

**MANIPAL UNIVERSITY****THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – DECEMBER 2016****SUBJECT: ORTHOPAEDICS & RHEUMATOLOGY/CLINICAL ORTHOPAEDICS & RHEUMATOLOGY  
(COMMON FOR 2008 REGULATION/2011 SCHEME)**

Thursday, December 15, 2016

Time: 10:00-13:00 Hrs.

Maximum Marks: 80

**✍ Answer SECTION “A” and SECTION “B” in two separate answer books.****SECTION “A”: ORTHOPAEDICS/CLINICAL ORTHOPAEDICS: 40 MARKS**

1. Describe the clinical features and management of anterior dislocation of the shoulder.  
(10 marks)
2. Describe the clinical features and management of chronic osteomyelitis.  
(10 marks)
3. **Write short notes on:**
  - 3A. Spastic diplegia and role of physiotherapy
  - 3B. Carpal tunnel syndrome
  - 3C. Ankle foot orthosis
  - 3D. Gout

(5 marks × 4 = 20 marks)

**SECTION “B”: RHEUMATOLOGY: 40 MARKS**

1. **Write short notes on any FOUR of the following five questions:**
  - 1A. What is Felty’s syndrome? Mention extra articular manifestation of Rheumatoid Arthritis.
  - 1B. Enlist the various seronegative spondyloarthropathies. Mention four differences between Ankylosing spondylitis and Rheumatoid Arthritis.
  - 1C. Enumerate the causes of Avascular Necrosis and its management.
  - 1D. Discuss the clinical features and management of osteoporosis.
  - 1E. What is Raynaud’s phenomenon? List the conditions producing Raynaud’s phenomenon.

(5 marks × 4 = 20 marks)

**✍ Answer any TWO FULL questions out of the following three questions:**

- 2A. Discuss calcium metabolism.
  - 2B. Mention clinical features of osteomalacia.
  - 2C. Discuss investigation and management of osteomalacia.
- (4+3+3 = 10 marks)

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## MANIPAL UNIVERSITY

THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – DECEMBER 2016

SUBJECT: NEUROSCIENCES  
(2008 REGULATION/2011 SCHEME)

Friday, December 16, 2016

Time: 10:00-13:00 Hrs.

Maximum Marks: 80

✍ Answer any FOUR questions.

1. Discuss the clinical features and diagnosis and management of a 60 year old right-handed male presenting with acute left middle cerebral artery territory ischemic stroke that occurred 7 days ago.

(20 marks)

2. Discuss the causes, assessment, management and rehabilitation of a 15-year-old male presenting with pure motor proximal lower and upper limb weakness of 2 years duration.

(20 marks)

3. Discuss the occupational consequences and management of a 20-year old male presenting with poorly controlled temporal lobe epilepsy.

(20 marks)

4. Write short notes on:

- 4A. Progressive supranuclear palsy
- 4B. Carpal tunnel syndrome
- 4C. Complex regional pain syndromes
- 4D. Bell's palsy

(5 marks × 4 = 20 marks)

5. Write short notes on:

- 5A. Subacute combined degeneration
- 5B. Neuritic leprosy
- 5C. Duchenne muscular dystrophy
- 5D. Obstructive sleep apnea syndrome

(5 marks × 4 = 20 marks)



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## MANIPAL UNIVERSITY

### THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016

SUBJECT: OCCUPATIONAL THERAPY IN ORTHOPAEDICS AND SURGICAL CONDITIONS  
(2011 SCHEME)

Saturday, December 17, 2016

Time: 10:00-13:00 Hrs.

Max. Marks: 80

- ✍ **Answer ALL the questions**
- ✍ **Draw the diagram wherever necessary.**

✍ **Long Questions:**

1. Draw a labelled diagram of above elbow prosthesis and explain checkout of the same.  
(5+15 = 20 marks)
2. Describe swan neck and boutonniere deformities caused by rheumatoid arthritis. Highlight any four importance of splinting in rheumatoid arthritis.  
(12+8 = 20 marks)
3. **Write short notes on:**
  - 3A. Work hardening and conditioning program  
(5+5 = 10 marks)
  - 3B. Describe post-operative management of flexor tendon injury  
(10 marks)
  - 3C. OT management for postural hypotension  
(10 marks)
  - 3D. Describe the cancer stages.  
(10 marks)



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## MANIPAL UNIVERSITY

**THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016**  
**SUBJECT: OCCUPATIONAL THERAPY IN NEUROLOGICAL, GERIATRIC AND**  
**MEDICAL CONDITIONS**  
**(2011 SCHEME)**

Tuesday, December 20, 2016

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**

✍ **Long Questions:**

1. Explain the common age related changes seen in elderly and describe the common pathological conditions that influence health and function.

(5+15 = 20 marks)

2. Describe any five neurodevelopmental techniques for normalizing muscle tone.

(20 marks)

3. **Write short notes on:**

3A. Fatigue management techniques for patients with multiple sclerosis.

3B. Recovery stages of proximal upper extremity according to Brunnstrom approach.

3C. Occupational Therapy treatment goals for clients with stroke.

3D. Classification of tactile agnosia.

(10 marks × 4 = 40 marks)



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**THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016**

**SUBJECT: OCCUPATIONAL THERAPY IN REHABILITATION  
(2011 SCHEME)**

Wednesday, December 21, 2016

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**

✍ **Draw diagram wherever necessary.**

✍ **Long questions:**

1. Explain types of crutches. Describe different gait patterns with axillary crutch.

(6+14 = 20 marks)

2. Explain purpose of splint application in hand. Discuss any seven mechanical principles of hand splinting.

(6+14 = 20 marks)

3. **Write short notes on:**

3A. Any five accessibility barriers on a ramp for wheel chair bound patient and modifications for the same.

(10 marks)

3B. Define communities based rehabilitation and explain the role of occupational therapy in it.

(2+8 = 10 marks)

3C. Delivery of OT service within a sub-acute rehabilitation setting.

(10 marks)

3D. Cryotherapy.

(10 marks)



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## MANIPAL UNIVERSITY

THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016

SUBJECT: OCCUPATIONAL PERFORMANCE: ADL, WORK AND LEISURE  
(2011 SCHEME)

Thursday, December 22, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

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✍ **Answer ALL the questions.**

1. Describe the long-term positive and negative effects of caregiving for an individual with disability.

(5+5 = 10 marks)

2. Explain the community based services for participation in work.

(10 marks)

3. **Write short notes on:**

3A. Importance of manipulative hand skills

3B. View of play and leisure as activity

3C. Interviewing as a method to evaluate caregiving

3D. Work readiness programs

(5 marks × 4 = 20 marks)



**MANIPAL UNIVERSITY****THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016****SUBJECT: BIO-ENGINEERING  
(2011 SCHEME)**

Friday, December 23, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

- ✍ **Answer ALL questions.**  
✍ **Draw diagrams and flow charts wherever appropriate.**

✍ **Long Questions:**

1. Explain in detail various parts of Metallic A.F.O including checkout procedure.  
(10 marks)
2. Explain the various parts of B.E prosthesis.  
(10 marks)
3. Explain the various deformities and orthotic management of C.T.E.V.  
(5 marks)
4. **Write short notes on any THREE of the following:**
  - 4A. Knight Spinal Brace
  - 4B. ASH Brace
  - 4C. SACH Foot
  - 4D. Checkout procedure of Below Knee Prosthesis

(5 marks × 3 = 15 marks)

