatman, Jiva and Universe.
- 3.3 Brief Introduction of *Shandilya Upanishad*, *Ashtanga Yoga:* Types of *Yama*, *Niyama*, *Asana*, Concept of *Nadi & Prana*, Stages of *Pranayama*, Concept & Types of *Pratyahara*, *Dharana*, *Dhyana*. *And Samadhi*.
- 3.3 Brief Introduction to *Jabaldarshanopanishad*, Ashtanga Yoga: Yama (10 Types), Niyama (10 Types), Asana (9 Types), Types of Prana&Nadi, Types of Pranayama, Pratyahara, Dharana, Dhyana (Its Types)& Samadhi.
- 3.4 Brief Introduction to *Trishikhibrahmanopanishad*, Concept & Types of *Yamas* and *Niyamas*, Concept & Types of *Asanas*, Types of *Nadi*, Types of *Prana&Pranayama*, Concept of *Pratyahara*, *Dharana*, *Dhyana*, *Samadhi*.
- 3.5 Brief Introduction of **Yogchudamanyupanishad**, Shadanga Yoga- Asana, Chakra, Nadi, Prana, Pranayama, Concept of Kundalini, Mitahara, Mudra & Bandhas, Concept of Pratyayahara, Dharana, Dhyana, and Samadhi.

BOOKS FOR REFERENCE

- 1. The Principal Upanisads, Radhakrishnan, S. Harpercollins India, 2006
- 2. Ishadi nau Upanishad, Gita press Gorakhapur
- 3. Nine Principal Upanisads, Saraswti, Swami Satyanand Yoga Publication Trust Bihar,2004.
- 4. Upanishads, Swami Ranganathananda Bharatiya Vidya Bhavan, Bombay, 1985
- 5. 108 Upanishad-(Sadhana Khand, Brahmavidya Khand, Jnana Khand)Sharma, Pt. Sriram Acharya, Shantikunj, Haridwar.
- 6. The Essence of Principal Upanishads, Sivananda, Swami, Divine Life Society, 1980
- 7. The Philosophy of the Upanishds, Chari, S.M. Srinivasa Munshiram Manoharlal, Delhi, 2002.
- 8. Upanishad Sangraha- Jagdish Shashtri, Motilal Banarasidas, Varanasi, Delhi, Chennai.

Subject Name: HATHA YOGA TEXTS - I

Subject Code: BS-CT202

Objectives:

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

- Understand about pre-requisites, principles about Hatha Yoga.
- Understand the relationship between Hatha Yoga and Raja Yoga.
- Understand different Hatha Yogic Techniques according to Hatha Yogapradipika.

Total Number of Ho	ours: 45	Theory	Tutorial	Practical
Credits		3	1	0
Hours/ week		3	1	0
SCHEME OF EXAMI	NATION			
Total Marks: 100				
Theory: 100	Practical : Nil			
Final Exam	Internal Assessment	Final Exam		Internal
(SEE)	(CT+TA)	(SEE)		Assessment
				(CT+TA/PR)
70	30			

Unit-I HathYoga Parampara, Asanas and Yogic Diet in HathaYoga Pradipika 15Hrs

- 1.1 Hatha Yoga: Goal of Hatha Yoga, Relationship between HathaYoga and RajaYoga, Hathayogis in HathaYoga Pradipika, Importance of Hatha and its secrecy.
- 1.2 Requisites of Hatha Yoga Practices: Time, Place, Concept of Matha.
- 1.3 Asanas: The techniques, benefits, precautions and contraindications of Asanas as mentioned in Hathapradipika.
- 1.4 Mitahara, Pathya and Apathya, Rules in food taking,
- 1.5 Badhaka Tattva (Obstacles) and Sadhaka Tattva (Facilitatory factors), Hathasiddhilakshana

Unit- II Pranayamas, Kriyas and Kundalini in HathaYoga Pradipika 15 Hrs

- 2.1 Shatkarma: Techniques, benefits, precautions and contraindications of Shatkarmas Dhauti, Basti, Neti, Nauli, Tratak and Kapalabhati as mentioned in Hathapradipika
- 2.2 Pranayama : techniques and benefits, Nadishuddi Pranayama, symptoms of Nadishuddhi Duration and time for Pranayama practice, Importance of Pranayama practice Levels of Pranayama.
- 2.3 Yukta and Ayukta Pranayama, Role of Diet in Pranayama practice. Types of aspirants, Manonmani
- 2.4 Classification of Kumbhaka and its benefits, HathaYogasiddhilakshanam

2.5 Kundalinias base for all Yoga. Results of Kundalini Prabodha, Synonyms for Sushumna

Unit- III Mudras & Bandhas, Nadanusandhana and Samadhi in HathYoga Pradipika 15Hrs

- 3.1 Mudras and Bandhas-classification, benefits and methods of practice.
- 3.2 Different types of Nada, Condition of Yogi in Unmani Avastha, Realisation.
- 3.3 Methods of Samadhi Practice, Samadhi in HathaYogapradipika
- 3.4 Vajroli, Amroli and Sahjoli
- 3.5 Techniques and benefits of Shambhavimudra, Unmani, Khechari, Nadanusandhana, Kandaswarupa.

REFERENCE BOOKS

- 1. Swami Digambaraji (1970), Hathapradipika of Swatmarama, Kaivalyadhama, Lonavala, Pune 410403.
- 2. Swami Niranjananda Saraswati, Gherandasamhita, Bihar School of Yoga, Munger, Bihar-811201
- 4. Swami Niranjanananda, Yoga Darshan, Sri Pachadashanam Paramahamsa Alakh Bara, Deoghar-814113
- 5. Swami Digambaraji(1997), Gheranda Samhita, SMYM Samiti, Kaivalyadhama, Lonavala-410403
- 6. Swami Atmananda(1966), The Four Yogas, Bharatiya Vidya Bhawan, Bombay-400007
- 7. Korpal, Nitin & Shankar, Ganesh:HathaYoga and Human Health, Satyam Publishing House, New Delhi, 2005.
- 8. Garote ML(2000), Hata Pradipika Vrutthi, Lonavala Yoga Institute, Lonavala.
- 9. Athavale Jayantha Balaji ed & Kunda Jayantha Athavali ed(2000). Hatha Yoga, Sanathana Samste, Goa.
- 10. Sahajananda Nath(2006), Hata Yoga Manjari, Kaivalyadhama Srimanmadhav Yoga Mandir Samiti,
- 11. Sharma B. R: Jotsna (Comentory of HathaYoga Pradeepika), Kaivalyadhama, Lonavala, 2013
- 12. Mukthi Bodhananda (2012), Hatha Yoga Pradipika Light on Hatha Yoga, Yoga Publication Trust, Munger.
- 13. Svathmarama(2000), The HataYogapradipika, with the commentary Jyotsna of Brahmananda and English translation the Adyar library and Research center, The theosophical society, Adyar hennai 600020
- 14. Sahay G. S: Hatha Yoga Pradeepika, MDNIY, New Delhi, 2013

Subject Name: Human Anatomy and Physiology-II

Subject Code: BS-CT203

Objectives:

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

• To know about the structure of the body

- To know about the necessary functions of the body
- To give brief idea about the diseases related to each system

Total Number of Hours: 45		Theory	Tutorial	Practical	
Credits		3	1	0	
Hours/ week		3	1	0	
	SCHEME OF EXAMINATION				
Total Marks: 100					
The	ory:100		Practical:	Nil	
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE) Internal Assessmen (CT+TA/P			
70	30				

Unit -1: Nervous system and special senses

[15 Hrs.]

- 1.1 Structure human brain. Anatomical position of different parts of brain. Structure of spinal cord and tracts.
- 1.2 Cognition, memory, executive function. Function of spinal cord, Cranial nerve and spinal nerve.
- 1.3 Peripheral nervous system: Autonomic nervous system. Somatosensory nervous system.
- 1.4 Special senses. Structure and function of eye, ear, nose, tongue and skin.

Unit -2: Endocrinology

[15 Hrs.]

- 2.1 Overview of endocrine system. Mechanism of hormone action.
- 2.2 Structure and location of Major of endocrine glands such as Pituitary, Adrenal, Thyroid, Parathyroid.
- 2.3 Secretion and function of Major of endocrine glands such as Pituitary, Adrenal, Thyroid, Parathyroid, and Endocrine function of Pancreas. local hormones. Endocrine function of other organs.

Unit -3: Reproductive system

[5 Hrs.]

- 3.1 Functional anatomy of male and female reproductive system.
- 3.2 Menstrual cycle. Gametogenesis. Fertilization. Pregnancy, menopause.

Unit -4: Excretory system

[10 Hrs.]

4.1 Functional anatomy of kidney, ureter, urinary bladder, urethra.

- 4.2 Excretory system of human. Kidney. Mechanism of urine formation-Ultrafiltration, selective reabsorption. Counter current mechanism. Tubular secretion. Role of kidney in osmoregulation.
- 4.3 Role of other organs on excretion in humans.
- 4.4 Acid base balance.

TEXT BOOKS

1. Jain AK: Text Book of Physiology (Volume I and II), Avichal publishing company

REFERENCE BOOKS:

- 2. Singh, Inderbir: Anatomy and Physiology for nurses, Jaypee Brothers, New Delhi.
- 3. Raju SM; Madala, Bindu: Anatomy and Physiology for general nursing.
- 4. Guyton and Hall: Text book of Medical Physiology
- 5. Chaurasia, BD: Human Anatomy
- 6. Sembulingam K; Sembulingam P: Essentials of Physiology for Dental students.
- 7. Bijlani R. L.:Understanding of Human Physiology, Jaypee Brothers Medical Publishers Pvt. Ltd, New Delhi, 2011
- 8. Pal G. K & others: Textbook for practical Physiology, Orient Longman Pvt. Ltd, Hyderabad, 2007
- 9. Mahapatra A.B.S.: Essential of medical Physiology, Current book Int.
- 10. Khurana I : Text book of Medical Physiology

Subject Name: Applied Biochemistry

Subject Name: BS-CT204

Objectives:

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

• Understand the concept of metabolism

• Have an understanding about the protein, carbohydrate, lipid metabolism

Total Numbe	r of Hours: 45	Theory	Tutorial	Practical
Credits		3	1	0
Hours/ week		3	1	0
SCHEME OF EXAMINATION				
Total Marks: 1	.00			
T	heory : 100		Practical : N	Vil
Final Exam	Internal Assessment	Final I	Exam	Internal
(SEE)	(CT+TA)	(SE	E)	Assessment
			-	(CT+TA/PR)
70	30			

<u>Unit-1: Metabolism of carbohydrates and lipids</u>[15 Hrs.]

- 1.1 Introduction to Metabolism: General features of metabolism, anabolism, catabolism, experimental approaches to study metabolism.
- 1.2 Carbohydrate Metabolism: Reaction and Energetic of glycolysis, Alcoholic & Lactic acid, Fermentation. Entry of Fructose, Galactose, Mannose etc. Reaction and energetic of TCA cycle. Gluconeogenesis. Glycogenesis and glycogenolysis Reactions and Physiological significance of Pentose phosphate pathway, Regulation of glycolysis, TCA cycle.
- 1.3 Electron Transport Chain and Oxidative Phosphorylation: Structure of Mitochondria, Sequence of electron carriers, site of ATP production, Inhibitors of electron transport chain. Hypothesis of mitochondrial oxidative phosphorylation (basic concepts). Inhibition and uncouplers of oxidative phosphorylation.
- 1.4 Lipid Metaoblism: Introduction hydrolysis of triacylglycerol transport of fatty acids into mitochondria, oxidation of saturated fatty acids. ATP yield from fatty acid oxidation. Biosynthesis of saturated and unsaturated fatty acids.
- 1.5 Metabolism of ketone bodies, oxidation of unsaturated and odd chain fatty acids. Biosynthesis of triglycerides and important phospholipids, glycolipids, sphingolipids and cholesterol. Regulation of cholesterol metabolism.

<u>Unit-2: Amino acid & Nucleic acid Metabolism</u>[15 Hrs.]

2.1 Amino Acids – General reactions of amino acid metabolism - Transamination, decarboxylation, oxidative & non-oxidative deamination of amino acids. Special

metabolism of methionine, histidine, phenylalanine, tyrosine, tryptophan, lysine, valine, leucine, isoleucine and polyamines.

- 2.2 Urea Cycle: individual reactions, importance of urea cycle, hyperammonemia, regulation of urea cycle, Interrelationship between urea cycle and TCA cycle.
- 2.3 Epinephrine and Nor-epinephrine: importance and biosynthesis from tyrosine, Histamine; biological importance and synthesis. PKU and AKU characteristic features, metabolic reasons.
- 2.4 Nucleic acid Metabolism: Biosynthesis of purine and pyrimidine nucleotides- sources of nitrogen and carbon atoms of purine and pyrimidine ring. Precursors of purine and pyrimidine biosynthesis. Conversion of nucleotides to deoxynucleotides.

<u>Unit-3: Basic immunology and molecular biology</u>[15 Hrs.]

- **3.1** Immunology: Types and functions of T-cells and B-cells, mononuclear cells, mast cells, dendritic cells, antigen, antibody, Allergic reaction, Hypersensitivity, Autoimmunity
- **3.2** Antigen-Antibody interactions: Agglutination, precipitation and opsonization, gel diffusion, ELISA, ELISPOT.
- 3.3 DNA Replication: Chromosomes, Mechanism of replication, synthesis of leading and lagging trend
- 3.4 Mechanisms of Transcription: Eukaryotic transcription, promoters, enhancers, RNA polymerase I, II and III. Reverse transcription, splicing
- 3.5 Translation: Ribosomes, structure, functional domain, tRNA, formation of intiation complex, chain elongation, translocation and termination. Protein biosynthesis, signals hypotethesis.

TEXT BOOKS

Lehninger Principles of Biochemistry 5th Ed By David L. Nelson and Michael M. Cox, WH Freeman and Company.

Kuby Immunology, 9TH Edition, byby Jenni Punt, Sharon Stranford, Patricia Jones, Judith A Owen

REFERENCE BOOKS

- 1. Textbook of Medical Biochemistry By MN Chatterjea and RanaShinde, Jaypee Brothers.
- 2. Davidson's Principles and Practice of Medicine: A Textbook for Students and Doctors (Hardcover) 15th Ed By LSP Davidson, J MacLeod and CRW Edwards. Publisher: Churchill Livingstone.
- 3. Medical Biochemistry (Paperback) By John W. Baynes and MarekDominiczak. Publisher: Mosby.
- 4. Review of Medical Physiology (Lange Basic Science) (Paperback) By William F. Ganong. Publisher: McGraw-Hilll Medical

Subject Name: Basics of Sanskrit Language-II

Subject Code: BS-CT205

Objectives:

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

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

• Read and understand original Yoga texts.

		Theory	Tutorial	Practical
Total Number o	of Hours: 45			
Credits		3	1	0
Hours/ week		3	1	0
SCHEME OF EXAMINATION				
Total Marks: 100				
Т	Theory : 100		Practical:	Nil
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE)		Internal Assessment (CT+TA/PR)
70	30		•	

Unit-I: वाच्य(कर्मवाच्यएवंभाववाच्य)व कृदन्त ।

[15 Hrs.]

- 1.1 कर्तृवाच्य, कर्मवाच्य और भाववाच्य का परिचय वाक्यरचना, वाक्यरूपान्तरण एवं अनुवाद।
- 1.2 कृ व ज्ञा (उभयपदी), मुद्, शक्, आप्,ब्र्,श्रु, धातुओं का कर्तृवाच्य के पांच लकारों(लट्,लृट्,लङ्,लोट्,लिङ्) में रूपज्ञान एवं वाक्य निर्माण व अर्थज्ञान सहित।
- 1.3 पठ् एवं कृ धातु का कर्मवाच्यरूप और भू एवं मुद् धातु का भाववाच्यरूप ज्ञान पांच लकारों (लट्,लृट्,लङ्,लोट्,लिङ्)में एवं वाक्य निर्माण व अर्थज्ञान सहित।
- 1.4 शतृ ,शानच् , क्त्वा,ल्यप्,तुमुन् प्रत्ययों से शब्दनिर्माण, वाक्यरचना और अनुवाद।
- 1.5 क्त एवं क्तवतु तव्यत्, अनीयर् एवं यत् प्रत्ययों से शब्दनिर्माण, वाक्यरचना और अनुवाद।

Unit-II: भाषादक्षता | [15 Hrs.]

- 2.1- संस्कृत से हिन्दी/ अग्रेजी में अनुवाद
- 2.2 संस्कृत में परस्पर वार्त्तालाप एवं मौखिक व्याख्यान(संस्कृत में स्व-परिचय आदि) का अभ्यास।
- 2.3- द्वितीया दीक्षा के प्रथम द्वितीय अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।
- 2.4- द्वितीया दीक्षा के तृतीय एवं चतुर्थ अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।
- 2.5- द्वितीया दीक्षा के पंचम एवं षष्ठ अध्याय से वाक्यनिर्माण एवं अर्थज्ञान का अभ्यास।

Unit-III भाषाभ्यास (योगग्रन्थों का अध्ययन व अवबोध)

[15 Hrs.]

- 3.1 -श्रीमद्भगवद् गीता के द्वितीय अध्याय के श्लोक 11 से 30 तक श्लोकों का सस्वर श्लोकपाठ और भाषाशास्त्रीय व्याख्या(पदच्छेद, अन्वय, शब्दार्थ(कारक,क्रियापद व अव्यय विश्लेषण) भावार्थ)।
- 3.2 -श्रीमद्भगवद् गीता के द्वितीय अध्याय के श्लोक 47 से 72 तक श्लोकों का सस्वर पाठ और भाषाशास्त्रीय व्याख्या(पदच्छेद, अन्वय, शब्दार्थ(कारक,क्रियापद व अव्यय विश्लेषण) भावार्थ)।
- 3.3-घेरण्डसंहिता के प्रथम-उपदेश के श्लोक 1 से 12 तक श्लोकोंकासस्वर श्लोकपाठ और भाषाशास्त्रीय व्याख्या(पदच्छेद, अन्वय, शब्दार्थ(कारक.क्रियापद व अव्यय विश्लेषण)भावार्थ)।
- 3.4 हठप्रदीपिका के प्रथम उपदेश के श्लोक 1 व 10 से 17 तकश्लोकोंकासस्वर श्लोकपाठ और भाषाशास्त्रीय व्याख्या(पदच्छेद, अन्वय, शब्दार्थ(कारक,क्रियापद व अव्यय विश्लेषण)भावार्थ) ।
- **3.5** -पातञ्जलयोगसूत्र के प्रथमपाद के सभी सूत्रो का सस्वर सूत्रपाठ और भाषाशास्त्रीय व्याख्या(पदच्छेद, अन्वय, शब्दार्थ(कारक,क्रियापद व अव्यय विश्लेषण) भावार्थ)।

BOOKS FOR REFERENCE

- 1. Perry E D: A Sanskrit Primer, MLBD, New Delhi, 2004
- 2. Kala MR: A Higher Sasnkrit Grammer for college students, MLBD, New Delhi,
- 3. DEVAVANIPRAVESIKA-: Robert p. goldman: MLBD-NEWDELHI.
- 4. प्रारम्भिकरचनानुवादकौमुदी: कपिलदेवद्विवेदी;विश्वविद्यालयप्रकाशनवाराणसी।
- 5. रचनानुवादकौमुदी : कपिलदेवद्विवेदी;विश्वविद्यालयप्रकाशनवाराणसी।
- 6. प्रौढ-रचनानुवादकौमुदी : कपिलदेवद्विवेदी;विश्वविद्यालयप्रकाशनवाराणसी।
- 7. द्वितीया दीक्षा- राष्ट्रिय संस्कृत संस्थान नईदिल्ली।
- 8. श्रीमद्भगवद्गीता (पदच्छेद अन्वय सहित) गीताप्रेस गोरखपुर।
- 9. पातञ्जलयोगदर्शनम्-मो.दे.रा.योग संस्थान दिल्ली।
- 10. हठयोगप्रदीपिका- स्वामी अनन्त भारती, चौखम्भा ओरियन्टालिया, दिल्ली।
- 11. HathaYogapradipika of Svatmarama, G.S Sahay, MDNIY, New Delhi.
- 12. Gheranda Samhita, Swami Digambarji & Gharote M.L Kaivalyadhama, Lonavla

Subject Name: Yoga Practicum II

Subject Name: BS-CP206

Objectives:

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

Explain and demonstrate the above mentioned practices skilfully.

• Have an in-depth understanding about Surya namaskara and Yogasanas.

Total Number of Hours: 60		Theory	Tutorial	Practical
Credits		0	0	3
Hours/ week		0	0	6
SCHEME OF EXAMINATION				
Total Marks: 100				
7	heory : NA	Practical: 100		
Final Exam	Internal Assessment	Final Exam		Internal
(SEE)	(CT+TA)	(SEE)		Assessment
				(CT+TA/PR)
		70		30

Practice of the following Yogic practices with brief theoretical knowledge about their importance of name, the technique, salient points, Do's & Don't, precautions to be taken and benefits of each of the following Yogic practices.

UNIT-1: HYMNS AND SATKARMA

[15 Hrs.]

A. RECITATION OF HYMNS

- 1.1.1 Recitation of Selected Sutras of Patanjal Yoga Sutra;
- 1.1.2 Recitation of Nirvan Satkama

A. SATKARMA

- 1.2.1 Neti (Sutra)
- 1.2.2 Agnisar

UNIT-2: YOGIC SURYANAMASKAR AND YOGASANA

[20 Hrs.]

A. YOGIC SURYANAMASKAR

2.1.1 Yogic Surya Namaskar of Bihar School of Yoga

B. YOGASANA

- 2.2.1 Tadasana, Vrikshasana, Urdhva-Hastottanasana,
- 2.2.2 Ardha Chakrasana, Paada Hastasana,
- 2.2.3 Dandasana, Swastikasana, Sidhasana, Bhadrasana, Padmasana, Vajrasana,
- 2.2.4 Mandukasana, Ushtrasana, Shashankasana;
- 2.2.5 Bhujangasana
- 2.2.6 Utthana-padasana, Ardha Halasana, Shavasana

UNIT-3: BANDHA, PRANAYAMA AND DHYANA

[15 Hrs.]

A. BANDHA

- 3.1.1 Jalandhara Bandha
- 3.1.2 Uddiyana Bandha
- 3.1.3 Mula Bandha,

B. PRANAYAMA

- 3.2.1 Anuloma-Viloma Pranayama
- 3.2.2 Concept of Puraka, Rechaka & Kumbhaka (Antar & Bahya Kumbhaka)
- 3.2.3 Nadishodhana Pranayama (Puraka+Antarkumbhaka+Rechaka) (1:1:1 & 1:2:2)

C. PRACTICES LEADING TO DHYANA

- 3.3.1 Pranav Japa and Soham Japa
- 3.3.2 Yoga Nidra (1)
- 3.3.3 Antarmauna

UNIT-4: CONTINUOUS EVALUATION BY THE TEACHERS

[10 Hrs.]

BOOKS FOR REFERENCES

- 1. Basavaraddi, I.V. & others: Prataha Smarana, MDNIY New Delhi.
- 2. Swami Kuvalyananda: Asana, Kaivalyadhama, Lonavla, 1993
- 3. Swami Satyananda Saraswati : Asana, Pranayama, Bandha, Mudra, Bihar School of Yoga, Munger, 2006
- 4. Swami Dhirendra Bhramhachari: Yogasana Vijnana, Dhirendra Yoga Publications, New Delhi, 1966
- 5. Basavaraddi, I.V. & others: Yogasana: A Comprehensive description about Yogasana, MDNIY, New Delhi, 2011.
- 6. Saraswati, Swami Satyananda: Surya Namaskar, Yoga Publication Trust, Munger, 2004
- 7. Dr. Nagendra H R : Pranayama, The Art & Science, Swami Vivekananda Yoga Prakashan, Bangalore, 2005
- 8. Sri Ananda: The Complete book of Yoga, Orient Course Backs, Delhi, 2003.
- 9. Swami Satyananda: Yoganidra, Yoga Publication Trust, Munger, 1998
- 10. Iyengar, B.K.S.: Light on Pranayama, Harper Collins, Swami Vivekanand Yoga Prakashan, 2012
- 11. Desikachar, Dr. Kausthub, The Heart of Asana, April 1, 2012

Subject Name: Human Anatomy and Physiology Practicum- II

Subject Code: BS-CP207

Objectives:

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

• Understand the principles and procedure of every experiment.

• Demonstarate an experiment with the interpretation of the results.

• Explain the procedure of each step of an experiment skillfully.

Total Number of Hours: 30		Theory	Tutorial	Practical
Credits		0 0 2		
Hours/ week		0	0	4
SCHEME OF EXAMINATION				
Total Marks: 100				
The	eory : NA		Practical:	100
Final Exam (SEE)	Internal Assessment	Final Exam	(SEE)	Internal
	(CT+TA)			Assessment
				(CT+TA/PR)
				1

Unit-1: Clinical / applied physiology

[15 Hrs.]

- 1.1 Introduction to Clinical examination.
- 1.2 Demonstration of electrocardiography, Electroencephalography.
- 1.3 Effects of exercise and posture on BP, HR.

Unit-2: Clinical / Applied physiology

[15 Hrs.]

- 2.2 Examination of higher function, Examination of cranial nerves.
- 2.3 Examination of motor system. Reflexes.
- 2.4 Examination of sensory system.

PRACTICAL GUIDE

1. Jain AK: Manual of Practical Physiology for BDS, Arya Publications

Subject Name: Biochemitry Practicum-II

Subject Code: BS-CP208

Objectives:

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

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

Total Number o	of Hours: 30	Theory	Tutorial	Practical	
Credits		0	0	2	
Hours/ week		0	0	4	
	SCHEME OF E	XAMINATION			
Total Marks: 100	Total Marks: 100				
7	heory : NA		Practical:	100	
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
				(CT+TA/PR)	
0	0	70		30	

Unit-I [15 Hrs.]

- Extraction and determination of Biomolecules from food products:
 - $\circ \quad \text{Starch (Polysaccharide) from potato.} \\$
 - o Casein (protein) from milk.
 - $\circ \quad \hbox{Oil (lipids) from oil seeds.}$
- Determination of pH of fruit juice, lemon juice, water and black tea
- Determination of Acid number, iodine value/saponification value of oil or fat.
- Qualitative analysis of Bio molecules

Unit-II [15 Hrs.]

- Carbohydrate Estimation of reducing sugars, Glucose, Maltose and Sucrose.
 - $\circ \quad \text{Reactions of Monosaccharides glucose and fructose.}$
 - $\circ\quad$ Reactions of disaccharides lactose, maltose and sucrose.
 - o Reactions of polysaccharides starch and dextrin
 - Proteins Precipitation reactions of proteins, Color reactions of proteins

Viva-Voce

TEXT BOOK

- 1. Laboratory manual of biochemistry by Pattabhiraman and Acharya.
- 2. Laboratory manual in biochemistry by Rajgopal and Ramkrishnan.

REFERENCE BOOK

- 1. M. K. Ganesh: Laboratory Manual of Practical Biochemistry, Jaypee Brothers Medical Publishers Ltd, Delhi, 2008
- 2. S. K. Sawhney & Randhir Singh: Introductory Practical Biochemistry, 2nd edition, Alpha Science International Ltd. 2005

Semester-III

Subject Name: Patanjala Yoga Darshana-I

Subject Code: BS-CT301

Objectives:

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

- Understand various modification of mind and the means of inhibiting them.
- Have an understanding about the essence of Samadhi.

Total Number of Ho	Fotal Number of Hours: 45 Theory Tutorial Practi		Practical		
Credits		3	3 1 0		
Hours/ week		3	1	0	
	SCHEME OF EXAMINATION				
Total Marks: 100	Total Marks: 100				
		Practical : Nil			
Theo	ory: 100		Practical:	Nil	
Theo Final Exam	ory: 100 Internal Assessment	Final Exam	Practical:	Nil Internal	
		Final Exam (SEE)	Practical:		
Final Exam	Internal Assessment		Practical :	Internal	

Unit - 1: Introduction to Yoga darshana of Patanjali

[15 Hrs.]

- 1.1 Introduction to Yoga Darshana and its relevance in Yoga Sadhana.
- 1.2 Theory of Evoluation and Meta-physics of Yoga Darshana.
- 1.3 Brief introduction to Maharshi Patanjali and Patanjala Yoga Sutra.
- 1.4 Brief Introduction to traditional commentators and commentaries of Patanjala Yoga Sutra: Vyasa Bhasya, Tatvavaisharadi, Bhoja Vritti and Yoga-vartika.
- 1.5 Concept of Antahkaran: Mana, Buddhi, Ahankar and Chitta.

Unit - 2: Concept of Chitta: its bhoomis, vrittis and Nirodhopayas [15 Hrs.]

- 2.1 Concept of Chitta and Chitta Bhoomis.
- 2.2 Concept of Chitta Vrittis and their classification.
- 2.3 Chitta vritti Nirodhopaya: Abhyasa and Vairagya.
- 2.4 Concept of Ishwar and Ishwar pranidhana.
- 2.5 Concept of Vikshepas: Antarayas, Concept of Chitta prasadanam.

- 3.1 Concept of Yoganushasanam, Yoga Lakshanam and its results.
- 3.2 Types of Samadhi: Samprajnatah and Asamprajnatah Samadhi.
- 3.3 Types of Samprajnatah Samadhi: Vitarka, Vichara, Anand and Ashmita.
- 3.4 Concept of Samapatti, Types of Samapatti: Savitraka and Nirvitraka, Savichara and Nirvichara.
- 3.5 Types of Asamprajnatah Samadhi: Bhavapratyaya and Upayapratyaya, Adhyatma-Prasadanam and Ritambhara-Prajna.

TEXT BOOKS

- 1. Swami Digambara Ji and others: Glossary of the Samkhakarika, Kaivalyadhama, Lonavala, 2012
- 2. Swami Virupaksananda: Samkhyakarika of I svarakrisna (with tattva Kamudia of Vachapati Mishra), Sri Ram Krishana Matha Madras, 1995
- 3. James R. Ballantyne: The Sankhya Aphorisms of Kapila, Parimal Publications, New Delhi, 2004

BOOKS FOR REFERENCE

- 1. V.V. Sovani: A critical study of the Sankhya System, Chukhambha Sanskrit Pratisthan, New Delhi, 2005
- 2. M.R. Yardi: The Yoga of Patanjali, Bhandarkar Oriental Research Institute, Poona, India, 1970
- 3. K.D. Prithvipaul: The Yogasurta of Patanjali M.L.B.D. New Delhi
- 4. Gaspar M. Koelmenn, S.J. Patanjal Yoga, Papal Athenaeum, Poona, 1970
- 5. Swami Ved Bharti: Yogasutra of Patanjali (with the Exposition of Vyasa) M.L.B.D. New Delhi, 2004, Vol I & II

Subject Name: HATHA YOGA TEXTS - II

Subject Code: BS-CT302

Objectives:

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

- Understand about Ghata, GhatasthaYoga.
- Understand about different types of Mudra
- Understand different Hatha Yogic Techniques according to Gheranda Samhita.

Total Number of Hours: 45 Theory Tutorial Prac			Practical		
Credits		3	3 1 0		
Hours/ week		3 1 0			
SCHEME OF EXAM	MINATION				
Total Marks: 100					
Theory: 100		Practical:	Nil		
Final Exam	Internal Assessment	Final Exam Internal			
(SEE)	(CT+TA)	(SEE) Assessment			
				(CT+TA/PR)	
70	30		·		

Unit- I GhataYoga and its applications in Gheranda Samhita

[15 Hrs.]

- 1.1 GhataYoga Introduction of Saptanga Yoga.
- 1.2 Satkriyas Classification, Practising methods and benefits.
- 1.3 Asana– Classification, Practising methods and benefits.
- 1.4 Mudra Introduction, 25 Mudras Classification
- 1.5 Techniques of Practising Mudra and their benefits.

Unit- II Pratyahara, Pranayama, Dhyan and Samadhi in Gheranda Samhita

[15 Hrs.]

- 2.1 Pratyahara Classification, Practising methods and benefits.
- 2.2 Pranayama Classification, Practising methods and benefits.
- 2.3 Meditation– Classification, Practising methods and benefits.
- 2.4 Classification of Samadhi and their practice
- 2.5 A comparative study of HathaYoga and Ghata Yoga.

Unit-III HathaYoga Practices in Gorakshashatakam and Sidhasiddhantapaddhati - [15 Hrs.]

- 3.1 Concept of SadangaYoga. Concept of Life
- 3.2 Diffrent components of SadangaYoga-Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadh
- 3.3 Nadi, Cakra and Kundalini in Gorakshashatakam, Control of mind
- 3.4 Concept of Avadhuta, Nature of Avadhuta, Concept of pinda
- 3.5 Introduction of Pindadhar, greatness of Yoga Scripture

REFERENCE BOOKS

- 1. Sadashivabrahmendra Saraswati(1978), ShivaYogadipika, Ananda Ashramagranthavali, Pune- 410403
- 2. Swami Niranjananda Saraswati, Gherandasamhita, Bihar School of Yoga, Munger, Bihar-811201
- 3. Swami Digambaraji(1997), Gheranda Samhita, SMYM Samiti, Kaivalyadhama, Lonavala-410403
- 4. Swami Vivekananda(1982), RajaYoga, Ramakrishna Ashrama Publications, Dehi Entally Road kolkata-700014.
- 5. Swami Digambaraji (1970), HathaYoga Pradipika of Swatmarama, Kaivalyadhama, Lonavala, Pune 410403.
- 6. Swami Niranjanananda, Yoga Darshan, Sri Pachadashanam Paramahamsa Alakh Bara, Deoghar-814113
- 7. ` Swami Adidevananda(1998), Patanjala Yoga Darshana Vyasa Bahshya sahitha, Shri Ramakrishna Ashrama, Mysore 570020.
- 8. Swami Niranjanananda(1997), HathaYogapradipika, Bihar School of Yoga-811201
- 9. Gharote M.L. & Pai, G.K. (Edi) Siddhasidhantpaddhati, Kaivalyadhama, Lonavla, 2005.

Subject Name: Impacts of Yogic Practice on Human Body

Subject Code: BS-CT303

Objectives:

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

• To throw light on anatomy so that student can experience the involvement of their body parts while practicing various postures of Yoga

Total Number of H	Total Number of Hours: 45		Tutorial	Practical	
Credits		3 1 0			
Hours/ week		3	1	0	
	SCHEME OF EXAMINATION				
Total Marks: 100					
The	ory: 100		Practical:	Nil	
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE) Internal Assessmen (CT+TA/PE			
70	30				

Unit - 1: Impacts of Yogic practices on the maintenance of milieu environment

- 1.1 Physiology of exercise. Types of exercise and its relation with Yoga.
- 1.2 Impacts of Yoga on control system regulation.
- 1.3 Neuro endocrine mechanism of impacts of vogic practice on human body.
- 1.4 Role of yogic practice on the maintenance of homeostasis and internal environment
- 1.5 Psycho-physiological and environmental factors of Yama and Niyama to get optimum health impacts.

Unit - 2: ASANA, PRANAYAMA AND MEDITATION

- 2.1 Mechanism of influence of six types of asanas: stretching; pivoting; strengthening; inverted; pressing; equilibration, Reciprocal inhibition and innervation.
- 2.2 Effects of different types of asana on musculo skeletal system, cardio cardiovascularsystem, respiratory system and major organs of the body.
- 2.3 Psycho-physiological effects of pranayama; physiological mechanisms involved in higher levels of adaptation through pranayama.
- 2.4 Different types of meditation its impacts on central nervous system and peripheral nervous system. Different types of meditation its impacts on cardiovascular system, respiratory system, and nerve muscle physiology.
- 2.5 Meditation its impacts on relaxation of each and every system its correlation with HPA Axis.

Unit - 3: WARM UP EXERCISE, KRIYAS, MUDRA AND BANDHAS

- 3.1 Warm up exercise and its importance to preparedness of yogic practice. Different warm-up exercise and its physiological importance.
- 3.2 Significance of salt during the practice of Kriya; Tonicity of a solution.
- 3.3 Effect of kriyas on major organs of Human body.
- 3.4 Principles behind practice of Mudras. Effects of Mudra on parts of Human body.
- 3.5 Principles behind practice of bandhas. Effects of bandhas on parts of human body

TEXT BOOKS

- Gore MM: Anatomy and Physiology of Yogic Practice, New Age Books, New Delhi.
- Sri Krishna: Notes on Structure and Functions of Human Body and Effects of Yogic Practice on it. I.C.H.Y.C., Kaivalyadhama.
- H. David Coulter: Anatomy of Hatha Yoga, A manual for students, teachers and practioners., Motilal Banarsidass Publishers Private limited, Delhi.
- A Handbook for Yogasana Teachers: The Incorporation of Neuroscience, Physiology, and Anatomy by Mel Robin, Publisher: Wheatmark; 1 edition (15 May 2009)

REFERENCE BOOKS

- Guyton and Hall: Text book of Medical Physiology
- Chaurasia, BD: Human Anatomy
- Jain AK: Text Book of Physiology (Volume I and II), Avichal publishing company
- Sembulingam K; Sembulingam P: Essentials of Physiology for Dental students.
- Bijlani R. L.:Understanding of Human Physiology, Jaypee Brothers Medical Publishers Pvt. Ltd, New Delhi, 2011
- Pal G. K & others: Textbook for practical Physiology, Orient Longman Pvt. Ltd, Hyderabad, 2007
- Jayaprakash, C.S: Sports Medicine, Jaypee brothers, New Delhi.
- Balkrishna Acharya: Yoga Vijnanam, Divya Publication, Haridwar.
- McArdle William D, Katch I Frank, Katch Victor L. Essentials of exercise physiology.
 Lippincott Williams & Wilkins.

Brown Stanley P, Miller Wayne C, Eason Jane M: Exercise Physiology Basis of Human movement in health and disease. Lippincott Williams & Wilkins.

Subject Name: Fundamentals of Psychology

Subject Code: BS-CT304

Objectives:

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

• Understand the necessity and significance of psychology.

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

Total Number of H	Theory	Tutorial	Practical		
Credits		3	3 1 0		
Hours/ week 3 1 0			0		
SCHEME OF EXAMINATION					
Total Marks: 100					
The	ory : 100		Practical:	Nil	
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE)		Internal Assessment (CT+TA/PR)	
70	30				

UNIT- I: HUMAN PSYCHE, PSYCHOLOGY - A SCIENCE OF BEHAVIOUR

[10 Hrs.]

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

UNIT- II: DOMAINS AND DYNAMIC OF BEHAVIOUR

[15 Hrs.]

- 2.1 Attention: Nature, Determinants of Attention; Perception: Nature; Gestalt theory of Perception
- 2.2 Learning: Nature; Theories: Learning by Trial and Error, Learning by Insight, Classical and Instrumental Conditioning
- 2.3 Intelligence: Nature; Emotional Intelligence (EI): Nature, Goleman's Model of EI; Spiritual Intelligence: Nature
- 2.4 Emotion: Nature; Physiological Basis of Emotion; Theories: James-Lange Theory, Cannon-Bard Theory
- 2.5 Motivation: Nature; Types of Motives: Biological Motives, Social and Psychological Motives; Maslow's Theory of Motivation.

UNIT- III: PERSONALITY AND ITS DEVELOPMENT

[10 Hrs.]

- 3.1 Personality: Nature and Types of Personality; Yogic View of Personality
- 3.2 Personality Development: Various Facets (Domains) and Stages of Personality Development; Determinants of Personality: Heredity and Environment
- 3.3 Theories of Personality of Sigmund Freud, Alfred Adler and C.G. Jung, Carl Rogers
- 3.4 Assessment of Personality: Personality Inventories, Projective Techniques, Case History Method
- 3.5 Yoga and Personality Development: Yogic Attitudes; Personality Development with special emphasis on *Panchakosha* and *Ashtanga Yoga*.

UNIT-IV: STRESS & ITS MANAGEMENT, MENTAL HEALTH AND YOGA [10 Hrs.]

- 4.1 Mental Health: Meaning and Importance; Indicators of Mental Health; Criteria of Normal and Abnormal Behaviour
- 4.2 Stress: Nature; Symptoms, Causes and Consequences of Stress; Stress and Mental Health; Yogic Perspective of Stress
- 4.3 Adjustment: Nature; Adjustment and Stress; Conflict and Frustration; Ways of Adjustment: Direct Ways and Indirect Ways (Defense-mechanisms)
- 4.4 Yogic Perspective of Mental Health; Promoting Mental Health,Impact of Yogic Lifestyle on Mental Health

REFERENCE BOOKS:

- 1. Basavaraddi, I.V. (Managing Editor) (2010). Yoga: Teacher's Manual for School Teachers. New Delhi: Morarji Desai National Institute of Yoga.
- 2. Bhatia, Hans Raj (2005). General Psychology. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.
- 3. Herrman, H., Saxena, S, & Moodie, R. (ed.) (2005). Promoting Mental Health. Switzerland: WHO Press, World Health Organization.
- 4. Hilgard, Ernest R., Atkinson, Richard C. & Atkinson, R.L. (1976). Introduction to Psychology. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.
- 5. Morgan, C. T., King, R.A., Weisz J. R. & Schopler J. (2006). Introduction to Psychology. New Delhi: Tata McGraw Hill Publishing Co. Ltd.
- 6. Nagendra, H. R. (1988). New Perspectives in Stress Management. Bangalore: Vivekanada Kendra.
- 7. Singh, A. K. (2007). Saral Samanya Manovijnana. Delhi: Motilal Banarasidas Publications.
- 8. Srivastava, D.N. (2007). General Psychology. Agra: Vinod Pustak Mandir.
- 9. Taylor, S. E. (2006). Health Psychology (6th ed.). New Delhi: Tata McGraw Hill.
- 10. Udupa, K.N. (2007). Stress and Its Management by Yoga. Delhi: Motilal Banarasidas.

Subject Name- Functional Hindi-I Subject Code- BS-CT305 (H)

Objectives: प्रस्तावित विषय के अध्ययन से विद्यार्थी

- हिन्दी के भाषिक इतिहास, संरचना और व्याकरण का ज्ञान प्राप्त कर सकेंगे
- हिन्दी शब्द भंडार से परिचित हो सकेंगे
- शुद्ध हिन्दी लेखन तथा व्यवहार का ज्ञान प्राप्त कर सकेंगे

Total Number of Hours: 45		Theory	Tutorial	Practical	
Credits	3	1	0		
Hours/Week		3	1	0	
SCHEME OF EXAMINATION					
	Total Marks: 100				
Th	eory : 100		Practical	: Nil	
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (S	EE)	Internal Assessment (CT+TA/PR)	
70	30				

इकाई 1- हिन्दी भाषा का सामान्य परिचय तथा व्याकरण

[15 Hrs.]

- 1.1 हिन्दी भाषा का आविर्भाव,विकासात्मक इतिहास तथा बोलियों का सामान्य परिचय
- 1.2 'हिन्दी' शब्द की व्युत्पत्ति और हिन्दी भाषा की संरचना का विकास
- 1.3 हिन्दी भाषा और व्याकरण- वर्ण विचार, शब्द विचार, वाक्य विचार
- 1.4 हिन्दी भाषा और व्याकरण- लिंग, वचन
- 1.5 हिन्दी भाषा और व्याकरण- कारक, उपसर्ग, प्रत्यय

इकाई 2- हिन्दी भाषा का शब्द भंडार और शब्द रचना

[15 Hrs.]

- 2.1 विकारी शब्द- संज्ञा, सर्वनाम, क्रिया, विशेषण
- 2.2 अविकारी शब्द- क्रिया विशेषण, सम्बंधसूचक, समुच्चयबोधक, विस्मयादिबोधक
- 2.3 अनेकार्थी शब्द, पर्यायवाची शब्द
- 2.4 समश्रुत शब्द, विलोम शब्द
- 2.5 वाक्यांश के लिये एक शब्द

इकाई 3- विराम चिह्न तथा अशुद्धि शोधन

[15 Hrs.]

- 3.1 विराम चिह्न परिचय और प्रयोग
- 3.2 हिन्दी की भाषिक संरचना और अशुद्धि- प्रकार, कारण
- 3.3 अशुद्धि शोधन- शब्दगत
- 3.4 अशुद्धि शोधन- वाक्यगत

3.5 प्रसिद्ध मुहावरे तथा प्रसिद्ध लोकोक्तियाँ

BOOKS FOR REFERENCE

- 1) टंडन पूरनचंद और ममता सिंगला. हिन्दी क्षमता 'ग', नई दिल्ली: किताब घर प्रकाशन, 2011
- 2) वर्मा आर. पी. और सुभाषिनी मिश्रा. हिन्दी भाषा और व्याकरण, दिल्ली: कांती पब्लिकेशंस, 2012
- 3) टंडन पूरनचंद और रवि शर्मा. हिन्दी दक्षता 'ग', नई दिल्ली: किताब घर प्रकाशन, 2013
- 4) प्रसाद अर्जुन. व्यावहारिक हिन्दी व्याकरण, दिल्ली : कौमुदी पब्लिकेशंस, 2012
- 5) तिवारी भोलानाथ. हिन्दी भाषा, इलाहाबाद : किताब घर प्रकाशन, 2013
- 6) गुरु कामताप्रसाद. हिन्दी व्याकरण, नई दिल्ली : प्रकाशन संस्थान, 2009

Subject Name: Functional English

Subject Code: BS-CT305 (E)

Objectives: The following are the objectives of this course:

- To acquire and strengthen the skill of communicating with others in English.
- To strengthen the LSRW skills of the students
- To acquire knowledge of basic grammar
- To be able to appreciate simple literary texts

Total Number o	f Hours: 45	Theory Tutorial Practical		
Credits		3	1	0
Hours/ week		3	1	0
SCHEME OF EXAMINATION				
Total Marks: 100				
Т	heory : 100		Practica	al : Nil
Final Exam	Internal Assessment	Final Exam		Internal Assessment
(SEE)	(CT+TA)	(SEE)		(CT+TA/PR)
70	30			

Unit 1: Basic and Applied Grammar

[15 Hrs.]

- 1.1 Basic knowledge of Noun, Pronoun, Verb, Adjective and Adverb
- 1.2 Determiners; Prepositions
- 1.3 Modals (can, could, shall, should, will, would, may, might, ought to, must, need to)
- 1.4 Subject-verb agreement
- 1.5 Tense; Voice (Changing from active to passive and vice-versa).

Unit 2: Writing Skills

[15 Hrs.]

- 1.1 Composing paragraph, messages and posters
- 1.2 Composing notice, and invitations
- 1.3 Formal letters (letters of complaint, enquiry, order, and adjustment)
- 1.4 Letters to the editor on various social, national and international issues.
- 1.5 Essay writing (Descriptive, Persuasive, Expository, Argumentative and Analytical essay)

Unit 3: Reading Skills and Vocabulary Building

[15 Hrs.]

- 1.1 Factual passages e.g. instructions, descriptions, reports
- 1.2 Discursive passages involving opinion e.g. argumentative, reflective, persuasive etc.
- 1.3 Literary texts e.g. poems, extracts from fiction, biography, autobiography, travelogue
- 1.4 One word substitution, word formation through suffixes, prefixes and basic root-words
- 1.5 Common phrases and idioms

Reference Books:

- 1. Wood, Frederick T. *A Remedial English Grammar for Foreign Students*. Basingstoke: Macmillan, 1966.
- 2. Thomson, Audrey Jean, Agnes V. Martinet, and Eileen Draycott. *A Practical English Grammar*. London: Oxford University Press, 2003.
- 3. Kumar, Sanjay, and Pushp Lata. *Communication Skills*. New Delhi: Oxford University Press, 2011.
- 4. Raman, Meenakshi, and Sangeeta Sharma. *Technical communication: Principles and practice.* New Delhi: Oxford University Press, 2015.
- 5. Gairns, Ruth, and Stuart Redman. *Oxford Learner's Pocket Phrasal Verbs & Idioms*. London: Oxford University Press, 2013.
- 6. Trask R. L: Language the Basics. London: Routledge, 2003.

Subject Name: Yoga Practicum-III

Subject Name: BS-CP306

Objectives:

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

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

Total Number of Hours: 60		Theory	Tutorial	Practical	
Credits		0	0	3	
Hours/ week		0	0	6	
SCHEME OF EXAMINATION					
Total Marks: 100					
Theory : NA		Practical: 100			
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
				(CT+TA/PR)	
		70	_	30	

Practice of the following Yogic practices with brief theoretical knowledge about their importance of name, the technique, salient points, Do's & Don't, precautions to be taken and benefits of each of the following Yogic practices.

UNIT-1: HYMNS AND SATKARMA

[15 Hrs.]

A. RECITATION OF HYMNS

- 1.1.1 Recitation of Selected Slokas of Bhagwat Geeta;
- 1.1.2 Recitation of Suryastakama

B. SATKARMA

- 1.2.1 Dhauti (Vastra Dhauti)
- 1.2.2 Kapalbhati (Seetkrama and Vyutkrama)

UNIT-2: YOGIC SURYANAMASKAR AND YOGASANA

[20 Hrs.]

A.YOGIC SURYANAMASKAR

2.1.1 Yogic Surya Namaskar of Swami Dheerendra Brahmachari

B. YOGASANA

- 2.2.1 Trikonasana, Kati Chakrasana, Veerabhadrasana I
- 2.2.2 Uttitha Padmasana, Baddha Padmasana,
- 2.2.3 Supta Vajrasana, Utthana Mandukasana; Simhasana,
- 2.2.4 Kagasana, Utkatasana, Vakrasana,
- 2.2.5 Shalabhasana, Dhanurasana,

UNIT-3: BANDHA, PRANAYAMA AND DHYANA

[15 Hrs.]

A. BANDHA

- 3.1.1 Jivha Bandha
- 3.1.2 Maha Bandha

B. PRANAYAMA

- 3.2.1 Nadishodhana Pranavama
- 3.2.2 Surya-bhedana and Chandra-bhedana Pranayama

Note: Preferably with the ratio 1:2:2:1 (Puraka:Antara Kumbhaka:Rechaka:Bahya Kumbhaka)

C. PRACTICES LEADING TO DHYANA

- 3.3.1 Yoga Nidra (2, 3)
- 3.3.2 Ajapa Dharana (Stage 1, 2, 3);
- 3.3.3 Mind sound resonance technique (MSRT)

UNIT- 4: CONTINUOUS EVALUATION BY THE TEACHERS

[10 Hrs.]

BOOKS FOR REFERENCES

- 1. Basavaraddi, I.V. & others: Prataha Smarana, MDNIY New Delhi.
- 2. Basavaraddi I. V. & Others : Teachers Manual for School Teachers, MDNIY, New Delhi, 2010
- 1. Basavaraddi, I.V. & others : Shatkarma: A Comprehensive description about Cleansing Process, MDNIY New Delhi, 2009
- 2. Basavaraddi, I.V. & others: Yogasana: A Comprehensive description about Yogasana, MDNIY, New Delhi, 2011.
- 3. Basavaraddi, I.V. & others: Pranayama; MDNIY New Delhi, 2012
- 4. Joshi, K.S.: Yogic Pranayama, Oriental Paperback, New Delhi.
- 5. Nagendra, H.R: Mind sound reasonance technique, Swami Vivekanand Yoga Prakashan, 2002, Bangaore.
- 6. Swami Niranjanananda Saraswati: Asana Pranayama Mudra Bandha; Bihar school of Yoga publications; Munger, 2001
- 7. Swami Satyananda: Yoganidra, Yoga Publication Trust, Munger, 1998
- 8. Swami Dhirendra Bhramhachari: Yogasana Vijnana, Dhirendra Yoga Publications, New Delhi, 1966
- 9. Iyengar, B.K.S.: Light on Pranayama, Harper Collins, Swami Vivekanand Yoga Prakashan, 2012
- 10. Desikachar, Dr. Kausthub, The Heart of Asana, April 1, 2012

Subject Name: Practicum - Practice of teaching Yoga - I

Subject code: BS-CP307

Objectives:

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

- Understand the principles and practices of teaching methods of Yoga.
- Have an in-depth understanding about session and lesson planning and class room arrangements.
- Have an idea about the different tools used in Yoga teaching.

Total Number of Hours: 30		Theory	Tutorial	Practical	
Credits		0	0	2	
Hours/ week		0	0	4	
	SCHEME OF I	EXAMINATION	ON		
Total Marks: 100					
Theory: NA			Practical: 100		
Final Exam	Internal Assessment	Final Exam	1	Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
				(CT+TA/PR)	
		70		30	

UNIT-1: PRINCIPLES AND METHODS OF TEACHING YOGA

- 1.1. Teaching and Learning: Concepts and Relationship between the two;
- 1.2. Meaning and scope of Teaching methods, and factors influencing them
- 1.3. Teaching aids its meaning and need, the role of Language, Voice, Fluency, Clarity and Body Language in an ideal presentation.
- 1.4. Essentials of Good Lesson Plan: concepts, needs, planning of teaching Yoga (Shatkriya, Asana, Mudra,

Pranayama & Meditation);

1.5. Practice of Yoga at different levels (Beginners, Advanced, School Children, Youth, Women and Special attention group);

UNIT-2: LESSON PLANNING IN YOGA AND CLASS MANAGEMENT

- 2.1. Techniques of mass instructions; Individualized teaching and group teaching.
- 2.2. Class management in Yoga: its meaning and need
- 2.3. Lecture cum demonstration in Yoga: Its meaning, importance and method of its presentation

- 2.4. Critical observation of a Yoga class/Yoga camp/Workshop
- 2.5. Models of Lesson Plan;

UNIT-3: PRACTICE OF TEACHING IN YOGA

Each student will have to prepare and give at least

- 3.1 Two Lecture cum Demonstration on any one topic of Yoga.
- 3.2 Two Yoga lesson for an Individual

Note: Each Student shall have to prepare and to give One lecture cum demonstration or one Yoga lesson for an indiviual on different Yoga practices (e.g.: Asana/Pranayama/Bandha/Mudra/Life Style Disorder) in final examination. The one practice teaching lesson will be observed / examined by the External examiner and internal examiner. These marks shall be considered as the final assessment marks of this practical paper. The duration of the class will be decided by the examiners, However it shall be maximum 30 minutes.

BOOKS FOR REFERENCE

- 1. Dr. Gharote M L: Teaching methods for Yogic practices, Kaivalyadhama, Lonavala, 2007
- 2. Dr. Raj Kumar: Principles & methods of Teaching, Printo graphics, Delhi,
- 3. Saket Raman Tiwari& others: Teaching of Yoga, DPH Publishing Corporation, Delhi, 2007
- 4. Dr. Shri Krishna: Notes on basic principles & methods of teaching as applied to yogic practices and a ready reckoner of yogic practices, Kaivalyadhama, Lonavala, 2009

Subject Name: Psychology Practicum

Subject Name: BS-CP308

Objectives:

1. Objectives of this course is to make the students familiar about the tests and the scales and the procedure of administering them.

Total Number of Hours: 30		Theory	Tutorial	Practical	
Credits		0	0	2	
Hours/ week		0	0	4	
SCHEME OF EXAMINATION					
Total Marks: 100					
Theory : NILL		Practical: 100			
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
				(CT+TA/PR)	
		70		30	

Practical & Practicum

[30 Hrs.]

Division/Distraction of Attention

- 1. Emotional Intelligence/Emotional Maturity
- 2. Spiritual Intelligence/Study of Values/Spiritual Belief
- 3. Self concept
- 4. Asakti/Anasakti Scale
- 5. Anxiety Scale
- 6. Aggression Scale
- 7. Fear of Death
- 8. Depression
- 9. Frustration
- 10. Personality Inventory
- 11. Adjustment/Mental Health
- 12. General Well-being
- 13. Case study

Note: Students are to conduct and report at least eight (8) practical.

The examiner will allot one practical at the time of examination.

Semester-IV

Subject Name: Patanjala Yoga Darshana-II

Subject Code: BS-CT401

Objectives:

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

- Undertsand the essence of Vibhutis and Kaivalya pada.
- Understand the practices of Yoga, chaturvyuhavada.
- Know the theory of Karma and principles of Karmaphala.

Total Number of Hours: 45		Theory	Tutorial	Practical	
Credits		3	1	0	
Hours/ week		3	1	0	
SCHEME OF EXAMINATION					
Total Marks: 100					
Theory : 100		Practical : Nil			
Final Exam	Internal Assessment	Final Exam Internal		Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
				(CT+TA/PR)	
70	30				

Unit - 1: Yoga Sadhanas in Yoga Darshana

[15 Hrs.]

- 1.1 Concept of Kriya Yoga: Tapa, Swadhyay, Ishwara Pranidhana, Theory of Kleshas: Avidya, Ashmita, Raga, Dewesh, Abhinivesh.
- 1.2 Concept of Chaturvyuhavada: Heya, Hetu, Hana, Hanopaya, Drishta and Drisha-nirupanam: Prakriti and Purusha.
- 1.3 Concept of Viveka-khyati, Brief Introduction to Ashtanga Yoga.
- 1.4 Bahiranga Sadhana and their Siddhis.
- 1.5 Theory of Karmasya and principles of karmaphala.

Unit - 2: Vibhutis in Yoga Darshana

[15 Hrs.]

- 2.1 Introduction of Dharana, Dhyana and Samadhi, Samyama and its Siddhis.
- 2.2 Three types of Chitta Parinamah.
- 2.3 Brief introduction of Vibhuties and its importance in Yoga Sadahana.
- 2.4 Bhoota jaya, Indriya jaya and their Siddhis, Satvapurushanyatakhyati and its Siddhis.
- 2.5 Vivek Jnana Nirupanam, Kaivalya Nirvachana.

- 3.1 Five Types of Siddhis and Jatyantar Parinamh.
- 3.2 Concept of Nirman Chitta and four types of Karmas.
- 3.3 Concept of Vasana and concept of Bahya Prdartha (external element) and its abilities.
- 3.4 Non-self-illumination of Buddhi and its function, Dharmamegha Samadhi and infinite knowledge.
- 3.5 Mutation of Guna, Karma, Pratiprasavah and Kaivalya.

BOOKS FOR REFERENCE

- 1. Swami Digambara Ji and others: Glossary of the Samkhakarika, Kaivalyadhama, Lonavala, 2012
- 2. Swami Virupaksananda: Samkhyakarika of I svarakrisna (with tattva Kamudia of Vachapati Mishra), Sri Ram Krishana Matha Madras, 1995
- 3. James R. Ballantyne: The Sankhya Aphorisms of Kapila, Parimal Publications, New Delhi, 2004
- 4. V.V. Sovani: A critical study of the Sankhya System, Chukhambha Sanskrit Pratisthan, New Delhi, 2005
- 5. M.R. Yardi: The Yoga of Patanjali, Bhandarkar Oriental Research Institute, Poona, India, 1970
- 6. K.D. Prithvipaul: The Yogasurta of Patanjali M.L.B.D. New Delhi
- 7. Gaspar M. Koelmenn, S.J.: Patanjal Yoga, Papal Athenaeum, Poona, 1970
- 8. Swami Ved Bharti: Yogasutra of Patanjali (with the Exposition of Vyasa) M.L.B.D. New Delhi, 2004, Vol I & II

Subject Name: Hath Yoga Texts-III

Subject Code: BS-CT402

Objectives:

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

- Understand about pre-requisites, principles about Hatha Yoga.
- Understand different Hatha Yoga Techniques of Classical texts.
- Understand the therapeutic application of Yogic Techniques

Total Number of Hours: 45		Theory	Tutorial	Practical
Credits		3	1	0
Hours/ week		3	1	0
SCHEME OF EXAMI	NATION			
Total Marks: 100				
Theory: 100		Practical : Nil		
Final Exam	Internal Assessment	Final Exam Internal		Internal
(SEE)	(CT+TA)	(SEE)		Assessment
				(CT+TA/PR)
70	30			

Unit- I Four Kinds of Yoga and Astakarmas in Hatharatnavali

[15 Hrs.]

- 1.1 Relationship between Hath Yoga and RajaYoga, Description of MahaYoga
- 1.2 Characteristics of Mantra Yoga Laya Yoga, Raja Yoa and Hath Yoga,
- 1.3 Purificatory Techniques : Cakri, Nauli, Dhauti, Neti, Basti, Gajakarni, Trataka and Mastakabharanti, Pupose of Cleansing Techniues
- 1.4 Salient Features of Hathasiddhi, , Conducive and Non-conducive Diet for Hatha Yoga
- 1.5 Rules and Regulations to be followed in Hath Yoga, Components of Success and Failures in Hatha Yoga

Unit-II Asanas, Pranayamas, Mudras and Samadhi in Hatharatnavali [15 Hrs.]

2.1 Description of Eighty Four Asanas: Techniques and their Benefits, Classification of Niyamas for the body and mind,

- 2.2 Pranayamas:Techniques, Benefits of Nine Pranayama- Bhastrika, Bhramari, Suryabhedana,, Ujjai, Sheetali, Murchha, Seetkari, Kevala and Bhujangakarni, Levels of Pranayama Prctitioners, Nadi Shodhana, Symptoms of Nadi Purification
- 2.3 Relationship between mind and breath, Descriptions of Eight Types of Nadas (Sounds), Synonyms of Pingala and Ida
- 2.4 Mudras: classification, benefits and methods of practice- Mahmudra, Mahabandha, Mahavedha, Uddiyan, Mulabandha, Jalandharbandha, Viparaitakarni, Vajroli, Shaktichalana and Khechari .
- 2.5 Description of Samadhi, Nadanusandhana, Four States of Yoga, Macrocosm and Microcosm, Manonmani avastha, Cakra and Nadis, Panchikarana

Unit-III Hatha Yoga Practices in Goraksha Samhita (Goraksha Paddhati) [15 Hrs.]

- 3.1 Concept and Result of Yoga, Description of Asanas: Techniques and their Benefits-Siddhasana and Kamalasana
- 3.2 Cakaras and their Petals, Kanda, Nadis, Panchaprana and Upaprana: their Locations and Locations, Kundalini, Concept of Japa- ajapa, The Concept of Bindu (Shiva) and Rajas (Shakti).
- 3.3 Bandhas and Mudras: Techniques of Practice, their relevance in Hatha Yoga sadhana, Nature of Shakti
- 3.4 Pranayama: Techniques and benefits, Nadishuddhi and Its Importance, Duration of Kumbhaka
- 3.5 Pratyahara, Panchadharana, Meditation- Sakala and Nishkala, Samadhi and its Result

REFERENCE BOOKS

- 1. Sawmi Vishnuswaroop: Goraksha Paddhati. Divine Yoga Institute, Kathmandu, Nepal
- 2. Gharote ML: Hatharatnavali, The Lonavala Yoga Institute, Lonavala, Pune, IInd Edition, 2009
- 3. Sadashivabrahmendra Saraswati(1978), ShivaYogadipika, Ananda Ashramagranthavali, Pune- 410403
- 4. Swami Niranjananda Saraswati, Gherandasamhita, Bihar School of Yoga, Munger, Bihar-811201
- 5. Swami Digambaraji(1997), Gheranda Samhita, SMYM Samiti, Kaivalyadhama, Lonavala-410403

- 6. Swami Vivekananda(1982), RajaYoga, Ramakrishna Ashrama Publications, Dehi Entally Road kolkata-700014.
- 7. Swami Digambaraji (1970), HathaYoga Pradipika of Swatmarama, Kaivalyadhama, Lonavala, Pune 410403.
- 8. Swami Niranjanananda, Yoga Darshan, Sri Pachadashanam Paramahamsa Alakh Bara, Deoghar-814113
- 9. Swami Adidevananda(1998), Patanjala Yoga Darshana Vyasa Bahshya sahitha, Shri Ramakrishna Ashrama, Mysore 570020.
- 10. Swami Niranjanananda (1997), Hatha Yogapradipika, Bihar School of Yoga-811201
- 11. Gharote M.L. &Pai, G.K. (Edi) Siddhasidhantpaddhati, Kaivalyadhama, Lonavla, 2005.

Subject Name: Yoga and Health

Subject code: BS-CT403

Objectives:

1. To understand the concept of body and health from the perspective of Yoga.

2. To have an understanding of the Yogic concept of Disease and the remedial measures therein

Total Number of Hours: 45		Theory	Tutorial	Practical
Credits		3	1	0
Hours/ week		3	1	0
	SCHEME OF E	XAMINATION	V	
Total Marks: 100				
Theory: 100		Practical : Nil		
Final Exam	Internal Assessment	Final Exam		Internal
(SEE)	(CT+TA)	(SEE)		Assessment
				(CT+TA/PR)
70	30			

Unit-1: Yogic concepts of health and disease

[15 Hrs.]

- 1.1. Health and Disease: Meaning and definitions, Concept of Adhi and Vyadhi, Yogic concept of Health and Disease, Yoga as a preventive Health care Heyamduhkhamanagatam.
- 1.2. Potential causes of ill-health: Tapatrayas and Kleshas, Physical and Physiological manifestation of Disease: Vyadhi, Alasya, Duhkha, Angamejayatva and Svasa-prashvasa. Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Duhkha, Daurmanasya, Bhranti-darsana, Alabdha-bhumikatva and Anavastitatva.
- 1.3. ShuddhiParikriyas in Yoga and their role in preventive and curative Health, Karma Shuddhi, (Yama, Niyama), GhataShuddhi (Shat-karma), SnayuShuddhi (Asana), PranaShuddhi (Pranayama), Indriya and Mano Shuddhi (Pratyahara), Chitta(Mano, Buddhi&Ahamkar) Shuddhi (Dharana, Dhyana and Samadhi).
- 1.4 Concepts of Trigunas, Pancha-koshas, Pancha-mahabhutas, Pancha-prana and Shat-chakra and their role in Health and Healing.
- 1.5 Concept of Swara Yoga and its efficacy in Health and Healing.

Unit-2: Yogic principles and practices of healthy living

[15 Hrs.]

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

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

Unit-3: Health benefits of Yogic practices

[15 Hrs.]

- 3.1. Health benefits of Yogasana.
- 3.2. Health benefits of Pranayama.
- 3.3. Health benefits of Shatkarma.
- 3.4. Health benefits of Bandha and Mudra.
- 3.5. Health benefits of Meditation.

BOOKS FOR REFERENCE

- 1. PreetiGoel and Rita Jain: Spectrum of Health (Sports Publications, New Delhi, 2003)
- 2. M. M. Gore: Anatomy and Physiology of Yogic Practices (New Age Books, New Delhi, 2008)
- 3. Dr. K. Krishna Bhat: The power of Yoga
- 4. Dr. R. S. Bhogal: Yoga Psychology, Kaivalyadhama Publication
- 5. Dr.Manmath M Gharote, Dr. Vijay Kant : Therapeutic reference in Traditional Yoga texts
- 6. T.S. Rukmani: Patanajala Yoga Sutra
- 7. Sahay, G. S.: Hatha Yoga Pradeepika, MDNIY Publication, 2013
- 8. Kdham: GherandaSamhita, Kaivalyadhama, Lonavla,

Subject Title: INTRODUCTION TO COMMON AILMENTS

Subject Code: BS-CT 404

Objectives:

• To be able to understand the common ailments and its causes, pathophysiology, clinical features, diagnosis and managements.

Total Number of Hrs: 45 Theory Tut			Tutorial	Practical	
Credits		3 1 0			
Hrs/ week	Hrs/ week 3 1			0	
SCHEME OF EXAMINATION					
Total Marks: 100					
Theo	ory: 100		Practical	:	
Final Exam (SEE)	Internal Assessment (CT+TA)	Assessi		Internal Assessment (CT+TA/PR)	
70	30				

Unit-1: Musculo-Skeletal Disorders

[09Hrs]

Introduction to Musculo-Skeletal Disorders: Meaning, Definition, Causes, Pathophysiology, Classification, Clinical Features, Diagnosis and Management of following conditions:

- 1.1. Back Pain: Lumbar Spondylosis, Intervertebral disc prolapse (IVDP) with Sciatica, Spondylitis.
- 1.2. Neck pain: Cervical Spondylosis.
- 1.3. Arthritis: Osteoarthritis, Rheumatoid Arthritis, Gout.
- 1.4. Fibromyalgia and Postural deformities such as Kyphosis, Scoliosis & Lordosis.

Unit-2: Cardio-Respiratory disorders

[09 Hrs.]

Introduction to Cardio-Respiratory Disorders: Meaning, Definition, Causes, Pathophysiology, Classification, Clinical Features, Diagnosis and Management of following conditions:

- 2.1.Bronchial Asthma & Chronic Bronchitis.
- 2.2. Sinusitis, Common cold, Allergic Rhinitis&Sleep apnea.
- 2.3. Hypertension, Atherosclerosis / Coronary artery disease.
- 2.4. Ischemic Heart disease Myocardial Infarction.

Unit-3: Gastrointestinal-Metabolic and Excretory Disorders

[09 Hrs.]

Introduction to Gastrointestinal-Metabolic and Excretory disorder: Meaning, Definition, Causes, Pathophysiology, Classification, Clinical Features, Diagnosis and Management of following conditions:

- 3.1. Dyspepsia, Hyperacidity and Peptic Ulcers.
- 3.2. Constipation and Irritable Bowel Syndrome.
- 3.3. Thyroid Disorders and Obesity.
- 3.4. Diabetes Mellitus

Unit-4: Obstetric & Gynecological Disorders

[09 Hrs]

Introduction to Obstetric & Gynecological Disorders: Meaning, Definition, Causes, Pathophysiology, Classification, Clinical Features, Diagnosis and Management of following conditions:

- 4.1.Menstrual Disorder (dysmenorrhea, pre-menstrual syndrome): Menstrual pain, cramp etc.
- 4.2. Polycystic Ovarian Syndrome (PCOS/ PCOD)
- 4.3. Menopausal discomfort (anxiety, irritability, insomnia, hot flashes)

Unit-5: Neurological and Psychological Disorders

[09 Hrs.]

Introduction to Neurological and Psychological Disorders: Meaning, Definition, Causes, Pathophysiology, Classification, Clinical Features, Diagnosis and Management of following conditions:

- 5.1. Migraine & Headache
- 5.2. Depression&Stress.
- 5.3. Insomnia, Dementia & Attention Deficit Hyperactivity Disorders (ADHD).

TEXT BOOKS

- 1. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers
- 2. Nagarathna R and Nagendra HR, Yoga therapy for common ailments series, SVYP publications, 2010
- 3. Swami Karmananda, Yoga therapy for common diseases, Yoga publication trust, Munger, 2001

REFERENCE BOOKS

1. A.K. Das (Ed.): Medicine Update. Bombay: Association of Physicians of India, 1998.

- 2. Aatreya, Shanti Parkash: Yoga Manovigyan, Indian Psychology, International Standard Publication, Varanasi: 1965
- 3. Bhavanani, A.B. (2006). Correction of Breathing Disorders through Rishiculture Ashtanga Yoga. Pondicherry, India: Dhivyananda Creations.
- 4. Bhavanani, A.B. (2008). Yoga for Health and Healing. Pondicherry, India: Dhivyananda Creations.
- 5. Bhavanani, A.B. (2008). Yoga for Health and Healing. Pondicherry, India: Dhivyananda Creations.
- 6. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers
- 7. Harrison: Principles of Internal Medicine, International Edition, 14th Edition, NewYork: McGraw Hill Co. Inc., 1998.
- 8. Khalsa, S.B., Cohen, L., McCall, T., &Telles, S (Ed.), The Principles and Practice of Yoga in Health Care (pp.17-29). East Lothian, UK: Handspring.
- 9. MDNIY publications:10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi, 2009
- 10. Nagarathna R and Nagendra H R: Yoga for Arthritis, Back pain, Diabetes, Pregnancy Breathing Practices, Swami Vivekananda Yoga Prakasana, Bangalore, 2000
- 11. Nagarathna, R and Nagendra, H.R.: Integrated Approach of Yoga Therapy for Positive Health, Swami V4ekananda Yoga Prakashana, Bangalore, 2001
- 12. ShivanandaSaraswati: Yoga Therapy (Hindi & English)
- 13. Swami kuvalayananda and S.L. Vanikar: Yoga Therapy: Kaivalyadhama, Lonavala, Revised Edition
- 14. Swami SatyanandaSaraswati: Yoga and Cardio Vascular Management, Yoga Publication Trust, Munger, 2005

Subject Name- Functional Hindi-II Subject Code- BS-CT405 (H)

Objectives: प्रस्तावित विषय के अध्ययन से विद्यार्थी

- हिन्दी के व्यावहारिक प्रयोग का ज्ञान प्राप्त कर सकेंगे
- अभिव्यक्ति तथा सम्प्रेषण की विभिन्न विधियों से परिचित हो सकेंगे
- भाषिक सम्प्रेषण के विभिन्न आयामों का ज्ञान प्राप्त कर सकेंगे

Total Number of Hours: 45		Theory	Tutorial	Practical	
Credits	3	1	0		
Hours/Week		3	1	0	
SCHEME OF EXAMINATION					
Total Marks: 100					
The	ory: 100		Practical	: Nil	
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE)		Internal Assessment (CT+TA/PR)	
70	30				

इकाई 1- संक्षेपण और पल्लवन

[15 Hrs.]

- 1.1 संक्षेपण-शाब्दिक अर्थ तथा परिभाषा, विशेषताएँ
- 1.2 संक्षेपण- विषयगत नियम, शैलीगत नियम
- 1.3 संक्षेपण- क्षेत्र, उदाहरण
- 1.4 पल्लवन- अर्थ तथा परिभाषा, विशेषताएँ
- 1.5 पल्लवन- नियम, उदाहरण

इकाई 2- निबंध और पत्र लेखन

[15 Hrs.]

- 2.1 निबंध लेखन- परिभाषा तथा स्वरूप, प्रकार
- 2.2 निबंध लेखन- तत्त्व, विशेषताएँ तथा उदाहरण
- 2.3 पत्राचार- परिचय, विशेषताएँ, पत्र के प्रकार
- 2.4 पत्राचार- रूपरेखा और उनके अंग
- 2.5 पत्राचार- प्रमुख प्रकारों के उदाहरण

इकाई 3 - अनुवाद

[15 Hrs.]

- 3.1 अनुवाद- व्युत्पत्तिमूलक अर्थ तथा परिभाषा, स्वरुप
- 3.2 अनुवाद- प्रक्रिया तथा प्रविधि
- 3.3 अनुवाद- प्रकार तथा क्षेत्र
- 3.4 अनुवाद- सीमाएँ तथा समस्याएँ
- 3.5 व्यावहारिक अनुवाद अभ्यास

BOOKS FOR REFERENCE

- 1) टंडन पूरनचंद और सुनील कुमार तिवारी. कार्यालयी हिन्दी एवं निबंध लेखन, नई दिल्ली: किताब घर प्रकाशन, 2012
- 2) टंडन पूरनचंद और हरीश कुमार सेठी. हिन्दी : प्रयोग, क्षमता और सम्प्रेषण 'क', नई दिल्ली: किताब घर, 2008
- 3) झाल्टे दंगल. प्रयोजनमूलक हिन्दी सिद्धांत और प्रयोग, नई दिल्ली: वाणी प्रकाशन, 2016
- 4) वर्मा आर. पी. और सुभाषिनी मिश्रा. हिन्दी भाषा और व्याकरण,दिल्ली: कांती पब्लिकेशंस, 2012
- 5) भाटिया कैलाशचंद्र और तुमुन सिंह. संक्षेपण और पल्लवन, नई दिल्ली: प्रभात प्रकाशन, 2007
- 6) अय्यर एन.ई.विश्वनाथ. अनुवाद कला, नई दिल्ली: प्रभात प्रकाशन, 2009
- 7) अय्यर एन.ई.विश्वनाथ. अनुवाद भाषाएँ-समस्याएँ, नई दिल्ली: प्रभात प्रकाशन, 2007
- 8) भदोरिया आश्तोष सिंह. सम्पूर्ण पत्रलेखन कला, दिल्ली: बैनियन ट्री पब्लिशर्स, 2010

Subject Name: Functional English II

Subject Code: BS-CT405 (E)

Objectives: The following are the objectives of this course:

- To acquire and strengthen the skill of communicating with others in English.
- To strengthen the LSRW skills of the students
- To acquire knowledge of basic grammar
- To be able to appreciate simple literary texts

Total Number of Ho	Total Number of Hours: 45		Tutorial	Practical		
Credits		3	1	0		
Hours/ week		3 1 0		0		
SCHEME OF EXAMINATION						
Total Marks: 100	Total Marks: 100					
Theo	ory : 100	Practical : Nil				
Final Exam	Internal Assessment	Final Exam		Internal		
(SEE)	(CT+TA)	(SEE) Assessment		Assessment		
				(CT+TA/PR)		
70	30		•			

Unit 1: Speaking and Listening Skills

[15 Hrs.]

- 1.1 Public speaking through speech and debates
- 1.2 Group Discussion
- 1.3 Role-Play and interview
- 1.4 Basic understanding of vowel sounds, consonant sounds and syllable
- 1.5 Listening activities

Unit 2: Advanced Writing Skills

[15 Hrs.]

- 2.1 Introduction and usage of common Punctuation marks such as full stop, comma, colon, semi-colon, apostrophes etc.
- 2.2Precise Writing
- 2.3 Writing a news report
- 2.4 Writing a speech or writing an article based on a verbal or a visual input
- 2.5 Composing Dialogues on a given situation, summarizing dialogues

Unit 3: Literary Appreciation

[15 Hrs.]

- 1.1 On the Rule of the Road by A.G. Gardiner
- 1.2 The Quest (Chapter 3 from The Discovery of India by Pt. Jawahar Lal Nehru)
- 1.3 Gitanjali Verse 50 and Verse no. 35 by R.N. Tagore,
- 1.4 The Road Not Taken by Robert Frost, All the World's a Stage by William Shakespeare
- 1.5 He Said it with Arsenic by Ruskin Bond, The Gift of the Magi by O'Henry

Reference Books:

- 1. Kumar, Sanjay, and Pushp Lata. *Communication Skills*. New Delhi: Oxford University Press, 2011.
- 2. Trask R. L. Language the Basics. London: Routledge, 2003
- 3. Tagore, R. Gitanjali. New Delhi: Rupa Publication, 2002.
- 4. Henry, O. *The Gift of the Magi and Other Short Stories*. New York: Dover Publications, 1992.
- 5. Bond, Ruskin. *The Best of Ruskin Bond*. Penguin Books India, 1994.
- 6. Frost, Robert. *The Road Not Taken and Other Poems.* New York: Dover Publications, 1993.
- 7. Shakespeare, W. As You Like It. London: Wordsworth Editions, 1992.
- 8. Nehru, J. L. *The Discovery of India*. UK: Penguin, 2008.
- 9. Gardiner, A.G. Leaves in the Wind. Palala Press, 2016.

Subject Name: Yoga Practicum IV

Subject code: BS-CP406

Objectives:

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

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

Total Number of Hours:60		Theory	Tutorial	Practical
Credits		0	0 0 3	
Hours/ week		0	0	6
	SCHEME OF E	XAMINATIO	V	
Total Marks: 100)			
	Theory : NA		Practical:	100
Final Exam	Internal Assessment	Final Exam		Internal
(SEE)	(CT+TA)	(SEE)		Assessment
				(CT+TA/PR)
		70	_	30

Practice of the following Yogic practices with brief theoretical knowledge about their importance of name, the technique, salient points, Do's & Don't, precautions to be taken and benefits of each of the following Yogic practices.

UNIT-1: HYMNS AND SATKARMA

[15 Hrs.]

A. RECITATION OF HYMNS

- 1.1.1 Recitation of Selected Slokas of Hath Yoga Texts;
- 1.1.2 Recitation of Suryastakama

B. SATKARMA

- 1.2.1 Nauli (Madhyama, Vama, Dakshina)
- 1.2.2 Trataka (Jatru)

UNIT-2: YOGASANA

[20 Hrs.]

- 2.1 Parshva Konasana, Veerabhadrasana-II
- 2.2 Kukkutasana, Janusirasana, Paschimottanasana, Gomukhasana
- 2.3 Marichayasana, Ardha Matsyendrasana
- 2.4 Kapotasana
- 2.5 Sarvangasana, Matsyasana

UNIT-3: MUDRA, PRANAYAMA AND DHYANA

[15 Hrs.]

A. MUDRA

- 3.1.1 Shanmukhi Mudra and Shambhavi Mudra
- 3.1.2 Kaki Mudra
- 3.1.3 Yoga Mudra

B. PRANAYAMA (WITH ANTAR & BAHYA KUMBHAKA)

- 3.2.1 Bhramari Pranayama
- 3.2.2 Ujjayi Pranayama and Bhastrika Pranayama
- 3.2.3 Sheetali Pranayama and Sitkari Pranayama,

Note: Preferably with the ratio 1:2:2:1 (Puraka:Antara Kumbhaka:Rechaka:Bahya Kumbhaka)

C. PRACTICES LEADING TO DHYANA

- 3.3.1 Ajapa Dharana (Stage 4, 5)
- 3.3.2 Yoga Nidra (4)

UNIT-4: CONTINUOUS EVALUATION BY THE TEACHERS [10 Hrs.]

BOOKS FOR REFERENCES

- 1. Basavaraddi, I.V. & others: Prataha Smarana, MDNIY New Delhi.
- 2. Swami Dhirendra Bhrahmachari : Yogasana Vijnana, Dhirendra Yoga Publications, New Delhi.
- 3. Swami Kuvalyananda: Asana Kaivalyadhama, Lonavla
- 4. Basavaraddi, I.V. & others: Yogasana: A Comprehensive description about Yogasana, MDNIY, New Delhi, 2011.
- 5. Basavaraddi, I.V. & others: Pranayama; MDNIY New Delhi, 2012
- 6. Iyengar, B.K.S.: Light on Yoga, Harper Collins Publishers.
- 7. Tiwari, O.P.: Asana Why and How? Kaivalyadhama, Lonavla.
- 8. Jayadev, Yogendra : Cyclopaedia Yoga (Vol. I-IV), The Yoga Institute, Santacruz, Mumbai.
- 9. Saraswati, Swami Satyanand: Asana, Pranayama, Bandha, Mudra Bihar School of Yoga, Munger.
- 10. Swami Niranjanananda Saraswati: Dharana Darshan; ; Bihar school of Yoga publications; Munger, 2001
- 11. Lajpat, Dr. R.: Discovering Human Potential Energy, Abhinav Rai Publication, Gurgaon, 1996
- 12. Lajpat, Rai & others: Meditation, Anbhava Rai Publications, Gurgaon
- 13. Saraswati, Swami Satya Nand: Meditation from Tantras, Yoga Publication Trust, Munger, 2004
- 14. Krishnamacharva, T.: Dhyanamalika, KYM, Chennai, 2005
- 15. Swami Satyananda: Yoganidra, Yoga Publication Trust, Munger, 1998
- 16. Iyengar, B.K.S.: Light on Pranayama, Harper Collins, Swami Vivekanand Yoga Prakashan, 2012
- 17. Desikachar, Dr. Kausthub, The Heart of Asana, April 1, 2012

Subject Name: Practicum - Practice of teaching Yoga - II

Subject code: BS-CP407

Objectives:

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

• Understand the principles of teaching Yoga

• Understand class and lesson management

• Explain the procedure, precaution, benefits and limitations of each practice.

Total Number of Hours: 30		Theory	Tutorial	Practical
Credits		0	0	2
Hours/ week		0	0 0 4	
	SCHEME OF I	EXAMINATIO	ON	
Total Marks: 100				
	Theory: NA		Practical:	100
Final Exam	Internal Assessment	Final Exam	-	Internal
(SEE)	(CT+TA)	(SEE)		Assessment
				(CT+TA/PR)
		70		30

- 1. Each student will have to prepare and give at least
 - (i) One Yoga lesson for small Group in the class
 - (ii) Two Yoga lesson for a Class on any one of the Yoga practices (Asana/Pranayama / Bandha /Mudra)
 - (iii)One Yoga lesson on Yogic management of any of the life style disorder.
 - (iv) One Yoga lesson for Mass

Under the supervision of their Yoga Practical Teacher. These marks shall be considered as the internal assessment marks of this practical paper.

2. Each Student shall have to prepare and to give One Yoga lesson for a small group on different Yoga practices (e.g.: Asana/Pranayama/Bandha/Mudra/Life Style Disorder) in final examination. The one practice teaching lesson will be observed / examined by the External examiner and internal examiner. These marks shall be considered as the final assessment marks of this practical paper. The duration of the class will be decided by the examiners, However it shall be maximum 30 minutes.

BOOKS FOR REFERENCES

- 1. Iyengar, B.K.S.: Yoga Shastra (Vol-I & II) Ramamani Iyenger Memorial Yoga Institute, PuneYOG, Mumbai
- 2. Basavaraddi, I.V. & others : Yoga Teacher's Manual for School Teachers MDNIY New Delhi.

Subject Name: Field Work

Subject code: BS-FW 408

Total Number of Hours: 30		Theory	Tutorial	Practical		
Credits		0	0	2		
Hours/ week		0	0	4		
SCHEME OF EXAMINATION						
Total Marks: 100	Total Marks: 100					
Th	eory : NA		Practical:	100		
Final Exam	Internal Assessment	Final Exam Internal		Internal		
(SEE)	(CT+TA)	(SEE)		Assessment		
				(CT+TA/PR)		
		70		30		

During this period students shall get an opportunity of teaching Yoga to villagers, weekly four hours. The academic institution where the student is undergoing his/her training takes the responsibility of organizing the classes in the near by villages.

Semester-V

Subject Name: Four Streams of Yoga

Subject Name: BS-CT501

Objectives:

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

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

Total Number of	Total Number of Hours: 45		Tutorial	Practical
Credits		3	0	0
Hours/ week		3 0 0		0
	SCHEME OF I	EXAMINATION		
Total Marks: 100				
	Theory: 100		Practical	: Nil
Final Exam	Internal Assessment	Final Exam		Internal
(SEE)	(CT+TA)	(SEE) Assessmer		Assessment
				(CT+TA/PR)
70	30			

Unit-I: Karma Yoga [10 Hrs.]

- 1.1 The concept and meaning of karma Yoga according to Bhagavadgita
- 1.2 Types of Karma according to Bhagavadgita.
- 1.3 Concept of SthitaPrajna according to Bhagavdgita.
- 1.4 Characteristics and Stages of SthitaPrajna according to Bhagavdgita.

Unit-II: JnanaYoga [10 Hrs.]

- 2.1 The concept and meaning of JnanaYoga according to Bhagavdgita (Shankar Bhashya).
- 2.2 Concept of Samkhya (Atman (Purusha), Jivatman) according to Bhagavdgita.
- 2.3 Sadhana Chatustaya, Stages of JnanaYoga practice (Shravan, Manana, Nidhidhyasana)
- 2.4 Qualities of Jnani.

Unit-III: Bhakti Yoga [10 Hrs.]

- 3.1 The concept and meaning of Bhakti Yoga according to Bhagavdgita (Shree Bhashya).
- 3.2 Concept of Bhakti, Shraddha, according to Bhagavadgita and Narada Bhakti Sura.
- 3.3 Concept of Paramatman(Parmeshwar or Purushottam) according to Bhagavdgita.
- 3.4 Navavidha Bhakti, Qualities of Bhakta according to Bhagavadgita.

Unit-IV: Dhyan Yoga [15 Hrs.]

4.1 Definitions of Yoga and the concept of Yoga Saddhana (Dhyana Yoga (Asana, Pranayam, Pratyahara, Dhyana) according to Bhagavadgita

- 4.2 Concept of Triguna and its role in Yoga Sadhna according to Bhagavadgita
- 4.3 Concept of Ahara and its role in Yoga Sadhna according to Bhagavadgita
- 4.4 Qualities of Yogi according to Bhagavadgita

BOOKS FOR REFERENCE

- 1. Swami Gambhiranand ; Bhagavadgita (with Gudharth Dipika) Sri Ramkrishna Matha Madras
- 2. Swami Gambhiranand; Bhagvatgita with the commentary of Sankaracharya, Advita Ashrama, Kolkata, 2003
- 3. Shri Bhashya(Shri Ramanujacharya), Shrimadbhagavadgita, Gita press gorakhapur.
- 4. Swami Adidevananda: Sri Ramanuja Gita Bhashya, Sri Ramakrishna Math Madras-04
- 5. Radhakrishnan, S.: The Bhagavad-Gita, Harpercollins India, 2011.
- 6. Swami Rama- Perennial Psychology Bhagvat gita (HI, USA, 1996)
- 7. Swami Shrikantananda; Gita Darshana, Indian Institute of Human Excellence Hyderabad
- 8. Swami Bhuteshananda : Nararad Bhakti Sutra, Advaita Ashrama Publication-Dept. Kolkata, II Edition, 2009
- 9. Swami Vivekananda: Jnana Yoga, Bhakti Yoga, Karma Yoga, Raja Yoga. Advaita Ashrama, Calcutta, 2000
- 10. Swami Abhidananda Bhagvatgita, the divine message, Ramakrishna Vedanta Matha, Kolkata, 1990
- 11. Swami Raghvendrananda; Universal message of the Bhagvatgita, Advita Ashrama, Kolkata, 2000
- 12. The Bhagavad-Gita(for daily living), Easwaran, Eknath ,JAICO publishing Mumbai,2003
- 13. The Philosophy Of the Bhagavadgita, Chari, S.M. Srinivasa Munshiram Manoharlal, Delhi, 2005.

Subject Title: YOGIC MANAGEMENT OF COMMON DISORDERS

Subject Code: BS-CT 502

Objectives:

 To be able to understand the measurements- investigations to assess the effect of Yogic Management -rationale for the disease specific Yoga protocol, scientific evidence if available, practices of choice and contra-indications. Probable healing mechanisms.

•	To be able to	prescribe suitable	diet regime

Total Number of H	Theory	Tutorial	Practical		
Credits		3 1 0			
Hrs/ week 3 1 0				0	
SCHEME OF EXAMINATION					
Total Marks: 100					
Theo	ory: 100		Practical	:	
Final Exam	Internal Assessment	Final Exam (SEE) Internal		Internal	
(SEE)	(CT+TA)	Assessme		Assessment	
				(CT+TA/PR)	
70	30				

Unit-1: Yogic Management of Musculo-Skeletal Disorders [09Hrs]

ShatKriya, Yogic Sukshma and Sthula Vyayama, Asana, Pranayama, Mudra, Bandha, Yoga nidra and Meditation as a form of therapy in various Musculo-Skeletal disorders like Back Pain, Neck pain, Arthritis, Fibromyalgia and Postural deformity etc and relevance of Yogic diet.

Unit-2: Yogic Management of Cardio-Respiratory disorders [09Hrs]

Shat Kriya, Yogic Sukshma and Sthula Vyayama, Asana, Sectional Breathing Practices, Pranayama, Mudra, Yoga Nidra and Meditation as a form of therapy in various Cardio-Respiratory disorderslikeHypertension,Ischemic Heart disease,Common cold, Allergic Rhinitis, Sinusitis &Sleep apnea and relevance of Yogic diet.

Unit-3: Yogic Management of Gastrointestinal – Metabolicand Excretory Disorders [09Hrs]

Shat Kriya, Yogic Sukshma and SthulaVyayama, Asana, Sectional Breathing Practices, Pranayama, Mudra, Yoga nidra and Meditation as a form of therapy in various Gastrointestinal-Metabolic and Excretory DisorderslikeDyspepsia (Indigestion), Hyperacidity, Peptic Ulcers, Thyroid Disorder, obesity, Constipation and Irritable Bowel Syndromeand relevance of Yogic diet.

Unit-4: Yogic Management of Obstetric & Gynecological Disorders [09Hrs.]

Yogic Sukshma and Sthula Vyayama, Surya namaskar, Asana, Sectional Breathing Practices, Pranayama, Bandha, Mudra, Yoga nidra and Meditation as a form of therapy in variousObstetric & Gynecological DisorderslikeMenstrual Disorder (dysmenorrhea, premenstrual syndrome)- Menstrual pain, cramp, Polycystic Ovarian Syndrome (PCOS/ PCOD), Menopausal discomfort (anxiety, irritability, insomnia, hot flashes) and relevance of Yogic diet.

Unit-5: Yogic Management of Neurological & Psychological Disorders [09Hrs.]

Yogic Sukshma and Sthula Vyayama, Surya namaskar, Asana, Sectional Breathing Practices, Pranayama, Mudra, Yoga nidra and Meditation as a form of therapy in various Neurological &Psychological DisorderslikeHeadaches, Migraine, Dementia, Insomnia, Depression and Stress and relevance of Yogic diet.

TEXT BOOKS

- 1. Bhavanani, A.B. (2013). Yoga Chikitsa: Application of Yoga as a therapy. Pondicherry, India: Dhivyananda Creations.
- 2. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers
- 3. Nagarathna R and Nagendra HR, Yoga therapy for common ailments series, SVYP publications, 2010
- 4. Swami Karmananda, Yoga therapy for common diseases, Yoga publication trust, Munger, 2001

REFERENCE BOOKS

- 1. A.K. Das (Ed.): Medicine Update. Bombay: Association of Physicians of India, 1998.
- 2. Aatreya, Shanti Parkash: Yoga Manovigyan, Indian Psychology, International Standard Publication, Varanasi; 1965
- 3. Abhedananda: The Yoga Psychology Ramakrishna Vedanta, Math, Calcutta, 1973.
- 4. Charu, Supriya: SarirRachanaevamKriyaVigyan
- 5. Bhavanani, A.B. (2008). Yoga for Health and Healing. Pondicherry, India: Dhivyananda Creations.
- 6. Dr Robin Monro, Dr R Nagarathna and Dr H. R. Nagendra, Yoga for common ailments, Gaia Publishers

- 7. Harrison: Principles of Internal Medicine, International Edition, 14th Edition, New York: McGraw Hill Co. Inc., 1998.
- 8. MDNIY publications:10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi, 2009
- 9. Nagarathna R and Nagendra H R: Yoga for Arthritis, Back pain, Diabetes, Pregnancy Breathing Practices, Swami Vivekananda Yoga Prakasana, Bangalore, 2000
- 10. Rai, Lajpat: Discovering Human Potential energy: A Physiological Approach to Yoga (AnubhavaRai Publications, 1998)
- 11. Ramesh Bijlani: Back to Health through Yoga, Rupa Publications India Pvt. Ltd, 2011
- 12. Swami kuvalayananda and S.L. Vanikar: Yoga Therapy: Kaivalyadhama, Lonavala, Revised Edition
- 13. Swami SaraswatiShankardevananda: Yoga on Hypertension, Yoga publication trust, Munger.
- 14. <u>Swami SaraswatiShankardevananda</u>: Yogic Management of Asthma and Diabetes, Yoga publication trust, Munger.
- 15. Swami SatyanandaSaraswati: Yoga and Cardio Vascular Management, Yoga Publication Trust, Munger, 2005
- 16. Swami Shankardevananda: Practices of Yoga for the Digestive System, Yoga publication trust, Munger.

Subject Name: Research Methodology

Subjectb code: BS-CT503

Objectives

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

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

Total Number of Ho	Total Number of Hours: 60		Tutorial	Practical	
Credits		4	0	0	
Hours/ week	Hours/ week		0	0	
SCHEME OF EXAMINATION					
Total Marks: 100					
The	ory: 100		Practical:	Nil	
Final Exam	Internal Assessment	Final Exam Internal		Internal	
(SEE)	(CT+TA)	(SEE) Assessment		Assessment	
				(CT+TA/PR)	
				(CITIA/IK)	

Unit- 1: Introduction to research methodology

[15 Hrs.]

- 1.1 Definition of research; Importance of Studying Research Methods: Evaluating Research Reports; Conducting Research, Thinking Critically About Research
- 1.2 Types of research Applied Research & Basic Research; Goals of Research: description, explanation, prediction, and control of behavior
- 1.3 Ethics of research: Informed consent, Anonymity, Confidentiality, Plagiarism
- 1.4 Research questions; Literature review; Different Sources of Information: Primary, Secondary, Tertiary source; Electronic Databases: Google Scholar, Pubmed&PsycINFO
- 1.5 Results Section, Discussion Section, Reference Section

Unit- 2: Introduction to Research Process& design

[15 Hrs.]

- 2.1 Hypothesis Operational definition; Sampling and Generalization Population and Sample; Probability Sampling: Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling; Sampling Bias and Nonprobability Sampling: snowball sampling, convenience
- 2.2 Types of Biological data (Scales of measurement) nominal, ordinal, interval, ratio
- 2.3Types of variables Independent, dependent, confounding variable; Reliability & Validity
- 2.4 Cross-sectional studies and its advantages and disadvantages; Cohort studies and its advantages and disadvantages;

2.5 Sampling methods, Data collection, Cost of the design, time implications and loss to follow-up, Controls, Ethical issues, Issues of bias and confounding

Unit-3: Statistics [15 Hrs.]

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

TEXT BOOKS:

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

REFERENCE BOOKS:

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

Subject Name: Fundamentals of Ayurveda

Subject Code: BS-CT504

Objectives

- To understand the basic principles and concepts of Ayurveda.
- To understand the role of Ayurveda in healthy lifestyle.
- To understand the role of Ayurveda in prevention and management of disease.
- To understand Relation between Yoga and Ayurveda.

Total Number o	Total Number of Hours: 45		Tutorial	Practical	
Credits		3	1	0	
Hours/ week	Hours/ week		3 1 0		
SCHEME OF EXAMINATION					
Total Marks: 100)				
7	Theory : 100	Practical : NA			
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE) Assessment		Assessment	
				(CT+TA/PR)	
70	30				

UNIT I: GENERAL INTRODUCTION TO AYURVEDA [10 Hrs.]

- 1.1 General introduction to Ayurveda
- 1.2 Definition, aim of Ayurveda, its origin, history and propagation.
- 1.3 Basic introduction to main Ayurvedic texts like Charaka Samhita, Sushruta Samhita and Ashtanga Samghra.
- 1.4 Ashtanga Ayurveda and its significance.
- 1.5 Concept of Health and Disease according to Ayurveda and its utility in health promotion and disease management.

UNIT II: SWASTHAVRITTA, DINACHARYA, RITUCHARYA, RATRICHARYA, SADVRITTA and ACAHARARASAYANA [10 Hrs.]

- 2.1 Basic principles of Ayurveda Tridosha, Saptadhatu, Trimala, Pancha Mahabhuta, Prakruti & Manas.
- 2.2 Concept and importance of Swasthavrita, Dincharya, Ritucharya
- 2.3 Concept of Sadvrita and Achara rasayana.
- 2.4 Concept of Agni, Srotas and Ama, Concept of Dharniya and Adharniya vega in Ayurveda.
- 2.5 Introduction to Dravya, Guna, Karma, Virya, Vipaka and Prabhava.

UNIT III: UPASTHAMBAS WITH SPECIAL EMPHASIS ON AHARA [10 Hrs.]

- 3.1 Concept of diet and Upasthambha.
- 3.2 Concept of ahara, ahara pachana, Pathya & Apathya in Ayurveda
- 3.3 Introduction to Shariraposhana (nourishment)
- 3.4 Concept of Oja in Ayurveda
- 3.5 Role of Ayurvedic diet in health and disease

UNIT IV: INTRODUCTION TO PANCHAKARMA AND OTHER METHODS OF AYURVEDIC TREATMENT [15 Hrs.]

- 4.1 Introduction of Panchakarma and other modes of treatment in Ayurveda.
- 4.2 Role of Poorva and Paschat karma in Panchakarma
- 4.3 Significance of Panchakarma in Ayurveda and Shatkarma in Yoga.
- 4.4 Approach of Ayurveda and Yoga as whole.
- 4.5 Relationship of Ayurveda and Yoga.

Books for References

Frawley, David : Yoga and Ayurveda: Self Healing....,

MLBD, New Delhi, 2000.

Sharma, R. & : Cahrak Samhita,

Dash, B. Chowkhamba Sanskrit Series Office, Varanasi, 1988.

Dr. Rakhee Mehra : Ayurveda Eka Parichaya,

MDNIY, New Delhi.

Frawley, David : Ayurvedic treatment for common diseases,

Delhi Diary, Delhi, 1974.

Singh, Ramharsh: Swasthvritta Vijyana,

Chowkhamba Sanskrit Prakashan, 2001.

Frawley, David : Ayurveda and the Mind,

MLBD, New Delhi, 2004.

Mishra, S.P.Yoga and Ayurveda,

Chaukhamba Prakashan, Varanasi, 1989.

Subject Name: Computer Applications

Subject Name: BS-CT505

Objectives

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

- Understand the application of computer in our day today life.
- To represent the data and organize them.
- Understand about operating system and importance of file management.

Total Nun	Total Number of Hours: 45		Tutorial	Practical	
Credits		3	1	0	
Hours/ week		3	1	0	
SCHEME OF EXAMINATION					
Total Marks: 100					
T	neory : 100		Practical : NA		
Final Exam	Internal Assessment	Final Exam		Internal	
(SEE)	(CT+TA)	(SEE)		Assessment	
				(CT+TA/PR)	
70	30				

UNIT-I: BASICS OF COMPUTER AND ITS APPLICATIONS

[10 Hrs.]

- 1.1 Definition of a Computer, Block Diagram of elements of digital computer-their functions;
- 1.2 Computer Hardware & Software, Computer generations, Types of Computers;
- 1.3 Primary Memory–RAM, ROM, PROM, EPROM, CPU, I-O devices;
- 1.4 Secondary storages, Magnetic Tape, Disk, Compact disks;
- 1.5 Hardware and Software. Micro, Mini, Main-frame and super computers, Discussion on recent IT trends.

UNIT-II: OPERATING SYSTEM

[15 Hrs.]

- 2.1 General introduction to Operating system, Definition of Operating System; Classification of Operating System
- 2.2 Operating System structure: Systems management and structure
- 2.3 Operating System services
- 2.4 Basic concepts of CPU scheduling
- 2.5 Computer system security: System threats

UNIT-III: OFFICE SOFTWARE

[10 Hrs.]

- 3.1 General Introduction to Office software System.
- 3.2 Classification of Office software System.
- 3.3 Word processing Software MS-Word
- 3.4 Spread-sheet Software MS-Excel
- 3.5 Presentation Software MS-Power-point.

UNIT - IV: INTERNET TECHNOLOGY

[10 Hrs.]

- 4.1 General introduction to internet
- 4.2 Brief history of internet, TCP/IP, IP address and domain name system, Client server architecture
- 4.3 Electronic mail, file transfer protocol, world wide web, web server, web browser
- 4.4 HTML, TELNET, DHTML, Netsurfing, Search engines
- 4.5 Creation and Usage of E-mail Account

BOOKS FOR REFERENCE

- 1. Andrew S Tanenbaum, David J Wetherall: Computers Networks, 5th Edition, 2010
- 2. Ron Mansfield: Working in Microsoft Office, McGraw Hill, 2008
- 3. Timothy N. Trainor, Diane Krasnewich: Computers! McGraw Hill, 2000
- 4. V Rajaraman: Fundamentals of computers, Prentice Hall India Pvt. Ltd, 2003
- 5. P. K. Sinha: Computer Fundamentals, BPB Publications, 1992
- 6. James Martin : Computers Network & distributed Processing, Prentice Hall, Englewood Cliffs, NJ, 1981
- 7. Donald H Sanders: Computers Today, McGraw Hill, First edition, 1983

Subject Name: Yoga Practicum V

Subject Name: BS-CP506

Objectives

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

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

Total Number of Hours: 60		Theory	Tutorial	Practical
Credits		0	0	3
Hours/ week	Hours/ week		0	6
	SCHEME OF E	XAMINATION		
Total Marks: 100				
Theory : NA		Practical: 100		
4.1				
Final Exam	Internal Assessment	Final Exam		Internal
		Final Exam (SEE)		Internal Assessment
Final Exam	Internal Assessment	-		Internal

Practice of the following Yogic practices with brief theoretical knowledge about their importance of name, the technique, salient points, Do's & Don't, precautions to be taken and benefits of each of the following Yogic practices.

UNIT-1: HYMNS AND SATKARMA

[15 Hrs.]

A. RECITATION OF HYMNS

- 1.1.1 Recitation of Selected Karikas of Samkhya Karika;
- 1.1.2 Recitation of Durgastkama

B. SATKARMA

- 1.2.1 Nauli (Nauli Chalana)
- 1.2.2 Trataka (Jyoti)

UNIT-2: YOGASANA

[20 Hrs.]

- 2.1 Hastapadangusthasana, Garudasana
- 2.2 Garbhasana, Navasana, Kurmasana, Rajkapotasana
- 2.3 Karna Peedasana,
- 2.4 Bakasana, Padangusthasana, Mayurasana
- 2.5 Sirshasana and its variations

UNIT-3: MUDRA, PRANAYAMA AND DHYANA

[15 Hrs.]

A. MUDRA

- 3.1.1 Maha Mudra
- 3.1.2 Simha Mudra
- 3.1.3 Vipareetkarni Mudra

B. PRANAYAMA (WITH ANTAR & BAHYA KUMBHAKA)

- 3.2.1 Surya-bhedana and Chandra-bhedana Pranayama,
- 3.2.2 Ujjayi Pranayama and Bhastrika Pranayama
- 3.2.3 Sheetali Pranayama and Sitkari Pranayama,

Note: Preferably with the ratio 1:4:2:1 (Puraka:Antara Kumbhaka:Rechaka:Bahya Kumbhaka)

C. PRACTICES LEADING TO DHYANA

- 3.3.1 Ajapa Dharana (Stage 6),
- 3.3.2 Yoga Nidra (Stage 5),

UNIT-4: CONTINUOUS EVALUATION BY THE TEACHERS [10 Hrs.]

Teacher must ensure that all practices are being done efficiently and skillfully.
 Minimum duration of the practice should be at least 1 minute and maximum can be 5 minutes

BOOKS FOR REFERENCES

- 1. Basavaraddi, I.V. & others: Prataha Smarana, MDNIY New Delhi.
- 2. Swami Dhirendra Bhramhachari:Yogasana Vijnana,Dhirendra Yoga Publications, New Delhi, 1966
- 3. Swami Kuvalyananda:Asana, Kaivalyadhama, Lonavla, 1983
- 4. Swami Satyananda Saraswati:Asana, Pranayama, Bandha, Mudra,Bihar School of Yoga, Munger, 2005-06
- 5. Basavaraddi, I.V. & others: Yogasana: A Comprehensive description about Yogasana, MDNIY, New Delhi, 2011.
- 6. Basavaraddi, I.V. & others : Shatkarma: A Comprehensive description about Cleansing Process, MDNIY New Delhi, 2009
- 7. Iyengar, B.K.S.:Light on Yoga, Harper Collins Publishers, 2009
- 8. Sen Gupta Ranjana: B.K.S. Iyengar Yoga, A Dorling Kindersley Limited, 2001
- 9. Tiwari, O.P.: Asana Why and How? Kaivalyadhama, Lonavla, 2011
- 10. Desikachar, Dr. Kausthub, The Heart of Asana, April 1, 2012

Subject Title: YOGA THERAPY PRACTICUM-I

Subject Code: BS-CP 507

Objective:

1. To understand and prepare the Yoga therapy module for specific diseases

2. To understand the precautions, indications and contra-indications of Yogic practices to specific diseases.

Total Number of Hrs: 30		Theory	Tutorial	Practical		
Credits		0	0	2		
Hrs/ week		0	0	4		
	SCHEME OF EXAMINATION					
Total Marks: 100						
Theory : NA		Practical: 100				
Final Exam	Internal Assessment	Final Exam (SEE)		Internal		
(SEE)	(CT+TA)			Assessment		
				(CT+TA/PR)		
		70		30		

^{*} Students are required to attend the clinical Yoga therapy sessions being conducted in OPD, MDNIY. Observation plays a vital role in clinical learning and this a core requirement for the progression.

Unit - 1:YOGA THERAPY FOR MUSCULO SKELETAL DISORDERS [08 Hrs.]

- 1.1. To prepare the Yoga Therapy Module for following Musculo skeletal disorders: Back Pain, Neck Pain, Arthritis and Fibromyalgia.
- 1.2. Precautions and contra-indications of Yogic practices to above mentioned Musculo skeletal disorders.

Unit - 2: YOGA THERAPY FOR DISORDERS OF GASTRO INTESTINAL AND EXCRETORY SYSTEM [07 Hrs.]

- 2.1. To prepare the Yoga Therapy Module for following disorders of gastro intestinal and excretory system: IBS, Hyperacidity, Dyspepsia, Constipation
- 2.2. Precautions and contra-indications of Yogic practices to above mentioned disorders of gastro intestinal and excretory system.

Unit - 3: YOGA THERAPY FOR CARDIO-VASCULAR DISORDERS:

3.1. To prepare the Yoga Therapy Module for following cardio-vascular disorders: Hypertension, IHD, Atherosclerosis/Coronary artery disease.

[07 Hrs.]

3.2. Precautions and contra-indications of Yogic practices to above mentioned cardiovascular disorders.

Unit- 4: YOGA THERAPY FOR RESPIRATORY DISORDER: [08 Hrs.]

- 4.1. To prepare the Yoga Therapy Module for following respiratory disorder: Asthma, Chronic Bronchitis, Common Cold, Allergic Rhinitis, Sinusitis, Sleep apnea.
- 4.2. Precautions and contra-indications of Yogic practices to above mentioned respiratory disorder.

TEXT BOOKS

- 1. Bhavanani, A.B. (2013). Yoga Chikitsa: Application of Yoga as a therapy. Pondicherry, India: Dhivyananda Creations.
- 2. Nagaratha R. and Nagendra H. R.: Commonailment series, published by SVYP, Bangalore, 2010
- 3. Swami Karmananda: Yogic management of common diseases, Yoga Publications
 Trust, Munger, 2001

REFERENCE BOOKS

- 1. Dr R. Nagarathna, Dr H R Nagendra, Yoga for Arthritis, Published by SVYP, Bangalore, 2001
- 2. Dr R. Nagarathna, Dr H R Nagendra: Yoga for Asthma by Published by SVYP, Bangalore, 1998
- 3. Giri, G.S. (1976). Yoga: Step-by-step. Pondicherry, India: Satya Press.

- 4. MDNIY publications:10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi, 2009
- 5. Reddy, M. Venkata and Others: Yogic Therapy,Sri M.S.R. Memorial Yoga series, Arthamuru A.P.2005
- 6. Yoga for Back Pain by Dr H. R. Nagendra, Dr R Nagarathna, Published by SVYP, Bangalore, Bangalore, 2001
- 7. Yoga for Cancer by Dr H. R. Nagendra, Dr R Nagarathna, Published by SVYP, Bangalore, Bangalore, 2006

Subject Name: Computer Practical

Subject Name: BS-CP508

Objectives:

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

- Understand the application of computer in our day today life.
- To represent the data and organize them.
- Understand about operating system and importance of file management.

Total Number of Hours: 30		Theory	Tutorial	Practical		
Credits		0	0	2		
Hours/ week		0	0	4		
	SCHEME OF EXAMINATION					
Total Marks:100	Total Marks:100					
Theory:		Practical: 100				
Final Exam	Internal Assessment	Final Exam		Internal		
(SEE)	(CT+TA)	(SEE)		Assessment		
				(CT+TA/PR)		
		70		30		

LIST OF PRACTICAL:

- 1. Introduction about Number Systems & Conversion from binary to decimal, decimal to binary, etc. and Data Operations (Additions, Subtractions, Multiplications, Divisions).
- 2. Introduction about MS-Word and write down the steps for performing various general operations in it (like open, saving, cut, copy, paste, printing document etc.).
- 3. Create a simple MS–Word document about introducing yourself and preparing your Bio- data (using various formatting options in MS-Word).
- 4. Learning and performing various options/operations in MS-Word.
- 5. Creating a table, Entering text and contents in a table.
- 6. Toolbars in word, using various toolbars options.
- 7. Watermarks and Water-marking a document.
- 8. Inserting cliparts /picture, Hyper-linking a text. e. Header/Footers.
- 9. Introduction about MS-Excel and write down the steps for performing various general operations in it (like open, saving, cut, copy, paste, printing document etc.).
- 10. Learning and performing various options/operations in MS-Excel. Like: Creating and saving a new Workbook.

 Deleting and Renaming a Worksheet.
- 11. Introduction about MS Power point explaining its various features and steps for performing various general operations in it.
- 12. Prepare a power-point presentation explaining the facilities/infrastructure available in your College/Institution.

- 13. Net Surfing
- 14. Creation and Usage of E-mail Account

BOOKS FOR REFERENCE

- 1 Andrew S Tanenbaum, David J Wetherall, Computers Networks, 5th Edition, 2010
- 2
- Ron Mansfield, Working in Microsoft Office, McGraw Hill, 2008 Timothy N. Trainor, Diane Krasnewich: Computers! McGraw Hill, 2000 3

Semester-VI

Subject Name: Yoga and Human Consciousness

Subject Code: BS-CT601

Objectives

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

• Understand the nature of Conciousness and Spirituality and its role in Yoga Practice.

Total Number of H	Total Number of Hours: 45		Tutorial	Practical		
Credits		3	1	0		
Hours/ week		3	1	0		
	SCHEME OF EXAMINATION					
Total Marks: 100						
Theory : 100		Practical : Nil				
Final Exam	Internal Assessment	Final Exam		Internal		
(SEE)	(CT+TA)	(SEE)		Assessment		
				(CT+TA/PR)		
70	30					

UNIT - I: INTRODUCTION TO CONSCIOUSNESS

[10 Hrs.]

- 1.1 Meaning & Definition of Consciousness.
- 1.2 Mind, body & Consciousness
- 1.3 Nature and scope of Human Consciousness
- 1.4 Crisis of Human Consciousness
- 1.5 Need of evolution of Human Consciousness.

UNIT - II: HUMAN CONSCIOUSNESS IN INDIAN AND WESTERN PERSPECTIVE [15 Hrs.]

- 2.1 Human Consciousness in *Vedic* literature (*Isha, Ken&Mandukya Upanishad*)
- 2.2 Human Consciousness in *Upanishads,Sankhya* and Yoga
- 2.3 Human Consciousness in Advaita Vedanta and Tantra
- 2.4 Consciousness and Human Consciousness in Biology, Psychology
- 2.5 Western Psychological views of Human Consciousness, States of consciousness: conscious, subconscious and unconscious

UNIT - III: YOGA AND SPIRITULITY

[10 Hrs.]

- 3.1 Spirituality& its meaning and its relevance in day to day life
- 3.2 Relationship between Yoga and Spirituality
- 3.3 Role of Moral values in the development of Spirituality
- 3.4 Yoga spirituality and Yoga Sadhana
- 3.5 Spirituality and Health

UNIT - IV: YOGA AND HUMAN CONSCIOUSNESS

[10 Hrs.]

4.1 Factors affecting the Human Consciousness.

- 4.2 Seven states of Human Consciousness
- 4.3 The Yogic way of evolution of Human Consciousness
- 4.4 Role of Spirituality in Human Consciousness
- 4.5 Methods of evolution of Human Consciousness according to *Maharshi Aurobindo*

BOOKS FOR REFERENCE

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

Subject Title: YOGIC MANAGEMENT OF NON COMMUNICABLE DISEASES

Subject Code: BS -CT 602

Objectives:

- To be able to understand the Non Communicable diseases and its Yogic Managements.
- To be able to prescribe suitable diet regime
- To be able to understand the measurements- investigations to assess the effect of Yogic
 Management -rationale for the disease specific Yoga protocol, scientific evidence if
 available, practices of choice and contra-indications. Probable healing mechanisms.

Total Number of Hrs: 45 Theory Tutorial			Tutorial	Practical	
Credits		3 1 0			
Hrs/ week		3	1	0	
SCHEME OF EXAMINATION					
Total Marks: 100					
Th	Practical :				
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE)	Internal Assessment (CT+TA/PR)	
70	30			1 ' '	

Unit-1: Introduction to Non Communicable diseases:

[02 Hrs.]

Brief introduction to communicable and non-communicable diseases: Meaning, definition, examples and its preventive measures.

Unit-2: Yogic Management of Diabetes Mellitus

[08 Hrs.]

- 2.1. Brief introduction to Diabetes mellitus;
- 2.2. Yogic management of Diabetes mellitus: Shat kriyas, Yogic Sukshma and Sthula Vyayama, Surya namaskar, Asana, Pranayama, Bandha, Mudra, Meditation and Yogic diet for the management of Diabetes mellitus.

Unit-3: Yogic Management of Bronchial Asthma

[08 Hrs.]

- 3.1.Brief introduction to Bronchial Asthma;
- 3.2. Yogic management of Bronchial Asthma: Shat kriyas, Yogic Sukshma and Sthula Vyayama, Asana, Sectional Breathing Practices, Pranayama, Mudra, Meditation and Yogic diet for the management of Bronchial Asthma.

Unit-4: Yogic Management of Hypertension

[09 Hrs.]

- 4.1. Brief introduction to Hypertension;
- 4.2. Yogic management of Hypertension: Shat kriyas, Yogic Sukshma and Sthula Vyayama, Asana, Sectional Breathing Practices, Pranayama, Mudra, Yoga Nidra, Meditation and Yogic diet for the management of Hypertension.

Unit-5: Yogic Management of Cerebrovascular Accident (Stroke) [09Hrs.]

- 5.1. Brief introduction to Cerebrovascular Accident;
- 5.2. Yogic management of Cerebrovascular Accident (Stroke): Yogic Sukshma and Sthula Vyayama, Asana, Sectional Breathing Practices, Pranayama, Mudra, Yoga Nidra, Meditation and Yogic diet for the management of Cerebrovascular Accident.

Unit-6: Yogic Management of Cancer

[09 Hrs.]

- 6.1. Cancer Prevalence, types, causes, pathophysiology, clinical features, complications, preventive measures;
- 6.2. Adjunct and palliative role of Yoga; pain and fatigue relief; improvement in Quality of Life (QoL); dealing with end life crisis

TEXT BOOKS:

- 1. Bhavanani, A.B. (2013). Yoga Chikitsa: Application of Yoga as a therapy. Pondicherry, India: Dhivyananda Creations.
- 2. Nagarathna R and Nagendra HR, Yoga therapy for common ailments series, SVYP publications, 2010
- 3. Swami Karmananda, Yoga therapy for common diseases, Yoga publication trust, Munger, 2001

REFERENCE BOOKS

- 1. A.K. Das (Ed.): Medicine Update. Bombay: Association of Physicians of India, 1998.
- 2. Bhavanani, A.B. (2006). Correction of Breathing Disorders through Rishi culture Ashtanga Yoga. Pondicherry, India: Dhivyananda Creations.
- 3. Bhavanani, A.B. (2008). Yoga for Health and Healing. Pondicherry, India: Dhivyananda Creations.

- 4. <u>David Danon</u>: Life, Yoga and Cancer: Lessons From the Battlefield, May 14, 2018 | Kindle eBook
- 5. Dr Robin Monro, Dr R Nagarathna and Dr H R Nagendra, Yoga for common ailments, Gaia Publishers
- 6. Harrison: Principles of Internal Medicine, International Edition, 14th Edition, New York: McGraw Hill Co. Inc., 1998.
- 7. Khalsa, S.B., Cohen, L., McCall, T., &Telles, S (Ed.), The Principles and Practice of Yoga in Health Care (pp.17-29). East Lothian, UK: Handspring.
- 8. Nagarathna, R and Nagendra, H.R.: Integrated Approach of Yoga Therapy for Positive Health, Swami Vivekananda Yoga Prakashana, Bangalore, 2001
- 9. Rai, Lajpat: Discovering Human Potential energy: A Physiological, Approach to Yoga, AnubhavaRai Publications, 1998
- 10. Reddy, M. Venkata and Others:Yogic Therapy, Sri M.S.R. Memorial Yoga series, Arthamuru A.P.2005
- 11. Robin Monoro, Nagarathna R and Nagendra, H.R.: Yoga for Common Ailments Gui Publication, U.K
- 12. SatyanandaSaraswati: Yoga and Cardiovascular Management, Yoga publication trust, Munger.
- 13. <u>Swami Saraswati Shankardevananda</u>: Yogic Management of Asthma and Diabetes, Yoga publication trust, Munger.
- 14. Swami Saraswati Shankardevananda: Yoga on Hypertension, Yoga publication trust, Munger.
- 15. TariPrinster: Yoga for Cancer: A Guide to Managing Side Effects, Boosting Immunity, and Improving Recovery for Cancer Survivors Paperback November 24, 2014.

Name of the course: YOGA PROTOCOLS FOR SPECIAL TARGET GROUPS

Course code: BS-CT603

Objectives:

After the completion of the program, the students should be able to

- Understand the physiological changes and abnormalities in different age groups.
- Provide Yoga therapy modules for different age groups according to their need.

Total Number of Hrs: 45		Theory	Tutorial	Practical		
Credits		3	1	0		
Hrs/ week		3	1	0		
	SCHEME OF EXAMINATION					
Total Marks: 100	Total Marks: 100					
Theory: 100		Practical :				
Final Exam	Internal Assessment	Einal Evans (CEE	_ ,		
(SEE)	(CT+TA)	Final Exam (SEEJ	Internal Assessment (CT+TA/PR)		

Unit-1: Yoga protocol for different age groups

[15 Hrs.]

- 1.1. Analysis the physical, physiological and psychological changes in different age groups (children, adolescent, youth).
- 1.2. Impact of Yoga practices on different age groups.
- 1.3. To prepare the Yoga practice modules/ schedules for different age groups(children, adolescent, youth).

Unit-2: Yoga protocol for Women's health

[15 Hrs.]

- 2.1 Stages of women's life: Menarche (puberty), Pregnancy and Menopause
- 2.2 Impact of Yoga practices on Menarche (puberty), Pregnancy and Menopause
- 2.3 To prepare the Yoga practice modules/ schedules for women's health: Menarche (adolescent girl), Pregnant (1, 2& 3 trimesters) and Menopause.

Unit-3: Yoga protocol for geriatric health

[15 Hrs.]

- 3.1. Brief introduction to old age
- 3.2. Common facing problems in old age- physical, physiological and psychological problems.

3.3 To prepare the Yoga practice modules/ schedules for geriatric health.

TEXT BOOKS:

- Anand Gupta: Yoga for Anti-aging: Secret to a Younger and Healthier Looking You:
 Volume 4 (Yoga for Everybody) Paperback Import, 5 Jul 2016
- 2. Swami Muktananda: Nawa Yogini Tantra: Yoga for Women Paperback January 1, 2003
- 3. Geeta S. Iyengar: Yoga: A Gem for Women Paperback 15 Mar 1983
- 4. <u>Swami Niranjanananda Saraswati</u>: Yoga Education for Children (Volume II) Paperback Illustrated, Yoga publication trust, Munger. 2014
- 5. <u>Satyananda Saraswati</u>: Yoga Education for Children Paperback, Yoga publication trust, Munger. 1999,

REFERENCE BOOKS:

- 1. Bhavanani, A.B. (2008). Yoga For Health And Healing. Pondicherry, India: Dhivyananda Creations.
- 2. Bobby Clennell: The Woman's Yoga Book: Asana and Pranayama for all Phases of the Menstrual Cycle Paperback May 4, 2010
- 3. Integrated approach of Yoga therapy for positive health-R Nagaratha, HR Nagendra
- 4. Jill Petigara & Lynn Jensen: Yoga and Fertility: A Journey to Health and Healing Paperback 30 Jan 2013
- 5. Khalsa,S.B., Cohen,L., McCall, T., &Telles, S (Ed.), The Principles and Practice of Yoga in Health Care (pp.17-29). East Lothian, UK: Handspring.
- 6. Kimberly Carson a**nd** Carol Krucoff: Relax into Yoga for Seniors: A Six-Week Program for Strength, Balance, Flexibility, and Pain Relief Paperback November 1, 2016
- 7. Linda Sparrowe: Yoga for a Healthy Menstrual Cycle Paperback Import, 18 May 2004
- 8. <u>Lisa Flynn</u>: Yoga for Children: 200+ Yoga Poses, Breathing Exercises, and Meditations for Healthier, Happier, More Resilient Children Paperback 18 May 2013
- 9. O P Sharma: Geriatric Care Hardcover 1 Jan 2008
- 10. Rachel carr: Yoga for all ages Hardcover 26 Jun 1972
- 11. Ramanathan, M. (2007). Applied Yoga-Application of Yoga in Various Fields of human Activity. Puducherry: Aarogya Yogalayam.

12. <u>Swati Chanchani</u> **and** <u>Rajiv Chanchani</u>Yoga for Children: a Complete Illustrated Guide to Yoga, Including a Manual for Parents and Teachers Paperback – 31 Jan 1997

Subject Name: Fundamentals of Counseling

Subject code: BS-CT604

Objectives:

- To develop a general understanding towards abnormal behaviour and disease process through various models of health psychology
- To understand causes of pathological behaviour and psych-diagnostic assessment.
- To develop skill for diagnosis and classification of mental disorders.

Total Number of Hrs: 45		Theory	Tutorial	Practical		
Credits	Credits 3		1	0		
Hrs/ week		3	1	0		
	SCHEME OF EXAMINATION					
Total Marks: 100						
Theory: 100		Practical :				
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam	(SEE)	Internal Assessment (CT+TA/PR)		
70	30					

Unit-1: Counselling Skills

[25 Hrs.]

- 1. Rapport Establishing Skills
- 2. Relationship Skills
- 3. Conversational Skills
- 4. Mind Skills Perception, Self-talk, Visual Images, Explanation, Decision Making
- 5. Managing Resistance Skills
- 6. Skills for understanding body movements (Body Language)
- 7. Listening Skills
- 8. Feedback Skills
- 9. Empathy Skills
- 10. Conflict Resolving Skills
- 11. Problem Solving Skills
- 12. Oral Persuasion Skills
- 13. Skills for understanding and managing feelings of the client

Unit-2: Counselling Techniques

[20 Hrs.]

- 1. Behaviour Modification Techniques Skinner
- 2. Conditioned Reflex Therapy Pavlov

- 3. Gestalt Therapy
- 4. Family Therapy
- 5. Couple Therapy
- 6. Rational Emotive Behaviour Therapy
- 7. Transactional Analysis
- 8. Assertive Training
- 9. Dream Interpretation
- 10. Anger Management
- 11. Neuro-linguistic Programme
- 12. Art of Positive Thinking

TEXT BOOKS

1. Hersen, M., Kazdin, A. E., & Bellack, A. S. (1991) The Clinical Psychology Handbook Pergamon. New York

REFERENCE BOOKS:

- 1. Sweet, J. J., Rozensky, A. & Tovian, S. M. (1991) Handbook of Clinical Psychology in Clinical.
- 2. Practice. New York: Plenum.
- 3. Walker, C. E. (2001) Handbook of Child Clinical Psychology. New York: John Wiley & Sons.

Subject Name: FUNDAMENTALS OF NATUROPATHY

Subject Code: BS-CT605

Objectives:

- > To introduce the basic principles of Naturopathy and its concepts.
- > To understand Basic modalities of treatment in Naturopathy.
- > To have an understanding about Benefits of Naturopathy and life style modification.
- > To understand the role of Yoga in Naturopathy treatment.

Total Number of Ho	Theory	Tutorial	Practical			
Credits		3	1	0		
Hours/ week		3	1	0		
	SCHEME OF EXAMINATION					
Total Marks: 100	I	Duration of Semester Examination : 3				
hours						
Theory: 100		Practical : Nil				
Final Exam	Internal Assessment	Final Exam (SEE)		Internal		
(SEE)	(CT+TA)			Assessment		
				(CT+TA/PR)		
70	30	0		0		

UNIT-1: INTRODUCTION TO NATUROPATHY

[15 Hrs.]

- 1.1. Definition of Naturopathy and its basic principles, History of Naturopathy.
- 1.2. Definition of health and natural way of healthy living.
- 1.3. Comparative study of the Naturopathy with other systems of Medicine; Catechism of Nature cure.
- 1.4. Inflammation and its different stages; Natural rejuvenation and vitality.
- 1.5. Immunity: How to acquire natural immunity in diseases & its importance.

UNIT-2: PRINCIPLES AND CONCEPTS OF NATUROPATHY

[15 Hrs.]

- 2.1 Laws of Nature: Concept of Pancha Mahabhootas, Shareera Dharmas Ahara, Nidra, Bhaya and Maithuna.
- 2.2 Importance of five elements (Pancha mahabhootas) Ether, Air, Fire, Water and Earth of Nature with its origin, properties, and importance in Naturopathy.

- 2.3 Detailed study of vital force, natural immunity, healing crisis, foreign matter,
 - importance of physical exercise and rest.
- 2.4 Importance of Physical and Mental Hygiene in Personal life and prevention of diseases.Concept of Detoxification in Naturopathy.
- 2.5 Arogya Rakshaka Panchatantras and their importance in maintaining good health and prevention of diseases.
- 2.6 The diagnostic procedures of Naturopathy Spinal analysis, Facial Diagnosis, Iris diagnosis, Chromo Diagnosis and their diagnostic values.

UNIT-3: NATUROPATHY THERAPEUTICS [15 Hrs.]

- 3.1. Fasting-Physiological effects of fasting, indications and contraindications of fasting and methods of fasting, management of healing crisis during fasting. Dietetics and Nutrition-Balanced diet according to nature cure, nutritious and eliminative diet, Importance of acidic and alkaline diet and its physiological effects on body.
- 3.2. Mud therapy-History of mud therapy, properties of mud, techniques of using mud in nature cure, types of mud, and its therapeutic properties, contraindications and other uses of earth power.
- 3.3. Hydrotherapy-Physical and remedial properties of water, physiological effects of water at different temperature in human body, with their therapeutics effect, methods of treatment, indications, contraindications, precautions, management of crisis during treatment and after treatment.
- 3.4. Massage- Physiological effect of massage on body part, indications and contraindications. Marmas (Vital points), acupressure points with their importance in massage.
- 3.5. Chromo therapy- Method of using chromo therapy in nature cure, importance, physiological effects of 7 colors on glands, chakras and other body organ systemits indications and contradictions.

REFERENCE BOOKS:

Arya, Jitendra Health Naturally: Nature Cure for Common Diseases, Arya Publication,

Pune, 2011.

Bernard Jensen Foods That Heal: A Guide to Understanding and Using the Healing

Powers of Natural Foods, Penguin, 1993.

Gala, Dhiren Nature Cure for Common Diseases, Navneet Publications, Mumbai

Ghosh, A.K Diet and Nutrition (English)

Henry Lindlahr Philosophy and Practices of Nature Cure, Sat Sahitya Sahayogi Sangha,

Hyderabad.

K. Laksmana Sarma, S. Speaking of Nature Cure, Sterling Publishers Pvt. Ltd, 2013.

Swaminathan:

Mahatma Gandhi Key to Health, Create Space Independent Publishing Platform, 2017.

M.K.Gandhi My Nature Cure

Parvesh Handa Naturopathy and Yoga, Gyan Publishing House, 2006

S.R. Jindal Nature Cure: A Way of LifeB. Jain Publishers, 1996

Singh, S.J. History and Philosophy of Nature Cure

Dr. J. H. Kellogg, USA Rational Hydrotherapy, National Institute of naturopathy, Pune.

John Harvey Kellogg The Art of Massage, TEACH Services, Inc., 2010.

Pauline Wills Colour Healing Manual: The Complete Colour Therapy Programme

Subject Name: Yoga Practicum-VI

Subject Name: BS-CP606

Objectives

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

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

Total Number of Hours: 60		Theory	Tutorial	Practical		
Credits		0	0	3		
Hours/ week		0	0	6		
	SCHEME OF EXAMINATION					
Total Marks: 100						
Theory : NA		Practical : 100				
Final Exam	Internal Assessment	Final Exam		Internal		
(SEE)	(CT+TA)	(SEE)		Assessment		
				(CT+TA/PR)		
		70		30		

Practice of the following Yogic practices with brief theoretical knowledge about their importance of name, the technique, salient points, Do's & Don't, precautions to be taken and benefits of each of the following Yogic practices.

UNIT-1: HYMNS AND SATKARMA

[10 Hrs.]

A. RECITATION OF HYMNS

- 1.1.1 Recitation of Upanishad jnana jyotih
- 1.1.2 Recitation of Yogasadhana Sloka, Mahamritunjaya mantra, Gayatri Mantra

B. SATKARMA

1.2.1 Concept of Basti (Jala Basti and Sthala Basti)

UNIT-2: YOGASANAS

[20 Hrs.]

- 2.1 Concept of Advance Postures
- 2.2 Vatayanasana, Natarajasana
- 2.3 Bhunamanasana, Hanumanasana, Marjariasana, Matsyendrasana
- 2.4 Yoganidrasana, Matsyasana
- 2.5 Ekapada and Dwipada Kandarasana

UNIT-3: PRANAYAMA AND DHYANA

[20 Hrs.]

A. PRANAYAMA

- 3.1.1 Nadi Shodhana pranayama
- 3.1.2 Bhramari Pranayama
- 3.1.3 Suryabhedana and Chandrabhedana Pranayama,
- 3.1.4 Ujjayi Pranayama and Bhastrika Pranayama,
- 3.1.5 Sheetali Pranayama and Shitkari Pranayama

Note: Preferably with the ratio 1:4:2:1 (Puraka:Antara Kumbhaka:Rechaka:Bahya Kumbhaka)

B. ELEMENTRY PRACTICES OF DHYANA

- 3.2.1 Breath Meditation,
- 3.2.2 Om Dhyana
- 3.2.3 Vipassana Dhyana
- 3.2.3 Preksha Dhyana

UNIT-4: CONTINUOUS EVALUATION BY THE TEACHERS [10 Hrs.]

REFERENCE BOOKS

- 1. Basavaraddi, I.V. & others: Prataha Smarana, MDNIY New Delhi.
- 2. Iyengar, B.K.S.:Light on Yoga, Harper Collins Publishers, 2009
- 3. Sen Gupta Ranjana: B.K.S. Iyengar Yoga, A Dorling Kindersley Limited, 2001
- 4. Saraswati, Swami Satyanand: Asana, Pranayama, Bandha, Mudra Bihar School of Yoga, Munger.
- 5. Basavaraddi, I.V. & others: Pranayama; MDNIY New Delhi, 2012
- 6. Swami Niranjanananda Saraswati: Dharana Darshan; ; Bihar school of Yoga publications; Munger, 2001
- 7. Lajpat, Dr. R.: Discovering Human Potential Energy, Abhinav Rai Publication, Gurgaon, 1996
- 8. Lajpat, Rai & others: Meditation, Anbhava Rai Publications, Gurgaon
- 9. Saraswati, Swami Satya Nand: Meditation from Tantras, Yoga Publication Trust, Munger, 2004
- Krishnamacharya, T.: Dhyanamalika, KYM, Chennai, 2005
 Swami Satyananda: Yoganidra, Yoga Publication Trust, Munger, 1998
- 11. Desikachar, Dr. Kausthub, The Heart of Asana, April 1, 2012

Subject Name: YOGA THERAPY PRACTICUM-II

Subject Code: BS-CP 607

Objective:

1. To understand and prepare the Yoga therapy module for specific diseases

2. To understand the precautions, indications and contra-indications of Yogic practices to specific diseases.

Total Number of Hrs: 30		Theory	Tutorial	Practical		
Credits		0	0	2		
Hrs/ week	Hrs/ week			4		
	SCHEME OF EXAMINATION					
Total Marks: 100						
Theory : NA		Practical: 100				
Final Exam	Internal Assessment	Final Exam (SEE) Internal				
(SEE)	(CT+TA)			Assessment		
				(CT+TA/PR)		
		70		30		

^{*} Students are required to attend the clinical Yoga therapy sessions being conducted in OPD, MDNIY. Observation plays a vital role in clinical learning and this a core requirement for the progression.

Unit - 1 :YOGA THERAPY FOR ENDOCRINE & METABOLIC DISORDERS [08 Hrs.]

- 1.1. To prepare the Yoga Therapy Module for following Endocrine & Metabolic Disorders: Diabetes Mellitus, Thyroids Disorders and Obesity.
- 1.2. Precautions and contra-indications of Yogic practices to above mentioned Endocrine & Metabolic Disorders.

Unit - 2: YOGA THERAPY FOR OBSTETRIC & GYNECOLOGICAL DISORDERS [07 Hrs.]

- 2.1. To prepare the Yoga Therapy Module for following Obstetric & Gynecological disorders: Polycystic Ovarian Syndrome (PCOS/ PCOD), Menstrual Disorders (Menstrual cramp and pain) and Menopausal discomfort.
- 2.2. Precautions and contra-indications of Yogic practices to above mentioned Obstetric& Gynecological disorders.

Unit - 3: YOGA THERAPY FOR NEUROLOGICAL DISORDERS:

[07 Hrs.]

- 3.1. To prepare the Yoga Therapy Module for following Neurological disorders: Migraine, Headache, Dementia & Cerebrovascular accidents (stroke).
- 3.2. Precautions and contra-indications of Yogic practices to above mentioned Neurological disorders.

Unit- 4: YOGA THERAPY FOR PSYCHOLOGICAL AND PSYCHIATRIC DISORDERS:[8 Hrs.]

- 4.1. To prepare the Yoga Therapy Module for following psychological and psychiatric disorder: Stress, Depression, Insomnia, and Attention Deficit Hyperactivity Disorders.
- 4.2. Precautions and contra-indications of Yogic practices to above mentioned psychological and psychiatric disorder.

TEXT BOOKS

- 1. Bhavanani, A.B. (2013). Yoga Chikitsa: Application of Yoga as a therapy. Pondicherry, India: Dhivyananda Creations.
- Nagaratha R. and Nagendra H. R.: Commonailment series, published by SVYP, Bangalore, 2010
- 3. Swami Karmananda: Yogic management of common diseases, Yoga Publications
 Trust, Munger, 2001

REFERENCE BOOKS

- 1. Dr R Nagarathna, Dr H R Nagendra, Yoga for Arthritis, Published by SVYP, Bangalore, 2001
- 2. Dr R Nagarathna, Dr H R Nagendra: Yoga for Asthma by Published by SVYP, Bangalore, 1998
- 3. Giri, G.S. (1976). Yoga: Step-by-step. Pondicherry, India: Satya Press.
- 4. MDNIY publications:10 Booklets, Yoga Therapy Series, MDNIY Publications, New Delhi, 2009
- 5. Reddy, M. Venkata and Others: Yogic Therapy,Sri M.S.R. Memorial Yoga series, Arthamuru A.P.2005
- 6. Yoga for Back Pain by Dr H R Nagendra, Dr R Nagarathna, Published by SVYP, Bangalore, Bangalore, 2001
- 7. Yoga for Cancer by Dr H R Nagendra, Dr R Nagarathna, Published by SVYP, Bangalore, Bangalore, 2006

Name of the course: Project Work

Course code: BS-PW608

Objectives:

Following the completion of this dissertation, students shall be able to:

- Carry out small scale research projects.
- Analyze his/her data and organize the data in tabular and graphical form.
- Interpret the data and draw the conclusion.

Total Number of Hrs: 30		Theory	Tutorial	Project Work	
Credits		0	0	2	
Hrs/ week		0	0	4	
SCHEME OF EXAMINATION					
Total Marks: 100	Total Marks: 100				
Theory : NA		Practical: 100			
Final Exam	Internal Assessment	Final Exam (SEE)	Internal	
(SEE)	(CT+TA)			Assessment	
				(CT+TA/PR)	
		70		30	

Note:

During this time, candidates are expected to carry out the following task.

Meet the guide at least once to report the progress.

Spend time every day for recording the data.

Examination:

Students shall be examined based on the presentation of their synopsis and progression of the Project Report.