**C–0670**

| Sub. Code |
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| 93311 |

**DIPLOMA EXAMINATION, APRIL 2019**

**Non-Semester**

**Opthalamic Techniques**

**FUNDAMENTALS SCIENCE**

**(2016 onwards)**

Time : 3 Hours Maximum : 75 Marks

**Part A** (10 × 2 = 20)

Answer **all** questions.

1. Name any two multicellular fungi
2. Tabulate the Shaffer's grading of Anterior Chamber
3. Write about staining.
4. Name any two antivirals.
5. Name the parts of conjunctiva.
6. Name the layers of retina.
7. What is substantia propria?
8. Name the methods to measure lop?
9. What is internal hordeolum?
10. What are the component of color vision?

**Part B** (5 × 5 = 25)

Answer **all** questions.

11. (a) Write about anaesthetics.

Or

(b) Write the anatomy of iris.

12. (a) Write about ocular Route of drug administration.

Or

(b) Write about retro virus

13. (a) Write about Unicellular fungi and antifungals in detail

Or

(b) Write the anatomy of oblique muscles in detail.

14. (a) Write in detail about anatomy of optic nerve.

Or

(b) Write about culture media in detail.

15. (a) Write about antibiotics.

Or

(b) Write about anomaloscopes.

**Part C** (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the factors affecting corneal transparency.

Or

(b) Write about aqueous outflow system.

17. (a) Write the anatomy of visual pathway.

Or

(b) Write about bacterial conjunctivitis.

18. (a) Write the morphology of bacteria.

Or

(b) Write the anatomy of lacrimal system.

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| C–0671 |
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| Sub. Code |
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| 93312 |

**DIPLOMA EXAMINATION, APRIL 2019**

**Non-Semester**

**Ophthalmic Technique**

**REFRACTION**

**(2016 onwards)**

Time : 3 Hours Maximum : 75 Marks

**Part A** (10 × 2 = 20)

Answer **all** questions.

1. Define Magnification
2. Write about concave mirror effect with diagram.
3. What is dynamic retinoscopy?
4. What is spherical equivalent?
5. What is Bjerrum Screen?
6. What is LogMAR notation?
7. What is prentice rule?
8. What is stenopic slit?
9. Write the characteristics of image.
10. Write the laws of refraction.

**Part B** (5 × 5 = 25)

Answer **all** questions.

11. (a) Write about characteristics of fundal reflex.

Or

(b) Write about conoid of sturm.

12. (a) Explain JCC procedure in detail.

Or

(b) Write methods of binocular balancing.

13. (a) Write the design of snellen letter.

Or

(b) Write about lensometer.

14. (a) Write the different visual axes of eye with diagram.

Or

(b) Write about polarization and its uses.

15. (a) Explain procedure of Hand neutralization.

Or

(b) Write the non optical devices used as LVAs.

**Part C** (3 × 10 = 30)

Answer **all** questions.

16. (a) Write about selection criteria for CL fitting.

Or

(b) Explain the types of dynamic retinoscopy.

17. (a) Write about JCC.

Or

(b) Write about hyperopia and its types.

18. (a) Explain the use of pupillometer.

Or

(b) Write about the procedure of IOL calculation.

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**C–0672**

| Sub. Code |
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| 93313 |

**DIPLOMA EXAMINATION, APRIL 2019**

**Non Semester**

**Ophthalmic Techniques**

**EYE DISEASES AND OPHTHALMIC PRACTICS**

**(2016 onwards)**

Time : 3 Hours Maximum : 75 Marks

**Part A** (10 × 2 = 20)

Answer **all** questions.

1. Blepharitis
2. Squint
3. Pingecula
4. Ophthalmia neonatorum
5. Keratitis
6. Scleritis
7. Senile Cataract
8. Types of glaucoma
9. Diabetic Retinopathy.
10. Sympathetic Ophthalmitis

**Part B** (5 × 5 = 25)

Answer **all** questions.

11. (a) Perforating Injury.

Or

(b) Refinitis Pigmentosa

12. (a) Hypertensive Retinopathy

Or

(b) Buphthalmos

13. (a) Extra ocular foreign body

Or

(b) Episcleritis

14. (a) Hypopyon ulcer

Or

(b) Purulent Conjunctivitis

15. (a) Orbital Cellulitis

Or

(b) Dacryocystitis.

**Part C** (3 × 10 = 30)

Answer **all** questions.

16. (a) Keratitis

Or

(b) Conjunctivitis

17. (a) Cataract and its Management

Or

(b) Glaucoma and its Management

18. (a) Squint

Or

(b) Optic Neuritis

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**C–0673**

**Sub. Code**
**93314**

**DIPLOMA EXAMINATION, APRIL 2019**

**Non-Semester**

**Ophthalmic Techniques**

**OPTOMETRIC INSTRUMENTS**

**(2016 onwards)**

Time : 3 Hours Maximum : 75 Marks

**Part A** (10 × 2 = 20)

Answer **all** questions.

1. Write about conformers in prosthetic eye.

2. What is the difference between spot retinoscope and streak Retinoscope.

3. What is the role of Nylon sutures in surgery?

4. Explain the role of red and green goggles in orthoptics investigations.

5. Draw and Label different part of PCIOL.

6. Explain about palpation.

7. Define principle of distance visual acuity charts.

8. Principle of Bausch and Lomb Keratometer.

9. Difference between spherical and cylinder lens.

10. Uses of glucometer.

**Part B** (5 × 5 = 25)

Answer **all** questions.

11. (a) Explain about Keratometer principle, optics and procedures.

Or

(b) Explain Duochrome test and Fogging procedures in detail.

12. (a) Explain about diplopia charting.

Or

(b) Explain Manufacturing of prosthetic eye.

13. (a) Write about different types of thermometer.

Or

(b) Write about types of sutures.

14. (a) Explain in detail about Perimeter.

Or

(b) What is JCC? Explain the importance, of use of JCC in refraction.

15. (a) How to assess grades of Binocular single vision in synaptophore?

Or

(b) Explain about procedure of streak retinoscope.

**Part C** (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain about procedure of A scan.

Or

(b) Types of Retinoscope.

17. (a) Bausch and Lomb Keratometer.

Or

(b) Direct Ophthalmoscope.

18. (a) Glucometer

Or

(b) Thermometer.

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**C–0674**

| Sub. Code |
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| 93311 |

**DIPLOMA EXAMINATION, APRIL 2019**

**Non Semester**

**Ophthalmic Techniques**

**FUNDAMENTAL SCIENCES**

**(upto 2015 onwards)**

Time : 3 Hours Maximum : 70 Marks

**Part A** (5 × 2 = 10)

Answer **all** questions.

1. What is direct reflex and consensual reflex?
2. List out extra ocular muscles.
3. List out layers of cornea and retina.
4. What are gram positive bacteria?
5. What are cycloplegics drugs?

**Part B** (4 × 5 = 20)

Answer any **four** questions.

6. Draw and label visual pathway.
7. What are factors responsible for corneal transparency?
8. What is accommodation? Explain the mechanism of accommodation.

9. Explain the process of specimen collection.

10. What are steroids? Explain side effects of steroids.

11. Explain the pathology of corneal ulcer.

12. Explain different types of antibiotic drugs.

**Part C** $(4 \times 10 = 40)$

Answer any **four** questions.

13. Draw and explain the anatomy of retina in detail.

14. What is swinging flash lights test? Explain different pupillary defects.

15. What is binocular single vision? Explain the grades of binocular single vision.

16. What is conjunctivitis? Explain the pathology of conjunctivitis.

17. What is retinoblastoma? Explain the pathology of retinoblastoma.

18. Explain the process of staining.

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| C–0675 |
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| Sub. Code |
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| 93312 |

**DIPLOMA EXAMINATION, APRIL 2019**

**Non-Semester**

**Opthalmic Techniques**

**REFRACTION**

**(Upto 2015 batch)**

Time : 3 Hours Maximum : 70 Marks

**Part A** (5 × 2 = 10)

Answer **all** questions.

1. Define refractive index.
2. What is magnification?
3. Convert 20/120 into mts.
4. What is legal blindness?
5. What is confrontation method?

**Part B** (4 × 5 = 20)

Answer any **four** questions.

6. Explain Snellen's law of refraction.
7. Explain (a) spherical lenses (b) cylindrical lenses (c) toric lenses.
8. Explain the procedure of IPD measurement.
9. Draw and explain strum's conoid.
10. What are the factors influencing visual acuity?

11. What is low vision? Explain different types of magnifiers.

12. What is contact lenses? Explain the parameters required for fitting contact lenses.

**Part C** $(4 \times 10 = 40)$

Answer any **four** questions.

13. Explain different types of dynamic retinoscopy.

14. What is hyperopia? Explain sign, symptoms and management of hyperopia.

15. What is prism? Explain the role of prism in ophthalmic practice.

16. What is visual acuity? Explain different types of visual acuity chart.

17. What is Maddox rod? Explain the construction of Maddox rod and use of Maddox rod in binocular vision?

18. What is keratometry? Explain construction, and use of keratometer.

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**C–0676**

**Sub. Code**
**93313**

**DIPLOMA EXAMINATION, APRIL 2019**

**Non Semester**

**Ophthalmic Techniques**

**EYE DISEASES AND OPHTHALMIC PRACTICE**

**(Upto 2015 BATCH)**

Time : 3 Hours Maximum : 70 Marks

**Part A** (5 × 2 = 10)

Answer **ALL** questions.

1. What is madarosis?

2. What type of discharge will be seen in bacterial, viral and fungal conjunctivitis?

3. What is hypopyon?

4. What is fincham's test?

5. What is bayonetting sign?

**Part B** (4 × 5 = 20)

Answer **FOUR** questions.

6. Write short notes on acute dacryocystitis.

7. What is squint? Write down classification of strabismus.

8. Write short notes on ophthalmia neonatorum.

9. Write short notes on management of pterygium.

10. Write short notes on PCO.

11. Write short notes on ECCE, SICS and ICCE

12. What are perforating injuries? Explain the management of perforating injuries?

**Part C** (4 × 10 = 40)

Answer any **FOUR** questions.

13. What is accommodative squint? Write sign, symptoms and investigation of accommodative esotropia type — II.

14. What is major amblyoscope? Explain the use of major amblyoscope in finding grades of BSV.

15. Explain different types of viral conjunctivitis and management of viral conjunctivitis.

16. What is corneal ulcer? Explain sign, symptoms and management of fungal corneal ulcer.

17. What is PACG? Explain the signs, symptoms and management of PACG.

18. What is POAG? Explain the field defects, fundus changes and diurinal variation in POAG?

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**C–0677**

**Sub. Code**
**93314**

**DIPLOMA EXAMINATION, APRIL 2019**

**Non-Semester**

**Ophthalmic Techniques**

**OPHTHALMIC INSTRUMENTATION AND MAINTENANCE**

**(Upto 2015 batch)**

Time : 3 Hours Maximum : 70 Marks

**Part A** (5 × 2 = 10)

Answer **all** questions.

1. What is scleral rigidity?

2. What are the parts of IOLs?

3. What is kinetic perimetry?

4. What is glucometer?

5. What is RAF?

**Part B** (4 × 5 = 20)

Answer any **four** questions.

6. Explain how to measure axial length.

7. Explain the advantages of indirect ophthalmoscope over direct ophthalmoscope.

8. Explain dynamic retinoscopy.

9. Explain the use of dark room in ophthalmic practice.

10. Explain the process of staining in corneal ulcer.

11. Explain the use of JCC in refraction.

12. What are different types of suture available?

**Part C** $(4 \times 10 = 40)$

Answer any **four** questions.

13. Explain the construction of slit lamp and use of slit lamp in ophthalmic practice.

14. What is glaucoma? Explain different types of glaucoma surgeries.

15. Explain dynamic and static retinoscopy.

16. Explain ocular prosthesis.

17. Explain the use of RAF and prism bar in orthopics.

18. Explain Hess chart construction and management.

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