## RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER SYLLABUS OF SCREENING TEST FOR THE POST OF ASSISTANT PROFESSOR – PHYSICAL MEDICINE & REHABILITATION MEDICAL EDUCATION DEPARTMENT

- 1. Basic Sciences as Applicable to P M R
  - Basic surgical techniques and basics of skin grafting as applicable to PMR
- 2. History and Scope of PMR, Definitions and Terminology
- 3. Understanding Disability
- 4. Community Based Disability Prevention and Rehabilitation
- 5. Legislations, Acts and Policies related to disability
- 6. Disability Assessment and Certification
- 7. Schemes and Benefits for persons with disabilities (PWDs)
- 8. Clinical Evaluation of Patients in P.M.R. and Documentation
- 9. Quality and Outcome Measures in PMR e.g., FIM, Barthel Index, GMFCS, FMS etc.
- 10. Diagnostic Tests, utility & interpretation in relation to PMR
- 11. Therapeutic Exercises (including PNF & NDT)
- 12. Electro Therapy and Physical Modalities e.g., SWD, IFT, Ultrasound etc.
- 13. Electro diagnostic Medicine EMG/NCV/Evoked potential studies/Audiometry
- 14. Pharmacotherapy in PMR
- 15. Gait and its Deviations, Gait Analysis
  - 16. Orthotics: Principles of orthotic prescription, biomechanics
  - 17. Prosthetics: Principles of prosthetic prescription, biomechanics
- 18. Wheel chairs, Seating Systems and Ambulatory Devices
- 19. Principles and scope of Occupational Therapy
- 20. Principles and scope of Physical therapy
  - Assessment and execution of exercise and physical modalities
- 21. Vocational and Psycho Social evaluation and rehabilitation
- 22. Rehabilitation of Patients with Amputations
- 23. Spasticity Management
  - Pathophysiology, Medical Management, Corrective and Surgical Management, Chemodenervation & Prescription of orthoses
- 24. Holistic Rehabilitation of Cerebral Palsy
- 25. Pediatric Rehabilitation including children with Autism Spectrum Disorders, learning disabilities and multiple disabilities, etc.
- 26. Rehabilitation interventions in patients suffering from endocrinological / metabolic disorders / metabolic syndromes, causing impairment, functional limitation or participation restriction
- 27. Rehabilitation of Patients with Neck and Back Pain
- 28. Rehabilitation of Patients with Arthritic & Rheumatological conditions

- Clinical evaluation, assessment of disability, impairment and functional limitation
- Comprehensive management including monitoring of disease control
- 29. Rehabilitation and management of Patients with Pain
  - Pathophysiology, Comprehensive Management and Rehabilitation of painful conditions including Neuropathic, musculoskeletal, somatic aspects, cancer pain, migraine, fibromyalgia, myofacial pain, trigeminal neuralgia, glossopharyngeal neuralgia etc.
  - Various peripheral & neuraxial blocks including clinical anatomy & rationale, Joint & soft tissue injections
  - Chronic pain management, education & rehabilitation
- 30. Essentials of Occupational Health
- 30. Rehabilitation of Cumulative Trauma Disorders including common occupational disorders
- 31. Management & Rehabilitation of Musculoskeletal Conditions of Upper and Lower Limbs and spine including infections, degenerative disorders, tendinopathies, and its sequelae, etc.
- 32. Rehabilitation of Patients with Spinal Cord Injury (SCI)
  - Introductions, Epidemiology and need; Models of Care
  - Anatomy, Mechanics and Syndromes of Traumatic Injury
  - Non-Traumatic SCI; Outcomes
  - Acute Phase Management: Conservative & Surgical
  - Comprehensive Rehabilitation
  - Complications and their management
- 33. Stroke Rehabilitation
  - Introduction, Pathophysiology and Risk Factors
  - Comprehensive Rehabilitation in the acute, sub-acute and chronic phases
  - Medical and therapeutic management of complications and Special Problems& needs
- 34. Rehabilitation of Patients with Traumatic Brain Injury
  - Epidemiology, Prevention, Pathophysiology, Prognosis
  - Comprehensive Rehabilitation in the acute, sub-acute and chronic phases
  - Recent advances in Traumatic Brain Injury management and rehabilitation
- 36. Rehabilitation of Patients with other Neurologic Disorders
  - Rehabilitation of Patients with Peripheral Neuropathies, nerve injuries
  - Rehabilitation of Patients with Hansen's Disease and anesthetic limbs
  - Rehabilitation of plexopathies, Motor Neuron Diseases (MND)
  - Rehabilitation of Patients with Poliomyelitis
    - Post Polio Residual Paralysis (PPRP) (conservative and surgical management of deformities around each joint
  - Rehabilitation of Patients with Diseases of Muscles & Myoneural Junction Muscular dystrophies, Myopathies, Myasthenia gravis, polymyositis, dermatomyositis, etc.
  - Rehabilitation of Patients with Movement Disorders and other neurodegenerative disorders, ataxia, multiple Sclerosis.

- Other Infective and Inflammatory disorders causing neurologic impairments necessitating rehabilitation
- 37. Rehabilitation of Patients with Neural Tube Defects rehabilitation, Long Term Complications
- 38. Neurogenic Bladder and Bowel Dysfunction & Management
- 39. Prevention and Management of Chronic Wounds
- 40. Speech and Hearing-Assessment and Rehabilitation
  - Basic knowledge of hearing aids
  - Types of speech disorders: Communication skills & interventions
  - Basics of sign language
- 41. Rehabilitation of Swallowing Disorders
- 42. Visual Rehabilitation
  - Common causes of blindness and low vision in India and its prevention
  - Assistive devices / technology for the visually impaired
- 43. Assessment, counseling and interventions for Sexual Dysfunctions in persons with disabilities
- 44. Rehabilitation of patients with HIV/AIDS
- 45. Principles of rehabilitation of persons with mental retardation
- 46. Principles of rehabilitation of persons with mental illness
- 47. Management of sports injury
  - Complete assessment of sports performance
  - Treatment and medical rehabilitation of persons of sports injuries
  - Taping and therapeutic exercises, Sports psychology & Post-injury rehabilitation
- 48. Principles and procedures in Burn Rehabilitation
- 49. Pulmonary Rehabilitation
  - General principles, Conditions like COPD, bronchiectasis, etc.
- 50. Cardiac Rehabilitation
  - General principles, Rehabilitation of Common cardiac conditions like MI, CHD, CMP, CCF, CAD, HT.
- 51. Vestibular Rehabilitation
- 52. Rehabilitation of patients with Peripheral Vascular Diseases
- 53. Geriatric Rehabilitation
- 54. Cancer Rehabilitation
  - Principles of rehabilitation of skeletal neoplasms
  - Rehabilitation of persons with long-term complications e.g., functional decline, radiation fibrosis, post-radiation weakness, myelitis etc.
  - Management of lymphedema & cancer pain
- 55. Rehabilitation protocol of Joint Replacements and other orthopaedic surgeries.
- 56. Rehabilitation of Patients with Congenital Deformities of upper and lower extremities like radial club hand, CTEV, CDH, AGMC etc. and Spinal Deformities
- 57. Health Promotion and principles of lifestyle disorder management
  - Lifestyle disease Prevention and management
  - Management of obesity and its complications
  - Importance and ways to promote physical activity

- 58. Women's Health and Rehabilitation
  - Pre- and post partum rehabilitation programs
- Post menopausal issues in rehabilitation and management of osteoporosis
- 59. Architectural Barriers, Environmental Modification
  - Identification of barriers, accessibility of persons with disabilities and barrier free environment
- 60. Organ Transplantation and Rehabilitation
- 61. Rehabilitation in ICU and CCU setting
- 62. Medical emergencies in PMR
  - Autonomic dysreflexia, Aspiration pneumonitis, DVT / PE, Urinary retention / obstruction, etc.
- 63. Palliative care / long-term care of terminally ill
- 64. Complementary and alternative medicine
- 65. Ethical practices in Rehabilitation
- 66. Evidence Based Rehabilitation
- 67. Research Methodology
  - Basic understanding of research methodology
  - Ability to identify research needs, formulate null hypothesis and interpret statistical analysis
- 68. Role of rehabilitation in Disaster Management
- 69. Quality assurance in PMR
- 70. Information & communication technology (ICT) and rehabilitation including telerehabilitation
- 71. Current Developments / Recent Advances in PMR
- 72. Teaching Methodology
- 73. Public health programme, State & National programs

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Pattern of Question Papers:

- 1. Objective Type Paper
- 2. Maximum Marks : 100
- 3. Number of Questions : 100
- 4. Duration of Paper : Two Hours
- 5. All Questions carry equal marks
- 6. There will be Negative Marking

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