

MARCH 2007

[KQ 399]

Sub. Code : 2417

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V – Orthodontics

(For candidates admitted from the Academic Year
2004 – 2005 onwards)

Paper I — APPLIED BASIC SCIENCES

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. Essay :

1. Write an essay on Muscles of mastication and their role in malocclusion. (20)
2. Discuss the prenatal growth of maxilla and its aberrations. (15)
3. Role of puberty in orthodontics. (15)

II. Short notes :

(6 × 5 = 30)

- (a) Antisialogogues
 - (b) Streptococcus Mutans
 - (c) Chemical Sterilization
 - (d) Calcium Metabolism
 - (e) Neural Crest Cells
 - (f) Chemical Messengers.
-

SEPTEMBER 2007

[KR 399]

Sub. Code : 2417

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — Orthodontics

**(For candidate admitted from the Academic Year 2004-
2005 onwards)**

Paper I — APPLIED BASIC SCIENCES

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. Essay :

**1. Describe in detail the anatomy of tongue and its
role in orthodontics. (20)**

2. Psychological aspects of malocclusion. (15)

**3. Synthesis of Vitamin – D and its role in
orthodontics. (15)**

II. Short notes : (6 × 5 = 30)

**(a) Role of Non Steroidal Anti Inflammatory
Drugs.**

(b) Periodontal Ligament

(c) Sensitization and Stabilization

(d) Treacher's Collins syndrome

(e) Elastics

(f) Histology of bone.

MARCH 2008

[KS 381]

Sub. Code : 2417

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V — Orthodontics

(For candidates admitted from the Academic Year
2004–2005 onwards)

Paper I — APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

- I. Essay questions : (2 × 20 = 40)
1. Discuss in detail the development and anatomy of the Temporomandibular Joint (TMJ). (20)
 2. Discuss in detail about calcium metabolism. (20)
- II. Short notes : (6 × 10 = 60)
1. Infection control.
 2. Primary and secondary cartilages.
 3. Growth hormone.
 4. Fibrous dysplasia of bone.
 5. Mechanism of action of drug.
 6. Essential amino acids.
-

September 2008

[KT 381]

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION.

(Revised Regulations)

Branch V – ORTHODONTICS

(For Candidates admitted from 2004-2005 onwards)

Paper I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time : Three hours

Maximum : 100 marks

Draw suitable diagram wherever necessary.

Answer ALL questions.

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

1. Write in detail about prenatal and post-natal development of maxilla.
2. Effects of nutrition and hormones on development of dentition.

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

1. Apoptosis.
 2. Juvenile diabetes mellitus.
 3. Adenoids.
 4. Balanced diet.
 5. Cephalosporins.
 6. Muscles of facial Expression.
-

March 2009

[KU 381]

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION

Branch V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

(Revised Regulations)

(For Candidates admitted from 2004 - 2005 onwards)

Paper I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time : Three hours

Maximum : 100 marks

Answer ALL questions

Draw suitable diagram wherever necessary

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

1. Briefly outline the molecular basis and genomics of heredity of the craniofacial region. Add a note on the inheritable types facial deformities and malocclusion.
2. Discuss the hard and soft tissue basis of mandibular growth rotations. Add a note on the impact of functional parameters in determining facial morphology.

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

1. Thyroid hormone and the human dentition.
2. Actin and Myosin.
3. Prostaglandins and orthodontic tooth movement.
4. Trisomy No.21.
5. Retrodiscal pad.
6. Protein-calorie malnutrition.

September 2009

[KV 381]

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION

Branch V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

(Revised Regulations)

(For Candidates admitted from 2004 - 2005 onwards)

Paper I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time : Three hours

Maximum : 100 marks

Answer ALL questions

Draw suitable diagram wherever necessary

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

1. Describe the normal development and maturation of the suck-swallow mechanism and its relationship to the human dentition. Add a note on the influence of deviant swallowing behaviour on facial morphology.
2. Outline the development of the branchial arches and discuss the embryologic basis of craniofacial and dental anomalies commonly seen in orthodontic practice.

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

1. Growth hormone and its regulation.
2. Adenoids and effects of its hypertrophy.
3. Muscles of facial expression and the smile line.
4. Hyoid bone and tongue posture.
5. Stem cells and their significance.
6. Genetic polymorphism.

March 2010

[KW 381]

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION

Branch V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

(Revised Regulations)

(For Candidates admitted from 2004 - 2005 onwards)

Paper I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time : Three hours

Maximum : 100 marks

Answer ALL questions

Draw suitable diagram wherever necessary

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

1. Discuss the current concepts of growth prediction in relation to orthodontics.
2. Discuss role of vitamins and hormones on the growth and development of Jaws and teeth.

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

1. Growth trends.
2. Mutations.
3. Development of speech.
4. Growth spurts.
5. Genetically controlled malocclusions.
6. Histological development of cleft-palate.

October 2011

[KZ 381]

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION

BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

**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. Role of parathormone and its clinical implications.	6	18	10
2. Prostaglandins and orthodontic tooth movement.	6	18	10
3. Role of fluorides in orthodontics.	6	18	10
4. Suckle swallow.	6	18	10
5. Active and passive immunity.	6	18	10
6. Development of speech and its difficulties related to Malocclusion.	6	18	10
7. Microbes predisposing to dental caries and its management.	6	18	10
8. Trisomy 21.	6	18	10
9. Muscles and ligaments related to TMJ.	6	18	10
10. Stem cells and its importance.	6	18	10

April 2012

[LA 381]

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION

BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

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

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Electromyography and masseter muscle.	7	18	10
2. Moist heat sterilization.	7	18	10
3. Meckles cartilage.	7	18	10
4. Ascorbic acid and vitamin D.	7	18	10
5. Oral manifestations of AIDS.	7	18	10
6. Stainless steel and Nitinol.	7	18	10
7. Fluorides in Dental caries.	7	18	10
8. Intramembranous and Endochondral ossification.	7	18	10
9. Pathway of dental pain.	7	18	10
10. Cleft lip and palate.	7	18	10

[LB 381]

OCTOBER 2012

Sub. Code: 2417

**M.D.S. DEGREE EXAMINATION
BRANCH V – ORTHODONTICS AND
DENTOFACIAL ORTHOPAEDICS
PAPER I – APPLIED BASIC SCIENCES
Q.P. Code : 242417**

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

Maximum : 100 marks

Answer ALL questions in the same order.

	Pages (Max.)	Time (Max.)	Marks (Max.)
1. Development of the palate and its anomalies.	7	18	10
2. Genetics and malocclusion.	7	18	10
3. Pharyngeal branches and its derivatives.	7	18	10
4. AIDS; add a note on the transmission and prevention of HIV in orthodontic practice.	7	18	10
5. Biostatistics for the orthodontist.	7	18	10
6. Bone grafts.	7	18	10
7. The sliding filament theory.	7	18	10
8. Drugs and their involvement in orthodontic tooth movement.	7	18	10
9. Safety valve mechanism.	7	18	10
10. Sterilization in Orthodontics.	7	18	10

[LC 381]

APRIL 2013

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION

BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time : 3 hours

Maximum : 100 marks

(10x10=100)

1. Temporomandibular joint.
2. Lateral pterygoid muscle.
3. Primary and secondary palate.
4. Cold sterilization.
5. Dental caries and white spot lesions.
6. Prostaglandins.
7. Down's Syndrome.
8. Growth hormone.
9. Developmental defects of the face.
10. Synchondrosis.

[LD 381]

OCTOBER 2013

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION

BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time: Three Hours

Maximum: 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

(10 x 10 = 100)

1. Describe in detail the various congenital anomalies causes malocclusion
2. Anatomy and development of tongue
3. Role of Vitamin D in orthodontics
4. Allergies in orthodontics
5. Sterilization
6. Neutral crust cells
7. Long face syndrome
8. Protein energy malnutrition
9. Deglutition
10. Movement of TMJ.

[LF 381]

OCTOBER 2014

Sub. Code: 2417

M.D.S. DEGREE EXAMINATION

BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time : 3 Hours

Maximum : 100 marks

(10 x 10 = 100)

1. AIDS : Transmission and Prevention of HIV in orthodontic practice.
2. Down's syndrome.
3. Cleft lip and palate.
4. Sterilisation in orthodontics.
5. Lateral pterygoid muscle.
6. Fluorides in orthodontics.
7. Bone grafts.
8. Genetics and malocclusion.
9. Growth hormone.
10. Temporo mandibular joint.

[LK 381]

JUNE 2017

Sub. Code: 2417

M.D.S DEGREE EXAMINATION
(For the Candidates Admitted up to the Academic Year 2012-2013 only)

BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS
PAPER I – APPLIED BASIC SCIENCES

Q.P. Code : 242417

Time : 3 Hours

Maximum : 100 Marks

(10 x 10 = 100)

1. Wolff's law and its application in orthodontics.
2. Nano application in orthodontics.
3. Role of Electro-Myography (EMG).
4. Evolution of temporo mandibular joint.
5. Biostatistics in orthodontics.
6. Functional occlusion.
7. Child psychology and its implications.
8. Syndesmosis and Synchondrosis with clinical implications.
9. Waldeyer's ring.
10. Calcium metabolism.
