

**MANIPAL UNIVERSITY**  
**MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2013**  
**SUBJECT: PAPER I: BASIC SCIENCES RELATED TO SPECIALITY**

Monday, October 07, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

1. Discuss the pathology and differential diagnosis of peri-arthritis of the shoulder joint. Describe the non-operative and operative management of peri-arthritis of shoulder.  

(30 marks)
  
2. Discuss Vitamin D metabolism. Classify rickets. Describe the diagnosis and management of rachitic deformities in children.  

(30 marks)
  
3. **Write short notes on:**
  - 3A. HIV
  - 3B. Whitlow of the pulp
  - 3C. Unicameral bone cyst
  - 3D. SACH foot

(10×4 = 40 marks)



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**MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2013**  
**SUBJECT: PAPER II: TRAUMATOLOGY AND REHABILITATION**

Tuesday, October 08, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

**Answer ALL questions.**

1. Classify trochanteric fractures. Discuss various methods of surgical management of trochanteric fractures.

(30 marks)

2. Describe the etiology and pathology of compartment syndrome. Describe the steps you would take to prevent and manage this condition.

(30 marks)

3. **Write short notes on:**

3A. Fracture of the odontoid process

3B. Neutralization plates

3C. Meniscal repair

3D. Essex-Lopresti fracture in upper limb

(10×4 = 40 marks)



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**MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2013**  
**SUBJECT: PAPER III: ORTHOPAEDIC DISEASES**

Wednesday, October 09, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

1. A 30 year old lady complains of pain and paraesthesia radiating along the left arm and forearm. Discuss the management.  

(30 marks)
  
2. Discuss the clinical features, differential diagnosis and recent trends in the management of osteosarcoma.  

(30 marks)
  
3. **Write short notes on:**
  - 3A. Rotator cuff tear
  - 3B. Pes cavus
  - 3C. Stress fracture
  - 3D. Trendelenberg gait

(10×4 = 40 marks)



## MANIPAL UNIVERSITY

### MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2013

#### SUBJECT: PAPER IV: RECENT ADVANCES IN ORTHOPAEDIC SURGERY

Thursday, October 10, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

1. What are the principles involved in bone grafting? Discuss the recent advances in the methods to enhance bone formation.  
(30 marks)
  
2. Describe the principle of distraction osteogenesis. Discuss the various indications. Enumerate different methods of distraction osteogenesis and their complications.  
(30 marks)
  
3. **Write short notes on:**
  - 3A. Crystal synovitis
  - 3B. MRI in lumbar disc prolapse
  - 3C. Intramedullary nailing in osteogenesis imperfecta
  - 3D. Primary bone healing

(10×4 = 40 marks)

