

Reg. No.

MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2020
SUBJECT: PAPER I: BASIC SCIENCES RELATED TO SPECIALITY

Monday, October 05, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss the structure of growth plate and write a note on nutritional rickets.

(6+9 = 15 marks)

2. Describe biomechanics of Hip joint. Discuss its application in Osteoarthritis of hip joint.

(6+9 = 15 marks)

3. **Write short note:**

3A. Round cell tumour of bone.

3B. Below knee Amputation

3C. Myositis Ossificans.

3D. Olliers disease.

3E. Jaipur Foot.

3F. Spinavertosa.

3G. Tension Band Principle.

3H. Anatomy of rotator cuff.

3I. Bone graft substitutes.

3J. Subacute osteomyelitis.

(7 marks × 10 = 70 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2020
SUBJECT: PAPER II: TRAUMATOLOGY AND REHABILITATION

Tuesday, October 06, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ **Answer ALL questions.**
✍ **Draw diagrams wherever necessary.**

✍ **Long Essays:**

1. Describe the structure of physis. Classify physal injury. Describe the management and complications of various types of physal injuries.

(5+3+7 = 15 marks)

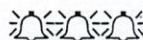
2. Discuss the principles of management of polytrauma patients.

(15 marks)

3. **Write short notes on:**

- 3A. Sacral fractures
- 3B. Principle, merits and demerits of locking compression plate
- 3C. Lachman's test for ACL
- 3D. Bone transport
- 3E. Terrible triad injury of elbow
- 3F. Fish tail deformity
- 3G. ASIA scoring for spinal injury
- 3H. Concept of Bridge Plating
- 3I. Odontoid fracture
- 3J. Functional cast bracing

(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2020
SUBJECT: PAPER III: ORTHOPAEDIC DISEASES

Wednesday, October 07, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. A boy aged 8 years is complaining of pain in his left hip associated with limping since 2 weeks. How would you proceed to assess and manage him?

(5+10 = 15 marks)

2. Describe the etiopathogenesis of Gouty arthritis. Outline its management.

(5+10 = 15 marks)

3. **Write short notes on:**

3A. Management of osteoarthritis of medial compartment of knee in a patient aged 48 years

3B. Stages of Intervertebral Disc Prolapse in lumbar spine

3C. Management of Chronic Osteomyelitis lower end femur with bone defect

3D. Role of Isotope Bone scan in Orthopaedics

3E. Chondromalacia Patellae

3F. Management of diabetic foot ulcers

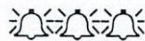
3G. Drugs used in Rheumatoid arthritis

3H. Sequelae of Tom Smith arthritis

3I. Congenital thoracolumbar scoliosis

3J. Prognostic factors in Osteosarcoma upper end of tibia

(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2020
SUBJECT: PAPER IV: RECENT ADVANCES IN ORTHOPAEDIC SURGERY

Thursday, October 08, 2020

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **Long Essays:**

1. ACL Injury. Write a note on.
 - 1A. Acute vs. Chronic tears
 - 1B. Patient Selection – Indications and contraindications
 - 1C. Tunnel placement
 - 1D. Autograft vs. Allograft
 - 1E. Synthetic Replacement

(3 marks × 5 = 15 marks)

2. Impingement Syndrome of the shoulder:
 - 2A. Diagnosis – Clinical tests, Imaging Modalities
 - 2B. Treatment – Non-Operative and Operative
 - 2C. Subcoracoid Impingement
 - 2D. Internal Impingement

(15 marks)

3. **Write short notes on:**

- 3A. MRI
- 3B. Disc Replacement.
- 3C. Elbow replacement
- 3D. Articular Bearing Technology – THR
- 3E. High Tibial Osteotomy
- 3F. Hallux Valgus.
- 3G. Bisphosphonates
- 3H. Giant cell tumour
- 3I. Locking Compression Plating
- 3J. Osteochondritis Dissecans

(7 marks × 10 = 70 marks)

