MANIPAL ACADEMY OF HIGHER EDUCATION
(Deemed University)

MS (ORTHOPAEDICS) DEGREE EXAMINATION – JULY 2005

SUBJECT: PAPER I: BASIC SCIENCES
Monday, July 04, 2005

Time: 3 Hours

Max. Marks: 100

✍ **Answer all questions.**

1. Describe the anatomy of the stabilizers of the gleno-humeral joint. Discuss the classification and clinical assessment of shoulder instability.

    (30 marks)

2. Discuss briefly the various surgical approaches to the hip.

    (30 marks)

3. Write short notes on:

    (10×4 = 40 marks)

3A. Fibrodysplasia ossificans progressiva.

3B. Freiberg's disease.

3C. Infantile torticollis.

3D. Prophylactic antibiotics in Orthopaedics.

MANIPAL ACADEMY OF HIGHER EDUCATION
(Deemed University)

MS (ORTHOPAEDICS) DEGREE EXAMINATION – JULY 2005

SUBJECT: PAPER II: TRAUMATOLOGY
Tuesday, July 05, 2005

Time: 3 Hours   Max. Marks: 100

✍ **Answer all questions.**

1. Discuss the structure of an epiphyseal plate. Classify epiphyseal injuries, give examples. Enumerate different complications which can occur following an epiphyseal injury.

(30 marks)

2. Discuss how you will proceed to evaluate and treat a forty year old man with a Type III open fracture of the left tibia with a closed comminuted fracture of the mid shaft of left femur.

(30 marks)

3. Write short notes on:

(10×4 = 40 marks)

3A. Monteggia lesion.

3B. EMG (Electromyography).

3C. Erb's palsy.

3D. Odontoid fracture.

MANIPAL ACADEMY OF HIGHER EDUCATION
(Deemed University)

MS (ORTHOPAEDICS) DEGREE EXAMINATION – JULY 2005

SUBJECT: PAPER III: GENERAL ORTHOPAEDICS
Wednesday, July 06, 2005

Time: 3 Hours   Max. Marks: 100

✍ **Answer all questions.**

1. Discuss your clinical approach in a new born child with a deformed foot.

(30 marks)

2. What are the factors to be taken into consideration in tendon-transfers? Discuss the methods

of tendon transfer in median nerve paralysis.

(30 marks)

3. Write short notes on:

(10×4 = 40 marks)

3A. Rib-vertebral angle.

3B. Patella alta.

3C. Osteoblastoma.

3D. Herring's classification of Perthes' disease.

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

MS (ORTHOPAEDICS) DEGREE EXAMINATION – JULY 2005

SUBJECT: PAPER IV: RECENT ADVANCES
Thursday, July 07, 2005

Time: 3 Hours

Max. Marks: 100

✍ **Answer all questions.**

1. Describe the relevant applied anatomy related to patellar instability. Discuss the current concepts in the management of patellar instability.

(30 marks)

2. Discuss the role of microvascular surgery in Orthopaedics.

(30 marks)

3. Write short notes on:

(10×4 = 40 marks)

3A. DEXA (Dual energy x-ray absorptiometry).

3B. Vascularized pedicle bone grafting.

3C. Jaipur foot.

3D. Biodegradable implants for fracture treatment.

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

MS (ORTHOPAEDICS) DEGREE EXAMINATION – DECEMBER 2005

SUBJECT: PAPER I: BASIC SCIENCES

Monday, December 05, 2005

Time: 3 Hours   Max. Marks: 100

✍ **Answer ALL questions.**

1. Describe the anatomy of the brachial plexus. How will you clinically assess and investigate a patient aged 60 years with wasting of small muscles of the hand and Horner's syndrome?

(30 marks)

2. Define adult respiratory distress syndrome (ARDS). What are its clinical features? How would you confirm the diagnosis and manage such a case?

(30 marks)

3. Write short notes on:

(10×4 = 40 marks)

3A. Orthopaedic manifestations of neurofibromatosis.

3B. Calcitonin.

3C. Myositis ossificans progressive.

3D. Langerhans cell histiocytosis.

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

MS (ORTHOPAEDICS) DEGREE EXAMINATION – DECEMBER 2005

SUBJECT: PAPER II: TRAUMATOLOGY

Tuesday, December 06, 2005

Time: 3 Hours   Max. Marks: 100

✍ **Answer all questions.**

1. Describe the biomechanics and classification of fracture neck of femur. Plan a treatment algorithm for the management of fracture neck of femur in a 45 year old patient.

(30 marks)

2. A young man of 25 years presents with history of fall from a height, tenderness over C5 C6 with incomplete neurological involvement. How would you manage the case? Outline the principles and the prognosis.

(30 marks)

3. Write short notes on:

(10×4 = 40 marks)

3A. Bohler's angle.

3B. Kocher's manoever.

3C. Fish tail deformity.

3D. Lisfranc's fracture.

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

MS (ORTHOPAEDICS) DEGREE EXAMINATION – DECEMBER 2005

SUBJECT: PAPER III: GENERAL ORTHOPAEDICS

Wednesday, December 07, 2005

Time: 3 Hours   Max. Marks: 100

✍   **Answer all questions.**

1.   Define adolescent coxa vara. Discuss its aetiopathogenesis and management.

(30 marks)

2.   Discuss the biomechanics of the knee in osteoarthrosis. Outline the management of a 50 year

old female patient with osteoarthritis of the knee joint.

(30 marks)

3.   Write short notes on:

(10×4 = 40 marks)

3A.   Tinel's sign.

3B.   Jone's transfer in radial nerve palsy.

3C.   Adhesive capsulitis.

3D.   Salter and Thompson classification of Perthes' disease.

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

MS (ORTHOPAEDICS) DEGREE EXAMINATION – DECEMBER 2005

SUBJECT: PAPER IV: RECENT ADVANCES
Thursday, December 08, 2005

Time: 3 Hours   Max. Marks: 100

✍ **Answer all questions.**

1. Define radio-active isotopes. What should be the ideal desirable characteristics of a bone seeking isotope? What are the commonly used radio-active isotopes used in clinical orthopaedics? Discuss their indications.

(30 marks)

2. Describe the microscopic structure of articular cartilage.

(30 marks)

3. Write short notes on:

(10×4 = 40 marks)

3A. Dead arm syndrome.

3B. Bone bank.

3C. MRI.

3D. Thoracoscopic Spinal surgery.

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