

[LO 541]

MAY 2019

Sub. Code: 2541

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

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Describe in detail the age changes occurring in the mandible and its applied aspects.
2. Write about the structure and histology of lymph node.
3. Write about the regulation of respiration.
4. Write about the significance of essential fatty acids.
5. Role of trace elements in health and disease.
6. Write about Disseminated Intravascular Coagulation.
7. Write about Infective granulomas and their applied oral aspects.
8. Drugs used in Xerostomia.
9. Anti-retroviral therapy.
10. Anti-diabetic drugs and their applied oral aspects.

[LP 541]

OCTOBER 2019

Sub. Code: 2541

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

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Cavernous sinus.
2. Pharyngeal arches and their derivatives.
3. Formation of lymph.
4. Essential aminoacids.
5. Virchow's triad.
6. Role of arachidonic acid and its metabolites in acute inflammation.
7. Antibiotic sensitivity test.
8. Loop diuretics.
9. Mechanism of drug resistance.
10. What is meant by data analysis? Explain different systematic ways of analyzing data.

[LQ 541]

**NOVEMBER 2020
(MAY 2020 SESSION)**

Sub. Code: 2541

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

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

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Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Write about the Digastric triangle and its clinical significance.
2. Write about the development of Tongue and its applied aspects.
3. Blood groups and their applied aspects.
4. Write about the mechanism of Deglutition and its applied aspects.
5. Write about the regulation of Blood Sugar.
6. Describe the role of Vitamin D in health.
7. Clinical applications of grading and staging of Cancer.
8. Anti-tuberculous therapy.
9. Local anesthetics used in Dentistry.
10. Oral infection with DNA virus.

[MDS 0321]

**MARCH 2021
(OCTOBER 2020 SESSION)**

Sub. Code: 2541

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

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Write about the Muscles Derived from the Pharyngeal Arches and their Applied Aspects.
2. Development of the Tongue and its Applied Aspects.
3. Hemoglobin and Hemoglobinopathies.
4. Write about the Regulation of Blood Pressure.
5. Parathyroid Hormone and its Role in Calcium Homeostasis.
6. Cellular Changes in Radiation Injury and its Manifestations.
7. Write about the Pathogenesis of Hemorrhagic Shock.
8. Tumor Angiogenesis and its Implications.
9. Anti-Diabetic Drugs and their Applied Oral Aspects.
10. Mycobacterial Infections.

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

[MDS 0322]

**MARCH 2022
(MAY 2021 SESSION)**

Sub. Code: 2541

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

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Write in detail about development of tongue. Add a note on developmental defects associated with it.
2. What is a structural unit of kidney. Enumerate the functions of the kidney. Write about Renin-Angiotensin system.
3. Write in detail about Vitamin C and its effects on oral tissues.
4. What are the various steps involved in wound healing.
5. List out the various methods of sterilization. Write in detail about chemical sterilization.
6. What are prostaglandins and what is their function. Write about newer anti-inflammatory drugs.
7. Draw anatomy of temporomandibular joint. Write about the muscles and ligaments associated with it and their functions.
8. Corticosteroids and its applications in dentistry.
9. Define anaemia. Classify them. Write in detail about the investigation on the diagnosis of anaemia.
10. Define bias and write its types.

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

[MDS 0223]

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

Sub. Code: 2541

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

FIRST YEAR

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Enumerate the various facial spaces. Write in detail about Ludwig's angina.
2. What are the functions of insulin and write in detail about oral manifestations of diabetes mellitus.
3. Write about fat soluble and water soluble vitamins. Write in detail about vitamin D and deficiency states associated with it.
4. Define metastasis. Write about different routes of spread of tumours.
5. Define immunity. What are the types of immunity and write about different types of vaccines.
6. Write about parotid gland and its relations. Write in detail about saliva secretion.
7. How is blood pressure regulated? Classify antihypertensive drugs and add a note on its effects on oral tissues.
8. Enlist the various cranial nerves. Write about trigeminal neuralgia.
9. Foci of infection.
10. What is sampling? Typing of sampling.

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

[MDS 1223]

DECEMBER 2023

Sub. Code: 2541

M.D.S. DEGREE EXAMINATION

FIRST YEAR

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Maxillary artery.
2. Innervation of Tongue.
3. Applied physiology of Platelets.
4. Diabetic Ketoacidosis.
5. Pathogenesis of Cardiogenic shock.
6. Role of growth factors in Acute Inflammation.
7. Viral inclusion bodies.
8. Tricyclic antidepressants.
9. Role of receptors in the mechanism of drug action.
10. Define 'bias' in Research. Discuss selection bias in detail.

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

[MDS 1024]

OCTOBER 2024

Sub. Code: 2541

M.D.S DEGREE EXAMINATION

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

FIRST YEAR

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Development of tongue and applied aspects.
2. Paranasal sinuses.
3. Regulation of salivary secretions.
4. Anaphylaxis.
5. Role of Vitamin D in oral health.
6. Chemical mediators of inflammation.
7. Focal sepsis.
8. Preanesthetic medication.
9. Hypertensive drugs pharmacotherapy and oral effects.
10. Tumor suppressor genes.

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

[MDS 0525]

MAY 2025

Sub. Code: 2541

M.D.S DEGREE EXAMINATION

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

FIRST YEAR

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Development of TMJ and describe the anatomy.
2. Artery and nerve supply of face.
3. Pain pathway.
4. Isoenzyme and clinical significance.
5. Blood grouping and applied aspects.
6. Antimicrobials in oral and maxillofacial medicine.
7. Role of vitamin A in oral health.
8. Immunoglobulins.
9. Function of Liver and Liver Function Test (LFT).
10. Tumor angiogenesis.

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

[MDS 1025]

OCTOBER 2025

Sub. Code: 2541

M.D.S DEGREE EXAMINATION

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

FIRST YEAR

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Head and neck lymph nodes and applied aspects.
2. Cavernous sinuses.
3. Regulation of respiration.
4. Hypersensitivity.
5. Role of vitamin C in oral health.
6. Necrosis and gangrene.
7. Corticosteroid in oral and maxillofacial medicine.
8. Cytokines.
9. Glucose Tolerance Test (GTT).
10. Oncogenes and carcinogenesis.

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

[MDS 0526]

MAY 2026

Sub. Code: 2541

M.D.S DEGREE EXAMINATION

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

FIRST YEAR

PART – I

BRANCH IX – ORAL MEDICINE AND RADIOLOGY

PAPER I – APPLIED BASIC SCIENCES

Q.P. Code: 242541

Time: 3 Hours

Maximum: 100 Marks

I. Elaborate on:

(10 x 10 = 100)

1. Principles of Antibiotic therapy. Classify Antibiotics and write on the Antibiotics used in orofacial infections.
2. Applied anatomy of facial nerve.
3. Describe about the modes of spread of malignancy.
4. Define Pain, write about Gate Control Theory.
5. Role of Vitamin C in Gingival Health.
6. Give a schematic diagram of Human Immunodeficiency Virus and write about the relationship between CD4 count and oral infections.
7. Hypersensitivity reactions.
8. Write about the muscle relaxants used in dentistry.
9. Renal Rickets.
10. Maxillary Sinus and its importance related to dentistry.
