

# **BPT COURSE OUTCOME**



**INSTITUTE OF HEALTH SCIENCES**

## **COURSE OUTCOMES**

### **SEMESTER- I**

#### **Psychology**

After the completion of the subject, students will be able to perform the following:

1. Student describes the definition and scope of Psychology
2. Student understands the different branches of Psychology.
3. Student describes the main psychological processes of psychology like learning, memory, perception, emotion and motivation.
4. Student will be able to understand the importance of heredity and environment in the development of personality and intelligence.
5. Student will be able to understand the practical importance of studying child Psychology for rehabilitation services.
6. Student knows how important is the importance of Industrial Psychology – human factors of engineering, decision making process, stress and mental health

#### **Sociology**

After the completion of the subject, students will be able to perform the following:

1. Demonstrate knowledge of core sociological concepts.
2. Demonstrate knowledge of how to use theory to conceptualize a sociological problem.
3. Develop an ability to use social scientific research methods to address sociological questions.
4. Demonstrate the ability to communicate sociological knowledge to others.
5. Develop the knowledge, skills, and attitudes necessary to be engaged members of the community.
6. Possess analytical skills in areas such as policy analysis, administration/management, communication, quantitative analysis and problem solving.

#### **Therapeutic 1**

1. Student's benefits basic concept of physiotherapy.
2. Student benefits basic concept of exercise therapy & electrotherapy.
3. Students learns the movement pattern, classification of movements
4. Students benefits the techniques of free exercises.
5. Learns the alignment of posture and its correction techniques
6. Relaxation techniques like massage, assistive techniques RPM Different electrical modalities their use and therapeutic effects.

### **SEMESTER- II**

#### **Anatomy**

On completion of this subject, the students will be able to perform the following:

1. Apply concept and knowledge of bones, joints, muscles, systems and functions of body organs.
2. Identify and locate the body structures in a human body.
3. Evaluate health information and medical research.

## **Physiology**

On completion of this subject, the students will be able to perform the following:

1. Have an enhanced knowledge and appreciation of mammalian physiology;
2. Understand the functions of important physiological systems including the cardio-respiratory, renal, reproductive and metabolic systems;
3. Understand how these separate systems interact to yield integrated physiological responses to challenges such as exercise, fasting and ascent to high altitude, and how they can sometimes fail;
4. Be able to perform, analyse and report on experiments and observations in physiology;
5. Be able to recognise and identify principal tissue structures.

## **Biochemistry**

On completion of this subject, the students will be able to perform the following:

1. Demonstrate knowledge and understanding of the molecular machinery of living cells;
2. Demonstrate knowledge and understanding of the principles that govern the structures of macromolecules and their participation in molecular recognition;
3. Demonstrate knowledge and understanding of the principles and basic mechanisms of metabolic control and molecular signalling;
4. Use basic laboratory skills and apparatus to obtain reproducible data from biochemical experiments;
5. Implement experimental protocols, and adapt them to plan and carry out simple investigations;
6. Analyse, interpret, and participate in reporting to their peers on the results of their laboratory experiments;
7. Participate in and report orally on team work investigations of problem-based assignments;
8. Build on their knowledge and understanding in tackling more advanced and specialised courses, and more widely to pursue independent, self-directed and critical learning.

## **Environmental Science**

On completion of this subject, the students will be able to

1. Understand the importance of environmental diversity into our life.
2. Understand how to conserve this diversity.
3. Understand all the prevention methods that creates damage to environment as well as to wildlife.
4. Awareness about ACT present to preserve our environmental diversity.

## **Therapeutics 2**

### **EXERCISE THERAPY- II**

On completion of this subject, the students will be able to

1. Demonstrate various exercise techniques for enhancing overall neuromusculoskeletal control that therapist needs to practice in future.
2. Physiotherapeutic techniques for various conditions
3. Assess and provide physiotherapeutic techniques in neuromuscular conditions.
4. Conditions for relief of pain, relaxation, conditioning and posture.

### **ELECTROTHERAPY – II**

On completion of this subject, the students will be able to

1. Understand the efficiency of all modalities for various neuromuscular condition.
2. Demonstrate the various electro modalities that therapist needs to practice in future.
3. Understand the limitations of modalities over various medical conditions.

## **SEMESTER- III**

### **Community Medicine**

1. Apply the principles and process of health management to enhance the effectiveness and efficiency of the national health programs.
2. Plan, organize, implement, monitor or evaluate outcome and impact of health care programmes and services.
3. Acquire the epidemiological know how and understand the dynamics of transmission of common communicable diseases for necessary measures to prevent and control diseases.
4. Identify through community diagnosis, the social, cultural, environmental and psychological factors influencing health behaviour and apply these principles in community level intervention programmes.
5. Integrate the know-how of diagnosis and management of health issues with the science of public health practice and expertise of health communication.
6. Critically appraise National health policies, priorities and approaches.
7. Plan, organize, implement and evaluate teaching/learning sessions for medical and paramedical personnel. Design research protocols, collect and analyse data on bio-medical, epidemiological, social and health service issues.

### **Biomechanics**

1. Student defines basic concepts of clinical biomechanics.
2. Student describes the phases and determinants of gait correct.
3. Student lists the characteristics of normal and pathological gait.
4. Student describes the basics of biomechanics of tissues, their rebuilding and healing.
5. Student is able to practically determine the weight and position of center of gravity section body and overall center of gravity of man.
6. Student analyzes and evaluates the movement in the joints.
7. Student is estimated adaptable to performance locomotor disabilities.
8. Student recognizes the determining factors in practice the opportunity to take rehabilitation.
9. Student knows how important is the importance of biology tissue in the patient's adaptation to the state after damage to the musculoskeletal system.

### **Patho, Phrama and Micro**

Students will be able to perform the following

1. Explain the basic nature of disease processes from the standpoint of causation, epidemiology, natural history, and the structural and functional abnormalities that result.
2. Classify diseases of various body systems and how they manifest clinically and histopathologically.
3. Able to diagnosed from clinical scenarios of congenital, hemodynamic, inflammatory, infectious, metabolic, environmental, and neoplastic diseases.

4. Identify a range of drugs used in medicine and discuss their mechanisms of action.
5. Report the clinical applications, side effects and toxicities of drugs used in medicine.
6. Explain the mechanisms of action and pathology of ethanol and drugs of abuse.
7. Translate pharmacological principles into clinical decision-making.

## **SEMESTER- IV**

### **Surgery**

Students will be able to perform the following

1. The student will be able to manage different postoperative emergencies and complications.
2. The student will successfully demonstrate directed history and physical examinations on the surgical patient, with emphasis on preoperative planning and decision-making.
3. The student will become familiar with ward procedures.
4. The student will participate in patient care activities.

### **Medicine 1:**

Students will be able to perform the following

1. Diagnose and manage common health problems of the individual and the community
2. Commensurate with his/her position as a member of the health team at the primary, secondary or tertiary levels. Using his/her clinical skills based on history, physical examination and relevant investigations

### **Medicine 2**

Students will be able to perform the following

1. After completion of lectures and demonstrations, in addition to clinics the student will be able to demonstrate a understanding of the diseases that therapists would encounter in their practice
2. In addition, the student will be able to demonstrate proficiency by written, oral and practical internal evaluation.

### **PCPC**

Students will be able to perform the following

1. Apply biomedical and behavioral scientific knowledge to the physiotherapy evaluation and management of complex pulmonary and cardiovascular dysfunction
2. Effectively assess and treat complex paediatric cardiopulmonary disorders.
3. Appropriately select, modify as necessary, and correctly demonstrate measurement and testing procedures commonly used in assessing patients with complex cardiopulmonary dysfunction.

## **SEMESTER- V**

### **Alternative medicine**

On completion of this subject, the students will be able to :

1. To apply yoga, naturopathy and acupressure as an adjunct treatment for various condition.
2. To understand the utility of above therapy in aiding in healing and relaxation.

### **Physiotherapy in surgical condition**

#### **GENERAL SURGERY**

On completion of this subject, the students will be able to

1. Demonstrate a general understanding of the surgical condition further understanding its etiology and pathology, the patient's symptoms and the resultant functional disability.
2. Understand the limitations imposed by various surgical condition on any therapy.
3. surgical conditions in which physical therapy will be an important component of overall management
4. physiotherapeutic techniques for various conditions

#### **PLASTIC SURGERY AND BURN**

On completion of this subject, the students will be able to

1. A deep insight on post operative case of graft and flap and burn patients that therapists would encounter in their practice.
2. Understand the etiology and pathology, the patient's symptoms and the resultant functional disability.
3. Understand the limitations imposed by various reconstructive surgical conditions on any therapy.
4. Reconstructive surgical conditions in which physical therapy will be an important component of overall management
5. Physiotherapeutic techniques for various conditions

#### **OBSTETRICS AND GYNAECOLOGY**

On completion of this subject, the students will be able to

1. Understand the anatomy, physiology and various conditions in Obstetrics and Gynaecological conditions relevant to Physiotherapy.
2. Assess and provide physiotherapeutic techniques in Obstetrics and Gynaecological
3. Conditions for relief of pain, relaxation, conditioning and posture.
4. Physiotherapeutic techniques for various conditions

## **SEMESTER –VI**

### **Medicine III**

On completion of this subject, the students will be able to

1. Demonstrate a general understanding of the neurological condition further understanding its etiology and pathology, the patient's symptoms and the resultant functional disability.
2. Understand the limitations imposed by various surgical procedures
3. A deep insight on post operative case of laminectomy etc patients that therapists would encounter in their practice.

## **Surgery II**

1. On completion of this subject, the students will be able to
2. Demonstrate a general understanding of the orthopedic condition further understanding its etiology and pathology, the patient's symptoms and the resultant functional disability.
3. Understand the limitations imposed by various orthopedic conditions on any therapy.

## **Medicine IV**

1. On completion of this subject, the students will be able to
2. Demonstrate a general understanding of the neuro- psychiatric condition further understanding its etiology and pathology, the patient's symptoms and the resultant effect on prognosis.
- 3.

## **SEMESTER -VII**

### **Rehab Science**

1. After completion of the course the student shall be conversant with the various aspects of rehabilitation and its importance in total rehabilitation of the disabled. Like
2. Conceptual framework of rehabilitation, team members, importance of each member in the field of rehabilitation.
3. Epidemiology and Preventive aspects of disability .Its implications- individual, family, social, economic and the state.
4. Community based Rehabilitation and out each programs to Rehabilitate persons with disabilities living in rural area.
5. Statutory provisions, Scheme of assistance to persons with disability.
6. Management of communication and behavioral problems, mental retardation, visual impairments.
7. Knowledge of various mobility aids, splints, orthosis and prosthesis.

## **Personal Management & Ethics**

On completion of this subject, the students will be able to :

1. Understand the ethical principles of physiotherapy profession.
2. Understand principles of management in personal management, time management and
3. Administration including budgeting.

## **PDPF**

1. By acquiring the knowledge of the above, the student shall be competent to evaluate interpret the clinical findings and plan a suitable management programme for the patients attending the clinic,
2. The skills of the various manual therapy techniques and neurological approaches shall enhance the therapeutic skills of the students.

## **SEMESTER – VIII**

### **PT NEUROLOGICAL CONDITIONS**

On completion of this subject, the students will be able to:

1. Ability to evaluate, diagnose and treat various neurological conditions

2. Proficiency in the application of various therapeutic approaches in the management of neurological conditions.

## **PT ORTHOPAEDIC CONDITIONS**

1. On completion of this subject, the students will be able to :
2. Enhancement of skills in evaluation ,diagnosis and selection of appropriate therapeutic protocols for various orthopaedic disorders