

UNIVERSITY OF LUCKNOW



DEPARTMENT OF NATUROPATHY

FACULTY OF YOGA AND ALTERNATIVE MEDICINE

BACHELOR OF NATUROPATHY AND YOGIC SCIENCE

(B.N.Y.S)

ORDINANCES AND SYALLBUS

BNYS DEGREE COURSE

Bachelor of Naturopathy and Yogic Sciences (BNYS)

Title of the Course:

The course shall be called Bachelor of Naturopathy and Yogic Sciences (BNYS).

Aims:

This course may be used in a variety of ways: for personal interest or as a course (to learn about several types of medicine), or as the start of your naturopathic training, or if you are already a therapist as post graduate training to extend your practice to become a naturopath.

Eligibility for Admissions:

- A candidate who has passed 10+2 or equivalent examination with Physics, Chemistry and Biology as subjects recognized by Central/State Government is eligible for admission to the first year of the course.
- A candidate who fulfills the above requirements shall have obtained not less than 50 percent marks in aggregate in the Science subjects (Physics, Chemistry and Biology) at the qualifying examination.
- However, the candidates belonging to Scheduled Castes and Scheduled Tribes shall be given a relaxation of 5 percent in the marks required for eligibility.
- No candidate shall be admitted to the course unless he/she completes 17 years of age by 31st of December of the year of admission or any other date prescribed by the University.

Medium of Instruction and Examination

The medium of instruction and examination in the course shall be English and Hindi.

Duration of the Course

- The duration of the course shall be five and half Years (5½ years)
- The course shall include a period of regular study of four and half years (4½ Years),
Followed by compulsory rotatory internship of one year.

General Rules for B.N.Y.S. Degree Course Examination:

- As per University norms.

Seats	- 60 (SIXTY)
Fee	- as per University norms.
Attendance	- as per University norms.
Procedure of Admission	- as per University norms.
Results	- as per University norms.

- **No student is allowed to study regular/private courses or to appear for examination of any such courses conducted by any University / Statutory Body / Council or any other recognized Institutions of State or Central Govt., failing which the admission of B.N.Y.S. Degree Course shall be cancelled.**

DESCRIPTIONS OF MARKS FIRST YEAR

SEMESTER-I

S.NO.	NOMENCLATURE	MARKS PRACTICAL			TOTAL
		INTERNAL	THEORY	/VIVA-VOCE	
1.	HUMAN ANATOMY-I	30	70	50	150
2.	HUMAN PHYSIOLOGY-I	30	70	50	150
3.	PHILOSOPHY OF NATURE CURE	30	70	50	150
4.	INDIAN PHILOSOPHY AND YOGA	30	70	50	150
5.	PRACTICE OF YOGA	30	70	50	150
					750

SEMESTER-II

S.NO.	NOMENCLATURE	MARKS PRACTICAL			TOTAL
		INTERNAL	THEORY	/VIVA-VOCE	
1.	HUMAN ANATOMY-II	30	70	50	150
2.	HUMAN PHYSIOLOGY-II	30	70	50	150
3.	BIO-CHEMISTRY	30	70	50	150
4.	SCHOOLS OF YOGA	30	70	50	150
5.	PRACTICE OF YOGA	30	70	50	150
					750

SECOND YEAR

SEMESTER-III

S.NO.	NOMENCLATURE	MARKS PRACTICAL			TOTAL
		INTERNAL	THEORY	/VIVA-VOCE	
1.	PATHOLOGY	30	70	50	150
2.	MICROBIOLOGY	30	70	50	150
3.	COMMUNITY MEDICINE	30	70	50	150
4.	HEALTH AND HEALTH DIMENSIONS	30	70	50	150
5.	PRACTICE OF YOGA	30	70	50	150
					750

SEMESTER-IV

S.NO.	NOMENCLATURE	MARKS PRACTICAL			TOTAL
		INTERNAL	THEORY	/VIVA-VOCE	
1.	BASIC PHARMACOLOGY	30	70	50	150
2.	MEGNETO THERAPY AND CHROMO THERAPY	30	70	50	150
3.	FORENSIC MEDICINE AND TOXICOLOGY	30	70	50	150
4.	DIAGNOSTIC METHOD IN YOGA AND NATUROPATHY	30	70	50	150
5.	PRACTICE OF YOGA	30	70	50	150
					750

THIRD YEAR

SEMESTER-V

S.NO.	NOMENCLATURE	MARKS			TOTAL
		INTERNAL	THEORY	PRACTICAL /VIVA-VOCE	
1.	DIETETICS	30	70	50	150
2.	MANAGEMENT OF DISEASES	30	70	50	150
3.	ACCUPRESSURE AND ACCUPUNTURE	30	70	50	150
4.	DIAGNOSTIC METHODS-I (NATUROPATHIC DIAGNOSIS)	30	70	50	150
5.	PANCHKARMA	30	70	50	150
					750

SEMESTER-VI

S.NO.	NOMENCLATURE	MARKS			TOTAL
		INTERNAL	THEORY	PRACTICAL /VIVA-VOCE	
1.	MANIPULATIVE THERAPIES	30	70	50	150
2.	PSYCHOLOGY AND BASIC PSYCHIATRY	30	70	50	150
3.	FUNDAMENTALS OF AYURVEDA	30	70	50	150
4.	DIAGNOSTIC METHODS-II(MODERN DIAGNOSTIC AND FIRST AID)	30	70	50	150
5.	NUTRITION AND HERBOLOGY	30	70	50	150
					750

FOURTH YEAR

SEMESTER-VII

S.NO.	NOMENCLATURE	MARKS PRACTICAL			TOTAL
		INTERNAL	THEORY	/VIVA-VOCE	
1.	FASTING THERAPIES	30	70	50	150
2.	PHYSIOTHERAPY	30	70	50	150
3.	HYDROTHERAPY	30	70	50	150
4.	MUD THERAPY AND MASSAGE THERAPY	30	70	50	150
5.	CLINICAL NATUROPATHY	30	70	50	150
					750

SEMESTER-VIII

S.NO.	NOMENCLATURE	MARKS PRACTICAL			TOTAL
		INTERNAL	THEORY	/VIVA-VOCE	
1.	OBSTETRICS AND GYNECOLOGY	30	70	50	150
2.	MEDICAL JURISPRUDENCE, FORENSIC MEDICINE AND TOXICOLOGY	30	70	50	150
3.	HOSPITAL ADMINISTRATION AND MANAGEMENT	30	70	50	150
4.	FIRST AID AND EMERGENCY MEDICINE	30	70	50	150
5.	HOLISTIC PRACTICE OF NATUROPATHY AND YOGA (INCLUDING SURGICAL DISEASES)	30	70	50	150
					750

FTH YEAR

SEMESTER-IX

S.NO.	NOMENCLATURE	MARKSPRACTICAL			TOTAL
		INTERNAL	THEORY	/VIVA-VOCE	
1.	RESEARCH METHODOLOGY	30	70	50	150
2.	YOGA THERAPY	30	70	50	150
3.	PHYSICAL MEDICINE & REHABILITATION	30	70	50	150
4.	ELECTROTHERAPY	30	70	50	150
5.	COMMUNITY HEALTH & MEDICINE	30	70	50	150
					750

(INTERNSHIP)

After Successful Completion of the B.N.Y.S Course, 1 year of Compulsory work in Naturopathy, Modern Medicine Hospital attached to the medical college or in any other approved hospitals.

This posting is called the Compulsory Rotatory Residential Internships.

PAPER 1- HUMAN ANATOMY-I

UNIT-1 INTRODUCTION

GENERAL ANATOMY: Introduction of Anatomy, Anatomical Terms, different branches of anatomy, Introduction of bones, its classification, functions, applied anatomy; Joints-types, actions, applied anatomy; Cartilage-types, action, applied anatomy, basics of all the tissues and systems of the human body.

OSTEOLOGY: (Bones of Skull & Upper limb) Names of the bones and their positions; general features, Skull - all normal and interior of skull & mandible.

UNIT-II MYOLOGY AND ARTHROLOGY

MUSCULAR SYSTEM: (Head & Neck and Upper Limb) Origin, Insertion, Nerve Supply and Action of the muscles with the applied anatomy and Clinical testing.

ARTHROLOGY: (Head & Neck, Upper Limb) General features of different types of joints. Brief study of the following joints of the body with Movements. Shoulder, Elbow, Wrist and other smaller joints of Head & Neck, Upper Limb.

UNIT-III HEAD, NECK and BRAIN

HEAD, NECK AND BRAIN: Head and neck- introduction, scalp, face and lacrimal apparatus, sides of the neck, suboccipital triangle, contents of vertebral canal (brief), meningeal layer, cavernous sinuses and other sinuses in brief, hypophysis cerebri, trigeminal ganglion, middle meningeal artery, contents of the orbit, triangles of the neck, ansa cervicalis, parotid gland, otic ganglion, submandibular gland, sublingual gland, thyroid gland, parathyroid gland, thymus, blood supply of deep structure, cervical ganglion, cervical plexus, styloid apparatus, oral cavity, palate, pharynx, auditory tube, nasal septum, paranasal sinuses, cartilage of larynx. Parts of nervous system, meninges, ventricles, motor and sensory pathways, cranial nerve, motor and sensory cortex and their blood supply with cross sectional studies in brief morphology of spinal cord. section of medulla - pyramidal decussation, sensory decussation, upper part of medulla, pons - mid level, midbrain- mid superior colliculus, inferior colliculus, cerebellum- horizontal- mid saggital section, horizontal section at interventricular formation, coronal section at anterior commissure, coronal section at mammillary body. Sensory organs (regionwise) - gross anatomy of eyeball, ear, nose and tongue in brief, blood brain barrier.

UNIT-IV MICRO ANATOMY and UPPER LIMB

UPPER LIMB: An introduction, breast, clavipectoral fascia, axilla, lumbar triangle, triangle of auscultation, bursa of upper limb, musculotendinous cuff, intermuscular spaces, cubital fossa, synovial sheath, retinaculum of hand, palmar aponeurosis, spaces of hand, anatomical snuffbox.

MICRO ANATOMY - Study of microscopes and artifacts, General Histology, study of the basic tissues of the body, functional correlation of the structural components of the organs, Systemic histology of concerned organs.

PRACTICALS

- I. **GROSS ANATOMY:** (Dissection / Demonstration of following parts of body)
- II. **Upper Limb:** Dissection: Pectoral, scapular, shoulder, arm, forearm (5wks) Prosected Parts: Joints, Palm and dorsum of hand.
- III. **Thorax:** Dissection: chest wall, Mediastinum, Lungs and heart.
- IV. **Abdomen:** Dissection: anterior abdominal wall and inguinal region, viscera and posterior abdominal wall.
- V. **Pelvis:** Dissection: Pelvic viscera and blood vessels and nerve saggital section (M & F) (2Wks) Prosected Parts: Sole of the foot and joints.
- VI. **Head and Neck:** Dissection: scalp, superficial and dissection of face and neck (8 wks to 10 wks). Prosected Parts: Orbit, eyeball, submandibular region, Temporal and infra Temporal fossa, cranial cavity, naso and oropharyngeal regions, Ear, larynx and pharynx. Cross sections at C-4, C-6 levels. Sagittal section of Head and Neck.
- VII. **Nervous system:** Section of brain and prosected specimens and major functional areas, Gross structure of brain and spinal cord and study of gross sections as mentioned earlier (in brief).
- VIII. **DEMONSTRATIONS:** Bones-as described in osteology section, Brain and Spinal cord.
- IX. **SPECIFIC SKILLS: Students should learn the following skills-**To localize important pulsations and the structure against which pressure can be applied in case of bleeding & Trauma of particular artery, To elicit superficial and deep reflexes, To demonstrate muscle testing and movements at joints, To locate for: Lumbar puncture, sternal puncture, pericardial tapping, and liver biopsy, To locate veins for venous puncture, To locate the site for emergency such as tracheotomy.

REFERENCE BOOKS

1. Text book of anatomy (Vol-I, II, III) - by B.D.Chaurasia
2. Text book of anatomy- by Hamilton
3. Practical Anatomy- by Cunningham
4. Human Embryology- by Inderbir Singh
5. Canningham's Text book of Anatomy - by Cunningham
6. Balley's text book of Histology - by Balley
7. Medical Embryology - by Langman

PAPER 2- HUMAN PHYSIOLOGY-I

UNIT I- HUMAN PHYSIOLOGY

1. Cell structure
2. Sub-cellular units
3. Cell membranes and their properties
4. Transport mechanisms
5. Bioelectrical potentials
6. Body fluids and homeostasis

UNIT II- BLOOD – Physical properties, composition and functions of blood.

Plasma proteins: Normal values, Origin and methods of separation, Functions and variations in health and disease.

Bone marrow: Formed elements, Composition and functions

Erythrocytes: Morphology and variations in health and diseases, Development of erythrocytes, Site and stages in development, Necessary factors, Regulation of development of erythrocytes, Life-span and fate of erythrocytes, Erythrocytes sedimentation rate (ESR)

Role and function of spleen

Hemoglobin: Structure, synthesis, function and metabolism, Types of hemoglobin

Anemia – Definition and classification

Jaundice – Definition and classification

Leucocytes: Classification, morphology, development and functions, Variation in health and disease

Thrombocytes: Origin, morphology and functions, Variation in health and disease

Homeostasis: Mechanism of homeostasis, coagulation of blood, Fate of clot and disorders of clotting

Anticoagulants: Mechanism of action and clinical applications

Blood groups: Classification, ABO and RH system, Blood transfusion, indication and hazards

Lymph and tissue fluids: Lymph and reticular system, Fluid compartments and Water Balance, Principles of immune system, Cellular and humoral immunity

UNIT III- VARIOUS SYSTEM OF BODY

❖ **CARDIO-VASCULAR SYSTEM**

Historical perspective and organization of cardiovascular system

Heart –Structure and properties of cardiac muscle, Cardiac metabolism, Enervation of heart, junction tissue of heart, Regeneration and spread of cardiac impulse

Electrocardiography: Einthoven's Law, Various ECG leads, normal ECG and its interpretation, Cardiac arrhythmias and heart block, Cardiac vector

Cardiac cycle: Pressure and volume change (mechanical events), Heart sound and stethoscopy, Principle of echo-cardiography, Measurement and regulation of cardiac output

Heart sounds: Description, causation and relation to other events in cardiac cycle, Clinical significance of heart sounds

Blood pressure: Definition, regulation and factors influencing B.P., Measurement of blood pressure, Physiology of hemorrhage and shock

Circulation, Blood vessels, Physical principle of blood flow, regulation of blood flow, Jugular venous pulse tracing, radial pulse tracing, Coronary, cerebral, renal and pulmonary circulation

e) Splanchnic, cutaneous and capillary circulation

❖ RESPIRATORY SYSTEM

Introduction, internal and external respiration, physiological anatomy of respiratory system.

Mechanics of respiration: Inspiration and expiration, Role of respiratory muscles and thoracic cage, Pressure and volume change during respiration, Work of breathing, lung compliance and its significance in health and diseases.

Lung volumes and capacities: Lung volumes and capacities and their measurements, Respiratory minute volume and maximum voluntary ventilation

Alveolar ventilation Composition of atmospheric, inspired, alveolar and expired air

Pulmonary circulation: Pulmonary circulation, ventilation-perfusion relationship, Diffusion of gases across pulmonary membrane, Oxygen uptake, transport and delivery, Carbon-dioxide uptake, transport and delivery

Organization of the respiratory centers: Nervous and chemical regulation of respiration, Classification and characteristics of hypoxia, cyanosis, asphyxia, hypercapnea, hypocapnea, dyspnoea, apnoea and orthopnea and periodic breathing., Respiratory aspects of high altitude, Physiology of acclimatization and hyperbarism, Respiratory / pulmonary function tests, Non-respiratory functions of lungs, Artificial respiration

❖ UNIT III- DIGESTIVE and EXCRETORY SYSTEM

DIGESTIVE SYSTEM

1. Introduction, organization and plan of digestive system

Saliva: Composition, functions, regulation of secretion, Methods of study of above aspects of saliva

Stomach: Functions of stomach, Composition and functions of gastric juice, Regulation of secretion and mechanism of HCL secretion, Gastric emptying time and its regulation, Methods of study of gastric function and its applied aspect.

Pancreas: Composition and functions of pancreatic juice, Regulation of pancreatic secretion, Methods of study of pancreatic secretion

Liver: Function, formation, storage and emptying of bile, Composition, function and regulation of release of bile, Entero-hepatic circulation, Tests for liver functions

Small intestine: Succus entericus, Composition, function and mechanism of secretions

Large intestine: Structure and Functions

Gastro-intestinal Hormones: Release and functions

Gastro-intestinal movements: Mastication, deglutition and vomiting, Movements of stomach and small intestines, Movements of large intestine and defecation, Regulation of movements and methods of study

Digestion and adsorption of carbohydrates, fats, proteins and vitamins, minerals and water.

❖ EXCRETORY SYSTEM

General introduction organs of excretion with special emphasis on evolution of excretory mechanisms

Renal system-functional anatomy and renal circulation

Nephron: Mechanism of urine formation, glomerular filtration, tubular function, Concentration and acidification of urine, Composition of normal urine, and abnormal constituents of urine, Renal function tests

Non-excretory functions of kidney: Physiology of maturation and its abnormalities

Skin-Structure and functions

PRACTICAL

HUMAN PHYSIOLOGY EXPERIMENTS

1. Recording of blood pressure in human beings and study the effects of exercise on blood pressure
2. Electrocardiography (Demonstrations)
3. Clinical examination of CVS and radial pulse
4. Determination of tidal volume, inspiratory reserve volume, expiratory reserve volume, inspiratory capacity, expiratory volume (All experiments are to be arranged for demonstration)
5. Stethoscopy, normal body temperature and its physiological variation
6. Pulse, respiration and temperature chart with correlation
7. Clinical examination of respiratory system
8. Plethysmography (Demonstration)
9. Determination of vital capacity and maximum ventilator volume with spirometry (Demonstration)

Note - The above 10 human physiology experiments are to be conducted with demonstration as a joint venture by physiologists and the clinical faculty, if necessary.

Reference books

1. Text book of Medical physiology by A.C. Guyton
2. Review of Medical physiology by W.F. Ganong
3. Concise text book of Medical physiology - S.K. Choudhary
4. Understanding Medical physiology - by Bijlani
5. Essentials of Medical Physiology - by Sembulingam
6. Best and Taylor's physiology basis of Medical practice
7. Practical physiology by Ghai
8. Practical physiology by Ranade

PAPER 3- PHILOSOPHY OF NATURE CURE

UNIT-I

The evolution of the human body.

Philosophy of the body, mind, soul, life, spirit and spiritual body.

Composition of the human body, according to Ayurveda, Naturopathy, Yoga, Modern Medicine & Homeopathy.

History and Fundamental (Basic) principles of Naturopathy.

Comparative study of the Naturopathy with other systems of Medicine.

Eminent Indian and Western Naturopaths

Laws of Nature:

Pancha Maha Bhutas.

Shareera Dharmas - Ahara, Nidra, Bhaya, Maithuna.

Inflammation and its different stages.

Natural rejuvenations.

Violations of Laws of Nature resulting in diseases

Dictum of Cure: Remove the root cause, Eliminate the toxin, Supplement of the vital Nutrients, Conservation of the vital energy or nerve energy.

Catechism of Nature Cure

Swasthya Vritam :- Dinacharya, Ratricharya., Ritucharya., Vegadharanam

Unity of disease, unity of cure and way of treatment.

How Nature Cures? Foreign matter and Toxins accumulation in the body and its importance in elimination through different ways of channels.(Toxemia/Foreign Matter Theory).

How to acquire Natural immunity in diseases.

Difference between functional and organic diseases.

Materia Hygienic

- a. Importance of Physical & Mental Hygiene
- b. Revolution & Evolution of Hygiene
- c. Hygiene not a cure
- d. Hygienic care of the sick
- e. Applications of Hygiene
- f. Medicine & the Hygiene contrasted
- g. Women & Hygiene
- h. Hygienists
- i. Future of Hygiene

UNIT II

The Philosophy of Life:-

- a. The Primordial Requisites of Life (Basic Needs of Living)
- b. The Laws of life.
- c. Mystery of life
- d. Life's Engineering
- e. Safeguards of life.
- f. How long can we live (Increase of average length of life), Are you Shortening your Life? Why Live Long?

The Philosophy of Health

- a. Health Standards
- b. Health & its Conditions
- c. Ancient Man Was Healthier Than We Are.
- d. Positive Habit
- e. Vital Economy
- f. Divine science of Health.
- g. Nine Doctors at your Command.
- h. Health Destroyer (Tea, Coffee, Salt, Sugar, Tobacco Chewing, Smoking, Alcohol, Non-Veg(Animal Food), Excess Fat & Oil, Negative Thinking & attitude etc.)
- i. The Secret of Health - Storing Energy & Enzymes
- j. Internal Symbiosis
- k. Your Body: Do- it Yourself Repair Shop

Body's Protective Mechanism

- a. Digestion: First Line of Defense Against Disease.
- b. The Liver: Second Line of Defense Against Disease.
- c. The Endocrine Glands: Third Line of Defense Against Disease.

Super Nutrition from Sprouts.

- a. Food is The Magic Healer.
- b. Let Food Be Your Medicine - Body As A Self Healer

Wheat Grass Miracles

- a. The Hippocrates Diet
- b. Salt Eating
- c. Stimulant Delusion

Preventive Medicine:-

- a. Prevention of Disease
- b. Prevention of Epidemics

UNIT III

Natural Ways of Care:-

- a. Keeping Your Body Clean:- (Colon, Liver, Lungs, Kidneys & Skin).
- b. Care of the Colon, Teeth, Eyes, Ears, Hairs, Feet & Skin.
- c. Care of the Glands & Emotional Control
- d. Care of the Orifices of the Body.

The Philosophy of Disease in Nature Cure:-

- a. The Essential Nature of Disease
- a. The Occasions for Disease

- b. The Suppression of Disease
- c. Is Disease Friend or Foe?
- d. The Rationale of Fever
- e. Disease has Many Faces
- f. You under the Doctor's Eye
- g. Fallacy of Diagnosis
- h. Iatrogenic Diseases
- i. Physiological Compensation.
- j. The Cure Core In Nature Cure:-
 - i) Living Matter Cures Itself.
 - ii) Reform Vs. Cure
 - iii) The Delusion of Cure
 - iv) To Cure The Incurable.
 - v) Rest Cure

The Hidden Truth about Drugs:-

- a. Biodynamics Vs. Pharmacodynamics
- b. Evils of Drug Medication
- c. Drug Indulgences
- d. Fallacy of Pharmacology
- e. Fallacy of Cure
- f. Drug cannot Heal You.
- g. Suppression Vs. Elimination
- h. Druglessness.

UNIT-IV

1. Properties of Water, Mud, Air and Sunlight.
2. Health is positive and disease is Negative.
3. Basic concepts in Nutrition and balanced diet.
4. Role of diet in nature cure and yoga(Satvic, Tamsic, Rajsic)
5. Outlines on
 - a) Regular Habits for health
 - b) Rest and Relaxation
 - c) Live Food- Natural Raw diet
 - d) Fasting
 - e) Exercises.Fundamentals of Ayurveda
6. Fundamental of Siddha
7. Fundamentals of Homeopathy
8. Fundamentals of Unani
9. Fundamentals of Allopathy
10. The Diagnostic Procedures in Naturopathy & their Diagnostic Values :-
Facial Diagnosis- The Science of Facial Expression
 - a) Iridiagnosis
 - b) Chromo-Diagnosis
 - c) Spinal Analysis
11. Arogya-Rakshaka Panchatantras and Their Importance In Restoration , Maintenance Of Health And Prevention Of Diseases.
12. Treatment Modalities in Nature Cure (in brief) :-
 - A) Enema - Colon Flushing
 - B) Colon Hydrotherapy

Hydrotherapy:-

Baths: Hip Bath, Spinal Bath, Spinal Spray, Foot Bath , Arm Bath , Contrast Arm & Foot Bath, Steam Bath, Sauna Bath, Sitz Bath , Jacuzzi, Full Immersion Bath, Whirlpool Bath, Cold Circular Jet Bath, Oxygen Bath

Packs: Full Wet Sheet Pack, Gastro Hepatic Pack, Kidney Pack
Under Water Massage
Douches

Mud Therapy:-Mud Packs, Mud Bath

Chromotherapy (Colour Treatment): Heat, Light, Ultra-violet and Infra red rays ,Chromothermolium

Heliotherapy: Sun Bath, Athapa-Snana (Banana Leaf Bath)

Air-therapy: Air Bath, Ozone Bath

Magnetotherapy

Massage Therapy

Aroma Therapy

Chiropractice

Osteopathy

Physiotherapy

Nutrition & Dietetics.

Crises and their Management.

Sleep - Repose

PRACTICALS

- i. Students should be introduced to various treatment procedures used in Naturopathy.
- ii. Students should have knowledge of giving various treatments.
- iii. Demonstration of :-
 - a) Natural Diet (Live food).
 - b) Satvic diet.
 - c) Boiled diet
 - d) Way of serving & various special diets.
- vi. Practicals with record.
- v. Visiting to various nature cure clinics/ hospitals.

Text Books-

1. Philosophy of Nature Cure- By Henry Lindlahr.
2. Practice of Nature Cure- By Henry Lindlahr
3. Human culture and Cure- By Dr. E.D. Babbit.
4. Practical Nature Cure- By Dr. K. Laxman Sharma.
5. History and Philosophy of Nature Cure- By S.J. Singh
6. My Nature Cure- By M.K. Gandhi
7. Natural health care - A to Z- By Belinda Gran
8. Introduction to Natural Hygiene- By Herbert M. Shelton
9. A Complete Hand book of Nature Cure- By H.K. Bakhru
10. Nature Cure - a way of life- By S.R. Jindal

Reference Books

1. My Nature Cure or Practical Naturopathy - By S.J. Singh
2. The Science of facial expression - By Louis Kuhne
3. The Story of my experiment with truth - BY M.K. Gandhi
4. Ayurveda for health and long life - By Dr. R.K. Garde
5. Everybody's guide to Nature Cure - BY Harry Benjamin
6. Prayer - By M.K. Gandhi
7. Diet and Diet Reforms - By M.K. Gandhi

PAPER-4 INDIAN PHILOSOPHY AND YOGA

Unit-I

Philosophy: Meaning, Definition, Nature and Dimensions, Concept of Metaphysics, Epistemology and Ethics
Characteristics and Classification of Indian Philosophy.

Unit-II

General account of Categories in Nyaya-Vaisesika Philosophy, Dravya, Guna, Karma, Samanya, Samanya, Visesa, Samvaya and Abhava Prama, Prameya and Pramana, Karya-Karana Sambandh.

Unit-III:

Subject of Purva Mimamsa and Uttar Mimamsa Types of Vedant Darshan: Advaita, Vishistadwait, Dwaita, Suddhadwaita and Dwaitadhwait Metaphysical Background of Samkhya–Yoga Philosophy
Description of Cittavriti, Cittabhumi and Path of Yoga.

Unit-IV:

Concept of Anekantvada, Syadavada and Saptbhanginaya, Ethical Discipline and means to Liberation in Jainism Buddhist Philosophy and Concept of Four Noble Truths Aim, Objective and Misconceptions of Yoga Conceptual analysis of Yoga and its Importance. Yoga Philosophy-general Introduction, Chitta, Chitt Bhumi & the eight fold path of yoga samadhi, vibhutiyan & Existence of god.

Books Recommended

1. Upadhyaya, Acharya Baldeo- Indian Philosophy
2. Sinha, J.N. - Indian Philosophy
3. Saxena, Sri Krishna- Nature of Consciousness in India
4. Saxena, Kanchan- Concept of Salvation in Hinduism and Christianity

PAPER5- PRACTICE OF YOGA

UNIT 1.

Yoga : Origin of yoga, definition of yoga, Aims and objective of yoga, and philosophy of yoga.

UNIT 2.

Yogasanas: Method, Precautions and Benefits of following Yogasana: Shirshasana, Vajrasana, Supta Vajrasana Paschimottanasana, Baddha Padmasana, Trikonasana , Ardhakati and Kati Chakrasana, Padahastanasana, shavasana,

UNIT 3

Pranayama: - Method, Precautions and Benefits of following Pranayama: Suryabhedana, Ujjayi, Bhastrika, Sheetkari, Sheetali, Bhramari, Murcha, Plavini.

UNIT 4-

ShatkarmaKriyas

- i) Neti- Jal, Sutra, Ghrita
- ii) Dhouti- Vamana, Vastra, Danda
- iii) Nauli- Madhya, Dakshina & Vama
- iv) Trataka- Bindu, Jyoti
- v) Kapalabhati

PRACTICAL

1. Asanas

2. Kriyas Praticals
3. pranayama
6. Practicals with records.

ASANA

A. Standing Postures: Tadasana, Ardhakati Chakrasana, Padahastasana, Ardha Chakrasana, Kati Chakrasana, Trikonsana.

B. Supine Postures: Shavasana, Matsyasana, Sarvangasana, Halasana, Chakrasana, Pavanmuktasana.

C. Prone Postures: Makarasana, Bhujangasana, Ardha Shalabhasana, Shalabhasana, Dhanurasana

D. Sitting Postures: Vakrasana, Ardhamatsyendrasana, Paschimottanasana, Ustrasana, Vajrasana, Padmasana, Baddha Padmasana, Supta Vajrasana

E. Pranayama: Kapalbhathi, Bhastrika, Sheetakari, Sheetali, Anuloma Viloma, Ujjayi, Bhramari, Plavani

F. Kriyas: Jala Neti, Sutra Neti, Dhouti – Vaman, Nauli - Dakshina- Madhya, Trataka – Jyoti, Kapalbhathi

Reference Books-

1. Sukshma Vyayama- Swami Dharendra Brahmachari
2. Basis and definitions of Yoga-Vivekananda Kendra
3. RajaYoga-Swami Vivekananda.
4. Asanas-Swami Kuvalyananda.
5. Complete works of sri Aurobindo-Sri Aurobindo
6. Asanas, Pranayama, Mudras & Bandhas - Swami Satyananda Saraswati,
7. Yoga in Daily life - Dr. A.U. Rahman
8. Yoga- The science of Holistic living-VKS yoga
9. Yogasana Vigyan-Swami Dharendra Brahmachari

SEMESTER II

PAPER I- HUMAN ANATOMY- II

UNIT I. THORAX

General Introduction

Osteology of Throat, Abdomen and Pelvis, Lower Limb and embryology, Pericardium, Thorax Wall, Position and Parts Of The Heart, Conducting System, Blood Supply And Nerve Supply Of The Heart , Names Of The Blood Vessels and their Distribution In The Body , Lungs & Pleura- General Features, Surface Markings, Broncho Pulmonary Segments , Applied Anatomy , Mediastinum , Diaphragm, Oesophagus, Thoracic Duct.

UNIT II. ABDOMEN AND PELVIS

Peritoneum- General disposition - horizontal and vertical, parts relation, blood supply, Nerve supply of abdominal organs.

Pelvic Organs –Parts, position, relation, blood supply, nerve supply.

UNIT III. LOWER LIMB

Deep fascia-modifications, saphenous veins, lymph nodes, adductor canal muscles-nerve supply, blood supply, action, joints, arches of foot , joints of lower limb.

UNIT IV. EMBRYOLOGY IN BRIEF

Definition of embryology , brief account of male and female, ovary; definition of gamete; sperm, ovum, gametogenesis, migration of primordial germ cells into gonadal ridge; structure of sperms growth of ovarian follicles, ovarian and uterine cycles. Principle of family planning (contraception), In-vitro fertilization (for integrated teaching). Systemic Embryology(Brief): Development of the individual organ of digestive system, genital system, urinary system, respiratory system, cardiovascular system, nervous system, special sensory organs (in brief) endocrine glands and mammary gland. Development abnormalities in Brief.

PRACTICAL

1. Demonstration of Thoracic organs and cavity by model
2. Demonstration of Abdominal organs and cavity by model
3. Demonstration of Articulation and bones of Lower limb by model

REFERENCE BOOKS

1. Text book of Anatomy- by Gray
2. Atlas of Histology- by Diforie
3. Atlas of Histology- by Poddar
4. Text book of Human Histology- by Dr. Veena Bharihoke
5. A Color Atlas of Human Anatomy - by McMinn
6. Grant's Method of Anatomy - by Grant
7. Regional & Applied Anatomy - by R.J. Last

PAPER II- HUMAN PHYSIOLOGY II

UNIT I

❖ ENDOCRINAL SYSTEM

Introduction-hormones, evolutionary back-ground and organization of endocrine control systems

Methods of study: Classification of hormones and mechanism of hormonal action, Regulation of hormone secretion and feed-back system

Hypothalamo- hypophyseal system Releasing hormones

Active principles: Chemical nature, biosynthesis, role of action, Control of secretion, excretion and its aspect., Clinical study of their hypo-and hyper function, Laboratory diagnosis of pituitary (anterior and posterior) gland, thyroid, Parathyroid, adrenal cortex and medulla and islets of langerhans.

REPRODUCTIVE SYSTEM

❖ REPRODUCTIVE SYSTEM

Physiology of reproduction: Introduction to physiology of reproduction, Sex determination and sex differentiation and chromosomal study

Male reproductive system: Growth, development and structure of testes, Gonadotropins and gonadal hormones, Functions of testes and spermatogenesis, Composition of semen

Female reproductive system: Ovary, gonadotropins, Structure of ovary and corpus luteum, Function of ovary, ovarian hormones, Physiology of menstruation cycle and physiology of pregnancy, Physiology of placenta, gestation and parturition, Physiological basic of tests for ovulation and pregnancy,

Physiology of lactation

UNIT II

❖ CENTRAL NERVOUS SYSTEM

Structural and functional organization of central nervous system

Neuron: Neuroglia, functional types of neurons

Cerebro-spinal fluid: Formation, circulation, functions of CSF, Methods of collection and clinical significance of CSF

Synapse: Types of synapses and their structure, Sympathetic transmission, General properties of neurotransmitters

Sensory Physiology: Classification and general properties of receptors, Sensory modalities and stereognosis

Reflexes: Reflex and general properties of reflexes (with examples)

Ascending tracts: Origin, course, termination and functions, Specific reference to pain pathway and physiology of pain

Organization of motor systems: Pyramidal and extra-pyramidal system, Upper and lower motor neurones and their lesions, Brown-sequard syndrome, Syringomyelia

Cerebellums: Functional anatomy, connections and functions, Effects of lesions and tests for cerebellar function

Basal ganglion: Functional anatomy, connections and functions, Diseases of basal ganglion and its clinical evaluation

Vestibular apparatus: Functions anatomy, connections and functions, Effects of lesions and their assessment, Physiology of maintenance and regulation of muscle tone, posture and equilibrium, Decelerated rigidity and righting reflexes

UNIT-III

Thalamus: Functional anatomy, connections and functions, Effects of lesions of thalamus

Hypothalamus: Functional anatomy, connections and functions, Effects of lesions of hypothalamus

Body temperature regulation: Normal body temperature, pyrexia and hypothermia

Cerebral cortex: Functional anatomy, Methods of study of cortical functions

Limbic system: Functional anatomy, connections and functions, EEG, Physiology of sleep and wakefulness

Higher functions: Learning, speech, memory, behaviour and emotions

AUTONOMIC NERVOUS SYSTEM

1. Sympathetic nervous system

2. Parasympathetic nervous system

UNIT IV- SPECIAL SENSES

Smell: Physiology of olfaction and olfactory discrimination, Olfactory pathway and defects of olfaction

Receptors, primary taste sensation and taste pathway

Vision: Functional anatomy of eye, extra and intra-ocular muscles, Errors of refraction and their correction, visual acuity, Physiology of aqueous humour, Cornea, lens, intraocular pressure, accommodation, Retina, rhodopsin cycle, dark and light adaptation, Visual pathway and effects of lesions in visual pathways, Field of vision, perimetry, binocular vision, Iris and papillary reflexes, Colour vision, colour blindness and tests for colour blindness, Formation and circulation of tears, lacrimal glands

Hearing: Functional anatomy of ear, function of external ear, Physiological functions of middle ear, Impedance matching and tympanic reflex, Functional anatomy of internal ear, cochlea, organ of corti, Auditory pathway and auditory cortex, Frequency analysis, sound localization, defects of hearing, Audiometry, tests for conduction defects, Aphasia

NERVE MUSCLE PHYSIOLOGY

- 1- Types of muscle and their properties and morphology.
- 2- Neuro-muscular junction, excitation-contraction coupling.
- 3- Clinical study of their hypo – and hyper function.
- 4- Myasthenia gravis.
- 5-

PRACTICAL

1. Normal value of hormones
2. Clinical examination of CNS
 - a) Motor functions
 - b) Sensory functions
 - c) Cranial nerves
 - d) Reflexes superficial and deep

Reference books

1. Text book of Medical physiology by A.C. Guyton
2. Review of Medical physiology by W.F. Ganong
3. Concise text book of Medical physiology - S.K. Choudhary
4. Understanding Medical physiology - by Bijlani
5. Essentials of Medical Physiology - by Sembulingam
6. Best and Taylor's physiology basis of Medical practice
7. Practical physiology by Ghai
8. Practical physiology by Ranade

PAPER III- BIO-CHEMISTRY

UNIT I-

Introduction: Hydrogen ions concentration, acids, bases, buffers, Henderson - Haselbasch Equation. Principles of calorimetry, Paper chromatography and Electrophoresis.

Amino Acids - Classification, structure, properties and side chains of amino acids. Peptides - Biological importance of peptides structure of Insulin.

Proteins - Definition, Biological importance, classification and properties, structure of proteins, coagulation and denaturation of proteins, Elementary aspects of the structure of collagen, Myoglobin and Hemoglobin.

UNIT II-

Enzymes: - Definition, classification, specificity, coenzymes, co-factors and activators, diagnostic importance of enzymes and iso-enzymes.

Carbohydrates: - Definition, classification and biological importance of Monosaccharide, Classification Properties and stereoisomerism, oligosaccharides-importance of Disaccharide, Polysaccharides - Functions.

Lipids: - Definition, classification and biological importance, Simple lipids: Composition of triglycerol, Waxes, Compound lipids: Functions of fatty acids - Properties of saturated and unsaturated fatty acids.

UNIT III –

Nucleic acids: - Definition, classification, composition and biological importance of nucleic acids, purines and pyrimidine bases, Structure of DNA, Structure, function and types of RNA. .

Vitamins: -Definition and classification, Brief account of source, biochemical function deficiency, diseases Vitamin antagonist, Hypervitaminosis

Minerals: - Calcium, Phosphorous, iron, copper, zinc, magnesium, manganese, lead, mercury, arsenic and metal toxicity fluorine and iodine.

UNIT IV –

Cell and subcellular structures: Cell membrane, its composition, function of subcellular structures, transport across cell membrane, Active and facilitated diffusion.

Metabolism: - Digestion and absorption of carbohydrates, lipids, proteins and nucleic acids.

Carbohydrate Metabolism - Glycogenesis, glycogenolysis and kreb's cycle, glycolysis, pyruvate oxidation citric acid cycle, Gluconeogenesis, Metabolism of Fructose and Galactose, regulation of metabolic pathways, disorders of carbohydrate metabolism, regulation of blood sugar, glucose tolerance test, diabetes mellitus. Biological oxidation - Oxidative phosphorylation.

Lipid Metabolism -Lipogenesis, synthesis of fatty acids, de-saturation, Phospholipids, Biosynthesis of lecithine, Cephalin and utilisation of Ketone bodies, Ketosis, synthesis and utilization of ketone bodies, Ketosis, synthesis and breakdown of cholesterol, disorders of lipid metabolism, outlines and formation and functions of prostaglandins and leucotrienes, fatty liver and lipotropic factors.

Metabolism of proteins and amino acids - Breakdown of tissue proteins, amino acids pool, general metabolism of amino acids, disposal of ammonia, urea cycle formation of glutamate and glutamine, disorders of amino acid metabolism.

Purine and Pyrimidine metabolism-Outline of synthesis and breakdown of purine and pyrimidine, Disorders of metabolism of purine and pyrimidine.

Biochemical genetics and protein synthesis - Replication, transcription, reverse transcription viruses, oncogenes, post transcription modification.

Biochemistry of blood - Outline of synthesis and degradation of heme, Function of Haemoglobin, abnormal haemoglobin, Jaundice , importance , functions and separation of plasma proteins, Functions of immunoglobulins , regulation of PH of blood, role of kidney and lungs in maintaining PH of blood, acidosis and Alkalosis.

Liver function - Liver Function tests, Detoxification mechanisms.

Kidney Function Tests - Composition of Urine, Urea clearance and creatinine clearance.

Energy metabolism (BMR) - Basal metabolic rate and its importance, calorific values of food, unbalanced diet, protein energy malnutrition (PEM) , Essential fatty acids , dietary habits and diseases, biochemistry of starvation.

Electrolytes and water metabolism.

PRACTICAL

Demonstration and report reading of:

Kidney Function test

Blood profile

Blood sugar profile

Liver function test

Enzymatic reactions

Structure and function of cell

BMR and MR calculation

Reference Books:-

- 1. Fundamentals of Biochemistry: Life at the Molecular Level-Donald Voet (Author), Judith G. Voet (Author), Charlotte W. Pratt (Author).**
- 2. Lehninger Principles of Biochemistry: International Edition- David L. Nelson (Author), Michael Cox (Author)**

PAPER IV- SCHOOLS OF YOGA

UNIT I-

INTRODUCTION OF VARIOUS SCHOOLS OF YOGA

- Ashtang Yoga
- Hatha Yoga

- Karma Yoga
- Raja Yoga
- Bhakti Yoga
- Gyan Yoga

UNIT II

Introduction of Astang Yoga- Origin, definition & objectives of Astang Yoga.

Yam, Niyam, Asana, Pranayam, pratyahar, Dharna, Dhyan, Smadhi.

UNIT- III

Hath Yoga

Introduction: Hath Yoga-Its definition & objectives, Origin & tradition of Hath yoga, General introduction of Basic Hath yogic text.

Essentials of Hath yoga : Importance of Place, Environment & Season for Hath sadhana, Aids & Obstructions to Hath asdhana, Prohibited & conductive food in Hath sadhana

Meaning, Definition, Objectives, Techniques, Benefits and Cautions of: Shatkarma, Asanas, Pranayama, Mudra & Bandhas

Meaning, Definition, Objectives, Types, Techniques, Proses and Benefitsof: Pratyahara, Dhyan, Samsdhi, Nadanusandhan, Spiritual Energy;Prana& Nadi, Panch Kosha, Chakras, Kudalini shakti Techniques of awakning Kundalini shakti.

UNIT-IV

Detail study of:-

Karma Yoga,
Raja Yoga,
Bhakti Yoga
Gyan YOGA

PRACTICAL

Article writing and presentation.

Books Recommended

1. B.K.S. Tyenger-Light on yoga, Harper collins publisher New Delhi, 2012
2. B.K.S. Tyenger-Light on Pranayama, Harper collins Publishr New Delhi, 2012
3. SW. Kuvalyanand&S.A. Sukla- Gorraksha shatakam, Kaivalyadham SMYM samiti, Lonavala, 2006
4. Mishra P. D. and Dr. Beena Misra- Yoga an Introduction

PAPER V- PRACTICE OF YOGA

Unit-I:

Yogic Sukshma Vyayam

Meaning and its Benefits

Techniques of Yogic Suksham Vyayam

Precautions concerning the following Sukshma Vyayam- Vakkshasthal vikasak- 2 step; Udar Shakti Vikasak- 10 step; Kati Shakti Vikasak- 5 step; Muladhar Chakra Shuddhi; Swadhisthan Chakra Shuddhi; Kudalini Shakti Vikasak; Jangha Shakti Vikasak- 2 step; Janu Shakti Vikasak; Pindali Shakti Vikasak; Pad Mul Shakti Vikasak; Pad Tal Shakti Vikasak; Padanguli Shakti Vikasak.

Unit-II:

Asanas

Techniques and Benefits of Asanas Types of Asanas in standing Posture

Precautions concerning the following Asanas: Utkatansana, Tarasana, Trikonasana, Kotichakrasana side bendings, Ardha Katicharasana, Garunasana, Vrakshasana, Virasana Natrajansana, Padhastana

Unit-III:

Bandha

Meanings Types of Bandha, Techniques and Precautions of the following Bandha Jalandhar Bandha, Mul bandha, Uddiyan Bandha, Maha bandha.

Unit-IV:

Mudra, Meditation

Types of Mudra, Benefits of Mudra.

Techniques and Precautions of the following Mudras: Gyan Mudra, Chin Mudra, Shambhavi Mudra, Nasikagra Mudra, Bhuchari Mudra, Akashi Mudra, Kaki Mudra.

Meditation

Meaning

Types of Meditation Benefits of Meditation

Difference between Dharana and Dhyan Yoga Nidra- meaning and Benefits.

PRACTICAL

Practice of above given Sukshma Vyayam, Asanas, Bandha, Mudra and Meditation Yoga techniques

Books Recommended

1. Swami, Shivananda- Dhyana Yoga
2. Swami Vivekananda- Dhyana Yoga
3. Swami Satyanand Saraswati- Yoga Nidra
4. Iyenger, B.K.S.- Pranayama

SECOND YEAR

SEMESTER III

PAPER I- PATHALOGY

UNIT I-

General Pathology

History and Scope of Pathology, Definition and various branches in Pathology, Scientific study of disease and methodology.

The cell and the reaction of cell, tissue and organ to injury. Structure of cell and its function, Causes and nature of cell injury.

Reaction of cell to Injurious agents: Lethal injury- Necrosis and gangrene, Cloudy swelling, Fatty changes in Liver, heart and kidney, Glycogen infiltration and hyaline degeneration, Lipoid degeneration, Mucoid degeneration, Pathological Calcification.

UNIT II

Inflammation and Repair:- Definition, Classification and nomenclature, Acute Inflammation.

Vascular and cellular phenomenon, cell of exudate chemical mediators and tissue changes in acute inflammation, Cardinal signs of acute inflammation, types and systemic effects of acute Inflammation.

Chronic Inflammation:- Difference between acute and chronic inflammation, Definition of Granuloma.

Wound healing:- Regeneration and Repair, Repair of epithelial and mesenchymal tissue, Primary union and secondary union, Mechanism involved and factors modifying repair process.

Gangrene - Causes, Dry Gangrene, Moist gangrene, Gas gangrene.

Granulomas :- Classification of granulomas, Tuberculosis- Genesis and fate of tubercle, primary and secondary tuberculosis, Definition, Classification and Pathology of Leprosy, Acquired, Primary, Secondary and Tertiary stages of syphilis, C.N.S.syphilis, C.V.S.syphilis and Gumma, congenital syphilis, Actinomycosis, maduramycosis and rhinosporidiosis.

6. Fluid and Hemodynamic Changes (circulatory disturbances):- Hyperemia, congestion and hemorrhage, Thrombosis, embolism, DIC, Ischemia, infarction and shock, Edema.

UNIT III

Immunopathology:- Basic Pathological mechanism in autoimmune disorders, Concept of immunodeficiency disorders, Pathology of AIDS.

Growth and its disorders :- Definition of agenesis, aplasia, atrophy, hyperplasia, hypertrophy, hypoplasia, metaplasia, Concept of dysplasia, anaplasia and carcinoma-in-situ.

Neoplasia:- Definition, Classification and Nomenclature, Characteristic features of benign and malignant tumours, Route of spread of malignant tumors, Grading and staging of cancers and pre-cancerous conditions, Carcinogenesis and carcinogens, Laboratory diagnosis of cancer-Biopsy, exfoliative cytology and prognostic prediction in cancer, Description of common tumours like-Fibroma, Lymphoma, Angioma, Liomyoma and Fibrosarcoma, Lymphosarcoma, Angiosarcoma and Leiomyosarcoma, Tumours of infancy and childhood.

Mineral and pigment metabolism:- Pathology of melanin pigment, Pathology of hemoglobin and its derivatives, Hemosiderosis and hemochromatosis

Genetic disorders:- Klinefelter's syndrome, turner's syndrome, Down's syndrome.

UNIT IV

SYSTEMIC PATHOLOGY

Disorders of RBC: Definition, morphologic and etio-pathologic classification of anemias. Iron deficiency anemia-B12 and folate deficiency anemia, sideroblastic anemia, post-hemorrhagic anemia, Concept and classification of hemolytic anemias, Laboratory investigations in anemia.

Disorders of WBC: Leukopenia & Leukocytosis, Agranulocytosis and Tropical Eosinophilia.

Coagulation and bleeding disorders: Structure, function and pathology of platelets, Definition and classification of blood dyscrasias, Laboratory investigations in bleeding disorders.

Diseases of Cardiovascular System: Arteriosclerosis and Atherosclerosis, Aneurysm, Rheumatic heart disease, Endocarditis, Myocardial Infarction, Congenital heart diseases, Congestive cardiac failure.

Diseases of Respiratory System: Lobar Pneumonia, bronchopneumonia, pulmonary Tuberculosis, Bronchiectasis and Pneumoconiosis, Tumors of lung.

Diseases of Gastro-intestinal system: Pleomorphic adenoma of salivary gland, Barrat's Oesophagus, Gastritis and peptic ulcer and tumors of stomach, Inflammatory bowel diseases- crohn's disease, ulcerative colitis, typhoid ulcer, Megacolon and Tumors of colon, Malabsorption syndrome, tropical sprue and Coeliac disease, Amoebiasis, bacillary dysentery and intestinal tuberculosis.

Diseases of liver, biliary tract and pancreas:- Liver function tests and hepatic failure, viral hepatitis, Cirrhosis of liver, tumors of liver, Alcoholic liver diseases, Indian childhood cirrhosis, cholecystitis and Gallstones, Pancreatitis and Diabetes Mellitus.

Diseases of Kidney:-Renal function tests, Renal failure, Polycystic kidney, Acute glomerulonephritis, Crescentic glomerulonephritis, Membranous glomerulonephritis, Nephrotic syndrome, Chronic glomerulonephritis, acute tubular necrosis, Pyelonephritis, Kidney in hypertension, Tumors of Kidney.

Diseases of Male Genital system: Orchitis and testicular tumors, Nodular hyperplasia of prostate, carcinoma of prostate, Carcinoma of penis.

Diseases of Female Reproductive Systems: Endometrial hyperplasia, adenomyosis and endometriosis, Carcinoma of cervix, tumors of ovary, Carcinoma and other diseases of vulva and uterus.

Diseases of Breast:-Fibrocystic disease and tumors of breast, Gynaecomastia.

Endocrine Pathology: Endocrinal lesions in brief mainly stressing on thyroid and Pheochromocytoma.

Musculo-skeletal Pathology: Osteomyelitis and Osteoporosis, Rickets and Osteoporosis, Tumors of Bone, Rheumatoid Arthritis, Gout, Myasthenia gravis and Progressive muscular dystrophy.

Diseases of Nervous System: Meningitis, tumors of CNS, Tumors of Peripheral Nerves, Encephalitis.

Diseases of Lymph nodes and Spleen: Lymphadenopathy, Malignant Lymphoma, basal cell carcinoma.

Pathology of Skin: Squamous cell carcinoma, Basal cell carcinoma, Malignant melanoma, Warts, Molluscum contagiosum, Fungal diseases.

Pathology of Eye.

Pathology of ENT.

PRACTICAL

Clinical Pathology Including Clinical Hematology & Clinical Bio-Chemistry.

Sample Collections for various hematological and clinical pathological investigations and anticoagulants used.

Theoretical aspects of HB estimation; hematocrit, blood indices, ESR and normal values in Hematology.

Blood grouping concept of blood groups.

Selection of donor, major and minor-cross-matching.

Blood transfusion, diseases transmitted by transfusions.

Goomb's test.

CSF Analysis.

Semen Analysis.
Urine analysis and microscopy.
Liver Function tests.
Renal function tests.
Glucose tolerance test.
Exfoliative cytology.

Reference Books:-

1. AN EXPERIENCED, TEACHER NOTES ON PATHOLOGY (BACTERIOLOGY, PARASITOLOGY & CLINICAL PATHOLOGY) PART-1 MEDICAL BOOK COMPANY
2. BERNER, ETA S. CLINICAL DECISION SUPPORT SYSTEMS: THEORY AND PRACTICE SPRINGER
3. BHATTACHARYA, G. K. CONCISE PATHOLOGY FOR EXAM PREPARATION ELSEVIER
4. BULLOCK, BARBARA L. FOCUS ON PATHOPHYSIOLOGY LIPPINCOTT W.W.
5. CAR PENTER, DONNA, O. ATLAS OF PATHOPHYSIOLOGY SPRING HOUSE
6. CHAKRABORTY, P. PRACTICAL PATHOLOGY NEW CENTRAL BOOK AGENCY
7. CHHABRA, ANIKAR PATHOLOGY RECALL LIPINCOTT WILLIAM & WILKINS
8. COHEN, J. INFECTIOUS DISEASES MOSBY
9. CROWLEY, L. V. AN INTRODUCTION TO HUMAN DISEASE JONES & BARTLETT
10. DAMJANOV, I. ANDERSON'S PATHOLOGY ELSEVIER

PAPER II-MICROBIOLOGY

UNIT-I

General Bacteriology:-

- a) Historical Introduction.
- b) Morphology and Physiology of Bacteria.
- c) Sterilisation and Disinfection.
- d) Cultivation of Bacteria.
- e) Bacterial Growth and Multiplication.
- f) Basic Principles of Bacterial Genetics.

UNIT II

1. Immunology

- a) Infection and Immunity.
- b) Immunoglobulins and Immune Response.
- c) Immune System and Antigen-Antibody Response.
- d) Complement and other Serological Tests.
- e) Hypersensitivity.
- f) Basic Principles of Auto-Immunity.

2. Systemic Bacteriology-

Streptococcus, Staphylococcus and Pneumococcus, Gonococcus, Meningococcus, Corynebacterium, Clostridium, Hemophilus, Bordetella, Mycobacterium, Spirochaetes, Yersinia, Chlamydia.

UNIT III

1. Parasitology

- a) Protozoology Entamoeba and Plasmodium
- b) Helminthology- Ankylostoma, Ascariasis, Taenia, Wuchereria.

2. Virology

- a) General properties- of Virus and their diagnosis.
- b) Herpes, Adenovirus, Picorna, Hepatitis Virus
- c) Poxvirus, Rabies Virus, Poliovirus, HIV, Bacteriophage

UNIT IV

1. Mycology

- a) General Characters and methods used of study and diagnosis of fungal infections.
- b) Superficial mycoses, systemic mycoses, Candidiasis, Aspergillosis, Mycetoma, Rhinosporidiosis.

2. Applied Microbiology

- a) Normal bacterial flora of human body.
- b) Diagnostic methods in common diseases
 - i) Meningitis, UTI, PID. Gastroenteritis, Respiratory Infection.
 - ii) Urogenital Infections, Pyogenic Infections, Nosocomial Infections, Infections of Ear, Eye and Oral Cavity.

c) Bacteriology of Water

PRACTICALS

1. Microscopes & Microscopy
2. Sterilization & Disinfection
3. Morphology of Bacteria
4. Culture media
5. Culture methods
6. Staining of Bacteria
 - a) Grams staining
 - b) Alberts staining
 - c) Z-N staining
7. Stools Examination
8. Identification of Bacteria
9. Demonstration of V.D.R.L. test
10. Demonstration of Widal test

Text Books

1. Text Book of Microbiology - By R.Anantha Narayana & C.K. Jayaram Paniker
2. Parasitology - By Jayaram Panikar
3. Bacteriology - By Dey
4. Text Book of Mircobiology - By Chakravarthy

Reference Books

1. Parasitology - By Chattarjee
2. Practical Microbiology - By R. Cruick Shank
3. Clinical Microbiology - By Bailey & Scott
4. Medical Laboratory Manual For Tropical Countries Vol. I & II- By Monica Cheesbrough

PAPER III
COMMUNITY MEDICINE (HEALTH)

UNIT-I

1. Evolution of Medicine Ancient Medicine, Scientific Medicine, Modern Medicine, Medical Evolution.
2. Concepts in Community Health Concepts of Health, Health & Development, Indicators of Health, Concepts of Disease, Concepts of Prevention, Disease Control & Eradication, Public Health, Social Medicine, Community Medicine, Health Services, Planning & Management, Risk Approach, Evaluation of Health Services.
3. General Epidemiology - Introduction, Measurement of Mortality & Morbidity, Epidemiologic Methods Descriptive Studies, Analytical Studies, Intervention studies, Association & Causation, Uses of Epidemiology, Infection Diseases Epidemiology, Disease Transmission, Immunity, Immunizing Agents, Disease Preventions & Control, Disinfection, Investigation of an Epidemic.

UNIT II

1. Genetics.
2. Screening of Diseases - Concepts, uses, criteria for screening, sensitivity & specificity
3. Epidemiology of communicable Diseases-
 - a. Respiratory infections- small pox, varicella, measles, rubella, Mumps, influenza, Diphtheria, Pertussis, Tuberculosis.
 - b. Intestinal Infections - Polio, Viral hepatitis, Cholera, Acute Diarrhoeal Diseases, Typhoid, Food Poisoning, Ameobiasis, Ascariasis, Ancylostomiasis, Taeniasis.
 - c. Arthropod - borne infections - Yellow fever, Japanese Encephalitis, Malaria, Filaria.
 - d. Surface Infections- Rabies, Trachoma, Tetanus, Leprosy, STD, AIDS.

UNIT III

1. Epidemiology of non-communicable diseases -Cancer, Cardio-Vascular Diseases, Diabetes, Obesity, Blindness, Accidents, Hypertension, Stroke, Rheumatic Heart Disease.
2. Demography & Family Planning - Demographic cycle, Population trends, Fertility related Statistics, Health aspects of Family planning, Contraceptive methods and Delivery System, National Family Welfare Programme.
3. Preventive Medicine in Obstetrics, Paediatrics & Geriatrics -Antenatal, Intranatal, Postnatal Care, Low Birth Weight, Infant Feeding, Growth & Development, Growth Chart, Under fives clinic, National Health Policy, Indicators of MCH care, School Health Services, Behavioral Problems, Geriatrics.

4. Environment & Health and Occupational Health- Purification of water & water Quality Standards, Air, Ventilation, Lighting, Noise, Radiation, Air Temperature & Humidity, Housing, Solid Wastes Disposal & Control, Excreta Disposal, Water Carriage System, Modern Sewage Treatment, Entomology Mosquito, Housefly, Lice, Itch mite, Cyclopes, Rat Flea, Rodents, Insecticides - Hazards, Diseases, Preplacement Examination, Measures for General Health, Protection of Workers, Prevention of Occupational Diseases, Legislation.

UNIT IV

1. Basic Medical Statistics - Censes, Vital Events, Legislation, SRS, Notification of Diseases, Measures of Dispersion & Centring, Sampling, Tests of Significance, Correlation & Regression.

2. Health Educations and Communication - Objectives, Principles, Aids, Practice of Health Education, Planning and Evaluation.

3. Health Planning - Management - International Health Organizations, Planning Cycle, Management Methods & Techniques, National Health Policy, Health Planning in India, Five Year Plans, Health Systems in India at Centre, State and District Levels, Panchayat Raj, Rural Development Schemes.

4. Health care of Community - Health Systems and National Health Programmes, Levels of Health care, Health for All, Primary Health Care, Health Care Delivery, Health Problems, Health Care Services and Systems, Voluntary Agencies, National Health Programme.

PRACTICALS

1. Insecticides - 10 + Models.
2. Universal Immunization Programme - 10 + Models.
3. Communicable Diseases - 10 + Models.
4. Insect Borne Diseases - 10 + Models.
5. Microscope Slides - 10 + Models.
6. Environment and Sanitation - 10 + Models.
7. Statistical Charts
8. Field Visits
 - a) Rural Health Centres.
 - b) Sewage Disposal Plant.
 - c) Water Filtration Plant.
 - d) Nature Cure Hospitals.
 - e) Yoga Institutes etc.

REFERENCE BOOKS :-

1. Text Book of preventive and Social Medicine-By J.E. Park & K. Park
2. Text Book of preventive and Social Medicine-By B.K. Mahajan & M.C. Gupta
3. Preventive Medicine by Dr. Ghosh.
4. Preventive Medicine by Dr. Yashpal Bedi.

PAPER IV - HEALTH AND HEALTH DIMENSIONS

Unit-I:

Health

Definition and Importance, Dimensions of Health Physical Health, Mental Health Social Health, Spiritual Health.

Unit-II:

Ancient theory of Disease

Multifactorial theory Supernatural theory
Germ theory
Yogic concept of disease.

Unit-III:

Yoga and Mental Health

Definition of Mental Health
Mental health in Yoga
Classification of Mental Disorder
Characteristics of Mentally Healthy Person. Mental health in total health
Determinants of mental health Obstructers of mental health Promotion of mental health

Unit-IV:

Holistic Health

Definition of Holistic Health Concept of Holistic Health.
Characteristics of Holistic Healthy Person.
Role of Yoga in Development of Holistic Health.
Yam, Niyam, Asanas, Pranayam, Pityharan, Dhrna, Dhyana, Samadhi.

PRACTICAL

Article writing and presentation

Reference Books:-

1. Misra, P.D.- Yoga and mental Health
2. Singh, Surendra & P.D. Misra- Health and Disease- Dynamics & Dimension
3. Joshi, Kalidas- Arogya
4. Yadav, Amarjeet & S.Tater- Yoga and Samagra Swasthya
5. Yadav, Amarjeet & S.Tater- Yoga and Total Health Rai D.N- Yoga Therapy: Body and Mind

PAPER V - PRACTISE OF YOGA

Unit-I: Yogic Sukshma Vyayam

Meaning and its Benefits-

Techniques of Yogic Suksham Vyayam, Precautions concerning the following Sukshma Vyayam:

Skandha Tatha Bahumul Shakti Vikashak Kriya, Bhujbandha Shakti Vikashak Kriya, Kohani Shakti Vikashak Kriya, Bhujballi Shakti Vikashak Kriya, Purnbhuj Shakti Vikashak Kriya, Manibandha Shakti Vikashak Kriya, Karprastha Shakti Vikashak Kriya, Kartal Shakti Vikashak Kriya, Anguli- Mul Shakti Vikashak Kriya, Anguli Shakti Vikashak Kriya.

Unit-II: Asanas

Techniques and Benefits of Asanas Types of Asanas in Sitting Posture, Precautions concerning the following Asanas: Pashchimottasana, Ardhamatsyendrasana, Gaumukhasana, Singhasana, Mandukasana, Kurmasana, Akarandhanurasana, Parvatasana, Vajrasana, Shashankasana, Yoga Mudrasana, Brahmamudrasana, Marjariasana etc.

Unit-III: Pranayama

Techniques of pranayama,

Benefits and Precautions concerning the following Pranayama: Bhramari Pranayama, Murcha Pranayama, Kapal Bhati, Pranayama, Bhastrika Pranayama.

Unit-IV: Shatkarma

Meaning Benefits and Precautions concerning the following Shatkarma: Danda Dhati, Bagi Kriya, Techniques and Benefits of Basti Kriya, Techniques and Benefits of Nauli Kriya, Techniques and Benefits of Kapal Bhati, Techniques and Benefits of Tartak.

PRACTICAL

Regular practice of above Sukshma Vyayam, Yogasana, Pranayama and Shatkarma.

Reference Books:-

1. Bramhachari, Swami Dharendra- Yogic Sukshma Vyayam
2. Swami Styanand, Asana, Pranayam, Bandha Mudra
3. Misra, P.D.- Yoga- An Introduction
4. Gupta, Rameshwar Das- Yoga Rashmi
5. Bhardwaj, Ishwar- Yogasana
6. Iyenger, B.K.S.- Pranayama, Kuvalyananda, Swami- Pran, Pranvidya

FOURTH SEMESTER

PAPER I-BASIC PHARMACOLOGY

UNIT-I

Introduction to Pharmacology

Definitions

Sources

Terminology use

Types:

1. Classification

2. Pharmacy-dynamics:

3. Actions, therapeutic-Adverse/ toxic, Pharmacokinetics:

4. Absorption, distribution, Metabolism, interaction,

5. Excretion- Review: Routes and principles of administration of drugs

6. Indian pharmacopeia

UNIT-II

CHEMOTHERAPY

Pharmacology of commonly used:

Penicillin

Cephalosporins

Aminoglycosides
Antibiotics-
Sulfonamides
Quinolones
Antiamoebic
Antimalarials
Anthelmintics
Antiviral & Antifungal agents
Antitubercular drugs
Antileprosy drugs
Anticancer drugs
Immuno- suppressants composition, action, Dosage, route, indications, contraindications, drug interactions, side effects, adverse effects, toxicity & role of nurse.

UNIT-III

Pharmacology of commonly used antiseptics, disinfectants and insecticides
Antiseptics: Compositions,
Action, dosage, route,
Indications, contraindications,
Drug interactions, side-effects,
Adverse effects, toxicity
Role of nurse- Disinfectants, Insecticides

UNIT-IV

Drugs acting on G I System

Pharmacology of commonly used
Antiemetic
Emetics Purgatives
Purgatives
Antacids
Cholinergic
Anticholinergics
Fluid and Electrolyte therapy
Antidiarrhoeals
Histamines
Composition, action, dosage, route,
Indications, contraindications, drug
Interactions, side effects, adverse effects, Toxicity & role of nurse .

Reference Books

1. ADR DRUG TODAY ELFIN DRUGS PVT LTD 1ST
2. AHMAD, IRFAN RAFFLE DENTAL SERIES: PHARMACOLOGY ARORA MEDICAL BOOK DIST. 1ST
3. ANAND, MAHINDRA KUMAR ADVANCE DRUG REVIEW ISSUE I. OCT.-DEC., ARORA MEDICAL BOOK DIST. 1ST

4. AULTON, M.E. PHARMACEUTICS THE SCIENCE OF DOSAGE FORM DESIGN CHURCHILL LIVINGSTONE 2ND
5. BADIYAL, D. ADR ADVERSE DRUG REACTIONS PEEPEE PUB. & DIS. 1ST
6. BAYER, ANTONY CLINICIAN'S GUIDE TO ASPIRIN CHAPMAN & HALL 1ST
7. BENNETT, P.N. CLINICAL PHARMACOLOGY CHURCHILL LIVINGSTONE 9TH
8. BHATTACHARYA, S. K. PHARMACOLOGY ELSEVIER 2ND
9. BILLINGSLEY, L. MELVIN PHARMACOLOGY REVIEW FOR NEW NATIONAL BOARDS A.I.T.B.S. 1ST
10. BRENNER, G.M. PHARMACOLOGY ELSEVIER 2ND

PAPER- II

MAGNET THERAPY AND CHROMOTHERAPY

UNIT-I

Magnet therapy: Definition of Magneto therapy, Historical highlights, Use of magnets upheld by Naturopathy, Magnetism in the Universe, Earth a huge natural magnet, Nature of Earth Magnetism.
 c) Earth magnetic effects on the human beings, Effects of Magnetism on living organisms, Bio-magnets- Biological experiments with magnets

Medical influence of magnetic field- Rheumatoid arthritis, hemiplegias, arthralgia, Neuralgias, Stimulation of nervous system, endocrine glands etc. Magnetotherapy, symptomatic relief, Combined treatments i.e. Magnetotherapy, Hydrotherapy, Massage, Diet & Yoga and the result of these combined treatments.

Magnets and their composition: Natural magnets and artificial magnets, Permanent magnets - classification of magnetic materials, Power of magnets, various qualities of magnets- low, medium and high power magnets and magnetic belts etc, Electro magnets - electromagnetic field on human behaviour, Electro magnets- for medical purpose -Electromagnetic treatment bed and hand Magnetiser,

foot magnetiser, vibroelectro massager, electro-magnetic chair etc. NonPulsating clinical Electro magnet.

Technique of application of magnets - North and South poles, local & general treatment and the Technique of application of Magnets in treatment of various common diseases.

Magnetised water and Magnetised oils-

Magnetised water in Nature, influence of magnetic field on the properties of water, method and preparation of magnetised water, dosage and therapeutic effect of magnetised Water .Method of preparation of magnetised oils and their application and therapeutic effects.

Advantages of Magneto Therapy , Magnetotherapy is a natural treatment - Use of Magnets as a preventive device, Clinical Reports from Indian and Foreign Magneto Therapists.

Magneto therapy and Acupressure- Acupuncture Points- Certain clinical case reports Utilisation of Acupuncture points in Magneto therapy.

Terminology - Technical terms related to Magnetotherapy.

Recent developments in Magnetotherapy.

PRACTICALS

Students should have demonstration classes in various types of Magnets, equipment and their clinical application.

1. Case Studies with record
2. Cases with bio-chemical reports

Reference Books—

1. Magneto therapy - Dr. H.L. Bansal
2. Magnetic cure for common diseases - Dr. R.S. Bansal, Dr. H.L. Bansal
3. The text book on Magneto therapy - by Dr. Nanubhai Painter
4. Magneto therapy and Acupuncture - Dr.A.K.Mehta
5. Electromagnetic treatment - Dr. H.L. Bansal
6. Magentic fields or healing by magnets - Dr. A.R. Davis and Dr. A.K. Bhattacharya of Naihat of West Bengal.

UNIT- II

CHROMOTHERAPY

Introduction: - Historical Highlights, Harmonic laws of the universe, Solar Family

Theory of light and force -

3. Chromophilosophy-Reflection, Refraction, Absorption-
4. The Source of light- the sun forming sources, the solar atmosphere- sun power- how the color effects are produced - influence of sun light on skin, muscles, digestive organs, Bones.
5. Chromo-chemistry - character of spectrum analysis, materials dicovered by the spectroscope , the spectrum- spectrum of grey and natural colour elements- spectra of elements of positive colours, chromatic repulsion and attraction.
6. Chromo-diagnosis and chromo-hygiene.

7. Chromo - therapeutics - the healing power of colour, healing power of red, yellow, orange, blue, Green and Violet, non-spectral colours, sun stroke action of sun light on micro-Organisms.
8. Practical Instruments for Colour healing- Blue, Green and Violet, Red, Pink, Yellow, Orange glasses- the solar thermoleum- the electro thermoleum, chromodisc, the chromolens- chromo light eradiator.
9. Directions to be followed during treatment with light.
10. Healing by means of substances charged with different coloured light-method of solarization of water, oils and food substances etc.
11. Chromo therapy prescriptions for different diseases.
12. Chromo – Mentalism, Bordeaux medicine.

PRACTICAL

Students should, have demonstration classes in various chromotherapeutic devices and their clinical application.

1. Case studies with record
2. Cases with bio-chemical reports
3. Demonstration of colour glasses & bottles.
4. Demonstration of instruments and equipments.

REFERENCE BOOKS-

1. The principles of light and colour- By Dr. E.D. Babbit
2. Human Culture and Cure in five parts- By Dr. E.D. Babbit
3. Colour therapy- By R.S. Amber
4. Healing through Colour- By Thea-Gimbel
5. The power of the rays-By S.G.J. Oseley
6. Colour Meditations- By S.G.J. Oseley
7. Colour and healing- By Gladya Mayer
8. Colour healing(Chromotherapy) - By Health Reserch Foundation (USA)
9. Practical colour Magic- By Raymond Buckland

UNIT III

AIR THERAPY

1. Composition of Air -Night and Day composition.
2. Ozone in the atmosphere.
3. Air Pollutants, their acceptable values
4. Physiology of Respiratory system.
5. Air baths (Cold and Hot)
6. Theory of Panchapranas and Nadis.

UNIT IV

SUN THERAPY (HelioTherapy)

1. History

2. Physiological and Chemical properties of Sunlight.
3. Effect of sunlight on vegetation and Micro-organism.
4. Rejuvenation during diseases.
5. General Sun Bath.
6. Dr. Rikli's method of Sun Bath.
7. Dr. Kuhne's method of Sun Bath.
8. Sun Bath through wet pack.
9. Sun bath of children and aged persons.
10. Sunbath with leaves-Atapasnana.
11. Oil sun bath (Abhyanga snana)
12. Sun Stroke.
13. Practice of Exercise in Sunlight.

Reference Books:-

1. All You Wanted to Know About Sun Therapy - Vijaya Kumar
2. Colour Therapy-Miracle of Sunrays - Rashmi Sharma and Maharaj Krishan Sharma
3. Science of Natural Life - Rakesh Jindal
4. Prakratik Chikitsa Sagar - Dr.Gaurishankar Mishra
5. Dhanwantari-prakrtik Chikitsank - Ganga Prasad Gaud "Nahar"

PAPER 3- FORENSIC MEDICINE AND TOXICOLOGY

UNIT I

Forensic medicine:-

Definition: forensic medico and its scope, Procedure of giving medical evidence with reference to Indian evidence act., Methods of identification of living and dead body – race, age, sex etc.

Death –medico legal aspects, certification of death, sudden death, causes, medico legal important signs of death, changes due to death and calculating time of death, Medico-legal autopsy, Medico-legal wounds, their classification and study and medico aspects, Examination of blood stains, hair and stains.

UNIT II

Miscellaneous causes of death form heat, cold, electricity, starvation etc., Violent asphyxia deaths-hanging, strangulation, suffocation and drowning, Sexual offences: - impotency and sterility, virginity, legitimacy, un-natural offences, medico legal aspects, Infanticide, Medico-legal aspect of insanity.

Toxicology:-General consideration of poisoning and classification, Actions of poison, factors, modifying their action, Diagnosis of poisoning, Treatment of poisoning in general.

UNIT III

Poisons:-

Corrosives, Non-metallic poises, Insecticides and weed killers, Metallic poisons, Organic irritant poisons, Somniferous poisons, Inebriate poisons, Deliria poisons, Drug dependence, Food poisoning, Spinal poisons, Cardiac poisons, Asphyxiates.

UNIT IV

Miscellaneous:-

Legal responsibilities: medical ethics, Responsibilities & duties of the medical practitioners to the state, Professional secrecy & privileged communication, Un-professional conduct, mal-practice, The rights & privileges & duties of medical practitioners, The factions of state-medical council and its relationship to Indian medical council, Medical ethics approved by Indian medical council, Similarities & difference between IMCC act IMC act.

PRACTICAL

1. Age estimation
2. Autopsies – 10
3. Skeleton remains
4. Spotters
5. Examination of injured
6. Alcoholic
7. Psychiatric.
8. Toxicology.

PAPER IV- DIAGNOSTIC METHODS IN YOGA AND NATUROPATHY

UNIT- I

1. Introduction to the science of facial expression
 - a) Historical highlights.
 - b) Definitions and scope of the science of facial expression.

2. Characters of the healthy body
 - a) Normal function
 - b) Normal figure
3. Foreign matter theory
 - a) Definitions of foreign matter.
 - b) The process of accumulation of foreign matter in the body.
 - c) Encumbrance.
 - d) Changes caused in the body due to the accumulations of foreign matter
 - e) General pathology of foreign matter

UNIT II

Nature: origin and cure of diseases of children and their unity

1. The Bad habits supports the accumulation of foreign matter in the body – tobacco, alcoholic, drinks, coffee, tea, opium, etc.

Drug addictions –pethedine, heroin, injection etc, suppression of diseases v/s elimination of morbid and diseased germs from the system.
2. Types of encumbrance –front encumbrance, right – side encumbrance front and right – side encumbrance, left side encumbrance and mixed or whole encumbrance, their description, general characters and possible diseases in the concerned encumbrance and their treatment.
3. Diseases of the internal organs and their treatment.
4. Process of elimination of foreign matter
 - a) Importance of Nature Cure treatments.
 - b) The digestive process- natural dietetics.
5. Methods to be followed to increase the vitality of the body.
6. The importance of Nabhi Pareeksha, the methods of Nabhi Pareeksha & the techniques of correction.

UNIT III

IRIDIOLOGY:

1. Introduction of iridology
 - a) Definitions of iridology
 - b) Historical highlights.
 - c) Comparison of other systems (allopathy) homoeopathy, ayurveda , unani, Diagnostic methods
 - d) Anatomy of the leis
 - e) Theory in application

- f) Theory of healing crisis
- g) A uniform division and classification of diseases

UNIT IV

1. Instruction in methods of application:-

- A. Technique in iris reading
- B. The normal and abnormal iris, color of the iris
- C. The vibratory theory
 - i). Study of density of the Iris
 - ii). Key to Iridology, iris charts brought up to date, zone areas, sectoral division

2. The iris reveals the cause of disease

3. Comparison of fermentation & inflammation

4. Interpretations of Iris manifestations

- a. Types of inflammation
- b. Inherent lesions and weakness
- c. Acidity ad
- d. Toxic settlements
- e. Nerve ringe
- f. The lymphatic rosary
- g. Injuries and operations
- h. Itch or psora spots in the iris-the surf rim
- i. The radial-solaris
- j. Tumours
- k. The sodium ring
- l. Anemia in the extremities and the brain
- m. Drug and chemicals appearance in the Iris and their poisonous effects in the body –arsenic, bismuth , bromides , coaltar products, ergot , glycerin, iodine, Iron ,lead, mercury, opium, phosphorous , quinine , salicylic, acid, sodium, strychnine, sulphur, turpentine, vaccines etc.

5. Case histories according to Iridology

6. Advance research in Iridology

- a. reflex areas and remote symptoms
- b. stomach and intestinal disorders, the principal causes, the principal disorders remedial measures.

PRACTICALS:

Clinical classes and hospital. Case studies 25 with record. Demonstration of equipments.

Reference Books:-

1. Sharma, Suresh Chandra- ModernDiagnosis
2. Macleod (ed.)- Davidson's Principles and Practices ofMedicine
3. Bakhru,H.K. - Handbook of NatureCure Jussawala, J.M.- NatureTherapeutics

UNIT-I

Concept of body, health and disease; concept of Yoga; Pancha Kosa, the basis for the IAYT, Pancha Kosa practices of Annamaya, Pranamaya, Monomaya, Vijianamaya and Anandamaya kosas.

UNIT-II

Health and Yoga Therapy through Yoga Vasishtha: Concepts of Adhi and Vyadhi as found in Yoga Vasishtha; the remedial measures; Handling the mind and emotions-enhancing the power of discrimination.

UNIT-III

Health and Yoga Therapy through Gheranda Samhita: Historical aspect; life of Gheranda; the dimensions of Hatha Yoga, contributed by Gheranda in comparison to other texts; study of the text and their usefulness in modern times.

UNIT-IV

Health and Yoga Therapy through Hatha Ratnavali, study of the text and their usefulness in modern times.

PRACTICAL

Yogic practices of:

1. Hatha Yoga
2. Hatha Ratnavali
3. Yoga Vasishtha

Books Recommended

1. Bramhachari, Swami Dharendra- YogicSukshmaVyayam
2. Swami, Satyananda- Asana, Pranayam,BandhaMudra
3. Misra, P.D.- Yoga: AnIntroduction
4. Kailvalyadham-GherandSamhita
5. सरस्वती, निरंजनानन्द, घेरण्डसंहिता, योगपब्लिकेशन्स ट्रस्ट, मुंगेर,बिहार,
6. घेरण्ड, घेरण्डसंहिता,संस्कृतिसंस्थान, बरेली (उ०प्र०),
7. Gharote, M.L., Hathapradipika, The Lonavla Yoga Institute, Lonavla, India.

THIRD YEAR (SEMESTER-V)

PAPER I - DIETETICS

UNIT I

DIETETICS

1. Concept of health in naturopathy
2. Dietetic principles in naturopathy
3. Concept of wholesome diet
4. Medicinal values of books
5. Natural qualities/properties/ character of foods in naturopathy/ ayurveda / modern nutrition

UNIT II

Natural food and health

1. Importance of green vegetables ,other vegetables, fruits, and the ingredients
2. Chemical composition of different raw juices and their effects and uses.
3. Wheat grass, beetroot, cabbage carrot, cucumber, lettuce, garlic, onion, lemon, Papaya, pineapple,
4. Mango, tomato, pomegranate, grapes, apple, bitter gourd, ashgourd, Knolkhol, pumpkins etc.
5. Sprouts, their nutritive values and methods of sprouting.
6. Food values in raw states germinated form and cooked form
7. Comparison with raw and cooked foods
8. Food combination and health
9. Health and herbs.
10. Naturopathic hospital dietetics and their classification

UNIT III

Disease management with diet

Diabetes, renal diseases, anemia, PEM, Peptic ulcer, Constipation, Mal absorption syndrome, liver diseases like jaundice, fatty liver etc.HBP, LBP, Atherosclerosis, gall bladder disease, cancer, tuberculosis and arthritis, food allergy and dietary management, diet and obesity, dietary modification for specific condition, dietary reactions for a different population groups with special reference to pregnancy, lactation, infancy, seasonal changes in the dietary pattern in Ayurveda /Naturopathy and modern nutrition, food hygiene and health, methods of cooking and nutrient losses and preservation , naturopathic approach towards vegetarian and non-vegetarian food, harmful effects of the food colours, , preservatives, pesticides, artificial manures dietary fiber and its therapeutic effects e.g. constipation, ano-rectal disorders, GIT disorders , D.M. etc, pediatric nutrition

UNIT IV

Nutrition and life span

Green vegetables and fruits, non-vegetarian diet :its positive and negative aspects in naturopathy, customs and manners of eating: different views. Effect of emotional state on food utilization kalpa therapy in naturopathy: grapes, mango, matha, milk etc.

Practicals

1. Visit to the dietetic department of the hospital.
2. Menu planning using natural foods in general patients.
3. Demonstration of sprouts
4. Preparation of low cost balanced for different population groups using natural foods
5. Modification of normal diet in consistency –liquid full soft
6. Canteen duties in naturopathy hospital
7. Knowledge of satvic food preparation in nature cure hospital
8. Visit to different nutrition centers like NIN, Hyderabad, CFTRI (MYSORE)

REFERENCE BOOKS:-

1. Swaminathan (1995): "Food & Nutrition", The Bangalore Printing & publishing co ltd., Vol I, Second Edition, Bangalore.
2. Srilakshmi (1997): "Food Science", New Age International (P) Ltd, Publishers, Pune.
3. Mudambi .R. Sumathi & Rajagpal M.V (1983), "Foods & Nutrition", Willey Eastern Ltd, Second Edition, New Delhi.
4. Thangam.E.Philip(1965): Modern Cookery, Orient Longman, II edition. Vol II, Bombay.

PAPER II

Management of Diseases

UNIT-I

Parasitic Diseases :-

- a) Malaria, Amoebiasis
- b) Ascariasis , Anchylostomiasis, Whipworm, thread worm and tape worm
- c) Filariasis,

Viral Diseases :

- a) Measles, mumps, chicken pox small pox
- b) Herpes simplex ,herpes zoster
- c) Rabies, polio-myelitis
- d) Influenza ,viral diseases of respiratory system

Bacterial Diseases :-

- a) Streptococcal ,staphylococcal, meningococcal infections
- b) Tuberculosis tetanus and gas gangrene
- c) Whooping cough, diphtheria, typhoid,
- d) Bacillary dysentery, cholera, food poisoning

Nutritional Diseases :-

- a) Vitamin deficiency diseases- beri beri, pellagra, scurvy
- b) Deficiency disease of vitamin A, D, E, Folic acid, B12, pyridoxine and riboflavin.
- c) Hypervitaminosis
- d) Obesity and diet therapy

Water and Electrolyte Balance :-

- a) Acidosis, alkalosis, sodium, and potassium imbalance

UNIT-2

Haematology :-

- a) Iron deficiency, sideroblastic & megaloblastic anaemia
- b) Angemia-secondary to chronic and systemic diseases
- c) Haemolytic Anemia, thalassemia , sickle cell anemia
- d) Aplastic anemia, polycythemia, leukaemia
- e) Bleeding disorders, hemophilia
- f) Blood group and transfusions
- g) Reynaud's Phenomenon
- h) Thrombocytopenia
- i) Thrombosis

Metabolic and Endocrine Disorders:-

- a) Hypothalamus – Pituitary disorders
- b) Thyroid , parathyroid and adrenal disorders

- c) Pheochromocytoma, Hypogonadism, diabetes mellitus
- d) Basics of hyperlipidemia, amyloidosis, hemochromatosis

Respiratory Disorder:-

- a) Acute tracheitis, bronchitis, pneumonia
- b) Lung abscess, bronchiectasis
- c) Fungal- aspergillosis
- d) Allergic – Bronchial asthma, Pulmonary eosinophilia
- e) Chronic bronchitis , emphysema, bronchogenic carcinoma
- f) Pleural effusion, empyema, pneumothorax, hydropneumothorax
- g) Pulmonary fibrosis, collapse of lung
- h) Pneumoconiosis , respiratory failure, adult respiratory distress syndrome (ARDS)

Disease of Alimentary System:-

- a) Diseases of mouth, esophagus, dysphagia
- b) Hiatus hernia , reflux esophagitis, achalasia cardia
- c) Carcinoma of esophagus, carcinoma of stomach
- d) Peptic ulcer, upper and lower G.I. bleeding
- e) Zollinger-Ellison syndrome, malabsorption syndrome
- f) Protein – losing enteropathy , traveller's diarrhea
- g) Ulcerative colitis , carcinoma of colon
- h) Constipation and abuse of laxatives
- i) Liver – hepatitis, chronic , hepatitis, cirrhosis, hepatic failure , portal hypertension , alcoholic liver, biliary cirrhosis, ascites , tumors of liver, alpha-fetoproteins, liver function tests
- j) Cholecystitis , gall stones
- k) Acute and chronic pancreatitis

Renal Diseases:-

- a) Renal function tests, physiologic anatomy of kidney
- b) Acute glomerulonephritis, Acute renal failure
- c) Acute tubular necrosis, chronic nephritis , nephritic syndrome
- d) Pyelonephritis, dialysis
- e) Renal involvement in systemic diseases

UNIT-3

Physical and Chemical Agents:-

- a) Temperature regulation, heat stroke , heat exhaustion
- b) Frost bite , air travel , electrical injuries
- c) Venomous bites and stings

Cardio- vascular system:-

- a) Congestive cardiac failure , arrhythmias
- b) Rheumatic fever, rheumatic valvular diseases
- c) Endocarditis , ischemic heart diseases
- d) Congenital heart diseases VSD, ASD ,PDA, coarctation
- e) Fallot's tetralogy , pericardial diseases
- f) Systemic and pulmonary hypertension , aortic aneurysm
- g) Pulmonary embolism, cardiac arrest, resuscitation syncope
- h) Peripheral vascular diseases

PRACTICAL

Demonstration of sign and symptoms and diagnosis of the patients of above diseases in the patients.

Reference Books:-

1. Sharma, Suresh Chandra- ModernDiagnosis
2. Kublyanand- YogaChikitsa
3. Joshi, Kailash- Arogya ThroughYoga
4. Singh, Surendra & P.D. Misra - Health ad Disease- Dynamics andDimensions
5. Misra, P.D.- Yoga and MentalHealth
6. Singh, R.H.-Yoga and YogicChikitsa
7. Sri Anand- The Complete Book of Yoga Harmony of Body &Mind
8. Chandrasekaran, K- Sound Health throughYoga
9. Yadav, Amarjeet- Medical Application ofYoga

PAPER III

ACCUPRESSURE AND ACCUPUNCTURE

UNIT I

- 1) Definition, concepts of acupuncture.
- 2) Traditional and modern theories of acupuncture.
- 3) Material and methods of acupuncture.
- 4) Principles of acupuncture.
- 5) Rules for the selection of acupuncture points.
- 6) Contraindications and complications of acupuncture.

UNIT II

The concept of meridians:

- a) Lung Meridians (Lu)
- b) Large intestine Meridians (Li)
- c) Spleen Meridian (SP)
- d) Stomach Meridian (ST)
- e) Heart Meridian (H)
- f) Small intestine meridian (Si)
- g) Urinary bladder meridian (UB)
- h) Kidney Meridian (K)
- i) Triple warmer meridian (TW)
- J) Gall Bladder meridian (GB)
- k) Liver Meridiahn (Liv)
- l) Governing vessel Meridian (GV)
- m) Conceptional vessels Meridian (CV)
- n) Eight extra Meridians.

UNIT-III

The extra-ordinary points.

Diagnostic methods (both acupuncture and modern)

Auriculo therapy scalp acupuncture.

Moxibustion.

Stimulation in Acupunture.

Sujok acupuncture (Korean technique)

Acupuncture therapeutics.

Acupuncture anesthesia.

Rreflexology & Zone therapy:-What is reflexology, history and development, How does reflexology work Body & its reflex zones Application, indications and contraindications, Preventive effects of reflexology.

Acupressure:-What is acupressure its origin & development physiological effects of acupressure therapeutic uses of acupressure.

UNIT-IV

Air therapy

Composition of air –Night and day composition, Ozone in the atmosphere, air pollutants, their acceptable value, Physiology of respiratory system., Air baths (Cold and Hot), Theory of pancha pranas and Nadi.

Pranic Healing

Reiki

PRACTICAL

- a. Demonstration of Needling techniques and Electro-stimulation, Moxibustion.
- b. Each Student should give treatments to at least 20 patients during the practicals.

REFERENCE BOOKS-

1. Clinical Practice of Acupuncture - By A.L. Agrawal
2. Clinical Acupuncture - By Dr. Anton Jaysurya
3. Principles and practice of Acupuncture - By Dr. J.K. Patel
4. Health in your hands - By Devendra Vora
5. Shiatsu - By Ohashi
6. Misra Satyendra- Introduction to Reflexology

PAPER IV

DIAGNOSTIC METHODS- I

(NATUROPATHIC DIAGNOSIS)

UNIT-I

FACIAL DIAGNOSIS

1. Introduction to the science of facial expression.
 - a) Historical highlights.
 - b) Definition and scope of the science of facial expression.

2. Characters of the Healthy Body.
 - a) Normal functions.
 - b) Normal Figure.

3. Foreign matter theory:-
 - a) Definition of foreign matter.
 - b) The process of accumulation of foreign matter in the body.
 - c) Encumbrance.
 - d) Changes caused in the body due to the accumulation of foreign matter.
 - e) General pathology of foreign matter.

4. The nature: origin and cure of diseases of children and their unity.

5. Bad habits support the accumulation of foreign matter in the body-tobacco, alcoholic drinks, coffee, tea, opium etc.
Drug addictions -Pethedine, Heroin, Injection etc., Suppression of diseases viz elimination of morbid and diseased germs from the system.

UNIT II

Encumbrance

1. Types of encumbrance - Front encumbrance, - back encumbrance front and right side Encumbrance, left side encumbrance and mixed or whole encumbrance, their description, general characters and possible diseases in the concerned encumbrance and their treatment.

2. Diseases of the internal organs and their treatment.

3. Process of elimination of foreign matter.
 - a) Importance of Nature Cure treatments.
 - b) The digestive process-natural dietetics.
 - c) Artificial outlets of elimination

4. Methods to be followed to increase the vitality of the body.
5. The importance of Nabhi Pariksha, the methods of Nabhi Pariksha & the techniques of correction.

UNIT III

IRIDIAGNOSIS :-

1. Introduction of iridology :
 - a) Definition of Iridology-;
 - b) Historical highlights.
 - c) Comparison of other systems - Allopathy , Homeopathy , Ayurveda, Unani etc. Diagnostic methods.
 - d) Anatomy of the Iris.
 - e) Theory in application.
 - f) The theory of healing crisis.
 - g) A unit form division and classification of diseases.
 - h) Philosophical phase.
 - i) Theoretical phase

UNIT IV

1. Instructions in Methods of Application :-
 - a) Technique in Iris reading.
 - b) The normal and abnormal Iris, colour of the Iris.
 - c) The Vibratory theory.
 - II. Study of density of the Iris.
 - III. Key to Iridiology.
 - a) Iris charts brought up to date.
 - b) Zone areas.
 - c) Sectoral Division.
2. Comparison of fermentation viz inflammation.
3. Interpretations of Iris manifestations I.
 - a) Types of inflammation
 - b) Inherent (Lesions and weakness)
 - c) Acidity and Catarrh
 - d. Toxic settlements
 - e. Nerve Rings
 - f. The Lymphatic rosary
 - g. Injuries and operations
 - h. Itch or Psora spots in the iris - the surf rim
 - i. The radii- solaris
 - j. Tumours
 - k. The sodium ring
- I. Anaemia in the extremities and in the brain. Drugs and chemicals appearance on the Iris and their poisonous effects in the body Arsenic, Bismuth, Bromides, Coaltar products, Ergot, Glycerin, Iodine, Iron, Lead,] Mercury, Opium , Phosphorous, Quinine, Salicylic acid, Sodium, Strychnine, Sulphur, Turpentine, Vaccines etc.
- II. The iris reveals the cause of disease.
4. Case histories according to Iridology.
5. Advance research in Iridology.

- a) Reflex areas and remote symptoms.
- b) Stomach and intestinal disorders, the principle causes, the principle disorders & remedial Measures.

PRACTICAL

Clinical classes and Demonstrations in the Nature Cure Hospital, Case Studies 25 with Record.
Demonstration of Equipments.

Recommended Text Books :-

1. Science of Facial Expression - By Louis Kuhne
2. The New Science of Healing - By Louis Kuhne
3. The Science and Practice of Iridology - By Bernard Jensen
4. Iridiagnosis and other Diagnostic Methods. - By Henry Lindlahr

REFERENCE BOOKS :-

1. Iridology : A Guide to Iris Analysis and Preventive Health Care - By Adam J. Jackson
2. Iridology: How to Discover Your Own Pattern of Health and well being Through the Eye- By Dorothy Hall
3. Iridology : A Complete Guide to Diagnosing Through the Iris and all related forms of treatment -By Davis and Farida.
4. Iridology : Alternative Health Series - By Adam J. Jackson
5. Vision of Health: Understanding Iridology- By Jensen, Bernard and Booden, Donald.
6. Eyes Talk: Through Iridology Better Health- By Vriend Joha.

PAPER V-Panchkarma

UNIT I-

Pancha Karma : Pancha Karma, its place in the therapy, Samsodhana and samsamana, scope and importance of Pancha Karma, Sadupakramas and Panch Karma Therapy: Sat Karmas of Yoga Tradition and Pancha Karma as purificatory measures and principles of nature cure practices. Pancha Karma Kala vichar, Ashtanga Ayurveda evum Pancha Karma, Yogya and ayogya of Pancha Karma, special qualities of vaidya dealing the Pancha Karma, common pathya and apathya of Pancha Karma. Snehana Karma Sneha and the properties and sources of Snehana Dravyas, Snehopaga durgs; The indications, contraindications, Procedures, types and schedule of Snehana; Features of adequate, inadequate and excessive oleation, Snehana as independent therapeutic measures

UNIT II-

Bahya Snehana • Abhyanga (Massage): Its types, methods, indications, contraindication and duration. Physiological and anatomical implications of massage therapy including lymphatic drainage, direction of blood circulation, origin and insertion of muscles and location of joints. Medium of Abhyanga-Snigdha ruksha. Massage oils. Direction and degree of pressure of massage. • Parisheka: Affusions, Udavartana, Udgharshana, mardana and Samvahana-their definition, specific uses and indications. • Avagaha, Kavalagraha and Gandusa: Their definition, types, medicaments, properties and uses. • Lepa (medicinal plaster), its types-Pralepa, Pradeha and Aalepana; Upanaha (Poultice) methods, drugs used and indications. • Pichu- Definitions, uses and types yonipichu, nasapichu, gudapichu; Dhupana and gandhanathe material used and their significance; Aksi Tarpana and Vranapurana method, indications duration signs and symptoms of proper and improper Tarpana

UNIT III-

Internal Snehana Accha Snenapana and Vicharana types, the preparations used and dosage schedule. Swedan Karma : Swedana, The properties and sources of Swedana Dravyas, Swedopaga drugs; The indications contraindications procedures, types and schedule of swedana; Features of adequate inadequate and excessive sudation swedana as independent therapeutic measure. Sagni Sweda : Sankara, Prastra, Nadi, Pariseka, Kuti etc. Tapa Sweda Vs. Usma sweda consideration, Kati vasti, Janu vasti, Manya vasti and Urah vasti. Niragni Sweda : With special reference to Vyayama (exercises) and Atapa Sevena (Exposure to sun rays), their types, indications and contraindications, with the knowledge about the physiological changes related with exercise and sunlight exposure e.g. the changes related with exercises and sunlight exposure e.g. the changes in muscular metabolic systems, respiration and cardiovascular changes, state of body heat, salt and electrolyte changes.

UNIT IV-

Upakalpaniya : Detailed knowledge about the materials, drugs, equipments and instruments used Panch Karma therapy and physical medicine, preparation of Peyadi samsarjan karma. Pancha Karma Sharira 1. Concept of Twaca, Kala, Asaya, Kosta, Sakha, Srotas, Dasa Sarira Pranayatana, Shatachakra, Nadi, Peshi, Snayu, Sandhi and their implication in the practice of bio-purificatory and rehabilitative procedures of Panch Karma. 2. Membrane physiology, transport across cell membrane, diffusion, factors affecting channels of cell membrane, osmosis across selectively permeable, membrane active transport and its mechanism, membrane potentials, Role of ions in Action potential as relevant to Sansodhana Karma. 3. Digestion, absorption and assimilation of lipids, Lipid metabolism plasma lipids, Triglycerides, phospholipids and cholesterol, their anatomical and physiological significance in the body as relevant to Snehana Karma. (2) 4. Body temperature and its regulation, Heat production and heat loss, heat transfer with in the body. Flow of blood and heat transfer, sweating and its regulation by autonomic nervous system other aspects of bio-purification and related mechanisms. 5. Concept of 'Gut Brain' its relevance to Vata System and Vasti Therapy.

PRACTICAL

Demonstration Panchkarma techniques and instruments.
Demonstration and clinical applications of panchkarma.

Reference Books :

1. Relevant portions of Charak Samhita.
2. Pancha Karma Therapy by Prof. R.H. Singh
3. Panch Karma Chikitsa by Dr. H.S. Kasture
4. Kayachikitsa Vol. I by Prof. R.H. Singh
5. Yoga and Yougiki Chikitsa by Prof. R.H. Singh
6. Physical Medicine and Rehabilitation.

SEMESTER VI

PAPER- I MANIPULATIVE THERAPIES

UNIT I

1. Introduction and History of Massage.
2. Rules, Regulations and Characteristics of Masseur
3. Structures especially concerned in massage and parts of the body to be specially Studied for the purpose is as follows:
 - a) Skin
 - b) Muscular System
 - c) Heart and Circulation
 - d) Nervous System
 - e) Skeletal System Including joints

UNIT II

1. Effects of the pressure of hand and lubricants on the following systems:-
 - a) Skin
 - b) Muscular System
2. Nutrition and Development Excitation of massage & contraction of massage.
 - a) Increase of muscular electro-excitability,
 - b) Removal of the fatigue from muscle.
 - c) On the ligaments and skeletal system
 - d) On the Circulatory system
 - f) On Respiration - Increase of respiratory activity and increase of tissue respiration.
 - g) On GIT-Improvement in appetite, improvement in secretion of digestive fluids, absorption and improvement in peristalsis.
 - h) Excretory System
 - i) Powder Massage - merits and demerits.
3. Getting crisis through massage (Side effects and benefits)
4. Basic therapeutic massage techniques, indications and contraindications of massage while applying to the patients.

UNIT III

1. Massage and its effects on:-
 - a) Nutrition
 - b) Haematogenesis
 - c) Phagocytosis
 - d) Increase in the number of blood corpuscles.
 - e) Absorption of increased inflammatory exudate, change in the weight of the person, obese or emaciated.
2.
 - i) Different Massage manipulations, classification and their detailed explanation, uses and contra-indications.
 - ii) Manipulative treatments in stress management
 - iii) Shiatsu in manipulative therapy (Acupressure)
 - iv) Manipulations and life extension.

v) Dry brush Massage

3. Movements of Joints:- i) Flexion

ii) Extension, Abduction, Adduction, Supination & Pronation, Circumduction, Deviations - Medial and Lateral, Opposition.

UNIT IV

1. Massaging in local areas under special circumstances - Massage to Abdomen, Massage to liver, Massage to Stomach, Massage to heart, Massage to head, Massage to spine, Special types of Massage in different diseases.

2. Massage to women.

3. Massage to infants and children.

4. Massage for prevention of diseases and maintenance of natural beauty.

5. Ayurvedic Massage-Technique, Methods and Manipulations.

6. Chiropractic:- Origin & aims of Chiropractic, X-Ray Technique and Chiropractic, Importance of spine in Chiropractic, Physiological effects of Chiropractic, Spinal Manipulative Therapy, Chiropractic Examination, Chiropractic treatments in various Diseases.

7. Osteopathy:- Definition & the Basic principles of osteopathy, Relation of osteopathy to Musculo-skeletal system.

8. Aromatherapy:- Definitions, Origin and History of Aroma therapy, Essential Oils and Its types, extraction of essential oils, distillation, cold pressing or expression, solvent extraction, storage, recognition, selection and mechanism of essential oils, Carrier oils - Almond, Apricot, Avocado, carrot, corn, primrose, grapeseed, hazelnut, Jojoba, Olive, Peanut, safflower, sesame, Soyabean & sunflower oil, Different methods of using essential oils- inhalation, diffusers, vaporizers, massage, baths, foot bath, pot pourri, compresses, oral intake, beauty treatment, room sprays, insect repellents etc, Description of different essential oils & their benefits, The best essential oils - The five fragrance categories - green, floral, citrus, Woody & Spicy and mixing of Aroma Oils & Equipment required for Mixing Oils, Aroma Oils for common problems and their therapeutic properties, Precautions, ill effects and careful handling of essential oils, Contraindications- Oils to be avoided in particular problems.

PRACTICAL

1. 35 demonstration classes
2. 10 demonstrations in Panchakarma
3. Each student should do 35 massages

Reference Books:-

1. Massage Books - By George Downing
2. Massage - By Constant Young
3. Massage Therapy - By Dr. J.H. Kellog
4. The Complete Book of Massage - By Clare Maxwell Hudson
5. Step by Step Massage - By Carole Me. Gilvery and Gini Reed
6. The Book of Massage - By Luinda Lidell with Sarathomas, Carola Berb Ford Cooke and Anthony Porta
7. The Complete step-by-step guide to eastern and western Massage to Common Ailments - By Penny Rich
8. Baby Massage - The Magic of Loving Touch - By Auckett, Anelia D

PAPER-II

PSYCHOLOGY AND BASIC PSYCHIATRY

UNIT I

- I. Definition and brief history of Psychology.
- II. Biology of Behaviour: Typical behaviour patterns, Sociobiology, Brain and Behaviour.
- III. Sensory process and Perception.
 1. Vision, Hearing, Smell, Taste, Skin senses.
 2. Perceptual Process - Attention from perception, visual depth perception, Consultancy, Movement perception, Plasticity, individual difference.

UNIT II

1. Principles of Learning: Classical conditioning, Instrumental conditioning, cognitive learning etc.
2. Memory: Theories about memory, Forgetting and Amnesia, Improving your Memory.
3. Thinking and Language: The thinking process, concepts, Problems solving, Decision making, Creative thinking, Language Communication.
4. Motivation: Theories of motivation, Biological motivation, Social motives, Motives to know and to be effective, Frustration and conflict of motives.

UNIT III

1. Emotion and Stress: Expression and perception of Emotions, physiology of emotion, Stress Theories of Emotion.
2. Social Perceptions, Influence and Relationship: Social perception social influence, social relationship.
3. Attitudes: The Nature of attitudes, the measurement of attitudes, attitude theories, Factor in attitude change, attitudes and behavior.
4. Development during infancy and childhood: Methods of studying development, infancy, early childhood and later childhood.

UNIT IV

1. Development during Adolescence, Adulthood and Old age: Adolescence, Youth, Early and Middle adulthood, Old age.
3. Personality: Type and Trait theories of personality, Dynamic personality theories, humanistic theories, learning and behavioural theories of personality.
4. **Abnormal Psychology (Psychiatry)** : Abnormality in everyday life, The language of Abnormality, General causes of abnormal Behaviour, Classifying Psychological Disorders: Clinical syndromes, Brain Syndrome, Psychoses, Neuroses, and Personality disorders, Psychoneuroses, Hysteria, Anxiety state and Neurasthenia, Other forms of Psychoneuroses (OCD, Phobias etc.), Treatment of Psychoneuroses - Psychotherapy and its procedures, Other therapies, Psychoanalysis and related school, Psychoses, Schizophrenia, Mania - Depressive Psychoses, Involutional Melancholia and Paronia, Alcoholic Mental Disorders, Toxic and Organic Psychoses, Epilepsy, Mental Deficiency, Antisocial personalities and crime.

5. Therapy for Psychological distress:

1. Positive Psychotherapy & other Psychotherapies: Psychoanalysis, Behaviour therapy, Logo therapy, Conversation therapy, Gestalt therapy and Primal therapy, Transactional analysis.
2. Positive Psychotherapy and its practical application for various conditions.

6. Co-relation of Psychology, Mental health and Yoga.

PRACTICAL

Practical demonstration of diagnosis, Case taking and counselling.

BOOKS RECOMMENDED:

1. Introduction to Psychology - By Clifford T. Morgan & Richard A. King
2. Abnormal Psychology - By James D Page
3. Positive Psychotherapy - By Nossrat Pesseschkian
4. Psychologies, Mental Health and Yoga - By A.S. Dalal
5. General Psychology - By J.P. Guilford
6. A brief Introduction to Psychology - By Clifford T. Morgan

PAPER-III
FUNDAMENTALS OF AYURVEDA

UNIT I

- 1) Brief history of Ayurveda
- 2) Introduction of Ayurveda Definition and Evaluation of Ayurveda Important works on Ayurveda
- 3) Astanga of Ayurveda

UNIT II

Panchmaha Bhoota Siddanta

- a) Darsana Sankhya - Yoga-Vaisheshika - Nyaya and Vedantha Darsanas
- b) Inter-relation between Yoga, Nature cure & Ayurveda
- c) Composition of Universe
- d) The concept of Pancha Mahabhootas - Prithvi-Aap-Tejas-Vayu-Akash
- e) Manovignana

UNIT III

1. Basics of Shareera Vignana Dosha, Dhatu, Mala, OJAS, Agni, Ama, Srotas Concepts of Agni.

2. Prakriti Vignana

3. Classification of Individuals into Seven categories

(Prakruthi) Swastha Vrittam

- a) Dinacharya
- b) Raticharya
- c) Ritucharya
- d) Vegadharanam
- e) Sadvritha

4) Astavidha Auhara sevana niyarnas

Importance of Tryopasthambha - Ahara, Nidra, Brahmacharya

5) Roga Vignanam

- a) Vyadhi and - Classifications of Vyadhi
- b) Nidana Pachaka - Nidana - Poorva Roopam - Roopam Upasayam and Samprapti
- c) ASTHI Sthana Pareeksha

d) Concept of Kriyaakaals - Sanchaya - Prakopa - Prasara - Sthaana Samsraya - Vyakti – Bheda

UNIT-IV

1) Concept of Arogya and Roga (Explanation about Hitaayu and Ahitaayu)

- a) Chikitsa Siddantha
- b) Chikitsa Vyakya - Paribhasha - Paryayas
- c) Chikitsa Purusha
- d) Chikitsa Paadas
- e) Samanya Chikitsa Siddanthas

2) Dravyabhoota Chikitsa and Adravya Ehoota Chikitsa

Explanation of Daiva Vyapaashraya and Yukti Vyapaashraya
Satvaavojaya Chikitsa.

3) Shodhana Karma

Pancho Karma

Poorva Karma

Pradhana Karma

4) Samsarjana

5) Pathya Apathya Vichara

6) Theory and Practice of Nadi Pareeksha.

Reference Books:-

1. Ayurveda:- The Science of Self Healing by Dr.Vasant Lad
2. Ayurveda and the Mind by Dr. David Frawley
3. Ayurveda and Marma Therapy: Energy Points in Yogic Healing by Dr. David Frawley, Dr. Subhash Ranade and Dr. Avinash Lele

PAPER IV -DIAGNOSTIC METHODS II
MODERN DIAGNOSTIC AND FIRST AID

UNIT I

Clinical Diagnosis Examination of Patients:-

1. Approach to a patient
2. History taking and case sheet writing
3. Symptomatology
4. Examination of Vital Data
5. Importance of height, weight, abdominal girth
6. General physical examination
7. Examination of breasts, back, spine and genitals
8. Systemic examination of the patient
 - a) Abdomen (Digestive system)
 - b) Cardiovascular System
 - c) Respiratory System
 - d) Renal system
 - e) Central Nervous system
 - f) Locomotor system
 - g) Examination of ear , nose and throat
 - h) Gynaecological examination
9. Provisional Diagnosis

UNIT II.

Routine and special Investigations:-

1. Laboratory Investigation
 - a) Urine analysis
 - b) Stool examination
 - c) Blood examination
 - i) Peripheral smear, Total WBC Count, Differential WBC Count
 - ii) Erythrocyte sedimentation rate (E.S.R), Hb Estimation
 - iii) Blood Sugar, Blood Urea, Serum uric acid, Serum cholesterol, Serum lipid profile, Serum creatinine.
2. Radiological Investigation :-
 - a) Plain chest X-Ray
 - b) K.U.B. X- Ray
 - c) Lumbar and cervical spine
 - d) Skull and paranasal sinuses
 - e) Joints
3. Contrast Radiography:-
 - a) Cholecystography
 - b) Pyelography
 - d) Angiography
 - e) Bronchogram
4. Electrocardiography.
5. Echo- Cardiography.
6. Coronary angiography
7. Electro- Encephalography
8. Bio-chemical investigations-
 - a) Liver function tests

- b) Creatinine clearance test
- c) Vanillo-mandellic acid (VMA) excretion test in urine
- d) SGOT and SGPT
- e) LDH
- f) CPK
- 9. Diagnostic Paracentesis
- 10. Diagnostic Thoracocentesis
- 11. Lumbar Puncture and CSF analysis
- 12. Radio-active Iodine up-take studies
- 13. Thyroid T3, T4 estimation
- 14. Diagnostic skin tests
- 15. Endoscopic procedures
- 16. Ultra-sonography
- 17. Computerised tomographic scan (CT Scan)
- 18. Magnetic Resonance technique (MRI)
- 19. Positron Emission Tomography (PET)
- 20. Doppler Study

UNIT III.

Final Diagnosis

FIRST AID

- 1. General principles of First Aid
- 2. Wounds Control of hemorrhage, Epistaxis
- 3. Shock- Classification and treatment
- 4. Dog bite, Snake bite, Scorpion sting
- 5. Burns and Scalds
- 6. Heat exhaustion, heat stroke and fainting, frost bite
- 7. Fractures, dislocations, sprains and strains
- 8. Poisoning
- 9. Epileptic fits, convulsions in children
- 10. Aspiration of foreign body
- 11. Artificial respiration
- 12. Bandages of different types
- 13. Unconsciousness and general principles of treatment

UNIT IV

Recognition, Evaluation of Clinical Emergencies.

I. Cardio Vasular System:-

- 1. Acute myocardial infarction
- 2. Cardiogenic Shock
- 3. Cardiac arrhythmias
- 4. Cardiac arrest

II. Respiratory System-

- 1. Hemoptysis
- 2. Status asthmaticus
- 3. Spontaneous pneumothorax
- 4. Acute respiratory failure

III. Gastro Intestinal System:-

- 1. Acute Vomiting
- 2. Perforation of Peptic Ulcer

3. Hematemesis
4. Hepatic Precoma and coma

IV. Central Nervous System:-

1. Unconscious patient
2. Cerebrovascular catastrophes
3. Convulsions
4. Status epilepticus

V. Renal System:-

1. Acute renal failure
2. Renal colic
3. Hematuria

VI. Endocrine and Metabolism :-

1. Thyroid crisis
2. Adrenal Crisis
3. Diabetic Keto acidosis and coma
4. Hypoglycemia

VII. Miscellaneous Emergencies-

1. Syncope
2. Acute peripheral circulatory failure
3. Acute reaction
4. Hypothermia

PRACTICAL

1. History taking and physical examination of cases.
2. Case sheet writing in different general cases (25)
3. Demonstration of equipments and instruments used for investigation in modern diagnostics
4. Demonstration tour of an ultra modern super-speciality Hospital to see the latest techniques of modern investigations.

RECOMMENDED TEXT BOOKS:-

1. Hutchinson's Clinical Methods- By Chamberlin
2. Clinical Methods- By P.S.Shanker
3. Manual of Clinical Methods- By Jai Vakil
4. Clinical Diagnosis- By P.J. Mehta
5. Modern Diagnosis- By Red Cross Society
6. Oxford's hand book of Clinical Medicine - By St. John Ambulance Association.
7. First Aid - By L.C. Gupta and others

PAPER V

NUTRITION AND HERBOLOGY

UNIT I

NUTRITION

I. Introduction of Nutrition:-

- 1) History of Nutrition
- 2) Progress in Food Science
- 3) Basic Principles of Nutrition
- 4) Food, Nutrition & Health
- 5) Need of Complete Nutrition
- 6) Nutritional Basis of Life and Life in Connection with Food
- 7) Composition of Body in Relation to Nutrition

UNIT II. Components of Food and their Classification:-

- 1) Carbohydrates
- 2) Proteins
- 3) Lipids
- 4) Vitamins
- 5) Minerals and Trace Elements
- 6) Water and Electrolytes
- 7) Metabolism and Energy Needs of the body
- 8) Energy Balance and the regulation of the body weight

A. Food Groups:-

- 1) Cereals
- 2) Millets and Coarse grains
- 3) Pulses
- 4) Green leafy Vegetables
- 5) Other Vegetables
- 6) Roots & Tubers
- 7) Fruits
- 8) Milk & Milk Products
- 9) Sugar & Jaggery
- 10) Honey
- 11) Nuts & Oil-seeds
- 12) Spices & Condiments

B. Nutritive Values of Food ingredients Commonly used in India

IV. The Science & Fine Art of Food & Nutrition:-

- 1) Philosophy of Nutrition
- 2) Calories: Measuring what we eat.
- 3) Organic foods & Organic acids
- 4) Organic Vs. Inorganic Foods
- 5) Salt Eating, Salt Stimulation Vs. Good Diet
- 6) Fruitarianism and Vegetarianism
- 7) Nature's Food Refinery
- 8) The Digestibility of Foods
- 9) Mental Influences in Nutrition

- 10) Absorption of Food
- 11) Uses of Food
- 12) How much shall we eat?
- 13) How to Eat?
- 14) Correct Food Combination - Food Combination Charts
- 15) Effects of Cooking
- 16) Uncooked Foods (Raw Eating)
- 17) Salads
- 18) Conservative Cooking
- 19) Effects of Denatured Foods
- 20) Under Nutrition
- 21) Hypo-Alkalinity
- 22) Diet Reform Vs. Supplemental Feeding
- 23) Beginning the Reform Diet
- 24) The Eliminating Diet
- 25) Feeding In Disease
- 26) Cow's Milk
- 27) Pasteurization
- 28) Mother's Milk
- 29) No Starch for Infants
- 30) Three Feeding a Day
- 31) Feeding of Infants
- 32) Feeding Children From Two to Six Years
- 33) Our Denatured Soil

V. Food as Medicine - Known Facts

- 1) Proteins are Body Builders
- 2) Proteins can be Body Killers
- 3) Fats -Concentrated Body Fuels
- 4) How Foods May become Poison?
- 5) Vegetables as Do It- Yourself Therapy
- 6) Solid Foods : When, What Kind, How Much?
- 7) Vitamins and Supplements for all ages
- 8) The Vitamins: Proof of natural food instincts
- 9) Facts about common foods
- 10) The Stimulant Delusion

VI. Food & Toxins

- 1) Infective agents & Toxins in food
- 2) Food Adulteration and Consumer Protection.
- 3) Food additives
- 4) Health hazards of added chemicals in foods
- 5) Nutrition & Infection
- 6) Study about adverse effect of Alcohol & Tobacco

UNIT III. Nutritional Diagnosis

VIII. Public Health and Nutrition-

- 1) Education in Nutrition
- 2) Nutritional Program
- 3) Nutrition Survey and Methodology
- 4) Balanced Diets
- 5) Nutritional assessments, Social aspects of the Nutrition
- 6) Fortification and Enrichment

- 7) Exercise in Balanced Diet
- 8) Nutrition in relation to disaster management
- 9) Nutritional requirements of special groups

IX. Nutrition in Health-

- 1) Human Nutritional requirements
- 2) Nutrition in Pregnancy , Lactation , Infancy, Childhood, Adolescence and Old Age
- 3) Nutrition and Immunity

X. Nutritional deficiency diseases, Preventive and Curative approach

XI. The Optimum Nutrition Program for Correcting Disease & Restoring , Building and Maintaining Health

UNIT IV

HERBOLOGY

1. Introduction to Herbology
2. The following herbs are to be studied with respect to their source and therapeutic uses. Botanical details shall be avoided.

S.No. Botanical Name.

- 01, Emblico Officinolis
02. Cassia Fistula
03. Ficus Glomerata
04. Vetiveria Zizanioides
05. Cinnamomum Camphora
06. Morsardica Chorantia
07. Tribulus Terrestris
08. Myristica Fragrans
09. Cuminum Cyminum
10. Sesamum Indicum
11. Ocimum Sanctum
12. Punica Granatum
13. Coriandrum, Sativum
14. Azadirachta Indica
15. Allium (epa
16. Piper Longum
17. Psoraleci Corylifolia
18. Taxus Baccota
19. Aegle Marrnelos
20. Semecarpus Anacardium

21. Phyllanthus Niruri
22. Piper Nigrum
23. Trigonella Foenum Graecum
24. Santhcjlum Album
25. AlBum sativum
26. Mimosa Pudica
27. Acorus Calamus
28. Asparagus Rocemosus
29. Rauwolfia Serpentine
30. Curcuma l.onga
31. Terminalju Chebula
32. Ferula Narthex
33. Syzygiurn Aramaticum
34. Terminalia Relerica
35. Gingiber Officinalis

Reference Books:-

1. M.Swaminathan – Principles of Nutrition andDietetics
2. M.Swaminathan – Food andNutrition
3. Dewan,A.P. – Food andNutrition
4. VijaiLaxmi –Dietetics
5. JussawalaJ.M. – Food that Heals : Natural Dietetics

YEAR IV SEMESTER VII

PAPER-I

FASTING THERAPIES

UNIT I

Introduction

1. Theory of fasting in animals.
2. History of Fasting
 - a. Fasting in Ancient India
 - b .History of Fasting in India
 - c .History of Fasting in Foreign countries
 - d .Historical highlights of fasting
3. Science and fasting

UNIT II

The Philosophy of Fasting

1. The philosophy of sane fasting
2. Philosophy of therapeutic – fasting
 - a) Life its existence in connection with health and diseases.
 - b) Nature of diseases.
 - c) Theory and physiological facts of Fasting.
 - d) Objection commonly raised in fasting therapy.
 - e) Pros and cons of fasting.

Physiology of fasting and starvation

- 1) General physiology
- 2) Source and metabolism of carbohydrates, fats and proteins during fasting and starvation.
- 3) Difference between fasting and starvation.
- 4) Difference between hunger and appetite.

UNIT III

Rules and regulation of sane fasting and therapeutic fasting.

Definition and classification of fasting

- 1) Definition of fasting in different aspects.
- 2) General classification of fasting (religious, political and therapeutic)
- 3) Methods types of therapeutic fasting (dry, water, juice, saline, monodiet (kalpa) fruit, intermittent, preventive, weekly etc)

Hygienic auxiliaries of fasting

- a) air and breathing
- b) enema
- c) bathing
- d) clothing
- e) water drinking
- f) exercise
- g) mental influence

Study of patients during and after fasting

1. crises during and their management
2. physiological effects of fasting
3. physiological aspects
4. study of tongue breath the temperature and pulse ect.
5. the loss gain of weight
6. who and when to break the fast
7. diet after the fast.

UNIT IV

Indication and contraindication of fasting

Therapeutic aspect of fasting

1. fasting in acute diseases
2. fasting and chronic diseases
3. role of fasting in various diseases
4. obesity and fasting
 - a. definition and assessment of obesity

- b. epidemiology
 - c. clinical features
 - d. etiology
 - e. treatment
5. fasting for preservation of health and prevention of diseases
- Result of fasting

Practicals

Study of 50 fasting cases

Cases study 25 with record

Reference Books:-

1. M.Swaminathan – Principles of Nutrition and Dietetics
2. M.Swaminathan – Food and Nutrition
3. Dewan, A.P. – Food and Nutrition
4. Vijai Laxmi – Dietetics
5. Jussawala J.M. – Food that Heals : Natural Dietetics

PAPER II

PHYSIOTHERAPY

UNIT I

- Basic physics in exercise therapy :-Mechanics: force, gravity, line of gravity, centre of gravity in human body, base, equilibrium, axes and planes Mechanical principles: - lever, order of lever, examples in human body, pendulum, spring
 - Introduction of exercise therapy:-
 - Starting positions: - fundamental starting position, derived position, muscles work for all the fundamental starting positions.
 - Classification of movements in detail
 - Voluntary movement
 - Involuntary movements
 - Active movements
 - Passive movement
 - Muscle strength

UNIT II

Anatomy and physiology of muscle tissue, causes of muscle weakness/paralysis, prevention of muscle weakness/ paralysis, types of muscles work and contractions, range of muscles work, muscle assessment. Principles of muscles strengthening/re-education, early re-education of paralyzed muscles. Techniques of strengthening different muscles groups.

Joint movement :-

Classification of joint movement, causes for restriction of joint movement , prevention of restriction of joint range of movements. Principles of mobilization of joint in increasing the range of motion. Technique of mobilization of stiff joints.

9. Relaxation Technique of relaxation, principles of obtaining relaxation in various positions.

UNIT- III

Posture: - types, factor responsible for good posture, factor for poor development of good posture principles and techniques of re-education, walking aids.

1. Co-ordination exercises: - definition of co-ordinate movement, in-co-ordinated movement ,principles of co-ordinate movements, techniques of co-ordination exercise
2. Gait: - analysis of normal gait with muscles work, various pathological gaits.
3. Crutch gait: - introduction, crutch measurements various types of crutch gait (in detail)
4. Neuromuscular facilitation techniques, functional re-education.

5. Suspension therapy: - principles of suspension types of suspension therapy effect and use of therapy their application either to mobilize a joint to increase joint range of motion or increase muscle power explaining the full detail of the components used for suspension therapy.]

UNIT IV

ELECTROTHERAPY

1. ELECTRICAL FUNDAMENTAL physical principles structure and properties of matter, molecular atom, proton, neutron, electron, ion etc. electrical energy: nature of electricity current, static electricity current, electric potentials generated by cell, ohm's law joule's law. Magnetic energy: nature and property of a magnet magnetic induction .show rule, Maxwell's cork-screw rule.
2. Electro magnet induction, principles and working of choke, coil, transformer, rectification of A.C to D.C., mental oxide rectifier, semiconductor, diode and triode, valves, details of charging and discharging est., transistors, elms and power moving coil millimeter and voltammeter
3. Low frequency current:- nature and principles of production of muscle's stimulating currents, types of low frequency current used for treatment, therapeutic electric stimulation
4. Preparation for electro therapy, preparation of apparatus, patient treatment techniques
 - a) Stimulating the muscles of extremity, back and face through the motor points.
5. Faradic and galvanic currents.
6. High frequency current treatment:-

Physics of high frequency currents, production of high frequency current principles, bio-physics of heat, physiology of heat and cold production, physiological and therapeutic effect and uses, technique of treatment, dangers and precautions, contra-indications of the following

 - a) Shortwave diathermy
 - b) Microwave diathermy
 - c) Ultrasonic therapy
 - d) Interferential therapy
7. Principles of radiation therapy, physics of radiation therapy, laws governing radiation.

Production, physiological and therapeutic effect, uses, techniques of treatment, danger and precautions, contra-indication etc., of the following

 - a) Infrared radiation therapy
 - b) Ultraviolet radiation therapy
 - c) Basic principles of transcutaneous never stimulation and interferential therapy
8. Wax therapy-physics-physiological and therapeutic effect and usesTechniques of application

PRACTICAL

1. Interrupted/modified D.C
 - a) stimulation of muscles directly
 - b) diagnostic tests :
 - i) F.G test
 - ii) S.D curve
 - iii) fatigue test

Uses of surged faradism and interrupted galvanism in various peripheral nerve lesions.

- a) Neuroproxia
 - b) Axonotomosis
 - c) Neurotosis
-
2. (High frequency current treatment)
 - a) Shortwave diathermy-setting up of apparatus including selection of method and electricity.

Technique preparation of patient, chocking, contra indication, applications, application of SWD for various conditions and various part of the body those must be practiced by the students.
 - b) Microwave diathermy- setting up a apparatus including selection of method and electric technique preparation of patient chocking contra-including application of MWD for various condition and various parts of the body. Those must be practiced by the student.
 - c) Ultraviolet radiation: setting up of apparatus selection of lamps technique of application of UVR for various condition like test does general body
 - d) Ultrasonic: setting up apparatus selection of doe's technique of application of various conditions and to various parts of body.
 - e) Interferential therapy

Reference Books:-

1. Govindan, S. - Food and Nutrition
2. Marganret, Hollis- Massage for Therapy
3. M.Dena Gardinen- Exercise Therapy
4. Miller-Meridianology
5. Mishra S.K- ABC OF Exercise Therapy
6. Mishra S.K- Remedial of Massage
7. Mishra S.K- Reflexology

PAPER III

HYDROTHERAPY

UNIT I

1. Introduction of history
2. Physical properties and chemical composition of water
3. Physiological basic of hydrotherapy the skin and its anatomical construction, function of the skin, temperature sense
4. Production of heat and its distribution in the body, regulation of the body temperature ,
5. Importance of water to human body
6. Physiological effect of water on different system of body

Skin

Respiration

Circulation

Nervous system

Heat and its production, dissipation etc

Tactile and temperature sense

7. Reflex areas of the body result of the application of hot and cold over relax areas.
8. Action and condition that encourage and discourage reaction, internal reaction modification thermal reaction
9. Place of water in preservation
10. Place of water in acute diseases
11. Place of water in emergency condition
12. Magnesium sulphate –

13. Use in hydrotherapy

i) Nerve sedatives, Hypnotic, calmative, analgesic, anesthetic, antispasmodic, insomnia, chorea, spastic-paralysis, exophthalmic goiter, mania, epilepsy and various painful conditions.

ii) Anti-thermic and antipyretic effects, relation and heat production and heat elimination to antipyretic methods, principles that govern the application of hydrotherapeutic measures for the reduction of temperature in fevers, methods that may be efficiently employed in various morbid conditions accompanied by rise in temperature – suggestions and effects, indications and contra-indications

iii) Secretary and sedative effects; prophylactic uses.

- a) Cold bathing in infancy and early childhood
- b) The cold bathing for Adults
- c) The cold baths for women
- d) The cold bath in old age – precautions

14. The techniques of Hydrotherapy:

Plain water bath:

Cold hip bath – Kallog's & Kunhe's sitz bath ,Shallow bath for males, females hand and arm bath,

Graduated bath footbath, hot and cold alternative , Natural bath leg bath, Non revulsive bath, Immersino bath, Cold Plunge bath, Whirl pool bath, Aeration bath,Viechy spray massage,Rapid bath, Brand bath, Fever bath, River bathing, Sea bathing.

Various baths and air baths, Russian bath, Turkish bath, Steam bath, Local steam bath, Steam inhalation, Hot air bath, Local hot air bath, Super hot air bath, Cold air bath, Indoor and out-door baths.

Pool Therapy:

- a) Introduction
- b) Principles of treatment Part I and Part II
- c) Physiological and Therapeutic effects of exercise in warm water.
- d) Indications and contra-indications
- e) Dangers and precautions

UNIT II

Douches :

Cold Douche, Hot Douche, Neutral Douche, Alternative Douche, Under water Douche , Contrast Douche, Horizontal Jet, Cephalic Douche, Lumbar Douche, Fan Douche, Rain Douche or Shower Douche, Depatic Douche, Circular Douche and Semi Circular Douche, Cerebrospinal Douche

Plantar Douche

Percussion Douche

Scotch Douche

Revulsive Douche

Ascending Douche

Calliper Douche

Filiform Douche

Fog Douche

Massage Douche

Shoulder Douche

Thoracic Douche

Abdominal Douche

Anal Douche

Perineal Douche

Pulmonary Douche

Cardiac Douche

Gastric Douche
Enteric Douche
Renal Douche
Articular Douche
Vapour Douche

UNIT III

Fomentation and Stupes :

The hot water bag, the siphon hot water bag, the thermopore, the mustard fomentation, clay and glycerine poultice, charcoal poultice, cotton poultice.

1. Compresses and Packs :

The wet sheet pack, cooling pack, cold shower pack, sweating pack, dry pack, half pack, hot blanket pack, evaporating pack, very cold compress, proximal compress, neutral compress, alternate compress, revulsive compress, compress of ten days for injuries and eruptions, alternative ten applications to the head and spine, local packs, wet girdle pack, dry abdominal bandage.

Abdominal heating compress, Head pack, Spinal pack

Hot and cold heart compress, Hot and cold lung compress

Hot and cold gastro hepatic compress

Hot and cold renal compress

Hot and cold intestinal compress

Hot and cold pelvic compress

Hot and cold abdominal pack

Hot and cold spinal pack

Hot and cold heat pancreatic pack

SPECIAL FORMS OF COMPRESS :

Cephalic compress, Chest pack, Triangular chest pack, Half chest compress, Joint compress, Pelvic pack, Foot pack, Cold spinal compress, Towerl chest pack, Pericardial or cardiac compress, Hip pack, Leg pack, Perineal compress, Prone packs, Lumbar compress.

2. Internal Use of water :

Irrigations and enema (Colon Flushing)

Cold water drinking, Hot water drinking

Water emetic, Irrigation of ear, Nasal

Irrigation, Vaginal irrigation, Intra-uterine irrigation, rectal irrigation

Enema : Hot, Warm, Cold, graduated enema

Coloclyster, Retentive enema, Tonic Enema

Hydriatic Prescription Making :

UNIT IV

- a) The natural defence of the organism
- b) Procedure for increasing vital resistance
- c) Procedures which excite the central ganglia
- d) Procedures that increase oxidation
- e) Measures that encourage general and local metabolic activity
- f) Procedures that increase general blood movement and local blood supply
- g) Measure that increase heat production
- h) Measures that increase the elimination of heat
- i) Measures that combat bacterial development in blood
- j) Measures that increases/lessen heal elimination
- k) Hydriatic in-compatibility
- l) Adoption of hydriatic prescription of individual disease
- m) Hydrotherapy as a means of rehabilitation and health promotion measure
- n) Emergency treatments in Hydrotherapy

PRACTICALS :

Demonstration of various therapeutic Procedure and treatments in Hydriotherapy during clinical classes at the hospital.

At the end of final B.Y.N.S. Course, candidate should be in a position to give treatments independently.

Books Recommended

1. Kullogg, J.H. - RationalHydro-therapy
2. Knipps,S - My WaterCure
3. Singh,S.J. - Chromotherapy
4. Misra, P.D. & Beena Misra- Nature Cure: Philosophy andMethods
5. Gandhi, M.K. - Key toHealth
6. Swaminathan, M- Food andNutrition

PAPER IV

MUD THERAPY AND MASSAGE THERAPY

UNIT I

MASSAGE THERAPY

Professional Ethics for the Massage Practitioner (b) Requirements for the Practice of Massage (c) The Consultation (d) Equipment and Products (e) Effects and Benefits of Massage (f) Contraindications for Massage (g) Endangerment Sites (2) Sanitary and Safety Practices – 10 Hours 10 (a) Safety Precautions for Therapist and Client (b) Maintaining Sanitary Conditions in the Massage Area and Sanitizing Linens (3) Practice and Techniques – 350 Hours 350 (a) Basic Massage Movements (b) Procedures for Complete Body Massage; Face and Scalp Massage (c) Heated Stone and Hydrotherapy (d) Massage for Nursing Home Clientele; Healthcare and Specialized Massage (e) Deep Tissue Part I - Basic Deep Tissue Techniques & Trigger Point Release (NMT) (f) Deep Tissue Part II - Orthopedic & Functional Assessments (g) Deep Tissue Part III - Athletics & Sports Massage; Therapeutic Stretching (h) Reflexology (i) Seated (Chair) Massage (j) Pre-Natal and Infant massage (k) Nutrition (l) Aromatherapy and Body Wrap (m) Review for Finals (n) Finals

UNIT II

Anatomy, Physiology and Kinesiology for Massage – 225 Hours 225 (a) Anatomy and Physiology Objectives, Anatomical Positions (b) Medical and Anatomical Terminology, The Regions of the Human Body (c) The Integumentary System (Skin) (d) Skeletal System (e) The Muscular System, The Circulatory System, Lymph-Vascular System (f) The Nervous System, The Endocrine System (g) The Respiratory System, The Digestive System, The Excretory System (h) The Human Reproductive System (i) Kinesiology – Study of Movement and Body Mechanics (5) Pathology – 50 Hours 50 (a) Effects of Disease on Structure and Function of the Body (6) Athletic and Therapeutic Massage (Program of Study) – 125 Hours 125 (a) Athletic Massage; Pre-event, Post-event, Rehabilitative, Restorative and Injury Prevention (b) NMT, PNF, and MET (c) Muscle Testing (d) SOAP Charting and Records Keeping for Insurance Claim (e) Active Assisted, Active Resistive and Passive Therapeutic Stretching Practical Requirements During the course of the program a student will be required to complete 250 Hands-on Clinic Hours. The approximate requirements are as follows: 125 Swedish-based Massages during classroom instruction 125 Clinic Massages under educator supervision

UNIT III

MUD THERAPY

Mud Therapy

Introduction to Mud Therapy

- i. Classification of mud for therapeutic use
- ii. Precautions for storing mud .
- iii. Methods of treatment of mud-applications,
 - a. packings,

- b. hot poulties,
- iv. effect of Mud on different systems of body

UNIT -IV

TYPES OF MUD THERAPY APPLICATION:

- a. Natural mud bath,
- b. full and partial mud packs,
- c. mud plaster,
- d. thermal bath,
- e. dry pack and sand pack
- f. sand baths
- g. Cosmatic uses of mud.

PRACTICAL:

Different types of movements and strokes of:

General Massage

Swedish Massage

Clinical Massage

Research updates.

Reference Books:-

1. The cure of advance cancer by Diet Therapy - Dr. Max Gerson M.D.
2. Toxemia - J.H. Tilden
3. Dainandin rogo ki Prakartik Chikitsa - Dr. Kulranjan Mukherjee
4. Swasthya ke liye Bhojan - Dr. Bhojraj Chhabaria
5. How to get well - Dr. Paavo Airola
6. The Encyclopedia of health & Physical Culture - Dr. Bernarr Macfadden
7. My water cure - Father Sebastian Kneipp
8. The New Science of Healing - Louis Kuhne
9. Return to Nature - Adolf Just
10. Diet Reform Simplified - Dr. Stanley Lief

PAPER V-CLINICAL NATUROPATHY

UNIT I

Good Clinical Practice

Guidelines And Standards

Decision-Making In Naturopathy

Screening And Prevention Of Disease

Scope Of Practice

Patterns Of Use

Fields Of Practice

Regulations

Limitations

UNIT II

Cardinal manifestations and presentation of disease

Abscess, acid-peptic disease, acne, AIDS, aging, allergies, Alzheimer disease, anal fissures, anemia, anorexia nervosa, anxiety disorders, appendicitis,

Arthritis-OA and RA, Asthma, ADD/ADHD, back pain, bad breath, bedsore, bladder infection, bronchitis, bruise, bursitis, cancer-breast cancer, colorectal cancer, leukemia, lung cancer, prostate cancer, skin cancer, stomach, uterine cancer, dental caries, cardiovascular disease, cerebrovascular disease, chlamydia, age spots, chronic fatigue syndrome, cirrhosis, common cold, colic, colitis, nasal congestion, conjunctivitis, constipation.

UNIT III

Menstrual cramps, Crohn's disease, cuts, cyst, cystitis, dandruff, deep vein thrombosis, clinical depression, dermatitis, diabetes, diverticulitis, dizziness, duodenal ulcer, dysmenorrhea, dyspepsia, diabetes mellitus, earache, earwax, blockage, eczema, emphysema, fainting, farsightedness, fatigue, fever, fibromyalgia, flatulence, flu, food poisoning, foot odor, gallstones, gas, gastritis, gastroenteritis, GERD, gingivitis, goiter, gout, headache, heatstroke, hemorrhoids, hepatitis, hernia, herpes, obesity, oligomenorrhea, oral cancer, ovarian cyst, Parkinson's disease, PID, phlebitis, PMS, postnasal drip, PTSD, rashes, Reynaud's disease, sciatica, seizure disorder, sinusitis, snoring, sore throat, scoliosis, sprains, acute abdomen.

UNIT IV

Management of pains

Pain sensory system

Chronic pain

Types of pain

Chronic discomfort and palpitation
Abdominal pain
Headache
Back, neck pain
Fever, hyperthermia
Fever rashes
Fever of unknown origin
Hypothermia and frostbite
Syncope, faintness, dizziness, vertigo
Weakness, disorders of movements and imbalances
Numbness, tingling and sensory loss
Aphasia, memory loss and other focal cerebral disorders.
Sleep disorder
Dysphasia, nausea, vomiting and indigestion
Diarrhea, cough
Edema
Weight loss
Jaundice, abdominal swelling
Sexual dysfunction
Healing crisis and Disease crisis

PRACTICALS

Practical demonstration of clinical Management

Reference Books:-

1. Govindan, S. - Food and Nutrition
2. Marganret, Hollis- Massages for Therapy
3. M.Dena Gardinen- Exercise Therapy
4. Miller-Meridianology
5. Mishra S.K- ABC OF Exercise Therapy
6. Mishra S.K- Remedial of Massage
7. Mishra S.K- Reflexology

SEMESTER VIII
PAPER-1
OBSTETRICS AND GYNECOLOGY

UNIT-I

OBSTETRICS

Basic Anatomy and Physiology, Anatomy and Physiology of female reproductive organs and pelvis, Maturation and fertilization of ovum, Development of placenta, Embryology of uterus, Physiology of pregnancy, Maternal changes due to pregnancy, Diagnosis of pregnancy, Differential diagnosis of pregnancy, Foetus in normal pregnancy, Antenatal care, Physiology of labor, Causation and stages of labor, Mechanism of labor, Conduct of normal labor, Physiology puerperium, Phenomena of normal puerperium, Care of puerperium, Care of new born child, Pathology of pregnancy, Hyperemesis gravidarum, Venereal diseases, Anemia in pregnancy

UNIT-II

Diseases

Diseases of the urinary system, Diabetes in pregnancy, Diseases and abnormalities of fetal membranes and placenta, Abortion, Ectopic pregnancy, Ante-partum hemorrhage, Placenta previa, Pathology of labor, Occipito-posterior position, Breech presentation, Prolapse of the cord, compound presentation, Multiple pregnancy, Contracted pelvis, Management of labor in contracted pelvis, Complications of 3rd stage of labor, Affection of new-born, Asphyxia neonatorum, Pre-term baby, Congenital malformations, Obstetrical operations, Forceps, Caesarean section, Induction of abortion and labor, Pathology of Puerperium – Puerperal infections:, Prenatal mortality and maternal mortality, Post-dated pregnancy Placenta insufficiency, Control of contraception Medical termination of pregnancy, pre-term labor, Ultra sonogram in Obstetrics.

UNIT-III

Gynecology

Anatomy of the female pelvic organs, External genitalia, Internal genitalia, Female urethra, Urinary bladder, Pelvic ureter, Rectum and Anal canal, Pelvic muscles, Pelvic fascia and cellular tissue, Blood vessels, lymphatic drainage and innervations of pelvic organs, Pelvic blood vessels, Pelvic lymphatics pelvic nerves,

UNIT IV

Puberty and Menopause, Neuroendocrinology in relations to reproduction, Menstruation, Examinations of a gynecological patient and the diagnostics aids, History, Examination, Ancillary aids, Cytology, Colonoscopy.

PRACTICALS

1. History taking of anti-natal and gynaecological cases
2. Demonstration of physical examination of ante-natal and Gynaecological cases
3. Demonstration of conducting labour, normal delivery and use of minor instrument during delivery
4. Demonstration of various equipment used in Obstetrics and Gynaecology
5. Case-history writing of ante-natal and gynaecological cases (25).

Reference Books:-

1. The John Hopkins Manual of Gynecology and Obstetrics
2. The Human Placenta in Health and Disease, An Issue of Obstetrics and Gynecology Clinics
Michael Nelson M.D. Ph.D., Leslie Myatt

PAPER –II

MEDICAL JURISPRUDENCE, FORENSIC MEDICINE AND TOXICOLOGY

UNIT I

FORENSIC MEDICINE-I

1. Definition of Forensic medicine and its scope.
2. Procedure of giving medical evidence with reference to Indian evidence act.
3. Methods of identification of living and dead body, race, age, sex etc.
4. Death:- Medico-legal aspects, certification of death, sudden death, causes, Medico- legal importance, sign of death, changes due to death and calculating time of death.
5. Medico legal autopsy.
6. Medico-legal wounds, their classification and study and medico legal aspects.
7. Examination of blood stains, hairs and seminal stains.
8. Miscellaneous causes of death from heat, cold, electricity , Starvation etc.,
9. Violent asphyxia deaths:- Hanging, Strangulation, Suffocation and drowning.
10. Sexual Offences: - Impotency and sterility, Virginity, legitimacy, un-natural Offences, Medico-legal aspects, Anesthetic death.
11. Infanticide.

UNIT II

FORENSIC MEDICINE-II

12. Medico-legal aspects of insanity.
13. Forensic Psychiatry.
14. Definition, Police inquest, difficulties in detection of crime, legal procedure in Criminal courts and their powers, oath, medical evidence, medical certificate, Dying declaration.
15. Rules of giving evidence, professional secrecy.
16. Post mortem examinations.
17. Death - signs of death cadaveric rigidity and spasm, putrefaction, estimation of Time since death.
18. Death from asphyxia, differences between hanging and strangulation, suffocation and Drowning.
19. Death from burns and scalds and lighting.
20. Rape and unnatural offences.
21. Abortion, pregnancy and delivery, miscarriage.
22. Law in relation to a medical man, medical ethics, duties, professional privilege and responsibilities.

UNIT III

TOXICOLOGY:

1. General considerations of poisoning and classification.
 - a) Actions of poisons, factors modifying their action.
 - b)Diagnosis of poisoning.
 - c) Treatment of poisoning in General.
2. Poisons:-
 - a) Corrosives
 - c) Insecticides and weed killers
 - e) Organic Irritant poisons
 - g) Inebriant poisons
 - i) Drug Dependence
 - k) Spinal poisons
 - m) Asphyxiants

UNIT IV

MEDICAL ETHICS

3. Legal responsibilities: Medical ethics.
 - b) Nonmetallic poisons
 - d) Metallic poisons
 - f) Somniferous poisons.
 - h) Delibriant poisons
 - j) Food poisoning
 - l) Cardiac poisons
 - n) Miscellaneous
4. Responsibilities and duties of the medical practitioners to the state, Professional secrecy and privileged communication.
5. Un-professional conduct and malpractice.
6. The rights and privilege and duties of medical practitioners.
7. The functions of state-medical council and its relationship to Indian Medical Council.
8. Medical ethics approved by Indian Medical council.

PRACTICALS

1. Age estimation.
2. Autopsies
3. Skeleton remains.
4. Spotters.
5. Examination of injured.
6. Alcoholic.
7. Psychiatric.
8. Toxicology.

TEXT BOOKS:-

1. Medical jurisprudence - By Modi
2. A Text Book of Forensic Medicine - By Narayana Reddy
3. A Text Book of Forensic Medicine - By M.R.K. Krishna

REFERENCE BOOKS:-

1. The essential of forensic medicine - By Dr. C.J. Polson, D.J. Gee and B. Knight
2. Forensic Medicine - By Corden and Shapiro
3. Principles and practice of Medical jurisprudence - By Taylor's
4. Legal Boundaries of Nature Cure - By Advocate (Dr.) Ashok Kumar Sharma

PAPER –III

HOSPITAL ADMINISTRATION AND MANAGEMENT

UNIT I

HOSPITAL ORGANISATION

1. Hospital Organisation - Structure and Function
2. Hospital Committees

THE HOSPITAL

1. Role of Hospital in Health Care
2. Hospital Planning and design
3. Special Features of Nature cure Hospital, Qualities of Therapist, Hospital Atmosphere, Scientific Attitudes, Awareness of Scope, Limitations of nature cure.
4. Newer Technology in Treatment through Naturopathy

UNIT II

THE CLINICAL SERVICES & CLINICAL SUPPORTIVE SERVICES

1. The Medical Staff Organization, interaction with patients.
2. Radiological Services
3. Laboratory Services

THE NURSING SERVICES SPECIALISED SERVICE AREAS

1. Casualty Services
2. Disaster Services
3. Out-patient Services
4. Day Care
5. Diagnostic Services
6. Medical Records

HUMAN RESOURCES

1. Personnel

MATERIALS MANAGEMENT FINANCES

1. Finances
2. Activity based costing in Hospital
3. Economics of H.M.

QUALITY ASSURANCE

1. Quality Management in our Hospitals
2. Medical Audit

INFECTION CONTROL

1. Control of Hospital acquired infection.

ETHICS & LAWS

1. Ethics
2. Law applicable to Hospitals
3. Consumer Protection act 1986 SECTION I-21. Indian Health Policy

UNIT III

Hospital Management (Naturopathy & Yoga) (Hospital Administration)

HOSPITAL ADMINISTRATION

1. The Hospital administrator - Role and Responsibilities
2. Profile of an effective Hospital Administrator

MANAGERIAL SKILLS

1. Planning
2. Information System
3. Communication
4. Decision Making
5. Monitoring and Evaluation
6. Managing Time
7. Meetings

UNIT IV

PSYCHOLOGICAL ASPECTS OF PATIENT MANAGEMENT

1. GENERAL PRINCIPLES OF PATIENT MANAGEMENT:-

- a. Use of patient-centered, holistic approach with careful considerations of all information available from history, Physical and mental state, Examination and investigations & in full consultation with patient, relatives etc.
- b. Immediate assessment and illness acuity/ severity rating with appropriate intervention, investigation & monitoring.
- c. The principles of patient support (physiological, psychological, social, spiritual and symptom management until a definitive diagnosis is reached & specific treatment is started.
- d. The ability to recognize the need for specialist help, appropriate environment and the speed with which these two are required.
- e. Patient referral:- as above and lines of communication , keeping the patient / family / carers informed.

2. PSYCHOSOCIAL MANAGEMENT:-

- a. Recognition of specialist availability and of interventions and their use.
- b. Role of psychosocial factors in precipitating and perpetuating illness.
- c. Consideration of patient's social circumstances, work, family etc. When Determining treatment options , available interventions & the role of other Organisations.

3. PSYCHOLOGICAL REHABILITATIONS:-

- a. Understanding of the integral role of rehabilitation & mental support in recovery especially after major illness, significant trauma or surgery.
- b. Appreciation of the need for a specific program of rehabilitation and the role of other health care professionals in providing this.
- c. Use of Nature Cure & Yoga modalities in psychological rehabilitations

PRACTICAL

1. Visit to the different Hospitals.
2. Project work in Planning & Designing the Hospital.

REFERENCE BOOKS

1. Hospital Planning & Administration - By Llewellyn Davies Macaulay , H.M.C.
2. Hospital Administration - By Francis C.M & Maria C.Desouza
3. Hospital ward Management - By Kusum Samant
4. Text Book of Social & Preventive Medicine - By Park. K.
5. Economics of Health care - By Martin Green
6. Hospital Planning - By Dr. Ashok Sahni
7. Principals of Hospital Administration & Planning - B.M. Sakharkar

PAPER IV

FIRST AID AND EMERGENCY MEDICINE

UNIT I

FIRST AID

1. General principles of First Aid
2. Wounds Control of hemorrhage, Epistaxis
3. Shock- Classification and treatment
4. Dog bite, Snake bite, Scorpion sting
5. Burns and Scalds
6. Heat exhaustion, heat stroke and fainting, frost bite
7. Fractures, dislocations, sprains and strains

UNIT II

1. Poisoning
2. Epileptic fits, convulsions in children
3. Aspiration of foreign body
4. Artificial respiration
5. Bandages of different types
6. Unconsciousness and general principles of treatment

UNIT III

Recognition, Evaluation of Clinical Emergencies.

I. Cardio Vasular System:-

1. Acute myocardial infarction
2. Cardiogenic Shock
3. Cardiac arrhythmias
4. Cardiac arrest

II. Respiratory System-

1. Hemoptysis
2. Status asthmaticus
3. Spontaneous pneumothorax
4. Acute respiratory failure

III. Gastro Intestinal System:-

1. Acute Vomiting
2. Perforation of Peptic Ulcer
3. Hematemesis
4. Hepatic Precoma and coma

Central Nervous System :-

1. Unconscious patient
2. Cerebrovascular catastrophes
3. Convulsions
4. Status epilepticus

UNIT IV

Renal System :-

1. Acute renal failure
2. Renal colic
3. Hematuria

Endocrine and Metabolism :-

1. Thyroid crisis
2. Adrenal Crisis
3. Diabetic Keto acidosis and coma
4. Hypoglycemia

Miscellaneous Emergencies-

1. Syncope
2. Acute peripheral circulatory failure
3. Acute reaction
4. Hypothermia

PRACTICALS

1. History taking and physical examination of cases.
2. Case sheet writing in different general cases (25)
3. Demonstration of equipments and instruments used for investigation in modern diagnostics
4. Demonstration tour of an ultra modern super-speciality Hospital to see the latest techniques of modern investigations.

RECOMMENDED TEXT BOOKS:-

1. Hutchinson's Clinical Methods- By Chamberlin
2. Clinical Methods- By P.S.Shanker
3. Manual of Clinical Methods- By Jai Vakil
4. Clinical Diagnosis- By P.J. Mehta
5. Modern Diagnosis- By Red Cross Society
6. Oxford's hand book of Clinical Medicine - By St. John Ambulance Association.
7. First Aid - By L.C. Gupta and others

PAPER V
HOLISTIC PRACTICE OF NATUROPATHY AND YOGA
(INCLUDING SURGICAL DISEASES)

UNIT I

Diseases of System:-

1. Cardiovascular Disorders
2. Gastrointestinal Disorders
3. Blood related Disorders
4. Respiratory Disorders
5. Neurological Disorders
6. Psychiatric Disorders
7. Musculoskeletal Disorders
8. E.N.T. Disorders
9. Ophthalmology Disorders
10. Obstetrics & Gynaecology Disorders

UNIT-II

1. Paediatric Disorders
2. Metabolic Disorders
3. Hormonal Disorders
4. Neuromuscular Disorder
5. Mental Retardation Disorder
6. Psychological Disorder
7. Sexual Disorder
8. Post surgical Rehabilitation
9. Post Chemotherapy Rehabilitation
10. Skin Disorders
11. Tumors & Cancers
12. Affections due to Parasites
13. Affections due to Physical agents & Intoxicants
14. Care of Wounds, Burns, Bites & Stings
15. Accidents & Emergencies

UNIT III

Cure of Surgical Disorders:-

1. Deviated Nasal Septum
2. Tonsillitis
3. Appendicitis
4. Uterine Fibroid
5. Uterine Prolapse
6. Hernia
7. Intervertebral Disc Prolapse
8. Cervical Spondylosis & Slip disc
9. Calcaneal Spur
10. Osteoarthritis

UNIT IV

1. Hydrocele etc.
2. Prostate
3. Hemorrhoids (Piles)
4. Fistula
5. Pyorrhea
6. Gall Stone & Renal Stone
7. Breast tumor

PRACTICAL

Demonstration of naturopathic intervention of disease management and record keeping. (25 Records)

RECOMMENDED BOOKS:-

1. Nature's Materia Medica - By Dr. J.M. Jussawala
2. The Genesis & Control of Disease - By George S. Wege
3. Constipation & Indigestion - By L. Ramachandran
4. Reversing Heart Disease - By Dr. Dean Ornish
5. Natural Cure for Rupture - By Bernarr Macfadden
6. Stop Hair Loss - By Dr. Paavo Airola
7. Worldwide Secrets for Staying Young - By Dr. Paavo Airola
8. Bragg Fitness program with Spine Motion- By Paul C. Bragg
9. There is a Cure for Arthritis - By Dr. Paavo Airola
10. Cancer overcome by Diet-An Alternative to Surgery
- By Louise Green Field

REFERENCE BOOKS:-

1. Medical Drugs on Trial? Verdict "Guilty"! - By Keki R. Sidhwa
2. Drink Your Troubles Away - By John Lust
3. Physical Fitness - By Prof. Arnold Ehret
4. Science of Natural Life - By Dr. Ganga Prasad 'Gaud' Nahar"
5. Home Remedies for Common Ailments - By H.K. Bakhru
6. The Greatest Health Discovery - American Natural Hygiene Society
P.O.Box 30630. Tampa FLORIDA- 33630
7. The cure of advance cancer by Diet Therapy - By Dr. Max Gerson M.D.
8. Natural Cure of Skin Ailments - By Dr. S.J. Singh
9. The Encyclopedia of Health and Physical Culture (Vol 7 &8) - By Bernarr Macfadden
10. Materia Medica - By J.M. Jussawala

SEMESTER IX

PAPER-1

Research Methodology

Unit- 1: Introduction to research methodology

Definition of research; Importance of Research, Research Methods: Evaluating Research, Reports writing; Types of research: Applied Research & Basic Research; Goals of Research: description, explanation, and prediction, Ethics of research: Informed consent, Anonymity, Confidentiality, Plagiarism

Unit- 2: Introduction to Research Process

Research questions; Literature review; Different Sources of Information: Primary, Secondary, Tertiary source; Electronic Databases: Google Scholar, Hypothesis Operational definition; Sampling and Generalization Sampling: Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling; Sampling Biased and Nonprobability Sampling: snow ball sampling.

Unit-3: Introduction to Research Design

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

Unit-4: Research in Naturopathy & Yoga.

Introduction, Planning a research Project, Design of the study, Statistics, Parameters to be recorded for specific diseases- Obesity, Diabetes mellitus, Hypertension Asthma Lumbago, Rheumatoid Arthritis and other Life Style Diseases, Project Preparation for Clinical Research, Bioethics, Ethical Issues in clinical trials, Recent research update in Naturopathy & Yoga, Psychological Aspects in Yoga Research, Status of Research in India on naturopathy and Yoga

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.
1. Research Methods - By Dr. H.R. Nagendra
2. Research Methodology in Naturopathy & Yoga- By CCRYN, New Delhi
3. Fundamentals of Evidence based Medicine– By Kamleshwar Prasad
4. Research Reports From 1981 to 2006 – By INYS (Jindal Nature Cure Institute)

PAPER-II
YOGA THERAPY

UNIT-I

Introduction to Yogic Therapy/Basis of Yogic Therapy, Role of Asanas in curing various diseases, Specific importance of Pranayama in curing various diseases, Vital role of Bandhas, Mudras, Drishtis, in curing various diseases, Role of Shat - kriyas in curing various diseases particularly digestive disorders, Role of general exercises.

UNIT-II

The effects of various Yogic practices on different systems Viz : Skeletal system, Endocrine system, Nervous system, Digestive system, Respiratory system, Excretory system, Endocrine system, Cardio - Vascular system, Muscular system, reproductive system.

UNIT-III

Research methods in Yogic therapy, statistical analysis etc. Yogic therapy for:

- a. Cardio- vascular diseases
- b. Psychiatric diseases
- c. Mental retarded diseases
- d. Neuro - Muscular disease
- e. Gastro - intestinal disease
- f. Hormonal diseases
- g. Respiratory disorders
- h. Metabolic disorders
- i. Ophthalmologic disorders
- j. Pediatric disorders
- k. E.N.T. Disorders
- l. Obstetrics & Gynecology disorder

UNIT-IV

Meditation and its applications on psycho- somatic disorders.

Yoga & Relaxation techniques

- a. QRT-Quick Relaxation Technique
- b. IRT- Instant Relaxation technique
- c. DRT- Deep Relaxation technique

Teaching methods of Yoga to public, students and patients.

Models lesson planning and adoption of Yoga in education system, limitations, vidhi and Nisheda (right and wrong), Workshop on Yogic therapy, Pranic Healing & Reiki Therapy

Therapy for psychological disorders:- Psychotherapy, therapy of Interpersonal relations, behavioral therapy, Yogic counseling, Yoga for – Children, Women, Geriatrics, Technology stress

PRACTICAL

1. Analysis of Yoga technique by Static method.
2. Preparation of charts and posters for Public health education.
3. Case History taking and determining the effect of Yogic practice on patients.

REFERENCE BOOKS:

1. Yogic therapy- By Dr. Vinokar, Govt. of India. publication. By Swami Satyananda.
2. Treatment of common Disease through Yoga. Saraswati, Science & Man By CCRYN, Delhi Publication.
3. Yoga Nidra By Swami Satyananda Saraswati.
4. Pranic Psychotherapy By Choa Kok Sui.

PAPER-III

PHYSICAL MEDICINE & REHABILITATION

UNIT-I

Exercise Therapy

Basic Physics in Exercise Therapy. a. Mechanics: Force, gravity, line of gravity, center of gravity in human body, base, equilibrium, axes and planes. b. Mechanical Principles: Lever, order of lever, examples in human body, pendulum, spring, Introduction to exercise therapy. Starting positions: Fundamental starting positions, derived positions, muscle work for all the fundamental starting positions.

UNIT-II

Classification of movements in details. a. Voluntary movements b. Involuntary movements Active movements, Passive movements Muscle strength: Anatomy and physiology of muscle tissue, causes of muscle weakness/paralysis, types of muscle work and contractions, range of muscle work, muscle assessment.

UNIT-III

Principles of muscle strengthening / reeducation, early reeducation of paralyzed muscles. Joint movement: Classification of joint movements causes for restriction of joint movement, prevention of restriction of joint, range of movement, principles of mobilization of joint in increasing the range of motion, Technique of mobilization of stiff joint. Relaxation: Technique of relaxation, Principles of obtaining relaxation in various positions. Posture: Types, factors responsible for good posture, factors for poor development of posture.

UNIT-IV

Coordination exercise: Definition of coordinated movements, in-coordinated movements, Principles of coordinated movements, technique of coordination exercise. Suspension therapy: principles of suspension, types of suspension therapy, effects and uses of suspension therapy with their application either to mobilize a joint to increase joint range of motion or increase muscle power. Therapeutic applications.

Book Reference (Both Theory and practical's)

- 1) Principles of Exercise Therapy - By Dena Gardiner.
- 2) Tidy's physiotherapy.
- 3) Cash text book of physiotherapy.
- 4) Clayton's Electrotherapy and actinotherapy.
- 5) Kisner's Therapeutic Exercise foundation and techniques

PAPER-IV

Electrotherapy

UNIT-I

Electrical fundamentals

a. Physical principle b. Structure and properties of matter c. Molecular atom ,proton,neutron,election, ion etc.
2. Electrical energy- a. Nature of electricity current b. Static electricity c. Electric potentials generated by cell Ohm's law, Joule's law, Magnetic energy- a. Nature and property of a magnet b. Magnetic induction c. Shaw rule d. Maxwell's corkscrew rule

UNIT-II

Low frequency currents treatments a. Nature and principle of production of muscle stimulating currents b. Types of low frequency current used for treatment c. Therapeutic electric stimulation d. Iontophoresis. Phonophoresis
Preparation- for electrotherapy a. Preparation of apparatus
Patient treatment technique a. Stimulating muscles of extremity, back and face through the motor points.

UNIT-III

High frequency current treatments a. Physics of high frequency currents b. Principles c. Biophysics of heat physiology and cold. d. Production, physiological and therapeutic effects and uses. e. Technique of treatment, dangers and precautions, contraindication of ultrasonic therapy

UNIT-IV

Principles of radiation therapy a. Physics of radiation therapy b. Laws governing radiation: Production, physiological and therapeutic effects, uses, techniques of treatment, dangers and precaution, contraindication of IRR therapy, UV therapy. c. Basic principles of TENS and IFT d. Laser therapy Wax therapy
a. Physics of Wax therapy b. Physiological and therapeutic effect and uses. c. Techniques of application.

PRACTICAL

1). Interrupted/modified D.C.
a) Stimulation of Muscles directly.

b)	Diagnostic tests
(i)	F.G. Test.
(ii)	S.d. Curve
(iii)	Fatigue Test.
	2. Uses of surged faradism and interrupted galvanisms in various peripheral nerve lesions. a) Neuroproxia. b) Axonotomosis c) Neurotomosis

Book Reference (Both Theory and practical's)

- 1) Principles of Exercise Therapy - By Dena Gardiner.
- 2) Tidy's physiotherapy.
- 3) Cash text book of physiotherapy.
- 4) Clayton's Electrotherapy and actinotherapy.
- 5) Kisner's Therapeutic Exercise foundation and techniques.

PAPER-V
COMMUNITY HEALTH & MEDICINE

UNIT-I

Concept of Community Health

Concepts of Health, Health & Development, Indicators of Health Concepts of Disease, Concepts of Prevention, Disease Control and Eradication, Public Health, Social Medicine, Community Medicine ,Health Services, Planning and Management, Risk Approach, Evolution of Health Services.

UNIT-II

General Epidemiology

Introduction, Measurement of Mortality and Morbidity, Epidemiologic Methods Descriptive Studies Analytical Studies, Intervention Studies, Association and Causation uses of Epidemiology Infection Disease Epidemiology, Disease Transmission, Immunity, Immunizing Agents Disease Preventions and Control, Disinfection, Investigation of an Epidemic.

UNIT-III

Epidemiology of Communicable Diseases

Respiratory infections- small pox, varicella, Measles, rubella, Mumps, influenza, Diphtheria, Pertussis, Tuberculosis. Intestinal Infections- Polio, Viral hepatitis cholera, Acute Diarrheal Diseases, Typhoid Food Poisoning, Amebiasis, Ascariasis, Ancylostomiasis, Taeniasis
Arthropod - Borne infections. Yellow fever, Japanese Encephalitis, Malaria, Filariasis, Surface infections - Rabies, Trachoma, Tetanus, Leprosy, STD, AIDS.

Epidemiology of non-communicable diseases

Cancer, Cardio- Vascular Diseases, Diabetes, Obesity, Blindness, Accidents, Hypertension Stroke, Rheumatic, Heart Disease.

Demography and Family Planning

Demographic cycle, Population trends, Fertility related Statistic ,Health aspects of Family planning, contraceptive methods and delivery system, National Family Welfare Program.

UNIT-IV

Health Planning -Management International Health Organization, Planning Cycle, Management Methods and Techniques, National Health Policy, Health Planning in India, Five Year Plans, Health Systems in India- at Centre ,State and District Levels, Panchayat Raj, Rural Development Schemes.

Health Educations and communication -

Objectives, Principles, Aids, Practice and Health Education ,Planning and Evaluation

Health care of community - Health systems and national health programs, Levels of Health care, Health for All Primary Health Care, Health care Delivery, Health Problems Health care services and systems, voluntary Agencies National Health Programs.

PRACTICALS

1. Insecticides - 10 + Models.
2. Universal Immunization Program - 10 + Models.
3. Communicable Diseases - 10 + Models.
4. Insect Borne Diseases - 10 + Models.
5. Microscope Slides - 10 + Models.

6. Environment and Sanitation - 10 + Models.

7. Statistical Charts

8. Field Visits

a) Rural Health Centers.

b) Sewage Disposal Plant.

c) Water Filtration Plant.

d) Nature Cure Hospital.

e) Yoga Institutes etc

Text Books:-

1. Text book of preventive and Social Medicine- By J.E. Park and K. Park

2. Text book of preventive and social medicine - By B.K. Mahajan &M.C. Gupta

Reference Books :-

1. Preventive Medicine by Dr. Ghosh.

2. Preventive Medicine by Dr. Yashpal Bedi.

Reference Papers:-

•World Health Organization Programs papers.

•National Health Programs papers.

•Voluntary Health Programs Papers.

•Red Cross Programs Papers.

•UNICEF Programs papers.