Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination - 25-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

BASIC SCIENCES

Q.P. CODE: 8101

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

1. Define joint play. Explain the rules of joint play testing with knee complex as example.
2. What are descriptive studies in research process? Explain the framework, advantages and disadvantages in cohort design.

SHORT ESSAY 6 X 10 = 60 Marks

3. Pathokinetics in diaphragm in COPD
4. Measurements and scaling techniques in research
5. Aerobic conditioning
6. Pulley systems in hand complex
7. Muscle plasticity in response to electrical stimulation
8. F wave and H-reflex

MASTER OF PHYSIOTHERAPY DEGREE EXAMINATION - 27-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

PHYSICAL AND FUNCTIONAL DIAGNOSIS – PARTS I AND II

QP Code: 8102

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

1. Write in detail about EMG.
2. Write in detail about PFT

SHORT ESSAY 6 X 10 = 60 Marks

3. Pathological investigations and imaging for lumbar spine disorder
4. Special test for **lumbar** spine
5. Scales used for knee complex and hip complex
6. Exercise ECG
7. Gait parameters
8. Evaluation of aging

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – 29-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

PHYSIOTHERAPEUTICS – I & II

Q.P. CODE: 8103

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

1. Describe exercise planning for obese and diabetic patients.
2. Physiotherapy protocol for total knee replacement

SHORT ESSAY 6 X 10 = 60 Marks

3. Combination therapy
4. Bladder and bowel training
5. PT management following C-Section
6. Compare and contrast isometric, isotonic and isokinetic exercises.
7. Explain holistic management for a cancer patient.
8. Role of physiotherapy in a psychiatric unit

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Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

P.T. IN CARDIORESPIRATORY DISORDERS AND INTENSIVE CARE

Q.P. CODE: 8104

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

1. Describe the methods of NIPPV. Explain the benefits of using the same.
2. List the types of Respiratory failure. Describe the features of each type. Outline Physiotherapy treatment strategies for each type.

SHORT ESSAY 6 X 10 = 60 Marks

3. Pulse Oximeter a useful tool during chest Physiotherapy. Explain.
4. Recent trends in managing peripheral arterial obstructive disease.
5. Identity risk factors seen for coronary artery disease. Give role of Physiotherapy.
6. Explain the importance of Vo_2 max testing in Physiotherapy practice.
7. Outline the types of breathing exercises for a breathless patient.
8. Write a short note on anaerobic threshold.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

P.T. IN MUSCULOSKELETAL DISORDERS AND SPORTS P.T.

Q.P. CODE: 8105

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

1. A 28 year old athlete has been diagnosed to have medial menisci injury. Write the assessment, investigations and management of the same.
2. Define amputation. Describe the various levels of amputations of lower limb and enumerate the rehabilitation program and complications of syme's amputations.

SHORT ESSAY 6 X 10 = 60 Marks

3. Describe various cervical orthosis.
4. Write the principles, indications, contra indications of taping techniques. Add a note on taping of Chondromalacia patella.
5. Explain Natural Apophyseal Glides (NAGS) and Sustained Natural Apophyseal Glides (SNAGS).
6. Physiotherapy management following total knee replacement
7. Myofascial release technique
8. Describe "H" reflex and write its significance.

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Master of Physiotherapy Degree Examination - 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

P.T. NEUROLOGICAL AND PSYCHOSOMATIC DISORDERS

Q.P. CODE: 8106

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

1. Enumerate different types of stroke. Discuss in detail about their PT management.
2. Write in detail about ANS dysfunction and management.

SHORT ESSAY 6 X 10 = 60 Marks

3. Shoulder hand syndrome
4. ASIA scale
5. Perception testing and training
6. Neurogenic bladder
7. Abnormal EMG findings
8. Vestibular rehabilitation

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

COMMUNITY PHYSICAL THERAPY AND COMMUNITY BASED REHABILITATION

Q.P. CODE: 8107

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

1. What are the implications of the theories of aging in respect of an independently living elder?
2. More than 2 decades after the Persons With Disability act was passed in parliament, the person with a disability is still a marginalized individual. Discuss with respect to locomotor disability.

SHORT ESSAY 6 X 10 = 60 Marks

3. A person of 50 is a homemaker with gait, communication and emotional dysfunction due to a Cerebro Vascular Accident. Discuss the role of institutional based rehabilitation and community based rehab in this context.
4. Describe using the Community Based Rehabilitation matrix the role of a Community Based Rehabilitation team in the life of a child with Down Syndrome with specific discussion of structure and functional problems.
5. Discuss the principles of ergonomics with respect to a dentist.
6. What is the evidence for physical activity in mechanical back pain?
7. Discuss the usefulness of field based fitness tests in exercise prescription for patients with knee arthritis.
8. Differentiate between work conditioning and work hardening.

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Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

PAEDIATRIC PHYSIOTHERAPY

Q.P. CODE: 8108

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

1. Write assessment and management of spastic hip in cerebral palsy. Write surgical intervention and post operative physiotherapy for same.
2. Write in detail about cardiac rehabilitation children.

SHORT ESSAY 6 X 10 = 60 Marks

3. Tracheotomy care in pediatric patient
4. Management of a child with intercostals drainage, third post operative day
5. Fitness testing in children
6. Post burn scar management in 6 year old boy
7. Role of physiotherapy in congenital talipeus equinovarus (CTEV)
8. Low back pain in paediatric –role of physical modalities

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination - 25-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

Principles of Physiotherapy Practice, Research Methodology & Biostatistics
PAPER-I (RS)

Q.P. CODE : 8111

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Describe Sampling in detail. How to determine the size and design of sampling.
2. Discuss the International Classification of Functioning Disability and Health (ICF) documentation with an example.
3. Scope of physiotherapy in an industrial setup.
4. Importance of ethical issues in research.
5. Criteria for a good research
6. Reliability and Validity.
7. ANOVA
8. WCPT Ethical principles for physiotherapy.
9. Types of study designs.
10. Scope of physiotherapy in community.

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Master of Physiotherapy Degree Examination – 27-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

Biomechanics, Exercise Physiology & Electrophysiology
PAPER-II (RS)

Q.P. CODE : 8112

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. What is Fatigue? Write about the work rest regimens to control fatigue.
2. Name the various types of current used for electrical stimulation in physiotherapy.
3. Define posture. Write in short the biomechanics of posture.
4. Ergonomic approach for an IT worker with backpain.
5. Explain the biomechanics of Respiration.
6. Explain the properties of peripheral nerves along with its physiology.
7. Importance of nutrition and caloric balance in health.
8. Write a note on applied biomechanics of shoulder.
9. Exercise prescription for a diabetic patient.
10. Explain the adaptations of various systems to endurance training.

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – 29-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

PHYSICAL AND FUNCTIONAL DIAGNOSIS
PAPER – III (RS)
Q.P. CODE: 8113

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Explain in detail assessment of physical fitness of an individual involved in group sports.
2. Describe the assessment procedure for a client with COPD.
3. Methods used for Gait analysis.
4. H – Reflex.
5. Biofeedback.
6. Anthropometric measurements.
7. Foot function index.
8. Aids and appliances used in Radial nerve injury.
9. Developmental screening.
10. Write a note on EMG.

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Master of Physiotherapy Degree Examination – 25-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

PHYSIOTHERAPEUTICS – PAPER-IV (RS)
Q.P. CODE: 8114

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Describe in detail about the tracts of pain. Explain the modulation of pain and the role of physical agents of pain modulation.
2. Physiotherapy for bed sores.
3. Mention the various monitoring system in ICU and write in detail about ventilators.
4. Management of congenital heart in physiotherapy.
5. Design a stress incontinence control programme for 45 years. Old women with physical agents and exercises.
6. Bobath and rood’s approach on hemiplegic patients.
7. Implications of theories of motor learning.
8. Uses of EMG in the field by physiotherapy.
9. Discuss the principles of yoga and add a note on pranayama.
10. Define MET. What are the different methods used to measure energy expenditure?

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Master of Physiotherapy Degree Examination – 27-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

Musculoskeletal & SPORTS PHYSIOTHERAPY
PAPER–V (RS)
Q.P. CODE: 8115

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Lower limb orthosis and its indications.
2. Write in detail the components of sports related fitness.
3. Explain in detail about the role of open and closed kinematic chain exercise following Patellectomy.
4. Core stabilization exercises and its importance.
5. Write the recent advances in the physiotherapy management of non specific neck pain.
6. Causes, pathoanatomy and management of CTEV or club foot.
7. The importance of acupressure in patients with trigger point.
8. Grades of Maitland's mobilization and its therapeutic effects.
9. Various stages of soft tissue injuries and the management in each state.
10. Mention the stages of Periarthritis of should and write about the physiotherapy management in detail.

Master of Physiotherapy Degree Examination – 27-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

Neurological and Psychosomatic Disorders
PAPER-V (RS)
Q.P. CODE: 8116

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. PT management of spasticity in chronic stroke.
2. Recent advances in Traumatic Brain Injury.
3. Management of Brachial Plexus injury.
4. Clinical features and PT management of anterior cerebellar artery impact.
5. Role of robotics gait training in spinal cord injury.
6. Define Duchenne muscular dystrophy, clinical features and role of PT management.
7. Remedial measures in prevention of falls in elderly.
8. Write a note on Theories of Motor learning.
9. Write the assessment and management of hemiplegic gait.
10. ICU management of SCI.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Part II Degree Examination – 27-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

CARDIO RESPIRATORY DISORDERS – PAPER-V (RS)

Q.P. CODE: 8117

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

Answer All the Questions 10 X 10 = 100 Marks

1. Describe Physiotherapy management for a patient with acute Head injury with emphasis on the effects of head injury on gas exchange and effects of head injury on brain. Add a note on the factors increase ICP.
2. Recent advances on Impact of an Outpatient Cardiac Rehabilitation Program.
3. Compare and Contrast the different field exercise tests in Cardiopulmonary function testing.
4. Describe in detail Physiotherapy methods to increase lung volume.
5. Describe the acute effect of upright positioning and mobilization on oxygen transport with relation to cardiopulmonary and cardiovascular system.
6. Describe the principles and methods for energy conservation.
7. Describe the significance of knowing the anatomical and physiological difference between adult and pediatric cardiopulmonary system by a physiotherapist handling infants.
8. Detail the 14 steps of Dr. Wenger's model of early mobilization in Cardiac Rehabilitation.
9. Write the breathing strategies to improve the lung function.
10. Write the physiological basis of antidysnic positions in treating Bronchial Asthma.

Master of Physiotherapy Degree Examination – 27-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

COMMUNITY REHABILITATION – PAPER-V (RS)

Q.P. CODE: 8118

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All the Questions 10 X 10 = 100 Marks

1. Write in detail about the importance of disability detection and early intervention.
2. Environmental barriers in the successful reintegration of low level spinal cord injury persons back to the society.
3. Emphasis and consideration to be made in exercise prescription for post menopausal women for general fitness.
4. Discuss the benefits of filed based fitness tests in school health assessment.
5. Enumerate a home program for a person with chronic asthma.
6. Role of holistic physiotherapy in aged.
7. Mode of transfer of skills in rural health centres.
8. Role of immunization during pandemics.
9. Discuss principles of health promotion in community.
10. Critique the present state of disability policy in India.

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy – Part II Degree Examination – 27-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

PEDIATRICS

PAPER -V (RS)

Q.P. CODE: 8119

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Effectiveness of NDT approach in treating cerebral palsy children.
2. Recent advance on Paediatric endurance and limb strengthening (PEDALS) for children with cerebral palsy using stationary cycle.
3. Enumerate the implications of motor learning theories to clinical practice.
4. Post-operative physiotherapy management for congenital Talipus Equino Varus.
5. Define and classify autism spectrum disorders and write about classical autism and its management.
6. Describe intra uterine development of nervous system.
7. Explain fitness assessment in pediatrics.
8. Explain the role of physiotherapist in public schools.
9. Clinical assessment and management of Hydrocephalous.
10. Role of sensory system in balance training.

Master of Physiotherapy Degree Examination – 25-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

Principles of Physiotherapy Practice, Research Methodology and Biostatistics, Exercise Physiology, Electrophysiology

Q.P. CODE: 8121

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Explain neuromuscular junction.
2. Explain the plan of physiotherapy management based on ICF.
3. Discuss Type I and type II bias with an example.
4. Explain Fatigue assessment.
5. Explain instrumentation for neuromuscular electrical stimulation.
6. Use of clinical practice guidelines in physiotherapy practice.
7. Discuss Communicating research.
8. Explain tests of normality.
9. Environmental influence on performance.
10. Electrical properties of muscle.

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Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – 27-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

PHYSICAL AND FUNCTIONAL DIAGNOSIS
Q.P. CODE: 8122

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Analysis of gait deviation in the frontal plane.
2. EMG and NCV changes in Myopathic and Neurogenic disorders.
3. Theories of motor learning.
4. Static and dynamic evaluation of a patient with Transtibial prosthesis.
5. Discuss the methods of disability evaluation. Explain any one health questionnaires for assessing physical disability.
6. Types of Activities of Daily Living (ADL). Describe the KATZ Index of activities of daily living.
7. Assessment of geriatric population and explain in rationale.
8. Scales used for the assessment of stroke.
9. Exercise ECG testing and monitoring.
10. Developmental gross and fine motor milestones in first 2 years of age.

Master of Physiotherapy Degree Examination – 29-Apr-2023

[Time: 3 Hours] [Max. Marks: 100]

PHYSIOTHERAPEUTICS
Q.P. CODE: 8123

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Write down the utility of theories of motor control and motor learning in the management of stroke patients.
2. Explain principles and techniques of Maitland mobilization.
3. General guidelines for cardiac and pulmonary rehabilitation.
4. Exercise prescription in obesity.
5. Importance and different phases in pranayama practice.
6. Rehabilitation protocol for cancer patient.
7. Physiotherapy in psychiatric condition.
8. Explain briefly about geriatric rehabilitation.
9. **What are the different types of urinary incontinence? Write in detail Physiotherapy management for stress incontinence.**
10. Facilitatory and Inhibitory Techniques.

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

MUSCULOSKELETAL DISORDERS AND SPORTS
Q.P. CODE: 8124

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Write the physiotherapy assessment and management for Hangman's fracture.
2. Describe the causes, clinical features, complication and management of Hemophilic arthritis.
3. Describe the causes, clinical features, complications and management of Enchondroma.
4. Explain Butler technique.
5. Explain the rotator cuff injury rehabilitation with recent advances.
6. Write the PT management for Sacralisation and lumbarisation.
7. Write physiotherapy management for TOS.
8. Write physiotherapy management for Spinal cord stenosis.
9. Describe sports pharmacology.
10. Compare the role of various manual therapy techniques in treatment of stiff knee.

Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

NEUROLOGICAL AND PSYCHOSOMATIC DISORDERS
Q.P. CODE: 8125

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 Marks

1. Explain the principles of Neuronal Plasticity and its implication in rehabilitation.
2. Enumerate the principles of PNF and discuss the special techniques and rationale for their clinical usage.
3. Explain the use of EMG biofeedback in neuro rehabilitation.
4. Recent advances in Gait rehabilitation in patients with Parkinson's.
5. Explain the concept and theories of Motor learning.
6. Virtual reality and its application in neurological rehabilitation.
7. What is Pushers Syndrome? Discuss the evaluation and management strategies for a 55 year old male patient with left hemiplegia.
8. Discuss the various scales used in stroke rehabilitation.
9. Repetitive Nerve Stimulation (RNS) study, methods, clinical application and use.
10. Discuss the clinical features of Myasthenia Gravis and different therapeutic and coping strategies for the same.

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

CARDIO RESPIRATORY DISORDERS

Q.P. CODE: 8126

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All the Questions 10 X 10 = 100 Marks

1. Write the difference between adult an peadiatric lungs.
2. Recent advances in comparison of aerobic and progressive resisted exercises on metabolic profile in older adults with diabetes mellitus.
3. Describe PFT in Restrictive lung diseases.
4. Explain PNF of respiration in detail.
5. Explain the Mechanisms affecting ventilation of lungs.
6. Enumerate VO_2 Max analysis with procedure.
7. Describe the different breathing strategies used for airway clearance.
8. Briefly explain Cardiopulmonary resuscitation.
9. Write in detail about PFT.

   Or

   Write in detail about Physiotherapy Management of Peripheral Vascular Disorder
10. **Contrast and compare between Restrictive Lung Diseases and COPD**

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Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

COMMUNITY PHYSIOTHERAPY

Q.P. CODE: 8127

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All the Questions 10 X 10 = 100 Marks

1 Recent advances in holistic approach for the treatment of musculoskeletal problems of the aged in the community.
2 Explain in detail the role of physiotherapy in the management of spastic cerebral palsy of a 4 year old boy in community level.
3. Discuss the evaluation and treatment plan for a 60 year old female with bilateral osteoarthritis of knee joint in community setup.
4. Discuss the importance of physiotherapist as master trainer in CBR.
5. Explain in detail the importance and role of primary health centers.
6. Discuss in detail the role of NGO in CBR.
7. Explain in detail the importance and objectives of the labor law.
8. What are the principles of Ergonomics and explain its importance in day to day life.
9. Explain the advantages and limitations of institutional based rehabilitation.
10. Discuss the Gait abnormalities seen in Hemiparetic patient. Write in detail about Gait training of right sided Hemiparetic patient in the community setup.

Rajiv Gandhi University of Health Sciences

Master of Physiotherapy Degree Examination – 02-May-2023

[Time: 3 Hours] [Max. Marks: 100]

PAEDIATRIC

Q.P. CODE: 8128

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions 10 X 10 = 100 M

1. Early intervention for a preterm infant.
2. Outline and describe integrated approach in management of Brachial Plexus Injury.
3. Incorporation of motor learning strategies in clinical practice.
4. Management of congenital dysplasia of hip.
5. Fitness assessment in school going children.
6. Management of motor issues in children with Autism.
7. Clinical assessment and investigations for Hydrocephalous.
8. Functional classification scales in children with cerebral palsy.
9. Genetic counseling to parents and its importance.
10. Motor learning theories.

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