

MANIPAL UNIVERSITY
THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – DECEMBER 2010
SUBJECT: CLINICAL ORTHOPAEDICS AND RHEUMATOLOGY
(COMMON FOR BOTH OLD & NEW REGULATION)

Monday, December 13, 2010

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. Classify nerve injuries. What is Tinels' sign Treatment options for a case of foot drop?
(10 marks)
2. Define dislocation. What are its complications? Describe the clinical features of anterior dislocation of shoulder joint.
(10 marks)
- 3A. Clinical features of rickets.
- 3B. Equinus deformity.
- 3C. Hand deformities in Rheumatoid Arthritis.
- 3D. Painful arc syndrome.
(20 marks)

SECTION "B": RHEUMATOLOGY: 40 MARKS

4. Write short notes on any FOUR out of the following 5 questions:
 - 4A. Describe the articular manifestations of Tuberculosis.
 - 4B. Mention salient investigations and treatment for Henoch Schölein Purpura.
 - 4C. Describe etiopathogenesis of Gout and enumerate 8 causes of hyperuricemia.
 - 4D. Discuss the treatment for RA in brief, enlisting the important classes of drugs with suitable examples.
 - 4E. Discuss the clinical features, investigations and treatment options for a patient with osteoporosis.
(5×4 = 20 marks)

✍ Answer any TWO out of the following 3 questions:

- 5A. Define Felty's syndrome.
- 5B. Describe its clinical features.
- 5C. Enlist salient investigations and treatment options.
(1+4+5 = 10 marks)
- 6A. Define Ankylosing Spondylitis.
- 6B. Describe the etiopathogenesis and clinical features.
- 6C. Discuss how to investigate and treat a patient with AS.
(1+4+5 = 10 marks)
- 7A. Define Osteomyelitis.
- 7B. Enlist the common organisms causing OM.
- 7C. Describe the common clinical manifestations.
- 7D. Mention any two important tests to diagnose Osteomeylitis and enumerate appropriate drugs for treatment.
(1+2+3+(2+2) = 10 marks)



MANIPAL UNIVERSITY
THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – DECEMBER 2010
SUBJECT: NEUROLOGICAL SCIENCES
(NEW REGULATION)

Wednesday, December 15, 2010

Time: 10:00-13:00 Hrs.

Maximum Marks: 80

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

1. Parkinson's disease – basal ganglia neurophysiology, clinical features and management.
2. What is paraplegia? Enumerate the causes of paraplegia and management.
3. Enumerate causes and management of Neurogenic bladder.
4. **Write short notes on:**
 - 4A. Beri Beri
 - 4B. Pellagra
 - 4C. Vitamin B12 deficiency neuropathy
 - 4D. Folate deficiency
5. **Write short notes on:**
 - 5A. Poliomyelitis
 - 5B. Rabies
 - 5C. Creutzfeldt Jacob disease
 - 5D. Herpes simplex encephalitis



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2010****SUBJECT: OCCUPATIONAL THERAPY IN ORTHOPAEDICS**

Friday, December 17, 2010

Time: 10:00-13:00 Hrs.

Max. Marks: 80

- ✍ **Answer all the Questions.**
✍ **Draw the Diagram Wherever Necessary.**

1. Elaborate on joint protection, energy conservation and work simplification in chronic arthritic patients.
(5+5+5 = 15 marks)
2. Enumerate types of shoulder dislocation and plan OT management for 28 yr old cricket player who underwent reconstruction surgery for the same.
(3+12 = 15 marks)
3. Describe the OT role during discharge phase for a 40 yr old male with incomplete SCI at L2 vertebral level.
(15 marks)
4. Mention the risk factors associated with cumulative trauma disorder and write in detail OT management for Dequerven's tendonitis.
(15 marks)
5. **Short notes:**
 - 5A. Draw and label the parts of above elbow prosthesis.
 - 5B. Briefly outline the OT management for periartthritis shoulder.
 - 5C. Describe the importance of sensory compensation techniques.
 - 5D. Volkmann's ischemic contracture.
(5×4 = 20 marks)



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THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2010

SUBJECT: OCCUPATIONAL THERAPY IN NEUROLOGY

Monday, December 20, 2010

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ Answer ALL the questions.

1. Describe in detail the assumptions of Neurodevelopment frames of reference. Write the management of spasticity in hemiplegia as described by this frame of reference.
(10+5 = 15 marks)
2. What is coma stimulation? Discuss in detail the specific sensory stimulation for a patient in deep coma as a result of traumatic brain injury.
(5+10 = 15 marks)
3. Define unilateral neglect. Discuss the different methods to evaluate unilateral neglect. Describe the treatment methods for the same.
(2+5+8 = 15 marks)
4. Define Amyotrophic Lateral Sclerosis (ALS). What are the clinical stages of ALS? Write the role of occupational therapy for the same.
(2+5+8 = 15 marks)
5. **Short Notes:**
 - 5A. Discuss and differentiate the functions of right and left cerebral hemisphere.
(2½+2½ = 5 marks)
 - 5B. What is Ataxia? Describe its clinical features.
(2+3 = 5 marks)
 - 5C. Motor Relearning Program strategies for teaching.
(5 marks)
 - 5D. Fitts and Posner's stages of learning.
(5 marks)



MANIPAL UNIVERSITY

THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2010

SUBJECT: OCCUPATIONAL THERAPY IN REHABILITATION

Wednesday, December 22, 2010

Time: 10:00-13:00 Hrs.

Max. Marks: 80

Answer all the questions.

1. What is organization and administration? Briefly describe the planning of an Occupational Therapy department in a rehabilitation centre.
(5+10 = 15 marks)
 2. Explain the Occupational therapy rehabilitation management for 55 years old newly blind male working as a teacher.
(15 marks)
 3. Define 'biofeedback'. Explain instrumentation for an EMG biofeedback. Describe the therapeutic procedures of reducing spasticity.
(2+10+3 = 15 marks)
 4. Explain the classification of Physical Adjunct Modalities. Discuss in detail any two modalities.
(5+10 = 15 marks)
- 5. Short notes:**
- 5A. Any three home management training techniques.
 - 5B. Guidelines for manual resistance exercise.
 - 5C. Elbow crutches.
 - 5D. Decision Tree process.

(5×4 = 20 marks)



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2010****SUBJECT: BIO-ENGINEERING**

Friday, December 24, 2010

Time: 10:00-11:30 Hrs.

Max. Marks: 40

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

1. Name the parts of a Boot. Describe the various shoe modifications for the management of Pes Varus.

(2+8 = 10 marks)

2. Explain the various design options of Syme's Prosthesis.

(10 marks)

3. Describe the design and functions of Terminal Devices of Below Elbow Prosthesis.

(5 marks)

4. **Write short notes on any THREE of the following:**

4A. Multi axial foot.

4B. Dennis Brown splint.

4C. A.F.O. plastic design

4D. Lumbosacral flexion - Extension and Lateral control Brace.

(5×3 = 15 marks)

