

## MANIPAL UNIVERSITY

MS (ORTHOPAEDICS) DEGREE EXAMINATION – APRIL 2015

SUBJECT: PAPER I: BASIC SCIENCES RELATED TO SPECIALITY

Wednesday, April 01, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Draw diagrams wherever necessary.

✍ Long Essays:

1. Define osteoporosis. Discuss about the aetiology, clinical features, investigations, prevention and treatment of senile osteoporosis.

(15 marks)

2. What is claudication? What are the differentiating features between vascular & neurogenic claudication. Discuss the aetiology, pathology and management of lumbar canal stenosis.

(15 marks)

3. Write short notes on:

3A. Bryant's traction

3B. Allopurinol

3C. Floor reaction orthosis

3D. Bone bank

3E. Anatomy and disorders of triangular fibrocartilage complex

3F. Giant cell variants

3G. Modified Jones transfer and difference from original transfer

3H. Clinical methods to diagnose anterior cruciate ligament injury

3I. Heterotrophic ossification

3J. Highly cross linked polyethylene

(7 marks × 10 = 70 marks)



## MANIPAL UNIVERSITY

## MS (ORTHOPAEDICS) DEGREE EXAMINATION – APRIL 2015

## SUBJECT: PAPER II: TRAUMATOLOGY AND REHABILITATION

Thursday, April 02, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

✍ Draw diagrams wherever necessary.

✍ Long Essays:

1. Classify distal radius fractures. Describe radiological indices of wrist. Describe various methods of treatment of distal radius fracture with their principles.

(15 marks)

2. Describe the structure of physis. Classify physeal injury. Describe the management and complications of various types of physeal injuries.

(15 marks)

3. Write short notes on:

3A. Classification of acromioclavicular injuries

3B. Hangman's fracture

3C. Suture configurations for tendon repair

3D. Types of crutches and patterns of crutch walking

3E. Stress fracture

3F. Sacral fractures

3G. Complications of fracture neck of femur in children

3H. Treatment of infected non-union of tibia

3I. Principles and priorities in management of a polytrauma patient

3J. Principle, merits and demerits of locking compression plate

(7 marks × 10 = 70 marks)



## MANIPAL UNIVERSITY

MS (ORTHOPAEDICS) DEGREE EXAMINATION – APRIL 2015

SUBJECT: PAPER III: ORTHOPAEDIC DISEASES

Saturday, April 04, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Draw diagrams wherever necessary.

✍ Long Essays:

1. Discuss about the etiopathogenesis and stages of tuberculosis of the hip joint. Describe the radiological types and discuss about the management of each type.

(15 marks)

2. Define Giant Cell Tumor (GCT) of bone. Describe in brief clinical features, diagnosis and management principles for GCT of upper end of tibia.

(15 marks)

3. Write short notes on:

3A. Classification of scoliosis

3B. Investigations and management of multiple myeloma

3C. Pigmented villonodular synovitis

3D. Dupuytren's contracture

3E. Langenskiold's procedure

3F. Management of recurrent anterior dislocation of shoulder joint

3G. Neuropathic joint

3H. Pes planus

3I. Vitamin D resistant rickets

3J. Singh's index

(7 marks × 10 = 70 marks)



## MANIPAL UNIVERSITY

MS (ORTHOPAEDICS) DEGREE EXAMINATION – APRIL 2015

SUBJECT: PAPER IV: RECENT ADVANCES IN ORTHOPAEDIC SURGERY

Monday, April 06, 2015

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

✍ Long Essays:

1. Discuss the management of osteosarcoma of lower end of femur. (15 marks)

2. Discuss the biomechanics of spine. Discuss the recent developments in management of spinal injuries. (15 marks)

3. Write short notes on:

- 3A. Damage control Orthopaedics
- 3B. Patellofemoral arthroplasty
- 3C. TEN nails
- 3D. DVT prophylaxis in Orthopaedics
- 3E. Wrist arthroscopy
- 3F. Cuff tear arthropathy
- 3G. Genu valgum in children
- 3H. Gene therapy in Orthopaedics
- 3I. MIPPO
- 3J. Teriparatide

(7 marks × 10 = 70 marks)

