

**C-1387**

**Sub. Code**

**93311**

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Non-Semester**

**Ophthalmic Techniques**

**FUNDAMENTAL SCIENCE**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. Tear substitutes.
2. Cycloplegics.
3. Mydriatics & mietics.
4. 3 grade of bsv.
5. Schirmers test.
6. Name the attachment of vitreous.
7. Define polycoria & corectopia.
8. Define culture media.
9. Give example for selective media.
10. Give two example for DNA virus.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Anti fungal drugs.

Or

(b) Local anaesthetics.

12. (a) Write about Dry eyes evaluation.

Or

(b) Explain tear film, Its origination, components &amp; function with a neat diagram.

13. (a) Give the parts of conjunctiva and explain.

Or

(b) Anatomy of cornea.

14. (a) Difference between gram positive and gram negative bacteria.

Or

(b) Write about the sample collection in conjunctiva.

15. (a) Give the origin, course and insertion of EOM.

Or

(b) Factors affecting OP.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Corneal transparency and corneal hydration.

Or

(b) Evaluation of binocular vision.

17. (a) Anti glaucoma drugs.

Or

(b) Write different types of routes of drug administration in general.

18. (a) Explain about anatomy of bacteria and draw the neat diagram.

Or

(b) Write about the differential staining methods.

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C-1388
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Sub. Code
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93312
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**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Non Semester**

**Ophthalmic Techniques**

**REFRACTION**

**(2016 Onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Refractive indices of cornea and lens.
2. Name the types of astigmatism
3. Define power
4. Write the uses of prisms
5. What is visual angle
6. Name 5 non optical LVA
7. SRK formula
8. Write about astigmatic dial
9. What is Maddox rod?
10. What is IPD? How do you measure it?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Write about Monocular Estimation Method.

Or

- (b) Write about Duochrome test.

12. (a) Explain A-Scan in detail.

Or

- (b) Write hyperopia and its types.

13. (a) Write the types of astigmatism in detail.

Or

- (b) Write construction of LogMAR chart.

14. (a) Write the principle of retinoscope and its types with diagram.

Or

- (b) Write about Javal Schiotz keratometer.

15. (a) Explain procedure of Hand neutralization.

Or

- (b) Write the contraindications of soft contact lenses.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write about B and L keratometer.

Or

- (b) Explain the construction of focimeter.

17. (a) Write about JCC.

Or

(b) Write about Myopia and its types.

18. (a) Explain the components of a trial box.

Or

(b) Write about the visual acuity charts used for children.

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<b>C-1389</b>
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<b>Sub. Code</b>
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<b>93313</b>
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**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Non Semester**

**Ophthalmic Techniques**

**EYE DISEASES AND OPHTHALMIC PRACTICE**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Hypopyon ulcer
2. Xerosis
3. Causative organisms in viral keratitis
4. External hordeolum
5. Perforating injury
6. Microcornea
7. Complicated cataract
8. Perimeter
9. Esotropia
10. Symblepharon

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) Write about sympathetic ophthalmia.

Or

(b) Write about Trachoma.

12. (a) Explain buphthalmos.

Or

(b) Write about hypertensive retinopathy.

13. (a) Write about iridocyclitis.

Or

(b) Write about bacterial keratitis

14. (a) Write about pingicuela.

Or

(b) Write about diabetic cataract.

15. (a) Write about membranous conjunctivitis.

Or

(b) Write about episcleritis.

**Part C****(3 × 10 = 30)**Answer **all** questions.

16. (a) Write about optic neuritis and its types.

Or

(b) Explain diabetic retinopathy.



17. (a) Write about congenital cataract.

Or

(b) Write about bacterial conjunctivitis.

18. (a) Explain about POAG.

Or

(b) Write about the exotropia and its types.

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**C-1390**

**Sub. Code**

**93314**

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Non-Semester**

**Ophthalmic Techniques**

**OPTOMETRIC INSTRUMENTS**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Use of Red green goggles.
2. Name the types of IOL.
3. Difference between static & kinetic perimetry.
4. What is cobalt blue filter?
5. Grades of BSV.
6. Measure of corneal curvature.
7. Moses effect.
8. Surgical forceps.
9. Near vision chart.
10. SICS.

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) Write about Spot retinoscope.

Or

(b) Write about SRK I &amp; II formula in IOL calculation.

12. (a) Explain Schiottz tonometer.

Or

(b) Write about diplopia charting.

13. (a) Write about ocular prosthesis.

Or

(b) Write about amblyoscope.

14. (a) Write the procedure of worth 4 dot test.

Or

(b) Write about glucometer.

15. (a) Explain field defects in glaucoma.

Or

(b) Write about sphygmomanometer.

**Part C****(3 × 10 = 30)**Answer **all** questions.

16. (a) Write about trab surgery.

Or

(b) Explain the illumination techniques in slit lamp.

17. (a) Write about Gonioscope.

Or

(b) Write about Javal schiotz keratometer.

18. (a) Explain in detail about A-scan.

Or

(b) Write about Indirect ophthalmoscope.

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<b>C-1391</b>
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<b>Sub. Code</b>
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<b>93311</b>
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**DIPLOMA IN OPHTHALMIC TECH. EXAMINATION,  
NOVEMBER 2019**

**Non-Semester**

**Ophthalmic Techniques**

**FUNDAMENTAL SCIENCES**

**(Upto 2015 Batch)**

Time : 3 Hours

Maximum : 70 Marks

**Part A**

(5 × 2 = 10)

Answer **all** questions.

1. What is Hippus?
2. List out the structures of angle of anterior chamber.
3. What is proptomyopia?
4. What are mydriatic drugs? Give one example of mydriatic drug.
5. Name one antiviral drug.

**Part B**

(4 × 5 = 20)

Answer any **four** questions.

6. Explain conventional pathway of aqueous drainage.
7. Explain the anatomy of conjunctiva.
8. Explain the factors influencing IOP maintenance.

9. Explain the process of sterilization.
10. Explain the pathway of cycloplegics drugs.
11. What corticosteroids? Explain the role of corticosteroid in ophthalmic practice.
12. Explain basic characters of bacteria.

**Part C**

(4 × 10 = 40)

Answer any **four** questions.

13. Draw and explain anatomy of angle of anterior chamber.
14. Tabulate the origin, insertion, nerve supply, blood supply, action of extra ocular muscle.
15. Explain the ocular route of drug administration pathway.
16. What is presbyopia? Explain the signs, symptoms and management of presbyopia.
17. Explain the methods of finding out amplitude of accommodation.
18. What tritanomaly? Explain different color vision charts.

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<b>C-1392</b>
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<b>Sub. Code</b>
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<b>93312</b>
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**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Non-Semester**

**Ophthalmic Techniques**

**REFRACTION**

**(Upto – 2015 batch)**

Time : 3 Hours

Maximum : 70 Marks

**Part A**

(5 × 2 = 10)

Answer **all** questions.

1. Define Snelen's law of refraction.
2. What is risley prism?
3. Convert 6/30 to feets.
4. What is a pinhole? Explain importance of pinhole in refraction.
5. Write SRK-I and SRK-II formula.

**Part B**

(4 × 5 = 20)

Answer any **four** questions.

6. What is decentration of lenses? Explain methods of getting prism in spectacle prescription.
7. Explain duochrome test.
8. Explain the use of JCC in refining axis and power in astigmatism.

9. What are different methods to measure amplitude of accommodation?
10. What is kinetic perimetry? Explain Bjerrum screen.
11. Explain the components of visual acuity.
12. What is cycloplegic refraction?

**Part C**

(4 × 10 = 40)

Answer any **four** questions.

13. What is astigmatism? Explain sign, symptoms and management of astigmatism.
14. Explain different methods of retinoscopy.
15. What is neutralization of lens? Explain the methods of neutralizing a lens.
16. Explain methods of recording visual acuity in children and chart used for recording visual acuity in children.
17. Explain non optical aids used in LVA management.
18. What is contact lens? Explain different types of contact lenses available.

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<b>C-1393</b>
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<b>Sub. Code</b>
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<b>93313</b>
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**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Non- Semester**

**Ophthalmic Techniques**

**EYE DISEASES AND OPHTHALMIC PRACTICE**

**(Upto 2015 onwards)**

Time : 3 Hours

Maximum : 70 Marks

**Part A**

(5 × 2 = 10)

Answer **all** questions.

1. What is blepharitis?
2. What is ACCO?
3. What is hypopyon?
4. What are grades of nuclear cataract?
5. Differentiate between primary and secondary glaucoma.

**Part B**

(4 × 5 = 20)

Answer **any four** questions

6. Explain the sign, symptoms and management of hardoleum internum and externum.
7. Explain the sign, symptoms and management of chalazion.
8. Write short notes on pterygium.

9. Explain the signs and grades of Trachoma.
10. Explain PCO.
11. Explain different types of IOLs.
12. Explain iridotomy and role of laser in glaucoma.

**Part C**

(4 × 10 = 40)

Answer **any four** questions

13. Explain the use of synoptophore in management of strabismus.
14. Explain the sign, symptoms and management of bacterial conjunctivitis.
15. What is corneal ulcer? Explain the management of viral corneal ulcer.
16. Explain different type of cataract surgery.
17. Explain field defects of glaucoma.
18. Explain how to manage chemical injuries.

C-1394
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Sub. Code
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93314
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**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Non Semester**

**Ophthalmic Techniques**

**OPHTHALMIC INSTRUMENTATION AND  
MAINTENANCE**

**(Upto – 2015 onwards)**

Time : 3 Hours

Maximum : 70 Marks

**Part A**

(5 × 2 = 10)

Answer **all** questions.

1. What is Imbert - Fick law?
2. What are types of IOLs?
3. What is the difference between spot and streak retinoscopy?
4. What is the use of sutures in ophthalmic practice?
5. What is ocular prosthesis?

**Part B**

(4 × 5 = 20)

Answer any **four** questions.

6. Explain the advantage of direct ophthalmoscope over indirect ophthalmoscope.
7. What is Schiottz tonometer? Explain the use and maintenance of schiottz tonometer.

8. What are instruments required in a SICS cataract surgery?
9. Explain the construction and use of Bjerrum screen.
10. What are different types of distant visual acuity charts available for measurement of visual acuity?
11. Explain the construction and use of Hess screen.
12. How to check BP with BP apparatus?

**Part C**

(4 × 10 = 40)

Answer any **four** questions.

13. Explain the principal of applanation tonometer. Explain the care and procedure of measurement of IOP with applanation tonometer.
14. Explain different illumination techniques of slit lamp?
15. Explain different methods of retinoscopy and the requirement of darkroom in retinoscopy.
16. What is gonioscope? Explain the use of gonioscope in glaucoma and types, procedure of use of gonioscope.
17. Explain keratometry.
18. Explain the construction and use of major amblyoscope.