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MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – APRIL 2022

PAPER I

Friday, April 01, 2022

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss the stages of fracture healing, physical and chemical modalities to enhance fracture healing.

(5+5+5 = 15 marks)

2. Enumerate the surgical approaches to the hip joint. Discuss one of the approaches in detail.

(6+9 = 15 marks)

3. **Short Essays:**

3A. Biofilm

3B. Flail chest

3C. Eosinophilic granuloma

3D. Giant cell variants

3E. DEXA scan (Dual Energy X-Ray Absorptiometry)

3F. Physeal plate structure

3G. Calcitonin

3H. Stiff hip gait

3I. Diabetic neuropathy

3J. Monitoring of Compartment Syndrome in leg

(7 marks × 10 = 70 marks)



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PAPER II

Saturday, April 02, 2022

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Classify ankle fractures. Discuss the management of common ankle fractures.
(15 marks)
2. Classify fracture distal end of radius. List common complications. How would you manage associated distal radioulnar injury?
(15 marks)

3. **Write short notes on:**

- 3A. Rotator cuff injury – repair and reconstruction
 - 3B. Floating knee
 - 3C. Diagnosis and management of Posterior cruciate ligament injury in a young athlete
 - 3D. Rehabilitation programme for an amputee
 - 3E. Management of Pathological fracture of long bones in adults
 - 3F. Proximal femoral nailing for intertrochanteric fractures
 - 3G. Treatment of Tendoachilles injury
 - 3H. Principles of management of nonunion in long bones
 - 3I. Functional cast bracing
 - 3J. Classification and management of post traumatic mallet finger
- (7 marks × 10 = 70 marks)



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PAPER III

Monday, April 04, 2022

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Long Essays:**

1. Classify Bone tumours. Write a note on management of a Giant Cell Tumour of the Distal Radius.

(15 marks).

2. Describe the aetiopathogenesis of Potts Spine a note on cold abscess and management of Potts spine of the thoraco lumbar junction in a 55yr old patient with paraparesis.

(15 marks)

3. **Write short notes on:**

3A. Trendelenburg test

3B. Kohlers disease

3C. Osgood schatlers disease

3D. Primary osteoarthritis of the knee in a 55yr old

3E. Ponsetti technique

3F. Neurological claudication

3G. Meniscal injury

3H. Dupuytrens contracture

3I. Gout

3J. Swan neck deformity

(7 marks × 10 = 70 marks)



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MS (ORTHOPAEDICS) DEGREE EXAMINATION – APRIL 2022

PAPER IV

Tuesday, April 05, 2022

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss the clinical features, investigations and management of infected Total Knee Replacement.

(5+5+5 = 15 marks)

2. 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)

3. **Write short notes on:**

3A. Bisphosphonates in the treatment of Osteogenesis Imperfecta

3B. Double bundle ACL reconstruction

3C. PTB

3D. Callotasis and applications

3E. Trauma scoring systems

3F. Autologous bone marrow injection

3G. Microdiscectomy

3H. Periprosthetic hip fractures

3I. Sprengel shoulder

3J. Safe surgical dislocation of Hip

(7 marks × 10 = 70 marks)

