

MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION**SECOND YEAR****BRANCH II – PHYSIOTHERAPY IN NEUROLOGY****PAPER II – PHYSIOTHERAPY INTERVENTIONS****(SPECIALITY – II)****Q.P. Code: 278132****Time: Three Hours****Maximum: 100 marks****Answer ALL questions in the same order.****I. Elaborate on :**

Pages (Max.)	Time (Max.)	Marks (Max.)
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- | | | | |
|--|----|---------|----|
| 1. Describe in detail the physiotherapeutic plan in the management Upper extremity in stroke patients using contemporary Approaches. | 17 | 40 min. | 20 |
| 2. Explain in detail the various theories of motor control and its clinical applications. | 17 | 40 min. | 20 |

II. Write notes on :

- | | | | |
|--|---|---------|---|
| 1. Biofeedback in Gait training. | 4 | 10 min. | 6 |
| 2. Symmetrical Vs Asymmetrical bilateral arm training. | 4 | 10 min. | 6 |
| 3. Cueing strategies in the management of parkinsonism. | 4 | 10 min. | 6 |
| 4. Parental role in improving quality of life in CP child. | 4 | 10 min. | 6 |
| 5. Guidelines for the management of Autonomic dysreflexia. | 4 | 10 min. | 6 |
| 6. Neurophysiologic basis of myofascial release. | 4 | 10 min. | 6 |
| 7. Stages of motor learning. | 4 | 10 min. | 6 |
| 8. Rancho Los amigo scale. | 4 | 10 min. | 6 |
| 9. Dissociated sensory loss. | 4 | 10 min. | 6 |
| 10. Pain Modulation theory. | 4 | 10 min. | 6 |

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
SECOND YEAR**

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER II – PHYSIOTHERAPY INTERVENTIONS

(SPECIALITY – II)

Q.P. Code: 278132

Time: Three Hours

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|---|----|---------|----|
| 1. Define pain. Classify the various types of pain, enumerate upon the various theories of pain and write about the management of chronic pain. | 17 | 40 min. | 20 |
| 2. Define motor control. Describe about the factors affecting motor control and enumerate upon the various theories of motor control. | 17 | 40 min. | 20 |

II. Write Notes on:

- | | | | |
|--|---|---------|---|
| 1. Cerebellar dysfunction. | 4 | 10 min. | 6 |
| 2. Adverse effect of immobilization of nervous system. | 4 | 10 min. | 6 |
| 3. Idiopathic Parkinsonism. | 4 | 10 min. | 6 |
| 4. Myofascial release techniques. | 4 | 10 min. | 6 |
| 5. Factors affecting the extent of injury in CVA. | 4 | 10 min. | 6 |
| 6. Task Oriented Approach. | 4 | 10 min. | 6 |
| 7. Artifacts in EMG. | 4 | 10 min. | 6 |
| 8. Role of Orthosis in cerebral palsy. | 4 | 10 min. | 6 |
| 9. Management of ALS. | 4 | 10 min. | 6 |
| 10. Incomplete spinal cord injury. | 4 | 10 min. | 6 |

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
SECOND YEAR**

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER II – PHYSIOTHERAPY INTERVENTIONS

(SPECIALITY – II)

Q.P. Code: 278132

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Enumerate upon the various concepts behind motor learning with emphasis on the various theories of motor learning and their implications for rehabilitations.
2. Describe in detail the principles and the various techniques of Proprioceptive Neuromuscular Facilitation.

II. Write notes on:

(10 x 6 = 60)

1. Bimanual approach
2. Neural plasticity.
3. Classification of TBI.
4. Visual deficits.
5. Complementary therapy for neurological disorders.
6. Abnormal bladders.
7. Repetitive nerve stimulation.
8. Management of Dyslexia.
9. Hyperkinetic disorders.
10. Body supported treadmill training.

[LD 132]

OCTOBER 2013

Sub. Code: 8132

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
SECOND YEAR**

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER II – PHYSIOTHERAPY INTERVENTIONS

(SPECIALITY – II)

Q.P. Code: 278132

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Explain the Theories of motor control and its clinical application.
2. Explain in detail Task Oriented Approach in the treatment of gait dysfunction in stroke patients.

II. Write notes on:

(10 x 6 = 60)

1. Functional Electrical Stimulation.
2. Management of DMD in Ambulatory Stage.
3. PNF in Parkinsonism.
4. Rood's Approach.
5. Oromotor Dysfunction.
6. Theories of pain.
7. Vestibular Stimulation Technique.
8. Unilateral Neglect.
9. Recovery of function after Brain damage.
10. Feedback.

[LE 132]

APRIL 2014

Sub. Code: 8132

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
SECOND YEAR**

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER II – PHYSIOTHERAPY INTERVENTIONS

(SPECIALITY – II)

Q.P. Code: 278132

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the assessment and management of Vestibular dysfunction.
2. Explain Neural plasticity and its principle.

II. Write notes on:

(10 x 6 = 60)

1. Mental Imagery Technique.
2. Stages of Motor Learning.
3. Constraint Induced Movement Therapy.
4. Gross Motor Function Classification System.
5. Feed Forward and Feed Back Mechanism.
6. Functional Training in Paraplegics.
7. Body Scheme and Body Image Disorder.
8. Motor Learning Strategies in Parkinsonism.
9. Oromotor dysfunction in Multiple sclerosis.
10. Management of Spasticity in Stroke.

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
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BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER II – PHYSIOTHERAPY INTERVENTIONS

(SPECIALITY – II)

Q.P. Code: 278132

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail about feed forward and feedback mechanism, various types of feed back its application in treatment.
2. Classify muscular dystrophy. Write in brief about P.T assessment and management of a 15years old child with Duchennes muscular dystrophy.

II. Write notes on:

(10 x 6 = 60)

1. Management of upper limb in hemiplegia
2. Cauda equina lesions
3. Normal Neuro physiological changes in gait with ageing
4. Role of P.T in management of Guillain Barre Syndrome
5. Classify Neuropathies and its management
6. Normal stretch reflex mechanism and its relevance in Neurological rehabilitation.
7. Neuro physiology of Nerve conduction.
Add note on factors affecting Nerve conduction.
8. Role of P.T in management of child with ataxic C.P.
9. Role of P.T in management of patient with motor dysfunction in multiple sclerosis.
10. Effects and uses of Neuro dynamics in diagnosis and management of peripheral pain.

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION
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BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER II – PHYSIOTHERAPY INTERVENTIONS

(SPECIALITY – II)

Q.P. Code: 278132

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the assessment and management of a 40 year old female patient with Multiple sclerosis.
2. Write in detail about the principles and techniques of Neuro developmental therapy.

II. Write notes on:

(10 x 6 = 60)

1. Stroke syndromes.
2. Voluntary control assessment for hand.
3. Management for Spina bifida.
4. Theories of motor control.
5. Management of Oromotor dysfunction.
6. Unilateral neglect.
7. Constrained induced movement therapy.
8. Rancho Los Amigos scale.
9. Electromyographic biofeedback.
10. Management of gait problems in Parkinson's disease.

[LH 132]

OCTOBER 2015

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER – II - PHYSIOTHERAPY INTERVENTIONS
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail neurological control of Bladder. Classify types of bladder dysfunction. Describe the rehabilitation of various types of neurogenic bladder dysfunction.
2. Discuss the various motor learning theories and its implication in treatment.

II. Write notes on:

(10 x 6 = 60)

1. Facilitatory and Inhibitory techniques.
2. Myelination of pyramidal tracts.
3. Theories of motor control.
4. Management of complication following autonomic dysfunction.
5. Role of EMG Biofeedback in Neurological rehabilitation.
6. Dyskinesias and its management.
7. Brunnstrom's sequential recovery stages of stroke.
8. Postural control mechanism.
9. Management of extra pyramidal lesions.
10. Principles and techniques of Rood's approach.

[LI 132]

APRIL 2016

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER – II - PHYSIOTHERAPY INTERVENTIONS
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss various types of Perceptual Disorders. Explain in detail P.T assessment and treatment of Perceptual Disorders.
2. Define Pain. Discuss about various theories of Pain and role of P.T modalities in management of Chronic Pain Syndrome.

II. Write notes on:

(10 x 6 = 60)

1. Visual evoked potential.
2. Role of Swiss ball in Neurological Rehabilitation.
3. P.T role in management of vestibular disorders.
4. Effects of ageing on nervous system.
5. List the various movement disorders and explain in detail P.T management of chorea.
6. Cortical reorganization.
7. Management of Obstetric Brachial Plexus injury.
8. Primitive reflexes – Merits and Demerits in rehabilitation.
9. Role of P.T in acute stage management of TBI.
10. Principles of Bobath approach.

[LJ 132]

OCTOBER 2016

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER – II PHYSIOTHERAPY INTERVENTIONS
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail the various concepts of systems theory and its clinical implications in Neurological Rehabilitation.
2. Write in detail about the physiotherapy management for traumatic Brain injury patient with cognitive dysfunction.

II. Write notes on:

(10 x 6 = 60)

1. Virtual reality for Gait training.
2. Dyslexia- training methods.
3. Areflexic bladder Rehabilitation.
4. Gaze stability exercises.
5. Guidelines for the management of complex regional pain syndrome.
6. Fatigue management strategies.
7. Erickson stages of child development.
8. Mirror box therapy.
9. Facilitation techniques for rolling.
10. Sensory modulation disorders.

[LK 132]

MAY 2017

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER – II PHYSIOTHERAPY INTERVENTIONS
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail the various pre practice and practice variables of motor learning and its clinical implications in Neurological Rehabilitation.
2. Discuss the physiotherapy program for pre Ganglionic and post Ganglionic Brachial plexus injury. Add note on prognostication of both types of injury.

II. Write notes on:

(10 x 6 = 60)

1. Sensory processing disorder.
2. Reflex bladder.
3. Thalamic pain syndrome.
4. Canalith repositioning maneuvers.
5. Coma stimulation program.
6. Principles of neural plasticity.
7. Physiotherapy management for athetoid CP.
8. Strabismus.
9. Tai-Chi.
10. Ambulatory aids for paraplegia.

[LL 132]

OCTOBER 2017

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER – II PHYSIOTHERAPY INTERVENTIONS
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on: **(2 x 20 = 40)**

1. Describe in detail the principles and the various techniques of proprioceptive Neuro Muscular Facilitation (PNF).
2. Write in detail the principles of physiotherapy for Truncal Ataxia.

II. Write notes on: **(10 x 6 = 60)**

1. Energy conservation technique and activity of pacing.
2. Task oriented approach.
3. Neuro muscular impairments associated with traumatic brain injury.
4. Body supported Treadmill training.
5. Mechanism of recovery in poliomyelitis.
6. Intervention strategies in Architectural barrier.
7. Dysaesthesia.
8. Functional bladder training program.
9. Body scheme and body image disorders.
10. Closed loop and open loop mechanism.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LM 132]

MAY 2018

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the assessment and management of vestibular dysfunction.
2. Enumerate in detail the principles of PT management of Traumatic Brain injury.

II. Write notes on:

(10 x 6 = 60)

1. Autonomic dysreflexia.
2. Hemiplegic hand.
3. Brain death.
4. Physiotherapy management of Myasthenic syndrome.
5. Complementary therapy for neurological disorders.
6. Post polio syndrome.
7. Bi-manual approach.
8. Combined inhibitory and facilitatory techniques for spasticity.
9. Cawthorne Cooksey exercises.
10. Principles of sensory re-education.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LN 132]

OCTOBER 2018

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER – II PHYSIOTHERAPY INTERVENTIONS
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Differentiate Neuropathy/Myopathy. Write in detail the Hypothetical causes, clinical features, physiotherapy management of Diabetic Neuropathy.
2. Enumerate the various concepts behind motor learning with emphasis on the various theories of motor learning and its implication for Rehabilitation.

II. Write notes on:

(10 x 6 = 60)

1. Pain syndrome and its management.
2. Modified constraint induced movement therapy.
3. Adverse effect of immobilization in nervous system dysfunction.
4. Unilateral neglect.
5. Feedback and feed forward mechanism.
6. Mental imagery technique.
7. Role of stem cell therapy on Neurological rehabilitation.
8. Management of Oromotor dysfunction in stroke patients.
9. Cawthorne Cooksey exercises.
10. PNF stretch.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LO 132]

MAY 2019

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY
SPECIALITY PAPER – II PHYSIOTHERAPY INTERVENTIONS**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail about the Physiotherapeutic plan and management of a 15 years old Guillain Barre Syndrome.
2. Explain in detail about the various stages of motor learning and their clinical implementation in the management of stroke patients.

II. Write notes on:

(10 x 6 = 60)

1. Motor relearning programme.
2. Guidelines for the management of Autonomic nervous system dysfunction.
3. Virtual Reality therapy.
4. Sensory re-education programme.
5. Diagonal Patterns of PNF.
6. Wheel Chair training after spinal cord injury.
7. Flaccid bladder re-training programme.
8. Management of Amyotrophic Lateral Sclerosis.
9. Parkinson plus syndrome.
10. Myasthenia gravis.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LP 132]

OCTOBER 2019

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY
SPECIALITY PAPER – II PHYSIOTHERAPY INTERVENTIONS**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe about the various types of motor control and explain in detail about motor control at the level of brainstem.
2. Classify various types of Traumatic Brain Injury. Write in detail about physiotherapy management for a patient with Grade III Diffuse Axonal Injury.

II. Write notes on:

(10 x 6 = 60)

1. Gait management in Parkinson's disease.
2. EMG biofeedback.
3. Swiss ball therapy for neurological impairments.
4. Sensory integration therapy.
5. Mirror Therapy.
6. Splints for Cerebral Palsy.
7. Management of different types of Tremors.
8. Importance of cueing in Parkinson disease.
9. Management of flaccidity.
10. Cerebellar Lesion.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LQ 1120]

NOVEMBER 2020
(MAY 2020 SESSION)

Sub. Code: 8132

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH II - PHYSIOTHERAPY IN NEUROLOGY
SPECIALITY PAPER – II PHYSIOTHERAPY INTERVENTIONS**

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on: (2 x 20 = 40)

1. Describe in detail the physiotherapy management for various stages of Duchene Muscular Dystrophy.
2. Discuss the principles, concepts and application of Neuro-dynamics in Neurological Rehabilitation.

II. Write notes on: (10 x 6 = 60)

1. Management of Learning Disorders.
2. Trigeminal Neuralgia management.
3. Detrusor Sphincter Dys-synergia.
4. Cawthorne-Cooksey exercises.
5. Fall prevention strategies.
6. Principles of Motor development.
7. Cognitive re-training program.
8. Facilitation techniques for sit to stand transfer.
9. Fitt and Posner's stage of Learning.
10. Postural reflexes re-training.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MPT 0321]

MARCH 2021

Sub. Code: 8132

(OCTOBER 2020 EXAM SESSION)

MPT DEGREE EXAMINATION

SECOND YEAR

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS

Q.P. Code : 278132

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write in detail about the Physiotherapy management strategies for stroke patients.
2. Elaborate the motor development concepts.

II. Write notes on:

(10 x 6 = 60)

1. Physiotherapy management for oromotor dysfunction.
2. Vestibular rehabilitation.
3. Gait training in Parkinson's patient.
4. Rood's inhibitory techniques.
5. Constraint induced movement therapy.
6. Visual evoked potential.
7. Brachial neuralgia.
8. Physiotherapy management for ataxic cerebral palsy.
9. Kitchen sink exercises.
10. Amyotrophic lateral sclerosis.
