HIMALAYAN UNIVERSITY, ARUNACHAL PRADESH

BACHELOR OF NATUROPATHY & YOGA SCIENCES

(BNYS)

1st Year (18 Months)

1st Year

S. NO.	SUB. CODE	SUBJECT NAME	MARKS			
			INTERNAL	THEORY	TOTAL	PASS
1	101	Human Anatomy - I	30	70	100	40
2	102	Human Anatomy - II	30	70	100	40
3	103	Human Physiology - I	30	70	100	40
4	104	Human Physiology - II	30	70	100	40
5	105	Philosophy of Nature Cure	30	70	100	40
6	106	Biochemistry	30	70	100	40
7	107	Principles of Yoga	30	70	100	40

2nd Year

S. NO.	**SUB. CODE**	**SUBJECT NAME**	**MARKS**			
			INTERNAL	**THEORY**	**TOTAL**	**PASS**
1	201	Pathology	30	70	100	40
2	202	Microbiology	30	70	100	40
3	203	Community Medicine	30	70	100	40
4	204	Yoga Philosophy	30	70	100	40
5	205	Basic Pharmacology	30	70	100	40
6	206	Colour Therapy and Magneto Biology	30	70	100	40
7	207	Forensic Medicine & Toxicology	30	70	100	40

3rd Year

S. No.	**Sub. Code**	**Subject Name**	**Marks**			
			Internal	**Theory**	**Total**	**Pass**
1	301	Manipulative Therapies	30	70	100	40
2	302	Acupuncture & Acupressure	30	70	100	40
3	303	Yoga and Applications	30	70	100	40
4	304	Diagnostic Methods - I	30	70	100	40
5	305	Diagnostic Methods - II	30	70	100	40
6	306	Psychology & Basic Psychiatry	30	70	100	40
7	307	Nutrition & Medicine Herbs	30	70	100	40

4rd Year

S. NO.	SUB. CODE	SUBJECT NAME	MARKS			
			INTERNAL	THEORY	TOTAL	PASS
1	401	Fasting Therapy & Dietetics	30	70	100	40
2	402	Obstetrics & Gynecology	30	70	100	40
3	403	Yoga Therapy	30	70	100	40
4	404	Hydrotherapy & Mud Therapy	30	70	100	40
5	405	Physical Medicine & Rehabilitation	30	70	100	40
6	406	First Aid & Emergency Medicine	30	70	100	40
7	407	Clinical Naturopathy				

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(BNYS)

1st YEAR

PAPER 101 :- HUMAN ANATOMY – I

I. GENERAL INTRODUCTION:

Importance of the study of Anatomy

1. Definitions & Sub divisions
2. Systems of the body
3. Structure of the cells
4. Terminology, Anatomical positions, Planes, & Surfaces.

II. OSTEOLOGY: (Including Ossification & Related Histology)

1. Types of Bones.
2. Classification of Bones.
3. Description of various bones of:
   a) Upper limb
   b) Thorax
   c) Abdomen and pelvis
   d) Vertebral column including cervical region

III. ARTHROLOGY:

1. Classification of Joints
2. Construction of Joints
3. Description of various joints of:
   a) Upper limb
   b) Thorax

c) Pelvis
d) Vertebral column

IV. MYOLOGY:

1. Types of Muscles
2. Muscles of Upper limb, Thorax, Abdomen and Pelvis
3. Origin, insertion, Blood supply, nerve supply and actions of these muscles

V. RESPIRATORY SYSTEM:

1. Upper respiratory tract – Nose, Pharynx, larynx
2. Trachea & Bronchial tree.
3. Lungs
4. Pleura
5. Mediastinum

VI. CARDIO VASCULAR SYSTEM:

1. Heart – Position, Surface anatomy and its description.
2. Great vessels – Aorta, Pulmonary trunk, superior vena cava, inferior vena cava and their branches.
3. Arteries and Veins – Structure of arteries and veins, important arteries & veins of the body.

VII. DIGESTIVE SYSTEM:

Oral cavity, Teeth, Hard palate, Soft palate, Esophagus, Stomach, Small Intestine (Duodenum, Jejunum & Ileum) Large intestine (Casecum, Appendix, ascending colon, transverse colon, descending colon, sigmoid colon, rectum), Anal canal, Anus, Liver, Gall bladder, Bile duct, Pancreas, Spleen, Peritoneum, Mesentery and their position in the abdominal quadrants.

VIII. URINARY SYSTEM:

1. Kidneys: position, surfaces, internal structures.
2. Ureters
3. Urinary Bladder
4. Male Urethra
5. Female Urethra

IX. LYMPHATIC SYSTEM:

Description of: Lymph, Lymph glands, Lymph ducts, Thoracic duct, and Cysterna chili.

PAPER 102 :- HUMAN ANATOMY – II

1. OSTEOLOGY: (including Ossification and related Histology)

Description of various bones of:

a) Lower limb
b) Skull as a whole

c) Individual Cranial bones of skull

II.ARTHROLOGY:

Description of various joints of:

a) Lower limb
b) Skull
c) Skull & Vertebral column

III. MYOLOGY:

Description of various muscles of:

a) Lower limb
b) Head
c) Neck

(Origin, Insertion, Blood Supply, Nerve supply and actions of these muscles)

IV. REPRODUCTIVE SYSTEM:

1. Male Reproductive organs:

Scrotum, Penis, Glands, Testes, Vas deferens, Spermatic cord, Epidermis, Seminal vesicles, Ejaculatory duct, Prostate gland etc.,

2. Female Reproductive system:

a) External genital organs: Vulva. Clitoris, vagina.
b) Internal genital organs:
Uterus, Cervix, Fallopian tubes, Ovaries, Ligaments of Uterus & Ovaries.
c) Mammary glands

V. ENDOCRINE SYSTEM:

Description of:
Pituitary, Pineal, Thyroid, Parathyroid, Thymus, Spleen,
Pancreas, Suprarenal, Ovaries & Testes.

VI. ORGANS OF SPECIAL SENSES:

- Tongue
- Nose
- Eye ball & associated structures, Lachrymal apparatus
- Ear: Description of external ear, middle ear and internal ear.
- The integumentary system: Description of skin & its appendages.

VII. DEMONSTRATION OF DISSECTED PARTS OF:

1. Lower limb
2. Head & Neck
3. Brain & Spinal Cord
4. Organs of Special senses. Cranial nerves.

PAPER 103 :- HUMAN PHYSIOLOGY – I

I. **BLOOD –** Physical properties, composition and functions of blood.

1. Plasma proteins

    a) Normal values
    b) Origin and methods of separation
    c) Functions and variations in health and disease.

2. Bone marrow

    a) Formed elements
    b) Composition and functions

3. Erythrocytes

    a) Morphology and variations in health and disease.
    b) Development of erythrocytes.
    c) Site and stages in development
    d) Necessary factors
    e) Regulation of development of erythrocytes
    f) Life-Span and fate of erythrocytes
    g) Erythrocytes sedimentation rate (ESR)

4. Hemoglobin

    a) Structure, synthesis, function and metabolism
    b) Types of hemoglobin.

5. Anemia – Definition and classification

6. Jaundice – Definition and classification

    a) Role and function of spleen.

7. Leucocytes

    a) Classification, morphology, development and functions
    b) Variation in health and disease.

8. Thrombocytes

    a) Origin, morphology and functions
    b) Variation in health and disease

9. Homeostasis

    a) Mechanism of haemostatic, coagulation of blood
    b) Fate of clot and disorders of clotting.

10. Anticoagulants

Mechanism of action and clinical applications

11. Blood group

a) Classification
b) ABO and RH system
c) Blood transfusion, indication and hazards

12. Lymph and tissue fluids

a) Lymph and reticular system
b) Principles of immune system
c) Collular and humeral immunity

II. CARDIOVASCULAR SYSTEM

Historical perspective, organization of cardiovascular system

1. Heart: -
   a) Structure and properties of cardiac muscle
   b) Innervation of heart, junctional tissue of heart.
   c) Regeneration and spread of cardiac impulse
   d) Various ECG leads, normal ECG and its interpretation.
   e) Cardiac Arrhythmias and heart blocks.

2. Heart sounds
   a) Description, Causation and relation to other events in cardiac cycle.
   b) Clinical significance of heart sounds.

3. Blood Pressure
   a) Definition, regulation and factors influencing B.P.
   b) Measurement of blood pressure.
   c) Physiology of hemorrhage and shock.

4. Circulation
   a) Blood vessels
   b) Physical principles of blood flow, regulation of blood flow.
   c) Jugular venous pulse tracing, radial pulse tracking.
   d) Coronary, cerebral, renal and pulmonary circulation.
   e) Splanochnic, cutaneous and capillary circulation.
   f) Cardiovascular changes in altitude and exercise.

III. RESPIRATORY SYSTEM

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

1. Mechanics of respiration
   a) Inspiration and expiration.
   b) Role of respiratory muscles and thorasic cage.
   c) Work of breathing, lung compliance and its significance in health and disease.

2. Lung volumes and capacities

a) Lung volumes and capacities and their measurements.
b) Respiratory minute volume and maximum voluntary ventilation.

3. Pulmonary circulation
   a) Pulmonary circulation, ventilation – perfusion relationship.
   b) Diffusion of gases across pulmonary membrane.
   c) Oxygen uptake, transport and delivery.

Carbon dioxide uptake, transport and delivery

4. Organization of the respiratory centers
   a) Nervous and chemical regulation of respiration
   b) Classification and characteristics of hypoxia, cyanosis, asphyxia, hyper apnea, hypooapnea, dyspnoea, apnoea and orthopnea and periodic breathing.
   c) Respiratory aspects of high altitude.
   d) Physiology of acolamatisation and hyperbarrism.
   e) Respiratory / pulmonary function tests.
   f) Non – respiratory functions of lungs.
   g) Artificial respiration.

IV. DIGESTIVE SYSTEM

1. Introduction, organization and plan of digestive system.
2. Stomach
   a) Functions of stomach
   b) Composition and functions of gastric juice.
   c) Regulation of secretion and mechanics of HCL secretion.
   d) Gastric emptying time and its regulation
3. Liver
   a) Function, formation, storage and emptying of bile.
   b) Composition, function and regulation of release of bile.
   c) Entero-hepatic circulation.
   d) Tests for liver function.
4. Small intestine
   a) Composition, function and mechanism of secretions.
5. Large Intestine
   a) Functions.
   b)
6. Gastro – intestinal movements
   a) Mastication, deglutition and vomiting
   b) Movements of stomach and small intestines
   c) Movements of large intestine and defecation.
   d) Regulation of movement and methods of study.
7. Digestion and absorption of carbohydrates, fats, proteins and vitamins, minerals and water.

V. EXCRETORY SYSTEM

1) General introduction, organs of excretion with special emphasis on evolution of excretory mechanisms. Renal system – Functional anatomy and renal circulation

PAPER 104 :- HUMAN PHYSIOLOGY – II

I. ENDOCRINES

1. Introduction – hormones, evolutionary back – ground and organisation of endocrine control systems.

II. REPRODUCTIVE SYSTEM

1. Physiology of reproduction
   a) Introduction to physiology of reproduction.
2. Male reproductive system
   a) Growth, development and structure of testes.
3. a) Functions of ovary, ovarian hormones.
4. Physiology of lactation.

III. NERVE MUSCLE PHYSIOLOGY

1. Muscle
   a) Types of muscle and their properties and morphology
   b) Neuro-muscular junction, exitation-contraction coupling.
   c) Clinical study of their hypo – and hyperfunction.
   d) Myasthenia gravis.

IV. CENTRAL NERVOUS SYSTEM

1. Structural and functional organisation of central nervous system.
2. Neuron
3. Neurogilia, functional types of neurons.
4. Synapse
   a) Types of synapses and their structure.
   b) Symphathetic transmission.
   c) General properties of neuro-transmitters.
5. Sensory Physiology
   a) Classification an dgeneral properties of receptors
   b) Sensory modalities and stereognosis.
6. Reflexes
   a) Reflex and general properties of reflexes (with examples)
7. Ascending tracts
   a) Origin, course, termination and functions.
   b) Specific reference to pain pathway and physiology of pain
8. Organization of motor system
   a) Pyramidal and extra-pyramidal systems
   b) Upper and lower motor neutrons and their lesions.

9. Cerebellum
    a) Functional anatomy, connections and functions

10. Basal ganglion
    a) Functional anatomy, connections and functions.

11. Vestibular apparatus
    a) Functional anatomy, connections and functions.
    b) Physiology of maintenance and regulation of muscle tone, posture and equilibrium.

12. Thalamus
    a) Functional anatomy, connections and functions

13. Hypothalamus
    a) Functional anatomy, connections and functions
    b) Effects of lesions of hypothalamus
14. Body temperature regulation
    a) Normal body temperature, pyrexia and hypothermia.
15. Cerebral cortex
    a) Functional anatomy
16. Reticular formation
    a) Physiology of reticular formation.
    b) EEG, physiology of sleep and wakefulness.
17. Higher functions
    a) Learning, speech, memory, behavior and emotions.

XI. AUTONOMIC NERVOUS SYSTEM

1. Sympathetic nervous system.
2. Parasympathetic nervous system.

XII. SPECIAL SENSES

1. Receptors, primary taste sensation and taste pathway
2. Vision
    a) Functional anatomy of eye, extra and inner-ocular muscles.

3. Hearing
    a) Functional anatomy of ear, function of external ear.
    b) Functional anatomy of internal ear, cochles, organ of cort.

Note: For the purpose of written theory examination, the syllabus is divided as follows: -

Theory paper – I

Section- A consisting of chapters on general physiology, blood, cardio-vascular system, respiratory system and digestive system and excretory system

Theory paper – II

Section- B Consisting of chapters on Endocrine system, reproductive system (male and female), nerve muscle physiology, central nervous system, atomic nervous system and special senses

PAPER 105 :- PHILOSOPHY OF NATURE CURE

1. A) What is Nature cure
   B) Definitions of Nature Cure and History of Naturopathy

2. Three fold constitution of man

3. Two fold attitude of mind and soul

4. Symphony of life

5. Basic Principles of Nature Cure

6. Laws of Nature

7. Violations of Nature

8. Catechism of Nature Cure
   a) Constructive Principle
   b) Destructive Principle
   c) Health
   d) Disease
   e) Acute disease
   f) Chronic disease
   g) Healing crisis
   h) Disease crisis
   i) Cure
   j) Normal/Natural

9. Philosophy and History of Indian Naturopaths
   a) Mahatma Gandhiji
   b) Vinoba Bhave
   c) Krisham Raju
   d) Laxman Sharma
   e) B.Venkat Rao
   f) Vitlaldas Modi
   g) Acharya Pacha Venkatrammaiah
   h) S.J.Singh
   i) Kulranjan Mukherjee
   j) Dinshamehta

10. Philosophy and History of Foreign Naturopaths
   a) Hippocrates
   b) Vincent Priesnitz
   c) Sebastian Kneipp
   d) Louish Kunhe
   e) Henry Lindlhar
   f) Herbert Shelton
   g) J.H.Kellog

h) Adolf just
i) Sigmund Freud
j) Arnold Riokli
k) John II Tilden
l) The School of Salerno
m) Aesculpins
n) Bernard Macfeddon
o) Bernard Jenson
p) Arnold Ehret
q) Paracelsus
r) Ignatz van peczely
s) F.W.Collins
t) R.M.Mclain

11. Primary causes of disease and its manifestations:

12. Unity of disease and Unity of cure.

13.A) Inflammation and its different stages
B) Suppression during the different stages of inflammation.

14.Nature cure in relation with pancha maha bhutas

15.Healing from within

16.Differences between functional and organic diseases

17.Conservation of Vitality.

How to acquire natural immunity

PAPER 106 :- BIOCHEMISTRY

1. Introduction and Prospects.

2. Proteins – Definition, Biological importance, classification and properties, structure of proteins, coagulation and denaturation of proteins.

3. Elementary aspects of the structure of collagen, Myoglobin and Hemoglobin.

4. Enzymes – Definition, classification, specificity, co-enzymes, co-factors and activators. Diagnostic importance of enzyme and so-enzymes.

5. Carbohydrates – Definition, classification and biological importance Monosaccharide's – classification, properties and stereo isomerism, oligosaccharides – importance of Disaccharides.

6. Polysaccharides – Functions.

7. Lipids – Definition, classification and biological importance.

    1. Simple lipids: Composition of criglycerol. Waxes.
    2. Compound Lipids: Function of Phospholipids, spongiolipids, & glycolipids.
    3. Derived lipids: Functions of fatty acids – properties of saturated and unsaturated fatty acids.

8. Vitamins – Definition and classification.
   Brief account of source, biochemical function and deficiency diseases

   Vitamin antagonists

   Hypervitaminosis

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

10. Metabolism – Digestion and absorption of carbohydrates, lipids, proteins and nucleic acids.

11. Metabolisms – Digestion and absorption of carbohydrates, lipids, proteins and nucleic acids

12. Carbohydrate Metabolism – Glycogen sis, glycogenolysis and Krebs's cycle, glycol sis, private oxidation, citric acid cycle, Gluconeogenesis, Metabolism of Fructose and Galaxies, regulation of metabolic pathways, disorders of carbohydrate metabolisms, regulation of blood sugar, glucose tolerance test, diabetes mellitus.

13. Lipid Metabolism – Lipogenesis, synthesis of fatty acids, de-saturation, phospholipids, Bio-synthesis of lecithin, Cephalin and their breakdown oxidation of fatty acids, formation and utilisation of ketone bodies, ketosis, synthesis and breakdown of cholesterol, disorders of lipid metabolism, outlines and formation and functions of prostaglandin's and leucotrienes, fatty liver and lipotropic factors.

14. 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 acids metabolism.

15. Purine and Pyrimidine metabolism – Outline of synthesis and breakdown of purine and pyrimidine Disorders of metabolism of purine and pyrimidine.

16) Liver function – Liver function tests, De-toxification, mechanisms.

17) Kidney Function tests – composition of urine, urea clearance and creatinine clearance.

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

PAPER 107 :- PRINCIPLES OF YOGA

1. What is Yoga, & various definitions of Yoga.

2. History of Yoga, (relative chronology, Yoga before the time of Patanjali, Indus valley civilization, Veda, Brahmans, Upanishads, Epics, Purina's and Smriti literature).

3. Original system of Yoga (Hiranyagrbha-yoga)
   a) Sankhya and yoga b) Buddhism and yoga c)Jainism and yoga
   d) Systamatisation of yoga by sage pantanjali e) Contribution of Vyasa's commentory to patanjali yoga.

4. Post patanjalian developments in Yoga.

5. Contemporary yoga, scientific and textual research studies.

6. Pathanjali's astanga yoga

7. Outlines on Branches of yoga - Raja, hatha, jnana, karma, bhakti, mantra, kundalini and laya.

8. Introduction to Yogasanas
   a) Definitions for Yogasanas, Animal postures
   b) Yogasanas and prana
   c) Yogasanas and Kundalini
   d) Yogasanas and the body mind connection
   e) Yogasanas and exercises.

9. Classification of yogasanas - beginners group, intermediate group, advanced group, dinamic and statis yogasanas.

10. Rules and regulations for Yogasanas.

11. Introduction to Pranayama
    a) Definition
    b) Pranic Body
    c) Prana and life style
    d) Breadth, health and pranayana
    e) Breathing and life span

Pranayama and spiritual aspirant

12. Rules and Regulations for the Pranayama Practice.

2nd YEAR

PAPER 201 :- PATHOLOGY

I. General Pathology: -

1. History and scope of pathology
   a) Definition and various branches in pathology
   b) Scientific study of disease and methodology
2. The cell and the reaction of cell, tissue and organ to injury
   a) Structure of cell and its functions
   b) Causes and nature of cell injury
   c) Toxic substances, physical agents and lack of nutrients.
   d) Infectious agents & Parasites.
   e) Immune mechanisms and genetic defects.
3. Inflammation and repair: -
   a) Definition, classification and nomenclature.
   b) Acute inflammation

   Vascular and cellular phenomenon, cells of exudates chemical mediators and tissue change in acute inflammation cardinal signs of acute inflammation.

   Fate, types and systemic effects of acute inflammation
4. Chronic Inflammation: -
   a) Difference between acute and chronic inflammation.
   b) Definition of Granuloma.
5. Wound Healing: -
   a) Restitution, regeneration and repair.
   b) Repair or epithelial and mesenchymal tissue.
   c) Primary union and secondary union.
   d) Mechanism involved and factors modifying repair process.
6. Growth and its disorders: -
   a) Definition of agenesis, aplaisa, atrophy, hyperplasia, hypertrophy, hypoplasia, metaplasia.
   b) Concept of dysplasia, anaplasia and carcinoma-in-situ.
7. Neoplasia
   a) Definition, classification and nomenclature.
   b) Characteristic features of benign and malignant tumors

Carcinogenesis and carcinogens

PAPER 202 :- MICROBIOLOGY

1) General Bacteriology: -

a) Historical Introduction
b) Morphology and Physiology of Bacteria.
c) Sterilization and Disinfections.
d) Cultivation of Bacteria.
e) Bacterial Growth and Multiplication.
f) Basic principles of Bacterial genetics.

2) Immunology: -

a) Immune system and antigen-antibody response.

b)

c) Basic principles of auto-immunity
d) Immuno Deficiency disease.

3) Parasitology: -

1. Helminthology – Enterobicus, vermicularis
2. Stool Examination for Parasites. Helminthiology Ankylostoma, Ascariasis, Taenia, Wucheria

4) Viruses - Measles, Chicken pox, mumps.

5.) Applied Microbiology:-

a) Normal bacterial flora of human body.
b) Bacteriology of Water, Milk and Air

Practicals

Blood smear for malaria parasite microfilaria and others parasites identification and interpretation of the parasites (Adult and Larva for Ms)

Text Books: -

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

PAPER 203 :- COMMUNITY MEDICINE

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 Diseases, concepts o f 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 Prevention & Control, Disinfection, Investigation of an Epidemic.

4. Environmental & Health - & Occupational Health

Purification of Water & Water Quality Standards, Air, Ventilation, Lighting, Noise, Radiation, Air Temperature & Humidity, Housing, Solid Wastes Disposal & Control, Excretory Disposal, Water Carriage System, Modern Sewage Treatment, Entomology – Mosquito, Housefly, Lice, Itch mite, Cyclopes, Rat Flea, Rodents, Insecticides – Ilazards, Diseases, Pre-placement examination, Measures for general health, protection of workers, prevention of occupational diseases, legislation

5.. Basic medical Statistics -

Censes, Vital Events, Legislation, SRS, Notification of Diseases, Measures of Dispersion & centering, Sampling, Tests of significance, correlation & regression.

6. Health Education and communication -

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

7. Nutrition and Health:

Classification of food, vitamin mineral, carbohydrate, protein, fat, energy balance, balanced diet, nutritional problems in public health low birth N+ Pem xeropthalmia, Nutritional anaemia, IDP, Endomic fiurosis, Lathyrism, Nutritional factors in selected disease. Assessment of Nutritional status, Nutritional surveillance Social aspects of Nutritional food hygine, food borne disease

8. Personal Hygiene:

1) Sun Bathing,

2) Hygiene of eating and drinking,

3) Rest, sleep, recreation and work,

4) Personal Cleanliness,

5) Mental Hygiene,

6) Health Destroying Habits Pan,

Suspan, Ganga, Drinks, Smoking, Coffee, Tea etc.

Mental Health

Health Programmes in India.

PAPER 204 :- YOGA PHILOSOPHY

Knowledge:

- After the completion of the course, the student shall be able to:
- Explain the basic understanding of *Yoga* as a philosophy
- Describe the various schools of philosophy which had an influence on *Yogic text* like buddhism, *samkhya*, *mimamsa* etc.
- Comprehend the concept of *brahman* according to *vedanta*

Skills:

- After the completion of the course, the student shall be able to
- At the completion of training, the student should be able to comprehend the basic

- Principles of *Yoga* and therapeutically apply them in his/her professional practice.

Theory

- *Yoga*, its definition, its basis, its relation to philosophy and its application
- Ancient roots of *Yoga* – literature review on reference to *Yoga* in *Upanishads, Vedas, Smritis and Puranas.*
- Buddhism – 4 main schools of Buddhist philosophy.
- *Nyaya* – Nature of physical world, individual soul, liberation and concept of
- upreme soul in Indian philosophy, theory of Body, Mind, Life and Soul and its
- philosophical background.
- *Vaisheshika* – Category of substance – *Nava dravyas*, category of quality – 24gunas.
- *Sankhya* – theory of cause and effect; *Prakriti, Purusa*; Process of evolution of
- universe; concept of liberation; Practical teachings of *Sankhya*.
- *Mimamsa* – Major teachings of *Mimamsa* system; selfless action, nonattachment, self-control, self-discipline, daily schedule for psychophysical wellbeing, social awareness, sense of equality, unity with diversity, selectiveness.
- *Vedanta* – Concept of *Atman, Brahma, Maya*, Universe, God; the self and human
- life; liberation and the means of attaining it.
- *PatanjaliYogaSutras* – Samadhi Pada, SadhanaPada.

PAPER 205 :- BASIC PHARMACOLOGY

UNIT-I

Introduction to Pharmacology

- Definitions
- Sources
- Terminology use
- Types: Classification
- Pharmacy-dynamics:
- Actions, therapeutic
    - Adverse, toxic
    - Pharmacokinetics:
- Absorption, distribution,
- metabolism, interaction,
- excretion
    - Review: Routes and
- principles of administration
- of drugs
    - Indian pharmacopoeia:
- Legal issues
- Storage of various drugs
- Calculation of drug dosage
    - Rational use of drugs

- Principles of therapeutics

UNIT-II

Chemotherapy

- Pharmacology of commonly used:
  - Penicillin
  - Cephalosporins
  - Aminoglycosides
  - Macrolide & Broad Spectrum
- Antibiotics
  - Sulfonamides
  - Quinolones
  - Antiamoebic
  - Antimalarials
  - Antihelmintics
  - Antiscabies agents
  - 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: Composition,

- action, dosage, route,
- indications, contraindications,
- drug interactions, side-effects,
- adverse effects, toxicity, and
- role of nurse
  - Disinfectants
  - Insecticides

UNIT-IV

Drugs acting on G I System

- Pharmacology of commonly used
  - Antiemetic
  - Emetics
  - 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

UNIT-V

Drugs used on Respiratory System

- Pharmacology of commonly used
  - Antiasthmatics
  - Mucolytics
  - Decongestants
  - Expectorants
  - Antitussives
  - Bronchodilators
  - Broncho constrictors
  - Antihistamines
- Composition, action, dosage, route,
- indications, contraindications, drug
- interactions, side effects, adverse effects,

PAPER 206 :- COLOUR THERAPY AND MAGNETO BIOLOGY

Magneto biology

Definitions of magneto therapy

Historical highlights

Vedic references related to magneto therapy

Biomagnetism

Effects on plants, birds and animals

Effects on mankind
Principles electromagnetism

Types of magnets

Natural

Artificial
Permanent
Electromagnets

Classification of magnets according to Power

Shapes

Clinical use

Physical properties of magnets

Magnetic permeability

Ferromagnetic materials
Ant ferromagnetic materials
Paramagnetic materials

Diamagnetic materials
Measurement of magnetic field

Mechanism of action of magnets in the body

Properties effects and corresponding features of north & south poles

Maintenance of permanent magnets

Magnetic field deficiency syndrome

Magnetic overload

Earth as a huge magnet

Effect of diamagnetism in various organ systems

Modes of application of magnets

General

Local
Different kinds of magnetic devices used in application of therapy

Magnetic charging, mechanism, dosage and its effect and limitations

Water, oil, milk, honey

Magnetic therapy through shad chakras

Contraindications, complications, and limitations of magneto therapy

Harmful effects of EMF and measures for minimizing it

PAPER 207 :- FORENSIC MEDICINE & TOXICOLOGY

A) Forensic Medicine: -

1. Definition: 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 signs of death, changes due to death and calculating time of death.

1. Medico – legal autopsy.

2. Medico – legal wounds, their classification and study and medico – legal aspects.

3. Examination of blood stains, hair and seminal stains.

4. Miscellaneous causes of death from heat, cold, electricity, starvation etc.

5. Violent asphyxial deaths – hanging, starangulation, suffocation and drowning.

6. Sexual offences: - Impotency and sterility, Virginity, Legitimacy, Un-natural offences, Medico legal aspects

7. Infanticide.

8. Medico – legal aspects of insanity

9. Forensic Psychiatry

10. Definition, police inquest, difficulties in detection of crime, legal procedure in criminal courts and their powers oath, medical evidence, medical certificate, dying declaration.

11. Rules of giving evidence, professional secrecy.

12. Post mortem examinations.

13. Death – signs of death cadaveric rigidity and spasm, putre – faction, estimation of time since death

14. Death from asph, differences between hanging and strangulation, suffocation and drowning.

15. Death from burns and scalds and lighting.

16. Rape and unnatural offences.

17. Abortion, pregnancy and delivery, miscarriage.

3rd YEAR

PAPER 301 :- MANIPULATIVE THERAPIES

1. Introduction and History 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 Purposes are: Skin, Muscular System, Heart and Circulation, Nervous System, Skeletal system including joints

4. Effects of the pressure of hands and lubricants on the systems: -

5. Getting crisis through massage (side effects and benefits)

6. Basic therapeutic massage techniques, indication and contradiction of massage while applying to the patients.

7. Massage and its effects-

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.

8. i) Different massage manipulations, classification and their detailed explanation, uses and contra-indications.

ii) Manipulative treatment in stress management.

iii) Shiatsu in manipulative therapy (acu pressure)

iv) Manipulation and Life extention v) Dry brush massage

9. Movements of joints: - Flexion, Extension, Abduction, Adduction, Supination, Circumduction, Deviations-medical and lateral & Opposition

10. Massaging in local areas under special circumstances: - Massage to abdomen, liver, Stomach, Heart, Head, Spine, Spewcial type of massages in different diseases.

11. Massage to women, infants & childerns

12. Massage for prevention of the diseases and maintenance of natural beauty

13. Ayurvedic massage- terminology, methods and manipulations

14. Chiropractice: Origin and aims of Chiropractice X-ray technique and Chiropractice Importance of spine in Chiropractice Physiological effects of Chiropractice Spinal manipulative therapy Chiropractice Examination

15. Osteopathy: Definition and the basic principles of osteopathy Relation of osteopathy to musculo-skeletal system

PAPER 302 :- ACUPUNCTURE & ACUPRESSURE

1. Definition, concepts of Acupuncture / Anatomy of Acupuncture.

2. Traditional and modern theories of Acupuncture

3. Materials and methods of acupuncture.

4. Principles of Acupuncture with modern views.

5. Rules for the selection of Acupuncture points

6. Contraindications and complications of Acupuncture

7. The concept of Meridians: -
a) Lung Meridian (Lu)
b) Large intestine Meridian (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) Gal bladder meridian (GB)
k) Liver Meridian (Liv)
l) Governing vessel Meridian (GV)
m) Conceptional vessels Meridian (CV)
n) Eight extra meridians

8. The extra-ordinary points

9. Diagnostic methods (both Acupuncture and modern)

10. Auriculo Therapy and SCALP Acupuncture

11. Moxibustion

12. Stimulation in Acupuncture

13. Acupuncture Therapeutics

14. Acupuncture Anaesthesia

15. Reflexology & Zone Therapy: -
What is reflexology, history and development
How does reflexology work
Body & its reflex zones
Applicatoins, indications and contra-indications
Preventive effects of reflexology

16. Acupressure: -
What is acupressure
Its origin & development
Physiological effects of acupressure
Therapeutic uses of acupressure

17. Acupuncture / Pressure in ACUTE disorders and emergency.

18. Pranic Healing

19. Reiki

PAPER 303 :- YOGA AND APPLICATIONS

Chapter 1

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

Chapter 2

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

Chapter 3

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

Chapter 4

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

PAPER 304 :- DIAGNOSTIC METHODS – I

1. Diagnostics of virus pathogens

a. Symptomatology, host range, test plants
b. Serology - basis of immunology, preparation of antibodies, methods
c. Nucleic acids determination - PCR, molecular hybridization
d. Electron microscopy

2. Diagnostics of bacterial pathogens

a. Biological, microscopically, and cultivation methods
b. Physiological, biochemical, and chemical methods
c. Serological and molecular methods

3. Diagnostics of fungi pathogens

a. Biological, microscopically, and cultivation methods. Symptomatology
b. Serological and molecular methods
c. Diagnostics of fungi secondary metabolits

4. Diagnostics of damage of pests

a. Determination of plant injuries
b. Determination of pests
c. Insects preparation methods

5. Diagnostics protocols of pathogens

6. Certification schemes

7. Excursions to relevant diagnostics laboratories

PAPER 305 :- DIAGNOSTIC METHODS – II

- Examination of the Patient
- Approach to a patient
- History taking and case sheet writing
- Symptomatology
- Examination of vital data
- Importance of height, weight, abdominal girth
- General physical examination
- Examination of skin, nail and hair
- Systemic examination of the patient
- Examination of Abdomen (digestive system
- Examination of Cardiovascular system
- Examination of Respiratory system
- Examination of Renal and urogenital system

- Examination of Central nervous system
- Examination of Locomotor system
- Examination of ear, nose and throat
- Gynecological examination
- Endocrine system and metabolic disorder
- Examination of eye
- Provisional diagnosis
- Routine and special investigations
- Laboratory investigations: Urine analysis, stool examination, blood
- examination-peripheral smear, total WBC count, differential WBC
- count; ESR, Hb estimation ;BT ,CT ,platelet count, red
- cell indices, bone marrow examination.
- Radiological investigations: Plain X ray chest, K.U.B., lumbar a
- cervical spine, skull and para nasal sinuses, joints
- Contrast Radiology: Barium swallow, barium meal, barium enema
- cholecystography, pyelography, angiography, bronchogram myelogram
- Electrocardiography
- Echo-cardiograph
- Coronary angiogr
- aphy
- Electro-encephalography
- Biochemical investigations: LFT, creatinine clearance test Vanillo-mandelic acid (VMA) excretion test in urine, SGOT and SGPT, LDH, CPK, blood urea, serum creatinine, cholesterol, renal function test, serum uric acid and serum amylase
- Diagnostic Paracentesis
- Diagnostic Thoracocentesis
- Lumbar puncture and CSF analysis
- Radioactive iodine uptake studies
- Thyroid T3, T4, TSH estimation
- Diagnostic skin tests
- Endoscopic procedures
- Ultra-sonography
- CT, PET, MRI, Doppler
- Tissue biopsy and FNAC
- Final Diagnosis

PAPER 306 :- PSYCHOLOGY & BASIC PSYCHIATRY

Psychology

Unit 1: The Evolution of Psychology-

- How psychology developed from speculation to science studying the mind and behavior early scientific approaches to psychology

- Structuralism
- Functionalism
- Contemporary approaches to psychology
- Behavioral approach
- Psychodynamic approach
- Cognitive approach
- Behavioural neuroscience approach
- Evolutionary psychology approach
- Sociocultural approach
- Positive approach to psychology: Humanistic movement and the positive psychology movement

Unit 2: Sensation and Perception

- How we sense and perceive the world
- The visual system
- The auditory system
- Other senses
- States of consciousness
- Levels of awareness
- Sleep and dreams
- Altered states of consciousness
- Hypnosis
- Meditation
- Drug induced states

Unit 3: Learning and Memory

- Types of learning
- Classical conditioning
- Operant conditioning
- Observational learning
- Cognitive factors in learning
- Memory
- Nature of memory
- Memory encoding: getting information into memory – the role of attention
- Levels of processing
- Enriching encoding
- Memory storage
- Sensory memory
- Short-term memory
- Long-term memory
- Memory retrieva
- Serial position effect
- Retrieval cues and the retrieval task

- Retrieval of autobiographical memories
- Retrieval of emotional memories
- Forgetting
- Biochemistry of memory
- Neural circuitry of memory
- Anatomy of memory
- Are there multiple memory systems? Implicit versus explicit memory
- Declarative versus procedural memory
- Semantic versus episodic memory

PAPER 307 :- NUTRITION & MEDICINE HERBS

- Nutrition
- Definition of food, nutrition, nutrient and diet
- What is nutrition healing
- Defining essential nutrients
- Proteins and amino acids
- Carbohydrates
- Lipids, sterols and their metabolism
- Energy needs: assessment and requirements in humans
    - Electrolytes, water and acid-base balance
- Minerals – calcium, phosphorous, magnesium, iron zinc, copper, iodine selenium, chromium, ultra trace minerals
- Vitamins – A, retinoid, D, E, K, Thiamine, Riboflavin, Niacin Pantothenic acid, Folic acid, B12, Biotin, C.
- Clinical manifestations of human vitamin and mineral disorders
- Role/significance of nutrition
- Regulation of gene expression
- Membrane and transport
- Control of food intake
- Antioxidants
- Food groups
- Metabolic consequences of starvation
- Fiber and other dietary factors affecting nutrient absorption and metabolism
- Hormone, cytokine and nutrient reactions
- Nutrition and immune system
- Oxidative stress and oxidant defense
- Diet in work and exercise performance
- Body composition: influence of nutrition, physical activity, growth and aging
- Maternal nutrition
- Nutritional requirements during infancy
- Diet, nutrition and adolescence
- Nutrition in the elderly
- Clinical nutrition assessment of infants and children

- Clinical and functional assessment of adults
- Nutritional assessment of malnutrition by anthropometric methods
- Laboratory tests for assessing nutritional status
- Dietary assessment
- Childhood obesity
- Nutritional management of infants and children with specific diseases and/or conditions
- Assessment of mal absorption
- Nutrition in pancreatic disorders
- Nutrition in liver disorders
- Nutrition and diet in the management of hyperlipidemia and atherosclerosis
- Nutrition, diet and hypertension
- Diet, nutrition and prevention of cancer
- Carcinogens in foods
- Nutritional support of the cancer patient
- Nutrition and diet in rheumatic diseases
- Nutritional management of diabetes
- Obesity
- Nutritional aspects of hematologic disorders

4th YEAR

PAPER 401 :- Fasting Therapy & Dietetics

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

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 disease.
c) Theory and Physiological facts of fasting.
d) Objections commonly raised in fasting therapy
e) Pros and Cons of fasting

III. 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.

IV. Rules & Regulations of Sane Fasting and Therapeutic Fasting

V. Definition and classification of Fasting

1) Definition of fasting in different aspects
2) General classification of Fasting (Religious, Political and Therapeutics)
3) Methods and types of therapeutic fasting (Dry, Water, Juice, Saline, Monodiet (Kalpa), Fruit, Intermittent, Preventive, Weekly etc.,)

VI. Hygienic Auxiliaries of Fasting

1) Air and Breathing
2) Enema
3) Bathing
4) Clothing
5) Water Drinking
6) Exercise
7) Mental influence

VII. Study of Patients during and After Fasting

1. Crises during fasting and their management.
2. Physiological effects of fasting
3. Physiological aspects
4. Study of the tongue, the breath, the temperature and pulse etc.
5. The loss and the gain of weight
6. How and when to break the fast.
7. How to break the fast

VIII. Indications and contraindications of Fasting

1. Fasting in acute diseases
2. Fasting in chronic diseases
3. Role of fasting in various diseases
4. Obesity and fasting

a. Definition and assessment of obesity & Types
b. Aetiology
c. Treatment

5. Fasting for preservation of health and prevention of diseases.

X. Results of Fasting

PAPER 402 :- OBSTETRICS & GYNECOLOGY

- 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 puerpurium
- Care of new born child
- Pathology of pregnancy
- Hyperemesis gravidarum
- Venereal diseases
- Anemia in pregnancy
- 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

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
- Puberty and Menopause
- Neuroendocrinology in relation to reproduction
- Menstruation
- Examination of a gynecological patient and the diagnostic aids
- History
- Examination
- Ancillary aids
- Cytology
- Colonoscopy

PAPER 403 :- YOGA THERAPY

1. Introduction to yogic therapy / Basis of yogic therapy.

2. Role of general exercises

Viz: - Gardening, Swimming, Streching Ex., Aerobic Ex.,Walking & Bare foot walking in curing general diseases

3. Research methods in yogic therapy, Statistical analysis etc.

4. Yogic therapy for: -
a. Cardio-vascular diseases
b. Psychic diseases
c. Mental retarded diseases
d. Neuro Muscular diseases
e. Digestive diseases
f. Hormonal diseases
g. Respiratory diseases
h. Metabolic diseases
i. Ophthalmologic disorders
j. Paediatric disorders
k. E.N.T. disorders
l. Obstetrics & Gynaecological disorders

5. Meditation and its applications on psychosomatic disorders

6. Relaxation & its Techniques
a) Art of relaxation
b) Training the mind
c) Experiences in yoga Nidra
d) Yoga nidra & Brain
e) Symbols of the unconscious
f) Emerging into Samadhi
g) Practice of yoga Nidra
h) QRT – Quick Relaxation Technique
i) IRT – Instant relaxation technique
J) DRT – Deep relaxation technique

7. Teaching methods of Yoga to Public, students and patients, Model lesson planning and adoption of Yoga in education system, limitations, vidhi and Nisheda (right and wrong)

8. Workshop on Yogic therapy

9. Desertations

10. Advanced techniques of Yoga therapy

11. Yoga and Mental health – Total integration of Personality, correct mental behavior and attitude, harmonial relationship of body and mind, self content tranquilising effect, Mental, Psychology of spiritual growth, spiritual value, toning judgement, pure consciousness, mode of living and disciplined life.

12. Applied Psychology: -
a. Stress – Its causes, effects and control.
b. Historical perspective, identifying psychological disorders.
i) Anxity disorders.
ii) Dissociative Disorders
iii) Somato form disorders
iv) Sexual disorders
v) Mood disorders
vi) Personality disorders
vii) Schizophrenia

c. Therapy for psychological disorders psychotherapy, therapy of Interpersonal relations, Behavior therapy

13. Correction of displaced Nabhi

14. Therapeutic Benefits of Yogic sukshma vyayam, sthula vyayam, Shakti Bandha series, sudarshana kriya

PAPER 404 :- HYDROTHERAPY & MUD THERAPY

PAPER 1

1. Introduction and history.

2. Physical properties and chemical composition of water.

3. Physiological basis of Hydrotherapy
The skin and its anatomical construction, functions of the skin, temperature sense

4. Production of heat and its distribution in the body, regulation of the body temperature, conditions that increase and decrease heat production in the body, body heat and body temperature.

5. Importance of water to human body.

6. Physiological effects of water on different systems of the body

i) General and Physiological aspects of heat upon: -
a. Skin
b. Respiration
c. Circulation
d. Nervous system
e. Heat and its production, dissipation etc.
f. Tactile and temperature sense.
ii) General and physiological effects of cold upon skin, respiration, circulation, nervous system, G.I.T., Body temperature and its maintenance, nervous system and circulatory System, digestive system

7. Reflex areas of the body, results of the application of hot and cold over reflex areas.

8. Actions and reaction, incomplete reaction, conditions that encourage and discourage reaction, internal reaction, thermic reaction, modified thermic reaction.
9. Place of water in preservation.
10. Place of water in Acute diseases.
11. Place of water in chromic diseases.
12. Magnesium sulphate – use in Hydrotheraphy

PART-II

1. General principles of Hydrotherapy
a) General rules of Hydrotherapy

b) Therapeutic significance of reaction.
c) Adaptation of individual cases.
d) Exaggeration of symptoms under treatment, the untoward effects and how to avoid them.
e) General indications and contra-indications.

2. Therapeutic actions and use of Hydrotherapy
a) Classification of Hydriatic effects, General principles excitation and depression.
b) Primary exitent effects when to apply and when not to apply.

1. Local haemostatic effects – Hydriatic heart tonics

2. Cardiaceffects – Hydratic heart tonics.

3. Uterine excitations, emanogogic effects.

4. Vesical excitations.

5. Intestinal excitation, peristalitic effects.
c) Secondary excitant effects: -

1. Restorative effects

2. Tonic effects of cold water, physiological effects of cold water. Cold water Vs. Medical tonics, application in the following

3. Anemia, Neuresthenia, Hypochondria, Cerebral congestion, Rheumatism, Diabetes millitus, Valvular heart diseases

4. Calorific effects.

5. Diaphoretic effects
Importance of attention to the skin in chronic diseases – alternative & qualitative effect – Hot baths in brights diseases, sweating baths in dropsy and obesity. Depurative or eliminative effects, Toxemia in Rheumatism

6. Expectorant effects.

7. Diuretic effects – Brights disease.
Uraemia – eclampsia.

8. Atomic Dyspepsia, Hyperacidity.
Revulsive and derivative effects, flexion, revulsive methods for combating superficial anemia and for relief of deep congestion method adapted to anemia of deep seated organs revulsion on analgesic measure

PAPER 405 :- PHYSICAL MEDICINE & REHABILITATION

Exercise therapy

Basic Physics in Exercise Therapy

Mechanics: Force, gravity, line of gravity, center of gravity in

Human body, base, equilibrium, axes and planes

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

Classification of movements in detail

Voluntary movements

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, 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 joints range of movement,

principles of mobilization of joint in increasing the range of motion.

Technique of mobilization of stiff joint

Relaxation: Techniques of relaxation, Principles of obtaining relaxation in

Various positions Posture: types, factors responsible for good posture, factors for poor development of posture Coordination exercises: Definition of coordinated movements, in coordinated movements, Principles of coordinated movements, technique of coordination exercise Gait: Analysis of normal gait with muscles work, various pathological gaits Crutch gait: introduction, crutch measurement, various types of crutch gait in detail Neuromuscular facilitation techniques, functional reeducation 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, explaining The full details of the components used for suspension therapy Myofascial Release Therapy and related therapies used in Sports Medicine Therapeutic applications Electrotherapy Electrical fundamentals Physical principles Structure and properties of matter Molecular atom, proton, neutron, electron, ion etc Nature of electricity current Static electricity Electric potentials generated by cell

Ohm's Law

Joule's Law

Magnetic energy

Nature and property of a magnet

Magnetic induction

Shaw rule

Maxwell's corkscrew rule

PAPER 406 :- FIRST AID & EMERGENCY MEDICINE

First Aid

- General principles of first aid-definition, principles, responsibilities and golden rules
- Resuscitation techniques-basic life support, mouth to mouth ventilation, artificial ventilation, Sylvester method.
- Unconsciousness and general principles of treatment, recovery position
- Transportation and handling of patient
- Hemorrhage and bleeding
- Shock
- Wounds
- Bandages, dressing and slings
- Fractures, sprains and strains
- Poisoning
- Asphyxia, Aspiration, drowning, suffocation and strangulation
- Road accidents
- Effect of temperature, sunburn, hypothermia, frost bite, heat exhaustion, heat Stroke
- Burns and scalds, electrical injuries
- Head injury, chest injury, blast injury, crush injury
- Sports injuries
- Epilepsy-febrile convulsions
- Syncope

- Dog bite, snake bite, scorpion bite and bee sting
- Emergencies in diasthetic patients and cardiac patient

Endocrine and Metabolism

- Thyroid crisis
- Adrenal crisis
- Diabetic ketoacidosis and coma
- Hypoglycemia
- Tetany
- Hypercalcemia
- Miscellaneous Emergencies
- Syncope
- Acute peripheral circulatory failure
- Anaphylaxis
- Hypothermia
- Hyperpyrexia
- Poisoning
- Drug overdose

PAPER 407 :- CLINICAL NATUROPATHY

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
- Cardinal manifestations and presentation of disease

Abscess, Acid-Peptic Disease, Acne, AIDS, Aging, Allergies, Alopecia, Alzheimer's Disease, Anal fissures, Anemia, Anorexia nervosa, Anxiety disorders, Appendicitis, Arthritis – OA & RA, Asthma, ADD/ADHD, Back pain, Bad breath, Bedsore, Bladder Infection, Bronchitis, Bruise, Bursitis, Cancer - Breast cancer, Cervical cancer, Colorectal Cancer, Leukemia, Lung cancer, Prostate cancer, Skin cancer, Stomach cancer, Uterine Cancer; Dental caries, cardiovascular disease, Cerebrovascular disease, Chlamydia,

Chiliasm (Age spots), Chronic fatigue syndrome, Cirrhosis, Common cold, Colic, Colitis, Nasal congestion, Conjunctivitis, Constipation, Menstrual cramps, Crohn's Disease, Cuts (cuts, wounds and scratches), Cyst, Cystitis, Dandruff, Deep venou Thrombosis, Clinical depression, Dermatitis, Diabetes, Diarrhea, Diverticulitis, Dizziness, Duodenal ulcer, Dysmenorrheal, Dyspepsia, Diabetes mellitus, Earache, Earwax Blockage, Eczema, Edema, Emphysema, Endometriosis, Epilepsy, Erectile dysfunction, External obits, Fainting, Farsightedness, Fatigue, Fever, Fibromyalgia, Flatulence, Flu, Folliculate, Food poisoning, Foot odor, Gallstones, Gas, Gastritis, Gastroenteritis, GERD, Gingivitis, Goiter, Gout, Headache, Heatstroke, Hemorrhoids, Hepatitis, Hernia, Herpes (genital), Obesity, Oligomenorrhea, Oral cancer, Ovarian cyst, Parkinson's Disease, PID, Phlebitis, PMS, Postnasal drip, PTSD, Rashes (hives), Reynaud's disease Sciatica, SAD, Seizure disorder, Sinusitis, Snoring, Sore throat, Scoliosis, Sprains, Acute Abdomen.

Path physiology

- Management of pains
- Pain sensory systems
- Chronic pain
- Types of pain
- Chronic discomfort and palpitation
- Abdominal pain
- Headache
- Back, neck pain
- Fever, hyperthermia
- Fever, rashes
- Fever of unknown origin
- Hypothermia & frostbite
- Syncope, faintness, dizziness, vertigo
- Weakness, disorders of movements and imbalance
- Numbness, tingling and sensory loss
- Aphasia, memory loss and other focal cerebral disorders
- Sleep disorders
- Dyspnea, cough
- Edema
- Dysphasia, nausea, vomiting and indigestion
- Diarrhea, constipation
- Weight loss
- Jaundice, abdominal swelling

- Sexual dysfunction
- Healing crisis and Disease crisis
- Approach to the patient in Naturopathic medicine with: