

[KD 209]      **APRIL 2001**      Sub. Code : 2220

M.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch II — Part II

Paper III — REHABILITATION

Time : Three hours      Maximum : 100 marks

Answer ALL questions.

1. Enumerate the various physical modalities used in the treatment of low back syndrome in a 50 year old man? (25)

2. Describe in detail the Rehabilitation programme of a 7 years old spastic cerebral palsy? (25)

Write short notes on : (50)

- (a) C.P.M.
- (b) Muscle grade chart
- (c) Jaipur foot
- (d) Occupational therapy
- (e) Swimming pool therapy

**NOVEMBER 2001**

**[KE 209]**

**Sub. Code : 2220**

**M.S. DEGREE EXAMINATION.**

(Revised Regulations)

**Branch II — Orthopaedic Surgery**

**Part II**

**Paper III — REHABILITATION**

**Time : Three hours**

**Maximum : 100 marks**

1. Outline the principles in the rehabilitation of Thoracolumbar Spine fracture with paraplegia patients. (25)
  2. Describe the various physical modalities and rehabilitations in severe crush injury hand. (25)
  3. Write short notes : (5 × 10 = 50)
    - (a) Newer trends in orthopic and prosthetic designs.
    - (b) Ultrasonic therapy.
    - (c) Splint used in DDH.
    - (d) Crutch gait.
    - (e) Mc Bride Scale.
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MARCH 2002

[KG 209]

Sub. Code : 2220

M.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch II — Orthopaedic Surgery

Part II

Paper III — REHABILITATION

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Illustrate with diagrams wherever necessary.

1. How is urinary bladder involved in spinal cord injury? Describe the management of paralytic urinary bladder. (25)
2. What is functional cast bracing? How does it work? Describe the long leg cast brace, its indications and its technique of application. (25)
3. Write short notes on : (5 × 10 = 50)
  - (a) Progressive resisted exercises.
  - (b) Low temperature thermoplastics
  - (c) Amputations in children.
  - (d) Ultrasound in physical therapy.
  - (e) Axillary crutches.

SEPTEMBER 2002

[KH 209]

Sub. Code : 2220

M.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch II — Orthopaedic Surgery

Part - II

Paper III — REHABILITATION

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Illustrate with diagrams wherever necessary.

1. Describe comprehensive rehabilitation of a case of complete irreversible conus cauda equina paralysis due to trauma. (25)
2. Name all kinds of walking aids. Describe crutches. Discuss various crutch gaits. (25)

3. Write short notes on : (5 × 10 = 50)
  - (a) Neurodevelopmental approach in occupational therapy
  - (b) Footwear modifications and their indications
  - (c) Muscle testing
  - (d) Floor reaction orthosis
  - (e) Gait cycle in normal human walking.

[KI 209]      APRIL 2003      Sub. Code : 2220

M.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch II — Orthopaedic Surgery

Part II

Paper III — REHABILITATION

Time : Three hours                      Maximum : 100 marks

Answer ALL questions.

1. Discuss the management of a Traumatic paraplegic patient with a special reference to Rehabilitation. (25)
  2. Discuss the surgical management of the deformities around knee due to poliomyelitis. (25)
  3. Write short notes on : (5 × 10 = 50)
    - (a) AIDS
    - (b) Volkmans contracture
    - (c) Jaipur Foot
    - (d) Deformities of Rheumatoid Hand
    - (e) Erb's splint.
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[KJ 209] **OCTOBER 2003** Sub. Code : 2220

M.S. DEGREE EXAMINATION  
(Revised Regulations)  
Branch II — Orthopaedic Surgery  
Part II  
Paper III — REHABILITATION

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

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

Answer **ALL** questions.

Draw suitable diagrams wherever necessary.

Essay Questions :                      (2 × 15 = 30)

1. Outline the limb sparing surgeries of the lower extremity.
2. What are the types of partial foot amputations? Discuss their indications.

3. Short notes :                      (10 × 5 = 50)
1. Phantom limb.
  2. Myoelectric Prosthesis.
  3. SACH Foot.
  4. Short Wave Diathermy.
  5. Splints.
  6. Isometric exercises.
  7. TENS.
  8. Cryotherapy.
  9. Plastazote.
  10. Heterotopic Ossification.



[KL 209] **AUGUST 2004** Sub. Code : 2220

M.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch II — Orthopaedic Surgery

Part II

Paper III — REHABILITATION

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 questions : (2 × 15 = 30)

(1) Discuss the general principles of technique of amputation surgery. Add a note on syme's amputation.

(2) Discuss the orthosis used in the upper limb.

II. Short notes : (10 × 5 = 50)

(a) Nerve conduction test.

(b) Laser therapy in orthopaedics.

(c) Ultrasound in orthopaedics.

- (d) Short wave diatherapy.
  - (e) Patellar tendon bearing prosthesis.
  - (f) Define rehabilitation.
  - (g) Bohler's frame.
  - (h) Von Rosen splint.
  - (i) Sliding traction.
  - (j) Three point gait.
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**FEBRUARY 2005**

**[KM 209]**

**Sub. Code : 2220**

**M.S DEGREE EXAMINATION.**

**(Revised Regulations)**

**Branch II — Orthopaedic Surgery**

**Part II**

**Paper III — REHABILITATION**

**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**

**Answer ALL questions.**

**Draw suitable diagrams wherever necessary.**

**I. Essay questions :**

**(2 × 15 = 30)**

**(1) Discuss GAIT. Describe the management of a Post-Polio-Residual-Paralysis patient with HAND-KNEE gait.**

**(2) Describe the indications, surgical technique and complications of Below-Knee computation. Write briefly recent advances in the fitment of Below-Knee prosthesis.**

**II. Short notes :**

**(10 × 5 = 50)**

- (a) SACH foot.**
- (b) Nerve conduction tests.**
- (c) Flow-reaction arthrosis.**
- (d) Patellar-tendon- Bearing prosthesis.**
- (e) Continuous passive motion.**
- (f) Neurogenic Bladder.**
- (g) Functional cost Bracing.**
- (h) SOMI Brace.**
- (i) Foot-Drop.**
- (j) Knuckle-Duster-Splint.**

[KO 209] MARCH 2006 Sub. Code : 2220

M.S. DEGREE EXAMINATION.

Branch II — Orthopaedic Surgery

REHABILITATION AND RECENT ADVANCES

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 diagram wherever necessary.

I. Essay questions : (2 × 15 = 30)

1. Discuss recent trends in management of spondylolisthesis and add a note on rehabilitation programme.

2. Elaborate various surgical procedures of "foot stabilization" in polio involving foot and ankle and describe one of them in detail.

II. Short Notes : (10 × 5 = 50)

(a) Bioabsorbable fixation.

(b) Flow reaction arthrosis (F.R.A.).

(c) Discuss the value of ultrasound in musculoskeletal diseases.

- (d) Gallodinium magnetic resonance imaging.
- (e) Remodelling of bone.
- (f) Interferential therapy.
- (g) Proximal Femoral Focal Deficiency (P.F.F.D).
- (h) Disease modifiers in rheumatoid arthritis.
- (i) Alloys in orthopaedics.
- (j) Popliteus muscle.



[KQ 207] MARCH 2007 Sub. Code : 2220

M.S. DEGREE EXAMINATION.

Branch II – Orthopaedic Surgery

(For candidates admitted from 1988–89 onwards)

Paper III — REHABILITATION

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 questions :

(1) Discuss the Rehabilitation programme and the team involved in the management of 25 year old carpenter with traumatic paraplegia at D-10 levels. (20)

(2) Discuss in detail about various pathological gait patterns. How do you analyse the gait pattern of a above knee amputee with prosthesis? (15)

(3) Write in detail about Spinal orthosis in Rehabilitation. Briefly mention about bracing for infantile Idiopathic Scoliosis. (15)

II. Short notes : (6 × 5 = 30)

- (a) Pain gate theory.
  - (b) Phantom pain.
  - (c) Myoelectric hand.
  - (d) Exercise protocol after THR
  - (e) Osteointegration prosthesis.
  - (f) Autonomic dysreflexia.
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SEPTEMBER 2007

[KR 211]

Sub. Code : 2218

M.S. DEGREE EXAMINATION.

Branch II — Orthopaedic Surgery

(For candidates admitted upto 2003–2004)

Part II — Paper III — REHABILITATION

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

Answer ALL questions.

I. Essay :

1. Describe normal gait cycle and its bio-mechanics and describe pathological gait variations. (20)

2. Describe concept, indications, methods of application and complications of 'Functional cast bracing'. (15)

3. Describe ulnar claw hand and tendon transfers and rehabilitation. (15).

II. Short notes:

(6 × 5 = 30)

- (a) Behaviour therapy for disabled.
  - (b) IPOF.
  - (c) Peri prosthetic fracture of TKR.
  - (d) Stem cell therapy.
  - (e) Bioabsorbable implants.
  - (f) Total shoulder replacement.
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