

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

[LQ 1120]

NOVEMBER 2020
(MAY 2020 SESSION)

Sub. Code: 8182

MPT DEGREE EXAMINATION
SECOND YEAR – (From the A.Y. 2018-2019)
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
Q.P. Code : 278182

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail P.T. management of Amyotrophic Lateral Sclerosis.
2. What are the essential elements of Constraint-induced movement therapy to improve Upper limb function and Locomotor training using body weight support to improve function of Post-stroke patient?

II. Write notes on:

(10 x 6 = 60)

1. Neuro dynamics in Neurologic conditions.
2. Rood's Approach.
3. Swiss ball therapy.
4. Virtual Reality therapy.
5. Mirror box therapy.
6. Neurogenic bladder.
7. Identify the clinical features of Brown-sequard, anterior, central and posterior cord syndromes.
8. Dix-Hallpike test.
9. Differentiate between Spasticity and Rigidity. How should each be examined?
10. Adverse effects of Immobilization on Musculoskeletal system.

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

[MPT 0321]

MARCH 2021

Sub. Code: 8182

(OCTOBER 2020 EXAM SESSION)

MPT DEGREE EXAMINATION

SECOND YEAR

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS

Q.P. Code : 278182

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in details neurological control of Bladder. Classify types of bladder dysfunction. Describe the rehabilitation of various types of neurogenic bladder dysfunction.
2. Discuss in detail assessment & P.T management of perceptual disorders?

II. Write notes on:

(10 x 6 = 60)

1. Virtual reality therapy.
2. Orthotics for neurological conditions.
3. Principles of motor relearning.
4. Task oriented approach & its significance.
5. Body weight supported treadmill training.
6. Coma arousal therapy.
7. Sensory retraining program.
8. Management of complications following spinal cord injury.
9. Mat activities in functional rehabilitation.
10. P.N.F in Parkinsonism.

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

[MPT 0921]

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

Sub. Code: 8182

**MPT DEGREE EXAMINATION
SECOND YEAR - (Regulations for the candidates admitted from 2018-2019)
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY
*Q.P. Code : 278182***

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail about physiotherapeutic plan and contemporary approach for 50 years old patient with stroke.
2. Write in detail about Physiotherapeutic management of Parkinsonism.

II. Write notes on:

(10 x 6 = 60)

1. Craniosacral therapy.
2. Movement disorders.
3. Pain management.
4. PNF.
5. Mental imagery technique.
6. Biofeedback.
7. Anterior horn cell.
8. NMES.
9. Neural plasticity.
10. Bimanual approach.

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

[MPT 0222]

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

Sub. Code: 8182

**MPT DEGREE EXAMINATION
SECOND YEAR - (Regulations for the candidates admitted from 2018-2019)
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY
*Q.P. Code : 278182***

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe in detail about physiotherapeutic management of cerebral palsy with traditional approach.
2. Write in detail about the assessment and management of traumatic brain injury patient.

II. Write notes on:

(10 x 6 = 60)

1. Constrained movement therapy.
2. Myopathies.
3. Carpal tunnel syndrome.
4. Bladder dysfunctions.
5. Myofacial release technique.
6. Cognitive dysfunctions.
7. Demyelinating diseases.
8. FES.
9. Task oriented approach.
10. Robotic therapy.

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

[MPT 0622]

**JUNE 2022
(MAY 2022 EXAM SESSION)**

Sub. Code: 8182

**MPT DEGREE EXAMINATION
SECOND YEAR - (Regulations for the candidates admitted from 2018-2019)
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY
*Q.P. Code : 278182***

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe the basic pathology and medical treatment of Duchenne muscular dystrophy and describe the current goals and interventions and safe exercise windows related to disuse atrophy.
2. Identify and analyze the function of the vestibular system.

II. Write notes on:

(10 x 6 = 60)

1. Fugal-Meyer Assessment.
2. Virtual reality therapy.
3. Motor relearning program.
4. Sensory re-education program.
5. Neural plasticity.
6. Swiss ball therapy.
7. Parkinsonism.
8. Identify the clinical features of Brown-Sequard, anterior, central, and posterior cord syndromes.
9. Rehabilitation for individuals with ALS.
10. Biofeedback.

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

[MPT 0223]

**FEBRUARY 2023
(OCTOBER 2022 EXAM SESSION)**

Sub. Code: 8182

MPT DEGREE EXAMINATION

**SECOND YEAR - (Regulations for the candidates admitted from the academic year 2018-2019)
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code : 278182

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the theories of motor control and its clinical application.
2. Define pain. Classify the various types of pain. Enumerate upon the various theories of pain and write about the management of chronic pain.

II. Write notes on:

(10 x 6 = 60)

1. Myofascial release techniques.
2. Constrained induced movement therapy.
3. Management of Amyotrophic lateral Sclerosis.
4. Guidelines for management of Autonomic dysreflexia.
5. Parental role in improving quality of life in CP child.
6. Biofeedback in gait training.
7. Trigeminal neuralgia management.
8. Cognitive Retraining program.
9. Principles of Neural plasticity.
10. Management of Oromotor dysfunction.

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

[MPT 0523]

MAY 2023

Sub. Code: 8182

MPT DEGREE EXAMINATION

SECOND YEAR - (Regulations for the candidates admitted from the academic year 2018-2019)

SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

Q.P. Code: 278182

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail about physiotherapy management of T10 level Spinal Cord injury patient.
2. Explain in detail about task oriented approach and its implications on upper limb of Middle Cerebral Artery stroke patient.

II. Write notes on:

(10 x 6 = 60)

1. Cauda equina lesions.
2. Fascioscapulohumeral dystrophy.
3. Management of ALS.
4. Mass versus distributed practice.
5. Theories of pain.
6. Coma arousal stimulation.
7. PNF for hemiplegic upper limb.
8. Stretch reflex mechanism.
9. Autonomic dysreflexia.
10. Transfer techniques of paraplegics.

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

[MPT 1223]

**DECEMBER 2023
(OCTOBER 2023 EXAM SESSION)**

Sub. Code: 8182

**MPT DEGREE EXAMINATION
SECOND YEAR - (Regulations for the candidates admitted from the academic year 2018-2019)
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code: 278182

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Identify appropriate motor learning strategies for the patient with Parkinson's disease in terms of practice and feedback.
2. Describe the clinical manifestations and assessment of ALS. Differentiate among restorative, compensatory and preventive interventions.

II. Write notes on:

(10 x 6 = 60)

1. Contrast the physiology and presentation of acute versus chronic pain.
2. Describe how the Dix-Hallpike test would elicit nystagmus for posterior SCC BPPV.
3. Describe complications associated with spinal cord injury.
4. Role of P.T management in Multiple Sclerosis.
5. P.T management of complications following Stroke.
6. Neurogenic bladder.
7. Role of P.T following Nerve repair in Erb's palsy.
8. Mirror box therapy.
9. Unilateral neglect.
10. Cerebellar dysfunction.

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

[MPT 0524]

MAY 2024

Sub. Code: 8182

MPT DEGREE EXAMINATION
SECOND YEAR - (Regulations for the candidates admitted from the academic year 2018-2019)
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

Q.P. Code: 278182

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What are the pathophysiological processes involved in Multiple Sclerosis? Discuss the assessment and effective exercise prescription for the patient with MS to improve aerobic performance.
2. What are the elements of task-specific over ground gait training and locomotor training using body weight support to improve function post-stroke?

II. Write notes on:

(10 x 6 = 60)

1. Outline the components of a physical therapy examination for a patient with chronic pain.
2. Define spinal shock and its P.T management.
3. What impairments in postural stability are typically seen in patients with Parkinson's disease?
4. Rancho Los Amigos scale and its significance.
5. Adverse effects of immobilization on the musculoskeletal system.
6. Craniosacral therapy.
7. Principles of neural plasticity.
8. Cortical reorganization.
9. Functional bladder training.
10. Mental imagery technique.

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

[MPT 1024]

OCTOBER 2024

Sub. Code: 8182

MPT DEGREE EXAMINATION

SECOND YEAR - (Regulations for the candidates admitted from the academic year 2018-2019)

SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS

BRANCH II – PHYSIOTHERAPY IN NEUROLOGY

Q.P. Code: 278182

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the assessment and differentiate between adaptation and habituation training for patients with vestibular dysfunction.
2. Outline the assessment and interventions to improve transfers for a patient with T10 level spinal cord injury. What type of progressive strengthening and endurance training activities would you suggest for each patient as an adjunct to the mat program?

II. Write notes on:

(10 x 6 = 60)

1. Constraint-induced movement therapy to improve UE function post-stroke.
2. Differentiate between cogwheel rigidity and lead pipe rigidity.
3. Discuss the problem of fatigue in MS and how it influences the design of an exercise program?
4. Retraining of bladder and bowel dysfunction.
5. Motor relearning programme.
6. Sensory re-education programme.
7. Cerebellar Lesion.
8. Principles of Motor development.
9. Management of Autonomic nervous system.
10. Theories of motor control.

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

[MPT 0525]

MAY 2025

Sub. Code: 8182

**MPT DEGREE EXAMINATION
SECOND YEAR - (Candidates admitted 2018-2019 onwards)
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code: 278182

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Write an essay on constraint induced movement therapy for a 40 year old person with left hemiparesis.
2. Explain the physiotherapy management for a 52 year old patient with cerebellar dysfunction.

II. Write notes on:

(10 x 6 = 60)

1. What is retropulsion? Write treatment techniques for retropulsion.
2. What is orthostatic hypotension? Brief about the treatment techniques to manage the same.
3. Physiotherapy management for a wheel chair bound person with Duchenne Muscular Dystrophy.
4. Coma stimulation strategies for a patient scoring below 8 points in Glasgow Coma Scale.
5. Physiotherapy treatment for a patient with syringomyelia at lower cervical level.
6. Write about the recovery stages as described by Brunnstrom.
7. Compare and contrast between Modified Ashworth Scale and Tardieu scale.
8. Write a note on using unstable support medium for balance training.
9. Motor priming techniques in neurorehabilitation.
10. How do you identify canalolithiasis pathology in benign paroxysmal positional vertigo? Add a note on Epley maneuver.

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

[MPT 1025]

OCTOBER 2025

Sub. Code: 8182

**MPT DEGREE EXAMINATION
SECOND YEAR - (Candidates admitted 2018-2019 onwards)
SPECIALITY PAPER II – PHYSIOTHERAPY INTERVENTIONS
BRANCH II – PHYSIOTHERAPY IN NEUROLOGY**

Q.P. Code: 278182

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the physiotherapy treatment for postural instability and gait dysfunction seen in a 52 year bank employee with Parkinson's Disease.
2. What are the functional potential of a young adult with C-6 complete spinal cord injury? Write in detail the physiotherapy treatment plan to improve his functional performance.

II. Write notes on:

(10 x 6 = 60)

1. What are the methods to prevent and treat shoulder subluxation in hemiplegic patient?
2. Write a note on physiotherapy treatment for proprioceptive deficits.
3. What are the do's and don'ts for heterotrophic ossification?
4. Write a note on hand arm bimanual intensive training.
5. What is the difference between decerebrate and decorticate rigidity? How do you position a patient with opisthotonus posture?
6. Mention energy conservation techniques in Myasthenia gravis.
7. How do you treat a patient with dysphagia?
8. Why do you think systems theory is superior over reflex hierarchical theory?
9. Physiotherapy treatment for a person with unilateral vestibular hypofunction.
10. Virtual reality for a child with bilateral spastic cerebral palsy.
