Syllabus for 1st Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper -1 HUMAN ANATOMY & PHYSIOLOGY

1. Introduction of human body, cell and various tissue of the body
2. Embryology and development.
3. Skeletal system of Human body
4. Muscles of the body
5. Circulatory System
6. The Blood
7. The main arteries and veins of the body & Lymphatic system
8. Digestive system
9. The Liver
10. The Gall bladder, Pancreas & Spleen
11. Respiratory system
12. Endocrine Organs
13. Excretory System,
14. Reproductive system
15. Central Nervous System
16. Brain & Cranial Nerves
17. Spinal Cord and peripheral nerves
18. Autonomic nervous system
19. The Food, Vitamins & Protein
20. Organs of taste and smell

Syllabus for 1st Year B. Sc. (Honors.) Ophthalmic Techniques (Theory)

Paper 2nd : OCULAR ANATOMY, PATHOLOGY, MICROBIOLOGY

A. OCULAR ANATOMY

1. Embryology of the eye in general
2. Orbit and its immediate relations
3. Lids and eye lid glands
4. Conjunctiva. Cornea and Sclera
5. Iris and Cilliary body
6. Lens and Vitreous
7. Retina & Choroid
8. Ocular Muscles
9. Visual pathways
10. Sympathetics and parasympathetics system
11. Vascular supply of eye
12. Lacrimal apparatus
13. Higher visual centres

B. OCULAR PHATHOLOGY

1. HAEMATOLOGY

a. Blood Cells and blood collection techniques
b. Haemoglobin estimation
c. Total leucocyte count
d. Differential leucocyte count
e. Erythrocyte sedimentation rate
f. Pheripheral blood film – staining, significance of a peripheral smear
g. Bleeding time, clotting time

2. CLINICAL PATHOLOGY

a. Urine collection methods
b. Physical Examination of Urine
c. Chemical Examination of Urine
d. Microscopic Examination of Urine

3. HISTOPATHOLOGY

a. Grossing of tissue
b. Tissue processing
c. Fixation of tissue
d. Section cutting
e. Staining – Hematoxylin & Cosin and Special Stains

C. OCULAR MICROBIOLOGY

1. Introduction to Microbiology & classification.
2. Gram Positive Bacteria
3. Gram Negative Bacteria
4. Fungi -sephorophytics and pathogenic
5. Virus
6. Aseptic techniques
7. Chlayadia & parasites.

Syllabus for 1st Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 3rd: Ocular Physiology & including binocular reflexes and its maintenance

A. OCULAR PHYSIOLOGY

1. General physiology of the eye - An introduction
2. Maintenance of Transparency of the Cornea
3. Maintenance of Transparency of the Lens
4. Visual acuity and form sense
5. Pupillary reflexes
6. Accommodation
7. Convergence
8. Intra Ocular Pressure
9. Night Vision
10. Colour Vision
11. Visual Fields
12. Extrinsic Muscles, Actions and Ocular Movements
13. Higher Visual Centres and righting reflexes
14. Electrophysiological Aspects
15. Conjugate and Disguate -Movements of the eye

B. OCULAR BIOCHEMISTRY

1. Introduction to various biochemical test
2. Tears film and pH
3. General Introduction to metabolic processes affecting the eye
4. Rhodopsin cycle
5. Aqueous and Vitreous Humours
6. Metabolism of lens and cornea.

Syllabus for 1st Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 4th- : Optics

1. Elementary basis of light- Interference, diffraction, polarization spectrum, surface tension,viscosity
2. Principles of Refraction.
3. Physical Optics -1, Lens Shapes -Convex, Concave
4. Physical Optics -2, Thin Lens equation, thick lens equation
5. Physical Optics -3, Front and back vertex power
6. Physical Optics -4. Aberrations
7. Physical Optics -5. Spherical, Cylindrical & Toric surfaces, Aspheric surfaces
8. Prisms -definition, uses, nomenclature, apex
9. Determination of focal length & diopteric power of lens
10. Strum's Conoid
11. Neutralization of lenses
12. Focimeter
13. Centre & Axis Marking by focimeter
14. Simple & Toric transposition
15. Prismatic effect & Decentration
16. Aberrations & Tints in spectacle Lenses
17. Spectacle Lens Manufacturing -Sphericals, Toric, Bifocals, Lenticular & Lab Visit
18. Spectacle Frames -History, Nomenclature, Types & parts, sides, joints, frame bridge.
19. Shape of Spectacle Frame -Measurements & Making, Frame & Face Measurements
20. Schematic eye
21. Emmetropia & Ammetropia -Aetiology, Population, Distribution,Growth of eye,
22. Myopia
23. Hypermetropia
24. Astigmatism
25. Aphakia/Pseudo-phakia
26. Presbyopia
27. Keratoconus
28. Post-Op. Refractive errors
29. Refraction of irregular reflex
30. Accommodation & Convergence -1, Far point, near point, range, amplitude of accommodation

-

31. Accommodation & Convergence -2. Methods of measurements, NPA. AC/A ratio.
32. Retinoscopy -Principle & Methods
33. Objective Refraction
34. Subjective Refraction
35. Cross Cylinder
36. Workshop
37. Manufacturing Spectacle Lens
38. Plastic Lenses -Manufacturing & Characteristic
39. Lens Designs -Ashperic
40. High Index Lenses,
41. Photocromatic Lenses
42. Tinted Lenses
43. Polaroid Lenses
44. Bifocals
45. Measurement for ordering spectacle, IPD, Marking centration.V. D. Calculation.
46. Fitting Bifocals, Multifocals, Prism Lenses
47. Fitting Lenses in Frames
48. Glazing & Edging
49. Final Checking & Adjustments to prescriptions
50. Patient complains, handling correction.
51. Repair of spectacles
52. Special types of spectacles monocells/ptosis hemianopic glasses
53. Test chart standards
54. Phoropter
55. Objective Optometer
56. Projection Charts
57. Refraction room Standards

Syllabus for 1st Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 1st: Anatomy & Physiology

A. Human Anatomy

1. Introduction of human body, cell and various tissue of the body
2. Embryology and development.
3. Skeletal system of Human body
4. Muscles of the body
5. Circulatory System
6. The Blood
7. The main arteries and veins of the body & Lymphatic system
8. Digestive system
9. The Liver
10. The Gall bladder, Pancreas & Spleen
11. Respiratory system
12. Endocrine Organs
13. Excretory System,
14. Reproductive system
15. Central Nervous System
16. Brain & Cranial Nerves
17. Spinal Cord and peripheral nerves
18. Autonomic nervous system
19. The Food, Vitamins & Protein
20. Organs of taste and smell

Syllabus for 1st Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 2nd -- Clinical Pathology & Microbiology :

A. OCULAR PATHOLOGY

1. Sampling and Collection of Blood: intro-venous and peripheral
2. Estimation of haemoglobin
3. Peripheral Blood Film Staining
4. Identification of normal white blood cells
5. Erythrocyte sedimentation rate
6. Urine chemical examination – Sugar and Protein
7. Hematoxylin and Cosin Staining

B. MICROBIOLOGY

1. Introduction to Microbiology: Culture media, Classification, Morphological, Lab. diagnosis of infection
2. Collection of samples
3. Serology
4. Culture media for bacteria, fungi and viruses
5. Oxidase test
6. Mantoux test
7. Staining procedures: Gram Staining
8. Staining procedures: Romanowsky stains
9. Staining procedures: Ziehl Neelsen's staining

Syllabus for 1st Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 3rd : Orthoptics

A. Orthoptics

1. Latent squint work-up
2. Synptophore
3. Maddox wing
4. Maddox rods
5. Prism bar
6. Near point of accommodation
7. Near point of convergence
8. Fusion exercises

B. OCULAR BIO-CHEMSTRY

1. Sampling and Collection of Blood
2. Biochemical tests, including blood sugar estimation
3. Ketone bodies in urine
4. Spectrophotometry
5. Serum-cholesterol

Syllabus for 1st Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 4th : Lens Grinding & Fitting

A. Optics

1. Workshop
2. Manufacturing Spectacle Lens
3. Manufacturing Bifocal Lenses
4. Measurement for ordering spectacle, IPD, Marking centration, V. D. Calculation.
5. Fitting Bifocals, Multifocals, Prism Lenses
6. Fitting Lenses in Frames
7. Glazing & Edging
8. Final Checking, Adjustments to prescriptions
9. Patient complains, handling correction.
10. Repair of spectacles
11. Special types of spectacles monocells/ptosis hemianopic glasses
12. Neutralization of lenses
13. Focimeter
14. Shape of Spectacle Frame -Measurements & Making, Frame & Face Measurements
15. Refraction under the supervision

Syllabus for 2nd Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 1st : PHARMACOLOGY AND PHARMACY

1. Ocular Pharmacology – An introduction
2. Autonomic nervous system
3. Routes of drug administration
4. Miotics, Mydriatics & Cycloplegics drugs
5. Antibacterial drugs & therapy
6. Antifungal drugs & therapy
7. Anti-Viral drugs & therapy
8. Antibacterial drugs & therapy
9. Anti-inflammatory drugs & therapy
10. Anti-glaucoma drugs & therapy
11. Ophthalmic dyes
12. Local Anaesthetics
13. Ophthalmic preservatives
14. Ocular lubricants
15. Ocular irrigating solutions
16. Ocular antiseptics & disinfectants
17. Anti-cataract agents
18. Contact lens solution
19. Chelating agents
20. Immunosuppressive agents

Syllabus for 2nd Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 2nd : REFRACTION (including prescription & fitting of Glasses)

1. Emmetropia & Ammetropia -Aetiology, Population, Distribution, Growth of eye.
2. Myopia
3. Hypermetropia
4. Astigmatism
5. Aphakia/Pseudo-phakia
6. Presbiopia
7. Keratoconus
8. Post-Op. Refractive errors
9. Refraction of irregular reflex
10. Accommodation & Convergence –1. Far point, near point, ranges. Amplitude of accommodation
11. Accommodation & Convergence – 2. Methods of measurements, NPA. AC/A ratio.
12. Retinoscopy -Principle & Method
13. Objective Refraction
14. Subjective Refraction
15. Cross Cylinder

Syllabus for 2nd Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 3rd : INVESTIGATIVE OPHTHALMOLOGY

1. Orthoptics-General Concept
2. Ocular muscles and movements
3. AC/ A ratio
4. Measurements of angle of squint
5. Latent squint
6. Maddox rod
7. Maddox wing
8. Synoptophore
9. Manifest concomitant
10. Squint concomitant
11. Paralytic Squint
12. Head posture and its significance
13. Hess Screening and its Interpretations
14. Pleoptics
15. Occlusion -types and uses
16. Nystagmus
17. A. V. Syndromes
18. Testing of ARC
19. Amblyopia
20. Disorders of accommodation
21. Paediatric visual acuity assessment
22. Paediatric Refraction
23. Neural aspects of binocular vision

Syllabus for 2nd Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 4th : OPHTHALMIC INSTRUMENTS AND APPLIANCES

1. Indirect Ophthalmoscope
2. Direct Ophthalmoscope
3. Slit Lamp: Haag-Streit.
4. Photo-slit lamp
5. Lensometer. Lens gauge
6. Tonometer
7. Fundus Camera
8. External eye photography
9. Auto-refractometer
10. Corneal Examination -1. Placido disc
11. Corneal Examination -2. Keterometer
12. Corneal Examination -3. V KG
13. Corneal Examination -4. Specular Microscopy
14. Corneal Examination -5. Aesthesiometer
15. Exophthalmometer
16. Perimeter – Manual & automated
17. Orthoptics Instruments -Haploscope/Home devices
18. Heidelberg Retino-tomography HRT -II
19. Nerve fiber analyzer
20. Frequency doubling perimeter
21. Non Contact Tonometer
22. Heidelberg Analmascope
23. Pachometers
24. Contrast sensitivity tests
25. Glare acuity tests
26. Colour vision tests
27. Dark adaptometer

Syllabus for 2nd Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 1st : PHARMACOLOGY AND PHARMACY

1. Quality Control

a. Sterilization
b. pH measurement
c Osmolarity
d Spectrophotometry for concentration

2. How to prepare following eye drops

a. Pilo-clonidine eye drops
b Artificial eye drops
c Glycerin eye drops
d Homatropine eye drops
e EDTA eye drops
f Sulphacetamide eye drops
g Dexamethasone eye drops
h Methylecellulose eye drops
i Saline eye drops
j Sodium citrate eye drops

3. MK Media preparation
4. Fluorescein Strip, Rose Bengal Strips preparation
5. Autologous serum eye drops preparation
6. Dilution of drug in different concentration
7. Steroid detection test

Syllabus for 2nd Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 2nd : REFRACTION and Prescription & Fitting of Glasses

1. Refraction and prescription of glasses in OPD.Practical test of the ability to prescribe glasses in various refractive disorders using various equipments

Syllabus for 2nd Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 3rd : SPECIAL INVESTIGATIONS (INCLUDING ORTHOPTICS)

A. INVESTIGATIVE OPHTHALMOLOGY

1. Manifest squint work-up
2. Paralytic squint work-up
3. Pleoptics
4. Orthoptic Exercises

Syllabus for 2nd Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 4th : APPLIANCES

A. OPHTHALMIC INSTRUMENTS AND APPLIANCES

1. Lensometer, Lens gauge
2. Tonometer
3. Placido disc
4. Keterometer
5. VKG
6. Specular Microscopy
7. Exophthalmometer
8. Perimeter
9. Non Contact Tonometer
10. Slit Lamp: Haag-Streit.
11. Photo-slit lamp
12. Fundus Camera
13. Contrast sensitivity tests
14. Glare acuity tests
15. Colour vision tests
16. Dark adaptometer

Syllabus for 3rd Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 1st : CLINICAL & ADVANCED OPTICS & ORTHOPTICS

A. CLINICAL & ADVANCED ORTHOPTICS

1. Orthoptic-General concept
2. Ocular muscles and movements
3. AC/ A ratio.
4. Measurements of angle of squint
5. Latent squint
6. Maddox rod
7. Maddox wing
8. Synoptophore
9. Manifest concomitant
10. Squint concomitant
11. Paralytic Squint
12. Head posture and its significance
13. Hess Screening and its Interpretations
14. Pleoptics
15. Occlusion -types and uses
16. Nystagmus
17. A. V. Syndromes
18. Testing of ARC
19. Amblyopia
20. Disorders of accommodation
21. Paediatric visual acuity assessment
22. Paediatric Refraction
23. Neural aspects of binocular vision

B. CLINICAL & ADVANCED OPTICS

1. Emmetropia & Ammetropia –Aetiology, Population. Distribution, Growth of eye.
2. Myopia
3. Hypermetropia
4. Astigmatism
5. Aphakia/Pseudo-phakia
6. Presbiopia
7. Keratoconus
8. Post-Op. Refractive errors
9. Refraction of irregular re/ex
10. Accommodation & Convergence -1. Far point, near point, range, amplitude of accommodation
11. Accommodation & Convergence -2. Methods of measurements. NPA. AC I A ratio.
12. Retinoscopy -Principle & Methods
13. Objective Refraction
14. Subjective Refraction
15. Cross Cylinder

Syllabus for 3rd Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 2nd : CLINICAL REFRACTION AND CONTACT LENSES

A. CONTACT LENS

1. History of Contact Lens
2. Corneal Anatomy and Physiology
3. Corneal Physiology and Contact Lens
4. Preliminary Measurements and Investigations
5. Slit Lamp Biomicroscopy
6. Contact Lens materials
7. Optics of the Contact Lens
8. Glossary of Terms: Contact Lenses
9. Indications and Contra Indications Contact Lens
10. Rigid gas permeable contact lens design
11. Soft Contact lens design & manufacture
12. Kertometery, Placido's disc, Tonography
13. Fitting philosophies
14. Fitting of Spherical SCL and effect of parameter changes
15. Astigmatism correction options
16. Fitting Spherical RGP contact Lenses, Low OK, High OK
17. Effects of RGP contact Lens parameter changes on lens fitting
18. Fitting in Astigmatism (Sph RGP)
19. Follow-up post fitting examination
20. Follow-up Slit Lamp examination
21. Fitting in Keratoconus
22. Fitting in Aphakia, Pseudophakia
23. Cosmetic Contact Lenses
24. Fitting Contact Lens in children
25. Toric Contact Lenses
26. Bifocal Contact Lenses
27. Continuous wear and extended wear lenses
28. Therapeutic Lenses/Bandage lenses
29. Contact lens following ocular surgeries
30. Disposable contact lenses, frequent replacement and Lenses
31. Use of Specular Microscopy and Pachymetry in Contact Lenses
32. Care & maintenance of Contact Lenses
33. Contact Lens modification of finished lenses

34. Instrumentation in contact lens practise
35. Checking finished lenses parameters
36. Recent developments in Contact lenses
37. Review of lenses available in India

B. CLINICAL & ADVANCED REFRACTIONS

1. Emmetropia & Ammetropia -Aetiology, Population, Distribution, Growth of eye.
2. Myopia
3. Hypermetropia
4. Astigmatism
5. Aphakia/Pseudo-phakia
6. Presbyopia
7. Keratoconus
8. Post-Op. Refractive errors
9. Refraction of irregular reflex
10. Accommodation & Convergence -1. Far point, near point, range, amplitude of accommodation
11. Accommodation & Convergence -2. Methods of measurements, NPA, AC/ A ratio.
12. Retinoscopy -Principle & Method
13. Objective Refraction
14. Subjective Refraction
15. Cross Cylinder
16. Low- Vision aids: Techniques & microscopes
17. Rehabilitation of blinds

Syllabus for 3rd Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 3rd : COMMUNITY OPHTHALMOLOGY &. EYE BANK& EYE CAMPS

A. EYE BANK

1. Publicity
2. How to donate your eyes
3. Collection of eyes
4. Preservation of eyes
5. Pre-operative Instructions
6. Post-operative Instructions
7. Latest techniques for preservation of donor Cornea

B. COMMUNITY OPHTHALMOLOGY

1. Concepts of community Ophthalmology - I
2. Concepts of community Ophthalmology - II
3. The Epidemiology of Blindness (General Principles) - I
4. The Epidemiology of Blindness (General Principles) - II
5. The Epidemiology of Blindness (Disease specific strategies) - III
6. The Epidemiology of Blindness (Disease specific strategies) - IV
7. Survey Methodological - I
8. Survey Methodological - II
9. Survey Methodological - III
10. Screening procedures in Ophthalmology – I
11. Screening procedures in Ophthalmology – II
12. School eye screening programme
13. Primary eye care
14. Organization of Out reach services
15. Organization of Reach-in-Programme
16. Information, Education, communication
17. Rehabilitation of the visually handicapped
18. National programme for control of Blindness – I
19. National programme for control of Blindness – II
20. Vision 2020 : The Right to sight

Syllabus for 3rd Year B. Sc. (Honors.) Ophthalmic Techniques

Theory

Paper 4th : INVESTIGATIONS IN CLINICAL OPHTHALMOLOGY & Management of OT

A. INVESTIGATIONS IN CLINICAL OPHTHALMOLOGY

1. Principle, Techniques and preparation of the patient
2. ERG
3. EOG
4. Electro-Oculomyo-gram
5. Ultra-sono-graphy
6. Tonography
7. Berman's Locator/Foreign body locator
8. Fluorescein Angiography
9. Ocular Photography -anterior segment
10. Dark Adaptometry : Adaptation & Adaptometry
11. Syringing & Lacrimal function Test
12. Gonioscopy
13. Pachometry
14. Perimetry
15. Laser therapy
16. Contrast Sensitivity
17. Slit Lamp
18. VKG
19. Specular Microscopy
20. Fundus Photography
21. Colour Vision Investigations – Ishhara Charts, E-G Lantern, Negal's anomaloscope, 100 Hue Test
22. A -Scan Biometry
23. Heidelberg Retina-tomography HRT –II
24. Nerve fiber analyzer
25. Frequency doubling perimeter
26. Non Contact Tonometry
27. UBM
28. OCT

B. MANAGEMENT OF OT

1. Introduction to Ocular in general.
2. Asepsis: How to achieve
3. Aanesthetic agents and where indicated
4. OT Sterilization procedures
5. Sterilization procedures of 0 T Instruments
6. Maintenance of Instruments and equipments: Ophthalmic Instruments
7. Maintenance of Instruments and equipments: Orthoptics Instruments
8. Maintenance of Instruments and equipments: Surgical Instruments
9. Maintenance of Instruments and equipments: Optometric & Contact Lens Equipment

Syllabus for 3rd Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 1st : Refraction

A. CLINICAL & ADVANCED OPTICS

1. Refraction and prescription of glasses in independent cabin

B. CONTACT LENS

1. Contact Lens fitting
2. Counselling to Contact Lens patient
3. Post-fitting instructions
4. Remedy of post-fitting problems

C. Clinical and Advanced Refractions

1. Refraction and Prescription of glasses

Syllabus for 3rd Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 2nd : Orthoptics & Pleoptics

A. CLINICAL & ADVANCED ORTHOPTICS

1. Manifest squint work-up
2. Paralytic squint work-up
3. Pleoptics
4. Orthoptic Exercises

Syllabus for 3rd Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 3rd : COMMUNITY WORK

A. EYE BANK

1. How to donate your eyes/Counselling
2. Collection of eyes
3. Preservation of eyes

B. COMMUNITY OPHTHALMOLOGY

1. Eye Screening Programme & Surveys
2. Eye camp (approx. 3) of 10 days each
3. PHC posting

Syllabus for 3rd Year B. Sc. (Honors.) Ophthalmic Techniques

Practical (including viva-voce)

Paper 4th ASSISTANCE IN CLINICAL OPHTHALMOLOGY & OT

A. INVESTIGATIONS IN CLINICAL OPHTHALMOLOGY

1. Fluorescein Angiography
2. Syringing & Lacrimal function Test
3. Slit Lamp
4. VKG
5. Specular Microscopy
6. NCT
7. Applanation and schiotz tonometry
8. Dark Adaptometry
9. A -Scan Biometry
10. Contrast Sensitivity
11. Perimetry
12. Keratometry
13. Focimetry
14. ERG/EOG/VER

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B. Sc. (Hons) Ophthalmic Techniques Phase I

Paper	Subject	Theory Final	Internal Assessment	Total
Theory				
I	Human Anatomy & Physiology	50	50	100
II	Ocular Anatomy, Pathology & Microbiology	50	50	100
III	Ocular Physiology & Biochemistry including Binocular reflexes & its maintenance	50	50	100
IV	Optics	50	50	100
Practical (Including Viva)				
I	Anatomy & Physiology	50	50	100
II	Ocular Pathology & Microbiology	50	50	100
III	Orthoptics	50	50	100
IV	Lens Grinding & fitting	50	50	100

Appendix - 1I

B. Sc. (Hons) Ophthalmic Techniques Phase II

Paper	Subject	Theory Final	Internal Assessment	Total
Theory				
I	Pharmacology & Pharmacy	50	50	100
II	Refraction (including prescription, making & fitting of glasses)	50	50	100
III	Investigative Ophthalmology	50	50	100
IV	Ohthalmic instruments and appliancess	50	50	100
Practical (Including Viva)				
I	Pharmacology & Pharmacy	50	50	100
II	Refraction (including prescription, making & fitting of glasses	50	50	100
III				
IV	Special investigation, including Orthoptics	50	50	100
	Appliances	50	50	100

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B. Sc. (Hons) Ophthalmic Techniques Phase III

Paper	Subject	Theory Final	Internal Assessment	Total
Theory				
I	Clinical & advanced Optics & Orthoptics	50	50	100
II	Clinical Refraction and Contact lenses	50	50	100
III	Community Ophthalmology and Eye Bank	50	50	100
IV	Investigations in Clinical Ophthalmology and management of OT	50	50	100
Practical (Including Viva)				
I	Refraction	50	50	100
II	Orthoptics and pleoptics	50	50	100
III	Community Work	50	50	100
IV	Investigations in Clinical Ophthalmology and management OT	50	50	100