

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**PG DIPLOMA IN ORTHOPAEDICS (D.ORTHO) EXAMINATION – APRIL 2018**  
**SUBJECT: PAPER I: BASIC SCIENCES RELATED TO SPECIALITY**

Monday, April 02, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **Long Essays:**

1. Enumerate the metaphysis which are totally or partially intraarticular. Discuss the pathology of acute haematogenous osteomyelitis, its possible complications and relevant investigations to diagnose the condition.

(15 marks)

2. Describe the Parathormone, calcium and Vitamin D homeostasis in the human body. Discuss the pathological role of their excess and deficiency on the musculoskeletal system.

(15 marks)

3. **Write short notes on:**

3A. Tension band principle

3B. Lachman test and reverse pivot shift test

3C. Clinical tests for median and ulnar nerve injuries

3D. Bone marrow aspiration and its significance

3E. Prophylactic antibiotics in orthopaedics

3F. Tourniquets

3G. SACH foot

3H. C- reactive protein

3I. Stress fracture

3J. Electromyography

(7 marks × 10 = 70 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**PG DIPLOMA IN ORTHOPAEDICS (D.ORTHO) EXAMINATION – APRIL 2018**  
**SUBJECT: PAPER II: TRAUMATOLOGY AND REHABILITATION**

Tuesday, April 03, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **Long Essays:**

1. Describe the anatomy of the ankle joint in relation to the injuries around the ankle joint. Classify ankle injuries. Discuss the various management option of fractures around ankle.  
(15 marks)

2. Describe the blood supply of scaphoid. Classify scaphoid fracture. How do you treat 25 year old young male with acute scaphoid waist fracture?  
(15 marks)

3. **Short Notes:**

3A. Necrotizing Fasciitis

3B. Lunate dislocation

3C. Terrible triad of knee

3D. Judet's, inlet and outlet radiographs of the pelvis and their significance

3E. Principles of Amputation in Digits of Hand

3F. Yergason's test

3G. Gamekeeper's Thumb

3H. Clinical tests for Anterior Interosseous Nerve Palsy

3I. Diagnostic tests for a patient with suspected Fat Embolism

3J. Blood Transfusion

(7 marks × 10 = 70 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**PG DIPLOMA IN ORTHOPAEDICS (D.ORTHO) EXAMINATION – APRIL 2018**  
**SUBJECT: PAPER III: ORTHOPAEDIC DISEASES**

Wednesday, April 04, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ **Answer ALL questions.**
- ✍ **Draw diagrams wherever necessary**
- ✍ **Long Essays:**

1. Describe the anatomy of intervertebral disc. What are the stages of disc prolapse? Discuss briefly about the clinical features of IVDP and management of a patient with suspected IVDP with acute urinary retention.

(15 marks)

2. Define claw hand. Enumerate various causes of claw hand. What is the pathogenesis of clawing? Discuss the principles of surgical correction of claw hand.

(15 marks)

3. **Write short notes on:**

- 3A. Radiological findings in ankylosing spondylitis
- 3B. Autologous chondrocyte implantation
- 3C. Adhesive capsulitis
- 3D. Osteoid osteoma
- 3E. Cervical rib
- 3F. Tom Smith Arthritis
- 3G. Management of foot drop
- 3H. Femoro-acetabular impingement syndrome
- 3I. Carpal tunnel syndrome
- 3J. Role of stem cells in orthopaedics

(7 marks × 10 = 70 marks)

