

**FIRST YEAR B.D.S. DEGREE EXAM**  
(Common to Second Year Paper I - Modified Regulation III Candidates)

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

*Q.P Code: 544203*

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** **(2 x 10 = 20)**

1. Write in detail about the development, function and histology of Periodontal ligament.
2. Discuss the various aspects of tooth number 11.

**II. Write Notes on:** **(10 x 5 = 50)**

1. Development of Tongue.
2. Incremental lines of Retzius.
3. Theories of dentin hypersensitivity.
4. Functions of Pulp.
5. Cemento-Enamel Junction.
6. Tooth numbering systems.
7. Occlusal aspect of Right Permanent Maxillary first molar.
8. Masticatory mucosa.
9. Theories of eruption.
10. Fixatives.

\*\*\*\*\*

**FIRST YEAR B.D.S. DEGREE EXAM**  
(Common to Second Year Paper I - Modified Regulation III Candidates)

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

*Q.P Code: 544203*

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** (2 x 10 = 20)

1. Explain Amelogenesis and life cycle of Ameloblast with suitable diagrams.
2. Describe the morphology of right permanent mandibular second premolar.

**II. Write Notes on:** (10 x 5 = 50)

1. Occlusal surface of Maxillary First Permanent molar.
2. Histology of Gingiva.
3. Cellular Cementum.
4. Functions of Pulp.
5. Osteoclast.
6. Principal fibres of Periodontal ligament.
7. Development of Palate.
8. Functions of Saliva.
9. Ground section of Tooth.
10. Theories of Tooth eruption.

\*\*\*\*\*

**FIRST YEAR B.D.S. DEGREE EXAM**  
(Common to Second Year Paper I - Modified Regulation III Candidates)

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

*Q.P Code: 544203*

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** (2 x 10 = 20)

1. Write an essay on functions, development, histology of Pulp.
2. Describe in detail about right maxillary first molar.

**II. Write Notes on:** (10 x 5 = 50)

1. Sharpe's fibers.
2. Development of tongue.
3. Non-keratinocytes.
4. Types of cementum.
5. Age changes of dentin.
6. Cementoenamel junction.
7. Serous cells.
8. Tome's process.
9. Curve of Spee and Curve of monsoon.
10. Histology of Tempromandibular joint.

\*\*\*\*\*

**FIRST YEAR B.D.S. DEGREE EXAM**  
(Common to Second Year Paper I - Modified Regulation III Candidates)

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

*Q.P Code: 544203*

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** (2 x 10 = 20)

1. Enumerate the stages in life cycle of ameloblast and write in detail about amelogenesis.
2. Describe in detail about Maxillary central incisors.

**II. Write Notes on:** (10 x 5 = 50)

1. Principle fibres of periodontal ligament.
2. Functions of cementum.
3. Enamel Lamellae.
4. Cap stage.
5. Histology of pulp.
6. Serous acini.
7. Osteoclasts.
8. Cusp of carabelli and Oblique ridge.
9. Occlusal morphology of mandibular 2<sup>nd</sup> premolar.
10. Define the following
  - Groove
  - Cusp
  - Cingulum
  - Fossa
  - Pit

\*\*\*\*\*

**FIRST YEAR B.D.S. DEGREE EXAM**  
(Common to Second Year Paper I - Modified Regulation III Candidates)

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

*Q.P Code: 544203*

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** **(2 x 10 = 20)**

1. Classify oral mucous membrane. Describe in detail about masticatory mucosa.
2. Describe in detail the morphology of Mandibular Permanent First Molar.

**II. Write Notes on:** **(10 x 5 = 50)**

1. Histology of Taste bud.
2. Ligaments of TMJ.
3. Periodontal Ligament Fibres.
4. Antrum of Highmore.
5. Interglobular Dentin.
6. Myoepithelial cells.
7. Cell Rests of Serre.
8. Mineralisation.
9. Development of Tongue.
10. Key of Occlusion and curve of Spee.

\*\*\*\*\*

[LO 655]

**FEBRUARY 2019**

Sub. Code: 4203

**FIRST YEAR B.D.S. DEGREE EXAM**  
(Common to Second Year Paper I - Modified Regulation III Candidates)

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

*Q.P Code: 544203*

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order**  
**Draw suitable diagrams wherever necessary**

**I. Elaborate on:** (2 x 10 = 20)

1. Classify salivary glands. Discuss in detail Parotid gland with suitable diagrams.
2. Write about the development of face with diagrams and add a note on developmental defects of palate.

**II. Write Notes on:** (10 x 5 = 50)

1. Epithelial rests of Malassez.
2. Fixatives.
3. Difference between Permanent and Deciduous dentition.
4. Primary, Secondary and Tertiary dentin.
5. Haematoxylin and Eosin staining.
6. Demilunes.
7. Types of Papillae.
8. Neural crest cells.
9. Active and Passive eruption of teeth.
10. Embrasures

\*\*\*\*\*

**FIRST YEAR B.D.S. DEGREE EXAM**  
(Common to Second Year Paper I - Modified Regulation III Candidates)

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

*Q.P Code: 544203*

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** **(2 x 10 = 20)**

1. Describe in detail about types of Dentin with Histology. Add note on age changes in Dentin.
2. Discuss in detail the chronology and morphology of Permanent right Maxillary first premolar.

**II. Write Notes on:** **(10 x 5 = 50)**

1. Role of neural crest in orofacial development.
2. Incremental lines of Enamel, Dentine and Cementum.
3. Keratinization.
4. Functions of pulp.
5. Nerve supply of Tongue.
6. Dead tracts.
7. Difference between cellular and acellular cementum.
8. Gingival ligament.
9. Taste Pathway.
10. Decalcification.

\*\*\*\*\*

**FIRST YEAR B.D.S. DEGREE EXAM**  
(Common to Second Year Paper I - Modified Regulation III Candidates)

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

*Q.P Code: 544203*

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** (2 x 10 = 20)

1. Define periodontium. Write in detail about the structure and functions of periodontal ligament.
2. Discuss in detail about the chronology and morphology of Permanent right Mandibular second premolar.

**II. Write Notes on:** (10 x 5 = 50)

1. Histology of Maxillary sinus.
2. Mechanism of shedding.
3. Compensating curves.
4. Deglutition.
5. Alveolar bone proper.
6. Odontoblasts.
7. Cementoenamel junction.
8. Macroscopic features of gingiva.
9. Surface structures in enamel.
10. Histophysiological stages in tooth development.

\*\*\*\*\*



**[BDS 0321]**

**MARCH 2021  
(AUGUST 2020 SESSION)**

**Sub. Code: 4203**

**FIRST YEAR B.D.S. DEGREE EXAM  
(Common to Second Year Paper I - Modified Regulation III Candidates)**

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

***Q.P Code: 544203***

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on: (2 x 10 = 20)**

1. Classify Salivary Glands. Discuss in detail the Histology of Serous and Mucous Acini. Add a note on Salivary Gland Ductal System.
2. Discuss in detail about the Chronology and Morphology of Permanent Right Mandibular Second Premolar.

**II. Write Notes on: (10 x 5 = 50)**

1. Histology of Maxillary Sinus.
2. Mechanism of Shedding.
3. Compensating Curves.
4. Deglutition.
5. Alveolar Bone Proper.
6. Odontoblasts.
7. Cementoenamel Junction.
8. Macroscopic Features of Gingiva.
9. Surface Structures in Enamel.
10. Histophysiological Stages in Tooth Development.

\*\*\*\*\*

**[BDS 0921]**

**SEPTEMBER 2021  
(FEBRUARY 2021 SESSION)**

**Sub. Code: 4203**

**FIRST YEAR B.D.S. DEGREE EXAM  
(Common to Second Year Paper I - Modified Regulation III Candidates)**

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

***Q.P Code: 544203***

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** **(2 x 10 = 20)**

1. Classify Oral Mucous Membrane. Write in detail about Specialized Mucosa.
2. Describe the Chronology and Morphology of Permanent Right Maxillary Canine.

**II. Write Notes on:** **(10 x 5 = 50)**

1. Development of Palate.
2. Advanced Bell Stage.
3. Hypomineralized Structures in Enamel.
4. Developmental Grooves
5. Oclusal Morphology of Permanent Maxillary First Molar.
6. Dentinal Hypersensitivity Theories.
7. Odontoclasts in Tooth Shedding.
8. Keratinization.
9. Cells of Periodontal Ligament.
10. Fixation.

\*\*\*\*\*

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

**[BDS 0322]**

**MARCH 2022  
(AUGUST 2021 SESSION)**

**Sub. Code: 4203**

**FIRST YEAR B.D.S. DEGREE EXAM**

**New Modified Revised Regulation (August 2016 Examination Session onwards)  
[Common to Modified Regulation III {Candidates admitted from 2003-2004  
to 2007-2008} and New Modified Regulation {Candidates admitted  
from 2008 – 2009 onwards}]**

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

***Q.P Code: 544203***

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on: (2 x 10 = 20)**

1. Classify oral mucosa. Write in detail about masticatory mucosa.
2. Describe the morphology of permanent maxillary canine.

**II. Write Notes on: (10 x 5 = 50)**

1. Bundle bone.
2. Early bell stage of tooth development.
3. Define a) Ridge b) Fossa.
4. Ectomesenchyme.
5. Theories of dentinal sensitivity.
6. Fibres of periodontal ligament.
7. Zones of pulp.
8. Oclusal aspect of maxillary first molar.
9. Formative phase of Ameloblast.
10. Odontoclasts.

\*\*\*\*\*

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

**[BDS 0722]**

**JULY 2022**

**Sub. Code: 4203**

**(FEBRUARY 2022 SESSION)**

**FIRST YEAR B.D.S. DEGREE EXAM**

**New Modified Revised Regulation (August 2016 Examination Session onwards)  
[Common to Modified Regulation III {Candidates admitted from 2003-2004 to 2007-2008}  
and New Modified Regulation {Candidates admitted from 2008 – 2009 onwards}]**

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

***Q.P Code: 544203***

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on: (2 x 10 = 20)**

1. Classify Salivary Glands. Discuss in detail Parotid Gland with suitable diagrams.
2. Write about the development of Face with diagrams and add a note on Developmental Defects of Palate.

**II. Write Notes on: (10 x 5 = 50)**

1. Cap Stage in Tooth Development.
2. Composition and Functions of Saliva.
3. Difference between Permanent and Deciduous Dentition.
4. Primary, Secondary and Tertiary Dentin.
5. Haematoxylin and Eosin Staining.
6. Demilunes.
7. Types of Papillae.
8. Neural Crest Cells.
9. Active and Passive Eruption of Teeth.
10. Temporomandibular Joint.

\*\*\*\*\*

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

**[BDS 1222]**

**DECEMBER 2022  
(AUGUST 2022 EXAM SESSION)**

**Sub. Code: 4203**

**FIRST YEAR B.D.S. DEGREE EXAM**

**New Modified Revised Regulation (August 2016 Examination Session onwards)  
[Common to Modified Regulation III {Candidates admitted from 2003-2004 to 2007-2008}  
and New Modified Regulation {Candidates admitted from 2008 – 2009 onwards}]**

**PAPER III – DENTAL ANATOMY, EMBRYOLOGY AND  
ORAL HISTOLOGY**

***Q.P Code: 544203***

**Time: 180 Minutes**

**Maximum: 70 Marks**

**Answer all questions in the same order  
Draw suitable diagrams wherever necessary**

**I. Elaborate on:** **(2 x 10 = 20)**

1. Maxillary canine.
2. Classify oral mucous membrane. Write in detail about histology of gingival.

**II. Write Notes on:** **(10 x 5 = 50)**

1. Enamel Lamellae, tufts.
2. Primary and secondary curvatures of dentinal tubules.
3. Difference between Mandibular First and Second Premolar.
4. Cellular cementum.
5. Cap stage.
6. Fibres of Periodontal Ligament.
7. Define a) Fossa b) Cingulum.
8. Zones of pulp.
9. Taste buds.
10. Bundle bone.

\*\*\*\*\*