

MANIPAL UNIVERSITY**THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2013****SUBJECT: CLINICAL ORTHOPAEDICS AND RHEUMATOLOGY
(COMMON FOR BOTH OLD & NEW REGULATION)**

Tuesday, June 11, 2013

Time: 10:00-13:00 Hrs.

Maximum Marks: 80

✍ Answer SECTION "A" and SECTION "B" in two separate answer books.

SECTION "A": CLINICAL ORTHOPAEDICS: 40 MARKS

1. What are the causes for back ache? Non operative management of backache. (10 marks)
2. Define nonunion. Enumerate the causes of nonunion. Describe the principles of management of nonunion. (10 marks)
- 3A. Claw hand
- 3B. Clinical features of Club Foot
- 3C. Fat embolism
- 3D. Osteosarcoma (20 marks)

SECTION "B": RHEUMATOLOGY: 40 MARKS

4. Write short notes on any FOUR of the following five questions:
 - 4A. Discuss the investigation and treatment of Rheumatoid Arthritis.
 - 4B. What is Henoch-Schonlein purpura? Discuss the clinical features, investigation and treatment.
 - 4C. Discuss extra articular manifestations of Rheumatoid Arthritis.
 - 4D. Describe calcium metabolism. Mention two disorders associated with it.
 - 4E. Write a note on Raynaud's phenomenon. Mention three differences between Raynaud's phenomenon and Raynaud's disease. (5×4 = 20 marks)

✍ Answer any TWO of the following three questions:

- 5A. Discuss clinical features of Ankylosing spondylitis.
- 5B. Mention the investigations to diagnose Ankylosing Spondylitis.
- 5C. Treatment of Ankylosing spondylitis. (4+3+3 = 10 marks)

- 6A. Discuss the causes and clinical features of osteoarthritis.
6B. Enlist the investigations and discuss management of osteoarthritis.
6C. Mention four causes of Avascular Necrosis.

(4+4+2 = 10 marks)

- 7A. What is gout? Discuss etiology of gout.
7B. Discuss the clinical features, investigations and treatment of gout.
7C. List three important differences between gout and pseudogout.

(3+4+3 = 10 marks)



Reg. No.

MANIPAL UNIVERSITY

THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2013

**SUBJECT: NEUROSCIENCES/NEUROLOGICAL SCIENCE
(COMMON FOR BOTH OLD & NEW REGULATION)**

Thursday, June 13, 2013

Time: 10:00-13:00 Hrs.

Maximum Marks: 80

✍ **Answer any FOUR questions. Each question carries TWENTY marks.**

1. Define Cerebro vascular accident.
Enumerate risk factors and etiopathologies
Enumerate clinical features of lateral medullary syndrome
Management of intracerebral hematoma
2. What is Parkinson's disease? Enumerate etiopathogenesis, clinical features and management of Parkinson's disease.
3. Meningitis - Etiopathogenesis, clinical features, management
4. **Short notes:**
 - 4A. Organophosphate poisoning
 - 4B. Lead poisoning
 - 4C. GB syndrome
 - 4D. Poliomyelitis
5. **Short notes:**
 - 5A. Rabies
 - 5B. Subdural hematoma
 - 5C. Pellagra
 - 5D. Beri Beri



Reg. No.										
----------	--	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2013

SUBJECT: OCCUPATIONAL THERAPY IN ORTHOPAEDICS

Saturday, June 15, 2013

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ Answer ALL the questions

✍ Draw the diagram wherever necessary.

1. Define and describe about spinal deformities and explain OT interventions for any two deformities.
(5+10 = 15 marks)
2. Enumerate the complications following amputation and plan post prosthetic OT management for a 32 yr old male with right above elbow amputation.
(5+10 = 15 marks)
3. Define burn injury with its clinical features and discuss the OT management for post burn contractures.
(2+3+10 = 15 marks)
4. Explain the post operative OT management for a 42 yr old female teacher who underwent ORIF for fracture shaft of humerus with nerve deficit.
(15 marks)
5. **Short notes:**
 - 5A. Mention the splints used in lateral epicondylitis and its uses.
 - 5B. Describe the sensory compensation methods used for housewife with Hansen's.
 - 5C. Describe the standard methods to evaluate fine motor coordination.
 - 5D. Write a note on deficits addressed under biomechanical FOR.(5×4 = 20 marks)



Reg. No.									
----------	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2013

SUBJECT: OCCUPATIONAL THERAPY IN NEUROLOGY

Tuesday, June 18, 2013

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**

1. What are the causes for traumatic brain injury and describe the mechanisms? Describe the occupational therapy management for a 23 year old medical student who has sustained traumatic brain injury and presently complains of in coordination of the right side.

(3+5+7 = 15 marks)

2. Discuss in detail the clinical features, problems, goals and occupational therapy treatment for a patient with transverse myelitis.

(4+3+3+5 = 15 marks)

3. Discuss the four steps of Carr and Shepherd's Motor Relearning Program. Explain the five strategies in Motor Relearning Program.

(5+10 = 15 marks)

4. Describe the occupational therapy assessment for intracranial tumors. Explain the specific Occupational Therapy considerations for patients who undergo chemotherapy, surgical intervention or radiation.

(5+10 = 15 marks)

5. **Short Notes:**

5A. Allen's cognitive levels

5B. Occupational therapy management for any two important problems of myasthenia gravis

5C. Functions of frontal lobe

5D. Desensitization techniques for sensory dysfunction

(5×4 = 20 marks)



MANIPAL UNIVERSITY

THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2013

SUBJECT: OCCUPATIONAL THERAPY IN REHABILITATION

Thursday, June 20, 2013

Time: 10:00-13:00 Hrs.

Max. Marks: 80

Answer all the questions.

1. Explain with diagram the use of various parts of biofeedback instrument. Discuss four clinical applications of biofeedback in occupational therapy.
(7+8 = 15 marks)
2. Discuss different types of crutches. Write down selection, measurement and gait pattern for use of axillary crutch.
(5+10 = 15 marks)
3. Define and describe hearing impairment and explain the technologies for hearing impairment with its benefits.
(5+10 = 15 marks)
4. Describe stages of pressure ulcer. Explain occupational therapy management for stage III pressure ulcer at gluteal region due to spinal cord injury at T6-T7.
(6+9 = 15 marks)
5. **Short notes:**
 - 5A. Describe assisted sliding transfer
 - 5B. Role of medical social worker in rehabilitation team
 - 5C. Mention any five merits and demerits of Community Based Rehabilitation (CBR)
 - 5D. Essential characteristics of clinical reasoning
(5×4 = 20 marks)



Reg. No.										
----------	--	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2013

SUBJECT: BIO-ENGINEERING

Saturday, June 22, 2013

Time: 10:00-11:30 Hrs.

Max. Marks: 40

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

1. Explain in detail various parts of Metallic A.F.O including check-out procedures. (10 marks)
2. Explain the various parts of B.E prosthesis. (10 marks)
3. Functions of Quadrilateral Socket. (5 marks)
4. **Write short notes on any THREE of the following:**
 - 4A. SOMI Brace
 - 4B. Boston Brace
 - 4C. SACH foot
 - 4D. Endoskeletal and Exoskeletal Prosthesis

(5×3 = 15 marks)

