DIPLOMA EXAMINATION, NOVEMBER 2023.

Non – Semester

Ophthalmic Technique

FUNDAMENTAL SCIENCES

(2016 onwards)

Duration : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** the questions.

1.   Write about functions of tear film.

2.   Name the Angle structures.

3.   What is Accommodation?

4.   Write about grades of BSV.

5.   Draw the different types of bacteria.

6.   Define culture media.

7.   What is Pharmacokinetics?

8.   Write about parenteral route of drug delivery.

9.   Cycloplegics.

10. Name the layers of retina.

Part B (5 × 5 = 25)

Answer **all** the questions.

11. (a) Explain origin, course, insertion and actions of EOM.

Or

(b) Write in detail about aqueous humour – outflow.

12. (a) Explain about various routes of drug delivery system.

Or

(b) Explain about functions of tear film.

13. (a) Specimen collection.

Or

(b) Difference between gram positive and gram–negative bacteria.

14. (a) Illustrate and explain about Lacrimal apparatus.

Or

(b) Write in detail about visual field defects.

15. (a) Explain in detail about mechanics of accommodation.

Or

(b) Write in detail about colour vision assessments.

Part C (3 × 10 = 30)

Answer **all** the questions.

16. (a) Write in detail about conjunctivitis.

Or

(b) Draw and explain about visual pathway.

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17. (a) Explain on Anti glaucoma drugs.

Or

(b) Write about the various staining methods.

18. (a) Write in detail about corneal transparency.

Or

(b) Write in detail about Evaluation of Dry eye.

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C–1068	Sub. Code
	93312

DIPLOMA EXAMINATION, NOVEMBER 2023.

Non – Semester

Ophthalmic Techniques

REFRACTION

(2016 onwards)

Duration : 3 Hours　　　　　　　Maximum : 75 Marks

Part A　　　　　　$(10 \times 2 = 20)$

Answer **all** the questions.

1. IPD

2. Refractive index

3. Diffraction

4. Vernier acuity

5. Use of prisms

6. Hyperopia

7. Magnification

8. Dioptre

9. Spherical equivalent

10. Accessories in the trial box

Answer **all** the questions.

11. (a)   Laws of refraction.

Or

(b)   Prentice rule.

12. (a)   Ascan.

Or

(b)   Soft CL fitting.

13. (a)   Magnifiers.

Or

(b)   Maddox Rod.

14. (a)   Types of magnification.

Or

(b)   Interference.

15. (a)   Radical retinoscopy.

Or

(b)   Prescription writing.

Part C $(3 \times 10 = 30)$

Answer **all** the questions.

16. (a)   Lensometer.

Or

(b)   Static Perimeter.

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17. (a) Construction of Snellen chart.

Or

(b) Static retinoscopy technique.

18. (a) Jackson Cross cylinder.

Or

(b) B and L Keratometer.

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C–1068

C–1069	Sub. Code 93313

DIPLOMA EXAMINATION, NOVEMBER 2023.

Non Semester

Ophthalmic Technique

EYE DISEASE AND OPHTHALMIC PRACTICE

(2016 onwards)

Duration : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** the questions.

1. Internal hordeolum

2. Cellulitis

3. Drinking water test in glaucoma

4. Symblepharon

5. Spring Catarrh

6. Scleromalacia perforans

7. Diagnostic dyes in eye examination

8. Siderosis Bulbi

9. Keratic precipitates

10. Kayser Fleischer ring

Part B $(5 \times 5 = 25)$

Answer **all** the questions.

11. (a) Pterigiyum.

Or

(b) Neovascular glaucoma.

12. (a) Entropion.

Or

(b) Demyelinating Optic neuritis.

13. (a) Traumatic cataract.

Or

(b) Orbital cellulitis.

14. (a) Hypertensive retinopathy.

Or

(b) Bacterial keratitis.

15. (a) Sympathetic ophthalmia.

Or

(b) Retinitis Pigmentosa.

Part C $(3 \times 10 = 30)$

Answer **all** the questions.

16. (a) Investigations for paralytic squint.

Or

(b) Iridocyclitis

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17. (a) Ptosis

Or

    (b) PACG

18. (a) Trachoma

Or

    (b) Scleritis

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C–1070

DIPLOMA EXAMINATION, NOVEMBER 2023.

Non Semester

Ophthalmic Technique

OPTOMETRIC INSTRUMENTS

(2016 onwards)

Duration : 3 Hours   Maximum : 75 Marks

Part A   (10 × 2 = 20)

Answer **all** the questions.

1.   Armstrong goggles

2.   Filters in ophthalmoscope

3.   Visual field

4.   Tonopen

5.   Hess chart

6.   Phacoemulsifiation

7.   Siedel test

8.   Blood sugar

9.   Synoptophore

10. Thermometer

Part B (5 × 5 = 25)

Answer **all** the questions.

11. (a) Schiotz tonometer

Or

(b) RAF ruler.

12. (a) Cataract surgical instruments.

Or

(b) Prism bar.

13. (a) Near vision charts.

Or

(b) Filters and accessories of slit lamp.

14. (a) Laboratory maintenance.

Or

(b) Jackson cross cylinder.

15. (a) Javal schotz keratometer.

Or

(b) Types of sututres.

Part C (3 × 10 = 30)

Answer **all** the questions.

16. (a) Indirect ophthalmoscope.

Or

(b) Gonioscope

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17. (a) Retinoscope

                    Or

     (b) A scan

18. (a) Screening at eye camps

                    Or

     (b) Ocular prosthesis

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C–1070

C–1427		Sub. Code
		93311

DIPLOMA EXAMINATION, NOVEMBER 2023.

First Semester

Optometry

OCULAR ANATOMY AND PHYSIOLOGY

(2023 onwards)

Duration : 3 Hours   Maximum : 75 Marks

Part A $(10 \times 1 = 10)$

Answer **all** questions.

1. Anterioposterior Diameter of normal adult eyeball is
    (a)   25 mm   (b)   24 mm
    (c)   235 mm   (d)   23 mm

2. Does not form the refractive media of eyes
    (a)   Tear film   (b)   Cornea
    (c)   Crystalline lens   (d)   Fovea centralis

3. Elevators of eye
    (a)   SR and IO   (b)   IO and SO
    (c)   IR and SO   (d)   SO and SR

4. Major retinal vessels present in

    (a)   Between the vitreous and internal limiting membrane

    (b)   The nerve Fibre layer

    (c)   The inner Plexiform layer

    (d)   The inner nuclear layer

5.   Normal aqueous production rate is about

     (a)   2 ML/min   (b)   2.3 ML/min

     (c)   2.6 ML/min   (d)   2.9 ML/min

6.   Corneal transparency is due to all except.

     (a)   Normal IOP

     (b)   Na⁺ K⁺ pump

     (c)   hypercellular stroma

     (d)   Peculliar arrangement of stromal lamella

7.   Phototransduction refers to

     (a)   Intllation of vision

     (b)   Processing of vision

     (c)   Transmission of visual sensation

     (d)   Visual perception

8.   Snellen's test type are based on the fact that two distant
     points can the visible as separate only when they subtend
     points can the visible as separate only when they subtend
     at the nodal point of eyes an angle of

     (a)   1 Minute   (b)   3 Minute

     (c)   5 Minute   (d)   2 Minute

9.   Which of the following is not true about Binouclar single
     vision

     (a)   Provides stereoscope vision

     (b)   Is present since Birth

     (c)   Is the cause of diplopia in paralytic squint

     (d)   Fusion is its second grade

10. In ERG the B wave represent the activity of

    (a)   Rods and cones   (b)   Bipolar cells

    (c)   Ganglion cells   (d)   All the above

<center>**Part B**   (5 × 5 = 25)</center>

<center>Answer **all** questions.</center>

11. (a)   Write in the short notes about structure of lens.

<center>Or</center>

    (b)   Write about the layers and functions of Tear Film.

12. (a)   Draw and name the parts of visual pathway.

<center>Or</center>

    (b)   Write about the primary and subsidiary action of extra ocular muscle.

13. (a)   Formation circulation and drainage of aqueous humour.

<center>Or</center>

    (b)   Corneal transparency.

14. (a)   Discuss the layer of retina.

<center>Or</center>

    (b)   Theories of colour vision.

15. (a)   ERG.

<center>Or</center>

    (b)   VEP.

<center>3</center>   **C–1427**

Part C (5 × 8 = 40)

Answer **all** questions.

16. (a) Write in detail about milestones in the development of the eye.

Or

(b) Draw and write about the layers of cornea in detail.

17. (a) Describe extra ocular muscle in detail.

Or

(b) Describe the layers, blood supply and nerve supply of urea.

18. (a) Discuss in detail on factors affecting the IOP.

Or

(b) Write about the tear film production and drainage.

19. (a) Visual activity-procedure and recording.

Or

(b) Physiology of normal vision.

20. (a) Binocular single vision.

Or

(b) ERG and VEP.

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C–1427

DIPLOMA IN OPTOMETRY EXAMINATION, NOVEMBER 2023.

First Semester

PHYSICAL, GEOMETRICAL OPTICS AND VISUAL OPTICS

(2023 onwards)

Duration : 3 Hours　　　　　　　　Maximum : 75 Marks

Part A　　　　　　　$(10 \times 1 = 10)$

Answer **all** questions.

1.　The medium in which speed of light in the same in all directions is called

　　(a)　Homogenous　　(b)　Non-Homogeneous

　　(c)　Empty　　(d)　None of these

2.　Interference pattern

　　(a)　Bright fringes are wider

　　(b)　Dark fringes are wider

　　(c)　Both are equal width

　　(d)　None of these

3.　The object placed at a very large distance of concave lens the image

　　(a)　real and diminished

　　(b)　real enlarged

　　(c)　virtual diminished

　　(d)　virtual enlarged

4. The distance of object infront of lens is always

   (a) Positive   (b) Negative

   (c) Virtual   (d) Zero

5. Anisometropia means

   (a) both the eyes are not oriented is the same parallel axis

   (b) high refractive errors between two eyes

   (c) difference in images

   (d) difference in pupil size

6. Regarding myopia which of the following is true

   (a) The far point is the infinity

   (b) It occurs with long actual length of eye

   (c) It can result from flat curvature

   (d) None of these

7. A patient of hypermetropia is given spectacle of

   (a) Concave lens   (b) Convex lens

   (c) Compound lens   (d) Mirror

8. Amblyopia is more common with

   (a) Myopes   (b) Hyper metropes

   (c) Both of these   (d) None of these

9. Choice of target used with ICC can be the following except

   (a) Rounded letters 'O' or 'C' 2 lines above Best VA

   (b) Rounded letters 'O' or 'C' Best VA

   (c) Double rings

   (d) Cluster of dots

C–1428

10. —————— drug is contraindicated inpatient with seizures.

   (a) tropicamicle   (b) cyclopertolate

   (c) homotrophe   (d) None of these

Part B $(5 \times 5 = 25)$

Answer **all** the questions

11. (a) Write a short note on Nature of light.

   Or

   (b) Discuss justify Refractive index of different media.

12. (a) Write a short note Power of a lens.

   Or

   (b) Discuss in brief Cylindrical lenses.

13. (a) Write notes on School myopia.

   Or

   (b) Classify amblyopia.

14. (a) What is principle behind retinoscopy. Name the parts of retinoscope.

   Or

   (b) Show with diagrams the different types of movement seen in retinoscope.

15. (a) Write short notes on PMT.

   Or

   (b) Write a sample Prescription report.

3   **C–1428**

Part C $(5 \times 8 = 40)$

Answer **all** questions.

16. (a) Explain in detail Electromagnetic spectrum.

Or

(b) Discuss in detail diffraction due to a slit.

17. (a) Write an essay about deviation produced by prisms.

Or

(b) Describe in detail Formation of images using lenses.

18. (a) Write a detailed notes on pathological myopia.

Or

(b) Write in detail about types of amblyopia and its management.

19. (a) Give a detailed notes on procedure of doing retinoscopy.

Or

(b) What are the advantages of retinoscopy over other methods of refraction.

20. (a) Write an essay about prescribing glasses in presbyopia.

Or

(b) Explain in detail about Cycloplegic refraction.

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