BNYS 2nd

PATHOLOGY

Subject Title : PATHOLOGY (Duration : 12 Months)

Subject Code : BNYS – T 201 A , BNYS– 201 B & BNYS – P201

Subject	Theory	IA	Total	Practical	IA	Viva voce	Total	Grand Total Marks
Pathology -I	80	20	**200**	60	10	30	**100**	**300**
Pathology –II	80	20						

*IA - **Internal Assessment**

GOALS AND OBJECTIVES

Goal:

The goal of teaching pathology to undergraduate students is to provide a comprehensive knowledge of the mechanisms and causes of disease, so that he/she is able to comprehend fully the natural history and clinical manifestations of disease.

Course Objectives:

- Explain the structure and ultra-structure of a sick cell, mechanism of cell degeneration, cell death and repair and be able to correlate structural and functional alterations.
- Describe the pathophysiological processes which govern the maintenance of homeostasis, mechanisms of their disturbance and the morphological and clinical manifestations associated with it;
- Delineate the mechanisms and patterns of tissue response to injury such that he/she can appreciate the pathophysiology of disease processes and their clinical manifestations;
- Correlate normal and altered morphology (gross and microscopic) of different organsystems in common diseases to the extent needed for understanding of disease processes and their clinical significance.

Course Outcomes (Cos) :

After the completion of the course, the student shall be able to:

- **CO 1 -** Elaborate on principles, procedures and interpretation of results of diagnostic laboratory tests;
- **CO 2 -** Perform with proper procedure simple bed side tests on biological fluid samples like blood, urine etc.
- **CO 3 -** Prepare investigation flow-charts for diagnosing and managing common diseases;
- **CO 4 -** Identify biochemical and physiological disturbances in diseases.

THEORY
(SECTION-I) (BNYS – T 201A)

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, aplasia, 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

c) Carcinogenesis and carcinogens.

. **SECTION-11**
(BNYS-T 201B)

Systemic Pathology :-

1. Disorders of RBC :-

a) Definition, morphologic and etio-pathologic classification of anemias.
b) Iron deficiency anemia, B12 and folate deficiency anemia.

2. Disorders of WBC:-

a) Leukopenia, Leukocytosis.
b) Leukaemia, Agranulocytosis and Tropical eosinophilia.

3. Coagulation and Bleeding disorders:-

a) Structure, function and pathology of platelet

4. Diseases of Cardiovascular system-

a) Arteriosclerosis and Atherosclerosis.
b) Rheumatic heart disease, endocarditis, myocardial infarction
c) Congenital heart disease

5. Diseases of respiratory system:-

a) Atelectasis, bronchiectasis and pneumoconiosis
b) Chronic-obstructive pulmonary disease (COPD)
c) Bronchial asthma, chronic bronchitis.

6. Diseases of Gastro-intestinal system:-

a) Gastritis and pepticulcer and tumors of stomach.
b) Amobiasis, bacillary dysentery and intestinal tuberculosis.

7. General disorder of Kidney, Liver and nervous system diseases.
8. General disorder of Skin disease

9. Musculo-skeletal syatem- Rheumatoid Arthriti, Gout, OA, Classification of Arthritis- all type

PRACTICAL

1. Demonstration of:-

a) Hemo grams in anemia-
i) Iron deficiency anemia
ii) Macrocytic anemia
iii) Macrocytic anemia
iv) Hemolytic anemia

Recommended Text Books for Pathology:-

1. Text Book of Pathology By N.C.Dey
2. Textbook of Pathology Harsh Mohan

Reference Books:-

1. Systemic pathology -By Symmers
2. Medical Laboratory Technology- By Ramnik Sood
3. Pathological basis of disease- By Robbins, Cotran and Kumar

MICROBIOLOGY

Subject Title : MICROBIOLOGY (Duration : 12 Months)

Subject Code : BNYS – T 202 & BNYS – P 202

Subject	Theory	IA	Total	Practical	Viva voce	IA	Total	Grand Total Marks
Microbiology	80	20	**100**	60	30	10	**100**	**200**

*IA - **Internal Assessment**

GOAL AND OBJECTIVES

Goals:

The goal of teaching Microbiology to undergraduate students is to provide a comprehensive knowledge of the natural history, mechanisms and causes of infectious disease, including etiology, pathogenesis, laboratory diagnosis, treatment and control of disease in the community.

Course Objectives:

- Remember and recall all the infectious micro-organisms of the human body host-parasite relationship
- Describe parasitic micro-organisms (viruses, fungi, bacteria, parasites) with the pathogenesis of the diseases they cause.
- Enumerate and illustrate sources and modes of transmission including insect vectors, of pathogenic and opportunistic organisms;
- Describe the pathways and mechanism of immunity to infection.
- Acquire knowledge about different vaccines that are available for the prevention communicable diseases;
- Effectively use sterilization and disinfection to control and prevent nosocomial and community acquired infection;
- Order laboratory investigations for bacteriological examination of food, water and air.

Course Outcomes (Cos) :

After the completion of the course, the students shall be able to:

- **CO 1 -** Prescribe and interpret laboratory investigations for diagnosis of communicable diseases and identify infectious agents by clinical manifestations;
- **CO 2 -** Perform common bed-side tests to detect and identify pathogenic agents, such a blood film for malaria, filarial, gram stain and stool sample for ova cyst, etc.

THEORY

1. General Bacteriology :-

a) Historical Introduction
b) Morophology and Physiology of Bacteria.

c) Sterilisation and Disinfection
d) Cultivation of Bacteria
e) Bacterial Growth and Multiplication
f) Basic Principles of Bacterial Genetics

2. Immunology-

a) Infection and Immunity
b) Immunoglobulins and Immune Response
c) Immune System and Antigen-Antibody Response
d) Compliment and other Serological Tests
e) Hypersensitivity
f) Basic Principles of Auto-Immunity.
g) Immunodeficiency disorders
h) Transplantation Immunology
i) Immunity in AIDS

3. Systemic Bacteriology-

Streptococcus, Staphylococcus and Pheumococcus, Gonococcus, Meningococcus, Corynaebatterium, Clostridium, Hemophilus, Bordetella, Mycobacterium, Spirochaetes,Yersinia ,Chalamydia.

4. Virology-

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

5. Parasitology

a) Protozoalogy - Entamoeba and Plasmodium
b) Helminthiology-. Ankylostoma. Ascariasis, Taenia, Wucheraria.

7. Mycology-

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

8. 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 - By Monica Cheesbrough

For Tropical Countries Vol. I & II

YOGA AND PHYSICAL CULTURE-I

Subject Title : YOGA AND PHYSICAL CULTURE-I (Duration : 12 Months)

Subject Code : BNYS – T 203 & BNYS – P 203

Subject	Theory	IA	Total	Practical	Viva voce	IA	Total	Grand Total Marks
Yoga and Physical Culture-I	80	20	**100**	60	30	10	**100**	**200**

*IA - **Internal Assessment**

GOAL AND OBJECTIVES

Goals:

The goal of teaching Yoga and Physical Culture to undergraduate student is to provide them with comprehensive understanding of yoga with reference to traditional texts like Patanjali Yoga sutras, Hatha Yoga Pradipika, Shiva Samhita, Gheranda Samhita and Swara yoga; various streams of Yoga, advanced meditative techniques like Yog Nidra, Omkar, cyclic meditation, Vipassana meditation and learn about their psychological & physiological benefits compared to exercises.

Course Objectives:

- Illustrate the knowledge of traditional texts like Patanjali Yoga Sutras, Hatha Yoga, Siva Samhita and Gheranda Samhita
- Understand the principles behind various meditative practices like Yog Nidra, Om meditation, cyclic meditation, Vipassana and so on
- Explain about yoga in relation to its application in education, sports;
- Demonstrate basic understanding of procedures of stretching an exercise.
- Describe basic physiological changes in asana
- Be aware of the effects of Shatkriyas and their adverse effects

Course Outcomes (Cos) :

After the completion of the course, the student shall be able to:

- **CO 1 -** Describe the concept of yoga as explained in the traditional texts
- **CO 2 -** Deliver a meditative session using any of the meditative styles.
- **CO 3 -** Implement various exercises loosening or eye exercises or stretching to complement yoga practice.

THEORY

1. Patanjali Yoga Sutras:

The chapters in detail i.e. Samadhi Pada , Sadhana Pada ,Vibhuti Pada & Kaivalya Pada.

2. Hatha Yoga :

Full text with necessary reference to Hatha Yoga Pradipika ,Gharenda Samhita , Siva Samhita, Hatha Ratnavali & Goraksasatakam.

4. Introduction to other streams of yoga: Kundalini, Tantra, Swara and kriya

5. Yoga Nidra-methods, applications, effects and benefits.

6. Meditation-types- Omkar , Cyclic, Vipassana, Transcendental.

a. methods of application
b. benefits,
c. precaution
d. influence on health and disease

7. Yoga in relation to personality and education

8. Yoga in relation to sports, games, social and political life

9. Eye exercises- benefits, methods and precautions

10. Physiological Aspects of Asana

11. Physiological, Neurophysiologic Aspect of Pranayama

12. Shatkriyas - Comparative Study of Shatkriyas with Other Systems Of Medicine

13. Physiological Aspects Of Exercises

14. Physical exercises for health and fitness

i. Introduction
ii. Who should stretch?
iii. When to stretch
iv. Why to stretch
v. How to stretch
vi. Relaxing stretches for back, leg, feet and ankles, hips, hamstrings and lower back
vii. Stretching exercises for elderly
viii. Stretching exercises for abdominal muscles, arms, chest, ankle, legs, thighs, forearm and knees
ix. Techniques of walking, running, cycling, etc
x. Caring for the back

PRACTICALS:

1. Stretching Exercises
2. Loosing exercises (Shitilikarana,Vyayama,and,Breathing,exercises)
3. All Asana of I B.N.Y.S. plus advanced postures from yoga Deepika,
4. Pranayama (as in I B.N.Y.S.)
5. Kriyas– (as in I B.N.Y.S.)
    a) Dhouti – Vastra, Danda
    b) Gajakarani–(Vaisara Dhouti)
    c) Nauli– all the three types
    d) Shankaprakshalana – laghu & maha shankaprakshalana
    e) Basti
6. Meditation:
    a. Omkara
    b. Cyclic
    c. Vipassana

RECOMMENDED BOOKS:

1. Yog Darshan – P.P Swami Ramdev ji
2. Basis and definitions of Yoga - Vivekananda Kendra
3. Yoga Darshan - P.P. Swami Ramdev ji
4. Yoga – its Philosophy and Practice - P.P. Swami Ramdev ji
5. Yoga Vignanam - Acharya Balkrishna ji
6. Asanas-Swami Kuvalyananda
7. Yog, its philosophy and practice – P.P. Swami Ramdev ji

8. Yog Vignanam – Acharya Balkrishna ji
9. Raja, Hatha, Jnana, Bhakti Yoga - Swami Vivekananda
10. Yoga Biomechanics : Stretching Redefined – Jules Mitchell
11. Pranayama Rahasya – P.P. Swami Ramdevji
12. Encyclopedia of Indian physical culture- DC Mujumdar

REFERENCE BOOKS

1. Yog Samanya Gyan – P.P Swami Ramdev ji
1. Science Studies Pranayama – Patanjali Research Foundation
2. Yoga in Synergy with medical sciences - Acharya Balkrishna ji
3. Science of Yoga: Understand the Anatomy and Physiology to perfect your Practice – Ann Swanson.
4. Yoga Anatomy – Leslie Kaminoff and Amy Matthews

DIAGNOSTIC METHOD IN YOGA & NATUROPATHY

Subject Title : DIAGNOSTIC METHOD IN YOGA & NATUROPATHY(Duration : 12 Months)

Subject Code : BNYS – T 204 & BNYS – P 204

Subject	Theory	IA	Total	Practical	Viva voce	IA	Total	Grand Total Marks
Diagnostic Method in Yoga & Naturopathy	80	20	**100**	60	30	10	**100**	**200**

*IA - **Internal Assessment**

GOAL AND OBJECTIVES

Goal:

The goal of teaching diagnostic methods in yoga and naturopathy to undergraduate students is to provide them with comprehensive knowledge of diagnostic methods employed traditional naturopaths that can be efficiently use to diagnose various diseases without the use of sophisticated

Course Objectives:

- Define and be aware of the historically significant developments in diagnosis procedures used in naturopathy
- Illustrate the characteristics of a healthy body with respect to naturopathic principles
- Describe the philosophical theories of causation of disease according to naturopathy
- Utilize knowledge of encumbrances,their types an interpretation, along with, naturopathic ways of therapeutically correcting them
- Understand and diagnose the pathology or the preponderance to a pathology based on physical diagnosis, anthropometric measurements and gait patterns.

Course Outcomes (Cos) :

After the completion of the course, the student shall be able to:

- **CO 1 -** Describe the characteristics of normal an unhealthy skin in different diseases
- **CO 2 -** Comprehend the techniques and interpretations of stool and urine diagnosis correlating modern medical knowledge and Ayurvedicsthoola and muthrapariksha
- **CO 3 -** Use of different diagnostic procedures in naturopathy to effectively and accurately diagnose various diseases, such as facial diagnosis, stool and urine diagnosis.

THEORY

1. Facial diagnosis

i) Introduction

ii) Characteristics of healthy body

iii) Foreign matter theory, toxemia theory, vitality theory

iv) Physiological and pathological perspective of foreign matter, toxemia and mm
v) Unity of disease, Unity of cure- interpretation with contemporary medicine
vi) Encumbrance, its types, its interpretation with contemporary medicine
vii) Habits- significance, consequence an its correspondence in encumbrance
viii) Significance of naturopathy treatment modalities in correction of encumbrance.

2. Iridiagnosis

1. Definition and Historical Highlights
2. Anatomy of iris in detail
3. Conceptual theories of Iridiagnosis
4. Comparison of the science of Iridiagnosis with concepts of Drishtipraraksha in Ayurveda and ophthalmology in modern medicine.
5. Technique in iris reading
    i. Normal and abnormal iris
    ii. The vibratory theory and its significance
    iii. Diagnostic chart
    iv. Iridoscope
    v. Zones
    vi. Sectorial division
    vii. Interpretation of iris manifestation
        a. Inherent lesions and weakness
        b. Cataract
        c. Toxic settlements
        d. Nerve rings
        e. Lymphatic rosary
        f. Injuries and surgeries
        g. Psora spot, scurf rim
        h. Radii Solaris
        i. Sympathetic nerve wreath
        j. Closed and open lesions
        k. Sodium ring
        l. Circulatory indicators
        m. Drugs and chemical appearance in the iris and their effect on the body
        n. Arsenic, bismuth, bromides, coal tar products, ergot, glycerin, iodine, lead, mercury, opium, phosphorus, quinine, salicylic acid... sodium, strychnine, sculpture, turpentine, vaccines etc.

3. Stool and Urine analysis

i) Characteristics of normal stool and urine
ii) Abnormal characteristics and significance
iii) Comparison of Stool and urine diagnosis Pareeksha in Ayurveda with mala &muthra

4. Skin Diagnosis

i) Anatomy of skin
ii) Skin types

iii) Abnormality and its significance in Health
iv) Comparison of skin diagnosis with twakpareeksha in Ayurveda

5. Tongue diagnosis

6. Pulse diagnosis

7. Chromo diagnosis

8. Advanced research updates

PRACTICAL

a. Case sheet writing - minimum 25 cases with naturopathic diagnostic methods
b. Regular hospital visit
c. Dissertation of at least 20 cases studies with significant and relevant Naturopathic diagnostic modalities

REFERENCE BOOKS:

1. MacFadden Encyclopedia of Physical Culture - Bernard McFadden
2. Asthangahridyam
3. Charaka Samhita
4. Susrutha Samhita
5. The Science of Facial Expression - Louis Kuhne
6. Iridology - Dr. Bernard Jenson

MODERN DIAGNOSTIC METHODS

Subject Title : MODERN DIAGNOSTIC METHODS (Duration : 12 Months)

Subject Code : BNYS – T 205 & BNYS – P 205

Subject	Theory	IA	Total	Practical	Viva voce	IA	Total	Grand Total Marks
Modern Diagnostic Methods	80	20	**100**	60	30	10	**100**	**200**

*IA - **Internal Assessment**

GOAL AND OBJECTIVES

Goal:

The goal of teaching Diagnostic Methods in Conventional Medicine to undergraduate students is to provide them with comprehensive knowledge of diagnostic methods employed by conventional doctors that can be used efficiently to diagnose various diseases, for diagnosis as well as prognosis

Course Objectives:

- Understand the procedures and nuances in approaching a patient and taking a detailed history and writing a case report;
- Illustrate examination procedures and techniques generally as well as for specific systems and make provisional diagnoses of common diseases;
- Describe laboratory investigations used for supporting the provisional diagnosis made after history taking and examinations;
- Prescribe and interpret radiological investigations, biochemical investigations, sonography, EEG, ECG, EMG, echocardiography, CT, PET, MRI, etc for diagnostic and prognostic purposes;
- Explain and demonstrate knowledge of invasive tests such as paracentesis, thoracocentesis, lumbar puncture, laparoscopy, endoscopy, biopsy, etc.

Course Outcomes (Cos) :

After the completion of the course, the student shall be able to:

- **CO 1 -** Effectively take a case history with examinations and prepare a detailed report;
- **CO 2 -** Prescribe and interpret any further investigations required for the provisional diagnosis made.

Integration:

At the completion of training, the student should be able to comprehensively understand the principles, procedures and nuances of Diagnostic Methods in Conventional Medicine and employ the same for diagnostic and prognostic purposes.

THEORY

1. Examination of the patient. (140 Hrs)

i) Approach to a patient.
ii) History taking and case sheet writing
iii) Symptomatology

iv) Examination of vital data
v) Importance of height, weight, abdominal girth
vi) General physical examination
vii) Examination of skin, nail and hair.
viii) Systemic examination of the patient
   a. Examination of Abdomen (digestive system)
   b. Examination of Cardiovascular system.
   c. Examination of Respiratory system
   d. Examination of Renal and urogenital system
   e. Examination of Central nervous system
   f. Examination of Locomotor system
   g. Examination of ear, nose and throat
   h. Gynecological examination.
   i. Endocrine system and metabolic disorder
   j. Examination of the eye
   k. Provisional diagnosis
   l. Routine and special investigations
      1. 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.
      2. Radiological investigations: Plain X-ray chest, K.U.B, lumbar and cervical spine, skull and paranasal sinuses, joints
      3. Contrast Radiology: Barium swallow, barium meal, barium enema; cholecystography, myelography, angiography, bronchogram, myelogram
      4. Electrocardiography
      5. Echo-cardiograph
      6. Coronary angiography
      7. Electro-encephalography
      8. 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
      9. Diagnostic Paracentesis
      10. Diagnostic Thoracocentesis
      11. Lumbar puncture and CSF analysis
      12. Radioactive iodine uptake studies
      13. Thyroid T3, T4, TSH estimation
      14. Diagnostic skin tests
      15. Endoscopic procedures
      16. Ultra-sonography
      17. CT, PET, MRI, Doppler
      18. Tissue biopsy and FNAC

2. Final Diagnosis

PRACTICAL

1. History taking and physical examination of cases.
2. Case sheet writing of different types of cases (25)
3. Demonstration of equipment and instruments used for investigation is modern diagnostics
4. Demonstration tour of an ultra-modern super-specialty hospital to view the latest technique of modern diagnosis

TEXTBOOKS

1. Hutchison's Clinical Methods
2. Manual of clinical Methods - PS Shankar
3. Clinical Diagnosis - JalVakil
4. Clinical Methods – Chamberlin
5. Physical Diagnosis - Golwala
6. Harrison's Principles of Internal Medicine
7. Manipal Manual of Clinical Medicine
8. Macleod's Clinical Examination
9. Davidson's Principles and Practice of Medicine
10. Essentials in Hematology and Clinical Pathology

BASIC PHARMACOLOGY

Subject Title : BASIC PHARMACOLOGY (Duration : 12 Months)

Subject Code : BNYS – T 206

Subject	Theory	IA	Total	Practical	Viva voce	IA	Total	Grand Total Marks
Basic Pharmacology	80	20	**100**	-	50	-	**50**	**150**

*IA - **Internal Assessment**

GOAL AND OBJECTIVES

Goal:

The goal of teaching Pharmacology to undergraduate students is to provide a comprehensive knowledge of scientific, evidence-based treatment of diseases through drug administration.

Course Objectives:

- Illustrate pharmacokinetics and pharmacodynamics of essential and common drugs

Course Outcomes (Cos) :

After the completion of the course, the student shall be able to:

- **CO 1 -** Be proficient in describing pharmacokinetics and pharmacodynamics of essential and common drugs
- **CO 2 -** Observe medical ethics in his professional practice.

THEORY

GENERAL PHARMACOLOGY

a) Introduction, Absorption, Distribution, Metabolism & Elimination of drugs
b) Route of Administration of Drugs
c) Pharmacokinetics and Pharmacodynamics
d) Adverse effects of drugs
e) Factors modifying drug action

AUTONOMIC & PERIPHERAL NERVOUS SYSTEM

a) Neurohumoral transmission
b) Sympathetic Nervous system- sympathomimetics, sympatholytics
c) Parasympathetic- Cholinergics, Anticholinergics, Ganglion Stimulants & Blockers
d) Local Anaesthetics

AUTOCOIDS

a) Histamines and Antihistamines
b) Prostaglandins, Leukotrines, thromboxane, PAF
c) NSAIDS
d) Substance P, Bradykinin

DRUGS AFFECTING RENAL SYSTEM

a) Diuretics and Antidiuretics
b) Uricosoric drugs

DRUGS AFFECTING CARDIOVASCULAR SYSTEM & BLOOD FUNCTION.

a) Drug Therapy of Hypertension, Shock, Angina
b) Diuretics
c) Coagulants, Anticoagulants, Antiplatelet drugs
d) Hypo-lipedemics

DRUGS AFFECTING GASTROINTESTINAL SYSTEM

a) Diarrhoea, Constipation, IBS,IBD
b) Emetics & Antiemetics
c) Drugs – Acid Peptic Disorders

DRUGS AFFECTING RESPIRATORY SYSTEM

a) Pharmacotherapy of Cough
b) Bronchial Asthma

DRUGS AFFECTING CENTRAL NERVOUS SYSTEM

a) Sedatives, Hypnotics
b) Antiepileptics
c) Opoid Analgesic
d) CNS Stimulants
e) Psychopharmacology
f) Neurogenic Disorder

CHEMOTHERAPY

a) Sulphonamides, Fluoroquinolones & urinary antiseptic
b) B. Lactum Antibiotics – Pen, Cephalosporius & other
c) Macrolide Antibiotics
d) Aminoglycosides
e) Drugs in TB & Leprosy
f) Antimalarial drugs
g) Amoebicidal & Antiprotozoal drugs
h) Antifungal drugs
i) Antivirl drugs – AIDS
j) Anticancer drugs
k) HPA & Corticosteroid
l) Pancreatic Hormones – Diabetes
m) Thyrotropin and Antithyroid drugs
n) Vitamins and Antioxidants
o) Immunomodulators
p) Treatment of Poisoning

TEXTBOOKS RECOMMENDED

a. Goodman & Gilman's - The Pharmacological Basis of Therapeutics
b. Basic & Clinical Pharmacology by Bertram G, Katzung
c. Clinical Pharmacology by DR Lawrence, PN Bennett & MJ Brown
d. Essentials of Medical Pharmacology by K.D. Tripathi
e. Pharmacology and Pharmacotherapeutics by RS Satoskar, SD Bhandarkar, SS Ainapure
f. Fundamental of Experimental Pharmacology by MN Ghosh

FUNDAMENTAL PRINCIPLES OF INTEGRATED SYSTEM OF MEDICINE –3rd

Subject Title : FUNDAMENTAL PRINCIPLES OF INTEGRATED SYSTEM OF MEDICINE –3rd (Duration : 12 Months)

Subject Code : BNYS – T 207

Subject	Theory	IA	Total	Practical	Viva voce	IA	Total	Grand Total Marks
Fundamental principles of integrated system of medicine –3rd	80	20	**100**	-	50	-	**50**	**150**

*IA - **Internal Assessment**

GOALS AND OBJECTIVES

Goal:

The goal at giving knowledge about the basics of Ayurveda which are important to identify the cause of disease and guide to follow healthy lifestyle to prevent and treat disease. It also provides a knowledge of History of Ayurveda and in order to be able to study, understand, comprehend and utilize the knowledge contained in Indian traditional texts in their professional practice, especially in the field of Yoga.

Course Objectives:

- Understand origin , history ,important of Roga.
- Understand Principles behind Roga Nidana & Vigyana
- Understand Fundamental viewpoints of Classical view of roga.

Course Outcomes (Cos) :

At the end of the course, the student will be able to:

- **CO 1 -** Describe the various principles of Ayurveda - Roga Nidana & Vigyana
- **CO 2 -** Explore the information about various ayurvedic Roga .
- **CO 3 -** Elucidate the history of Ayurveda, Siddha , Homoeopathy & Unani.

THEORY

1. Basics of Roga Nidana

- Importance of Nidan Panchaka
- Hetu – Definition, Synonyms, Classification, Importance
- Purva Rupa – Defition, Synonyms, Samanaya and Vishist Roop, Importance
- Rupa- Defition, Synonyms, Samanya and Pratyatma Lakshana, Difference between Vyadhi and Lakshna, Importance of Rupa

- Upashaya/Anupashaya- Defition, Types, Importance in Diagnosis
- Samprapti- Defition, Synonyms, Type, Samprapti Ghatak
- Shatkriyakala- Importance & Types
- Sadhya-Asadhyata- Types and Importance
- Conceepts and Importance of Upadrav

2. Basics of Roga Vigyana II

- Outlines of Rog Vigyana
- Nidana, Purvarupa, Rupa, Samanya and Vishista Samprapti of following diseases-Pandu, Hridroga, Swas, Kasa, Grahani, Atisara, Pravahika, Parinam Shool, Mutrakrichha, Kamla, Kushta, Aamvata, Sandhivata, Vatrakta.

RECOMMENDED BOOKS:

1. Ayurveda Siddhant Rahasya/ A Practical Approach to Science of Ayurveda – Acharya Balakrishna
2. Ashtang Hridayam – Acharya Balkrishnaji