

[LL 6183]

AUGUST 2017

Sub. Code: 6183

BOT DEGREE EXAMINATION
(New regulations for the candidates admitted from 2014-2015 onwards)
THIRD YEAR
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY

Q.P. Code: 786183

Time: Three hours

Maximum: 100 Marks

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

1. Describe the principles of PNF. Explain in detail about the various techniques of Proprioceptive Neuromuscular Facilitation.
2. Occupational therapy assessment and management of middle age working women suffering from early Osteoarthritis.

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

1. Transfer techniques in paraplegia.
2. Role of occupational therapist in burns unit.
3. Occupational therapy management of supracondylar fracture in a school going student.
4. Carr shephered motor relearning program.
5. Principles of splinting and explain any one of it in detail.
6. Assessment of the components of attention.
7. Cognitive perceptual functions.
8. Role of occupational therapy in sensory loss patients.

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

1. Bobath concept.
2. Neural plasticity.
3. Clinical significance of deep tendon reflex.
4. Mechanism of wrist drop.
5. Define functional reach.
6. Phases of swallowing.
7. Purpose of muscle tone evaluation.
8. Any four principles of tendon transfer.
9. Dynamic splints.
10. Any four executive functions of brain.

[LM 6183]

FEBRUARY 2018

Sub. Code: 6183

BOT DEGREE EXAMINATION
(New regulations for the candidates admitted from 2014-2015 onwards)
THIRD YEAR
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY

Q.P. Code: 786183

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail about occupational therapy assessment and management of 48 years old man who is diagnosed with Guillain Barrie Syndrome in recovery stage.
2. Explain in detail about occupational therapy evaluation and management of 40 years old female psychologist with below Knee Amputation.

II. Write notes on:

(8 x 5 = 40)

1. Plan out deformity prevention in Hansen's diseases.
2. Bladder training followed by spinal cord injury.
3. Types of wheelchair and modifications.
4. Management of pressure sores.
5. Occupational therapy plan for spondylolisthesis of L5 and S1.
6. Function and dysfunctions of Basal ganglia.
7. Short term and long term treatment goals for peripheral nerve injury.
8. Techniques to control edema.

III. Short answers on:

(10 x 2 = 20)

1. Purpose of testing jaw jerk.
2. Decerebrate posture diagram.
3. Features of Global aphasia.
4. Any two none standardized assessment of coordination.
5. Causes of deep vein thrombosis.
6. First four stages of fracture healing.
7. Volumeter.
8. Associated reaction.
9. Any two functional activities for finger extension.
10. Prime muscles for supination and pronation movement of upper extremity.

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

Q.P. Code: 786183

Time: Three hours

Maximum: 100 Marks

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

1. Occupational therapy assessment and management of 35 years old male with T10 complete spinal cord injury.
2. Describe the occupational therapy assessment and management of 68 years old house wife with Rheumatoid Arthritis in the chronic stage.

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

1. Occupational therapy for low back pain.
2. ADL training to hemiplegic.
3. Occupational therapy management for Volkman's Ischemic Contracture.
4. Management of spasticity.
5. Mobility aids.
6. Role of occupational therapy during pre prosthetic training.
7. Assessment and therapy plan for fracture neck of femur.
8. Functions and dysfunctions of cerebellum.

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

1. Purpose of testing abdominal reflex.
2. Test for nystagmus.
3. Any four types of abnormal gait.
4. Uses of biofeedback.
5. Mechanism of claw hand.
6. Sensory compensation.
7. Any two examples for impairment.
8. Any four types of connective tissue.
9. Any four procedures of muscle testing.
10. Define endurance.

BOT DEGREE EXAMINATION
(New regulations for the candidates admitted from 2014-2015 onwards)
THIRD YEAR
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY

Q.P. Code: 786183

Time: Three hours

Maximum: 100 Marks

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

1. Describe the clinical features and OT management of Parkinson's disease.
2. What are the principles of Splinting? Describe the different types of splints and their indications.

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

1. Techniques used in the Motor relearning program (MRP).
2. Difference between spondylitis, spondylosis and spondylolisthesis.
3. Autonomic dysreflexia.
4. Median nerve palsy.
5. Methods to prevent shoulder sub-luxation after stroke.
6. Affolter's approach.
7. Assessment of hand functions.
8. Mobility aids for people with physical challenges.

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

1. NDT facilitation techniques.
2. Agnosia.
3. Remedial approach.
4. Open task and closed task.
5. Trendelenburg gait.
6. Body scheme disorders.
7. Assessment of proprioception and Kinesthesia.
8. Scoliosis.
9. Carpal tunnel syndrome.
10. Rigidity.

BOT DEGREE EXAMINATION
(New regulations for the candidates admitted from 2014-2015 onwards)
THIRD YEAR
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY

Q.P. Code: 786183

Time: Three hours

Maximum: 100 Marks

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

1. Describe the role of occupational therapy for a person with C4-C5 level of incomplete spinal cord injury.
2. What is the role of occupational therapist in median nerve injury at elbow level, explain the motor and sensory reeducation programme in detail?

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

1. Compartmental syndrome of forearm.
2. Plaster of paris splint, types and complications.
3. Definition, causes and compensatory changes of scoliosis.
4. Motor dysfunctions due to cortical lesion.
5. Principles of sensory testing.
6. Glasco coma scale.
7. Management of pressure sores.
8. Management of edema.

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

1. Q-Angle.
2. Chorea.
3. Pseudohypertrophy.
4. What is selective attention?
5. What is parasthesia?
6. Stereognosis.
7. What is sprain?
8. Avascular necrosis.
9. What is referred pain?
10. Endo prosthesis.

[LQ 6183]

FEBRUARY 2020

Sub. Code: 6183

BOT DEGREE EXAMINATION
(New regulations for the candidates admitted from 2014-2015 onwards)
THIRD YEAR
PAPER IV – OT IN ORTHOPAEDICS AND NEUROLOGY

Q.P. Code: 786183

Time: Three hours

Maximum: 100 Marks

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

1. Describe the clinical features, deformities in Rheumatoid Arthritis and explain the role of occupational therapy in Rheumatoid arthritis.
2. Describe Rancho Los Amingo scale. Explain in details the role of occupational therapy for the patient with traumatic brain injury in second stage of Rancho Los Amingo scale.

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

1. Describe the differences between Aphasia, Dysarthria and Verbal Apraxia.
2. Describe five performance errors which you may observe in a person who has an Ideational Apraxia.
3. Describe the intervention approaches for perceptual impairments.
4. Goals of Splinting.
5. Brunstrom stages of the Arm.
6. Methods of concentric and eccentric strengthening for medial epicondylitis.
7. How to manage wrist drop?
8. Difference between upper motor neuron and lower motor neuron Paralysis.

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

1. Define muscle tone.
2. What is two point discrimination?
3. Stages of pressure ulcers.
4. What is Romberg sign?
5. What is dysmetria?
6. What is greenstick fracture?
7. What is Rhythmic initiation?
8. Parts of wheelchair.
9. Types of terminal device.
10. What is form constancy?

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

[LR 1220]

**DECEMBER 2020
(AUGUST 2020 EXAM SESSION)**

Sub. Code: 6183

**BOT DEGREE EXAMINATION
THIRD YEAR**

(New regulations for the candidates admitted from 2014-2015 onwards)

PAPER IV – O.T. IN ORTHOPAEDICS AND NEUROLOGY

Q.P. Code: 786183

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What is Reflex sympathetic dystrophy? Explain the stages of Reflex sympathetic dystrophy and its occupational therapy management.
2. Describe different causes, features and occupational therapy management for Low Back Pain.

II. Write notes on:

(8 x 5 = 40)

1. Occupational therapy management for elbow dislocation.
2. Occupational therapy management for lateral Epicondylitis.
3. Cubital tunnel syndrome.
4. PNF relaxation techniques.
5. Brunstrom stages of hand.
6. Inhibitory techniques of Rood's.
7. How to manage subluxed shoulder?
8. Sensory retraining for stroke.

III. Short answers on:

(10 x 2 = 20)

1. Types of rigidity.
2. Ideomotor Apraxia.
3. Axonotmesis.
4. How to reduce muscle atrophy?
5. What is hallux valgus?
6. What is spondylolisthesis?
7. What is Radial club hand?
8. What is partial claw hand?
9. What is phantom limb sensation?
10. What is Saturday night palsy?

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

[BOT 0921]

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

Sub. Code: 6183

BOT DEGREE EXAMINATION

THIRD YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)

PAPER IV – O.T. IN ORTHOPAEDICS AND NEUROLOGY

Q.P. Code : 786183

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe a comprehensive Rehabilitation program for a 30 year old man with right above elbow amputation.
2. Describe the anticipated functional abilities of C5 level complete Spinal Cord injury patient and explain the role of occupational therapy.

II. Write notes on:

(8 x 5 = 40)

1. Carpal tunnel syndrome.
2. Classification of nerve injuries.
3. Describe indications of tendon transfer.
4. Describe the types of exercises used in strength and endurance training program.
5. Swing to and swing through gait.
6. Types of tremor.
7. Features of Cerebellar Gait.
8. Joint protection techniques.

III. Short answers on:

(10 x 2 = 20)

1. Draw a neat labeled diagram of upper extremity dermatome.
2. Ideational Apraxia.
3. Neuropraxia.
4. How to reduce inflammation?
5. What is Tinel sign?
6. What is avulsion fracture?
7. What is Babinski sign?
8. How to assess stereognosis?
9. What is Homonymous hemianopia?
10. What is Tetraplegia?

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

[BOT 0122]

**JANUARY 2022
(AUGUST 2021 EXAM SESSION)**

Sub. Code: 6183

**BACHELOR OF OCCUPATIONAL THERAPY DEGREE COURSE
THIRD YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)
PAPER IV – O.T. IN ORTHOPAEDICS AND NEUROLOGY
*Q.P. Code : 786183***

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe the application of Motor Relearning Program (MRP) for a patient with right hemispheric stroke.
2. Describe the brachial plexus. Explain the Occupational therapy interventions for a patient with damage to the upper trunk of the brachial plexus.

II. Write notes on:

(8 x 5 = 40)

1. Parts of a standard wheelchair.
2. Prosthetic training.
3. OT management for complex regional pain syndrome.
4. Cognitive remediation for memory deficits.
5. Short- and long-term goals for a patient with Rheumatoid Arthritis.
6. Principles of Hand Splinting.
7. Brunnstrom recovery stages of Arm.
8. NDT inhibitory techniques.

III. Short answers on:

(10 x 2 = 20)

1. Mobile Arm Support (MAS).
2. Tenodesis Grasp.
3. Open task vs closed task.
4. Terminal Device.
5. Tests for coordination.
6. Volkman's sign.
7. Rancho Los Amigos (RLA) scale – stage IV.
8. Souque's phenomenon.
9. Adaptive devices for dressing.
10. Dinner fork deformity.

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

[BOT 0622]

JUNE 2022
(FEBRUARY 2022 EXAM SESSION)

Sub. Code: 6183

BACHELOR OF OCCUPATIONAL THERAPY DEGREE COURSE
THIRD YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)
PAPER IV – O.T. IN ORTHOPAEDICS AND NEUROLOGY
Q.P. Code : 786183

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe the Rancho Los Amigos (RLA) Scale. Describe in detail the Occupational Therapy management for RLA stage V and VI.
2. Describe the Brunnstrom stages of Arm and Hand recovery. Write the OT management for stage IV and V of arm and hand recovery.

II. Write notes on:

(8 x 5 = 40)

1. Uses of hand splints with suitable examples.
2. Edema management techniques.
3. Cognitive remediation for attention deficits
4. Secondary complications of Spinal cord injury.
5. Lower extremity Orthotic management for Poliomyelitis.
6. Four step process of Motor relearning program (MRP).
7. OT goals for a patient with Parkinson's disease.
8. Hand function assessment.

III. Short answers on:

(10 x 2 = 20)

1. What is Complex regional pain syndrome Type I?
2. Indication of functional resting hand splint.
3. Indication of Aero-plane splint.
4. Age of onset of Duchenne Muscular Dystrophy.
5. Deficits addressed in biomechanical approach.
6. Sensory and Motor area for speech.
7. Apraxia.
8. Carpal tunnel syndrome.
9. Dressing adaptations for a patient with rheumatoid arthritis.
10. Uses of weight bearing technique.

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

[BOT 1022]

**OCTOBER 2022
(AUGUST 2022 EXAM SESSION)**

Sub. Code: 6183

**BACHELOR OF OCCUPATIONAL THERAPY DEGREE COURSE
THIRD YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)
PAPER IV – O.T. IN ORTHOPAEDICS & NEUROLOGY
*Q.P. Code : 786183***

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe how you would manage a 35 years old with Multiple Sclerosis.
2. Describe in detail about Task Oriented Approach.

II. Write notes on:

(8 x 5 = 40)

1. Ontogenic patterns in ROOD's approach.
2. Diabetic neuropathy.
3. De quervain's syndrome.
4. Principles of Muscle testing.
5. Joint Protection Technique.
6. Spondylosis.
7. Shoulder dislocation.
8. Define ADL. Explain the types and standardised tool to assess ADL.

III. Short answers on:

(10 x 2 = 20)

1. Functions of Occipital lobe.
2. D1 and D2 flexion.
3. Job analysis.
4. Scoliosis.
5. Name the primitive reflexes.
6. Types of Motor Relearning Programme.
7. Define Cognition.
8. Name four Assistive devices.
9. Parts of Wheelchair.
10. Define Frames of Reference.

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

[BOT 0423]

**APRIL 2023
(FEBRUARY 2023 EXAM SESSION)**

Sub. Code: 6183

**BACHELOR OF OCCUPATIONAL THERAPY DEGREE COURSE
THIRD YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)
PAPER IV – O.T. IN ORTHOPAEDICS & NEUROLOGY**

Q.P. Code: 786183

Time: Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What is Motor Neuron Disease? How will you treat 30 years old tailor with early features of Motor Neuron Disease?
2. Describe role of Occupational therapy for a 40 years old driver with D7 complete Spinal cord injury.

II. Write notes on:

(8 x 5 = 40)

1. Neuro developmental Approach.
2. Splinting for Claw Hand.
3. Stump care.
4. Erb's palsy.
5. Management of Sensory Deficit.
6. Basic principles of muscle power testing.
7. Cognitive perceptual functions.
8. Shoulder Hand Syndrome.

III. Short answers on:

(10 x 2 = 20)

1. Ankle Foot Orthosis.
2. Unilateral Neglect.
3. Activities to increase Endurance.
4. Mobile Arm Support.
5. Transfer techniques used for Quadriplegic.
6. Types of Attention.
7. Key points of Control.
8. Pes Planus.
9. Bennett's fracture.
10. Osteotomy.

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

[BOT 1123]

**NOVEMBER 2023
(AUGUST 2023 EXAM SESSION)**

Sub. Code: 6183

**BACHELOR OF OCCUPATIONAL THERAPY DEGREE COURSE
THIRD YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)
PAPER IV – O.T. IN ORTHOPAEDICS & NEUROLOGY**

Q.P. Code: 786183

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe pathophysiology, types, clinical features and course of multiple sclerosis as on occupational therapist discuss the goal setting and intervention for a patient with multiple sclerosis.
2. Describe Colle's fracture. Explain the significance of the treatment by conservative method or with Open Reduction and Internal Fixation (ORIF) in the rehabilitation phase.

II. Write notes on:

(8 x 5 = 40)

1. Subtypes of Amyotrophic Lateral Sclerosis (ALS).
2. Mention the Brunnstrom's recovery stages of upper limb recovery.
3. Describe pivot transfers for an individual with spinal cord injuries.
4. Decorticate rigidity its manifestation and significance.
5. Describe the concept of pressure as applied to splinting.
6. Resting hand splint.
7. Kienböck's disease.
8. What is the position of immobilization for scaphoid fracture and its significance?

III. Short answers on:

(10 x 2 = 20)

1. Principles of intervention Rood's approach.
2. Describe total hip replacement.
3. Frozen shoulder.
4. Management of hypersensitivity after fingertip amputation.
5. Dysdiadochokinesia.
6. Management of joint stiffness.
7. Indications of short and long Thumb Spica splints.
8. What is the optimum line of pull or force in dynamic splint?
9. Zone II of the flexor tendon injury.
10. Difference between touchdown weight bearing and partial weight bearing following hip surgery.

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

[BOT 0824]

AUGUST 2024

Sub. Code: 6183

**BACHELOR OF OCCUPATIONAL THERAPY DEGREE EXAMINATION
THIRD YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)
PAPER IV – O.T. IN ORTHOPAEDICS & NEUROLOGY**

Q.P. Code: 786183

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss Occupational Therapy Assessment and Management for 70 years old male with Parkinson's disease.
2. Describe the Occupational Therapy assessment and management of 65 years old house wife with Rheumatoid Arthritis in chronic stage.

II. Write notes on:

(8 x 5 = 40)

1. Principles of Rehabilitation Approach.
2. Occupational Therapy Management for Acute Low Back Pain.
3. What is Amnesia? Explain about the types of Amnesia.
4. Myoelectric Prosthesis.
5. Ape thumb Deformity.
6. Post polio syndrome.
7. Classification of Burns.
8. Write notes on the Upper Limb Unilateral Diagonal Patterns of Proprioceptive Neuromuscular Facilitation with suitable examples.

III. Short answers on:

(10 x 2 = 20)

1. What is two point Discrimination?
2. What are extra pyramidal signs?
3. Cock up splint.
4. Souque's Phenomenon.
5. What is meant by postural control?
6. Quadriplegia.
7. Prehension of hand.
8. Brown sequard syndrome.
9. Contrast bath.
10. Purpose of Hand Dynamometer.

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

[BOT 0225]

FEBRUARY 2025

Sub. Code: 6183

**BACHELOR OF OCCUPATIONAL THERAPY DEGREE COURSE
THIRD YEAR - (Regulations for the candidates admitted from 2014-2015 to 2021-2022)
PAPER IV – O.T. IN ORTHOPAEDICS & NEUROLOGY**

Q.P. Code: 786183

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss about the Occupational Therapy Assessment and Management for 45 years old women working as a computer operator suffering from early Osteoarthritis.
2. What is Complex Regional Pain Syndrome? Explain the stages of Complex Regional Pain Syndrome and its Occupational Therapy Management.

II. Write notes on:

(8 x 5 = 40)

1. What is synergy? Explain about the types of synergy in Hemiplegia.
2. Write about the common treatment techniques of sensory re-education for Peripheral nerve injuries.
3. What is Apraxia? Explain about the different types of Apraxia with examples.
4. Write about Floor Reaction Orthosis. Explain its biomechanics, indications and contraindications.
5. Occupational Therapy management for ulnar claw hand.
6. Volkmann's Ischemic Contracture.
7. Equilibrium Coordination Tests.
8. Occupational Therapy Management for Edema.

III. Short answers on:

(10 x 2 = 20)

1. Orthostatic hypotension.
2. Rhythmic stabilization.
3. Cortical Sensations.
4. Imitation Synkinesis.
5. What is Tenodesis Grasp?
6. Lhermitte's Sign.
7. Horner's syndrome.
8. What is Bradykinesia?
9. Midline Symmetry.
10. Rebound Phenomenon.

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

[BOT 0825]

AUGUST 2025

Sub. Code: 6183

**BACHELOR OF OCCUPATIONAL THERAPY DEGREE COURSE
THIRD YEAR - (Candidates admitted from the academic year 2014-2015 to 2021-2022)
PAPER IV – O.T. IN ORTHOPAEDICS & NEUROLOGY**

Q.P. Code: 786183

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe the evaluation and occupational therapy intervention for a patient with hemiplegia using the NDT approach.
2. Explain the principles of splinting. Describe the types of hand splints with their indications.

II. Write notes on:

(8 x 5 = 40)

1. Describe the functional goals of OT in lower limb amputees.
2. Short note on hand function retraining.
3. Explain the ADL training techniques in patients with SCI.
4. Role of OT in management of complex regional pain syndrome.
5. Management of radial nerve palsy.
6. Write a note on evaluation of cutaneous sensation.
7. Write a note on total hip replacement rehabilitation.
8. Functional training in post-stroke shoulder subluxation.

III. Short answers on:

(10 x 2 = 20)

1. Rigidity and its types.
2. Clonus.
3. Coma stimulation.
4. Define arthroplasty.
5. What is a claw hand?
6. List two complications of fractures.
7. Functions of Temporal Lobe.
8. Spinal Brace.
9. Define Perception.
10. List out Instrumental ADL.
