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MANIPAL UNIVERSITY

MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2016

SUBJECT: PAPER I: BASIC SCIENCES RELATED TO SPECIALITY

Monday, October 17, 2016

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

☒ Answer ALL the questions.

☒ Long Essays:

1. Explain fracture healing. Discuss the different principles of management of nonunion.
(15 marks)
2. Explain the biomechanics of spinal column and its application in management of spinal fractures.
(15 marks)

3. Write short notes on:

- 3A. Posterior approach to the hip joint
- 3B. Axillary crutches
- 3C. Nerve repair
- 3D. Arthroscope
- 3E. Biopsy of bone tumors
- 3F. Cock-up splint
- 3G. MRSA in Orthopaedics
- 3H. Plaster of Paris
- 3I. Chondral grafts
- 3J. Loose bodies in joints

(7 marks × 10 = 70 marks)



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MANIPAL UNIVERSITY

MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2016

SUBJECT: PAPER II: TRAUMATOLOGY AND REHABILITATION

Tuesday, October 18, 2016

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **Long Essays:**

1. Describe the blood supply of talus. Classify fracture neck of talus. Discuss the management of fracture neck of talus.

(15 marks)

2. Describe the applied anatomy of the lower end of humerus in a child. How will you manage a case of lateral condylar fracture in a child aged 9 years? Enumerate the complications.

(15 marks)

3. **Write short notes on:**

3A. Garden's alignment index

3B. Fish tail deformity

3C. ARDS

3D. Luxatio erecta

3E. Barton's fracture

3F. Tuber joint angle

3G. Principles of functional cast brace

3H. Chance triad in spinal injury

3I. Relevance of Salter's classification in physeal injury

3J. Wave plates

(7 marks × 10 = 70 marks)



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MANIPAL UNIVERSITY

MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2016

SUBJECT: PAPER III: ORTHOPAEDIC DISEASES

Wednesday, October 19, 2016

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Long Essays:

1. Discuss the aetiopathology of avascular necrosis of femoral head. How will you manage a 42 years old patient with bilateral avascular necrosis of the femoral heads?

(15 marks)

2. What are the causes of neurological complications in spinal tuberculosis? How do you manage a case of tuberculosis of dorsal spine with paraplegia?

(15 marks)

3. Write short notes on:

3A. Syndactyly

3B. Triple arthrodesis

3C. Quadriceps contracture

3D. Boston brace

3E. Jaipur foot

3F. Interferential therapy

3G. Painful arc syndrome

3H. Bone cement

3I. Technetium 99m

3J. Chemonucleolysis

(7 marks × 10 = 70 marks)



MANIPAL UNIVERSITY**MS (ORTHOPAEDICS) DEGREE EXAMINATION – OCTOBER 2016****SUBJECT: PAPER IV: RECENT ADVANCES IN ORTHOPAEDIC SURGERY**

Thursday, October 20, 2016

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL questions.**

✍ **Long Essays:**

1. Describe different methods of fixation of a prosthesis to the bone. Discuss their advantages and limitations. What are the radiological features of aseptic loosening of a prosthesis?

(15 marks)

2. Describe briefly surgical staging of bone tumours. Discuss its relevance in the management of benign and malignant bone tumours.

(15 marks)

3. **Write short notes on:**

3A. Pedicular screw

3B. Role of bone scans in Orthopaedics

3C. Arthroscopic meniscectomy

3D. Vertebroplasty

3E. Distraction osteogenesis

3F. Shoulder impingement syndrome

3G. Pollicisation

3H. Nerve conduction studies

3I. Ultra high molecular weight polyethylene

3J Dupuytren's contracture

(7 marks × 10 = 70 marks)

