

ANNEXURE-III**SCHEME AND SYLLABUS FOR THE POST OF ASSISTANT PHYSIOTHERAPIST IN
DIRECTOR OF MEDICAL INSURANCE SERVICE****Scheme of Examination**

Written Examination (Objective Type)	No.of Questions	Duration (Minutes)	Maximum Marks
Paper-I: General Studies and General Abilities	150	150	150
Paper-II:Physiotherapy(Diploma Level)	150	150	150
Total			300

PAPER-I: GENERAL STUDIES AND GENERAL ABILITIES

1. Current Affairs: International, National and State.
2. Society, Heritage and Culture, Polity, Economy, Human Development Indices and the Development Programmes in India and Telangana.
3. Natural Resources in India and Telangana: their distribution, exploitation, conservation and related issues.
4. Basic concepts of Ecology and Environment and their impact on health and economy; Disasters and Disaster management.
5. Impact of changing demographic trends on health, environment and society.
6. Agriculture, Industry, Trade, Transportation and Service sectors in India and Telangana.
7. Food adulteration, Food processing, food distribution, food storage and their relevance to public health.
8. Recent trends in Science and Technology.
9. Telangana Statehood movement and formation of Telangana State.
10. Moral values and Professional ethics.
11. Logical Reasoning: Analytical Ability and Data Interpretation.

PAPER-II: PHYSIOTHERAPY (DIPLOMA LEVEL)

1. History of Physio therapeutics.
 - International and national definitions of Physiotherapy (WHO and state councils in India).
 - Role of Physiotherapy in meeting the needs and demands of national health care delivery system.
2. Electrotherapy (Low Frequency, Medium & High Frequency.current and advanced practices (invasive and non-invasive methods) for pain management. Clinical implications of Selection of dosage, techniques, indications, contraindications, method of application, precautions, advantages, disadvantages, dangers, therapeutic effects, physiological effects, uses and rationale for selecting a particular modality in a specific condition
 - Short Wave Diathermy – Pulsed and Continuous,
 - Microwave Diathermy – Pulsed and continuous,
 - Ultrasonic Therapy,
 - Ultraviolet Therapy,
 - Infrared radiation,
 - Laser Therapy,
 - Paraffin Wax Bath,

- Cryotherapy,
 - Moist heat therapy Contrast bath,
 - Electronic Traction,
 - Iontophoresis,
 - Interferential Therapy.
 - Transcutaneous Electrical Nerve Stimulation,
 - Electrical Stimulation – Faradic, Galvanic, S.D curves, Dynamic currents,
 - Continuous Passive Motion.
 - Fluid therapy,
 - Biofeedback
3. Exercise Therapy, First aid and exercise physiology.
- Muscle work, adaptive response to exercise, activation of muscle and recruitment, pelvic floor stability, core activation.
 - Isometric, isotonic exercises for the whole body
 - Starting position, derived positions, active and passive movements, Progressive resisted exercises, Muscle grading, Re-education of muscles,
 - Joint mobility, Goniometry, Use of assistive devices for mobility (canes, crutches, walkers, wheelchairs)Relaxation
 - Postural correction, feedback methods, parallel bar training, Gait evaluation and training,
 - Breathing exercises including postural drainage
 - frenkels exercise, vestibular and cerebellar dysfunction
 - Suspension therapy, Hydrotherapy, Bands tubes and various methods of resistance used in exercise therapy
 - Principles of First aid, safety methods to prevent falls.
 - Wound dressing, debridement, disinfection methods
 - CPR(basic and advanced in emergency situation to save life)
 - Patient transfer and lifting methods.
 - Counselling and interpersonal relations in health care.
 - Recording and measurement of vitals and administration of medicine.
 - Optimal Nutrition for human performance, (Carbohydrates, Lipids & proteins, Vitamins, Minerals, and water) and exercise.
 - Body composition assessment, physique, performance, and physical activity, over weight, obesity and weight control and Physical activity in sports and diseased.
 - Clinical exercise planning for cancer, cardiovascular and pulmonary, gynaecological, plastic surgery, burns, neuro and orthopaedics conditions.
4. Therapeutic Fascial release methods, instrument assisted and non-instrument assisted methods.Clinical subjects for physiotherapy practice. Applied Physiology, General medicine, elements of biochemistry, Pharmacology, Microbiology, Pathology and radiology.
- stroking manipulation, pressure manipulations, percussion manipulations, shaking manipulations
 - Instrument assisted soft tissue mobilisation
 - Fascial Manipulation.
 - Positional release methods tightened tissues.
 - Clinical therapeutic Taping.
5. Administration, supervision, Physiotherapy law and ethics, Sociological and Psychological aspects of health care and Research methodology
- Physiotherapy and Law Medico legal aspects of Physiotherapy, liability, negligence, malpractice, Licensure, workman's compensation.
 - guidance and counselling services of students and faculty
 - Design of curriculum for a basic Physiotherapy Programme and its use in scope of practice
 - Evidence based practice in Physiotherapy.
 - Psychological and sociological aspects of health and illness.

6. Biomechanics, Ergonomics, Kinesiology, Basics of physics, orthotics, prosthetics used in Physiotherapy treatment.
 - Basic Mechanics
 - Basic physical properties of bone, cartilage, muscle, tendons, ligaments, joints.
 - Kinetics and kinematics of individual Joints of Upper Extremity, Lower extremity, Vertebral column, Thoracic Cage and Pelvis.
 - Ergonomics and body mechanics.
 - Prescription, application, fabrication of assistive, adaptive, orthotic, protective, supportive, and prosthetic devices for spine, upper and lower limb.

7. Community based Physiotherapy, geriatric physiotherapy and basics of acupuncture, yoga, occupational therapy and speech therapy.
 - Barriers and facilitators for different categories health and disability.
 - National healthcare delivery system.
 - Levels of prevention of diseases
 - Disability evaluation systems used in government sector and disablement benefits.
 - Social security measures to protect from occupational hazards and physiotherapist role in various respiratory, neurological and orthopaedic conditions.
 - Fitness and physical function of geriatric population.
 - Utilisation of yoga and acupuncture in association with physiotherapy.
 - Therapeutic effects of asana, and pranayama

8. Orthopaedic and sports Physiotherapy management
 - Fractures of upper limb
 - Fractures of Lower limb
 - Dislocations of upper limb and lower limb
 - Strains and sprains
 - Myofascial pain syndromes
 - Acute sports injury on field physiotherapy
 - Principles of Injury prevention
 - Principles of sports physiotherapy
 - Congenital musculoskeletal disorders
 - Soft tissue injuries (muscle, ligament and tendon)
 - Post infectious and neoplastic musculoskeletal conditions.
 - Spinal surgeries and physiotherapy
 - Amputations and arthroplasty

9. Physiotherapy in Neurological and Neurosurgical conditions including (Paediatric and adult population including critical care).
 - Physiotherapy in Cortical and subcortical lesions
 - Central and peripheral nervous system disorders physiotherapy.
 - Radiculopathies, plexopathies, neck and back pain
 - Stroke and other cerebro vascular accidents
 - Traumatic brain injury physiotherapy
 - Pediatric developmental delays following prenatal, natal and post-natal neurological conditions
 - Neoplastic conditions of nervous system and post neurosurgical physiotherapy
 - Physiotherapy for Vestibular, cerebellar, basal ganglionic dysfunction, praxis and motor planning disorders.
 - Critical care physiotherapy management in stroke units, neurological, neurosurgical ICU's.
 - Parkinsonism and other movement disorders physiotherapy.
 - Muscular dystrophies and primary muscle disorders physiotherapy management.
 - Neurotisation, nerve transfers and soft tissue transfers physiotherapy management.
 - Pelvic dyssynergia, bladder and bowel control training,
 - Biofeedback methods for functional training
 - Orthotics, robotics and assistive technology in neuro physiotherapy.
 - Burns and reconstructive surgery, Plastic surgery, Obstetrics and gynaecology, Urology, Dermatology

10. Physiotherapy in cardio vascular and pulmonary conditions(including ICU and critical care)
- Physiotherapy for ventilated patients in ICU's
 - COPD, Bronchiectasis, bronchitis, asthma, cystic fibrosis, ILD (interstitial Lung Diseases), Pulmonary Fibrosis and pulmonary surgeries Physiotherapy.
 - Physiotherapy in Cardiac conditions (Myocardial infarction, cardiac surgeries.
 - Physiotherapy for critically ill(Postural drainage, FET(forced expiratory techniques),
 - Assistive devices used for respiratory and cardiac efficiency (PEP devices, inspiratory devices).
 - Physiotherapy following abdominal surgeries(types of incisions and surgeries, complications and management- role of Physiotherapy)
 - Physiotherapy in vascular Disorders(Arterial, venous and lymphatic conditions pre and post surgeries)
 - Preventive physiotherapy for patients at risk for cardiac, pulmonary and vascular disorders.