

**APRIL 2001**

**[KD 606 F]**

**M.P.T. DEGREE EXAMINATION.**

**Fourth Semester**

**Paper III — HAND CONDITIONS — (Elective)**

**Time : Three hours**

**Maximum : 100 marks**

**Answer ALL questions.**

**All questions carry equal marks.**

1. Discuss the evolution of the thumb from early ages to man. Explain its uniqueness. (20)
2. Describe the criteria for selecting a muscle for tendon transfer. Give the role of physiotherapy from week 1 to week 8. (20)
3. Identify the deformity seen in the hand in a patient of Rheumatoid arthritis. Give the physiotherapy for the same. (20)
4. Describe the disability with an ulnar nerve injury in the hand. Give the type of orthoses used in these case. (20)

5. Write short notes on : (4 × 5 = 20)

- (a) Sensory assessment of hand
- (b) Functional position of hand describe it with a diagram
- (c) Discuss the materials used in hand splinting
- (d) Discuss the methods of mobilizing a stiff hand.

NOVEMBER 2001

[KE 606 F]

Sub. Code : 8006

M.P.T. DEGREE EXAMINATION.

*Elective*

Paper VI — HAND CONDITIONS

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

1. Describe the pre-operative care and post-operative management of a young lady with total claw hand in left hand due to Hansen's disease who had undergone tendon-transfer operation to the deformed hand and fingers.
  2. 46 yrs. old woman diagnosed as carpal tunnel syndrome on Right side. Discuss its clinical features, special tests and Physiotherapy management.
  3. Write in detail about the finger fracture rehabilitation.
  4. Enumerate post-operative protocol for zone-II flexor-tendor repair.
  5. Describe in detail normal functions of the hand and explain about Extensor mechanism of finger.
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**MARCH 2002**

**[KG 606 F]**

**Sub. Code : 8006**

**M.P.T. DEGREE EXAMINATION.**

(Common to New/Revised Regulations)

**HAND CONDITIONS — (Elective)**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

1. Describe the role of physiotherapy in management of Paul-Brands Tendon Transfer. (20)
  2. Describe a motor, sensory and functional assessment of hand. (20)
  3. Describe a classical rheumatoid hand. How will you manage the same in physiotherapy. (20)
  4. Identify common fractures of carpal and metacarpal of Thumb. Discuss P.T. Management of the same. (20)
  5. Write short notes on : (4 × 5 = 20)
    - (a) Give the differences between Ape and Human hand
    - (b) Describe the deformities seen in the Leprosy hand. How will you rehabilitate the same.
    - (c) Describe splints used for median and ulnar nerve injury. Discuss the material used.
    - (d) Give PT management for Dupentren's contracture
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**SEPTEMBER 2002**

**[KH 606 F]**

**Sub. Code : 8006**

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE  
EXAMINATION.**

(Common to New/Revised Regulations)

**HAND CONDITIONS — (Elective)**

**Time : Three hours**

**Maximum : 100 marks**

Answer ALL questions.

All questions carry equal marks.

1. Discuss anatomy of hand with special emphasis on tendon arrangement. (20)
2. Give detailed assessment and management of hand functions in Leprosy. (20)
3. A 25 years old adult sustained with Colle's Fracture referred to the physiotherapy department following immobilisation. Discuss physiotherapy management and its complications. (20)
4. Write in detail about the post-operative management of Metacarpo phalangeal joint arthroplasty. (20)

5. Short notes : (4 × 5 = 20)

- (a) Cock up splint
  - (b) Ape hand
  - (c) Primary tendon grafting
  - (d) Discuss the methods of mobilizing a stiff hand.
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OCTOBER 2003

[KJ 606 F]

Sub. Code : 8006

MASTER OF PHYSIOTHERAPY (MPT) DEGREE  
EXAMINATION.

(Common to New/Revised Regulations)

HAND CONDITIONS — (Elective)

Time : Three hours

Maximum : 100 marks

Theory : Two hours and  
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

M.C.Q. must be answered **SEPARATELY** on the  
Answer Sheet provided as per the instructions on the  
first page.

Answer **ALL** questions.

Draw suitable diagrams wherever necessary.

I. Write an Essay on : (2 × 15 = 30)

1. Describe the physiotherapy evaluation of spastic hand and discuss its management.
2. Explain the importance of joint production techniques and its application in ADL of inflammatory joint diseases of hand.

II. Write short notes on : (10 × 5 = 50)

1. Define the following terms of dysmerphology :

- (a) Arachnodactyly (1)
- (b) Brachydactyly (1)
- (c) Polydactyly (1)
- (d) Camptodactyly (1)
- (e) Macrodactyly. (1)

2. What surgical procedures are performed to correct clawing of fingers and list out the aims of post-operative physiotherapy of the same. (2 + 3)

3. Explain the cross finger flap and discuss its advantages and disadvantages. (2 + 3)

4. What are the major functions of the triangular fibrocartilage complex and classify its abnormalities. (2 + 3)

5. Explain pathomechanics of colle's fracture with its signs and symptoms.

6. Describe the indications of total wrist arthroplasty and list out post operative physiotherapy plan. (2 + 3)

## OCTOBER 2003

7. A 44 years old female is complaining of her right and little finger slowly curling into her palm over hte last two years and there is a familial history of her father had same problem. Give your diagnosis and its physiotherapy management.
  8. What is differential diagnosis of numbness and tingling in the radial side of the hand and explain its electrophysiological assessments for diagnosis.
  9. Principles of splinting.
  10. Which hand joints are involved in generalized osteo arthritis and explain its physiotherapy management? (2 + 3)
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## AUGUST 2004

- (h) How the edema in burned hand is treated?
  - (i) What are the most frequently performed provocative tests for assessing carpal instability?
  - (j) Explain the management of thoracic outlet syndrome.
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**MARCH 2006**

**[KO 606 F]**

**Sub. Code : 8006**

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE  
EXAMINATION.**

(Common to New/Revised Regulations)

**Elective – HAND CONDITIONS**

<b>Time : Three hours</b>	<b>Maximum : 100 marks</b>
<b>Theory : Two hours and forty minutes</b>	<b>Theory : 80 marks</b>
<b>M.C.Q. : Twenty minutes</b>	<b>M.C.Q. : 20 marks</b>

**Answer ALL questions.**

**Draw suitable diagrams wherever necessary.**

**I. Write Essay on : (2 × 15 = 30)**

**(1) Explain in detail about Rehabilitation of  
rheumatoid hand.**

**(2) Discuss various protocol for flexor tender  
injury rehabilitation.**

**II. Write Short notes : (10 × 5 = 50)**

- (a) Extensor mechanism.**
- (b) Reflex sympathetic dystrophy.**
- (c) Desensitization.**
- (d) Handle bar palsy.**
- (e) Duputrens disease.**
- (f) Prehension.**
- (g) Carpal tunnel syndrome.**
- (h) Jebson Taylor and Fugl meyer tests for hand  
function.**
- (i) Tendon transfers in Hansen's disease.**
- (j) Biofeed back for hand coordination.**

**SEPTEMBER 2006**

**[KP 606 F]**

**Sub. Code : 8006**

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE  
EXAMINATION.**

**(Common to New/Revised Regulations)**

**Elective – HAND CONDITIONS**

**Time : Three hours                      Maximum : 100 marks**

**Theory : Two hours and                      Theory : 80 marks  
forty minutes**

**M.C.Q. : Twenty minutes                      M.C.Q. : 20 marks**

**Answer ALL questions.**

**Draw suitable diagrams wherever necessary.**

**I. Essay :**

**(1) Write an essay on the Assessment of Hand.  
(20)**

**(2) Describe the PT management for Stiff Hand.  
(15)**

**(3) Explain the techniques and modalities of  
Hand Therapy. (15)**

**II. Short notes :**

**(6 × 5 = 30)**

- (a) Physio Thumb.**
- (b) Strickland method Vs Kleinert method.**
- (c) Span Grip.**
- (d) Hand – Arm Vibration Syndrome.**
- (e) Simpson Splint.**
- (f) Roping.**



MARCH 2008

[KS 606 F]

Sub. Code : 8109

MASTER OF PHYSIOTHERAPY (MPT) DEGREE  
EXAMINATION.

(Common to New/Revised Regulations)

*Elective* — HAND CONDITIONS

Q.P. Code : 278109

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay : (2 × 20 = 40)

1. (a) Describe the course of median nerve and ulnar nerve in the hand.

(b) What are the muscles innervated by them and what are their actions?

(c) What are the deformities that will occur if these nerves are cut at the wrist level?

(d) Add a note on the correction of these deformities. (20)

2. Describe in detail about cumulative Trauma disorders and their management. (20)

II. Short notes : (10 × 6 = 60)

1. Principles of tendon transfer surgery.

2. Oedema management.

3. Zones of hand injuries.

4. Crush injury of hand

5. Complex regional pain syndrome.

6. Trigger finger.

7. Biofeed back for hand co-ordination.

8. Handle bar palsy.

9. Reynaud's phenomena.

10. Desensitization.

September 2008

[KT 606 F]

Sub. Code : 8109

MASTER OF PHYSIOTHERAPY (MPT) DEGREE  
EXAMINATION.

(Common to New/Revised Regulations)

*Elective* — HAND CONDITIONS

Q.P. Code : 278109

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Long Essay : (2 × 20 = 40)

1. Discuss in detail about Flexor tendon Zones in the Hand and explain the mechanism of Injury, classification and Rehabilitation of Avulsion Injuries of the Flexor digitorum profundus Tendon.

2. Describe in detail about the physical therapy Evaluation of Hand Function and explain the Role of the Physiotherapist in the prevention and Management of Hand Oedema.

II. Short notes :

(10 × 6 = 60)

1. Guyon's canal syndrome.
2. Rolando's Fracture and its Management.
3. Kaltenborn's carpal Mobilization technique.
4. Boutonniere Versus Pseudo Boutonniere deformity.
5. Myoelectric partial Hand Prosthesis.
6. Bennett's Fracture and its Management.
7. Roping.
8. Span Grip.
9. Handle bar palsy.
10. Prehansion.

March 2009

[KU 606 F]

Sub. Code: 8109

**MASTER OF PHYSIOTHERAPY (MPT)  
DEGREE EXAMINATION**

**(Common to New/Revised Regulation)**

**Elective – HAND CONDITIONS**

*Q.P. Code : 278109*

**Time : Three hours**

**Maximum : 100 marks**

**Answer All questions**

**Draw suitable diagrams where ever necessary**

**I. Essay questions :**

**(2 x 20 = 40)**

1. Discuss in detail about causes, pathogenesis, stages, medical, surgical and physiotherapy management of reflex sympathetic dystrophy.
2. Describe in detail the principles involved in tendon transfer and rehabilitation of hand after palmaris longus transfer.

**II. Write short notes on :**

**(10 x 6 = 60)**

1. Dellon's Moberg pick up test.
2. Volar plate.
3. Tendon gliding exercises.
4. Game keeper thumb.
5. Joint protection technique.
6. Management of stiff hand.
7. Hand-held dynamometer.
8. Double crush syndrome.
9. Buddy taping.
10. Radial tunnel syndrome.

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March 2010

[KW 709]

Sub. Code: 8109

**MASTER OF PHYSIOTHERAPY (MPT)  
DEGREE EXAMINATION**

**(Common to New/Revised Regulation)**

**Elective – HAND CONDITIONS**

*Q.P. Code : 278109*

**Time : Three hours**

**Maximum : 100 marks**

**Answer All questions**

**Draw suitable diagrams where ever necessary**

**I. Essay questions :**

**(2 x 20 = 40)**

1. Define the principles of hand surgery and explain the rehabilitation for severe burns of hand and upper extremity.
2. List down the instruments used in sensory evaluation kit and explain in detail the methodology and ways of documentation. Add a note on its reliability and validity.

**II. Write short notes on :**

**(10 x 6 = 60)**

1. Test selection for compression syndromes.
2. Essex lepresti fracture.
3. Splint for thenar paralysis.
4. Non operative therapy for baseball finger.
5. Geometric of thumb opposition.
6. Pathmechanic of swan neck deformity.
7. Physiotherapy treatment after flexor tendon tenolysis.
8. Sensory re-education of hand.
9. Management of dequveraines disease.
10. Pisiform mobilization.

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September 2010

[KX 709]

Sub. Code: 8109

**MASTER OF PHYSIOTHERAPY (MPT)  
DEGREE EXAMINATION**

**SECOND YEAR**

**(Revised Regulation)**

**For candidates admitted from 2000-2001 onwards & 2005-2006 onwards**

**Paper – II Physiotherapy (Elective Subject)**

**Elective – HAND CONDITIONS**

*Q.P. Code : 278109*

**Time : Three hours**

**Maximum : 100 marks**

**Answer All questions**

**Draw suitable diagrams where ever necessary**

**I. Essay questions :**

**(2 x 20 = 40)**

1. a) Describe the course of median nerve and ulnar nerve in the hand.  
b) What are the muscles innervated by them and what are their actions?  
c) What are the deformities that will occur if these nerves are cut at the wrist level?  
d) Add a note on the correction of these deformities.
2. Discuss the assessment of hand function and add a note on joint protection techniques and methods of performing daily activities with a minimal amount of stress to the joint.

**II. Write short notes on :**

**(10 x 6 = 60)**

1. Volar plate.
2. Thoracic outlet syndrome.
3. Techniques for reduction of oedema.
4. Scar management in hand.
5. Crush injury of the hand.
6. Reynaud's phenomena.
7. Biomechanics of lumbrical.
8. Rehabilitation of the hand after stroke.
9. Hand held dynamometer.
10. Game keeper thumb.

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**MAY 2011**

**[KY 709]**

**Sub. Code: 8109**

**MASTER OF PHYSIOTHERAPY (MPT)  
DEGREE EXAMINATION  
SECOND YEAR**

**Revised Regulation :  
For candidates admitted from 2000-2001 onwards & 2005-2006 onwards**

**PAPER – II PHYSIOTHERAPY (Elective Subject)**

**HAND CONDITIONS – (Elective)**

***Q.P. Code : 278109***

**Time : Three hours**

**Maximum : 100 marks**

**Answer All questions**

**Draw suitable diagrams where ever necessary**

**I. Essay Questions : (2 x 20 = 40)**

1. Discuss in detail about, Pathogenesis clinical feature medical, surgical and physiotherapy management of reflex sympathetic dystrophy.
2. Define scar discuss in detail about management and prevention of scar in burns .

**II. Write Short Notes : (10 x 6 = 60)**

1. Pathomechanics of TYPE -1 Z thumb deformity.
2. Physiotherapy management in dequervains disease.
3. Factors affecting tendon healing.
4. Manual therapy treatment technique in thoracic outlet syndrome.
5. Mirror box therapy in hand rehabilitation after stroke.
6. Classification of cold injury.
7. Biomechanics lunate couple.
8. The reason behind the deviation proximal phalanges in ulnar direction in rheumatoid arthritis.
9. Criteria for tendon transfer.
10. Cause of clubbing and grading of clubbing.

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