

[KO 206] MARCH 2006 Sub. Code : 2217

M.S. DEGREE EXAMINATION,

Branch II — Orthopaedic Surgery

Paper I — APPLIED BASIC SCIENCES IN
ORTHOPAEDIC SURGERY

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 60 marks
Twenty minutes

M.C.Q. : Forty minutes M.C.Q. : 40 marks

Answer any TWO short notes in each subjects.

Draw suitable diagrams wherever necessary.

All questions carry equal marks.

(12 × 5 = 60)

ANATOMY

(2 × 5 = 10)

1. Collateral ligaments of knee joint.
2. Blood supply of a long bone
3. Axillary nerve.

MARCH 2006
PHYSIOLOGY

(2 × 5 =10)

4. Mechanism of muscle pain
5. Anticoagulants in vivo
6. Signs of Tetany and its physiological principle.

BIOCHEMISTRY

(2 × 5 =10)

7. Action of steroid hormones.
8. Collagen cross links.
9. Renal rickets.

PHARMACOLOGY

(2 × 5 =10)

10. Haemostatic drugs.
11. Selective oestrogen receptor modulators.
12. Drugs used in osteogenic sarcoma.

MICROBIOLOGY

(2 × 5 =10)

13. Hydatid cyst in bones.
14. Tuberculosis of the spine.
15. Madura root.

PATHOLOGY

(2 × 5 =10)

16. Apoptosis.
17. Fibrinoid necrosis.
18. Dystrophic calcification.

[KQ 209] MARCH 2007

Sub. Code : 2217

M.S. DEGREE EXAMINATION.

Branch II – ORTHOPAEDIC SURGERY

Candidates admitted from 2004-05 onwards

**Paper I — APPLIED BASIC SCIENCES IN
ORTHOPAEDIC SURGERY**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
twenty minutes**

Theory : 60 marks

M.C.Q. : Forty minutes

M.C.Q. : 40 marks

Answer any TWO short notes in each subject.

All questions carry equal marks.

(ANATOMY)

(2 × 5 = 10)

1. (a) Rotator cuff.
- (b) Inversion of the foot.
- (c) Arterial supply of the spinal cord.

MARCH 2007

(PHYSIOLOGY)

(2 × 5 = 10)

2. (a) Calcitonin.
(b) Cytotoxic T cell.
(c) Haemorrhagic shock.

(BIOCHEMISTRY)

(2 × 5 = 10)

3. (a) Galactosemia.
(b) Prostaglandins.
(c) Chromatography.

(PHARMACOLOGY)

(2 × 5 = 10)

4. (a) Edifenamate.
(b) Raloxifene.
(c) Hydroxychloroquine.

(MICROBIOLOGY)

(2 × 5 = 10)

5. (a) Universal precaution.
(b) R.A. factor.
(c) Gas gangrene.

(PATHOLOGY)

(2 × 5 = 10)

6. (a) Fibrous Dysplasia.
(b) Factors influencing wound healing.
(c) Fat embolism.
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SEPTEMBER 2007

[KR 212]

Sub. Code : 2219

M.S. DEGREE EXAMINATION.

Branch II — Orthopaedic Surgery

(Candidates admitted upto 2003-04 and Candidate
admitted from 2004-05 onwards)

Paper I — APPLIED BASIC SCIENCES IN
ORTHOPAEDIC SURGERY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
twenty minutes

Theory : 60 marks

M.C.Q. : Forty minutes

M.C.Q. : 40 marks

Answer any TWO short notes in each subject.

All questions carry equal marks.

(ANATOMY)

1. (a) Bursae around the knee joint (2 × 5 = 10)
- (b) Bryant's triangle
- (c) Blood supply of talus and its applied anatomy

SEPTEMBER 2007

(PHYSIOLOGY)

2. (a) Dysbaric osteonecrosis (2 × 5 = 10)
(b) Looser's zone
(c) Define reflex and write about stretch reflex.

(BIOCHEMISTRY)

3. (a) Gaucher's disease (2 × 5 = 10)
(b) Bence Jones proteins
(c) Pseudo gout.

(PHARMACOLOGY)

4. (a) Salmon calcitonin (2 × 5 = 10)
(b) Cox - II inhibitors
(c) Calcitriol.

(MICROBIOLOGY)

5. (a) Gas gangrene prophylaxis (2 × 5 = 10)
(b) Hepatitis- B vaccination
(c) Fungal osteomyelitis—Investigation and microbiology

(PATHOLOGY)

6. (a) Osteopetrosis (2 × 5 = 10)
(b) Tubercle granuloma
(c) Myositis ossificans.

[KS 212]**Sub. Code : 2219**

M.S. DEGREE EXAMINATION.

Branch II — Orthopaedic Surgery

(Candidates admitted from 2004–2005 onwards)

Paper I — APPLIED BASIC SCIENCES IN ORTHOPAEDIC
SURGERY**Q.P.Code 222219**

Time : Three hours

Maximum : 100 marks

(ANATOMY)

I. Answer any FOUR : (4 × 5 = 20)

- (1) Arches of Foot.
- (2) Carpel Tunnel.
- (3) Blood supply of head of femur.
- (4) Pivot joint.
- (5) Cruciate Anastomosis.

(PHYSIOLOGY)

II. Answer any FOUR : (4 × 5 = 20)

- (1) Nerve conduction.
- (2) Stem Cells.
- (3) Osteoclasts.
- (4) Membranous ossification.
- (5) Parathyroid Hormone.

(BIO CHEMISTRY)

III. Answer any THREE : (3 × 5 = 15)

- (1) Scurvy
- (2) Alkaline phosphatase
- (3) Benz zones protein.
- (4) Synovial fluid.

(PATHOLOGY)

IV. Answer any THREE : (3 × 5 = 15)

- (1) Pathogeneses of Rheumatoid arthritis.
- (2) Virchow's Triad
- (3) Neurofibroma.
- (4) Osseous Necrosis.

(MICROBIOLOGY)

V. Answer any THREE : (3 × 5 = 15)

- (1) Madura Mycosis
- (2) Nosocomial infections.
- (3) Gas gangrene.
- (4) Autoclave.

(PHARMACOLOGY)

VI. Answer any THREE : (3 × 5 = 15)

- (1) Calcitonin.
- (2) Antiviral Therapy.
- (3) Fourth generation of cephalosporin.
- (4) Disease modifying drug therapy for rheumatoid.

September 2008

[KT 212]

Sub. Code: 2219

M.S. DEGREE EXAMINATION

Branch II – Orthopaedic Surgery
Paper I – APPLIED BASIC SCIENCES IN ORTHOPAEDIC
SURGERY

(For candidates admitted from 2004-2005 onwards)

Q.P. Code : 222219

Time : Three hours

Maximum : 100 marks

All questions carry equal marks.

I. ANATOMY – Answer any FOUR : (4 X 5 = 20)

1. Brachial plexus
2. Popliteal fossa.
3. Lower end of humerus.
4. Epiphyseal (growth) plate.
5. Axis (2nd cervical vertebra)

II. PHYSIOLOGY – Answer any FOUR : (4 X 5 = 20)

1. Adult respiratory distress syndrome.
2. Vitamin D
3. BMP (Bone morphogenic protein).
4. Wallerian degeneration.
5. Plasma cell.

III. BIOCHEMISTRY– Answer any THREE : (3 X 5 = 15)

1. Uric acid.
2. Alkaptonuria.
3. Mucopolysaccharides.
4. Calcitonin.

IV. PATHOLOGY – Answer any THREE : (3 X 5 = 15)

1. Caseation.
2. FNAC.
3. codman's triangle.
4. Thrombosis.

V. MICROBIOLOGY– Answer any THREE : (3 X 5 = 15)

1. Rheumatoid factors.
2. Hydatid cyst.
3. Clostridium tetani.
4. Acid fast bacilli.

V1. PHARMACOLOGY– Answer any THREE : (3 X 5 = 15)

1. Rifampicin.
 2. Methotrexate.
 3. Aminoglycosides.
 4. Alendronate.
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March 2009

[KU 212]

Sub. Code: 2219

M.S. DEGREE EXAMINATION

Branch II – ORTHOPAEDIC SURGERY

(For candidates admitted from 2004-2005 to 2008-2009 onwards)

**Paper I - APPLIED BASIC SCIENCES IN
ORTHOPAEDIC SURGERY**

Q.P. Code : 222219

Time : Three hours

Maximum : 100 marks

All questions carry equal marks

I. ANATOMY – Answer any FOUR : (4 x 5 = 20)

1. Femoral ante version.
2. Fibrous flexor sheath.
3. Artery of Adamkiewicz.
4. Martin Gruber anastomosis.
5. Anterior glenohumeral ligaments.

II. PHYSIOLOGY – Answer any FOUR : (4 x 5 = 20)

1. Wallerian degeneration.
2. Isokinetic muscle contraction.
3. Hypercalcemia.
4. Bone morphogenetic protein.
5. Hyaluronic acid.

III. BIOCHEMISTRY – Answer any THREE : (3 x 5 = 15)

1. Hydroxyapatite.
2. 1,25 – dihydroxycholecalciferol.
3. Ochronosis.
4. Serum alkaline phosphatase.

IV. PATHOLOGY – Answer any THREE : (3 x 5 = 15)

1. Rheumatoid factor.
2. Gouty tophi.
3. Cystic tuberculosis.
4. Osteoid.

V. MICROBIOLOGY – Answer any THREE : (3 x 5 = 15)

1. Salmonella osteomyelitis.
2. Polymerase chain reaction.
3. Brucellosis.
4. Radiation methods of sterilization.

VI. PHARMACOLOGY – Answer any THREE : (3 x 5 = 15)

1. Amino glycosides.
2. Antibiotic beads.
3. Allopurinol.
4. Locally acting steroids.

September 2009

[KV 212]

Sub. Code: 2219

M.S. DEGREE EXAMINATION

Branch II – ORTHOPAEDIC SURGERY

(For candidates admitted from 2004-2005 to 2008-2009 onwards)

**Paper I - APPLIED BASIC SCIENCES IN
ORTHOPAEDIC SURGERY**

Q.P. Code : 222219

Time : Three hours

Maximum : 100 marks

All questions carry equal marks

I. ANATOMY – Answer any FOUR : (4 x 5 = 20)

1. Cervical rib.
2. Upper end of femur.
3. Cubital fossa.
4. Nucleus pulposus.
5. Ossification.

II. PHYSIOLOGY – Answer any FOUR : (4 x 5 = 20)

1. Brown sequard syndrome.
2. Hypoxia.
3. Anticoagulants.
4. Fat absorption.
5. Tetany.

III. BIOCHEMISTRY – Answer any THREE : (3 x 5 = 15)

1. Gout.
2. Collagen tissue.
3. C.S.F.
4. Tumor markers.

IV. PATHOLOGY – Answer any THREE : (3 x 5 = 15)

1. Pathogenesis of amyloidosis.
2. Hodgkin's disease.
3. L.E. Cell phenomenon
4. Comb's test.

V. MICROBIOLOGY – Answer any THREE : (3 x 5 = 15)

1. Herpes virus.
2. Auto immune diseases.
3. Laboratory diagnosis of mycetoma.
4. Sarcoidosis.

V1. PHARMACOLOGY – Answer any THREE : (3 x 5 = 15)

1. Gene therapy in cancer.
2. Hepatotoxic drugs.
3. Biphosphonates.
4. Steroids.
