

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – DECEMBER 2005

SUBJECT: CLINICAL ORTHOPAEDICS AND RHEUMATOLOGY

(COMMON FOR BOTH OLD & NEW REGULATION)

Thursday, December 08, 2005

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. Enumerate the injuries caused by fall on the out stretched hand. Discuss the clinical features and management of supracondylar fracture of humerus in a child. Add a note on the complications of this fracture. (2+4+4 = 10 marks)
2. What are the stages of tuberculosis of the hip? Mention the clinical features and management of tuberculosis of the hip. (3+3+4 = 10 marks)
3. Write short notes on: (5 × 4 = 20 marks)
 - 3A. Baker's cyst.
 - 3B. Galeazzi fracture dislocation.
 - 3C. Mal union.
 - 3D. Denis Browne splint.

SECTION "B": RHEUMATOLOGY: 40 MARKS

4. Discuss the clinical features, diagnosis and management of Systemic Lupus Erythematosus (SLE). (4+3+3 = 10 marks)

OR

Discuss the clinical manifestations, diagnosis and management of Progressive Systemic Sclerosis. (4+2+4 = 10 marks)

5. Classify Polymyositis and Dermatomyositis. Discuss the clinical features, diagnosis and management of Polymyositis- Dermatomyositis.

OR

Classify Juvenile chronic arthritis. Discuss the clinical features, diagnosis and management of Still's disease. (2+3+2+3 = 10 marks)

6. Write short notes on any **FOUR** of the following.

- 6A. Pseudogout.
- 6B. Sjogren's syndrome
- 6C. Extra articular features of rheumatoid arthritis.
- 6D. Enteropathic arthritis
- 6E. Disease modifying agents in rheumatoid arthritis.

(5×4 = 20 marks)



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THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2005**SUBJECT: OCCUPATIONAL THERAPY IN NEUROLOGY**

Monday, December 12, 2005

Time: 3 Hrs.

Max. Marks: 80

Answer ALL questions

1. List the components of flexor and extensor synergy of the arm. A 35 year old vegetable vendor with left cerebral vascular accident is in Brunnstrom stage 3, with respect to her arm. Use Brunnstrom approach and describe the management for her arm.
(5+10 = 15 marks)
2. What is sensory stimulation? Describe in detail the sensory stimulation for a patient with altered consciousness.
(3+12 = 15 marks)
3. Discuss the pathophysiology and clinical signs of myasthenia gravis. Describe the role of occupational therapy for patients who have myasthenia gravis.
(7+8 = 15 marks)
4. Explain the clinical features of multiple sclerosis. Plan out the occupational therapy program for a 25 year old house wife who is diagnosed as relapsing-remitting multiple sclerosis.
(5+10 = 15 marks)
5. Short notes:
 - 5A. Signs and symptoms of hydrocephalus after infancy.
 - 5B. Functions of the frontal lobe.
 - 5C. What is multi context approach? Describe the analysis of surface task and underlying task characteristics with examples.
 - 5D. Palliative care.

(5×4 = 20 marks)



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THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2005**SUBJECT: OCCUPATIONAL THERAPY IN ORTHOPAEDICS**

Tuesday, December 13, 2005

Time: 3 Hrs.

Max. Marks: 80

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

1. Explain the various complications of SCI and how will you prevent them. Also, discuss the OT management in each.

(5+4+6 = 15 marks)

2. Describe the pathology and clinical features of poliomyelitis. Explain the OT role in post polio residual paralysis of right upper limb.

(5+10 = 15 marks)

3. Discuss the musculoskeletal dysfunction areas addressed by Occupational Therapists and their interventions for each of them.

(15 marks)

4. Enumerate the non-rheumatoid diseases affecting joints. Describe pathophysiology, clinical manifestation and the Occupational Therapy role in Ankylosis Spondylitis.

(3+12 = 15 marks)

5. Write short notes on the following:

5A. Transfer training in paraplegia.

5B. Describe CTEV and briefly outline the OT role.

5C. Straight leg raising test and its significance.

5D. Tennis elbow and splinting management.

(20 marks)



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THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2005**SUBJECT: OCCUPATIONAL THERAPY IN REHABILITATION**

Wednesday, December 14, 2005

Time: 3 Hrs.

Max. Marks: 80

Answer ALL questions.

1. Explain the three essential characteristics of clinical reasoning. Discuss the decision tree process.
(6+9 = 15 marks)
2. Discuss the different stages of HIV. Write down the stage wise Occupational therapy for a 45 year old casual worker admitted in a general hospital.
(5+10 = 15 marks)
3. Explain with diagram the uses of various parts of a biofeedback instrument. Discuss four clinical applications of biofeedback in Occupational therapy.
(7+8 = 15 marks)
4. Define 'Vocational Rehabilitation'. Discuss your plan for vocational rehabilitation of a 35 year old industrial laborer having unilateral below knee amputation.
(2+13 = 15 marks)
5. Write short notes:
 - 5A. Progressive resistive exercises (PRE).
 - 5B. Powered wheel chair.
 - 5C. Five fit principles of splinting.
 - 5D. Role of medical social worker in rehabilitation team.
(5×4 = 20 marks)



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THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2005**SUBJECT: BIO – ENGINEERING**

Thursday, December 15, 2005

Time: 1½ Hrs.

Max. Marks: 40

✍ **Answer ALL questions.**

1. Describe the checkout procedures of an above elbow prosthesis. What body motions you would teach the amputee to accomplish elbow locking?
(8+2 = 10 marks)
2. Define stump. Write the characteristics of an ideal stump. Describe the post-operative care to develop an ideal stump.
(2+3+5 = 10 marks)
3. Describe the parts of A.F.O – plastic design with its advantages over metal design.
(5 marks)
4. Write short notes on any **THREE** of the following:
 - 4A. Milwankee Brace.
 - 4B. S.A.F.E. FOOT.
 - 4C. U.C.B.L. orthosis.
 - 4D. SOMI BRACE.

(5×3 = 15 marks)

