

## Diploma in Optometry Technician course

### FIRST YEAR

| Paper               | Name of Paper  | Internal | External | Total |
|---------------------|--|----------|----------|-------|
| Theory First Paper  | Anatomy, Physiology, Pathology, Microbiology & Pharmacology. | 25       | 75       | 100   |
| Theory Second Paper | Ocular Anatomy & Physical, Physiological optics.             | 25       | 75       | 100   |
| Practical           |  | 25       | 75       | 100   |

### SECOND YEAR

| Paper               | Name of Paper                            | Internal | External | Total |
|---------------------|--|----------|----------|-------|
| Theory First Paper  | Diseases of eye.                         | 25       | 75       | 100   |
| Theory Second Paper | Mechanical optics & Ocular Pharmacology. | 25       | 75       | 100   |
| Practical           |  | 25       | 75       | 100   |

**Outline of Curriculum  
of  
Diploma in Optometry Technician course**

**FIRST YEAR**

**THEORY ( Classes: 9 AM to 12 Noon)**

**First paper : Syllabus covers -**

1. Only basic idea of General Anatomy & Physiology (Cytology, Histology, Osteology and only basics of all organ systems of body
2. Only basics of relevant Pathology, Pharmacology, Microbiology & Ocular Pharmacology.

**Second paper : Syllabus covers -**

1. Detailed Ocular Anatomy and Physiology.
2. Basic physics related to light and physical, physiological optics.
3. Hand hygiene & prevention of cross infection.
4. Basic life support (BLS) & Cardio-pulmonary resuscitation (CPR).

## FIRST YEAR

### PRACTICAL ( Classes: 1 PM to 4 PM)

Practical classes will be after lunch; from 1 PM to 4 PM.

Students must present in the hospital/ Optometry lab for practicals.

- Hands on training of Vision monitoring.
- Hands on training of Subjective refraction.
- Hands on training of Retinoscopy(wet and dry).
- Hands on training of Prescribing lenses & prisms.
- Hands on training of Tonometry (Schiotz).
- Hands on training of Corneal staining.
- Hands on training of Ishihara charting.
- Hands on training of Schirmer's test & TBUT.

**Following subjects must be taught; though there will not be any exam from these-**

1. Basic Computer skills.
2. Basic English.
2. **Soft skills like - Interpersonal relationship skills & moral education.**

**Outline of Curriculum  
of  
Diploma in Optometry Technician course**

**SECOND YEAR**

**THEORY ( classes:9 AM to 12 Noon)**

**First paper : Syllabus covers -**

1. Details of Diseases of eye.
2. Nursing Procedures like vital recording, IM/IV/SC injection, Oxygen therapy, Nebulization, IV infusion.

**Second paper : Syllabus covers -**

1. Mechanical optics and Lenses, Lenses prescription.
2. Instruments and equipments used in eye.
3. Community ophthalmology.
4. Drugs used in Optometry.

## SECOND YEAR

### PRACTICAL ( classes:9 AM to 12 Noon)

Practical exams syllabus should cover-

- Hands on training of slit lamp biomicroscope examination.
- Hands on training of Gonioscopy.
- Hands on training of Applanation tonometry.
- Hands on training of Syringing.
- Hands on training of Perimetry.
- Hands on training of Keratometry, A scan.
- Hands on training of B Scan.
- Hands on training of Direct ophthalmoscopy.
- Hands on training of Indirect Ophthalmoscopy.
- Hands on training of assistance in Common Ocular surgeries.
- Hands on training of Fundus Camera & FFA.

## ELIGIBILITY CRITERIA FOR ADMISSION & DURATION OF THE COURSE

### **COURSE DURATION:-**

- It is 2 years, **full time** Diploma Course.

### **ELIGIBILITY:-**

- Candidate must have passed 12<sup>th</sup> with  
Physics, Chemistry, Biology

Or

Physics, Chemistry, Maths

with 35% marks in Intermediate exams.

(From UP board or any other recognised board).

- Candidate must have completed age of 17 years of age as on 31<sup>st</sup> December of admission year. There is no maximum age limit for the admission.

## SCHEDULE OF EXAMINATION

### FIRST YEAR

| <u>Paper</u>               | <u>Subjects</u>   | <u>Mark</u> | <u>Internal Assessment Marks</u> | <u>Total Marks</u> | <u>Pass Marks</u> | <u>Duration of Exam.</u> |
|----------------------------|---|-------------|----------------------------------|--------------------|-------------------|--------------------------|
| <u>First Paper Theory</u>  | <p>1 Only basic idea of General Anatomy &amp; Physiology (Cytology, Histology, Osteology and only basics of all organ systems of body</p> <p>2.Only basics of relevant Pathology, Pharmacology, Microbiology &amp; Ocular Pharmacology.</p>                           | 75          | 25                               | 100                | 50                | 3 Hours                  |
| <u>Second Paper Theory</u> | <p>1.Detailed Ocular Anatomy and Physiology.</p> <p>2.Basic physics related to light and physical, physiological optics.</p> <p>3.Hand hygiene &amp; prevention of cross infection.</p> <p>4.Basic life support (BLS) &amp; Cardio-pulmonary resuscitation (CPR).</p> | 75          | 25                               | 100                | 50                | 3 Hours                  |
| <u>Practical</u>           | Oral & Practical  | 75          | 25                               | 100                | 50                | 3 Hours                  |

## SCHEDULE OF EXAMINATION

### SECOND YEAR

| <u>Paper</u>               | <u>Subjects</u>   | <u>Mark</u> | <u>Internal Assessment Marks</u> | <u>Total Marks</u> | <u>Pass Marks</u> | <u>Duration of Exam.</u> |
|----------------------------|---|-------------|----------------------------------|--------------------|-------------------|--------------------------|
| <u>First Paper Theory</u>  | 1. Details of Diseases of eye<br>2. Nursing Procedures like vital recording, IM/IV/SC injection, Oxygen therapy, Nebulization, IV infusion.                       | 75          | 25                               | 100                | 50                | 3 Hours                  |
| <u>Second Paper Theory</u> | 1. Mechanical optics and Lenses, Lenses prescription.<br>2. Instruments and equipments used in eye.<br>3. Community ophthalmology<br>4. Drugs used in Optometry . | 75          | 25                               | 100                | 50                | 3 Hours                  |
| <u>Practical</u>           | Oral & Practical  | 75          | 25                               | 100                | 50                | 3 Hours                  |



## SCHEDULE OF COURSE

(List of holidays, Total hours, Subject wise allotment of hours)

- **List of Holidays:-**

|                      |            |
|----------------------|------------|
| Sundays              | - 52 days  |
| Summer vacation      | - 10 days  |
| Winter vacation      | - 10 days  |
| Gazetted holidays    | - 23 days  |
| Preparatory holidays | - 10 days  |
| <hr/>                |            |
| Total Holidays       | - 105 days |
| <hr/>                |            |

- **Total Hours :-**

|   |                                  |
|---|----------------------------------|
| Theory classes per day  | - 3 Hours                        |
| Practical classes per day                                       | - 3 Hours                        |
| Total hours per day   | - 6 Hours                        |
| Total days & hours in One year<br>(after deduction of holidays) | - 260 days<br>or<br>- 1560 Hours |

## SCHEDULE OF COURSE

### Subject wise allotment of hours

#### FIRST YEAR

Theory (780 Hours) Practical (780 Hours)

|   |   |         |
|---|---|---------|
| <b><u>First Paper Theory</u></b>  | 1. Only basic idea of General Anatomy & Physiology (Cytology, Histology, Osteology and only basics of all organ systems of body). | 150 Hrs |
|   | 2 Only basics of relevant Pathology, Pharmacology, Microbiology & Ocular Pharmacology.  | 150Hrs  |
| <b><u>Second Paper Theory</u></b>   | 1. Detailed Ocular Anatomy and Physiology   | 160 Hrs |
|   | 2. Basic physics related to light and physical, physiological optics  | 140 Hrs |
|   | 3. Hand hygiene & prevention of cross infection.  | 30 Hrs  |
|   | 4. Basic life support (BLS) & Cardio-pulmonary resuscitation (CPR).   | 40 Hrs  |
| <b><u>Third Paper Practical</u></b>   | As described in curriculum  | 780 Hrs |
| <b><u>Theory: Other Subjects</u></b><br>(These subjects must be taught; though there will not be any exam from these) | 1. Basic Computer skills.   | 30 Hrs  |
|   | 2. Basic English.   | 30 Hrs  |
|   | 3. Soft skills like - Interpersonal relationship skills & moral education   | 10 Hrs  |

## SCHEDULE OF COURSE

### Subject wise allotment of hours

#### SECOND YEAR

Theory (780 Hours) Practical (780 Hours)

|   |   |         |
|---|---|---------|
| <b><u>First<br/>Paper<br/>Theory</u></b>    | 1. Details of Diseases of eye   | 250 Hrs |
|   | 2.Nursing Procedures like vital recording, IM/IV/SC injection, Oxygen therapy, Nebulization, IV infusion. | 20 Hrs  |
| <b><u>Second<br/>Paper<br/>Theory</u></b>   | 1.Mechanical optics and Lenses, Lenses prescription .   | 300 Hrs |
|   | 2.Instruments and equipments used in eye  | 100 Hrs |
|   | 3.Community ophthalmology.  | 50 Hrs  |
|   | 4.Drugs used in Optometry .   | 60 Hrs  |
| <b><u>Third<br/>Paper<br/>Practical</u></b> | As described in curriculum  | 780 Hrs |

## Details of Curriculum for First Year Diploma in Optometry Technician

| <b>PAPER 1st Theory</b>  | <b>Topics</b>   | <b>Hours.</b> |
|--|---|---------------|
| <b>1. Only basic idea of General Anatomy &amp; Physiology (Cytology, Histology, Osteology and only basics of all organ systems of body).</b> | 1. General Orientation about parts of human body. Various terms used in Anatomy. Total numbers of bones, their names & location. Basic idea about organization of body, from cell to organ systems. | 02Hrs         |
|  | 2. Structure of Animal cell, Cell organelles & their functions  | 02 Hrs        |
|  | 3. Human tissue, types, structure & functions.  | 05 Hrs        |
|  | 4. Osteology: Names, location, identification of all bones. (Details of skull bones is not required).   | 10 Hrs        |
|  | 5. Joints: types, basic structure & examples.   | 02 Hrs        |
|  | 6. Skin & appendages.   | 02 Hrs        |
|  | 7. GIT: : Location, Gross structure, various parts & their functions.<br>Details of process of food ingestion, digestion, absorption & defaecation. (Microscopic structure is not required.)        | 20 Hrs        |
|  | 8. Respiratory tract: Location, Gross structure, various parts & their functions. Details of breathing mechanism, different respiratory volumes. (Microscopic structure is not required.)           | 20 Hrs        |
|  | 9. Urinary tract: Gross structure, various parts & their functions. (Microscopic structure is not required.)<br>Process of urine formation & voiding.   | 10 Hrs        |
|  | 10. Male reproductive system: Only gross structure & functions of different parts. (Microscopic structure is not required.)   | 05 Hrs        |
|  | 11. Female reproductive system: Only gross structure & functions of different parts. (Microscopic structure is not required.)<br>Menstrual cycle.   | 05 Hrs        |

## Details of Curriculum for First Year Diploma in Optometry Technician

| PAPER 1st<br>Theory  | Topics  | Hours. |
|--|---|--------|
| <b>1. Only basic idea of General Anatomy &amp; Physiology (Cytology, Histology, Osteology and only basics of all organ systems of body).</b> | 12. Endocrine system: Hormones secreted by Pituitary, Thyroid, Parathyroid, Pancreas, Adrenal cortex, Adrenal medulla, Gonads & functions of different hormones. (Details of structure of these glands not required). | 10 Hrs |
|  | 13. Gross structure of brain & spinal cord. Functions of different parts of brain & spinal cord. (Details not required.)  | 10 Hrs |
|  | 14. Blood: Composition & Functions. Details about Plasma, RBCs, WBCs, Platelets, Clotting system.   | 10 Hrs |
|  | 15. Gross structure & functions of sensory Organs - Eye, Ear, Nose, Tongue. (Details not required).   | 05 Hrs |
|  | 16. Basic gross structure of heart, vessels opening into heart & Leaving the heart. Arterial & Venous tree of body.   | 10 Hrs |
|  | 17. Lymphatic system: Structure & Functions.  | 05 Hrs |
|  | 18. Inumune system: Components & various mechanisms of defense.   | 07 Hrs |

## Details of Curriculum for First Year Diploma in Optometry Technician

| PAPER 1st<br>Theory  | Topics   | Hours. |
|--|--|--------|
| <b>2. Only basics of relevant Pathology, Pharmacology, Microbiology &amp; Ocular Pharmacology.</b> | 1. Basic steps of Acute & chronic inflammation.                | 03 Hrs |
|  | 2. Basics of Necrosis & apoptosis.                             | 03 Hrs |
|  | 3. Basics of Shock.  | 03 Hrs |
|  | 4. Basics of Disorders of blood coagulation system.            | 08 Hrs |
|  | 5. Basics of Disorders of Immune system of body.               | 05 Hrs |
|  | 6. Modes of disease transmission & prevention of infection.    | 05 Hrs |
|  | 7. Sterilization & methods of sterilization used in hospitals. | 10 Hrs |
|  | 8. Basic idea about types of Bacteria, Virus, Fungi.           | 20 Hrs |
|  | 9. Routes of drug administration.                              | 02 Hrs |
|  | 10. Adverse effects & side effects of drugs.                   | 02 Hrs |
|  | 11. Basic idea of Analgesics : Opioid & NSAIDs.                | 02 Hrs |
|  | 12. Basic idea of Anti Microbials.                             | 20 Hrs |
|  | 13. Basic idea of Anti H-1 Histaminics & Corticosteroids.      | 02 Hrs |
|  | 14. Anti Glaucoma drugs.                                       | 15 Hrs |
|  | 15. Dyes used in Ophthalmology.                                | 05 Hrs |
|  | 16. Artificial tears & Other drugs used in dry eye.            | 05 Hrs |
|  | 17. Topical Antimicrobials & NSAIDs and Steroids used in eye.  | 20 Hrs |
|  | 18. Mydriatics & Cycloplegics                                  | 05 Hrs |
|  | 19. Various methods of drug administration in eye.             | 15 Hrs |

## Details of Curriculum for First Year Diploma in Optometry Technician

| PAPER 2nd<br>Theory   | Topics   | Hours. |
|---|--|--------|
| <b>1.Detailed<br/>Ocular<br/>Anatomy and<br/>Physiology</b> | 1.Detailed Structure of Orbit & Contents of orbit.   | 10 Hrs |
|   | 2.Eye ball: Comprehensive anatomy.   | 05 Hrs |
|   | 3.Extra Ocular muscles: gross structure, origin, insertion, nerve supply and action.         | 10 Hrs |
|   | 4.Blood supply to eye & Nerve supply to eye.   | 15 Hrs |
|   | 5.Gross, microscopic anatomy, blood & nerve supply of Conjunctiva.                           | 10 Hrs |
|   | 6.Gross, microscopic anatomy, blood & nerve supply of Cornea.                                | 15 Hrs |
|   | 7.Gross, microscopic anatomy, blood & nerve supply of Sclera.                                | 10 Hrs |
|   | 8.Gross, microscopic anatomy, blood & nerve supply of Uvea.                                  | 15 Hrs |
|   | 9.Gross, microscopic anatomy, blood & nerve supply of Lens.                                  | 10 Hrs |
|   | 10.Gross, microscopic anatomy, blood & nerve supply of Angle of AC.                          | 05 Hrs |
|   | 11.Physiology of aqueous production and drainage.  | 10 Hrs |
|   | 12.Gross, microscopic anatomy, blood & nerve supply of Vitreous.                             | 05 Hrs |
|   | 13.Gross, microscopic anatomy, physiology, blood & nerve supply of retina & optic nerve.     | 20 Hrs |
|   | 14.Gross, microscopic anatomy, physiology, blood & nerve supply of Visual/pupillary pathway. | 20 Hrs |

## Details of Curriculum for First Year Diploma in Optometry Technician

| PAPER 2nd Theory   | Topics  | Hours. |
|--|---|--------|
| <b>2. Basic physics related to light and physical, physiological optics.</b> | 1.Introduction  | 05 Hrs |
|  | 2.Light – Definition & Theory   | 03 Hrs |
|  | 3.Properties of Light   | 05 Hrs |
|  | 4.Reflection & Refraction   | 07 Hrs |
|  | 5.Diffraction & Dispersion  | 05 Hrs |
|  | 6.Transmission & Absorption   | 05 Hrs |
|  | 7.Geometrical Optics  | 05 Hrs |
|  | 8.Spherical Lenses  | 05 Hrs |
|  | 9.Astigmatic & Toric Lenses   | 05 Hrs |
|  | 10.Prism  | 05 Hrs |
|  | 11.Vergence of Light  | 05 Hrs |
|  | 12.Magnification of Lenses  | 05 Hrs |
|  | 13.Homocentric Lenses System Gausse's Theorem                                   | 05 Hrs |
|  | 14.Optical Aberration of images -Spherical Aberration<br>- Chromatic Aberration | 05 Hrs |
|  | 15.Lasers Fundamental   | 10 Hrs |
|  | 16.Schematic & Reduced Eye Angle Alpha  | 05 Hrs |
|  | 17.Visual Acuity  | 05 Hrs |
|  | 18.VA-Testing   | 15 Hrs |
|  | 19.Retinocopy   | 20 Hrs |
|  | 20.Cycloplegic Drugs & Mydriatics   | 05 Hrs |
|  | 21.Subjective Refraction  | 05 Hrs |
|  | 22.Simple & Toxic Transposition   | 05 Hrs |
|  | 23.Spherical Equivalent   | 05 Hrs |
|  | 24.Accommodation & Convergence  | 15 Hrs |



## Details of Curriculum for First Year Diploma in Optometry Technician

| PAPER 2nd Theory  | Topics                                    | Hours. |
|---|---|--------|
| <b>3. Hand hygiene &amp; prevention of cross infection.</b> | 1. Hand hygiene & method of Hand washing. | 15 Hrs |
|   | 2. Prevention of cross infection.         | 15 Hrs |

| PAPER 2nd Theory   | Topics   | Hours. |
|--|--|--------|
| <b>4. Basic life support (BLS) &amp; Cardio-pulmonary resuscitation (CPR).</b> | 1. Code blue.  | 05 Hrs |
|  | 2. Details of basic life support (BLS) & Cardio-pulmonary resuscitation (CPR). | 35 Hrs |

**Curriculum  
for  
Practical :- First Year  
Diploma in Optometry Technician**

| <b>Practical</b> | <b>Topics</b>   |
|------------------|---|
|                  | <ul style="list-style-type: none"><li>• Hands on training of Vision monitoring.</li><li>• Hands on training of Subjective refraction.</li><li>• Hands on training of Retinoscopy(wet and dry).</li><li>• Hands on training of Prescribing lenses &amp; prisms.</li><li>• Hands on training of Tonometry (Schiotz).</li><li>• Hands on training of Corneal staining.</li><li>• Hands on training of Ishihara chating.</li><li>• Hands on training of Schirmer's test &amp; TBUT.</li></ul> |

## Details of Curriculum for Second Year Diploma in Optometry Technician

| PAPER 1st<br>Theory                          | Topics  | Hours. |
|--|---|--------|
| <b>1.Details of<br/>Diseases<br/>of eye.</b> | 1. Common Symptoms in ophthalmology and Examination of eye.   | 15 Hrs |
|  | 2. Definition, Causes, s/s, investigations & management of error of refraction.<br>(Myopia, Hypermetropia, Astigmatism, Presbyopia)   | 15 Hrs |
|  | 3. Definition, Causes, s/s, investigations & management of Diseases of Lacrimal apparatus.<br>(Dacryocystitis, Lacrimal tumors, Dry eye, Watering of eye etc.)  | 15 Hrs |
|  | 4. Definition, Causes, s/s, investigations & management of Diseases of eyelids.<br>(Ptosis, Lagophthalmos, blepharitis, stye, chalazion, int. hordeolom, Trichiasis, entropion, ectropion, Blepharospasm) | 20 Hrs |
|  | 5. Definition, Causes, s/s, investigations & management of Diseases of Conjunctiva.<br>(Conjunctivitis, Pterygium, Pinguecula, red eye, sub-conj. bleed)  | 15 Hrs |
|  | 6. Definition, Causes, s/s, investigations & management of Diseases of Cornea.<br>(Keratitis, Cornealulcer, Corneal opacity, keratoconus, keraloplasty)   | 15 Hrs |
|  | 7. Definition, Causes, s/s, investigations & management of Diseases of Sclera.<br>(Episcleritis, Scleritis & Staphyloma)  | 10 Hrs |
|  | 8. Definition, Causes, s/s, investigations & management of Diseases of uvea.<br>(Uveities, endophthalmitis, Pan ophthalmitis)   | 15 Hrs |
|  | 9. Definition, Causes, s/s, investigations & management of Diseases of lens.<br>(Cataract, Latest techniques in surgery of Cataract, Subluxation/dislocation of lens)                                     | 20 Hrs |
|  | 10. Definition, Causes, s/s, investigations & management of Diseases of Angle of AC.<br>(Glaucoma)  | 20Hrs  |
|  | 11. Definition, Causes, s/s, investigations & management of Diseases of Vitreous.<br>(Vitreous haemmorrhage, Vitreal opacities, Vitrectomy)   | 05Hrs  |
|  | 12. Definition, Causes, s/s, investigations & management of Diseases of Retina<br>(Diabetic & hypertensive retinopathy, RD, CSR, CME, Retinoblastoma, CRAO, CRVO, BRAO, BRVO Eale's disease)              | 20Hrs  |
|  | 13. Definition, Causes, s/s, investigations & management of Diseases of Optic nerve.<br>(Optic neuritis, papillaedena, Optic atrophy)   | 15Hrs  |

## Details of Curriculum for Second Year Diploma in Optometry Technician

|                                      |   |       |
|--------------------------------------|---|-------|
| <b>1.Details of Diseases of eye.</b> | 14. Destructive surgeries of eyeball  | 05Hrs |
|                                      | 15. Definition, Causes, s/s, investigations & management of Diseases of Strabismus  | 10Hrs |
|                                      | 16. Definition, Causes, s/s, investigations & management of Diseases of Orbit.<br>(Proptosis, Orbital fracture, Orbital cellulitis) | 05Hrs |
|                                      | 17. Community ophthalmology<br>(Blindness, Various programmes related of blindness)   | 05Hrs |
|                                      | 18. Miscellaneous Vitamin A deficiency, Low vision aids, first aid in Ocular Injuries.  | 10Hrs |
|                                      | 19. Definition, Causes, s/s, investigations & management of Amblyopia   | 10Hrs |
|                                      | 20. Color blindness   | 05Hrs |

## Details of Curriculum for Second Year Diploma in Optometry Technician

| PAPER 1st<br>Theory  | Topics                                     | Hours. |
|--|--|--------|
| <b>2.Nursing Procedures like vital recording, IM/IV/SC injection, Oxygen therapy, Nebulization, IV infusion.</b> | 1. Temperature monitoring & Fever.         | 02 Hrs |
|  | 2. Pulse monitoring.                       | 02 Hrs |
|  | 3. BP monitoring.                          | 02 Hrs |
|  | 4. Respiration monitoring.                 | 01 Hrs |
|  | 5. Types of Injection routes.              | 01 Hrs |
|  | 6. IM Injection.                           | 01 Hrs |
|  | 7. IV Injection.                           | 01Hrs  |
|  | 8. SC Injection.                           | 01 Hrs |
|  | 9. Oxygen Therapy.                         | 03 Hrs |
|  | 10. Nebulization                           | 03 Hrs |
|  | 11. IV Infusion (Also with infusion pump). | 01 Hr  |
|  | 12. Care of Unconscious patient.           | 02 Hrs |

## Details of Curriculum for Second Year Diploma in Optometry Technician

| PAPER 2nd<br>Theory   | Topics   | Hours. |
|---|--|--------|
| <b>1.Mechanical optics and Lenses, Lenses prescription.</b> | 1.A Brief History of Ophthalmic Lenses, Spectacles   | 05 Hrs |
|   | 2.Terms Used in Lens Workshop  | 05Hrs  |
|   | 3.Ophthalmic Lens Material   | 20Hrs  |
|   | 4.Lens Standard  | 10Hrs  |
|   | 5.Ophthalmic Lens Blank Manufacture- Glass & Plastic   | 20Hrs  |
|   | 6.Ophthalmic Prescription Lens Making  | 20Hrs  |
|   | 7.Lens Defects   | 10Hrs  |
|   | 8.Ophthalmic Lens Designs  | 20Hrs  |
|   | 9.Types of Ophthalmic Lenses : Aspheric, High Index, Multifocal, Bifocal & Trifocal Lenses, Photo Chromatic Lenses, Polaroid Lenses, Tinted Lenses, Protective Lenses. | 30Hrs  |
|   | 10.Spectacles Frames: History, Nomenclature & Terminology, Classification.   | 10Hrs  |
|   | 11.Types of Frame Material   | 10Hrs  |
|   | 12.Types of Human Faces, Choice of Frames  | 10Hrs  |
|   | 13.Cosmetic & Functional Dispensing of Spectacles  | 10Hrs  |
|   | 14.Measurement for Ordering Spectacles : IPD, VD   | 10Hrs  |
|   | 15.Special Measurement for Fitting Special Types of Lenses   | 10Hrs  |
|   | 16.Fitting of Lenses in Various Types of frames  | 10Hrs  |
|   | 17.Spectacles Intolerance  | 10Hrs  |
|   | 18.Special types of Spectacles   | 10Hrs  |
|   | 19.Dispensing of Prisms, Prismatic effect of lens  | 20Hrs  |
|   | 20.Contact Lenses  | 20Hrs  |
|   | 21.Low Vision Aids   | 10Hrs  |
|   | 22.Magnification by Lenses   | 20Hrs  |

## Details of Curriculum for Second Year Diploma in Optometry Technician

| PAPER 2nd Theory                                 | Topics   | Hours. |
|--|--|--------|
| <b>2.Instruments and equipments used in eye.</b> | 1.Refractrometer                               | 10Hrs  |
|  | 2.Lensometer                                   | 05Hrs  |
|  | 3.Keratometer                                  | 05Hrs  |
|  | 4.Ophthalmoscope                               | 10Hrs  |
|  | 5.Slit Lamp                                    | 10Hrs  |
|  | 6.Corneal Loupe                                | 05Hrs  |
|  | 7.Operating Microscope                         | 05Hrs  |
|  | 8.Perimeter                                    | 03Hrs  |
|  | 9.Tonometer                                    | 05Hrs  |
|  | 10.Gonioscope                                  | 03Hrs  |
|  | 11.Pachymeter                                  | 02Hrs  |
|  | 12.Exophthalmometer                            | 02Hrs  |
|  | 13.ERG, EOG, VER                               | 05Hrs  |
|  | 14.Orthoptic instruments like synoptophore etc | 15Hrs  |
|  | 15.A and B scan                                | 05Hrs  |
|  | 16.Retinoscopes                                | 05Hrs  |
|  | 17.Ishihra Chart                               | 05Hrs  |

| PAPER 2nd Theory                  | Topics                                      | Hours. |
|-----------------------------------|---|--------|
| <b>3.Community ophthalmology.</b> | Introduction                                | 03Hrs  |
|                                   | National Programme for Control of Blindness | 17Hrs  |
|                                   | National Immunization Programme             | 10Hrs  |
|                                   | Blindness : Causes and its Prevention       | 20Hrs  |

| PAPER 2nd Theory                  | Topics                         | Hours. |
|-----------------------------------|--------------------------------|--------|
| <b>4.Drugs used in Optometry.</b> | 1. Topical NSAIDS.             | 05Hrs  |
|                                   | 2. Topical Steroids.           | 05Hrs  |
|                                   | 3. Anti Glancoma drugs.        | 10Hrs  |
|                                   | 4. Anti VEGF drugs.            | 05Hrs  |
|                                   | 5. Cycloplegics & Mydriatics.  | 10Hrs  |
|                                   | 6. Drugs used in dry eye.      | 10Hrs  |
|                                   | 7. Dyes used in ophthalmology. | 05Hrs  |
|                                   | 8. Topical Antimicrobials.     | 10Hrs  |

Curriculum  
for  
Practical :- Second Year  
Diploma in Optometry Technician

|                  | Topics  |
|------------------|---|
| <b>Practical</b> | <ul style="list-style-type: none"> <li>• Hands on training of slit lamp biomicroscope examination.</li> </ul>   |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of Gonioscopy.</li> </ul>                            |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of Applanation tonometry.</li> </ul>                 |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of Syringing.</li> </ul>                             |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of Perimetry.</li> </ul>                             |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of Keratometry, A scan.</li> </ul>                   |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of B Scan.</li> </ul>                                |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of Direct ophthalmoscopy.</li> </ul>                 |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of Indirect Ophthalmoscopy.</li> </ul>               |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of assistance in Common Ocular surgeries.</li> </ul> |
|                  | <ul style="list-style-type: none"> <li>• Hands on training of Fundus Camera &amp; FFA.</li> </ul>               |