

**Ordinance & Syllabus
For
B.Sc. in Yoga
academic programme**

**Duration :
3 years
&
6 months Internship**

Bachelor of Science in Yoga (B.Sc.- Yoga)

ORDINANCE

Chapter "A"

1. B.Sc. - Yoga degree will be under the **faculty of Medicine** of C.S.J.M. University, Kanpur.
2. **Duration of Course :**
 - B.Sc. in Yoga course will be a full time course.
 - Duration will be three years.
 - This course shall be divided into three professional examinations namely B.Sc. in Yoga (B.Sc.- Yoga) Part-I at the end of first academic year, B.Sc.- Yoga Part-II at the end of second academic year and B.Sc.- Yoga Part-III at the end of third academic year.
3. **No. of Seats :**

Total no. of Students to this course shall be **40**.
4. **Admission.**

Eligibility Criteria:
For admission in this course candidate has to pass 10 + 2 or it's equivalent examination in Arts/Commerce/Science (any discipline) conducted by any Board or University incorporated by law and recognized by this University with minimum of 45% marks (40% marks for SC/ST student).

Mode of Admission :
The candidates for admission to this course shall be selected through an entrance test conducted by the University or on the basis of merit of marks in 10 + 2 or it's equivalent examination.
5. **Medium of instruction :**

English/ Hindi shall be the medium of instruction in the class and in the University examination.
6. This Course shall be run under **self finance scheme**.
7. **Method of Teaching :**

The method of teaching adopted shall be a combination of lectures, demonstrations and practicals by the full time faculty, visiting or part time or guest faculty.
8. **Classes** - the classes for B.Sc.- Yoga course shall be run in the University Institute of Paramedical Sciences (University Institute of Health Sciences).

9. Examination :

There shall be an annual University examination at the end of each academic year in the form of theory papers examination and practical examinations. The candidate shall be required to appear in every subject as specified in the course structure for each year.

Duration of Examination :

Each theory paper examination shall be of three hours duration.

Examiners :

The board of examiners for theory papers examination shall consist of 50% internal and 50% external examiners and for practical examination there should be one external examiner and one internal examiner (of the institute). All examiners shall be decided by honorable Vice Chancellor of the University.

Evaluation :

The answer books of the annual University examination shall be evaluated as per the university rules.

10. Attendance to appear in the annual University examination :

The permission to appear in annual examination shall be granted to such candidate only who have fulfill the condition of 75% attendance in each subject separately in theory and practical as per the university rule.

Regarding attendance requirements students will have to fulfill the condition of 75% attendance. 15% relaxation in attendance, in exceptional circumstances can be made by the Vice Chancellor on recommendation of the head of the institute/department.

"B"

Regulations : Scheme of Examination

B.Sc. in Yoga Part-I (First Year) University Examination

S. No.	Subjects	Subject code	THEORY MARKS				PRACTICAL MARKS				Total marks
			Theory Paper	Internal Assessment	Total	Minimum marks	Practical	Internal Assessment	Total	Minimum Marks	
1.	Human Anatomy & Physiology	BYOG-101	80	20	100	50	80	20	100	50	200
2.	Fundamentals of Clinical Biochemistry	BYOG -102	80	20	100	50	80	20	100	50	200
3.	Medical Terminology	BYOG -103	80	20	100	50	-	-	-	-	100
4.	Fundamentals of Yoga	BYOG -104	80	20	100	50	80	20	100	50	200
Grand Total											700

B.Sc. in Yoga Part-II (Second Year) University Examination

S. No.	Subjects	Subject code	THEORY MARKS				PRACTICAL MARKS				Total marks
			Theory Paper	Internal Assessment	Total	Minimum marks	Practical	Internal Assessment	Total	Minimum Marks	
1	Yoga and Physical Culture	BYOG-201	80	20	100	50	80	20	100	50	200
2	General Pathology & General Microbiology	BYOG-202	80	20	100	50	80	20	100	50	200
3	Community Medicine	BYOG-203	80	20	100	50	-	-	-	-	100
4	Biostatistics & Research Methodology	BYOG-204	80	20	100	50	-	-	-	-	100
Grand Total											600

B.Sc. in Yoga Part-III (Third Year) University Examination

S. No.	Subjects	Subject code	THEORY MARKS				PRACTICAL MARKS				Total marks
			Theory Paper	Internal Assessment	Total	Minimum marks	Practical	Internal Assessment	Total	Minimum Marks	
1	Yogic Diet & Yoga for Common health	BYOG-301	80	20	100	50	80	20	100	50	200
2	Advanced Yogic Therapy	BYOG-302	80	20	100	50	80	20	100	50	200
3	Yoga & Mental Health	BYOG-303	80	20	100	50	80	20	100	50	200
4	Allied Yogic Sciences	BYOG-304	80	20	100	50	80	20	100	50	200
Grand Total											800

Internal Assessment

- It will be for theory and practical both.
- It will be done through the whole year.
- Candidate must obtain at least 35% marks in theory and practicals separately in internal assessment to be eligible for the annual university examination.

- Internal assessment (Theory) will be done as follows :

- | | |
|---|-------------------|
| a) Mid-term and term examinations | = 10 marks |
| b) Assignments/Projects/Class test/Clinical Presentations | = 05 marks |
| c) Attendance | = 05 marks |
| Total | = 20 marks |

- Internal assessment (Practical) will be done as follows :

- | | |
|---------------------------|-------------------|
| a) Laboratory manual | = 10 marks |
| b) Day to day performance | = 05 marks |
| c) Attendance | = 05 marks |
| Total | = 20 marks |

- Internal assessment of subjects without practicals will be done as :

- | | |
|--|-------------------|
| a) Mid Term and term examinations | = 10 marks |
| b) Assignments/ Projects/ class test/ Clinical Presentations | = 05 marks |
| c) Attendance | = 05 marks |
| Total | = 20 marks |

Criteria for Passing

- A candidate is declared to have passed University examination in a subject, if he/she secures 50% of the marks in theory and 50% in practicals separately. For computation of 50% marks in theory, the marks scored in the internal assessment (theory) shall be added to the University conducted written examination and for passing in practical the marks scored in University conducted practical examination and internal assessment (practical) shall be added together.

Grace Marks:

- If a candidate fails in one subject (theory only) in the annual University examination, five grace marks will be given to the candidate by the University before the declaration of result.
- Candidate failing in practical examination will be considered as failed.

Supplementary Examination:

- A candidate failing in a subject but securing at least 30% aggregate marks will be required to appear in the university examination after 3 months in that subject/ subjects while attending classes of next year. Those who secure less than 30% aggregate marks will be required to appear in all the subjects.
- If the candidate fails in supplementary examination his/her session will be shifted by one year. The candidate will have to take admission in the previous year and pay the tuition fee for the academic year. He/she will have to appear in all the subjects in the examination.
- Supplementary examination will be held not earlier than 3 months and later than 6 months from the date of annual University examination.

Division:

- Candidate will be awarded division at the end of 3rd academic year as follows:
 - Distinction - 75% and above marks in any subject.
 - First division - 60% and above in the aggregate of marks of all subjects
 - Second division- 50% or more but less than 60% in the aggregate of marks of all subjects.

Internship

- A candidate will have to undergo internship for a period of **six calendar months** in a Yoga centre which fulfills the norms decided by the University.

Degree:

- The degree of B.Sc. in Yoga (B.Sc.- Yoga) course of the University shall be conferred on the candidates who have pursued the prescribed course of study for not less than three academic years and have passed examinations as prescribed under the relevant scheme and completed 6 months of compulsory rotatory internship.

"C"**Fee Structure**

Tuition Fee : Rs. 30,000/- per year (may be change by the University from time to time).

Examination fee, Enrollment Fee, Application Form Processing Fee, Group Insurance Fee, Games Fee & Degree Fee : As per the other courses running at University Institute of Paramedical Sciences (University Institute of Health Sciences) of the University.

Security Deposit/ Caution Money (Refundable after completion of the course): As per the other courses running at University Institute of Paramedical Sciences (University Institute of Health Sciences) of the University.

"D"

Staff

For B.Sc. - Yoga course staff should be as following :

(A) Teaching Faculty

Professor	Reader	Lecturer
01	01	03

(B) Supported Staff

Yoga Instructor - 02

Bachelor of Science in Yoga (B.Sc. - Yoga)

Syllabus

Course of Study

B.Sc. in Yoga Part-I (First Year)

Sl.	Subjects	Teaching hours		
		Theory	Practicals	Total
1	Human Anatomy & Physiology	100	100	200
2	Fundamentals of Clinical Biochemistry	100	80	180
3	Medical Terminology	120	--	120
4	Fundamentals of Yoga	100	100	200
5*	Computer	30	30	60
6*	English	40	--	40

* Not included for University Examination.

B.Sc. in Yoga Part-II (Second Year)

Sl.	Subjects	Teaching hours		
		Theory	Practicals	Total
1	Yoga and Physical Culture	100	100	200
2	General Pathology & General Microbiology	100	100	200
3	Community Medicine	80	--	80
4	Biostatistics & Research Methodology	100	--	100

B.Sc. in Yoga Part-III (Third Year)

Sl.	Subjects	Teaching hours		
		Theory	Practicals	Total
1	Yogic Diet & Yoga for Common health	80	80	160
2	Advanced Yogic Therapy	100	100	200
3	Yoga & Mental health	80	80	160
4	Allied Yogic Sciences	100	100	200

Internship

- There shall be six months of Internship after the final year examination for candidates declared to have passed the examination in all the subjects.
- During the internship candidate shall have to work at yoga centre for 6 Calendar months.
- Each candidate is allowed maximum of 6 holidays during entire Internship Program and in case of any exigencies during which the candidate remains absent for a period more than 6 days, he/she will have to work for the extra days during which the candidate has remained absent.
- The Internship should cover all the aspects of Yoga. Based on the attendance and work done during posting the Director/Principal/ head of institution/department shall issue '**Certificate of Satisfactory Completion**' of training following which the University shall award the B.Sc. in Yoga degree or declare the candidate eligible for the same.
- **No candidate shall be awarded degree without successfully completing six months internship.**
- Institution shall have to satisfy itself that satisfactory infrastructure facilities for yoga exist in the Institute where the internship training has to be undertaken.
 - a. It is mandatory for the Institution to have its own well equipped yoga centre.
 - b. Senior yoga teacher should manage yoga centre at the Institute.
- Teaching Institute's Director / Principal can at his discretion grant NOC to the students to do the Internship at the place of his choice provided the concerned Institute fully satisfies the above criteria. For the purpose of granting NOC the candidate shall have to submit to the Institution the status of yoga services available at the place where he intends to do his Internship.

B.Sc. in Yoga First Year

Human of Anatomy & Physiology

Subject Code : BYOG-101

Min. Hrs - Theory : 100 Hrs. & Practical : 100 Hrs.

THEORY

ANATOMY :

1. General Anatomy

- a) Cell - structure & function
- b) Tissue
 - Epithelium
 - Connective
 - Sclerous
 - Muscular
 - Nervous
- c) Skeletal system (in brief)
- d) Lymphatic System

2. Systemic

Basic Features of :

- a) Cardiovascular system
- b) Respiratory system
- c) Digestive system
- d) Excretory system
- e) Genital (Male & Female) system
- f) Nervous system

PHYSIOLOGY

1. Cell

2. Blood

- a) Blood cells
- b) Haemoglobin
- c) Blood groups
- d) Coagulation Factors
- e) Anaemia & Immunoglobulins

3. Cardiovascular system

Heart rate, cardiac cycle, cardiac output, blood pressure, hypertension, radial pulse

4. Respiratory System

- a) Ventilation
- b) Functions
- c) Lungs Volumes and capacities

5. Gastrointestinal System

Process of digestion in various parts

6. Endocrinology

- a) List of Endocrine Glands
- b) Hormones : Their secretion and functions (in brief)

7. Excretion system

- a) Structure of nephron
- b) Urine formation

8. Central Nervous System

- a) Parts
- b) Sliding Filament Theory
- c) Neuro Muscular Junction
- d) Wallerian Degeneration
- e) Motor Nervous system
 - Upper motor neuron system
 - Lower motor neuron system
- f) Sensory nervous system
- g) Sympathetic Nervous system
- h) Parasympathetic nervous system

9. Skin - Structure & Functions

10. Muscular System

Classification of muscles & their functions

11. Special Senses - Eye & ear (in brief)

12. Reproductive System- structure & function of male & female reproductive organs, menstruation, puberty, menopause, fertilization & development of fertilized ovum, placenta & its function.

PRACTICAL

ANATOMY

1. Identification and description of all anatomical structures.
2. The learning of Anatomy by demonstration only through dissected parts, slides, models, charts etc.
3. Demonstration of dissected parts (upper extremity, lower extremity, thoracic & abdominal viscera, face and brain).
4. Demonstration of skeleton-articulated and disarticulated.

PHYSIOLOGY

1. Measurement of pulse, blood pressure.
2. Elicitation of Reflexes & jerks.
3. Identification of blood cells by study of peripheral blood smear.

Fundamentals of Clinical Biochemistry

Subject Code : BYOG-102

Min. Hrs - Theory : 100 Hrs. & Practical : 80 Hrs.

THEORY

- 1. Basics of energy metabolism, nutrition & dietetics -**
Unit of measuring energy, calorific value of food, BMR & factors affecting it, SDA of food, calculation of energy requirement, balanced diet, nutrition in health & diseases (Protein energy malnutrition).
- 2. Chemistry of carbohydrates & their related metabolism -**
Introduction, definition, classification, biomedical importance
Brief outline of metabolism :
Glycogenesis & glycogenolysis (in brief), Glycolysis, citric acid cycle & its significance, HMP shunt & Gluconeogenesis (in brief), regulation of blood glucose level.
- 3. Amino acids -** Definition, classification, essential & non essential amino acids.
- 4. Chemistry of Proteins & their related metabolism -**
Introduction, definition, classification, biomedical importance
Metabolism :
Transformation, Decarboxylation, Ammonia formation & transport, Urea cycle.
- 5. Chemistry of Lipids & their related metabolism -**
Introduction, definition, classification, biomedical importance, essential fatty acids.
Brief outline of metabolism :
Beta oxidation of fatty acids, Ketosis, Cholesterol & its clinical significance, Lipoproteins in the blood composition & their functions in brief, Atherosclerosis.
- 6. Enzymes -**
Introduction, definition, classification, coenzymes, isoenzymes, properties, factors affecting enzyme action, enzyme inhibition, diagnostic value of serum enzymes - Creatinine kinase, Alkaline phosphatase, Acid phosphatase, LDH, SGOT, SGPT, Amylase, Lipase, Carbonic anhydrase etc.
- 7. Acid base balance concepts & disorders -** pH, Buffers, Acidosis, Alkalosis
- 8. Hormones -**
Classification, general mode of action, hormones of Pituitary, Thyroid, Parathyroid, Adrenals, Reproductive Glands, Pancreas, hormonal disorders, counter regulatory hormones.

9. Vitamins -

Water & fat soluble vitamins, sources, requirement, deficiency disorders & biochemical functions.

10. Water metabolism-

Distribution of fluids in the body, ECF, ICF, Water metabolism, dehydration.

11. Hyperglycemia & hypoglycemia -

Diabetes mellitus - definition, types, features, gestation diabetes mellitus , glucose tolerance test, glycosurias,
Hypoglycemia & its causes

12. Liver functions and their assessment -

Based on -

- a) Carbohydrate metabolism
- b) Protein metabolism
- c) Lipid Metabolism
- d) Measurements of serum enzyme levels
- e) Bile pigment metabolism : Jaundice - its types and their biochemical findings.

13. Renal functions tests -

Various tests, GFR & clearance.

14. Tumor markers & their clinical applications -

Including oncofetal antigens, CEA etc.

15. General concepts & functions of immunoglobulins

PRACTICAL

- 1. Identification of Carbohydrates (Qualitative Tests)
- 2. Identification of Proteins (Qualitative Tests)
- 3. To study general properties of the enzyme Urease & Achromatic time of Salivary Amylase.
- 4. Estimation of glucose in urine by Benedict's methods.
- 5. Urine analysis - normal & abnormal constituents of urine.
- 6. Blood glucose estimation.

Medical Terminology

Subject Code : BYOG -103

Min. Hrs - Theory : 120 Hrs.

- 1. Objective
- 2. Basic Elements of Medical Terms - Root, Prefixes, Suffixes, Colours, Numeral, Symbols, Abbreviation .
- 3. Terms pertaining to Body as a whole.
- 4. Terms relate to investigations and operation, treatment of conditions, disorders of -
 - a) Skin and Breast (integumentary system)
 - b) Musculoskeletal
 - c) Neurological and psychiatric disorder
 - d) Cardio- vascular
 - e) Blood and blood forming organs
 - f) Respiratory
 - g) Digestive

- h) Uro-genital
 - i) Gynecological
 - j) Maternal, Antenatal and Neonatal conditions.
 - k) Endocrine and Metabolic
 - l) Sense organs - Vision & Hearing
 - m) Systemic: Infections, diseases, Immunological diseases, diseases of the connective tissue.
 - n) Geriatrics and Psycho geriatrics.
5. Supplementary terms : Selected terms relating:
- a) Oncology
 - b) Anesthesiology
 - c) Physical Medicine and Rehabilitation
 - d) Nuclear medicine.
 - e) Plastic surgery of burns and maxillofacial surgery
 - f) Radio- Diagnosis
 - g) Radiotherapy
6. Medical Jurisprudence
- a) Introduction
 - b) Legal procedure, Medical law and ethics

Fundamentals of Yoga

Subject Code : BYOG -104

Min. Hrs - Theory : 100 Hrs. & Practical : 100 Hrs.

1. Different definitions, Philosophy and origin of Yoga
 - The Philosophy of Yoga as outlined in the Vedas, Upanishads, Puranas, Smritis. Bhagwat Gita etc.
 - Relation between Indian and Western Philosophy
 - i. The theory of the inter-relationship between the body, mind and soul
 - ii. Difference between conscious mind & sub conscious mind
 - iii. Evidence for existence of the soul (soul=God's Computer)
2. Fundamental Outline of Ashtanga Yoga
 - Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, Samadhi
3. Kriyas (Shatkarmas)
 - Neti - Ghrita Neti, Sutra Neti/ Rubber Neti, Jal Neti
 - Dhauti - Jal dhauti, Vastra dhauti, Danda dhauti
 - Basti - Direct basti, Self basti, Ganesh basti
 - Nauli - Bama nauli, Dakshina nauli, Madhyama nauli & Rotating nauli
 - Trataka - Antah trataka, Madhya trataka, Bahya trataka
 - Kapalbhathi - Ancient method
 - Shankh Prakshalan- Old Method, New Method and Herbal Method

4. Yogasana
 - Importance, Method and Limitations
 - Rules and Regulations to be followed for Practicing Yogasanas
 - Difference between Yogasanas and Physical exercise
 - Sookshma Vyayama (Physical exercise) and twisting exercises of spinal cord, Why compulsory before Yogasanas practice ?
 - Surya Namaskar- important method & limitations.
5. Streams of Yoga
 - Raja Yoga, Hatha Yoga, Gyana Yoga, Karma Yoga, Bhakti Yoga, Japa Yoga, Mantra Yoga etc.

PRACTICAL

Practice of Shatkarma, Sookshma Vyayama, Twisting exercises of Spinal cord, Surya Namaskar, Yogasana (Relaxation Yogasan, Meditation Yogasan & Physical Yogasan), Pranayama, Mudra, Bandh, Naad Anusandhan, Pratyahar, Dharana, Dhyana & Samadhi.

Computer

(Not for university Examination)

(Min. Hrs - Theory : 30 Practical : 30)

1. Basics of computer
2. Hardware and software
2. Input and output devices
3. Operating system – DOS, etc
4. Internet-
Email, social networking, application in medicine, browsing journals and article using internet

English

(Not for university Examination)

(Min. Hrs - Theory : 40 Hrs.)

1. Introduction:
Study techniques, Organisation of effective note taking and logical processes of analysis and synthesis, the use of the dictionary, enlargement of vocabulary & effective diction.
2. Applied Grammar:
Correct usage, the structure of sentences, the structure of paragraphs.
3. Written Composition:
Precise writing and summarising, writing of bibliography, enlargement of vocabulary.
4. Reading and comprehension
Review of selected materials and express oneself in one's words, enlargement of vocabulary.
5. The study of various forms of composition paragraph, essay, letter, summary, practice in writing.
6. Verbal communication:
Discussions and summarization, debates, oral reports, use in teaching.

Yoga and Physical Culture
Subject Code: BYOG-201
Min. Hrs - Theory : 100 Hrs. & Practical : 100 Hrs.

1. Patanjali Yoga sutra - meaning and detail
 - Samadhi Pada
 - Sadhana Pada
 - Vibhooti Pada
 - Kaivalya Pada
2. Hatha Yoga Pradipika
3. Kundalini Yoga and Tantra Yoga
4. Yoga Nidra and Multiplication of energy through visualization- Method, Application and Benefits.
5. Meditation - Methods of application, benefits, precautions.
 1. Ancient - Padast dhyana, Pindhast dhyana, Rupast dhyana, Roopateet dhyana, Positive Thinking Dhyana
 2. Modern - Omkara, Vipassana, Preksha, Sakshi, Transitional Meditation (T.M.)
6. Relaxation Techniques - Method, Effects and Benefits
 - Quick Relaxation Techniques
 - Instant Relaxation Techniques
 - Deep Relaxation Techniques
7. Physiological aspects of Yogasana and exercise
8. Physiological aspects of Pranayama in neuro- physiological conditions
9. Physiological aspects of Bandhs, Mudras and Kriyas (Shatkarmas)
10. Comparative study of Shatkriyas with other systems of Medicine

PRACTICAL

1. **Yogasanas**
Siddhasana, Padmasana, Bhadrasana, Samasana, Swastikasana, Vajrasana, Singhasana, Gomukhasana, Veerasana, Ardhamatsyendrasana, Matsasyendrasana, Vakrasana, Paschimottasana, Ustrasana, Uttanapadasana, Shalabhasana, Halasana, Pawanmuktasana, Vipartakaraniasana, Sarvangasana, Dhanurasana, Matsyasana, Kurmasana, Mayurasana, Sirsana, Trikonasana, Ardhakatichakrasana, Katiasana, Padahasthasana, Makrasana, Baddhapadmasana, Naukasana, Navasana, Chakrasana, Garudasana, Akarnadhanurasana, Janusirshasana, Suptavajrasana, Karnapeedasan, Tolangulasana, Garbhapindasana, Yognidrasana, Mandukasana, Rajakapotasana, Parsavakonasana, Hanumanasana, Vrikshasana, Tadasana, Garudasana, Natarajasana etc.
2. **Pranayamas**
Anuloma-Viloma (Nadi-shuddhi), Surya-bhedi, Chandra-bhedi, Ujjai, Sheetali, Sheetkari, Sadhanta, Bhastrika, Sarvanga (1:4:2:1), Plavani, Moorchha, Kevli, Bhramari, Kapalhati (Swami Ramdev's method).
3. **Bandhas**
Moolbandh, Uddyanbandh, Jalandharbandh, Yonibandh and Mahabandh.
4. **Kriyas (Shatkarmas)**
Neti, Dhauti, Basti, Nauli, Trataka, Kapalhati (ancient method), Shankh Prakshalan.
5. **Meditation**
Omkara, Cyclic, Preksha, Vipassana, Sakshi, Padast, Pindhast, Roopast, Roopateet, Sakaratmak soch (Positive Thinking) Dhyana.

General Pathology & General Microbiology

Subject Code : BYOG-202

Min. Hrs - Theory : 100 Hrs. & Practical : 100 Hrs.

THEORY

GENERAL PATHOLOGY

1. Cell Injury and Cellular Adaptations.

- Normal Cell
- Cell Injury- types of cell injury, etiology of cell injury, morphology of cell injury, cellular swelling (in brief)
- Cell death : types- autolysis, necrosis, apoptosis & gangrene (in brief)
- Cellular adaptations-atrophy, hypertrophy, hyperplasia & dysplasia (in brief)

2. Inflammation

- Acute inflammation - vascular event, cellular event, inflammatory cells(in brief)
- Chronic Inflammation - general features, granulomatous inflammation, tuberculoma (in brief)

3. Haemodynamic Disorders :

Oedema, hyperemia, congestion, haemorrhage, circulatory disturbances, thrombosis, ischaemia & infarction (in brief)

4. Neoplasia :

Definition, how does it differ from hyperplasia, difference between benign tumor and malignant tumor (in brief)

5. Healing

Definition, different phases of healing, factors influencing wound healing. (in brief)

GENERAL MICROBIOLOGY

1. General characters and classification of Bacteria.

2. Sterilization and Disinfection.

- Physical agents- Sunlight, Temperature less than 100⁰C, Temperature at 100⁰C, steam at atmospheric pressure and steam under pressure, irradiation, filtration.
- Chemical Agents- Alcohol, Aldehyde, Dyes, Halogens, Phenols, Ethylene oxide.

3. Staining Methods

- Simple, Grams staining, Ziehl-Neelsen staining or AFB staining, Negative, Impregnation

4. Collection and Transportation of Specimens

- General Principles, Containers, Rejection
- Samples - Urine, Faeces, Sputum, Pus, Body fluids, Swab, Blood

5. Disposal of Laboratory/Hospital Waste

Non-infections waste, infected sharp waste disposal, infected non-sharp waste disposal.

6. Parasitology

Parasitism, host & vectors etc., classification of parasites, diseases caused by various parasites (in very brief)

7. Mycology

Morphology & structure of fungi (in brief), classification of fungi, lab diagnosis of fungal infections, opportunistic fungal infection

8. Virology

General characters of viruses, classification of viruses, lab diagnosis of viral infections (in brief).

9. Nosocomial Infections (in brief)

PRACTICAL

GENERAL PATHOLOGY

1. Components & Setting of the Compound Microscope.
2. Focusing of object.
3. Use of low & high power objectives of microscope.
4. Use of oil immersion lens.
5. Care and maintenance of the Microscope.

GENERAL MICROBIOLOGY

1. Preparation of swabs/sterile tubes & bottles.
2. Preparation of smear.
3. Staining.: Gram & Ziehl -Neelsen staining.
4. Identification of Culture Media.
5. Identification of Instruments.
6. Identification of common microbes.
7. Culture media used for fungus.

Community Medicine

Subject Code: BYOG-203

Min. Hrs. : 80 Hrs.

1. **Health and Disease:** Definitions, Concepts, Dimensions and Indicators of Health, Concept of well-being, Spectrum and Determinants of Health, Concept and natural history of Disease, Concepts of disease control and prevention, Modes of Intervention, Population Medicine, The role of socio-economic and cultural environment in health and disease.
2. **Epidemiology:** definition and scope. Principles of Epidemiology and Epidemiological methods: Components and Aims, Basic measurements, Methods, Uses of epidemiology, Infectious disease epidemiology, Dynamics and modes of disease transmission, Host defenses and Immunizing agents, Hazards of Immunization, Disease prevention and control, Disinfection. Screening for Disease: Concept of screening, Aims and Objectives, Uses and types of screening.
3. **Epidemiology of communicable disease:** Respiratory infections, Intestinal infections, Arthropodborne infections, Zoonoses, Surface infections, Hospital acquired infections Epidemiology of chronic non-communicable diseases and conditions: Cardio vascular diseases: Coronary heart disease, Hypertension, Stroke, Rheumatic heart disease, Cancer, Diabetes, Obesity, Blindness Accidents and Injuries.
4. **Public health administration:** an overview of the health administration set up at Central and state levels. The national health program-highlighting the role of social, economic and cultural factors in the implementation of the national programs. Health problems of vulnerable groups- pregnant and lactating women, infants and pre-school children, occupational groups.
5. **Health programs in India:** Vector borne disease control program, National leprosy eradication program, National tuberculosis program, National AIDS control program, National program for control of blindness, Iodine deficiency disorders (IDD) program, Universal Immunisation program, Reproductive and child health program, National cancer control program, National mental health program. National diabetes

control program, National family welfare program, National sanitation and water supply program, Minimum needs program.

6. **Demography and Family Planning:** Demographic cycle, Fertility, Family planning-objectives of national family planning program and family planning methods, A general idea of advantage and disadvantages of the methods.
7. **Preventive Medicine in Obstetrics, Paediatrics and Geriatrics:** MCH problems, Antenatal, Intranatal and post natal care, Care of children, Child health problems, Rights of child and National policy for children, MCH services and indicators of MCH care, Social welfare program for women and children, Preventive medicine and geriatrics.
8. **Nutrition and Health:** Classification of foods, Nutritional profiles of principal foods, Nutritional problems in public health, Community nutrition program.
9. **Environment and Health:** Components of environment, Water and air pollution and public health: Pollution control, Disposal of waste, Medical entomology.
10. **Hospital waste management:** Sources of hospital waste, Health hazards, Waste management.
11. **Disaster Management:** Natural and man made disasters, Disaster impact and response, Relief phase, Epidemiologic surveillance and disease control, Nutrition, Rehabilitation, Disaster preparedness.
12. **Occupational Health:** Occupational environment, Occupational hazards, Occupational diseases, Prevention of occupational diseases. Social security and other measures for the protection from occupational hazard accidents and diseases. Details of compensation acts.
13. **Mental Health:** Characteristics of a mentally healthy person, Types of mental illness, Causes of mental ill health, Prevention, Mental health services, Alcohol and drug dependence. Emphasis on community aspects of mental health.
14. **Health Education:** Concepts, aims and objectives, Approaches to health education, Models of health education, Contents of health education, Principles of health education, Practice of health education.

Biostatistics and Research Methodology

Subject Code: BYOG - 204

Min. Hrs. : 100 Hrs.

BIOSTATISTICS

1. **Introduction:** Meaning, definition, characteristics of statistics. Importance of the study of statistics, Branches of statistics, Statistics and health science, Parameters and Estimates, Variables and their types, Measurement scales.
2. **Tabulation of Data:** Basic principles of graphical representation, Types of diagrams – histograms, frequency polygons, smooth frequency polygon, cumulative frequency curve, Normal probability curve.
3. **Measures of Central Tendency:** Need for measures of central Tendency, Definition and calculation of **Mean** – ungrouped and grouped, interpretation and calculation of Median-ungrouped and grouped, Meaning and calculation of Mode, Geometric mean & Harmonic mean, Guidelines for the use of various measures of central tendency.
4. **Measures of Dispersion :** Range, mean deviation, standard deviation & variance.

5. **Probability and Standard Distributions:** Meaning of probability of standard distribution, the binominal distribution, the normal distribution, Divergence from normality – skewness, kurtosis.
6. **Correlation & regression :** Significance, correlation coefficient, linear regression & regression equation.
7. **Testing of Hypotheses , Level of significance, Degrees of freedom.**
8. **Chi-square test, test of Goodness of fit & student t-test.**
9. **Analysis of variance & covariance:** Analysis of variance (ANOVA), what is ANOVA? Basic principle of ANOVA, ANOVA technique, Analysis of Co variance (ANACOVA)
10. **Sampling:** Definition, Types- simple, random, stratified, cluster and double sampling. Need for sampling - Criteria for good samples, Application of sampling in community, Procedures of sampling and sampling designs errors.

RESEARCH METHODOLOGY

1. **Introduction to Research methodology:**
Meaning of research, objectives of research, Motivation in research, Types of research & research approaches, Research methods vs methodology, Criteria for good research.
2. **Research problem:**
Statement of research problem, Statement of purpose and objectives of research problem, Necessity of defining the problem
3. **Research design:**
Meaning of research design, Need for research design, Features for good design, Different research designs, Basic principles of research design.
4. **Measurement & scaling techniques:** Measurement in research-
Measurement scales, sources of error in measurement, Technique of developing measurement tools, Meaning of scaling, its classification, important scaling techniques.
5. **Methods of data collection:** collection of primary data, collection data through questionnaires & schedules, Difference between questionnaires & schedules.
6. **Computer technology:**
Introduction to Computers, computer application in research computers & researcher.

Yogic Diet & Yoga for Common Health
Subject Code: BYOG - 301
Min. Hrs - Theory : 80 Hrs. & Practical : 80 Hrs.

Yogic Diet

- What is Yogic diet and how does it help in digestive disorders?

Or

- What are the Tamasik, Rajsik and Sattvik foods?
- What about Non-vegetarian foods?
- Vegetarianism and Yoga.
- What are our balanced foods?
- Different thoughts about foods.
- How to choose our food?
- Five compulsory rules of foods.
- The most important aspect of foods.
- The art of cooking foods.
- Importance of leaves, seeds and cover in food.
- Diet and disease.
- Right process of Fasting.
- What is the Poor nutrition & It's various causes?

Yoga for Common Health

1. Challenges and solutions
 - (a) Introduction of Yama & Niyama
 - (b) Why & how inquiry or asses daily about Yama & Niyama to get rid of our mental virus ?
 - (c) Why Yoga ?
 - (d) Yoga way of Life and Society
2. Health & physical exercises
 - (a) Concept of Health and Yoga physical exercises
 - (b) “Give 1 hour daily to body and mind and be fit 24 hours”
3. Breath - to increase the vital power and immune power to fight diseases
 - (a) Introduction of Pranayama
 - (b) Proper & full Breathing practices
4. Relax Yourself through
 - (a) Shavasana (b) Yoga nidra
5. Physical Exercise
 - (a) Suryanamaskar
 - (b) Twisting exercises of spine
 - (c) The set of 12 Yogasanas
6. Brief of five physical & mental exercises

PRACTICAL

- Practicals related to theory topics.
- Five Physical Practices of Preventive Yoga

1	King exercise (Twisting exercise of spine)	10 to 25 times	
	Queen exercise (Twisting exercise of spine)	10 to 25 times	
	Prince exercise (Bal machalan exercises)	10 to 25 times	
	Princess exercise (Shoulder exercises)	10 to 25 times	
2	Nauli kriya (Whole Stomach exercise)	5 to 10 minutes	
3	(i) Bhastrika Pranayama	2 to 5 minutes	
	(ii) Anuloma-viloma Pranayama	2 to 5 minutes	
	(iii) Bhramari Pranayama	2 to 5 minutes	
4	Maha bandha	10 to 50 times	
5	Walking exercises or hard exercises (Shram Vyayam) or Anga-anga-ke Vyayam For mental relaxation Shavasana/ Yoga Nidra	20 to 30 minutes	

Advanced Yogic Therapy

Subject Code: BYOG - 302

Min. Hrs - Theory : 100 Hrs. & Practical : 100 Hrs.

1. Introduction of Yogic Therapy
2. Role of Yogasana in curing various diseases
3. Role of Pranayama in curing various diseases
4. Role of Bandhs, Mudras and Nadd- Anusandhan in curing various diseases
5. Role of Kriyas (Shatkarmas) in curing various diseases
6. Role of general exercise like Sookshma Vyayama, twisting exercises of spinal cord and Suryan-namaskar
7. The effects of various yogic practices on different systems
 - Skeletal system
 - Endocrine system
 - Nervous system
 - Digestive System
 - Respiratory System
 - Excretory system
 - Cardiovascular system
 - Muscular system
 - Reproductive system and
 - Five Senses (eyes, ear, nose tongue and skin)
8. Yoga and Relaxation Techniques
 - QRT - Quick Relaxation Techniques
 - IRT - Instant Relaxation Techniques
 - DRT - Relaxation Techniques
9. Meditation and its effects on psycho-somatic disorders
10. Teaching method of yoga to public and patient, model lesson planning and adoption of yoga in education system

11. Yogic Therapy for

- Cardiac diseases
- Respiratory diseases
- Psychiatric diseases
- Metabolic diseases
- ENT disorders
- Pediatric disorders
- Neuro- muscular diseases
- Digestive disorders
- Ophthalmological disorders
- Obstetrics and Gynecological disorders
- Mentally Retarded

12. Advance Techniques of Yoga therapy

- PET (Pranic Energization Technique)
- MSRT (Mind Sound Resonance Technique)
- MIRT (Mind Imagery Technique)

13. Pranic Healing and Reiki Therapy

PRACTICAL

Practicals related to Theory topics.

Yoga & Mental Health

Subject Code: BYOG - 303

Min. Hrs - Theory : 80 Hrs. & Practical : 80 Hrs.

1. Role of Yoga in

- Total integration of personality
- Correct mental behavior and attitude
- Pure Consciousness
- Mental, Psychological and spiritual growth
- Mode of living and disciplined life

2. Role of Yoga in curing various Psychological disorders -

- Depression
- Stress
- Anxiety disorder
- Panic disorder
- OCD (Obsessive Compulsive disorder)
- Mood disorder (Bipolar disorder)
- Sexual disorder
- Personality disorder
- Schizophrenia

PRACTICAL

Practicals related to theory topics.

Allied Yogic Sciences
Subject Code: BYOG - 304
Min. Hrs - Theory : 100 Hrs. & Practical : 100 Hrs.

- | | |
|--|--|
| 1. Naturopathy
3. Accupressure (Reflexology)
5. Shivambu (Cow Urine) Therapy

7. Reiki | 2. Magnetic Therapy
4. Hasya Yoga (Laughing therapy)
6. Mental Treatment through subconscious Mind
8. Home Herbal Education |
|--|--|

Naturopathy

1. History of Naturopathy Development
2. Philosophy of Naturopathy and It's principles
3. Causes of foreign matter (Vikar)
4. Naturopathy and Panch Tattva
5. The Theory of Panch Tattva treatment (Chikitsa)
 - (a) Akash Tattva (Ether) Chikitsa – fasting, how to cure disease through fasting.
 - (b) Vayu Tattva (Air) Chikitsa – Svar Sadhana and Pranayama method
 - (c) Agni Tattva (Fire) Chikitsa – Sun bath, Sun rays treatment, various kinds of hot and cold packs
 - (d) Jala Tattva (Water) Chikitsa – Different disease eradicating bath like –Hip bath, Sitz bath, Fraction bath, Anima, Hot and Cold Bath, Tub Bath, Spine bath
 - (e) Prithvi (Earth) Tattva Chikitsa – different kinds of soil application – Mitti ki Patti, Mud bath, Hot and cold mud application.
6. Aahaar Chikitsa (Diet treatment) - what is balanced food, disease treatment through Aahaar, what is uncooked food (Apakaahaar), rules of taking food, fundamental knowledge of food elements.
7. Evaluation of food materials
8. How to do Kalpa Chikitsa through Milk, Curd, and Buttermilk (Mattha).
9. Brief Introduction of Shatkarmas – Neti, Basti, Dauti, Nauli, Kapalbhati (Ancient method), Tratak and Shankha Prakshalana.
10. The Science of Massage and It's kinds
11. The Science of uncooked food and It's method
12. Wheat green grass and It's utility
13. Method of Kayakalp through Honey, Soup, Juice, Vegetables and Fruits, etc.
14. Different Kinds Of Diseases, Symptoms, Fundamental Cause For Diseases And Treatment Through Naturopathy
15. Methods of disease examination
 - i. Old method
 - ii. Modern method

Magnetic Therapy

1. History of Magnet Discovery
2. The effect of Magnet on Living things
3. The effect of Magnet on Human Metabolism
4. Magnet and It's attracting Power
5. The effect of Magnet on Living and non Living Things
6. The Knowledge of Magnet Poles
7. The effect of Magnet on human blood circulation
8. Magnet and It's structure and treatment power
9. The shape and size of Magnet

10. How Magnet works on diseases
11. Different methods of application of Magnet
12. Magnetic water, property of Magnetic water and application methods
13. Role of Magnet on disease eradication
14. What should be the position of Magnet if a person is in lying or sitting position
15. Experiences of Indian specialists about Magnet
16. What is Electro Magnetic Therapy?
17. Limitations of electromagnetic therapy
18. Methods of application of electromagnetic therapy
19. Electromagnet therapy and its precautions
20. How to use Magnet for gaining health in various diseases like –
Headache, cervical spondylosis, neck pain, shoulder pain, Frozen shoulder, neuralgia, elbow joint pain, bed wetting, diabetes, heart disease, back pain, knee pain, joint pain, lumber spondylosis, gout, Rheumatic Arthritis, disc slip, disc prolapse, Migraine, Colitis, Sciatica, Vertigo, Leucorrhoea, Menorrhagia, Insomnia, Hair fall, Constipation etc.

Acupressure (Reflexology)

1. History, development, theory and classification of Acupressure.
2. Nervous system, Spine (Sushumna) and uses of Acupressure
3. Different kinds of Acupressure
4. Determination of time factor in Acupressure application
5. Names of different apparatus using in Acupressure therapy
6. Methods of using Acupressure apparatus
7. Instructions for Acupressure therapy
8. Introduction to Acupressure therapy as a pain removal property
9. Benefits of Acupressure therapy
10. Precautions in applying Acupressure therapy
11. importance of Reflexology in Acupressure
12. Mother Child law
13. Different kinds of treatment through Acupressure
14. Limitations of Acupressure therapy
15. How to control various diseases like –
Ankles(Swollen), Ankylosing spondylitis, Arthritis, Asthma, Baldness, Bed Wetting, Breast Lump, Bronchitis, Cataract, Colitis, Constipation, Cramps in calf muscles, Cough, Urethritis, Depression, Diabetes, Eczema, Fainting, Fatigue, Flatulence, Headache, Haemorrhoids, Hepatitis, Hernia, Hypertension, Hypoglycemia, Indigestion, Insomnia, Infection, Impotence, Jaundice, Knee pains, Leucorrhoea, Menstrual cramps, Migraine, Paralysis, Parkinson's disease, Sciatica, Sinusitis, Tooth ache, Urine retention, Vertigo etc through acupressure.

Hasya Yoga (Laughing therapy)

The usefulness of hasya yoga (laughing therapy) in physical and mental diseases
There are many kinds of laughing

1. Thahake wali Hansi (Bgkds okyh g|lh)
2. Hanuman Ji wali Hansi (guqeku th okyh g|lh)
3. Kashmir apple kate hue Hansi (d"ehjh lsc [kkrs gq;s g|lh)
4. Child hood wali Hansi (cPpkas okyh g|lh)
5. One meter wali Hansi (ou ehVj okyh g|lh)
6. Jhula wali Hansi (>wyk okyh g|lh)
7. Lion wali Hansi ("ksj okyh g|lh)

8. Bhangra nritya mei Hansi (HkkaxM+k u`R; esa gjlh)
9. Clapping karate hue muskurane wali Hansi (rkyh ctkrs gq;s eqLdqjkus okyh gjlh)
10. Dog Kapalbhathi Hansi (dqUkk diky Hkkfr gjlh)
11. Pilla Kapalabhathi adi 125 prakar ki Hansi (fiYyk diky Hkkfr gjlh)

Shivambu (Cow Urine) Therapy (Shivambu=Cow Urine)

1. What is the Science behind Shivambu therapy?
2. What is the history of Shivambu therapy?
3. What is the correct method of Shivambu therapy?
4. How to give Shivambu therapy in various diseases?
5. What are the precautions one should take while using Shivambu?
6. What kind of food one should take in using Shivambu therapy?
7. How to gain lifelong health through Shivambu therapy?
8. What is the relationship between Shivambu therapy and Yoga?
9. What is the relationship between Shivambu therapy and Naturopathy?
10. How to eradicate chronic and mild diseases through Shivambu therapy?

Mental Treatment Through subconscious Mind

1. There is a big treasury hidden inside you.
2. How does your brain work?
3. Magic of your subconscious Mind.
4. Treatment for mental problems in olden days.
5. Treatment for mental problems in modern days
6. Simple techniques for mental treatment
 - i. Subconscious mind declines towards life
7. How to get desired results?
8. How to get wealth by using the power of subconscious mind?
9. You have the right to become a rich man.
10. You cannot achieve any success without involving your subconscious mind.
11. How do scientists use their subconscious mind?
12. Miracle of your deep sleep and subconscious mind?
13. Your subconscious mind and your carrier problems.
14. Your subconscious mind and happiness.
15. Your subconscious mind and good human relationship.
16. How to use our subconscious mind for forgiveness
17. How does your subconscious mind work to remove mental obstacles
18. How to use our subconscious mind to get rid of fear?
19. How we can become young in mind?

Reiki

i. Reiki- I

1. The meaning of Reiki and history
2. Five important rules of Reiki and five steps
3. What is Aura and why we need to clean the Aura before using Reiki
4. The theory of Reiki
5. Why we do Prayer, Shubh sankalpa, Maintain positive attitude before Reiki?
6. In Reiki pratham there is a attunement of Sahasrar Chakra, Ajna Chakra, Vishuddhi Chakra and Anahat Chakra

7. What should be the position of palms when we take Reiki ourselves or give to others?
8. Fundamental knowledge of Seven Chakras and their shape, colours, awakening
9. Other methods of Reiki and it's precautions
10. Chakra pranayama, Sudarshan Chakra and method of concentration and practice
11. Sakshi darshan
12. The method of to be healthy and powerful

ii. Reiki - II

1. Method of touch Reiki and distance Reiki
2. Attunement of Sahasrar Chakra, Ajna Chakra, Vishuddhi Chakra and Hrudaya Chakra through Reiki symbol
3. The practice of power symbol, balancing symbol and connection symbol
4. The method of home or office atmosphere cleaning
5. Reiki box method dwara karya siddhi ki sadhana vidhi
6. To give Reiki by opening the chakras
7. Reiki symbol meditation
8. Amazing method to control sex
9. To stop negative thoughts through Rechak dhyan
10. Reiki methods for different diseases
11. Method for making chakras strong

iii. Reiki Karuna

1. History of Karuna reiki
2. Meaning of Karuna reiki and it's works
3. Role of Karuna reiki on physical, mental diseases and solving other problems

Home Herbal Education

1. Introduction of Ayurveda, History of Ayurveda. How Ayurveda Originated.
2. Basic Philosophy of Ayurveda
“Tridosh Theory” The basis of Ayurveda detailed description of vata, Pitta & Kapha types, places & functions of tridosh.
3. Study of body-prakriti (Body temperament), know your prakriti.
4. How to lead healthy life through **Ayurveda concepts** of daily regimen (Dincharya), seasonal regimen (Ritu-charya), care of patient (Rogi charya) how to behave in the family & society.
5. Detail description of food (Aahar)
6. Diagnostic methodology which includes Nadi-Pariksha (Pulse Examination), Stool Examination, Urine Examination, Eye, Tongue, Skin, Nails, Hairs, Bones Examination.
7. Body purification concept “Panchakarma” Snehana (Oleation) & Swedan (Fomentation) these two are poorva karma of Panchakarma Vaman (Emesis), Virechan (Purgation) Vasti (Anema) Rakta-Moksham (Blood-Letting) it reveals concept of “Sansodhan-Chikitsa of body purification.
8. Introduction of words viz Anupaan, Pathya, Rasayan, Vajikaran, Pragyapradh, ooj, Deepan, Pachan, Yogvani, Brinhan, Bhawana, Lekhan, Snigdha, Grahi, Kalk, Asava, Arishta.
9. Detail Description of **“Six-Ras”** i.e. Sweet, Sour, Bitter, Acidic, Salty, Pungent (Madhur-Aml-Lavan-Katu-Tikta-Kashaya)
10. Basic principles of Ayurveda treatment
11. Different uses of Kitchen Prophets Vize Turmeric, Garlic, Ginger, Corriander.
12. Uses of different cereals & pulses Viz Wheat, Gram etc.
13. Uses of Various fruits Viz Apple, Mango, Papaya etc.
14. Uses of various dry fruits & Oily products Viz Cashew, flax Brassica, Olive Oil etc.
15. Uses of various vegetables.

16. Uses of various Herbal medicinal plants Viz – **Amla, Harad, Bahera, Giloy, Kutki, Chirayata, Bhringraj, Shatavar, Ashwagandha, Moosali, Mulathi, Ghrita-Kumari, Kaunin, Bael, Neem, Gudmar, Methi, Sunthi, Guggulu, Kantakari, Apamarg, Samai** etc.
17. Treatment of Various Diseases-Piles, Obesity, Diabetes, Arthritis, Worms, Blood-Pressure, Asthma, Acidity, Hepatitis, Urticaria, Dermatitis, Anemia, Colitis, Insomnia, Bronchitis, sinusitis, Renal, Stone, Different sexual Disorders of Males & Females, menstrual Irregularities in Ladies, eyes disorders, Epilepsy, thyroid etc.
Special attention of simple Herbal Home Remedies on above disorders.
18. Rasayan chikitsa (rejuvenation therapy) to prevent diseases & check on early ageing.
19. Role of **Tulsi, Haldi, Aloe vera, Neem & Flax Seeds** in detail.

Practical of Allied Yogic Sciences

Practicals related to theory topics.