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MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2019
SUBJECT: PAPER I: BASIC SCIENCES RELATED TO SPECIALITY

Tuesday, October 08, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

- 1A. Describe the bone homeostasis. Classify and discuss the causes for Osteoporosis.
1B. Add a note on role of Bisphosphonates in the management of Osteoporosis.
(10+5 = 15 marks)
2. Describe the normal gait cycle. Describe Quadriceps gait & Trendelenberg gait.
(10+5 = 15 marks)

3. **Short Notes:**

- 3A. Jaipur Foot
3B. Sprengel's deformity
3C. Describe the blood supply of Scaphoid and its clinical significance.
3D. Diagnostic ultrasound in Orthopaedics.
3E. Rheumatoid Factor
3F. Bone graft substitutes
3G. Anatomy of posterolateral stabilizing structures of knee.
3H. Giant cell variants
3I. Nosocomial infection
3J. Tinel's sign
(7 marks × 10 = 70 marks)



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MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2019
SUBJECT: PAPER II: TRAUMATOLOGY AND REHABILITATION

Wednesday, October 09, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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

✍ **Long Essays:**

1. Classify thoracolumbar spine injuries. Give radiological classification of burst fracture. Outline the management of burst fracture of L1 vertebra.
(15 marks)

2. Classify proximal humerus fracture. Discuss the management options for various types. Outline the management for type IV fracture in elderly females.
(15 marks)

3. **Write short notes on:**

- 3A. Trans scaphoid perilunate dislocation.
- 3B. Management of trochanteric fractures in elderly.
- 3C. Radiological evaluation of acetabular fractures.
- 3D. Reamed and unreamed intramedullary interlocking nailing.
- 3E. Henrys approach for radius at various levels and its applied anatomy.
- 3F. Indications and complications of external fixator.
- 3G. Management of zone II flexor tendon injury.
- 3H. Evaluation and management of posterolateral corner injuries of the knee.
- 3I. Trauma scoring systems.
- 3J. Stress shielding.

(7 marks × 10 = 70 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2019
SUBJECT: PAPER III: ORTHOPAEDIC DISEASES

Thursday, October 10, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Long Essays:**

1. Discuss the clinical presentation, evaluation and management options of acute lumbar disc prolapse in 40 year gentle-man.

(15 marks)

2. Discuss the evaluation and management of 15year boy with osteosarcoma of lower end of femur.

(15 marks)

3. **Write short notes on:**

3A. Carpal tunnel syndrome

3B. Painful arc syndrome

3C. Femoro-acetabular impingement

3D. Congenital Pseudarthrosis of tibia

3E. Avascular necrosis of Talus

3F. Osgood Schlatter disease

3G. Osteoid osteoma

3H. Vertebra plana

3I. Backer's cyst

3J. Blount's disease

(7 marks × 10 = 70 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2019
SUBJECT: PAPER IV: RECENT ADVANCES IN ORTHOPAEDIC SURGERY

Friday, October 11, 2019

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

✍ Long Essays:

1. Discuss the Diagnosis, clinical manifestations, Investigations and Treatment of Obstetric Birth Palsy in a 7 month old Child. (15 marks)

2. Discuss the recent advances in the management of Tuberculosis of the Spine. (15 marks)

3. Write short notes on:

3A. Nerve Transfers

3B. Watershed line in Distal Radius

3C. Coxo – femoral Bypass

3D. Gene therapy in Orthopaedics

3E. Pedicular Screw

3F. Suture Anchors in Orthopaedics

3G. Medical management of Osteoporosis

3H. Damage control Orthopaedics

3I. Vacuum Assisted Wound Closure

3J. Free Functioning Muscle Transfer

(7 marks × 10 = 70 marks)

