

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

[AHS 0222]

**FEBRUARY 2022  
(OCTOBER 2021 EXAM SESSION)**

**Sub. Code: 1624**

**M.OPTOM**

**FIRST YEAR (Candidates admitted from 2018-2019 & 2020-2021 onwards)**

**PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

*Q.P. Code : 281624*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Write in detail about Exotropia and its classification, clinical features and optical and non-optical management.
2. Write in detail about Nystagmus, clinical features and types.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Testing colour vision and stereopsis in preschooler
2. Role of refractive error on the development of strabismus
3. What is the role of accommodative and vergence mechanisms in esotropia?
4. What are the Clinical features of sensory exotropia and management?
5. Expand and discuss on APGAR score
6. Dispensing consideration for single vision, bi-focal and progressive lenses for children
7. Duane's retraction syndrome
8. Congenital ptosis and Examination
9. Diagnostic for amblyopia
10. Role of the optometrist in diagnosis and management of Dyslexia

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

**[AHS 0522]**

**MAY 2022**

**Sub. Code: 1624**

**M.OPTOM**

**FIRST YEAR (Candidates admitted from 2018-2019 & 2020-2021 onwards)**

**PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

***Q.P. Code : 281624***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Aetiology and pathophysiology of Cranial Nerve III palsy and elaborate on the diagnostic test and its management.
2. Esotropia classification, features and management.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Krimsky and Modified Krimsky.
2. Beilschowsky's Head Tilt Test.
3. What are the effects of COVID and online classes on Myopia progression among school-going children?
4. What factors in pregnancy increase the risk of congenital cataracts?
5. Convergence insufficiency.
6. Diagnostic test for Microtropia.
7. Refractive correction options for pediatric aphakia.
8. Adult amblyopia and management.
9. Visual acuity testing in infants.
10. Importance of AC/A ratio.

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

**[AHS 1022]**

**OCTOBER 2022**

**Sub. Code: 1624**

**M.OPTOM  
FIRST YEAR**

**(Candidates admitted from 2018-2019 & 2020-2021 onwards)  
PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

*Q.P. Code : 281624*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Aetiology and pathophysiology of III cranial nerve palsy and elaborate on the diagnostic test and its management.
2. Write in detail about Esotropia and its causes, classification, clinical features and optical and non-optical management.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Browns syndrome.
2. Discuss the special consideration to be kept in mind while dispensing glasses for children.
3. Diagnosis and management of amblyopia.
4. Describe the role of atropine in myopia management.
5. Intermittent divergent squint.
6. What are the different types of Nystagmus and its available management options?
7. Write in detail about accommodative insufficiency.
8. Testing colour vision and stereopsis in preschooler.
9. What is ARC? How to assess and manage ARC?
10. Role of the optometrist in diagnosis and management of Dyslexia.

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

**[AHS 0523]**

**MAY 2023**

**Sub. Code: 1624**

**M.OPTOM  
FIRST YEAR**

**(Candidates admitted from 2020-2021 onwards)**

**PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

***Q.P. Code: 281624***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Write on different types of prisms and its application in strabismus.
2. Write on Dyslexia and Optometrists role in the same.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Color vision testing in Pediatric Population.
2. Clinical features in Infantile Esotropia.
3. Write on APGAR score.
4. Use of Cycloplegics in Infant Refraction.
5. Discuss in detail regarding Dispensing guidelines in Pediatrics.
6. Write on development of Binocular vision in Infants.
7. Discuss Myopia management options in Children.
8. Discuss accommodative insufficiency in detail - its symptoms, signs, tests and management options.
9. Write on Electrodiagnostics role in Pediatric Population.
10. Evidence-Based management guidelines in Amblyopia.

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

**[AHS 1023]**

**OCTOBER 2023**

**Sub. Code: 1624**

**M.OPTOM  
FIRST YEAR (From 2020-2021 onwards)  
PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

***Q.P. Code: 281624***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Aetiology and pathophysiology of III cranial nerve palsy and elaborate on the diagnostic test and its management.
2. Write in detail about Esotropia and its causes, classification, clinical features and optical and non-optical management.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Browns syndrome.
2. Discuss the special consideration to be kept in mind while dispensing glasses for children.
3. Diagnosis and management of amblyopia.
4. Describe the role of atropine in myopia management.
5. Intermittent divergent squint.
6. What are the different types of Nystagmus and its available management options?
7. Write in detail about accommodative insufficiency.
8. Testing colour vision and stereopsis in preschooler.
9. What is ARC? How to assess and manage ARC?
10. Role of the optometrist in diagnosis and management of Dyslexia.

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

**[AHS 0524]**

**MAY 2024**

**Sub. Code: 1624**

**M.OPTOM**

**FIRST YEAR (From 2020-2021 onwards)**

**PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

***Q.P. Code: 281624***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Write on Accommodative and Non-Accommodative forms of Esotropia.
2. Stereopsis Testing in Children.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Perceptual correlates in Ishihara Pseudo-Isochromatic testing plates.
2. "Learn to Read", "Read to Learn", - Elaborate.
3. Write on Vestibulo Ocular Reflex.
4. Explain Accommodation plane and Vergence Plane with a diagram.
5. Anisometropic Amblyopia management options.
6. Write on classification of myopia.
7. Use of cycloplegics in Pediatrics.
8. Write on Brown's syndrome.
9. Clinical Use of Yoke Prisms.
10. Explain Park's Three Step test with an example.

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

**[AHS 1024]**

**OCTOBER 2024**

**Sub. Code: 1624**

**M.OPTOM  
FIRST YEAR (From 2020-2021 onwards)  
PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

***Q.P. Code: 281624***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Write in detail about Esodeviation and its classification, clinical features, evaluation and management.
2. Write in detail about Nystagmus, clinical features and types.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Write about the Hess chart and diplopia charting findings in 6<sup>th</sup> nerve palsy.
2. Write about development of scotopic retinal sensitivity.
3. Write about convergence insufficiency – features, evaluation and management.
4. Write about the role of the optometrists in the diagnosis and management of reading disabilities.
5. When does color vision develop in children? Write about the tests for color vision in children.
6. Write about Duane's retraction syndrome.
7. Indications and importance of performing cycloplegic refraction in pediatric and binocular vision clinic.
8. Write about anomalous retinal correspondence and its types.
9. Write about the mechanism of Dichoptic training and its application in vision therapy for binocular vision disorders.
10. Write about emmetropization and the feedback mechanisms.

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

**[AHS 0525]**

**MAY 2025**

**Sub. Code: 1624**

**M.OPTOM**

**FIRST YEAR (From 2020-2021 onwards)**

**PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

***Q.P. Code: 281624***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Explain Clinical features of Nystagmus and Optometric management.
2. Exotropia - Classification, Clinical features, optical and non-optical management in different types of Exotropia.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Prism prescription methods.
2. TORCH - Explain.
3. Short note on Infant Accommodation and Convergence.
4. Dynamic Retinoscopy techniques.
5. Emmetropization.
6. Write on Congenital Ptosis.
7. "Sheard's and Percival's Criterion"- Explain.
8. Dispensing of contact lenses in Pediatrics.
9. Pediatric Vision testing charts for Infants.
10. List and write few words on Common Genetic eye diseases in pediatrics.

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

**[AHS 1025]**

**OCTOBER 2025**

**Sub. Code: 1624**

**M.OPTOM  
FIRST YEAR (From 2020-2021 onwards)  
PAPER IV – PAEDIATRIC OPTOMETRY AND BINOCULAR VISION**

***Q.P. Code: 281624***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Describe in detail the various methods of vision assessment in the paediatric population. Discuss the techniques suitable for different age groups and their clinical significance.
2. Describe the different types of prisms used in clinical practice and explain their applications in the diagnosis and management of strabismus.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Write briefly on the refractive error trends observed till Emmetropization.
2. Define stereopsis and explain its types.
3. North-Eastern State University College of Optometry (NSUCO) Oculomotor test scoring method for saccadic eye movements.
4. Divergence excess with its characteristics.
5. Methods of assessing visual field in children.
6. Dyslexia and its basic types.
7. Anomalous retinal correspondence and its types.
8. Define AC/A ratio and methods of calculating it.
9. Clinical significance of electrophysiological testing in assessing visual function in children.
10. Factors to be considered in selecting frames for the children.

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