

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

[AHS 0122]

JANUARY 2022

Sub. Code: 2752

(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

B.OPTOM
THIRD YEAR (Regulation 2018-2019)
PAPER II – ORTHOPTICS
Q.P. Code : 802752

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about the Extra ocular muscles of the eyeball along with its actions, innervations and blood supply.
2. Write in detail about Convergence with neat diagram, various components of convergence and its Anomalies.
3. Write in detail about Divergent Strabismus, along with classification, investigations and management.

II. Write notes on:

(8 x 5 = 40)

1. Physiological Diplopia.
2. Non-Harmonious Abnormal Retinal Correspondence.
3. Microtropia.
4. Brown's Syndrome.
5. Hess Charting.
6. Management for Amblyopia.
7. Fick's axes of rotation.
8. Yoke muscles.

III. Short answers on:

(10 x 3 = 30)

1. Simultaneous Macular Perception.
2. Egocentric Localisation.
3. Sherrington's law.
4. Orthophoria.
5. Eccentric Fixation.
6. RAF ruler.
7. After Image test.
8. Saccades and pursuits.
9. Negative Relative Accommodation.
10. Esotropia.

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

[AHS 0922]

SEPTEMBER 2022

Sub. Code: 2752

(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

B.OPTOM
THIRD YEAR (Regulation from 2018-2019)
PAPER II – ORTHOPTICS
Q.P. Code : 802752

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Exotropia - classification, investigation and management.
2. Anatomy of extraocular muscles, innervation and blood supply.
3. Neuromuscular anomalies- classification and etiological factors.

II. Write notes on:

(8 x 5 = 40)

1. Duane retraction syndrome.
2. Sensory adaptation.
3. Maddox wing test.
4. AC/A ratio.
5. Synaptophore.
6. Duochrome test.
7. Horopter.
8. Retinal rivalry.

III. Short answers on:

(10 x 3 = 30)

1. Antagonist.
2. ARC.
3. Uncrossed diplopia.
4. Strabismic amblyopia.
5. Andersons goggles.
6. Eccentric fixation.
7. Nystagmus.
8. AV phenomenon.
9. Near reflex triad.
10. Congenital muscle fibrosis.

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

[AHS 0423]

APRIL 2023

Sub. Code: 2752

B.OPTOM
THIRD YEAR (Regulation 2018-2019 onwards)
PAPER II – ORTHOPTICS
Q.P. Code : 802752

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Amblyopia – Definition, development, grades and anomalies.
2. Binocular Single Vision – Grading and Abnormalities.
3. Anomalous Retinal correspondence.

II. Write notes on:

(8 x 5 = 40)

1. Eccentric Fixation.
2. A.V Phenomenon.
3. Prism bar cover test.
4. Abnormal head posture and its significance.
5. Restrictive Squint.
6. Pseudostrabismus.
7. Yolk muscles.
8. Assessment of AC / A ratio.

III. Short answers on:

(10 x 3 = 30)

1. Binocular fusion.
2. Anisokonia.
3. Duction.
4. Herring's law.
5. Visual distance.
6. Cyclophoria.
7. Two test for suppression.
8. Saccades and Pursuits.
9. Stereopsis.
10. Brown syndrome.

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

[AHS 1123]

NOVEMBER 2023

Sub. Code: 2752

B.OPTOM

THIRD YEAR (Regulation 2018-2019 onwards)

PAPER II – ORTHOPTICS

Q.P. Code: 802752

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about Esotropia- causes, classification, investigations and treatment.
2. Write in detail about the Horopter with neat diagram and explain about pannum's fusional area and Fixation Disparity.
3. What is Suppression? Explain its causes, investigation and treatment.

II. Write notes on:

(8 x 5 = 40)

1. AC/A ratio.
2. Prism Bar cover test.
3. Near point of Convergence.
4. Monocular Estimation Method.
5. Amplitude of Accommodation.
6. Duane's Syndrome.
7. Diplopia Charting.
8. Paralytic Strabismus.

III. Short answers on:

(10 x 3 = 30)

1. Hering's Law.
2. Grades of Binocular single vision.
3. Nystagmus blockage syndrome.
4. Cyclophoria.
5. Types of Diplopia.
6. Synergist and Antagonist.
7. Pseudo strabismus.
8. Worth four dot test.
9. Bagolini Striated glass.
10. Corresponding retinal points.

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

[AHS 0424]

APRIL 2024

Sub. Code: 2752

B.OPTOM

THIRD YEAR (Regulation 2018-2019 onwards)

PAPER II – ORTHOPTICS

Q.P. Code: 802752

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Amblyopia – Definition, clinical importance and methods of evaluation and management.
2. Define Nystagmus, elaborate on its etiology, types and management.
3. How is Hess charting done. What are its indications? Explain with diagram the procedure and clinical interpretation.

II. Write notes on:

(8 x 5 = 40)

1. Define AC/A ratio. What is its clinical significance in convergence anomalies?
2. What are the various recti and oblique muscles?
3. Anomalies of Accommodation.
4. Convergence types and Components.
5. Anomalous Retinal Correspondence.
6. Park's three step test.
7. 'A' phenomenon.
8. Comitant and Incomitant strabismus.

III. Short answers on:

(10 x 3 = 30)

1. Worth four dot test – Indications and procedure in normal subjects.
2. Cyclophoria.
3. Hering's law.
4. Use of Red green goggles in Orthoptics.
5. Maddox wing.
6. Pseudoesotropia.
7. Vision therapy in correction of Amblyopia.
8. Fusional vergence.
9. Convergence insufficiency - Management.
10. Brown syndrome.

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

[AHS 0125]

JANUARY 2025

Sub. Code: 2752

B. OPTOM

THIRD YEAR (Regulation 2018-2019 onwards)

PAPER II – ORTHOPTICS

Q.P. Code: 802752

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Anatomy of Extra ocular muscles, actions of Recti and Obliques, LPS.
2. Difference between Paralytic and Non-Paralytic squint.
3. Nystagmus – Definition, Classification, Etiology, Types and Management.

II. Write notes on:

(8 x 5 = 40)

1. Test for Binocular Single Vision.
2. Esotropia.
3. Treatment of Amblyopia.
4. Synoptophore.
5. Visually guided behaviour.
6. Hess screen.
7. Diplopia.
8. Spatial sense.

III. Short answers on:

(10 x 3 = 30)

1. Sherrington's law.
2. Horopter.
3. Maddox rod.
4. Retinal rivalry.
5. Duane's syndrome.
6. Vergence.
7. Double elevation palsy.
8. Fick's axes.
9. Two basic principles of Squint surgery.
10. R.A.F. Ruler.

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

[AHS 0425]

APRIL 2025

Sub. Code: 2752

B. OPTOM

THIRD YEAR (Regulation 2018-2019 onwards)

PAPER II – ORTHOPTICS

Q.P. Code: 802752

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about Accommodation with neat diagram, various theories of accommodation and its measurements.
2. Write in detail about Abnormal Retinal Correspondence, its types, investigations and treatment.
3. Write in detail about Amblyopia along with classification, investigations and treatment.

II. Write notes on:

(8 x 5 = 40)

1. Accommodative Esotropia.
2. Convergence Insufficiency.
3. Accommodation Infacility.
4. A-V Phenomenon.
5. Worth four dot test with neat diagram.
6. Dynamic Retinoscopy.
7. Fixation Disparity.
8. Grades of Binocular Single Vision.

III. Short answers on:

(10 x 3 = 30)

1. Visual Direction.
2. 4 Prism Base out test.
3. Bruckner reflex test.
4. Recession and Resection of Extra ocular muscles.
5. Neutral density filter.
6. Versions and vergence ocular movements.
7. Hirschberg's test.
8. AC/A ratio.
9. Maddox wing.
10. Monocular cues.

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

[AHS 1125]

NOVEMBER 2025

Sub. Code: 2752

B. OPTOM

THIRD YEAR (Regulation 2018-2019 onwards)

PAPER II – ORTHOPTICS

Q.P. Code: 802752

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Write in detail about Amblyopia – etiology, investigations and its management.
2. Write in detail about the investigations in Non-Strabismic Binocular vision assessment and its uses.
3. Write in detail about the Neuro muscular anomalies classification and etiological factors.

II. Write notes on:

(8 x 5 = 40)

1. Dynamic Retinoscopy.
2. Fixations disparity.
3. Grades of Binocular Single Vision.
4. After image test.
5. Double Maddox rod test.
6. Park Three-step test.
7. Types of Nystagmus.
8. Diplopia charting.

III. Short answers on:

(10 x 3 = 30)

1. Forced Duction test.
2. Accommodation facility.
3. Proximal accommodation.
4. Physiological diplopia.
5. 4 prism base out test.
6. Monocular cues.
7. Hirschberg's test.
8. Neutral density filter.
9. Pseudo strabismus.
10. Yoke muscles.
