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MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – JULY 2023

PAPER I

Monday, July 03, 2023

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Write a short note on biomechanics of the hip. Briefly describe the posterior approach to the hip

(15 marks)

2. Define non-union and delayed union also describe causes and diagnosis. Describe in detail the treatment of a case of infected non union of the Tibia

(15 marks)

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

3A. Chronic Osteomyelitis

3B. Classification of open fractures

3C. CRPS

3D. Classify nerve injuries and enumerate the treatment

3E. Principles of amputation

3F. Blood supply to the head of the femur

3G. Fracture Healing

3H. Applied anatomy of the rotator Cuff

3I. Myositis ossificans

3J. Arches of the foot

(7 marks × 10 = 70 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – JULY 2023
PAPER II

Tuesday, July 04, 2023

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. A 45y male presents with fracture neck of femur fracture of one month duration. Discuss the principles of management of this patient?

(15 marks)

2. Describe the applied anatomy of cruciate ligaments of knee. Describe the clinical features and management of an acute anterior cruciate ligament injury?

(15 marks)

3. **Write short notes on:**

3A. Lauge – Hansen classification.

3B. Essex lopresti fracture.

3C. SLAP injury.

3D. Jersey finger.

3E. Hoffa's fracture.

3F. Compartment syndrome.

3G. Odontoid fracture.

3H. Scapulothoracic dissociation.

3I. Acromio clavicular dislocation.

3J. Management of tibial plateau fracture.

(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – JULY 2023

PAPER III

Wednesday, July 05, 2023

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer All Questions:

✍ Long Essays:

1. Mention variants of osteogenic sarcoma. Discuss the clinical features, investigations and management of osteosarcoma of distal femur in an 18 yr old boy.

(5+10 = 15 marks).

2. Discuss extra articular manifestation of Rheumatoid arthritis. Add a note on use of biologicals in the treatment.

(10+5 = 15 marks)

3. Write short notes on:

- 3A. Synovectomy of knee in hemophilia
- 3B. Congenital radio ulnar synostosis
- 3C. Primary femoral shortening in DDH management
- 3D. Split posterior tibial tendon transfer
- 3E. MRSA (Methicillin Resistant Staphylococcus Aureus)
- 3F. Telescoping rod in Osteogenesis Imperfecta
- 3G. SpinaVentosa
- 3H. Surgical Treatment of de-Quervains Disease
- 3I. Subtalar Arthrodesis
- 3J. Felon (pulp space infection)

(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – JULY 2023

PAPER IV

Thursday, July 06, 2023

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss the role of Stem cell therapy in the field of Orthopaedic Surgery (15 marks)
2. What is the current concept in the Management of Osteoporosis? (15 marks)

3. **Write short notes on:**

- 3A. Biodegradable implants
- 3B. Bone grafting of chondral defects in Knee joint
- 3C. Role of Bone marrow injections
- 3D. One-stage Versus Two-stage revision Hip replacement
- 3E. DVT prophylaxis in elective major Orthopaedic surgeries
- 3F. Vertebroplasty
- 3G. Management of Giant cell tumour at proximal tibia
- 3H. Designing of Orthopaedic operation theatre
- 3I. ATLS Guidelines in Polytrauma
- 3J. Lower limb Prosthesis

(7 marks × 10 = 70 marks)

