

MASTER OF PHYSIOTHERAPY (MPT) DEGREE EXAMINATION**SECOND YEAR****BRANCH II – PHYSIOTHERAPY IN NEUROLOGY****PAPER I – PHYSIOTHERAPY ASSESSMENT****(SPECIALITY – I)*****Q.P. Code: 278122*****Time: Three Hours****Maximum: 100 marks****Answer ALL questions in the same order.****I. Elaborate on :****Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|---------|----|
| 1. Describe the limbic system. Explain the control of motor activity of brainstem that regulate and coordinate the movements. | 17 | 40 min. | 20 |
| 2. Describe the disorder of spinal cord. Explain the movement analysis of functional mobility skill and assessment of assistive devices in spinal cord injury. | 17 | 40 min. | 20 |

II. Write notes on :

- | | | | |
|---|---|---------|---|
| 1. Assessment of Balance. | 4 | 10 min. | 6 |
| 2. Visual Dysfunction. | 4 | 10 min. | 6 |
| 3. Today's health care model. | 4 | 10 min. | 6 |
| 4. Level of consciousness. | 4 | 10 min. | 6 |
| 5. Elements of evidence based practice. | 4 | 10 min. | 6 |
| 6. Neuromuscular junction. | 4 | 10 min. | 6 |
| 7. Brain injury classification. | 4 | 10 min. | 6 |
| 8. Assessment of autonomic nervous system. | 4 | 10 min. | 6 |
| 9. International classification of impairment, disability and handicap model. | 4 | 10 min. | 6 |
| 10. Learning disorder. | 4 | 10 min. | 6 |

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

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278122

Time: Three Hours

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

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

- | | | | |
|--|----|---------|----|
| 1. Write about the need and purpose of physiotherapy assessment.
Add a note on the preferred patterns of practice in physiotherapy. | 17 | 40 min. | 20 |
| 2. Describe about various electro diagnostic test for neurological Dysfunction. Explain about Somatosensory evoked potentials and its usefulness in diagnosing neurological dysfunction. | 17 | 40 min. | 20 |

II. Write Notes on:

- | | | | |
|--|---|---------|---|
| 1. Fatigue. | 4 | 10 min. | 6 |
| 2. CSF Examination. | 4 | 10 min. | 6 |
| 3. Muscle tone and its abnormalities. | 4 | 10 min. | 6 |
| 4. Lacunar stroke. | 4 | 10 min. | 6 |
| 5. Assessment of primitive reflexes. | 4 | 10 min. | 6 |
| 6. Types of sensation. | 4 | 10 min. | 6 |
| 7. Craniovertebral junction anomalies. | 4 | 10 min. | 6 |
| 8. Brunnstrom's stages of recovery. | 4 | 10 min. | 6 |
| 9. Involuntary movement. | 4 | 10 min. | 6 |
| 10. Role of brain stem in motor control. | 4 | 10 min. | 6 |

[LC 122]

APRIL 2013

Sub. Code: 8122

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

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278122

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail the development of nervous system.
2. Enumerate the clinical signs and symptoms of cerebellar lesion and its PT Assessment.

II. Write notes on:

(10 x 6 = 60)

1. Principles of Evidence based practice.
2. Scales to quantify cognitive function.
3. Apraxia.
4. Intervention strategies in Architectural Barrier.
5. APTA'S Preferred practice pattern in Neuromuscular physiotherapy.
6. Brain Lateralisation.
7. Limbic System.
8. Assessment of Balance.
9. Modified Plantigrade.
10. Kinematic gait analysis.

[LD 122]

OCTOBER 2013

Sub. Code: 8122

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

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278122

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail the Neural control of locomotion .
2. Enumerate the pathophysiology, impairments & assessment of Traumatic Brain Injury.

II. Write notes on:

(10 x 6 = 60)

1. Code of Ethics.
2. Stretch Reflex.
3. Neurulation.
4. Conceptual Framework for Clinical Practice.
5. Influence of psychosocial factors on Rehabilitation.
6. Pain Gate Theory.
7. Striatonigral Pathway.
8. Assessment of Developmental Milestone.
9. Tabetic Syndrome.
10. Craig-Scott Orthosis.

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

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278122

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Describe the autonomic nervous system.

Explain the control of motor activity at the spinal cord level.

2. Describe the movement disorder of basal ganglia.

Explain the assessment of balance, posture and functional movement analysis based on motor relearning program.

II. Write notes on:

(10 x 6 = 60)

1. Assistive device for cerebral palsy.
2. Body scheme and body image disorder.
3. Adverse effect of immobilisation on the musculoskeletal system.
4. Myasthenia gravis.
5. Aging of nervous system.
6. Examination of the work place.
7. Documenting the plan of care.
8. Motor nerve conduction study.
9. Abnormalities in bladder and bowel dysfunction.
10. Gross motor coordination

[LF 122]

OCTOBER 2014

Sub. Code: 8122

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

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278122

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Explain two treatment strategies to improve spontaneous use of left upper extremity and decreasing unilateral neglect in 72 year old woman followed by a stroke.
2. Write an essay on PT Assessment and Management of Traumatic Quadriplegia with a history of 22 year old male.

II. Write notes on:

(10 x 6 = 60)

1. Vestibulo - Ocular reflex testing.
2. Tabetic Syndrome.
3. Motor abnormality in stroke.
4. PNF technique used to treat hypotonicity due to cerebellar condition.
5. Brunnstrom's sequential recovery with stages of stroke.
6. ICF coding.
7. Value – Laden situation in rehabilitation.
8. Berg Balance Scale.
9. Gerstmann's syndrome.
10. Acute stress disorder and post traumatic stress disorder.

[LG 122]

APRIL 2015

Sub. Code: 8122

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

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

PAPER I – PHYSIOTHERAPY ASSESSMENT

(SPECIALITY – I)

Q.P. Code: 278122

Time: Three Hours

Maximum: 100 marks

Answer All questions

I. Elaborate on:

(2 x 20 = 40)

1. Elaborate on neural tube defects and discuss in detail about assessment and PT management.
2. Write about the need and purpose of Physiotherapy assessment.
Add a note on preferred patterns of practice in Physiotherapy.

II. Write notes on:

(10 x 6 = 60)

1. Types of Sensation.
2. Involuntary Movement.
3. Brain injury Classification.
4. Pain Gate Theory.
5. Kinematic Gait Analysis.
6. Apraxia.
7. Nerve Conduction Studies.
8. Shoulder dysfunction in Hemiplegia.
9. Myotonia Congenita.
10. Visual Evoked Potentials.

[LH 122]

OCTOBER 2015

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail Task Oriented Circuit Training programme in the treatment of gait dysfunction in stroke patients.
2. A 60 year old woman with a 7 year history of Parkinsonism. Lately she has experienced increasing severity of symptoms and is referred for physical therapy. Describe your PT assessment and treatment protocol for the same.

II. Write notes on:

(10 x 6 = 60)

1. Code of Ethics
2. Dill Hall Pixe Test
3. Gross Motor Co-ordination
4. Spatial relation syndrome
5. Modified Plantigrade posture after stroke
6. POMA Scale
7. Elements of Evidence based physiotherapy practice
8. Principles of Redundancy
9. Principles of Bobath approach
10. Adverse effects of immobilisation on Musculoskeletal system

[LI 122]

APRIL 2016

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write detail Physiotherapy assessment for a 20 year old T₁₀ Traumatic Spinal Cord injury patient in Rehabilitation Center.
2. Kinematic Analysis of Gait. Add a note on Circumductory Gait.

II. Write notes on:

(10 x 6 = 60)

1. Assessment of muscle tone.
2. Late responses.
3. Blood supply of brain.
4. Personality and coping styles.
5. Code of ethics.
6. Assessment of superficial reflexes.
7. Movement analysis supine to sit.
8. Limbic system.
9. Agitation and violence.
10. Associated reactions.

[LJ 122]

OCTOBER 2016

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail the development of Nervous system.
2. Elaborate the complete clinical presentation, physiotherapy assessment of right side Middle Cerebral Artery (MCA) stroke with perceptual disorder.

II. Write notes on:

(10 x 6 = 60)

1. Modified Hoehn and Yahr Scale.
2. Functional activity assessment.
3. Purpose and needs of physiotherapy assessment.
4. Involuntary movements.
5. Postural control mechanism.
6. CSF examination.
7. Cranio vertebral junctional anomalies.
8. Negative impact of pathological reflexes on stroke management.
9. Assessment of cognition.
10. Kinematic analysis of Gait.

[LK 122]

MAY 2017

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write a detailed physiotherapy assessment of Postural instability predominant Idiopathic Parkinsonism. Add a note on Postural stress syndrome.
2. Define Electro Myography. Explain in detail the various normal and abnormal Motor unit action potentials.

II. Write notes on:

(10 x 6 = 60)

1. Blood supply of Spinal cord.
2. Behavioural disorders in ageing.
3. Timed up and go test.
4. Types of sensation.
5. Influence of psychosocial factors on Rehabilitation.
6. Myotatic reflex.
7. Conceptual frame work for clinical practice.
8. Visual defects in multiple sclerosis.
9. Sacral sparing and its clinical implication.
10. Assessment of developmental milestone.

[LL 122]

OCTOBER 2017

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail the Neural control of locomotion.
2. Write in detail the appropriate features, complications and complete physiotherapy assessment of patient with T6 vertebral fracture with Spinal cord injury.

II. Write notes on:

(10 x 6 = 60)

1. Central fatigue.
2. Pathological reflexes.
3. Evoked potential.
4. Principles of evidence based physiotherapy practice.
5. Apraxia.
6. Assessment of co-ordination.
7. Role of brainstem on motor control.
8. Coping strategies.
9. Task intrinsic feedback.
10. Tests of autonomic dysfunction.

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

[LM 122]

MAY 2018

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail about the thalamic system. Add note on various functions of thalamus and its implications in movement control.
2. Write in detail about systems assessment of various components of balance.

II. Write notes on:

(10 x 6 = 60)

1. Prone development milestones.
2. Cervicogenic dizziness.
3. Wheelchair assessment for DMD.
4. Stages of motor control.
5. Appraising the evidence.
6. Multidimensional functional assessment for pain.
7. Homonymous hemianopia.
8. Functional Independence measure.
9. Neuro-diagnostic tests for Axonopathy.
10. Alzheimer's disease.

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

[LN 122]

OCTOBER 2018

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write in detail about physiotherapy assessment for a 45 year old Right Middle Cerebral Artery Stroke patient.
2. Assessment of Motor function.

II. Write notes on:

(10 x 6 = 60)

1. Sensory evoked potential.
2. ICF coding.
3. Paraplegia.
4. Postural reflexes.
5. Duchenne muscular dystrophy.
6. Criteria for equipment recommendations in cerebral palsy children.
7. Assessment of muscle spasticity.
8. Assessment of combined cortical sensation.
9. Assessment of balance.
10. Movement analysis of half kneeling.

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

[LO 122]

MAY 2019

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail the role of various senses and special senses in maintaining the balance and equilibrium of human body.
2. Describe briefly about the various nerve conduction studies.

II. Write notes on:

(10 x 6 = 60)

1. Assessment of muscle endurance.
2. Cognitive dysfunction.
3. Effects of immobilization on muscular system.
4. Assessment of muscle bulk.
5. Spinal reflexes.
6. Kinetic analysis of Gait.
7. Work conditioning for persons with neurological impairment.
8. Berg balance scale.
9. Associated reactions.
10. Assessment of perceptual function.

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

[LP 122]

OCTOBER 2019

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail about the assessment of Limbic system.
2. Describe in detail about the assessment of stroke patients according to Brunnstorm approach.

II. Write notes on:

(10 x 6 = 60)

1. Primitive, spinal and cortical reflexes.
2. Myasthenia gravis.
3. Aging of Nervous system.
4. Connections of basal ganglia.
5. Vestibular disorders.
6. Nerve conduction velocity.
7. Personality and coping styles.
8. NAGI Model.
9. Modified Hoehn and Yahr Scale.
10. Assessment of cognitive functions.

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

[LQ 122]

NOVEMBER 2020
(MAY 2020 SESSION)

Sub. Code: 8122

**MPT DEGREE EXAMINATION
SECOND YEAR
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY
SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT**

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail about the various circuits of basal ganglia and its role in movement control and disorders.
2. Write in detail about movement analysis of functional mobility skills based on task oriented concepts.

II. Write notes on:

(10 x 6 = 60)

1. Benign Paroxysmal positional vertigo.
2. Ophthalmoplegia.
3. Assessment of hand control for cerebral palsy.
4. Central fatigue.
5. Spatial relation syndrome.
6. Limits of stability.
7. Assessment of hyperkinetic movement disorders.
8. NAGI model.
9. Upper limb tension tests.
10. Substance abuse.

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

[MPT 0321]

MARCH 2021

Sub. Code: 8122

(OCTOBER 2020 EXAM SESSION)

MPT DEGREE EXAMINATION

SECOND YEAR

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT

Q.P. Code : 278122

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write a detailed Physiotherapy assessment for a 5-year-old spastic diplegic cerebral palsy child.
2. Elaborate Physiotherapy assessment and management for neurotmesis type ulnar nerve lesion of one month duration.

II. Write notes on:

(10 x 6 = 60)

1. Discuss the importance of psychosocial factors in Physiotherapy assessment.
2. The Stroke Rehabilitation Assessment of Movement (STREAM).
3. Nagi's model of disability.
4. Modified Ashworth scale.
5. Assessment of fine motor skills.
6. Assessment of fifth cranial nerve.
7. Asymmetrical tonic neck reflex.
8. Assessment of superficial sensation.
9. Functional reach test.
10. Gower's sign.

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

[MPT 0921]

**SEPTEMBER 2021
(MAY 2021 EXAM SESSION)**

Sub. Code: 8122

MPT DEGREE EXAMINATION

SECOND YEAR - (Regulations for the candidates admitted on or before the A.Y.2017-2018)

SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

Q.P. Code : 278122

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write a detailed Physiotherapy assessment and management strategies for Parkinson's patient.
2. Discuss Physiotherapy assessment for middle cerebellar stroke patients.

II. Write notes on:

(10 x 6 = 60)

1. International Classification of Impairments Disability and Handicap Model (ICIDH-1).
2. Examination strategies in neurological Physiotherapy.
3. Glasgow coma scale.
4. Gross Motor Function Measure (GMFM).
5. Kinematic analysis of gait cycle.
6. Assessment of seventh cranial nerve.
7. Tonic labyrinthine reflex.
8. Assessment of combined cortical sensation.
9. Berg balance scale.
10. Romberg's test.

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

[MPT 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 8122

MPT DEGREE EXAMINATION

SECOND YEAR - (Regulations for the candidates admitted on or before the A.Y.2017-2018)

SPECIALITY PAPER I – PHYSIOTHERAPY ASSESSMENT

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

Q.P. Code : 278122

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write a detailed Physiotherapy assessment and management strategies for Parkinson's patient.
2. Discuss Physiotherapy assessment for middle cerebellar stroke patients.

II. Write notes on:

(10 x 6 = 60)

1. International Classification of Impairments Disability and Handicap Model (ICIDH-1).
2. Examination strategies in neurological Physiotherapy.
3. Glasgow coma scale.
4. Gross Motor Function Measure (GMFM).
5. Kinematic analysis of gait cycle.
6. Assessment of seventh cranial nerve.
7. Tonic labyrinthine reflex.
8. Assessment of combined cortical sensation.
9. Berg balance scale.
10. Romberg's test.
