

APRIL 2001

[KD 1560]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION

(New Regulations)

Part I

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Describe the blood supply of head and neck of Femur. Discuss the management of Fracture neck of Femur with non-union.
2. Describe the metabolism of Vitamin D. Discuss the clinical features and management of Rickets in a boy of 10 years old.
3. Write briefly on :
 - (a) Mycotic infections
 - (b) Bone grafting
 - (c) Renal function tests
 - (d) C.T. Scan
 - (e) SACH foot.

NOVEMBER 2001

[KE 1560]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION

(New Regulations)

Part I

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Describe the structure, function and repair of articular cartilage. (25)
 2. Describe the formation of Brachial Plexus. Discuss the clinical features and management of Radial Nerve Paralysis. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Renal Osteo dystrophy
 - (b) Venous Thrombosis
 - (c) Arches of Foot
 - (d) Plasma Proteins
 - (e) Bone Scan.
-

MARCH 2002

[KG 1560]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.

(New Regulations)

Part I

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Time : Three hours Maximum : 100 marks

Answer ALL questions.

1. Describe fracture healing. Outline the factors which affect fracture healing and the causes of non-union. Classify non-union and describe its treatment. (25)
2. Discuss the etiology of Volkmann's ischaemia. What are the clinical features and investigations done? How do you manage it? (25)
- 3 Write briefly on : (5 × 10 = 50)
 - (a) CALLOTASIS.
 - (b) Wolf's law.
 - (c) Traction in orthopaedics.
 - (d) Ortolani's Sign.
 - (e) Heterotropic ossification.

SEPTEMBER 2002

[KH 1560]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION

(New Regulations)

Part I

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions

1. Describe pathophysiology of Volkmann's ischaemic contracture c. upper limb, describe the clinical features and discuss the management. (25)
2. Describe the development of spine in reference to meningocele, describe the various types of meningocele and add a note on treatment of meningomyelocele and its sequelae. (25)
3. Write briefly on (5 × 10 = 50)
 - (a) Cervical Rib
 - (b) MRI of Lumbar spine

(c) B.K. prosthesis

(d) Steroids in orthopaedics

(e) Solitary plamacytoma

[KH 1560]

APRIL 2003

[KI 1560]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.

(New Regulations)

Part I

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss blood supply of neck of femur and clinical features, diagnosis, management of avascular necrosis of head of femur. (25)
 2. Discuss anatomy of upper end of humerus, clinical features and management of recurrent dislocation of shoulder joint. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Congenital pseudo–arthrosis tibia
 - (b) CT Scan
 - (c) Habitual dislocation of patella
 - (d) Cyclophosphamide
 - (e) Trendelenberg gait.
-

OCTOBER 2003

[KJ 1560]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.

(New Regulations)

Part I

**BASIC SCIENCES AND GENERAL PRINCIPLES
OF SURGERY**

Time : Three hours Maximum : 100 marks
Theory : Two hours and Theory : 80 marks
forty minutes
M.C.Q. : Twenty minutes M.C.Q. : 20 marks

**M.C.Q. must be answered SEPARATELY on the
Answer Sheet provided as per the instructions given on
the first page of the M.C.Q. Booklet**

Answer ALL questions.

Draw suitable diagrams wherever necessary.

Write Essay : (2 × 15 = 30)

- 1. Define Classify and discuss the Pathophysiology and management of Haemorrhagic Shock. (15)**
- 2. Define and discuss the acute compartmental syndrome with decompressive procedures. (15)**

3. Short notes : (10 × 5 = 50)

- (1) Fracture Healing with Role of Bone graft.**
- (2) Causalgia and related syndromes.**
- (3) Rotator cuff as secondary socket for stability.**
- (4) Surgical anatomy of arches of foot and name abnormal types.**
- (5) Gait cycle with abnormal gaits.**
- (6) Types of biopsy and FNSC as diagnostic procedures with merits and demerits.**
- (7) Arthroscopic portals and diagnostic arthroscopy procedure with limitations.**
- (8) Limb salvage procedure with New adjuvert chemotherapy.**
- (9) Role of manipulative reduction in orthopaedic practice.**
- (10) Radiological procedures in hip lesion.**

AUGUST 2004

[KL 1560]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.

(New Regulations)

Part I

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Write Essay :

(2 × 15 = 30)

**(1) Discuss the physiology of blood clotting and
its relation to Orthopaedics. (15)**

**(2) Describe briefly the factors encouraging
anaerobic infections of a wound and measures to
prevent it. (15)**

II. Short notes :

(10 × 5 = 50)

- (a) Heterotopic ossification.**
- (b) Anti-tuberculosis drugs.**
- (c) MRI in orthopaedics.**
- (d) Phlebothrombosis.**

(e) Osteoporosis.

(f) Syphilitic infections of bone.

(g) Chronic volkmans ischaemic contracture.

(h) Haemophilia.

(i) Trophic ulcer.

(j) Resistant Rickets.

MARCH 2006

[KO 1560]

Sub. Code : 3103

**DIPLOMA IN ORTHOPAEDICS EXAMINATION.
BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Time : Three hours Maximum : 100 marks

**Theory : Two hours and Theory : 80 marks
forty minutes**

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Write Essays : (2 × 15 = 30)

**(1) Describe patho-physiology, diagnosis and
management of Deep Vein Thrombosis.**

**(2) Describe structure of bone and fracture
healing.**

II. Short notes : (10 × 5 = 50)

(a) Blood groups.

(b) Ultrasound in orthopaedics.

(c) Cervical rib.

(d) Typhoid osteomyelitis.

(e) Bone mineral index.

(f) Charcot joint.

(g) Tourniquet.

(h) Botulinum toxin injection in orthopaedics.

(i) Psoas abscess.

(j) Osteomalacia.

SEPTEMBER 2006

[KP 1560]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.

**BASIC SCIENCES AND GENERAL PRINCIPLES
OF SURGERY**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Write Essay :

(1) Discuss the management of the orthopaedic problems associated with haemophilia. (20)

(2) Give an account of bone weakness in the elderly. (15)

(3) Describe the Arches of foot and management of flat foot. (15)

II. Short notes :

(6 × 5 = 30)

(a) Bone Bank

(b) Automatic Bladder

(c) Absorbable implants for fracture fixation

(d) Autologous blood transfusion

(e) Horner's syndrome

(f) Entrapment neuropathy.

MARCH 2007

[KQ 1561]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.
BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY

Paper I

Common to

(For candidates admitted from 1993-94 onwards

and

Candidates admitted from 2004-05 onwards)

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay Questions:

1. Describe the structure of Bone and healing of fractures. (20)

2. Describe the surgical anatomy of Hip joint and describe the blood supply of femoral head. (15)

3. Describe the calcium metabolism and clinical manifestations and management of Rickets. (15)

II. Short notes : (6 × 5 = 30)

- (a) Arches of foot
 - (b) Osgood-Schlatter's disease
 - (c) Stress fracture
 - (d) Tardy ulnar nerve Palsy.
 - (e) Recurrent dislocation of shoulder
 - (f) Endoscopic spine surgery.
-

MARCH 2008

[KS 1561]

Sub. Code : 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.

Paper I — BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY

Common to all regulations

Q.P.Code : 353103

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw diagrams wherever necessary

- I. Essay : (2 × 20 = 40)
- (1) Describe anatomy of typical spinal nerve. Discuss diagnosis and management of peripheral traumatic nerve injury. (20)
 - (2) Describe the fracture healing. What are the factors that influence fracture healing? (20)
- II. Short notes (6 marks each) : (10 × 6 = 60)
- (1) Blood supply to long bone.
 - (2) Synovial fluid analysis.
 - (3) Bigelow's ligament.
 - (4) Epiphyseal growth plate.
 - (5) Crush syndrome.
 - (6) Vitamin D.
 - (7) Bone grafting.
 - (8) Gas gangrene.
 - (9) Bursae around the knee.
 - (10) Periostium.
-

September 2008

[KT 1561]

Sub. Code: 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.

Paper I – BASIC SCIENCES AND GENERAL PRINCIPLES OF SURGERY

(Common to all Candidates)

Q.P. Code : 353103

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Describe anatomy of the hip joint. Discuss various surgical approaches to the hip joint.
2. Describe the metabolic response to major trauma and factors modifying the same

II. Write short notes on :

(10 X 6 = 60)

1. Cervicle rib.
 2. Horner syndrome.
 3. Spina bifida.
 4. Cold abscess.
 5. Backer cyst.
 6. Multiple Myeloma.
 7. Torticolitis.
 8. Bamboo spine.
 9. Pes Planus.
 10. Madelung deformity.
-

MARCH -2009

[KU 1561]

Sub. Code: 3103

**DIPLOMA IN ORTHOPAEDICS EXAMINATION.
Paper I – BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

(Common to all Candidates)

Q.P. Code : 353103

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions : (2 X 20 = 40)

1. Describe gait cycle. Discuss the effect of various disorders of the hip joint on gait cycle.
2. Describe brachial plexus. How will you evaluate and manage total brachial plexus palsy in an adult.

II. Write short notes on : (10 X 6 = 60)

1. Coagulation of blood.
2. Autologous bone graft.
3. Congenital torticollis.
4. Brodies abscess.
5. Anti tubercular drugs.
6. Synovial chondromatosis.
7. Osgood-sclatter's disease.
8. Bone cement.
9. Fat embolism.
10. Paralytic hip dislocation.

September - 2009

[KV 1561]

Sub. Code: 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION.

Paper I – BASIC SCIENCES AND GENERAL PRINCIPLES OF SURGERY

(Common to all Candidates)

Q.P. Code : 353103

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions : (2 X 20 = 40)

1. Discuss the role of vitamin D, parathormone and calcitonin in bone metabolism.
2. Discuss the aetiology, pathology and management of gas gangrene.

II. Write short notes on : (10 X 6 = 60)

1. Types of fracture healing.
2. Reflex bladder in paraplegia.
3. Wallerian degeneration.
4. Stove in chest.
5. Epiphyseal growth plate.
6. Bone scan.
7. Plaster of paris.
8. Deep vein thrombosis.
9. Second line anti tubercular drugs.
10. Orthopaedic complications of high doses of steroids.

March 2010

[KW 1561]

Sub. Code: 3103

DIPLOMA IN ORTHOPAEDICS EXAMINATION

BASIC SCIENCES AND GENERAL PRINCIPLES OF SURGERY

(Common to all Candidates)

Q.P. Code : 353103

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary

Answer ALL questions

I. Essay questions :

(2 x 20 = 40)

1. Discuss in brief coagulation factors and coagulation of blood. How will you evaluate and manage acute haemophilic bleeding into the knee joint in a child?
2. Describe various types of bone grafts. Discuss indications and complications of bone grafting.

II. Write short notes on :

(10 x 6 = 60)

1. Types of fracture healing.
2. Skeletal traction.
3. Bone cement.
4. Osteogenesis imperfecta.
5. Tom Smith's arthritis.
6. Madura foot.
7. Triple dislocation of knee.
8. Bilateral genu varum.
9. Disease modifying anti-rheumatic drugs.
10. Osteochondritis dissecans.

September 2010

[KX 1561]

Sub. Code: 3103

DIPLOMA IN ORTHOPAEDICS (D.ORTHO.) EXAMINATION.

**Part I for Candidates admitted upto 2003-04 & Candidates admitted
from 2008-09 onwards**

And

Paper I for Candidates admitted from 2004-05 to 2007-08

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Q.P. Code : 353103

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

I. Essay questions :

(2 X 20 = 40)

1. Discuss the Pathophysiology of Osteo Arthritis and Discuss the Recent advances in the management of Osteoarthritis.
2. What are the Principles involved in Bone Graft? Describe various bone graft substitutes.

II. Write short notes on :

(10 X 6 = 60)

1. Arches of Foot.
2. Osteoclasts.
3. Blood supply of Femoral Head.
4. Cervical Rib.
5. Synovial Fluid Analysis.
6. Ankylosing Spondylitis.
7. Factors influencing bone healing.
8. Skeletal Traction.
9. Pathological Fracture.
10. Fat Embolism.

APRIL 2011

[KY 1561]

Sub. Code: 3103

DIPLOMA IN ORTHOPAEDICS (D.ORTH.) EXAMINATION

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Q.P. Code : 353103

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Discuss the anatomy of Brachial Plexus and management of Brachial Plexus Injury.	11	35	15
2. Define Shock and discuss about various types of Shock, clinical features and its management.	11	35	15

II. Write notes on :

1. Osteo blasts.	4	10	7
2. Looser's zone.	4	10	7
3. Gas gangrene.	4	10	7
4. Semi membranous bursae.	4	10	7
5. Christmas disease.	4	10	7
6. Sequestrum.	4	10	7
7. Hyaline cartilage.	4	10	7
8. Deep vein thrombosis.	4	10	7
9. Chemotherapy of TB spine.	4	10	7
10. Bigelow's ligament.	4	10	7

October 2011

[KZ 1561]

Sub. Code: 3103

**DIPLOMA IN ORTHOPAEDICS (D.ORTH.) EXAMINATION
BASIC SCIENCES AND GENERAL PRINCIPLES OF SURGERY**

Q.P. Code : 353103

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

**Pages Time Marks
(Max.) (Max.) (Max.)**

- | | | | |
|--|----|---------|----|
| 1. Describe the anatomy of shoulder joint and discuss the anatomical basis of recurrent dislocation of shoulder. | 11 | 35 min. | 15 |
| 2. Discuss about the etiology of pyrexia in immediate post operative period and how to prevent post operative infection. | 11 | 35 min. | 15 |

II. Write notes on :

- | | | | |
|--------------------------------------|---|---------|---|
| 1. Flexor tendon injury of hand. | 4 | 10 min. | 7 |
| 2. Blood supply of Talus. | 4 | 10 min. | 7 |
| 3. Nerve conduction study. | 4 | 10 min. | 7 |
| 4. Vitamin D. | 4 | 10 min. | 7 |
| 5. Fungal infection in Orthopaedics. | 4 | 10 min. | 7 |
| 6. Cephalosporin. | 4 | 10 min. | 7 |
| 7. Tendon repair. | 4 | 10 min. | 7 |
| 8. Trophic ulcer. | 4 | 10 min. | 7 |
| 9. Foot drop. | 4 | 10 min. | 7 |
| 10. Cardio pulmonary resuscitation. | 4 | 10 min. | 7 |

April 2012

[LA 1561]

Sub. Code: 3103

DIPLOMA IN ORTHOPAEDICS (D.ORTH.) EXAMINATION

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Q.P. Code : 353103

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Surgical Anatomy of shoulder joint, and its altered anatomy in a case of Recurrent Anterior Dislocation.	16	35	15
2. Discuss about various organisms causing Non Specific and Specific infections in bone. How will you manage a case of Acute, hematogenous, Non specific Osteomyelitis of Tibia.	16	35	15

II. Write notes on :

1. Physiology of Blood coagulation.	4	10	7
2. Plasma Globulins in orthopedic conditions.	4	10	7
3. Pathology of Osteosarcoma.	4	10	7
4. Pathology of Osteoporosis.	4	10	7
5. Different types of Biopsy in a bone.	4	10	7
6. Skeletal HIV infection.	4	10	7
7. Diabetic gangrene of foot and management.	4	10	7
8. Ulnar nerve injury at mid forearm level.	4	10	7
9. Drugs in Osteoporosis.	4	10	7
10. Chemotherapy of Osteo sarcoma.	4	10	7

[LB 1561]

OCTOBER 2012

Sub. Code: 3103

**DIPLOMA IN ORTHOPAEDICS (D.ORTH.) EXAMINATION
BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Q.P. Code: 353103

**Time: 3 hours
(180 Min)**

Maximum: 100 marks

ANSWER ALL QUESTIONS IN THE SAME ORDER.

I. Elaborate on:

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Anatomy of normal Hip joint and changes in structures around Hip joint in a case of congenital Dislocation of Hip.	16	35	15
2. Discuss the clinical features and management of Gas Gangrene.	16	35	15

II. Write notes on:

1. Management of Haemophilic arthropathy.	4	10	7
2. Clinical importance of Vitamin D.	4	10	7
3. Investigations in Multiple Myeloma.	4	10	7
4. Pathology of Rheumatoid Arthritis.	4	10	7
5. Pathology of Tetanus.	4	10	7
6. Various methods of Instrument Sterilization.	4	10	7
7. Madura mycosis.	4	10	7
8. Management of Deep Vein Thrombosis.	4	10	7
9. Chemo therapy of Multiple Myeloma.	4	10	7
10. Parathyroid Hormones in orthopedic practice.	4	10	7

(LC 1561)

APRIL 2013

Sub. Code: 3103

DIPLOMA IN ORTHOPAEDICS (D.ORTH.) EXAMINATION

**BASIC SCIENCES AND GENERAL PRINCIPLES OF
SURGERY**

Q.P. Code: 353103

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. What is the Biological process of fracture healing in cortical and cancellous bone?
2. What are the causes of High Ulna nerve paralysis? Discuss the clinical features, complications and management of a patient with this type of paralysis.

II. Write notes on:

(10X7=70)

1. Torticollis
2. Deformities in clubfoot
3. ARDS
4. Tennis elbow
5. Rib hump
6. Compartment syndrome
7. Local causes of non-union
8. Loose bodies in the knee
9. Alkaline phosphatase
10. Vascular sign of Narath

(LD 1561)

OCTOBER 2013

Sub. Code: 3103

DIPLOMA IN ORTHOPAEDICS (D.ORTHO) EXAMINATION

**APPLIED BASIC SCIENCES IN ORTHOPAEDICS AND GENERAL
PRINCIPLES OF SURGERY**

Q.P. Code: 353103

Time: Three Hours

Maximum: 100 marks

I. Elaborate on:

(2X15=30)

1. Describe the Anatomy of Brachial Plexus. Discuss the clinical features of and management of Radial Nerve Palsy.
2. Define Shock. Discuss about various types of Shock, clinical features and its management.

II. Write notes on:

(10X7=70)

1. Hyaline cartilage.
2. Bursae around the knee.
3. Wallerian degeneration.
4. Vitamin D.
5. Brodie's Abscess.
6. Nerve Conduction Study.
7. Ultrasound in Orthopaedics.
8. Cephalosporin.
9. Bone cement.
10. Trendelenberg gait.
