(Revised Regulations)

PART - II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

O.P. Code: 419104

Time: Three Hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

- 1. Explain contemporary task-oriented Approach with emphasis on its evaluation and treatment principles. (20)
- 2. Write about the various practice conditions and its effect on motor skill acquisition and retention. (15)
- 3. How do the sensory systems affect posture and balance control?

 Write about the assessment and treatment of the sensory strategies in patients with Postural disorders. (15)

II. Write notes on: $(6 \times 5 = 30)$

- 1. Write about the Occupational Therapy assessment and management of apraxia.
- 2. Discuss about the various scales for the assessment of balance.
- 3. Write about the Occupational Therapy management of dysphagia in patients with neurological dysfunction.
- 4. Write about Neural plasticity.
- 5. Write about Lowenstein Occupational Therapy Cognitive Assessment (LOTCA).
- 6. Discuss Functional electrical stimulation in retaining upper extremity function.

(Revised Regulations)

PART - II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

O.P. Code: 419104

Time: Three Hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

1. Write the differences between traditional and contemporary approaches.

Describe in detail the Carr and Shepherd's motor relearning program for stroke. (20)

2. What is Vestibulo Ocular Reflex (VOR)?

Discuss in detail the role of vestibular system in postural control. (15)

3. Discuss the role of cerebral cortex, basal ganglia and cerebellum in producing voluntary movement. (15)

II. Write notes on: $(6 \times 5 = 30)$

- 1. Gate control theory of pain.
- 2. Functional electrical stimulation.
- 3. Computers in assistive technology.
- 4. Endurance training by using Bio-mechanical approach.
- 5. Assumptions of task oriented approach.
- 6. Role of Reticular Activating System (RAS) in consciousness.

(Revised Regulations)

PART - II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419104

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on: $(2 \times 20 = 40)$

1. Describe in detail the Neuro physiology of Sensory motor approaches to treatment.

2. What are reflexes and reactions? Discuss the importance of testing reflexes and reactions.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Wheel chair measurement.
- 2. Principles of Brunstrom.
- 3. Activity adaptation.
- 4. Vestibular stimulation.
- 5. Assistive technology.
- 6. Basal ganglia.
- 7. Motor control.
- 8. Evaluation of somatosensory system.
- 9. ADL.
- 10. Types of orthosis.

(Revised Regulations)

PART - II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on: $(2 \times 20 = 40)$

- 1. Describe in detail about the Neuro physiology of spasticity & explain its management.
- 2. Discuss about the Neuro psychological function and describe one standard neuro psychological test for stroke and traumatic brain injury.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Bobath approach.
- 2. FES.
- 3. Diet progression in dysphagia.
- 4. Vestibular stimulation.
- 5. Principles of biomechanical approach.
- 6. Spinal orthoses.
- 7. Motion analysis.
- 8. Principles of making splint.
- 9. Technologies in cognitive retraining.
- 10. Electro myography.

Revised Regulations: For candidates admitted from 2005-2006 onwards ${\bf r}$

PART – II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on: $(2 \times 20 = 40)$

- 1. Discuss the role of cerebral cortex, basal ganglia and cerebellum in producing voluntary movements.
- 2. What are reflexes and reactions? Discuss the importance of testing reflexes and reactions.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Principles of brunstrom.
- 2. Assistive technology.
- 3. Gait control theory of pain.
- 4. Endurance training by using Biomechanical approach.
- 5. Role of Reticular Activating System (RAS) in consciousness.
- 6. Work hardening programme.
- 7. Spinal orthoses.
- 8. Principles of making splint.
- 9. ADL.
- 10. Functional tests used for upper extremity.

PART – II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on: $(2 \times 20 = 40)$

- 1. Explain in detail the assumptions/principles of Proprioceptive Neuromuscular Facilitation (PNF). Describe the diagonal patterns of PNF for upper and lower limbs with suitable examples.
- 2. Discuss in detail the Multicontext treatment approach.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Limb apraxia.
- 2. Inhibitory techniques of NDT.
- 3. Vestibular rehabilitation.
- 4. Types of aphasia.
- 5. Types of wheelchairs.
- 6. Functions of basal ganglia.
- 7. Assessment of memory functions.
- 8. Upper motor neuron and lower motor neuron lesions.
- 9. Assessment and treatment of astereiognosis.
- 10. Phases of deglutition.

PART – II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

| Time: Three Hours | Maximum: 100 marks | | | | | | | |
|--|---------------------------------------|---------|----|--|--|--|--|--|
| Answer ALL questions | | | | | | | | |
| Draw suitable diagrams where ever necess I. Elaborate on : | Pages Time Marks (Max.) (Max.) (Max.) | | | | | | | |
| 1. Explain role of vestibular system in posture and movement. | 17 | 40 min. | 20 | | | | | |
| 2. Describe the motor function of basal ganglion and brain stem. | 17 | 40 min. | 20 | | | | | |
| II. Write notes on : | | | | | | | | |
| 1. Explain the cross section of spinal cord and reflexes of | | | | | | | | |
| spinal cord. | 4 | 10 min. | 6 | | | | | |
| 2. Dysfunction of cerebellum. | 4 | 10 min. | 6 | | | | | |
| 3. Descending tracts of spinal cord. | 4 | 10 min. | 6 | | | | | |
| 4. How will you use motor control therapy to improve | | | | | | | | |
| voluntary control in stroke patients? | 4 | 10 min. | 6 | | | | | |
| 5. What are the treatment principals in somatosensory | | | | | | | | |
| rehabilitation? | 4 | 10 min. | 6 | | | | | |
| 6. Explain the assumptions underlying the reconstruction | | | | | | | | |
| of roods approach. | 4 | 10 min. | 6 | | | | | |
| 7. State the primary goal of neurodevelopment treatment | | | | | | | | |
| approach. | 4 | 10 min. | 6 | | | | | |
| 8. Task oriented approach. | 4 | 10 min. | 6 | | | | | |
| 9. Define ADL. Types of ADL and explain some | 4 | 10 min. | 6 | | | | | |
| standardized ADL scales. | | | | | | | | |
| 10. Explain any one standardized scale for cognitive and | | | | | | | | |
| perceptual evaluation. | 4 | 10 min. | 6 | | | | | |

PART – II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

| Q.P. Code: 419106 | | | |
|--|--------------------|---|----|
| Time: Three Hours | Maximum: 100 marks | | |
| Answer ALL questions | | | |
| Draw suitable diagrams where ever necessary. I. Elaborate on : | Pages | y Pages Time Marks (Max.) (Max.) (Max.) | |
| 1. Explain in detail the Principles of Neurodevelopment therapy Discuss in detail the function-dysfunction continua and the postulates regarding change and interventions. | 17 | 40 min. | 20 |
| 2. Discuss in detail the assessment and management of dysphagia | . 17 | 40 min. | 20 |
| II. Write notes on : | | | |
| 1. Functions of the frontal lobe. | 4 | 10 min. | 6 |
| 2. Associated reactions in Brunnstrom's approach. | 4 | 10 min. | 6 |
| 3. Assessment of righting reactions and equilibrium responses in neurological evaluation. | 4 | 10 min. | 6 |
| 4. Visual foundation Skills. | 4 | 10 min. | 6 |
| 5. PNF technique of "reversal of antagonists". | 4 | 10 min. | 6 |
| 6. CT scan. | 4 | 10 min. | 6 |
| 7. OT management of memory deficits. | 4 | 10 min. | 6 |
| 8. Indications and applications of Biomechanical approach in neurological conditions. | 4 | 10 min. | 6 |
| 9. Muscle Spindles. | 4 | 10 min. | 6 |
| 10. Therapeutic use of any two special senses in neurorehabilitation | n. 4 | 10 min. | 6 |

PART – II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

| Q.1. Coue. 419100 | | | |
|--|--|---------|----|
| Time: Three Hours | Maximum: 100 marks | | |
| Answer ALL questions | | | |
| Draw suitable diagrams where ever necess I. Elaborate on : | ary Pages Time Marl (Max.) (Max.) (Max.) | | |
| 1. Define Orthosis, classification of arthosis. Draw and explain various orthosis given to a Rheumatoid arthritis patient. | 17 | 40 min. | 20 |
| 2. Define Pain. Theories of pain and explain the occupational therapy management for pain. | 17 | 40 min. | 20 |
| II. Write notes on : | | | |
| 1. Ascending tracts of spinal cord. | 4 | 10 min. | 6 |
| 2. Parts of cerebral cortex and areas of functional localization of cerebral hemisphere. | 4 | 10 min. | 6 |
| 3. Motor function of basal ganglion and brain stem. | 4 | 10 min. | 6 |
| 4. Role of vestibular system in posture and movement. | 4 | 10 min. | 6 |
| 5. Roods components of motor control. | 4 | 10 min. | 6 |
| 6. Brunnstrom motor recovery of hand after CVA, how will you give hand therapy using Brunnstrom approach? | 4 | 10 min. | 6 |
| 7. What are the assumptions of Biomechanical approach? | 4 | 10 min. | 6 |
| 8. Assumption of rehabilitation approach. | 4 | 10 min. | 6 |
| 9. Job analysis and types of job analysis. | 4 | 10 min. | 6 |
| 10. What is activity adaptation? How will you adapt painting for a quadriplegic? | 4 | 10 min. | 6 |

PART – II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

Time: Three Hours Maximum: 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on: $(2 \times 20 = 40)$

- 1. Explain in detail the basic concepts underlying the Carr and Shephard's Motor Relearning Program (MRP). Describe the assessment based on MRP.
- 2. Explain in detail vestibular based rehabilitation.

II. Write notes on: $(10 \times 6 = 60)$

- 1. MRI Scan.
- 2. Tonic neck reflexes.
- 3. Powered wheelchair.
- 4. Assessment of metacognitive functions.
- 5. Light versus heavy work muscles in Rood's approach.
- 6. Occupation-based activity analysis.
- 7. Functions of cerebellum.
- 8. Dynamic orthosis in neurological disorders.
- 9. Assessment of tone.
- 10. Assessment of stereognosis.

PART – II

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

Time: Three Hours Maximum: 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on: $(2 \times 20 = 40)$

- 1. Explain in detail the basic concepts underlying the Neurodevelopmental approach (NDT). Describe the assessment and treatment of axial control based on NDT.
- 2. Explain in detail the cognitive disability frame of reference.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Nerve conduction studies.
- 2. Associated reactions.
- 3. PNF techniques to improve strength.
- 4. Steps of motor relearning program.
- 5. Size principle of motor unit recruitment and its application in OT.
- 6. Theory-focused activity analysis.
- 7. Role of OT in chronic pain.
- 8. Tracheostomy and implications to OT.
- 9. Monofilaments.
- 10. Describe any two standardized assessments for hand functions.

BRANCH IV – ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY - I

Q.P. Code: 419106

Time: Three Hours Maximum: 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on: $(2 \times 20 = 40)$

1. Define cognitive and perception. Explain in detail the cognitive and perceptual training for a 43 year old head injured person in RLA stage IV and V.

2. Define job evaluation. Describe in detail job evaluation for a teacher diagnosed with Parkinson diseases.

II. Write notes on: $(10 \times 6 = 60)$

- 1. FES for improving muscle strength.
- 2. Surgical management for ulnar nerve palsy.
- 3. Leisure time activity Muscular dystrophy patient.
- 4. Bobath approach.
- 5. Apraxia and its types.
- 6. Role of hypothalamus in postural control.
- 7. Significance of MRI scan in head injury.
- 8. Gate control theory in pain.
- 9. Neuropsychological evaluation.
- 10. Spinal cord reflexes.

M.O.T. DEGREE EXAMINATION SECOND YEAR PAPER I – CLINICAL SPECIALITY – I BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY

Q.P. Code: 419106

Time: Three hours Maximum: 100 Marks

I. Elaborate on : $(2 \times 20 = 40)$

1. Discuss the role of Cerebellum in the control of motor function.

2. Discuss the internal organization and Neuro Physiology of Spinal Cord.

II. Write notes on : $(10 \times 6 = 60)$

- 1. Dominance of human brain.
- 2. Neuropsychological evaluation for brain injury.
- 3. Evaluation of somatosensory system.
- 4. Role of MRI in CNS disorders.
- 5. Rehabilitative approach.
- 6. Vestibular stimulation.
- 7. Motor performance evaluation.
- 8. Stretch reflex.
- 9. Role of vestibular system in posture.
- 10. Types and assessment of attention.

M.O.T. DEGREE EXAMINATION SECOND YEAR PAPER I – CLINICAL SPECIALITY – I BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY

Q.P. Code: 419106

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Write in detail the motor control theories.

2. Describe the application of NDT for a patient with right MCA infarct.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Physiology of regulation of muscle tone.
- 2. Structure and function of cerebellum.
- 3. Apraxia types and assessment.
- 4. Function of hypothalamus.
- 5. Standardized cognitive assessments.
- 6. Classification of tasks.
- 7. Vestibulo-ocular reflex.
- 8. Dysphagia management.
- 9. Pyramidal and extra-pyramidal tracts.
- 10. The spinal cord and spinal nerves.

M.O.T. DEGREE EXAMINATION SECOND YEAR PAPER I – CLINICAL SPECIALITY – I BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY

Q.P. Code: 419106

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. a) Describe the Motor control theories in detail.

- b) Explain the traditional and contemporary approaches with examples.
- 2. Describe the Neuro-anatomy and physiology of spinal cord and spinal nerves.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Memory dysfunctions.
- 2. Meta-cognitive skills and management.
- 3. Special tests for assessing low back pain.
- 4. Any two motor-learning theories.
- 5. Neurological investigations.
- 6. Assumptions of NDT.
- 7. Endurance training using Bio-mechanical approach.
- 8. Wheel chair adaptations for tetraplegic patients.
- 9. Assistive devices in OT.
- 10. Gait analysis.

[LM 806] MAY 2018 Sub. Code: 9106

M.O.T. DEGREE EXAMINATION SECOND YEAR PAPER I – CLINICAL SPECIALITY – I BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY

Q.P. Code: 419106

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Describe the Bio-mechanical approach. Write the application of Bio-mechanical approach in Neurological conditions.

2. Describe the structure and function of Cerebellum.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Neurophysiology of speech disorders.
- 2. Types of attention and their assessment.
- 3. Dynamical system's theory of motor control.
- 4. Vestibular system and its role in movement.
- 5. Evaluation of reflexes and reactions.
- 6. Traditional and contemporary approaches.
- 7. Assessment of home making skills.
- 8. Pre-vocational evaluation.
- 9. Types of wheel chair and their prescription.
- 10. Assistive technology.

[LN 806] OCTOBER 2018 Sub. Code: 9106

M.O.T. DEGREE EXAMINATION SECOND YEAR PAPER I – CLINICAL SPECIALITY – I BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY

Q.P. Code: 419106

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Describe the ascending and descending tracts.

2. Describe in detail the Motor Relearning Program.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Examination of mixed (sensory and motor) Cranial nerves.
- 2. Assessment of Cognition and perceptual skills.
- 3. Interventions using Rehabilitative approach.
- 4. PNF relaxation techniques.
- 5. Work hardening and work conditioning.
- 6. Orthotic management in neurological conditions.
- 7. Wheel chair skills training.
- 8. Dysphagia management.
- 9. Assessment of in-coordination.
- 10. CT scan and MRI.

[LP 806] OCTOBER 2019 Sub. Code: 9106

M.O.T. DEGREE EXAMINATION SECOND YEAR BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY – I

Q.P. Code: 419106

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. What is postural control? Describe the role of different systems in controlling the posture.

2. Describe in detail the Task-oriented approach.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Swallowing assessment.
- 2. Vestibular Rehabilitation.
- 3. Wheelchair prescription.
- 4. Endurance training using bio-mechanical approach.
- 5. Retraining upper extremity functions using Bobath approach.
- 6. Neuro-psychological evaluation.
- 7. Cortico-spinal tract.
- 8. Brainstem level reflexes.
- 9. Four step process of MRP.
- 10. Instrumental ADL.

Sub. Code: 9106

[LQ 1120] NOVEMBER 2020 (MAY 2020 SESSION)

M.O.T. DEGREE EXAMINATION SECOND YEAR BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY – I

Q.P. Code: 419106

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Describe the role of Brainstem.

2. Describe in detail the Proprioceptive Neuromuscular facilitation approach.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Facial nerve.
- 2. Apraxia.
- 3. Bobath facilitation techniques.
- 4. Standardized tools for assessing Occupational dysfunctions.
- 5. Work assessments in OT.
- 6. Alternative Augmentative Communication (AAC) for patients with communication disorders.
- 7. Types of Wheel chairs and their indications.
- 8. Traditional vs Contemporary approaches.
- 9. Equilibrium Reaction and Protective extension.
- 10. Roods approach in Spasticity management.

[MOT 0321] MARCH 2021 Sub. Code: 9106 (OCTOBER 2020 EXAM SESSION)

M.O.T. DEGREE EXAMINATION SECOND YEAR BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY – I Q.P. Code: 419106

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Compare and contrast the application of Bobath approach and Brunnstorm approach in Stroke.

2. Discuss the role of vestibular system and treatment of postural related deficits.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Cerebellum and its functions and dysfunctions
 - 2. Theories of motor control
 - 3. Somato Sensory Evoked Potential (SSEP) test
 - 4. Lower Extremity Motion analysis
 - 5. Descending tracts
 - 6. Wheel chair adaptations
 - 7. Balanced Sitting training in MRP
 - 8. Motor function of cerebral cortex
 - 9. Brain Dominance
 - 10. Principles of Task Oriented Approach

[MOT 0222] FEBRUARY 2022 Sub. Code: 9106 (OCTOBER 2021 EXAM SESSION)

M.O.T. DEGREE EXAMINATION SECOND YEAR BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY – I Q.P. Code: 419106

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Write in detail the motor control theories.

2. Classification of neurological disorder and surgical management.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Pain assessment and management.
- 2. The Skeletal muscles nervous system.
- 3. Assistive technology.
- 4. Assessment of memory function.
- 5. Investigation of EEG.
- 6. Making child care.
- 7. Leisure time activities.
- 8. Introduction rehabilitation approach.
- 9. Assessment of in-coordination.
- 10. Motion Analysis.

[MOT 0223] FEBRUARY 2023 Sub. Code: 9106 (OCTOBER 2022 EXAM SESSION)

M.O.T. DEGREE EXAMINATION SECOND YEAR BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY – I

Q.P. Code: 419106

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Explain in detail the cognitive disability frame of reference.

2. Discuss the internal organization and neuro physiology of spinal cord.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Dominance of human brain.
- 2. Stretch reflex.
- 3. Powered wheelchair.
- 4. Functions of cerebellum.
- 5. Muscle spindles.
- 6. Assessment and treatment of Astereognosis.
- 7. Principles of making splint.
- 8. Activity adaptation.
- 9. Write about Neural plasticity.
- 10. Computers in Assistive technology.

[MOT 0523] MAY 2023 Sub. Code: 9106

M.O.T. DEGREE EXAMINATION SECOND YEAR BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY PAPER I – CLINICAL SPECIALITY – I

Q.P. Code: 419106

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Motor functions of the Cerebral Cortex. The hypothalamus and Control of Integrative Processes.

2. Define Pain, Theories of Pain and explain the Occupational Therapy Management for Pain.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Roods Components of Motor Control.
- 2. Assumption of Rehabilitation Approach.
- 3. Tonic Neck reflexes.
- 4. Nerve Conduction Studies.
- 5. Describe any two Standardized Assessments for Hand Function.
- 6. Significance of MRI Scan in head injury.
- 7. Wheel chair Adaptations for Tetraplegic patients.
- 8. Assistive technology.
- 9. Surgical Management of Neurological Conditions.
- 10. Higher Functions of the Nervous System.

[MOT 1223] DECEMBER 2023 Sub. Code: 9106 (OCTOBER 2023 EXAM SESSION)

M.O.T. DEGREE EXAMINATION

SECOND YEAR - (Regulations for the candidates admitted on or before the A.Y. 2021-2022)
BRANCH IV - ADVANCED OCCUPATIONAL THERAPY IN NEUROLOGY
PAPER I – CLINICAL SPECIALITY – I

Q.P. Code: 419106

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Discuss the role of cerebral cortex, basal ganglia and cerebellum in producing voluntary movement.

2. Describe in detail about the neuro physiology of spasticity and explain its management.

II. Write notes on: $(10 \times 6 = 60)$

- 1. Spinal Orthosis.
- 2. Electromyography.
- 3. Wheel chair measurement.
- 4. What are reflexes and reactions?
- 5. Technologies in cognitive retraining.
- 6. Functional tests used for upper extremity.
- 7. Types of Aphasia.
- 8. Upper motor neuron and lower motor neuron lesions.
- 9. Dysfunction of cerebellum.
- 10. Define ADL. Types of ADL and explain some standardized ADL scales.