February 2011

[KY 6024] **Sub. Code: 6024**

BACHELOR OF OPTOMETRY DEGREE EXAMINATION.

Second Year

Paper III — VISUAL OPTICS - I & II

Q.P. Code : 806024

Time : Three hours **Maximum : 100 marks**

Answer ALL Questions

Draw diagrams wherever necessary

I. Essays: **(2 x 15 = 30)**

1. Write in detail about etiology, clinical features, types and management of astigmatism.
2. Write in detail about the drugs used in refraction and the procedure of cycloplegic retinoscopy.

II. Short Notes : **(10 x 5 = 50)**

1. Cardinal data of a spectacle lens.
2. Components of optical system.
3. Axes of the eye.
4. Optical aberrations of the eye.
5. Prism.
6. Factors affecting visual acuity.
7. Presbyopia.
8. Components of Hypermetropia.
9. Signs of Pseudophakia.
10. Anomalies of accommodation.

III. Short Answers : **(10 x 2 = 20)**

1. Vergence.
2. Magnification.
3. Angle kappa.
4. AC/A ratio.
5. Amblyopia.
6. Types of Myopia.
7. Define Anisometropia.
8. Uses of cross cylinder.
9. Use of Pinhole.
10. Vertex distance.

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August 2011

[KZ 0811] **Sub. Code: 6024**

BACHELOR OF OPTOMETRY DEGREE EXAMINATION.

Second Year

Paper III — VISUAL OPTICS - I & II

Q.P. Code : 806024

Time : Three hours **Maximum : 100 marks**

Answer ALL Questions

Draw diagrams wherever necessary

I. Essays: **(2 x 15 = 30)**

1. Optics, types, clinical features and management of Astigmatism.
2. Principles and technique of retinoscopy.
3. Cardinal points of the eye.

II. Short Notes : **(10 x 5 = 50)**

1. Measurement of corneal thickness (Pachymetry).
2. Far point of the eye.
3. Jackson cross cylinder.
4. Pseudophakia.
5. Curvature myopia.
6. Uses of Prisms in Ophthalmology. 7. Angle kappa.
8. Anisometropic Amblyopia.

III. Short Answers : **(10 x 2 = 20)**

1. Transpose: + 4.00 D Sph / - 1.00 D Cyl x 55^{o}.
2. Optical axis of the eye.
3. Identification of a cylindrical lens.
4. Maddox wing.
5. Visual angle.
6. Correction of Presbyopia.
7. Diagnosis of Aphakia.
8. Refractive index of the crystalline lens.
9. Facultative Hypermetropia.
10. Refractive error in cortical cataract.

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[LB 0212] **AUGUST 2012** **Sub. Code: 6024**

B.Sc. OPTOMETRY

SECOND YEAR

PAPER III – VISUAL OPTICS I & II

Q.P. Code : **806024**

Time : Three hours **Maximum : 100 marks**

(180 Mins) Answer ALL questions in the same order.

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. Write in detail about etiology, types of hypermetropia, clinical features and management.	7	20	10
2. Write in detail about drugs used in refraction and the technique of retinoscopy.	7	20	10
3. AC/A ratio and anomalies of accommodation.	7	20	10
II .Write notes on:			
1. Cardinal points of the eye.	4	10	5
2. Types of astigmatism and its management.	4	10	5
3. Use of Prisms in Ophthalmology.	4	10	5
4. Visual acuity in children.	4	10	5
5. Duochrome test.	4	10	5
6. Optical aberrations of the eye.	4	10	5
7. Refraction of normal human crystalline lens.	4	10	5
8. Signs of aphakia and difficulties of aphakic correction.	4	10	5
III. Short answers on:			
1. Types of myopia.	2	4	3
2. Aniseikonia.	2	4	3
3. Angle alpha and Kappa.	2	4	3
4. Jackson cross cylinder.	2	4	3
5. Maddox rod.	2	4	3
6. Identification of spherical lens and its power.	2	4	3
7. Far point of the eye.	2	4	3
8. Transpose +3.00Sph / -2.00Cyl x 75°.	2	4	3
9. Corneal curvature and its measurement.	2	4	3
10. Binocular refraction.	2	4	3

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[LC 0212] **FEBRUARY 2013** **Sub. Code: 6023**

B.Sc. OPTOMETRY

SECOND YEAR

PAPER II – OCULAR DISEASES I & II

Q.P. Code : **806023**

Time : Three hours **Maximum : 100 marks**

I. Elaborate on : **(3 x 10=30)**

1. Field defects in neuro-ophthalmology.
2. Complications of cataract surgery.
3. Tumors of iris.

II. Write notes on: **(8 x 5=30)**

1. Lagophthalmos.
2. Orbital cellulites.
3. Fungal keratitis.
4. Retinitis pigmentosa.
5. Optic atrophy.
6. Uveitis in parasitic infections.
7. Tonometry.
8. Ectopia lentis.

III. Short answer on: **(10 x 3=30)**

1) Fundus fluroscein angiography.
2) Viral keratitis.
3) Vitamin A deficiency.
4) Ectropion.
5) Microphthalmos.
6) Asteroid hyalosis.
7) Drusen.
8) Adies pupil.
9) Scleritis.
10) Cystoid macular oedema.

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[LD 0212] **AUGUST 2013** **Sub.Code :6024**

B.SC. OPTOMETRY
SECOND YEAR
PAPER III – VISUAL OPTICS (I & II)
Q.P. Code: 806024

Time: Three hours **Maximum : 100 Marks**

Answer All questions

I Elaborate on: **(3x10 =30)**

1. Define Retinoscopy. Discuss the technique, principles and practice of Retinoscopy
2. Discuss in detail about the optics, signs and management of Aphakia
3. Define accommodation. Discuss in detail the anomalies of accommodation and the management

II. Write notes on: **(8 x 5 = 40)**

1. Sturm's conoid
2. Dueochrome test
3. Axes of eye
4. Define Amblyopia and a note on Anisometropic Amblyopia
5. Convergence insufficiency
6. Methods of testing visual acuity in children
7. Jackson cross cylinder and its applications
8. Prisms in ophthalmology

III. Write short answers on: **(10 x 3 = 30)**

1. Astigmatic fan
2. Maddox wing
3. Transpose and Diagnose: +3.5 D sph. / -1.50 D cyl. X 35^{o}
4. Post mydriatic test
5. Facultative hypermetropia
6. Presbyopic correction
7. Hirschberg test
8. Pinhole
9. Types of myopia
10. Optical components of eye

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[LE 0212] **FEBRUARY 2014** **Sub.Code :6024**

B.SC. OPTOMETRY
SECOND YEAR
PAPER III – VISUAL OPTICS (I & II)
Q.P. Code: 806024

Time: Three hours **Maximum : 100 Marks**

Answer All questions

I Elaborate on: **(3x10 =30)**

1. Write in detail about optics, types, clinical features and management of Myopia
2. Write the procedure in detail of Dynamic Retinoscopy
3. Define visual acuity. Discuss in detail the various types of visual acuity charts and their applications

II. Write notes on: **(8 x 5 = 40)**

1. AC/A Ratio
2. Sturm's conoid
3. Transposition
4. Pinhole test
5. Cardinal points of the eye
6. Prisms in Ophthalmology
7. Axes of the eye
8. Optical aberrations of the eye

III. Write short answers on: **(10 x 3 = 30)**

1. Astigmatic fan
2. Kappa angle
3. Post mydriatic test
4. Second sight
5. Vergence
6. Vertex distance
7. Hirschberg test
8. Maddox Rod
9. Ametropia
10. Latent Hypermetropia

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[LF 0212] **AUGUST 2014** **Sub.Code :6024**

B.Sc. OPTOMETRY
SECOND YEAR
PAPER III – VISUAL OPTICS (I & II)
Q.P. Code: 806024

Time: Three hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Write in detail about the drugs used in refraction and the procedure of cycloplegic retinoscopy.
2. Write in detail about keratometry.
3. Classification of Myopia.

II. Write notes on: **(8 x 5 = 40)**

1. Anisometropia
2. Fogging
3. Angle Kappa
4. Duochrome Test
5. Snellen's Chart
6. Factors affecting visual acuity
7. Components of optical system
8. Magnification

III. Write short answers on: **(10 x 3 = 30)**

1. Vergence
2. Magnification
3. Ac / A ratio
4. Amblyopia
5. Use of pinhole
6. Facultative hypermetropia
7. Visual angle
8. Astigmatic fan
9. Ametropia
10. Null Point

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[LG 0215] **FEBRUARY 2015** **Sub.Code :6024**

B.Sc. OPTOMETRY

SECOND YEAR

PAPER III – VISUAL OPTICS - (I & II)

Q.P. Code: 806024

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Optics, types, clinical features and management of Hypermetropia.
2. Different visual acuity charts and their applications.
3. Classification of Myopia.

II. Write notes on: **(8 x 5 = 40)**

1. Measurement of corneal thickness (Pachymetry).
2. Jackson cross cylinder.
3. Uses of prisms in ophthalmology.
4. Optics of Astigmatism.
5. Anisometropia.
6. Pseudophakia.
7. Optical aberrations of the eye.
8. Axes of the eye.

III. Write short answers on: **(10 x 3 = 30)**

1. Maddox Wing.
2. Angle Kappa.
3. Null point.
4. Anetropia.
5. Visual angle.
6. Identification of cylindrical lens.
7. RAF ruler.
8. Maddox Rod.
9. Cycloplegia.
10. Visual axis.

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[LH 0815] **AUGUST 2015** **Sub. Code: 6024**

B.Sc. OPTOMETRY

SECOND YEAR

PAPER III – VISUAL OPTICS - (I & II)

Q.P. Code: 806024

Time : Three Hours **Maximum : 100 marks**

Answer ALL questions

I. Elaborate on: **(3 x 10 = 30)**

1. Write in detail about etiology, types of Myopia, clinical features and its management.
2. Define Retinoscopy. Discuss the technique, principles and practice of Retinoscopy.
3. Different visual acuity charts and their applications.

II. Write notes on: **(8 x 5 = 40)**

1. Duo chrome test.
2. Keratometry.
3. Jackson cross cylinder and its applications.
4. Optical components of eye.
5. Types of myopia.
6. Cardinal points of the eye.
7. Types of astigmatism and its management.
8. Fogging.

III. Short Answers on: **(10 x 3 = 30)**

1. RAF ruler.
2. What is Ametropia?
3. Cardinal points of the eye.
4. Magnification.
5. Define Anisometropia.
6. Amblyopia.
7. Pseudophakia.
8. Define: Presbyopia.
9. AC/A ratio
10. Prisms in ophthalmology.

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[LI 0216] FEBRUARY 2016 **Sub.Code :6024**

B.Sc. OPTOMETRY

SECOND YEAR

PAPER III – VISUAL OPTICS - (I & II)

Q.P. Code: 806024

Time: Three Hours **Maximum : 100 Marks**

Answer All questions

I. Elaborate on: **(3 x 10 = 30)**

1. Optics, types, clinical features and management of Hypermetropia.
2. Write in detail about the drugs used in refraction and the procedure of cycloplegic retinoscopy.
3. Write in detail about Anisometropia and Anisekonia.

II. Write notes on: **(8 x 5 = 40)**

1. Factors affecting visual acuity.
2. Pseudophakia.
3. Components of Hypermetropia.
4. Angle kappa.
5. Methods of testing visual acuity in children.
6. Post mydriatic test.
7. Amblyopia.
8. Components of optical system.

III. Short answers on: **(10 x 3 = 30)**

1. Optical aberrations of the eye.
2. Vergence.
3. Use of Pinhole.
4. Transpose:- -4.00DSPH/+1.50DCYL *25.
5. Facultative Hypermetropia.
6. Hirschberg test.
7. Vertex distance.
8. Astigmatic fan.
9. Visual axis.
10. Principle of keratometer.

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[LJ 0816] AUGUST 2016 **Sub. Code: 6024**

B.Sc. OPTOMETRY
SECOND YEAR
PAPER III – VISUAL OPTICS - I

Q.P. Code: 806024

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Write in detail about etiology, types of hypermetropia, clinical features and management.
2. Define Retinoscopy. Discuss the technique, principles and practice of Retinoscopy.
3. Write in detail about etiology, clinical features, types and management of astigmatism.

II. Write notes on: **(8 x 5 = 40)**

1. Components of eye as optical system.
2. Prescribing Prisms.
3. Factors affecting visual acuity.
4. Presbyopia and types of correction.
5. Components of Hypermetropia.
6. Anomalies of accommodation.
7. Binocular Balancing.
8. Aphakia and Pseudophakia.

III. Short answers on: **(10 x 3 = 30)**

1. AC/A ratio.
2. Amblyopia.
3. Types of Myopia.
4. Define Anisometropia.
5. Uses of cross cylinder.
6. Transpose: + 3.00 D Sph / - 1.50 D Cyl x 180.
7. RAF ruler.
8. Identification of a cylindrical lens.
9. Maddox wing.
10. Refractive index of the crystalline lens.

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[LK 0217] FEBRUARY 2017 **Sub. Code: 6024**

B.Sc. OPTOMETRY
SECOND YEAR
PAPER III – VISUAL OPTICS - I

Q.P. Code: 806024

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Write in detail about etiology, types of Myopia, clinical features and its management.
2. Write in detail about the drugs used in refraction and the procedure of cycloplegic retinoscopy.
3. Define accommodation and AC/A. Discuss in detail the anomalies of accommodation and the management.

II. Write notes on: **(8 x 5 = 40)**

1. Measurement of corneal thickness (Pachymetry).
2. Colour Vision Test.
3. Anisometropic Amblyopia.
4. Sturm's conoid.
5. Convergence insufficiency.
6. Methods of testing visual acuity in children.
7. Contrast Sensitivity tests.
8. Stereogram.

III. Short answers on: **(10 x 3 = 30)**

1. Define Ametropia.
2. Transpose: + 3.00 D Sph / + 1.00 D Cyl x 55o.
3. Binocular refraction.
4. Post mydriatic test.
5. Hirschberg test.
6. Astigmatic clock dial test.
7. Spherical Equivalent.
8. Latent Hypermetropia.
9. Magnification.
10. Pinhole test.

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[LL 0817] AUGUST 2017 **Sub. Code: 6024**

B.Sc. OPTOMETRY

SECOND YEAR

PAPER III – VISUAL OPTICS - I

Q.P. Code: 806024

Time: Three Hours **Maximum: 100 Marks**

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. Write in detail on aetiology, components, clinical features and treatment of hypermetropia.
2. Explain principle, optics and procedure of retinoscopy.
3. Write in detail about aphakia.

II. Write notes on: **(8 x 5 = 40)**

1. Snellens Visual acuity charts.
2. Aetiology of refractive errors.
3. Axes and angles of the eye.
4. Pathological myopia.
5. Types of anisometropia.
6. Sturm's conoid.
7. Jacksons cross cylinder.
8. Purkinje Sanson images.

III. Short answers on: **(10 x 3 = 30)**

1. Pseudomyopia.
2. RAF ruler.
3. With the rule astigmatism.
4. Types of IOL.
5. Transpose : +2.50Dsph / -1.50D cyl axis 45.
6. Axial ametropia.
7. PMT.
8. Fogging.
9. Depth of focus.
10. Tentative addition based on age in presbyopia.

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