DIPLOMA EXAMINATION, NOVEMBER 2022.

Non-Semester

Ophthalmic Technique

FUNDAMENTAL SCIENCES

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

- 1. Define conjuctivitis.
- 2. What are the components of extra ocular muscles?
- 3. Brief the intra ocular pressure (IOP).
- 4. List out the layers of cornea.
- 5. Mention the ocular normal flora.
- 6. Brief the corneal scraping.
- 7. What is therapeutic index?
- 8. What are the types of injection?
- 9. Draw the picture of hordeolum internum.
- 10. Mention the albino eye.

Part B

 $(5 \times 5 = 25)$

Answer all questions.

11. (a) Write the anatomy of pupil.

Or

- (b) Explain the anatomy of optic nerve.
- 12. (a) Explain the mechanism of accommodation.

Or

- (b) Mention the formation of tear.
- 13. (a) Draw a neat diagram of T4 virus and label it.

Or

- (b) Discuss briefly on ocular infection of fungi.
- 14. (a) Explain the types of drug.

Or

- (b) Elaborate the advers drug reactions.
- 15. (a) Discuss on the coditions of conjunctivitis.

Or

(b) Explain the retinoplastoma.

Part C

 $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Elaborate the components of posterior chamber of eye.

Or

(b) Write in detail note on anatomy of cornea and sclera.

 $\mathbf{2}$

17. (a) Discuss the mechanisms of binocular and color vision of eye.

Or

- (b) Describe in detail on steps involved in Gram's staining.
- 18. (a) Discuss types and uses of bacterial culture media.

Or

(b) Elaborate the topical route of drug administration.

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DIPLOMA EXAMINATION, NOVEMBER 2022

Non-Semester

Opthalmic Techniques

REFRACTION

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** questions.

- 1. What is refractive index of a medium?
- 2. With motion indicates ______ refractive error and ______ lenses are to be used.
- 3. Formula for power of lens.
- 4. What is Real image?
- 5. Uses of pinhole.
- 6. Explain monocular estimate method.
- 7. 6/60 What does this mean?
- 8. What are the uses of SITA fast in humphrey perimetry?
- 9. Any two indications for contact len fitting.
- 10. What is OBR?

Answer all the questions.

11. (a) Draw a diagram and show refraction of light through air, water and a positive lens.

Or

- (b) What is the importance of measuring IPD?
- 12. (a) What is spherical equivalent? How to calculate it?

Or

- (b) Discuss about Dynamic retinoscopy.
- 13. (a) Give brief notes on uses of prisms.

 \mathbf{Or}

- (b) What are the uses of keratometry?
- 14. (a) Write a sample spectacle prescription and explain its components.

Or

- (b) Parts of a trial frame with diagram.
- 15. (a) How telescope is used as a low vision Aid?

 \mathbf{Or}

(b) Snellen Acuity chart.

Part C

 $(3 \times 10 = 30)$

Answer **all** questions.

16. (a) Write in detail about laws of refraction.

Or

(b) Give notes on perimetry.

 $\mathbf{2}$

17. (a) Write in detail about characteristics of images, real virtual. Give diagram.

Or

- (b) Visual acuity testing methods.
- 18. (a) Procedure of Keratometry.

Or

(b) Construction and use of Lensometry.

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DIPLOMA EXAMINATION, NOVEMBER 2022.

Non-Semester

Ophthalmic Techniques

EYE DISEASES AND OPHTHALMIC PRACTICE

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** the questions.

- 1. Trichiasis
- 2. Symptoms of acute dacryocystitis.
- 3. Meaning of xerosis.
- 4. What is madras eye?
- 5. Signs of viral keratitis.
- 6. How to differentiate episcleritis and scleritis.
- 7. Causes of secondary cataract.
- 8. Remedy for congenital cataract.
- 9. What is IOP?
- 10. Cotton wool spots are found in which stage of ———.

Part B	$(5 \times 5 = 25)$
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Answer **all** the questions.

11. (a) Chalazion. Signs and Management.

Or

- (b) Write about amblyoscope.
- 12. (a) What are the types of discharge found in various types of conjunctivitis?

 \mathbf{Or}

- (b) Differentiate Pterygium and Pinguecula.
- 13. (a) Give brief notes On Hypopyon corneal ulcer.

Or

- (b) What are the differences between episcleritis and scleritis?
- 14. (a) Grading of PSC.

Or

- (b) Management of Senile cataract.
- 15. (a) Describe Buphthalmos.

 \mathbf{Or}

(b) First aid for chemical burns.

Part C

 $(3 \times 10 = 30)$

Answer **all** the questions.

16. (a) Write in detail about the types of squint.

Or

(b) Give detailed notes on types of conjunctivitis and differential diagnosis involved.

 $\mathbf{2}$

17. (a) Write in detail about Viral keratitis.

 \mathbf{Or}

- (b) Classification of cataracts.
- 18. (a) Write in detail about types of Glaucoma.

Or

(b) Give notes on Optic Neuritis.

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DIPLOMA EXAMINATION, NOVEMBER 2022

Non – Semester

Ophthalmic Techniques

OPTOMETRIC INSTRUMENTS

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A $(10 \times 2 = 20)$

Answer **all** the questions.

- 1. Name any four surgical instruments for cataract surgery.
- 2. Note on Nylon sutures.
- 3. Prism Bar
- 4. Principle of Gonioscopy.
- 5. Hess Screen
- 6. Write any two near vision charts.
- 7. Principle of Retinoscopy.
- 8. Note about causative organism for corneal ulcer.
- 9. Name the types of indirect tonometers.
- 10. Sclerotic scatter.

Part B (5 × 5 = 25)

Answer **all** the questions.

11. (a) Slit lamp techniques for fundus examination.

Or

- (b) Significance of school screening programmes.
- 12. (a) Write a note on spot retinoscopes and it's use.

 \mathbf{Or}

- (b) Note down the advantages, disadvantages and limitations of Keratometer.
- 13. (a) Discuss about glaucoma surgical instruments.

Or

- (b) Note down the parts of slit lamp.
- 14. (a) Write a note on perimeters.

Or

- (b) Write a note on BP apparatus.
- 15. (a) Discuss Briefly about A scan technique.

Or

(b) Write a note on cylindrical power refinement.

 $\mathbf{2}$

Part C (3 × 10 = 30)

Answer **all** the questions.

16. (a) Discuss detail about the parts and procedure of direct ophthalmoscope.

Or

- (b) Discuss about types, procedure and advantages of indirect gonioscopy.
- 17. (a) Write briefly about principle, parts and procedure of Bausch and Lomb Keratometer.

Or

- (b) Write down the significance of cycloplegic refraction in young adults.
- (a) Note down the types of retinoscopies and Discuss about the significance of dark room maintance for retinoscopy.

Or

(b) Write a note on contact and Non-contact tonometer.

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