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**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (ORTHOPAEDICS) DEGREE EXAMINATION – JUNE 2024**

**PAPER I**

Monday, June 10, 2024

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss different surgical approaches to knee joint. (15 marks)

2. Describe fracture healing and enumerate factors affecting fracture healing (15 marks)

3. **Write a short notes on:**

3A. Safe surgical dislocation of hip joint.

3B. Functional cast brace

3C. Pivot shift test

3D. Spinal shock

3E. Bone graft substitutes

3F. Radiotherapy in bone tumours.

3G. Modified Russel traction

3H. Tension band principle

3I. Bioabsorbable fixation of fractures

3J. Ceramics in Orthopaedics

(7 marks × 10 = 70 marks)



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**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (ORTHOPAEDICS) DEGREE EXAMINATION – JUNE 2024**

**PAPER II**

Tuesday, June 11, 2024

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss anatomy, clinical features, management of Carpal instability. Write a note on perilunate dislocation.

(15 marks)

2. Describe anatomy of the median nerve. What are the various clinical test for median s nerve palsy? Discuss briefly the tendon transfers for claw hand.

(15 marks)

3. **Write short notes on:**

3A. Jones fracture.

3B. Chance fracture.

3C. Dead arm syndrome.

3D. Chinese classification of proximal tibia fractures.

3E. Pedicle screw principle.

3F. Terrible triad of elbow.

3G. Management of wrist drop.

3H. Bohler's angle.

3I. Bennet's fracture.

3J. Management of habitual patellar dislocation.

(7 marks × 10 = 70 marks)



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**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (ORTHOPAEDICS) DEGREE EXAMINATION – JUNE 2024**

**PAPER III**

Wednesday, June 12, 2024

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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✍ **Answer All Questions:**

✍ **Long Essays:**

1. Classify bone tumours on the basis of cell of origin. Discuss management of distal femur giant cell tumour in a 35 year old lady. Add a note on limb salvage surgery.

(5+5+5 = 15 marks).

2. Discuss deformities of hand in a case of Rheumatoid arthritis and management.

(7+8 = 15 marks)

3. **Write short notes on:**

3A. Systemic diseases predisposing to bone infections

3B. Skew foot

3C. Degenerative lumbar intervertebral disc disease

3D. Haemophilic knee

3E. Surgical management of chronic osteomyelitis

3F. Sprengel deformity

3G. Trigger finger

3H. Teriparatide

3I. Pseudogout

3J. Decubitus ulcer

(7 marks × 10 = 70 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**MS (ORTHOPAEDICS) DEGREE EXAMINATION – JUNE 2024**

**PAPER IV**

Thursday, June 13, 2024

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Describe the clinical features in a case of Anterior Cruciate Ligament (ACL) insufficiency and the clinical tests to demonstrate the instability. Discuss the recent advances in the surgical management of ACL reconstruction

(3+4+8 = 15 marks)

2. Discuss the principle of Ultrasound and explain in detail the various uses in Orthopaedic practice, both diagnostic and therapeutic applications.

(5+5+5 = 15 marks)

3. **Write short notes on:**

3A. Vertebroplasty

3B. Pulse lavage

3C. VAC dressings

3D. HA coated implants

3E. Radiofrequency ablation in Orthopaedic surgeries

3F. Distraction histiogenesis

3G. Various arthroscopic portals of shoulder

3H. Denisumab

3I. Bioabsorbable implants

3J. MIPO principle of AO foundation with 2 examples

(7 marks × 10 = 70 marks)

