

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

[MS 0524]

MAY 2024

Sub. Code: 4012

M.S. DEGREE EXAMINATION

BRANCH III – OPHTHALMOLOGY

**PAPER IV – RECENT ADVANCES IN OPHTHALMOLOGY
AND COMMUNITY OPHTHALMOLOGY**

Q.P. Code: 224012

Time: Three Hours

Maximum: 100 Marks

Elaborate on:

(2 x 15 = 30)

1. National prevention and control of blindness.
2. Recent advances in glaucoma surgeries and glaucoma drainage devices.

II. Write notes on:

(10 x 7 = 70)

1. Biologicals in ophthalmology.
2. Optical coherence tomography angiography.
3. Nano technology in drug delivery system.
4. School screening program.
5. Preventable blindness.
6. Descemet stripping endothelial keratoplasty.
7. Orbital prosthesis.
8. Preservation of donor cornea.
9. Botox in ophthalmology.
10. Fine needle aspiration cytology.

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

[MS 1224]

**DECEMBER 2024
(OCTOBER 2024 EXAM SESSION)**

Sub. Code: 4012

M.S. DEGREE EXAMINATION

OPHTHALMOLOGY

**PAPER IV – RECENT ADVANCES IN OPHTHALMOLOGY
AND COMMUNITY OPHTHALMOLOGY**

Q.P. Code: 224012

Time: Three Hours

Maximum: 100 Marks

Elaborate on:

(2 x 15 = 30)

1. Discuss the
 - a) Diabetic population rate in, World / India / Tamil Nadu.
 - b) Strategies and for screening – Diabetic Retinopathy at community level.
 - c) Role of secondary and tertiary care centers in treatment.
2. List out
 - a) Some of the causes for difficult cataract surgeries.
 - b) Management – Step wise.
 - c) Recent modalities available for the same.

II. Write notes on:

(10 x 7 = 70)

1. Adjustable sutures.
2. NPCB – 12th five-year plan.
3. Hospital Corneal Retrieval Programme.
4. Amblyopia – screening and management.
5. Genetic counselling regarding potential blinding diseases.
6. Botulinum toxin.
7. Cortical blindness.
8. Ultrasonic cleaning.
9. Recent management trends in chemical injuries.
10. RAINBOW study.

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

[MS 0525]

MAY 2025

Sub. Code: 4012

M.S. DEGREE EXAMINATION

OPHTHALMOLOGY

**PAPER IV – RECENT ADVANCES IN OPHTHALMOLOGY
AND COMMUNITY OPHTHALMOLOGY**

Q.P. Code: 224012

Time: Three Hours

Maximum: 100 Marks

Elaborate on:

(2 x 15 = 30)

1. Discuss the role of Teleophthalmology in community eye care. List the advantages and disadvantages.
2. Discuss types and principles of lasers in ophthalmology. Elaborate on their uses in ophthalmic surgery.

II. Write notes on:

(10 x 7 = 70)

1. OCT - Angiography.
2. Aflibercept.
3. Genetics in retinitis pigmentosa.
4. Current concepts in Intraocular Lens (IOL).
5. Recent trends in macular hole management.
6. Dyes in vitreoretinal surgery.
7. Minimally invasive glaucoma surgery.
8. Optical biometry.
9. Low Vision Aids.
10. SLET (Simple Limbal Epithelial Transplantation).

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

[MS 1025]

OCTOBER 2025

Sub. Code: 4012

M.S. DEGREE EXAMINATION

OPHTHALMOLOGY

**PAPER IV – RECENT ADVANCES IN OPHTHALMOLOGY
AND COMMUNITY OPHTHALMOLOGY**

Q.P. Code: 224012

Time: Three Hours

Maximum: 100 Marks

Elaborate on:

(2 x 15 = 30)

1. During a middle school survey around 30% children not having 6/6 vision.
 - a) Discuss the various, common / less common etiologies for this.
 - b) Treatment for the same.
 - c) Improvement steps in eye care facilities to reduce this percentage.
2. Discuss the
 - a) Etiologies of leucomatous corneal opacity (corneal blindness).
 - b) Treatment options available.
 - c) Recent Advancement in techniques for this condition.

II. Write notes on:

(10 x 7 = 70)

1. Low vision aids.
2. Neonatal unit protocols for ROP.
3. RAAB survey.
4. Macular degeneration – magnitude of disease and management in community level.
5. Viral conjunctivitis – preventive measures.
6. MIGS.
7. Newer approaches in pediatric cataract.
8. Adjustable sutures.
9. Ocular trauma score.
10. Laser filtering surgery.
