

[LI 381]

JUNE 2016

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code : 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay: (1 x 15 = 15)**

1. Genetics of dentofacial variations in human malocclusion.

**II. Short Essays: (6 x 10 = 60)**

1. Mechanism and factors affecting eruption of teeth. Explain about Primary failure of eruption.
2. What are the different types of data collection in Orthodontics and explain the meaning of “p” value?
3. Types and properties of nickel titanium wires.
4. Servo system theory of Jaw Growth.
5. Cranial base growth and its significance in face development.
6. Relevance of muscle physiology in Orthodontic Therapy.

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[LJ 381]

OCTOBER 2016

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code : 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay: (1 x 15 = 15)**

1. Describe the phenomenon of growth rotation on the jaws. Add a note on its relevance to treatment planning and orthodontic mechanotherapy.

**II. Short Essays: (6 x 10 = 60)**

1. Write in detail about Neural crest cells and their role in development of the face.
2. Measures of location and variability in biostatistics.
3. Functional cranial analysis of maxilla and mandible.
4. Genetic control at various levels of orthodontic tooth movement.
5. Physiology of bone.
6. Puberty and its role in Orthodontics.

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[LK 381]

JUNE 2017

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**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

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**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code : 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay: (1 x 15 = 15)**

1. Describe the anatomy and development of tongue. Discuss in detail about the functions and position of tongue which contribute to development of various malocclusions.

**II. Short Essays: (6 x 10 = 60)**

1. Neural crest cells.
2. Etiology, classification, clinical features and orthodontic management of temporo mandibular disorders.
3. Development and role of primary and secondary cartilages in cranio facial development.
4. First and second messengers in orthodontic tooth movement.
5. Sterilization and disinfection in orthodontics.
6. Orthodontic applications of Botulinum Toxin.

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[LL 381]

OCTOBER 2017

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code : 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay: (1 x 15 = 15)**

1. Discuss the development of branchial arches and the embryologic basis of craniofacial and dental anomalies seen in orthodontic practice.

**II. Short Essays: (6 x 10 = 60)**

1. Pathway of dental pain.
2. Transmission and prevention of HIV infections in orthodontic practice.
3. Antibiotic prophylaxis for rheumatic fever.
4. Naso Alveolar moulding in cleft lip palate infants.
5. Vertical control of Maxillary Growth.
6. Impression materials used in orthodontic practice.

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[LM 381]

MAY 2018

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code : 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay: (1 x 15 = 15)**

1. Discuss the role of relevant vitamins and hormones in craniofacial growth and development.

**II. Short Essays: (6 x 10 = 60)**

1. Aesthetic arch wires.
2. Inherited malocclusions.
3. Chemical messengers and orthodontic tooth movement.
4. Importance of puberty in orthodontic treatment.
5. Role of muscles in development and treatment of various malocclusions.
6. Drugs affecting orthodontic therapy.

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[LN 381]

OCTOBER 2018

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 onwards)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code: 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay:** **(1 x 15 = 15)**

1. Explain in detail about the Calcium metabolism and its role in Orthodontics.

**II. Short Essays:** **(6 x 10 = 60)**

1. Annealing in orthodontics.
2. Haemophilia.
3. 'P' value and its inference.
4. Homeostasis.
5. Clasp Knife reflex.
6. Anatomy of Temporo Mandibular joint.

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[LO 381]

MAY 2019

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code: 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay:** (1 x 15 = 15)

1. Discuss the pharmacology of anesthetic drugs used in dental practice.

**II. Short Essays:** (6 x 10 = 60)

1. Various generations of bonding agents.
2. Genetic counseling
3. Mendelian inheritance.
4. Mechanism of Contraction and Relaxation of Muscles.
5. Edge Centroid relation.
6. Double Blind study in statistics.

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[LP 381]

OCTOBER 2019

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code: 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay:** **(1 x 15 = 15)**

1. Discuss the role of relevant vitamins and hormones in craniofacial growth and development.

**II. Short Essays:** **(6 x 10 = 60)**

1. Evolution of temporo mandibular joint.
2. Von Willebrand disease.
3. Developmental defects of the face.
4. Cancrum oris.
5. Bioforce archwires.
6. Disinfection of impression of intra oral structures recorded in patients.

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[LQ 381]

NOVEMBER 2020  
(MAY 2020 SESSION)

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code: 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay:** (1 x 15 = 15)

1. Discuss the anatomy, development and function of tongue and its role in orthodontics.

**II. Short Essays:** (6 x 10 = 60)

1. Histology of bone.
2. Growth hormone.
3. Glass ionomer cements.
4. Prostaglandins and orthodontic tooth movement.
5. Role of homeobox genes in craniofacial growth.
6. Erickson's eight stages of emotional development.

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[MDS 0321]

MARCH 2021  
(OCTOBER 2020 SESSION)

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code: 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay:** (1 x 15 = 15)

1. Discuss the evolution, applied anatomy and importance of Tempromandibular joint in relation to growth and development of the face.

**II. Short Essays:** (6 x 10 = 60)

1. Biostatistics in Orthodontics.
2. Form and function of Bones.
3. Genetic counseling.
4. Lattice structure of different forms of stainless steel and their properties.
5. Management of children with Psychological disorders in Orthodontic clinic.
6. Bioforce archwires.

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[MDS 0721]

JULY 2021  
(MAY 2021 SESSION)

Sub. Code: 2467

**M.D.S DEGREE EXAMINATION**  
(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code : 242467*

**Time: 3 Hours**

**Maximum: 75 Marks**

**I. Essay:** **(1 x 15 = 15)**

1. Discuss the role of relevant Vitamins and Hormones in Craniofacial growth and development.

**II. Short Essays:** **(6 x 10 = 60)**

1. Inherited Malocclusions.
2. Aesthetic Arch wires.
3. Drugs affecting Orthodontic therapy.
4. Role of muscles in the development and treatment of various Malocclusions.
5. Importance of Puberty in Orthodontic treatment.
6. Chemical messengers and Orthodontic Tooth movement.

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**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[MDS 1121]**

**NOVEMBER 2021  
(OCTOBER 2021 SESSION)**

**Sub. Code: 2467**

**M.D.S DEGREE EXAMINATION  
(For the Candidates Admitted from the Academic Year 2013-2014 to 2017-2018)**

**BRANCH V – ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**PAPER I – APPLIED ANATOMY, PHYSIOLOGY, PATHOLOGY,  
GENETICS PHYSICAL ANTHROPOLOGY AND  
DENTAL MATERIAL**

*Q.P. Code : 242467*

**Time: 3 Hours**

**Answer ALL Questions**

**Maximum: 75 Marks**

**I. Essay:** **(1 x 15 = 15)**

1. Discuss the etiology, clinical features and Orthodontic management of Temporomandibular disorders.

**II. Short Essays:** **(6 x 10 = 60)**

1. Role of Genetic in Orthodontics.
2. Evidence based Orthodontics.
3. Calcium metabolism and its role in Orthodontics.
4. Application of Nanotechnology in Orthodontics.
5. Evaluation, prevention and treatment of white spot lesions in Orthodontic practice.
6. Hormonal Imbalance and Jaw growth.

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