

[LC 6163]

FEBRUARY 2013

Sub. Code: 6163

**THIRD YEAR BOT EXAM**

**Paper – IV OT IN ORTHOPAEDICS AND NEUROLOGY**

**Q.P. Code: 786163**

**Time: Three Hours  
(180 Min)**

**Maximum: 100 marks**

**I. Elaborate on:**

**(2X20=40)**

1. Complete occupational therapy evaluation treatment procedures for fracture Complications and Nerve injury.
2. Role of occupational therapy in complication of spinal cord injury.

**II. Write Notes on:**

**(8X5=40)**

1. Mobile arm support.
2. Occupational therapy management for middle cerebral artery syndromes.
3. Body Mechanism techniques in low back pain.
4. Management of the sensory deficit.
5. Therapeutic exercises.
6. Adaptations in ADL.
7. Neuro developmental approach.
8. Box and block test.

**III. Short Answers on:**

**(10X2=20)**

1. Tenodesis splint.
2. Functional abilities.
3. Stage of shoulder hand syndrome.
4. Partial lobe functions.
5. Define myasthenia gravis.
6. Flexor synergy of upper extremity.
7. Precautions of T.H.R.
8. Activities to improve Co-ordination.
9. Sensory recovery gradings.
10. Clinical features in diabetic neuropathy.

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[LD 6163]

AUGUST 2013

Sub. Code : 6163

**THIRD YEAR BOT EXAM**

**Paper IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

**Q.P. Code: 786163**

**Time: Three hours**

**Maximum : 100 marks**

**I. Elaborate on: (2x20 = 40)**

1. Discuss the evaluation and management of a 70 year old male client with Parkinsonism.
2. Describe Total hip replacement and post-operative evaluation and functional management

**II. Write Notes on: (8x5 = 40)**

1. Task oriented approach
2. Colles fracture
3. O.T. role in low back pain
4. Glasgow Coma Scale
5. Guillen – Barre Syndrome
6. ASIA Impairment classification scale
7. Describe how to assess muscle tone
8. Mention the various primitive Reflex levels

**III. Short Answers on: (10x2 = 20)**

1. Functional R.O.M
2. Clonus
3. Four Types of Rigidity
4. Define Endurance
5. Two Facilitating and Two inhibitory techniques
6. Transient ischemic Attack
7. Claw hand
8. Lateral Prehension
9. Autonomic Dysreflexia
10. I-ADL

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[LE 6163]

FEBRUARY 2014

Sub. Code : 6163

**THIRD YEAR BOT EXAM**

**Paper IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

**Q.P. Code: 786163**

**Time: Three hours**

**Maximum : 100 marks**

**I. Elaborate on: (2x20 = 40)**

1. Classification of spinal cord injuries, emphasize the assessment and application of rehabilitation approach.
2. Indication and contra indications of TKR emphasize role of OT.

**II. Write Notes on: (8x5 = 40)**

1. Treatment principles of NDT
2. Muscle tone evaluation
3. Assessment of contracture and deformities
4. Sensory re-education
5. Procedures of POP casting
6. Equilibrium and balance activities with the reference of approaches.
7. OT management of in co-ordination
8. List ADL assistive devices and brief the indications and contraindications.

**III. Short Answers on: (10x2 = 20)**

1. Define posture
2. Assessment of superficial sensation
3. Equipments used in biomechanical approach
4. Assessment of grip and pinch strength
5. Cognitive training
6. Coma stimulation
7. Complications of low back pain
8. Clinical features of intra cranial tumour
9. Four principles of PNF
10. Difference between orthoses and prostheses.

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[LF 6163]

AUGUST 2014

Sub. Code : 6163

**THIRD YEAR BOT EXAM  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

***Q.P. Code: 786163***

**Time: Three hours**

**Maximum: 100 marks**

**I. Elaborate on: (2x20=40)**

1. Discuss multiple sclerosis, OT assessment and applications of various approaches.
2. List the hand injuries; emphasize specific assessment and applications of biomechanical approach.

**II. Write Notes on: (8x5=40)**

1. Crush injuries and post surgical OT management.
2. Brief the motor learning theory.
3. Classifications of hand splinting and their application procedures.
4. Gait assessment.
5. Role of OT in reflex arc syndrome.
6. NDT for balance and equilibrium.
7. Diabetic neuropathy and OT management.
8. Check outs for myoelectric prostheses.

**III. Short Answers on: (10x2=20)**

1. Define postural alignment.
2. Prognosis of muscular dystrophy.
3. Management of tremor.
4. List 5 medicine ball strengthening activities.
5. Frenckle's exercises.
6. List 4 spinal brace.
7. Perceptual assessment.
8. Assessment of deep sensation.
9. Activities to improve dynamic balance for stroke.
10. Assessment of limb length discrepancy.

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[LG 6163]

FEBRUARY 2015

Sub. Code : 6163

**THIRD YEAR BOT EXAMINATION  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

**Q.P. Code: 786163**

**Time: Three hours**

**Maximum: 100 marks**

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

1. Explain the Occupational Therapy treatment and evaluation for a 23 year old male following Traumatic Brain injury at Ranchos recovery level of five and six.
2. Discuss the Goals, Anatomical and Mechanical principles of Hand splinting.

**II. Write notes on: (8 x 5 = 40)**

1. Brunstrom stages of upper extremity recovery
2. Post operative management in O.T following flexor tendon repair in hand
3. Treatment for patient with shoulder hand syndrome
4. Complications of spinal cord injury
5. O.T Management for low back pain
6. Energy conservation methods
7. Manual muscle testing – Grading systems
8. Principles of NDT/Bobath approach towards adult stroke patient

**III. Short answers on: (10 x 2 = 20)**

1. Trigger finger
2. Dagger grip
3. Serial casting
4. Mobile arm support
5. Unilateral neglect
6. Universal cuff
7. Extension synergy
8. Dysmetria
9. Cogwheel rigidity
10. Diabetic neuropathy

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[LH 6163]

AUGUST 2015

Sub. Code: 6163

**B.O.T. DEGREE EXAMINATION**

**THIRD YEAR**

**PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

***Q.P. Code: 786163***

**Time : Three Hours**

**Maximum : 100 marks**

**Answer ALL questions**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Discuss Parkinsonism, O.T assessment and treatment for a 60 year old male client.
2. Explain the role of Occupational Therapy for a 50 year old woman following total hip arthroplasty.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Rancho's levels of Cognitive functioning.
2. Adaptive and remedial treatment for body scheme disorder.
3. Principles of treatment for Inco-ordination.
4. Flexor and extensor synergy.
5. Treatment of approaches for Unilateral neglect.
6. O.T Management in tendon transfer.
7. Levels of amputation in Upper limb.
8. Autonomic Dysreflexia.

**III. Short Answers on:**

**(10 x 2 = 20)**

1. Tenodesis grasp.
2. Visual analogue scale.
3. Intermittent Catheterization.
4. Prime movers in shoulder adduction.
5. Anosognosia.
6. Work behavior.
7. Hematoma.
8. Tenolysis.
9. Two point discrimination.
10. Boutonniere deformity.

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[LI 6163]

**FEBRUARY 2016**

**Sub. Code: 6163**

**THIRD YEAR BOT EXAMINATION  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

***Q.P. Code: 786163***

**Time: Three hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. What is Muscle Tone? What are the abnormalities in Tone? How normal Tone maintained in a Muscle, and methods of grading Muscle Tone?
2. Role of Occupational Therapy in the management of a 40 years old man with Gullain Barre Syndrome.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Deformities in Leprosy.
2. Shoulder Hand Syndrome.
3. Assessment of Gait deviation.
4. Coma stimulation.
5. Role of OT in minimizing complications of Hemiplegia.
6. Executive functions of Brain.
7. Body mechanics for low back Pain.
8. Affolter approach.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Nystagmus
2. Sensory loss
3. Bell's palsy
4. Spinal Cord tumors
5. Romberg's sign
6. Pyramidal tract
7. Cerebellar function
8. Foot drop
9. Sling
10. Facial nerve

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[LJ 6163]

**AUGUST 2016**

**Sub. Code: 6163**

**THIRD YEAR BOT EXAMINATION  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

**Q.P. Code: 786163**

**Time: Three hours**

**Maximum: 100 Marks**

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

1. Explain the occupational therapy management for a male 35 years old client with Spinal Cord Injury at T12 level.
2. Describe a standard above Elbow Prosthesis and Prosthetic training program (Doning and Removing).

**II. Write notes on: (8 x 5 = 40)**

1. Treatment principles for memory disorder.
2. Discuss four principles of P.N.F.
3. Methods of testing sensation (Touch/pressure, Temperature).
4. Five strategies to teach clients in motor relearning program.
5. Sensory stimulation in coma patients.
6. Characteristic symptoms in Parkinsonism and treatment.
7. Brachial plexus injury.
8. Types of muscular Dystrophy.

**III. Short answers on: (10 x 2 = 20)**

1. Occupational performance.
2. Constructional Apraxia.
3. Body scheme.
4. Short term memory.
5. Mnemonics.
6. Kinesthesia.
7. Backward chaining.
8. Homonymous Hemianopia.
9. Dysdiokinesia.
10. Claw hand.

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[LK 6163]

**FEBRUARY 2017**

**Sub. Code: 6163**

**BOT DEGREE EXAMINATION  
THIRD YEAR  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

**Q.P. Code: 786163**

**Time: Three hours**

**Maximum: 100 Marks**

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

1. A 70 year old man who is suffering from Parkinson's disease. List out the problems related to occupational therapy and the role of OT in improving postural control and fall prevention.
2. A house wife complaints with pain in her joints due to Rheumatoid Arthritis, Explain the OT program in detail .

**II. Write notes on:** **(8 x 5 = 40)**

1. Mechanism of recurrent dislocation of shoulder.
2. Sensory perception analysis.
3. Role of OT in clubfoot.
4. Splinting for claw hand.
5. Parts of standard above elbow prosthesis.
6. Adaptations in ADL.
7. NDT – Facilitation Techniques.
8. Applications of IADL in adult with Brain injury.

**III. Short answers on:** **(10 x 2 = 20)**

1. Define Quality of life.
2. Define frames of reference.
3. Motor planning.
4. Purdue pegboard test.
5. Muscle re-education.
6. Dexterity.
7. Klumpke's palsy.
8. Glasco coma scale score.
9. Swan Neck deformity.
10. Define proprioception.

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[LL 6163]

**AUGUST 2017**

**Sub. Code: 6163**

**BOT DEGREE EXAMINATION**  
**(Regulations for the candidates admitted from 2013-2014 onwards)**  
**THIRD YEAR**  
**PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

***Q.P. Code: 786163***

**Time: Three hours**

**Maximum: 100 Marks**

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

1. Explain occupational therapy for 35 years old hotel manager with stroke in the region of internal capsule.
2. Describe occupational therapy for 55 years old house wife with right side fracture neck of humerus following period of immobilization.

**II. Write notes on:** **(8 x 5 = 40)**

1. Biofeedback.
2. Executive functions of brain.
3. Principles of splinting.
4. Checkout below elbow prosthesis.
5. Positioning in flaccid stage hemiplegic.
6. Explain any five adaptive aids for ADL.
7. Mobile arm support.
8. Task oriented approach.

**III. Short answers on:** **(10 x 2 = 20)**

1. Use of sphygmomanometer.
2. Any four types of attention.
3. Movements possible at cervical region.
4. Arches of hand.
5. Primary extensors to the thumb.
6. Somatosensory cortex.
7. Cadence.
8. Synergy.
9. Postural control.
10. Resting position of hand.

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

**[LN 6163]**

**AUGUST 2018**

**Sub. Code: 6163**

**BOT DEGREE EXAMINATION  
(Regulations for the candidates admitted from 2010-2011 onwards)  
THIRD YEAR  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

**Q.P. Code: 786163**

**Time: Three hours**

**Maximum: 100 Marks**

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

1. OT Management for a client with T<sub>12</sub> Paraplegia. Add a note on spinal cord injury complications and their management.
2. OT management for shoulder hand syndrome.

**II. Write notes on: (8 x 5 = 40)**

1. Mobile arm support.
2. Muscle re-education program for tendon transfer.
3. Explain the techniques of NDT in treating stroke clients.
4. What are the perceptual problems seen in head injury? How are they treated?
5. Pre-prosthetic training in below elbow amputation.
6. Pre-vocational assessment.
7. Progressive and regressive resistive muscle strengthening protocol.
8. Evaluation of co-ordination.

**III. Short answers on: (10 x 2 = 20)**

1. Post polio syndrome.
2. Short opponence splint.
3. Straight leg raising test.
4. List the complications of supra condylar fracture.
5. Medicine ball.
6. Festinating gait.
7. List four functions of frontal lobe.
8. Flexor synergy of upper extremity.
9. List four activities to increase pinch strength.
10. List four difference between upper motor neuron lesion and lower motor neuron lesion.

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

**[LO 6163]**

**FEBRUARY 2019**

**Sub. Code: 6163**

**BOT DEGREE EXAMINATION  
(Regulations for the candidates admitted from 2010-2011 onwards)  
THIRD YEAR  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

***Q.P. Code: 786163***

**Time: Three hours**

**Maximum: 100 Marks**

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

1. Explain OT management for a housewife with Cerebellar lesion.
2. What are the assumptions and treatment, principles of motor-relearning theory?  
Explain how to apply this approach for clients?

**II. Write notes on:** **(8 x 5 = 40)**

1. Intervertebral disc prolapse.
2. Sensory re-education program.
3. Biofeed back.
4. Management of hand according to Brunnstrom's approach.
5. Rancho's levels of cognitive functioning.
6. Checkouts for above elbow prosthesis.
7. Evaluation and management of unilateral neglect.
8. Rehabilitation approach.

**III. Short answers on:** **(10 x 2 = 20)**

1. Tenodesis grasp.
2. Bed positioning in side lying for a stroke client.
3. Postural hypotension.
4. Two point discrimination.
5. Peg Board.
6. AFO.
7. Modified Ashworth scale.
8. Waddling gait.
9. List four functions of parietal lobe.
10. List difference between Bell's Palsy and facial palsy.

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

**[LP 6163]**

**AUGUST 2019**

**Sub. Code: 6163**

**BOT DEGREE EXAMINATION  
(Regulations for the candidates admitted from 2010-2011 onwards)  
THIRD YEAR  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

***Q.P. Code: 786163***

**Time: Three hours**

**Maximum: 100 Marks**

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

1. Explain the clinical features, etiology and occupational therapy management for Myasthenia Gravis.
2. Classify Seizure disorders and explain the occupational therapy management for Seizure disorders.

**II. Write notes on: (8 x 5 = 40)**

1. Purposes of Evaluating Muscle Strength.
2. Draw a neat labeled diagram of upper extremity dermatome.
3. Therapeutic exercises for neuromuscular coordination.
4. Indications of Tendon Transfer.
5. Therapeutic exercises for Duchenne's Muscular Dystrophy.
6. Joint protection techniques for Rheumatoid arthritis Hand.
7. Orthostatic Hypotension.
8. Foot care in leprosy.

**III. Short answers on: (10 x 2 = 20)**

1. Define Endurance.
2. Global aphasia.
3. What is Apraxia?
4. Tests to confirm Median Nerve Injury.
5. What is Neuropraxia?
6. How to assess Pain?
7. Functions of interossei of Hand.
8. Activities to improve Co-ordination.
9. Saques finger Phenomenon.
10. Knee Jerk Reflex.

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**THE TAMIL NADU Dr.M.G.R. MEDICAL UNIVERSITY**

**[LQ 6163]**

**FEBRUARY 2020**

**Sub. Code: 6163**

**BOT DEGREE EXAMINATION  
(Regulations for the candidates admitted from 2010-2011 onwards)  
THIRD YEAR  
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY**

***Q.P. Code: 786163***

**Time: Three hours**

**Maximum: 100 Marks**

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

1. Explain the causes, clinical features, muscle involvements and sensory motor re-education after Radial Nerve Injury.
2. Describe the Occupational Therapy management for Cerebellar Ataxia.

**II. Write notes on: (8 x 5 = 40)**

1. Diabetic Neuropathy.
2. Shoulder Subluxation.
3. Pathological Gait.
4. Activities of Daily Living.
5. Deformities in Rheumatoid Arthritis.
6. Volkmann's Ischemic Contracture.
7. Work simplification techniques for meal preparation.
8. Check out of Orthosis.

**III. Short answers on: (10 x 2 = 20)**

1. Types of Terminal Devices.
2. Supinator Jerk.
3. Measurement of Pain.
4. Relaxation Techniques of PNF.
5. What is Graphesthesia?
6. Tests for Ulnar nerve dysfunctions.
7. Purposes of Splints.
8. What is regressive Resistive Exercise?
9. Define dermatome.
10. Two Point Discrimination.

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

**[BOT 0921]**

**SEPTEMBER 2021  
(FEBRUARY 2021 EXAM SESSION)**

**Sub. Code: 6163**

**BOT DEGREE EXAMINATION**

**THIRD YEAR - (Regulations for the candidates admitted on or before the A.Y. 2013-2014)**

**PAPER IV – O.T. IN ORTHOPAEDICS AND NEUROLOGY**

***Q.P. Code : 786163***

**Time : Three hours**

**Answer ALL Questions**

**Maximum : 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Define Motor learning. Describe the forms of learning and its application of motor learning in Neuro Rehabilitation.
2. Describe a comprehensive rehabilitation program for a 30 year old man with right above Elbow amputation.

**II. Write notes on:**

**(8 x 5 = 40)**

1. DeLorme principles.
2. Anterior cruciate ligament injury.
3. Energy conservation techniques.
4. Alternating hemiplegia.
5. Management of Hallux valgus.
6. Adaptations for Incoordination.
7. Autonomic Dysreflexia.
8. Dexterity Tests.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Brown Sequard syndrome.
2. Reflex Arc.
3. Rhythmic Initiation.
4. Antalgic Gait.
5. Partial Claw hand.
6. Tapping Techniques.
7. In-hand Manipulation skills.
8. Define synergy.
9. Methods of measuring Edema.
10. Splints for microstomia.

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