

[LO 531]

MAY 2019

Sub. Code: 2531

**M.D.S DEGREE EXAMINATION
(For the Candidates Admitted from the Academic Year 2018-2019 onwards)**

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Describe the innervations of pulp and management of pulpal pain.
2. Randomized Controlled Trials.
3. Measures of Central Tendency.
4. Cardiopulmonary Resuscitation.
5. Balanced Diet.
6. Vital capacity and its importance.
7. Physiological functions of saliva.
8. Regulations of body temperature.
9. Parotid gland and its functions.
10. Development and growth of mandible.

[LQ 531]

**NOVEMBER 2020
(MAY 2020 SESSION)**

Sub. Code: 2531

**M.D.S DEGREE EXAMINATION
(For the Candidates Admitted from the Academic Year 2018-2019 onwards)**

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Discuss in detail the various stages and muscles associated with Deglutition.
2. Enumerate the various bodies which govern research in India. Discuss the role of two agencies and its implication on research.
3. Discuss the difference between association and causation. Enumerate the various criteria for causation of disease.
4. What is Dental Hypersensitivity? What are the various theories associated with Dental Hypersensitivity?
5. What are Biomarkers? Enumerate the various Biomarkers for dental diseases.
6. Enumerate the common drug interactions encountered in routine dental practice.
7. What are the common manifestations in the oral cavity of immune compromised patient?
8. Discuss the role of biostatistics in various spheres of medical research.
9. Describe the role of hormones in maintenance of glucose metabolism in our body.
10. Discuss the role of antioxidants in the management of Potentially Malignant oral conditions.

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

[MDS 0322]

**MARCH 2022
(MAY 2021 SESSION)**

Sub. Code: 2531

**M.D.S DEGREE EXAMINATION
(For the Candidates Admitted from the Academic Year 2018-2019 onwards)**

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Association of occupational dental erosion and oral health related quality of life among battery factory workers in Chennai. Discuss the Research design, methodology and statistics in detail.
2. Mucosal changes in the elderly.
3. Endocrine regulation of blood sugar.
4. Hypersensitivity, add a note on oral hypersensitivity reactions.
5. Principles involved in Bioassay.
6. Importance of social anthropology.
7. Fundamentals of Genetics.
8. Pulp-periodontal complex.
9. Cell structure and function.
10. Use and limitations of statistics in public health.

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

[MDS 0522]

**MAY 2022
(OCTOBER 2021 SESSION)**

Sub. Code: 2531

**M.D.S DEGREE EXAMINATION
(For the Candidates admitted from the Academic Year 2018-2019 onwards)**

FIRST YEAR

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Origin, Insertion and Nerve Supply of Masseter Muscle.
2. Developmental Anomalies of Teeth.
3. Taste Buds.
4. Krebs Cycle.
5. Caries Susceptibility Tests.
6. Ludwig's Angina.
7. Chemical Mediators of Inflammation.
8. Hypothesis Testing
9. Parametric and Non – Parametric Tests.
10. Functions of Liver.

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

[MDS 0223]

**FEBRUARY 2023
(OCTOBER 2022 EXAM SESSION)**

Sub. Code: 2531

**M.D.S. DEGREE EXAMINATION
(For the Candidates admitted from the Academic Year 2018-2019 onwards)**

FIRST YEAR

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Facial Nerve.
2. Emergency Drugs in Dental Practice.
3. Random Sampling and Randomization.
4. Discuss Sterilization of Dental Instruments.
5. Causes for Altered Oral Flora.
6. Drugs and its effects on Oral Tissue Development.
7. Oral Mucous Membrane in Health and Disease.
8. Role of Trace Elements in Oral Diseases.
9. Cultural Anthropology.
10. Genetic Counselling.

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

[MDS 0723]

**JULY 2023
(MAY 2023 EXAM SESSION)**

Sub. Code: 2531

**M.D.S. DEGREE EXAMINATION
(For the Candidates admitted from the Academic Year 2018-2019 onwards)**

FIRST YEAR

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on: **(10 x 10 = 100)**

1. Describe in detail the Origin, Course and Applied Anatomy related to the Mandibular division of Trigeminal Nerve.
2. Discuss in detail the various functions of Saliva in health and disease.
3. Enumerate the various Analgesics used in Dental care.
4. Define Research. Critically analyse the various types of Research.
5. Enumerate the Homeostatic involved in maintenance of Calcium balance in our body.
6. What is evidence based Dental practice? Discuss the basis of evidence in preventive Dental practice.
7. Enumerate and discuss the various non-parametric inferential statistical methods.
8. Discuss in detail the various theories involved in the eruption of Permanent Teeth.
9. Discuss the role of Computer in Research.
10. Describe in detail the various steps involved in the disposal of Biomedical Waste.

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

[MDS 1223]

DECEMBER 2023

Sub. Code: 2531

M.D.S DEGREE EXAMINATION

FIRST YEAR

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Describe arterial supply and venous drainage of the face and add a note on its clinical importance.
2. Randomized controlled trials.
3. Trigeminal nerve and its clinical implications.
4. Discuss deglutition in detail.
5. Define hemorrhage. Explain various effects of hemorrhage.
6. Factors affecting healing of oral wounds and complication of wound healing.
7. Prevention of health care associated infections.
8. Write in detail about sampling methods.
9. Gingiva in health and disease.
10. Antibiotics in dentistry.

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

[MDS 1024]

OCTOBER 2024

Sub. Code: 2531

M.D.S DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2018-2019 onwards)

FIRST YEAR

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Innervation of dentin and pulp.
2. Classify paranasal air sinuses and discuss in detail about maxillary air sinus with its clinical importance.
3. Enumerate the factors involved in blood coagulation and describe the intrinsic mechanism of Coagulation.
4. Explain the regulation of blood calcium level and add a note on vitamin D.
5. Syncope and its management in dental office.
6. Diet and oral health
7. Developmental anomalies of teeth.
8. Analgesics in dentistry.
9. Hierarchy of evidence in research and discuss about systematic review.
10. Uses of bio statistics in health research.

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

[MDS 0525]

MAY 2025

Sub. Code: 2531

M.D.S DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2018-2019 onwards)

FIRST YEAR

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Pharyngeal arches and its derivatives.
2. Muscles of mastication.
3. Stages of shock.
4. Role of enzymes in health and disease.
5. Molecular methods in diagnosis of infection.
6. Adverse effects of drugs in the oral cavity.
7. Histopathology of developmental disturbances of teeth.
8. Oral foci of infection.
9. Procedural steps to minimize bias.
10. Various softwares used in Biostatistics.

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[MDS 1025]

OCTOBER 2025

Sub. Code: 2531

M.D.S DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2018-2019 onwards)

FIRST YEAR

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Evolution of skull and facial bones.
2. Anatomical considerations for Dental implants.
3. Fluid and electrolyte balance.
4. Biomarkers in Gingival Crevicular Fluid.
5. Oral Parasitic infections.
6. Role of receptor in mechanism of drug action.
7. Tumor host interaction.
8. Non-organ specific autoimmune diseases.
9. Standard guidelines and checklist for research designs.
10. Plagiarism and its importance.

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[MDS 0526]

MAY 2026

Sub. Code: 2531

M.D.S DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2018-2019 onwards)

FIRST YEAR

PART – I

BRANCH VII – PUBLIC HEALTH DENTISTRY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242531

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Development of Mandible and its age changes.
2. Dangerous areas of Head and Neck.
3. Function of RBC.
4. Role of minerals in Oral health.
5. Infection control in Outreach programmes.
6. Corticosteroids in Dentistry.
7. Cellular response to injury and cellular adaptations.
8. Sex chromosomes and its anomalies.
9. Various statistical method of testing hypothesis.
10. Correlation and regression tests.
