

MANIPAL UNIVERSITY**THIRD YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2011****SUBJECT: CLINICAL ORTHOPAEDICS AND RHEUMATOLOGY
(COMMON FOR BOTH OLD & NEW REGULATION)**

Tuesday, June 07, 2011

Time: 14:00-17:00 Hrs.

Maximum Marks: 80

✗ Answer SECTION "A" and SECTION "B" in two separate answer books.**SECTION "A": CLINICAL ORTHOPAEDICS: 40 MARKS****✗ All questions are compulsory.**

1. Define amputation. Enumerate the indications for amputation. Describe the features of an ideal below knee amputation stump.

(10 marks)

2. Enumerate the clinical features of osteoarthritis. Discuss the modalities of treatment of osteoarthrosis of knee

(10 marks)

3A. Care of the paraplegic patient.

3B. Carpal tunnel syndrome

3C. Fracture healing

3D. Sudek's osteodystrophy.

(20 marks)

SECTION "B": RHEUMATOLOGY: 40 MARKS**4. Write short notes on any FOUR out of the following FIVE questions:**

4A. Enumerate the criteria for diagnosis of SLE.

4B. Mention the organism associated with PAN. Describe the clinical manifestations of PAN.

4C. Enlist four causes of polyarthritis. Give two differentiating features between gout and pseudogout.

4D. Discuss the treatment for Gout in brief.

4E. Discuss the etiopathogenesis and clinical features of Ankylosing Spondylitis.

(5×4 = 20 marks)

✍ **Answer any TWO out of the following THREE questions:**

5A. Define AVN and enumerate eight causes for AVN.

5B. Describe clinical manifestations of AVN.

5C. Enlist salient investigations and treatment options.

(3+3+4 = 10 marks)

6A. Define Henoch Schölein Purpura.

6B. Describe the demographics, etiopathogenesis and clinical features.

6C. Discuss how to investigate and treat a patient with HSP.

(1+4+5 = 10 marks)

7A. Define Reactive Arthritis.

7B. Enlist the common causative organisms.

7C. Describe the common clinical manifestations.

7D. Mention important investigations 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 – JUNE 2011****SUBJECT: NEUROSCIENCES/NEUROLOGICAL SCIENCES
(COMMON FOR BOTH OLD & NEW REGULATION)**

Thursday, June 09, 2011

Time: 14:00-17:00 Hrs.

Maximum Marks: 80

✍ **Answer any FOUR questions. All questions carry TWENTY marks.**

1. Short notes:

- 1A. Head injury and mechanism.
- 1B. Subdural hematoma.
- 1C. Epidural hematoma.
- 1D. Subarachnoid hemorrhage.

2. Cerebrovascular accident

- Definition, subtypes
- Etiopathogenesis, risk factors
- Management

3. Myasthenia gravis - Etiopathogenesis, clinical features, management**4. Short notes:**

- 4A. Rabies.
- 4B. Complex regional pain syndrome.
- 4C. Syringomyelia.
- 4D. Wilson disease.

5. What is Parkinson's disease?

Enumerate clinical features, management of Parkinson's disease.

Add note on Akinetic rigid syndrome.



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2011****SUBJECT: OCCUPATIONAL THERAPY IN ORTHOPAEDICS**

Saturday, June 11, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

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

1. Describe the role of OT for a 45 yr house wife with chronic rheumatoid arthritis.
(15 marks)
2. Describe any three complications of spinal cord injury and explain the OT management for the same.
(5+10 = 15 marks)
3. Describe the various complications following amputation and explain the prosthetic training program for a 45 yr old engineer who undergone above elbow amputation.
(8+7 = 15 marks)
4. Describe the OT role for 50 yr traffic constable undergone total right hip replacement surgery and highlight the indication and contraindications for the same.
(5+10 = 15 marks)
5. **Short Notes:**
 - 5A. Describe in brief OT management for scaphoid fracture.
 - 5B. Hypertrophic Scar management.
 - 5C. Write brief note on orthopedic goal setting process.
 - 5D. Define tennis elbow and its splinting rationale.

(5×4 = 20 marks)



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2011****SUBJECT: OCCUPATIONAL THERAPY IN NEUROLOGY**

Tuesday, June 14, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

✍ Answer ALL the questions:

1. Discuss in detail the motor impairments seen after Cerebral Vascular Accident and describe the management for the same.
(7+8 = 15 marks)
2. Describe Glasgow coma scale. Describe the occupational therapy management for a traumatic brain injury patient currently in Glasgow coma scale 10 (M₄, V₂, E₄).
(5+10 = 15 marks)
3. Explain the levels of awareness and the types of compensatory strategies. Discuss the treatment principles for memory disorders.
(7+8 = 15 marks)
4. Write in detail the pathological classification of intracranial tumors. Discuss the role of occupational therapy in postoperative Ependymoma of spinal cord.
(10+5 = 15 marks)
5. **Short Notes:**
 - 5A. Features of temporal lobe dysfunction.
 - 5B. Post operative precautions for craniotomy procedure.
 - 5C. Pyramidal tract lesions at pontine level.
 - 5D. Adaptive aids for in-coordination.

(5×4 = 20 marks)



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2011****SUBJECT: OCCUPATIONAL THERAPY IN REHABILITATION**

Thursday, June 16, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

Long Answer Questions:

1. Describe the various assessment strategies for architectural barriers. Write various considerations for a barrier free building for a wheelchair user.
(9+6 = 15 marks)
2. Describe in detail the types of strengthening exercises. Also explain the benefits of continuous passive motion.
(10+5 = 15 marks)
3. Discuss the Occupational Therapy rehabilitation program for a 60 year old woman with congestive heart failure in the class III (New York Heart Association).
(15 marks)
4. Discuss the different stages of Human immuno deficiency virus (HIV). Write down the stage wise Occupational therapy management for 32 yrs old driver diagnosed with HIV.
(15 marks)

Short Answer Questions:

- 5A. Describe the cognitive process involved in clinical reasoning.
- 5B. Describe briefly the theoretical base of rehabilitation frame of reference (FOR).
- 5C. Describe in Brief any three adaptive devices used in home management.
- 5D. Indications for thermal agents.

(5×4 = 20 marks)



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – JUNE 2011****SUBJECT: BIO-ENGINEERING**

Saturday, June 18, 2011

Time: 14:00-15:30 Hrs.

Max. Marks: 40

✍ **Answer all the questions. Draw diagrams and flowcharts wherever appropriate.**

1. Name the parts of a Boot. Describe the various shoe modifications for the management of flexible and fixed PES VALGUS.

(2+8 = 10 marks)

2. Name the parts of Above Knee Prosthesis. Explain the bio-mechanics of Quadrilateral total contact socket. Brief the suction socket suspension system.

(2+5+3 = 10 marks)

3. Explain the different Harnessing systems of Below Elbow Prosthesis.

(5 marks)

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

4A. Single axis Ankle joint foot.

4B. Floor reaction orthosis.

4C. Knight spinal Brace.

4D. Terminal Devices of upper limb prosthesis.

(5×3 = 15 marks)

