

# MANIPAL UNIVERSITY

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

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

Wednesday, December 10, 2008

Time available: 10.00-13.00 Hours.

Maximum Marks: 80

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

### SECTION "A": CLINICAL ORTHOPAEDICS: 40 MARKS

1. Describe the aetiopathogenesis of Poliomyelitis. Enumerate the common deformities in the lower limb. Describe briefly the management of equinus deformity of right ankle.  
(3+3+4 = 10 marks)
2. Classify Supracondylar fractures of the Humerus. Enumerate the clinical features, complications and management.  
(2+2+2+4 = 10 marks)
3. Write short notes on:
  - 3A. Below knee caliper.
  - 3B. Elbow crutch.
  - 3C. Carpal tunnel syndrome.
  - 3D. C.P.M.

(5×4 = 20 marks)

### SECTION "B": RHEUMATOLOGY: 40 MARKS

4. Classify vasculitis. Discuss the clinical features, diagnosis and management of Wegener's granulomatosis.  
(2+3+2+3 = 10 marks)
- OR**
- Discuss etiology, pathogenesis, clinical features and management of Systemic Lupus Erythematosus (SLE).  
(2+2+3+3 = 10 marks)
5. Discuss clinical features, diagnosis and management of Reiter's syndrome.  
(4+3+3 = 10 marks)
- OR**
- Classify polyarthritis. Mention the articular manifestation and medical management of Rheumatoid arthritis.  
(3+3+4 = 10 marks)
6. Write short notes on any **FOUR** of the following:
    - 6A. Sjogren's Syndrome
    - 6B. Reiter's syndrome.
    - 6C. Polymyositis.
    - 6D. Gout
    - 6E. CREST syndrome.

(5×4 = 20 marks)



**MANIPAL UNIVERSITY****THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – DECEMBER 2008****SUBJECT: NEUROLOGICAL SCIENCES  
(COMMON FOR BOTH OLD & NEW REGULATION)**

Thursday, December 11, 2008

Time available: 10.00-13.00 Hours.

Maximum Marks: 80

**Answer any FOUR questions. Each question carries 20 marks.**

1. What is Muscular Dystrophy? Classification, Clinical features, management of DMD.
2. Etiology, classification, investigation and management of MCA stroke.
3. Myasthenia Gravis – Etiology, Clinical features, investigation management.
4. Short notes:
  - 4A. Multiple system atrophy.
  - 4B. Pellagra.
  - 4C. Wernicke Korakoff's syndrome.
  - 4D. Blocepharyngeal Neuralgia.
5. Short notes:
  - 5A. Diabetic Neuropathy.
  - 5B. Amyotrophic lateral sclerosis.
  - 5C. Neurogenic bladder.
  - 5D. Carpel Tunnel syndrome.



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

Friday, December 12, 2008

Time: 10.00-13.00 Hrs.

Max. Marks: 80

✍ **Answer all the questions:**

✍ **Draw diagram wherever is necessary.**

1. Write in detail about the physical and psychosocial problems following burn injury person and discuss the Occupational Therapy role in it.  
(5+10 = 15 marks)
2. Explain the management of below knee amputee. Discuss the Occupational Therapy role in prosthesis training and Rehabilitation.  
(15 marks)
3. Define Osteoarthritis (OA) and its derangement process. Discuss the occupational therapy management for the 55 year old housewife with bilateral OA of knee joint.  
(6+9 = 15 marks)
4. Define fracture. List the various type of humerus fracture and their associated late complications. Describe the role of occupational therapy in respect to each of these complications.  
(2+4+9 = 15 marks)
5. Short Notes:
  - 5A. Desensitization Techniques.
  - 5B. Swan neck deformity.
  - 5C. Home evaluation in paraplegia with possible solutions.
  - 5D. Enumerate Occupational therapy role in peri-arthritis shoulder.

(5×4 = 20 marks)





## MANIPAL UNIVERSITY

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

SUBJECT: OCCUPATIONAL THERAPY IN NEUROLOGY

Saturday, December 13, 2008

Time: 10.00-13.00 Hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**

1. Discuss in detail the assumptions of neurodevelopmental treatment. (15 marks)
2. Define balance. What are the impairments underlying balance dysfunction? How can occupational therapist structure intervention to assist patients with balance dysfunction using Carr and Shepherd's MRP? (2+6+7 = 15 marks)
3. Describe the evaluation and occupational therapy for body scheme disorders. (8+7 = 15 marks)
4. A 20 year old college student had sustained a traumatic brain injury in a motor vehicle accident. The following are the problem list. Patient is in Ranchow level VII, decreased arousal and attention, decreased and inconsistent visual tracking, inability to follow commands, agitated, decreased upper extremity function and dependent in ADL. Identify the treatment goals and plan the occupational therapy intervention. (15 marks)
5. **Short notes:**
  - 5A. Shoulder hand syndrome.
  - 5B. Define hydrocephalus and describe its etiology.
  - 5C. Remedial Vs adaptive training in cognition.
  - 5D. Meiner's diseases.

(5×4 = 20 marks)



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

Monday, December 15, 2008

Time: 10.00-13.00 Hrs.

Max. Marks: 80

**Answer all the questions.**

1. Discuss the planning of an Occupational therapy department with special emphasis on physical infrastructure, professionals and equipments.  
(15 marks)
2. Explain the graph of maximum expiratory flow for constructive and obstructive pulmonary disease. Discuss the principles of rehabilitation for an adult of 50 years chronic smoker suffering from COPD working as rickshaw driver.  
(5+10 = 15 marks)
3. Define 'Mobility Aids' and illustrate them diagrammatically. Discuss the different types of mobility aids. Explain the gait pattern used with axillary crutch.  
(2+8+5 = 15 marks)
4. Occupational therapist is an important professional in the industrial rehabilitation for a client. Justify it.  
(15 marks)
5. Write short notes:
  - 5A. Psychological considerations for adaptive devices.
  - 5B. Precautions and contraindications for short wave diathermy.
  - 5C. Symbolism for Persons with HIV.
  - 5D. Define and differentiate between blindness and low vision.  
(5×4 = 20 marks)



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

Tuesday, December 16, 2008

Time: 10.00-11.30 Hrs.

Max. Marks: 40

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

1. Describe the various parts of an Above Elbow Prosthesis. (10 marks)
2. List the various checkout procedures of a Below Knee Prosthesis. (10 marks)
3. Describe the various designs of orthotic knee joint with their indication. (5 marks)
4. Write short notes on any **THREE** of the following:
  - 4A. Single Axis Ankle Joint foot
  - 4B. Dennis Brown Splint
  - 4C. SOMI BRACE
  - 4D. Rocker Bottom Sole(5×3 = 15 marks)

