# Rajiv Gandhi University of Health Sciences, Karnataka

Final Year B.Sc. Optometry Degree Examination - APRIL 2015

Time: Three Hours | Max. Marks: 100 Marks

## Visual Optics

## Q.P. CODE: 1632

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Four) 4 x 10 = 40 Marks

1. What is accommodation? Discuss the associated anomalies of accommodation.
2. What is Subjective refraction? Explain in detail about the different ways of Subjective refraction.
3. What is Myopia? Discuss the optical principle, clinical types, features and treatment options.
4. Explain about schematic and reduced eyes with neat diagram.
5. Explain the optics of Retinoscopy. Briefly explain Retinoscopy of Myopia and Hypermetropia.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

6. Explain the optical defects of the eye.
7. Brief on types of Hypermetropia
8. Brief on Sturm's conoid
9. Define range and amplitude of accommodation with example.
10. Define Presbyopia. Mention its clinical symptoms and treatment options.
11. Define Anisometropia and its treatment options.
12. Types of astigmatism with examples
13. Define Aphakia and its disadvantages.
14. Explain relation between accommodation and convergence.

SHORT ANSWERS 10 x 2 = 20 Marks

15. Aniseikonia
16. Transpose the following in minus cylinder form:
    $+2.25/+1.25 \times 90^0$
    $+1.50/+0.750 \times 180^0$
17. Uses of Cycloplegia
18. Define Pseudophakia.
19. Image formed by convex lens
20. Define Emmetropia.
21. Convert the following in feet system: (a) 6/60 (b) 6/15.
22. Define contrast sensitivity.
23. Define AC/A ratio.
24. Define near point of convergence.

# Rajiv Gandhi University of Health Sciences, Karnataka

## III Year B.Sc. Optometry Degree Examination - APRIL 2015

Time: Three Hours Max. Marks: 100 Marks

## Low Vision Aids and Geriatric Optometry

## Q.P. CODE: 1636

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Four) 4 x 10 = 40 Marks

1. A telescope is composed of +10D objective lens and -30D ocular lens. The system is focused for infinity by an Emmetropic patient, determine the following.
   a) The magnification of telescope
   b) The type of telescope
   c) The tube length
2. Write in detail on corneal and lenticular changes that occur in the elderly patient.
3. The neonate or young baby who appears to be visually impaired how do you assess the child and what are the differential diagnosis to prove the child is visually impaired?
4. Write in brief about vascular disorder due to old age.
5. Explain the options available in India of rehabilitation of visually impaired.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

6. Briefly explain the spectacle dispensing in elderly – considerating the spectacle lenses and frames.
7. Write short note on spectacle magnifiers.
8. Describe the different ways of enlarging an image in low vision practice.
9. Accessory of low vision aids
10. Write short note on dispensing contact lenses in elderly.
11. Write in detail about the different macular function test used in ARMD.
12. Write a short note on Age-related changes in Visual Acuity and Contrast Sensitivity.
13. Brief about CCTV used in low vision care.
14. Explain aetiopathogenesis of diabetic retinopathy.

SHORT ANSWERS 10 x 2 = 20 Marks

15. Refractive changes due to uveitis
16. Define low vision.
17. Mention stages of low vision.
18. LogMAR
19. Parkinson’s disease
20. Why BI prisms are used in spectacle magnifiers?
21. Difference between near acuity and reading acuity
22. Atherosclerosis
23. Actinic Keratosis
24. CRVO

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours | Max. Marks: 100 Marks

## Low Vision Aids and Geriatric Optometry

Q.P. CODE: 1636

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Four) 4 x 10 = 40 Marks

1. Elaborate on rehabilitation of visually impaired in India.
2. Write in detail on corneal and lenticular changes that occur in the elderly patient.
3. Write low vision management for a child with retinitis pigmentosa.
4. Write in brief about vascular disorder due to old age.
5. Explain about diabetic retinopathy.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

6. Briefly explain the spectacle dispensing in elderly – considerating the spectacle lenses and frames.
7. Write short note on stand magnifiers.
8. Describe the different ways of enlarging an image in low vision practice.
9. Electronic magnifying devices for low vision care
10. Write short note on dispensing contact lenses in elderly.
11. Write in detail about the different macular function test used in ARMD.
12. Write a short note on Age-Related changes in Visual Acuity and Contrast Sensitivity.
13. Brief about magnification in telescopes
14. Explain aetiopathogenesis of ARMD.

SHORT ANSWERS 10 x 2 = 20 Marks

15. Refractive changes due to uveitis
16. Define low vision.
17. Name near vision charts
18. LogMAR
19. Clinical presentation of Glaucoma
20. Why BI prisms are used in spectacle magnifiers?
21. Typoscope
22. Atherosclerosis
23. Talking books
24. CRVO

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours | Max. Marks: 100 Marks

## Contact Lens

## Q.P. CODE: 1637

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Four) 4 x 10 = 40 Marks

1. Give FDA classification of soft contact lens types with advantages and disadvantage of each.
2. List the tear and non tear related deposits. Write in detail about one type of deposit in each category.
3. In SCL fitting, on what factors does the selection of a) center thickness b) $H_20$ content c) total diameter d) BOZR depend.
4. A 27-year-old woman Wishes to wear contact lenses for presentations at business meetings. She was a previous failure with contact lenses that ‘‘did not give sharp vision.’’ her refractive status of the eye is (BE) is -3.00Dsph -0.75Dcyl @ 090 20/20. Explain briefly how will you mange this patient justify your answer.
5. Enlist corneal infiltrate condition in contact lens wear and explain any one

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

6. Management of corneal oedema
7. Write short note on SEAL
8. Write short note on silicone hydrogel lens- ocular benefits and challenges
9. How will you differentiate between contact lens–induced abnormalities of corneal curvature and true ectasia.
10. What are the indications and contraindications for disposable contact lenses?
11. Write briefly on lens and lens fit related complications.
12. Different types of bifocal and multifocal contact lenses available in India
13. Role of silicone hydrogel lenses in everyday practice.
14. Advantage and disadvantage of RGP contact lens.

SHORT ANSWERS 10 x 2 = 20 Marks

15. Wetting angle
16. Base curve (BC)
17. Common symptoms after RGP fitting
18. What are the signs and symptoms of a poor fit?
19. Tear breakup time
20. Draw a neat and labeled diagram of RGP tricurve design.
21. Organic Deposits
22. Apical toricity
23. Oxygen permeability
24. Piggyback contact lens

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - APRIL 2015

Time: Three Hours | Max. Marks: 100 Marks

## Contact Lens

## Q.P. CODE: 1637

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Four) 4 x 10 = 40 Marks

1. What is dry eye? How will you diagnose a patient to have dry eye? What treatment measure will you recommend for a soft lens wearer who is diagnosed to have dry eye?
2. What is Toric soft contact lens? Describe various Toric lens designs which of them are available in India.
3. Enlist corneal infiltrate condition in contact lens wear and explain any one.
4. Write in detail about the manufacturing of soft contact lens.
5. Explain preliminary measurement and investigation done before fitting CL.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

6. Different types of bifocal and Multifocal contact lenses are available in India
7. Role of Silicone hydrogel lenses in everyday practice
8. Advantage and disadvantage of RGP contact lens
9. Write short note on different methods for evaluation the anterior profile of the cornea.
10. Write about various method of disinfecting SCL.
11. Management of corneal neovascularisation
12. How hydrophilic soft contact lenses are classified?
13. The advantages and disadvantages of monovision correction
14. Write the fitting philosophies for correcting Keratoconus.

SHORT ANSWERS 10 x 2 = 20 Marks

15. Oxygen transmissibility
16. Extended wear
17. Oxygen flux
18. Prism ballast
19. SPK
20. Tear breakup time
21. Name any two contact lenses they can fit irregular cornea.
22. Fluorescein staining
23. Inorganic deposits
24. Videokeratography

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - APRIL 2015

Time: Three Hours | Max. Marks: 100 Marks

## Systemic Diseases & Ocular Diseases

## Section A: Systemic Diseases - 50 Marks

Q.P. CODE: 1638

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1638 and 1639 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Discuss the types, clinical features and complications of malaria.
2. Describe the modes of spread of malignant tumours.
3. Describe the clinical features, types and complications of diabetes mellitus.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

4. Hypertensive retinopathy
5. Congenital syphilis
6. Metabolic syndrome
7. Toxoplasmosis and ocular lesions
8. Aschoff nodules

SHORT ANSWERS 5 x 2 = 10 Marks

9. Micro-angiopathy
10. Neoplasm
11. Xerosis
12. Chancre
13. Goitre

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours | Max. Marks: 100 Marks

## Systemic Diseases & Ocular Diseases

## Section A: Systemic Diseases - 50 Marks

Q.P. CODE: 1638

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1638 and 1639 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Classify systemic hypertension. Enumerate the risk factors for hypertension. Mention the complications of hypertension.
2. Discuss the aetiology, clinical features and management of toxoplasmosis.
3. What are the types of Embolism? Describe thrombo-embolism in detail.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

4. Diabetic ketoacidosis
5. Spread of tuberculosis
6. Immunoglobulins
7. Arthritis
8. Thyrotoxicosis

SHORT ANSWERS 5 x 2 = 10 Marks

9. Micro-aneurysm
10. Lepromin test
11. Rosettes
12. Keratomalacia
13. Hamartoma

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours | Max. Marks: 100 Marks

## Systemic Diseases & Ocular Diseases

## Section B: Ocular Diseases - 50 Marks

## Q.P. CODE: 1639

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1638 and 1639 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Define blindness and criteria for blindness. What is avoidable blindness and mention the conditions?
2. Classify Glaucomas. What are the clinical features of primary open angle glaucoma? What are the investigations done for POAG (Primary Open Angle Glaucoma)?
3. Describe the clinical features, complications and management of corneal ulcer.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

4. Macular function tests
5. Photophobia
6. Optic neuritis
7. Proptosis
8. Blepharitis

SHORT ANSWERS 5 x 2 = 10 Marks

9. Ectropion
10. Chalazion
11. Hypopyon
12. Phlycten
13. Follicles

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - APRIL 2015

Time: Three Hours | Max. Marks: 100 Marks

## Systemic Diseases & Ocular Diseases

## Section B: Ocular Diseases - 50 Marks

## Q.P. CODE: 1639

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1638 and 1639 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. What are the causes for a “Red Eye”? Discuss the differential diagnosis of a “Red Eye”.
2. Enumerate the causes for watering of the eye. How would you proceed to investigate a case of watering in the eye?
3. Describe the clinical features of the involvement of the eye in thyroid eye disease.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

4. Staphylomas
5. Dry eyes
6. WHO classification of Trachoma
7. Keratoconus
8. PHTHISIS BULBI

SHORT ANSWERS 5 x 2 = 10 Marks

9. Synechiae
10. Pannus
11. Trichiasis
12. Hyphaema
13. Optic atrophy

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours | Max. Marks: 100 Marks

## Dispensing Optometry & Occupational Optometry

## Section A: Dispensing Optometry - 50 Marks

Q.P. CODE: 1640

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note: Both QP Codes 1640 and 1641 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Explain overall frame adjustment.
2. A 65 year old female patient c/o frame is vertically misaligned. She is using metal frame since 1 year. How will you check form Vertical alignment?
    a. Face form
    b. X-ing
    c. Variant Planes
3. Describe the datum and boxing system of measurement with the help of suitable diagram.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

4. Write a note on selecting frame for children.
5. Write a note on steps for measuring bifocal height.
6. Write a note on dispensing in Progressive Addition Lenses.
7. Write briefly about faults on the lens surface.
8. Write a short note on lens verification.

SHORT ANSWERS 5 x 2 = 10 Marks

9. Frontal angle
10. Vertex distance
11. Pantoscopic tilt
12. Aspheric lenses
13. Antireflection coating

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - APRIL - 2015

Time: Three Hours | Max. Marks: 50 Marks

## Dispensing Optometry (Section A)

## Q.P. CODE: 1640

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary
(Note: Both QP codes 1640 and 1641 should be answer within total duration of three hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. List and describe the various faults, which might be introduced by careless surfacing of a glass lens.
2. Briefly explain the Edging of lenses for plastic, metal and rimless frames
3. Describe the effects of distortion in high powered plus and minus spectacle lenses

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

4. Briefly explain About the faults on the material of the lens.
5. Measurement of monocular PD.
6. Mechanical detail of PAL
7. Explain about datum system in briefly.
8. Explain advantages of plastic lenses over glass

SHORT ANSWERS 5 x 2 = 10 Marks

9. Chromatic aberration
10. Advantages of aspheric lens.
11. Trifocal lenses.
12. Mechanical requirement of bifocal lenses.
13. Facial wrap

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# Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Optometry Degree Examination – SEPTEMBER 2015

Time: Three Hours Max. Marks: 50 Marks

## OCCUPATIONAL OPTOMETRY (SECTION – B)

Q.P. Code: 1641

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

(Note: Both QP codes 1640 and 1641 should be answered within total duration of three hours)

LONG ESSAYS (Answer any two) 2 x 10 = 20 Marks

1. Code of ethics, laws governing optometric practice in India – your suggestions.
2. Write a note on non mechanical ocular injuries.
3. What are the effects of UV and IR radiations? What are the preventive measure and treatment for the same?

SHORT ESSAYS (Answer any four) 4 x 5 = 20 Marks

4. What are the factors that affect the health of a man's safety at work?
5. What is computer vision syndrome? List the criteria for a standard VDT workstation.
6. Enumerate the important insurance policies.
7. Write about the advantage of vision screening to industry.
8. Briefly explain the Objective and activities of scheme for incumbents in blind schools.

SHORT ANSWERS 5 x 2 = 10 Marks

9. IOFB
10. Any two effect of visual display units on eye
11. The protective equipments essential for a welder
12. What is school vision screening programme?
13. Target diseases under vision 2020 programme

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# Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Optometry Degree Examination – APRIL - 2015

Time: Three Hours Max. Marks: 50 Marks

## OCCUPATIONAL OPTOMETRY (SECTION – B)

Q.P. Code: 1641

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

(Note: Both QP codes 1640 and 1641 should be answered within total duration of three hours)

LONG ESSAYS (Answer any two) 2 x 10 = 20 Marks

1. Describe the screening programme for school children at the community level and its importance.
2. Outline the strategies to reduce the incidence of various ocular injuries in the community.
3. Briefly note down visual requirements and standards for different jobs.

SHORT ESSAYS (Answer any four) 4 x 5 = 20 Marks

4. Write short note on occupational causes of the visual and eye problems.
5. Write down the material for construction of eye protectors.
6. Discuss the problem and solution at the VDT work station.
7. Write in briefly the ocular effect of IR & UV exposure.
8. Write about acid and alkali burns.

SHORT ANSWERS 5 x 2 = 10 Marks

9. What are the duties towards a patient by an Optometrist?
10. Write two circumstances in which a suit can be filed against an Optometrist.
11. Write the important kinds of ethics.
12. IOFB
13. Type of eye camps

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# Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Optometry Degree Examination – APRIL 2015

Time: Three Hours | Max. Marks: 100 Marks

## PEDIATRIC OPTOMETRY, BINOCULAR VISION AND ADVANCED OPTOMETRY

Q.P. Code: 1642

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

### LONG ESSAYS (Answer any four) — 4 x 10 = 40 Marks

1. Explain the uses of prisms in eye care.
2. Brief on the causes and management options for strabismic, anisometropic, visual deprivation and idiopathic amblyopia. Brief on how you can diagnose eccentric fixation.
3. Write a note on
   a) What is esodeviation?
   b) Classify esodeviation?
   c) Outline your management plan for a boy of 3 years whose cycloplegic refraction shows +6.00 D sph (6/60) (OU). He has squint (OU), rest of the ocular findings within normal limits. Comment on the tentative diagnosis and differential diagnosis for this case.
4. Give a short note on indication of wearing spectacles in pediatric age group.
5. Discuss in detail the grades of binocular single vision.

### SHORT ESSAYS (Answer any eight) — 8 x 5 = 40 Marks

6. What is ARC? Brief on two test used for ruling out ARC.
7. Briefly explain Visual direction, localizing sign and corresponding points.
8. What is fusional vergence? How do you measure it? Give its normal values.
9. Types of Duane's retraction syndrome and its management
10. Clinical characteristics of nystagmus
11. Write briefly on frisby, randot stereo acuity test and Lang test.
12. Non stereoscopic clues to spatial orientation
13. Explain Hering's and Sherington's law.
14. Cycloplegic refraction

### SHORT ANSWERS — 10 x 2 = 20 Marks

15. Pseudo-esotropia
16. Infantile exotropia
17. Accommodative insufficiency
18. Monofixation syndrome.
19. Synaptophore
20. Geometrical equator
21. Listing's plane
22. Nodal point
23. Signs and symptoms of albinism
24. What type of contact lens material is used for pediatric group? Mention its Dk value.

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours | Max. Marks: 100 Marks

## Paediatric Optometry, Binocular Vision and Advanced Optometry

Q.P. CODE: 1642

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Four) 4 x 10 = 40 Marks

1. What is preferential looking? Give detail on visual acuity tests based on preferential looking.
2. Define Exotropia. Classify Exotropia. Write a note on intermittent Exotropia and its management.
3. Define Nystagmus. Write a brief note on classification, clinical features and non-surgical management of Nystagmus.
4. Give a short note on indication of wearing spectacles in paediatric age group.
5. Write a note on (a) Brown's syndrome (b) Duane's Retraction Syndrome (c) Microtropia.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

6. Write a note on (a) Cover-uncover test (b) Alternate cover test (c) Prism cover test.
7. Write a note on accommodative Esotropia and its management.
8. Write a note on grades of binocular vision and methods to check them.
9. Write a note on Strabismic and vision deprivation amblyopia.
10. Write a note on Dissociated Vertical Deviation (DVD).
11. Brief on retinopathy of Prematurity
12. Indication of recurrent Stye
13. Write briefly on (a) Krimsky test (b) Hirschberg test (c) Titmus test.
14. Write a note on signs and symptoms of congenital glaucoma.

SHORT ANSWERS 10 x 2 = 20 Marks

15. Fresnel prism
16. Spiral of Tillaux
17. Worth – four dot test
18. After image test
19. Vergence
20. Monofixation syndrome
21. Angle kappa
22. Corresponding points
23. Signs and symptoms of Albinism
24. What type of contact lens material is used for pediatric group? Mention its Dk value.

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours Max. Marks: 80 Marks

## Low Vision Aids and Geriatric Optometry

## Q.P. CODE: 3121

Revised Scheme - 3

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Three) 3 x 10 = 30 Marks

1. Write in details on corneal and lenticular changes that occurs in the elderly patient.
2. The neonate or young baby who appears to be visually impaired how do you assess the child and what are the differential diagnosis to prove the child is visually impaired
3. Write in brief about vascular disorder due to old age.
4. A telescope is composed of +20D objective lens and -40.0D ocular lens. the system is focused for infinity by an emmetropic patient, determine the following.
    a) The magnification of telescope
    b) The type of telescope
    c) The tube length

SHORT ESSAYS (Answer any Six) 6 x 5 = 30 Marks

5. Write short note on Guidelines & training to use various aids
6. Describe the different ways of enlarging an image in low vision practice.
7. Spectacle magnification
8. Write short note on dispensing Contact lenses in elderly
9. Write in detail about the different macular function test used in ARMD.
10. Briefly explain the systemic diseases associated with age
11. Explain aetiopathogenesis of diabetic retinopathy

SHORT ANSWERS 10 x 2 = 20 Marks

12. Refractive changes due to uveitis
13. Define low vision.
14. Enlist the type of near visual acuity chart
15. Define social blindness
16. Parkinson’s disease
17. Relative size enlargement
18. Role of rehabilitation center in india
19. Atherosclerosis
20. Actinic keratosis
21. CRVO

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours | Max. Marks: 80 Marks

## Contact Lens

## Q.P. CODE: 3122

Revised Scheme - 3

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Three) 3 x 10 = 30 Marks

1. What is dry eye? How will you diagnose a patient to have dry eye? What treatment measure will you recommend for a soft lens wearer who is diagnosed to have dry eye
2. What are toric soft contact lenses? Describe various toric lens design. which of them are available in india.
3. Enlist corneal infiltrate condition in contact lens wear and explain any one.
4. Explain preliminary measurement and investigation done before fitting CL

SHORT ESSAYS (Answer any Six) 6 x 5 = 30 Marks

5. Role of silicone hydrogel lenses in everyday practice.
6. Advantage and disadvantage of RGP contact lens.
7. Write short note on different methods for evaluating the anterior profile of the cornea.
8. Management of cornel neovascularization
9. How hydrophilic soft contact lenses classified.
10. The advantages and disadvantages of monovision correction
11. Write fitting philosophies for correcting Keratoconus

SHORT ANSWERS 10 x 2 = 20 Marks

12. Oxygen transmisibiity
13. Extended wear
14. Oxygen flux
15. Prism ballast
16. SPK
17. Tear breakup time
18. Name any two contact lenses that can fit irregular cornea
19. Fluorescein staining
20. Inorganic Deposits
21. Videokeratography

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours Max. Marks: 80 Marks

## Systemic Diseases Ocular Diseases

## Q.P. CODE: 3123

Section A – Systemic Diseases (40 Marks)

Revised Scheme - 3

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note : Both QP Codes 3123 and 3124 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Explain the pathophysiology, classifications, diagnosis complications and management of Arterial hypertension.
2. Mention the nutrition related disorders. Explain in detail about nutritional disorders of eye.
3. What is diabetes mellitus? Explain the ocular manifestation of diabetes mellitus

SHORT ESSAYS (Answer any Two) 2 x 5 = 10 Marks

4. Tuberculosis and eye
5. Characteristic of benign and malignant tumor
6. Goitre

SHORT ANSWERS 5 x 2 = 10 Marks

7. Chemotherapy
8. Obesity
9. Toxoplasmosis
10. List the drugs used in treatment of tuberculosis
11. Larva migrans

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours Max. Marks: 80 Marks

## Systemic Diseases Ocular Diseases

## Q.P. CODE: 3124

Section B – Ocular Diseases (40 Marks)

Revised Scheme - 3

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note : Both QP Codes 3123 and 3124 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Discuss closed angle glaucoma and the modalities available for its management
2. Outline the dystrophies and degenerations of the retina
3. Discuss tear film dynamics in diseases & medications and their evaluations

SHORT ESSAYS (Answer any Two) 2 x 5 = 10 Marks

4. Short note on Corneal ulcer.
5. Classification of conjunctivitis.
6. Short note on developmental anamalies of eyelids

SHORT ANSWERS 5 x 2 = 10 Marks

7. Coloboma
8. Myopic degeneration.
9. ARMD
10. Hypopyon.
11. Moonson's Sign

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# Rajiv Gandhi University of Health Sciences, Karnataka

## III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours Max. Marks: 80 Marks

## Dispensing Optometry Occupational Optometry

## Q.P. CODE: 3125

Section A – Dispensing Optometry (40 Marks)

Revised Scheme - 3

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note : Both QP Codes 3125 and 3126 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Describe in detail the process of surfacing of a glass.. Explain the various defects in manufacturing of glass
2. Write briefly about the faults on the material of the lens
3. Describe the Measurements of assorted faces for spectacle

SHORT ESSAYS (Answer any Two) 2 x 5 = 10 Marks

4. Explain advantages of plastic lenses over glass.
5. Describe the effects of distortion in high powered plus and minus spectacle lenses
6. Briefly explain the image jump in bifocal lens

SHORT ANSWERS 5 x 2 = 10 Marks

7. Explain the term segment height and segment depth.
8. Mechanical requirement of bifocal lenses.
9. Varifocal lenses
10. Glass cement
11. PMMA

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# Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours Max. Marks: 80 Marks

## Dispensing Optometry Occupational Optometry

## Q.P. CODE: 3126

Section B – Occupational Optometry (40 Marks)

Revised Scheme - 3

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

(Note : Both QP Codes 3125 and 3126 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Describe screening programme for school children at the community level and its importance.
2. Write your recommendations for different population who require ocular protection against damage from exposure to ultra violet radiations.
3. Briefly note down visual requirements, standards for different jobs

SHORT ESSAYS (Answer any Two) 2 x 5 = 10 Marks

4. Discus the problem and solution at the VDT work station
5. Write on the ocular effect of IR & UV exposure
6. Write about acid and alkali burns

SHORT ANSWERS 5 x 2 = 10 Marks

7. What are the duties towards a patient by an Optometrist?
8. Write two circumstances in which a suit can be filed against an Optometrist
9. Write the important code of ethics.
10. IOFB
11. Types of eye camps

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# Rajiv Gandhi University of Health Sciences, Karnataka

## III Year B.Sc. Optometry Degree Examination - SEPTEMBER 2015

Time: Three Hours Max. Marks: 80 Marks

## Pediatric Optometry, Binocular Vision and Advances in Optometry

## Q.P. CODE: 3127

Revised Scheme - 3

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Three) 3 x 10 = 30 Marks

1. What is AC/A ratio and its clinical significance? Explain any three tests used for determining it.
2. Give a brief outline of your management plan of an 8 year old boy with OD: +5.50 DS (6/15) NV N10, OS: +1.00 DS (6/6) NV N6. What might be the probable diagnosis of this patient? Justify
3. 1. Write a note on
   a) Mechanism of BSV
   b) Horopter and physiological diplopia
   c) Advantage of BSV
   d) Grades of BSV with Example?
4. How will you take history of a patient with squint in orthoptic clinic.

SHORT ESSAYS (Answer any Six) 6 x 5 = 30 Marks

5. What is ARC? Brief on two test used for ruling out ARC.
6. Refractive accommodative esotropia.
7. Duane Retraction Syndrome.
8. Strabismic and vision deprivation amblyopia.
9. Difference between ductions, versions and vergence.
10. Fundamental laws of ocular motility.
11. Write a note on Dissociated vertical deviation

SHORT ANSWERS 10 x 2 = 20 Marks

12. Which age group you will use HOTV cards.
13. Confrontation test
14. Write down the difference between aniseikonia & anisocoria
15. Visual axis
16. Centre of rotation
17. Angle alpha
18. Sherrington's law
19. Vergences
20. Corresponding retinal elements
21. Infantile exotropia

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# Rajiv Gandhi University of Health Sciences, Karnataka

## III Year B.Sc. Optometry Degree Examination - APRIL 2015

Time: Three Hours Max. Marks: 80 Marks

## Pediatric Optometry, Binocular Vision and Advances in Optometry

## Q.P. CODE: 3127

Revised Scheme - 3

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Three) 3 x 10 = 30 Marks

1. Briefly explain the Development of Binocular vision.
2. Briefly explain Nystagmus – definition, classification and clinical evaluation.
3. Write a short note on Anomalous Trichromacy
4. Briefly explain Amblyopia – definition, clinical importance and methods

SHORT ESSAYS (Answer any Six) 6 x 5 = 30 Marks

5. Short note on Neural aspects of binocular vision
6. Common test used for ruling out latent squint
7. Down's Syndrome
8. Short note on A-V phenomenon.
9. How will you distinguish Convergence insufficiency and paralytic Convergence.
10. Short note on cycloplegic refraction
11. Explain Pseudoesotropia

SHORT ANSWERS 10 x 2 = 20 Marks

12. Donder's law
13. Y pattern of deviation
14. Corneal Xerosis
15. Uses of binocular single vision.
16. Worth 4 dot test.
17. Eccentric fixation
18. Aneisokonia.
19. Nerve supply of extra ocular muscles.
20. Explain Cover Uncover test
21. The important things you should note while taking the H/O headache

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