

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2022**  
**PAPER I**

Monday, October 03, 2022

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Anatomy of the brachial plexus. Write a note on Erb's palsy. (15 marks)
  
2. Biomechanics of the knee. Write a note on meniscal injuries. (15 marks)

3. **Write short notes:**

- 3A. Meralgia Paresthetica
- 3B. Principles of open fracture management
- 3C. Milwaukee Brace
- 3D. Nerve injury classification. Write a note on Nerve conduction study
- 3E. Rotator cuff
- 3F. Bohler's angle
- 3G. Fracture healing
- 3H. Rickets
- 3I. Blood supply of talus
- 3J. Fat embolism

(7 marks × 10 = 70 marks)



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**PAPER II**

Tuesday, October 04, 2022

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Classify posterior dislocation of the hip. Outline the principles of management. Briefly discuss the complications

(15 marks)

2. Discuss the classification and management of Monteggia fracture.

(15 marks)

3. **Write short notes on:**

3A. Fracture disease

3B. Hangman fracture

3C. Treatment of supination external rotation injury of the ankle

3D. Interlocking nails

3E. Tension band wiring

3F. Clinical features of Monteggia fracture dislocation

3G. Seatbelt Triad

3H. Joshi's External Stabilisation System (JESS)

3I. Lunate dislocation

3J. Management of Sudeck's osteodystrophy

(7 marks × 10 = 70 marks)



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**PAPER III**

Thursday, October 06, 2022

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

**✍ Answer ALL questions.**

**✍ Long Essays:**

1. Juvenile Rheumatoid Arthritis:
  - 1A. ILAR Classification
  - 1B. Differential Diagnosis
  - 1C. Clinical Characteristics
  - 1D. Course, Complications and Prognosis
  - 1E. Management

(3+2+5+3+2 = 15 marks).

2. Legg-Calve-Perthes Disease
  - 2A. Etiopathogenesis
  - 2B. Classifications
  - 2C. Treatment

(3+7+5 = 15 marks)

**3. Write short notes on:**

- 3A. Radial Club Hand
- 3B. CRPS
- 3C. Giant Cell Tumor
- 3D. Management of Osteoporosis
- 3E. Calcification of the supraspinatus tendon
- 3F. TB Spine – Types, Spread, Treatment
- 3G. Pagets Disease of the bone
- 3H. Acute Osteomyelitis
- 3I. Primitive Neuroectodermal Tumor.
- 3J. Slipped Capital Femoral Epiphysis-Classification, Treatment.

(7 marks × 10 = 70 marks)



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**PAPER IV**

Friday, October 07, 2022

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

**✍ Answer ALL the questions.**

**✍ Long Essays:**

1. Describe the causes for recurrent dislocation of patella. How will you diagnose and manage a case with soft tissue abnormality causing recurrent dislocation of patella?

(5+5+5 = 15 marks)

2. Describe the etiopathology, clinical features and management of osteoporotic vertebral fractures.

(5+5+5 = 15 marks)

3. **Write short notes on:**

3A. Rehabilitation of ACL reconstructed knee.

3B. Biopsy in Malignant Bone Tumors.

3C. Current concepts in management of clavicle fractures

3D. Vacuum Assisted Closure (VAC)

3E. Damage control Orthopaedics

3F. Daycare surgical procedures in orthopaedics.

3G. Bone Bank

3H. Fixation methods in periprosthetic fractures in a patient with THR

3I. Distraction histiogenesis

3J. Femoro Acetabular Impingement

(7 marks × 10 = 70 marks)

