

MANIPAL UNIVERSITY
THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2007
SUBJECT: CLINICAL ORTHOPAEDICS AND RHEUMATOLOGY
(COMMON FOR BOTH OLD & NEW REGULATION)
Monday, December 10, 2007

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 sustained at the wrist due to a fall on an outstretched hand. Describe the clinical features, management and complications of Colles' fracture.
(3+3+2+2 = 10 marks)
2. Classify joints. What are the clinical tests in diagnosing congenital dislocation of the hip? Outline the principles in management of CDH in a 3 month old child.
(4+2+4 = 10 marks)
3. Write short notes on:
(5 × 4 = 20 marks)
 - 3A. Arthrodesis.
 - 3B. Tardy ulnar nerve palsy.
 - 3C. Monteggia fracture dislocation.
 - 3D. Giant cell tumor.

SECTION "B": RHEUMATOLOGY: 40 MARKS

4. Discuss pathogenesis, clinical features and diagnosis of Rheumatoid arthritis.
(4+4+2 = 10 marks)

OR

Discuss the aetiopathogenesis, clinical features and management of systemic lupus erythematosus (SLE)
(2+4+4 = 10 marks)
5. Classify spondylarthritidis. Discuss the aetiology, clinical features and management of Reiter's disease.
(2+2+3+3 = 10 marks)

OR

Discuss the clinical features, diagnosis, management and complications of progressive systemic sclerosis.
(3+2+2+3 = 10 marks)
6. Write short notes on any **FOUR** of the followings:
 - 6A. Acute Gout
 - 6B. Henoch-Scholein purpura
 - 6C. Polymyalgia Rheumatica
 - 6D. Still's disease
 - 6E. Criteria for diagnosis of Rheumatoid arthritis.
(4×5 = 20 marks)



MANIPAL UNIVERSITY
THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2007
SUBJECT: NEUROLOGICAL SCIENCES
(COMMON FOR BOTH OLD & NEW REGULATION)

Tuesday, December 11, 2007

Time available: 3 Hours.

Maximum Marks: 80

✍ **Essay questions.**

- 1A. Motor Neuron disease – clinical features, patho physiology and treatment.
- 1B. Parkinson's disease - clinical features, patho physiology and treatment.

(10×2 = 20marks)

✍ **Write short notes on :**

- 2A. Dementia
- 2B. Decubitus ulcer
- 2C. Bell's palsy
- 2D. Polymyositis
- 2E. Entrapment neuropathy
- 2F. Meningitis
- 2G. Transverse myelitis
- 2H. Subdural empyema

(5×8 = 40marks)

✍ **Briefly answer the questions :**

- 3A. Subdural/ epidural/intracranial bleeding.
- 3B. Meningocele.
- 3C. Differences between UMN/LMN lesions.
- 3D. Pella.
- 3E. Duchenne's muscular dystrophy.
- 3F. Risk factors for atherosclerosis.
- 3G. Various types of gait.
- 3H. Complex regional pain syndrome.
- 3I. Define postural hypotension and write its causes.
- 3J. Syringomyelia.

(2×10 = 20marks)



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2007****SUBJECT: OCCUPATIONAL THERAPY IN ORTHOPAEDICS**

Wednesday, December 12, 2007

Time: 3 Hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**✍ **Draw diagrams wherever is necessary.**

1. Define poliomyelitis and its early symptoms. List the common presentations as part of PPRP. Explain various functional disabilities in a patient with flail upper limb due to poliomyelitis and discuss the occupational therapy role in that.

(3+4+4+4 = 15 marks)

2. Describe the parts in above elbow prosthesis and explain occupational therapy role in prosthetic training program.

(8+7 = 15 marks)

3. Discuss, how you will use the biomechanical frames of reference to restore elbow function following fracture.

(5+10 = 15 marks)

4. Explain in detail the occupational therapy program for 35 year old teacher with Cauda equina syndrome.

(15 marks)

5. Write short notes on the following:

5A. Cozen sign.

5B. Deformities in Hansen's disease.

5C. Carpal tunnel syndrome.

5D. Joint protection and work simplification.

(5×4 = 20 marks)



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2007****SUBJECT: OCCUPATIONAL THERAPY IN NEUROLOGY**

Thursday, December 13, 2007

Time: 3 Hrs.

Max. Marks: 80

Answer ALL the questions.

1. Explain the clinical manifestations of Parkinson's disease. Use proprioceptive neuromuscular facilitation to provide relaxation for a person with Parkinson's disease.
(10+5 = 15 marks)
2. Define and describe different types of attention. Discuss in detail the treatment of attention deficit using multicontext treatment approach.
(10+5=15 marks)
3. Describe the features of astrocytoma. Explain the role of occupational therapy for an 46 year old accountant who is diagnosed as having right frontal lobe astrocytoma with partial resection of the tumor.
(5+10 = 15 marks)
4. Describe the evaluation and occupational therapy for body scheme disorders.
(8+7 = 15 marks)
5. Short notes:
 - 5A. Define aphasia and list the types of aphasia
 - 5B. Alcoholic neuropathy
 - 5C. Syringobulbia
 - 5D. Meiner's disease
(4×5 = 20 marks)



MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2007****SUBJECT: OCCUPATIONAL THERAPY IN REHABILITATION**

Friday, December 14, 2007

Time: 3 Hrs.

Max. Marks: 80

Answer ALL questions.

1. Discuss the process of rehabilitation for an unemployed married above elbow amputee, admitted to a rehabilitation center in his pre prosthetic phase, having psychosocial and family problems post physical disability.
(15 marks)
2. Classify heat modalities. Discuss the physiological effects of heat. Explain the precautions and contraindications of short wave diathermy.
(4+5+6 = 15 marks)
3. Describe the mechanical principles for the fabrication of hand splinting. Write down the check out procedure of long opponance splint.
(9+6 = 15 marks)
4. Define 'Clinical Reasoning'. Discuss the essential characteristics of clinical Reasoning with examples.
(2+13 = 15 marks)
5. Write short notes:
 - 5A. Walking Frames.
 - 5B. Temporal Rhythm for HIV.
 - 5C. Pivot Transfer.
 - 5D. Powered wheel chair.

(5×4 = 20 marks)



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MANIPAL UNIVERSITY**THIRD YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2007****SUBJECT: BIO – ENGINEERING**

Saturday, December 15, 2007

Time: 1½ Hrs.

Max. Marks: 40

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

1. Describe the checkout procedures of an Above Elbow Prosthesis. Explain the arm motions to operate the Terminal Device.
(7+3 = 10 marks)
2. Describe the parts of KAFO. Write the indications of a KAFO.
(8+2 = 10 marks)
3. Describe the various socket design options for Below Knee Stump with indications of each design.
(5 marks)
4. Write short notes on any **THREE** of the following:
(5×3 = 15 marks)
 - 4A. STEN FOOT.
 - 4B. Milwaukee Brace.
 - 4C. Constant friction knee joint.
 - 4D. Thomas Heel.

