

MANIPAL UNIVERSITY

THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2008

**SUBJECT: CLINICAL ORTHOPAEDICS AND RHEUMATOLOGY
(COMMON FOR BOTH OLD & NEW REGULATION)**

Monday, June 16, 2008

Time available: 3 Hours.

Maximum Marks: 80

Answer Section "A" and Section "B" in TWO SEPARATE ANSWER BOOKS.

SECTION "A": CLINICAL ORTHOPAEDICS: 40 MARKS

1. Classify fractures. What are the steps in the healing of a fracture? Enumerate the complications in an open fracture. (3+4+3 = 10 marks)

2. Discuss the aetiology and complications of acute osteomyelitis. Briefly discuss the management of chronic osteomyelitis. (3+3+4 = 10 marks)

3. Write short notes on:
 - 3A. Torticollis.
 - 3B. Axonotmesis.
 - 3C. Pathological fracture.
 - 3D. Thomas splint.(5×4 = 20 marks)

SECTION "B": RHEUMATOLOGY: 40 MARKS

4. Discuss the clinical features, diagnosis and management of Ankylosing spondylitis. (4+3+3 = 10 marks)

OR

Discuss the pathogenesis, clinical features, diagnosis and outline the medical management of Rheumatoid arthritis.

(2+3+3+2 = 10 marks)

5. Discuss the clinical features, diagnosis and management of systemic lupus erythematosus (SLE) (4+3+3 = 10 marks)

OR

Discuss the pathogenesis, clinical features and management of Gout.

(2+4+4 = 10 marks)

6. Write short notes on any **FOUR** of the following
 - 6A. Felty's syndrome.
 - 6B. Reiter's syndrome
 - 6C. Henoch-Scholein purpura
 - 6D. Temporal arteritis.
 - 6E. Hypercalcemia.

(5×4 = 20 marks)



MANIPAL UNIVERSITY
THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: NEUROLOGICAL SCIENCES
(COMMON FOR BOTH OLD & NEW REGULATION)

Tuesday, June 17, 2008

Time available: 3 Hours.

Maximum Marks: 80

Answer any FOUR questions. Each question carries 20 marks.

1. Classify etiology, investigation and management of acute MCA infarct.
2. Classify etiology, investigation and management of acute onset Paraplegia.
3. Classify Etiology, investigations and management of Parkinson's disease.
4. Short Notes:
 - 4A. Compressive Myelopathy
 - 4B. Alzheimer's Disease
 - 4C. Beri Beri
 - 4D. Role of Chest Physiotherapy in Acute stroke.
5. Short Notes:
 - 5A. Duchenne Muscular Dystrophy
 - 5B. Organo phosphate poisoning
 - 5C. Downs syndrome
 - 5D. Bedsore in Paraplegia.



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2008****SUBJECT: OCCUPATIONAL THERAPY IN ORTHOPAEDICS**

Wednesday, June 18, 2008

Time: 3 Hrs.

Max. Marks: 80

Answer ALL the questions.**Draw diagram wherever is necessary.**

1. Write about the Pathophysiology of peripheral nerve injury. Discuss the motor and sensory dysfunctions and occupational therapy management of the same.
(7+8 = 15 marks)
2. Explain the patho mechanism of ulnar drift deformity of metacarpophalangeal joint in rheumatoid arthritis and discuss the occupational therapy role for the same.
(5+10 = 15 marks)
3. Explain Occupational Therapy role in acute care management of post surgical phase of supracondylar fracture of femur.
(15 marks)
4. Enumerate the post surgical management of flexor tendon injury (FTI) by occupational therapy therapist using the Kleinert's protocol.
(15 marks)
5. **Short notes:**
 - 5A. Drop arm test.
 - 5B. Enumerate two important complication following spinal cord injury along with causative factors.
 - 5C. Occupational therapy role in keloid scar management.
 - 5D. Colle's fracture and its occupational therapy management.

(5×4 = 20 marks)



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2008****SUBJECT: OCCUPATIONAL THERAPY IN NEUROLOGY**

Thursday, June 19, 2008

Time: 3 Hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**

1. What is unilateral neglect? Explain in detail the occupational therapy and assessment and management for the same.
(4+11 = 15 marks)
2. Define and describe the clinical features of amyotrophic lateral sclerosis. Plan out the occupational therapy program for a 58 year old teacher diagnosed as stage III of amyotrophic lateral sclerosis.
(6+9 = 15 marks)
3. Define and describe the clinical features of syringomyelia. Outline the occupational therapy management for a patient with syringomyelia.
(7+8 = 15 marks)
4. Identify the signs and symptoms of cerebellar disorders and explain the physiological basis for any 6 clinical features of patients with cerebellar disorders.
(3+12 = 15 marks)
5. Short notes:
 - 5A. Hoehn and Yahr's stages of Parkinson's disease.
 - 5B. Define aphasia and describe the types of aphasia.
 - 5C. Signs of menigeal irritation.
 - 5D. Function dysfunction continuum of neurodevelopmental therapy.(5×4 = 20 marks)



Reg. No.

MANIPAL UNIVERSITY

THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: OCCUPATIONAL THERAPY IN REHABILITATION

Friday, June 20, 2008

Time: 3 Hrs.

Max. Marks: 80

✍ Answer ALL the questions.

1. Define Community Based Rehabilitation (CBR). Discuss the different components of CBR. Explain five different roles of Occupational Therapist working in CBR.
(2+8+5 = 15 marks)
2. Discuss the basic principles of administration and organization.
(15 marks)
3. Explain different types of wheel chair with respect to the user's need. Describe the necessary modifications in a wheel chair for a person with spinal cord injury at C2-C3 level.
(7+8 = 15 marks)
4. Define hand splinting. Discuss four important principles related to dynamic assist for mobilization.
(2+13 = 15 marks)
5. Short notes:
 - 5A. Occupational Therapy management of pressure sores.
 - 5B. Short Wave Diathermy (SWD).
 - 5C. MET.
 - 5D. Elstein three point scale for interpretation.

(5×4 = 20 marks)



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MANIPAL UNIVERSITY
THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2008
SUBJECT: BIO – ENGINEERING

Saturday, June 21, 2008

Time: 1½ Hrs.

Max. Marks: 40

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

1. Describe the checkout procedures of an Above Knee Prosthesis.
(10 marks)

2. Explain the various parts of an A.F.O. – Metal design and plastic design.
(6+4 = 10 marks)

3. Describe the prosthetic management of a very short Below Elbow Amputee.
(5 marks)

4. Write short notes on any **THREE** of the following:
 - 4A. Variable friction knee joint
 - 4B. SOMI BRACE
 - 4C. Metatarsal Bar
 - 4D. Mechanism of T.D. operation in an above Elbow prosthesis.(5×3 = 15 marks)

