C–3245	Sub. Code
	91411

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

GENERAL ANATOMY AND PHYSIOLOGY

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write short note on pancreas?

2. Explain conduction system of heart?

3. Brief about hearing mechanism?

4. Structure and function of the connective tissue with diagram.

5. Explain about the importance of Rhfactor and its significance.

6. Write a note on structure and functions of synorial joints.

7. Write short notes on structure and function of kidney?

8. Write short note on electro cardiogram?

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Write a brief note on voluntary and involuntary muscles.

10. Explain anatomy and physiological process of stomach with a neat labelled sketch.

11. Give a brief note on menstrual cycle with a labeled structure of female reproductive system?

12. Discuss about the lung volumes capacity and brief the pulmonary ventilation.

13. Enumerate the structure of the fundamental tissues of the body?

14. Describe the formation and flow of lymph and brief its functions.

15. Compare the structural and functional differences between somatic and autonomic parts of the nervous system with a neat diagram.

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C–3217	Sub. Code 91412

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

GENERAL ANATOMY AND PHYSIOLOGY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Saliva.

2. What is trachea?

3. Ureter.

4. Landsteiner's law.

5. Deglutition.

6. Notes on purpura.

7. Uses of gall bladder.

8. Amniocentesis.

9. Ovulation.

10. Melatonin.

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

Answer **all** questions by choosing either (a) or (b).

11. (a) Draw a neat diagram of cardio vascular system and label the parts.

Or

(b) Erythroblastosis fetalis.

12. (a) Functions of skin.

Or

(b) Endometrial cycle.

13. (a) Explain excretory system.

Or

(b) Describe in detail about digestive system.

14. (a) Write a note on different types of taste sensation and explain taste pathway.

Or

(b) Female reproductive system.

15. (a) Autonomous nervous system.

Or

(b) Explain the anatomy of spinal cord and significance of spinal nerves.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Difference between voluntary and involuntary muscles.

Or

(b) Difference between artery and vein.

17. (a) Explain urinary system in detail.

Or

(b) Skull bones.

18. (a) Explain lung volumes and capacities.

Or

(b) What is blood grouping system and explain different types of blood groups?

———————

C–3218	Sub. Code
	91413

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

GENERAL AND OCULAR BIO CHEMISTRY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Racemic mixture.
2. Draw the structure of maltose.
3. What are the layers of tearfilm?
4. Function of haemoglobin.
5. Define cofactor.
6. Write the interpretation of clothing time.
7. Name any two types of cataract.
8. Define M.M. Equation.
9. What is a bimolecule?
10. Write the structure of two amino acids.

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Write short notes on classification of carbohydrates.

Or

(b) Biochemical composition of cornea.

12. (a) Walds visual cycle.

Or

(b) Write a detailed note on estimation of haemoglobin.

13. (a) Write a detailed note on classification of enzymes.

Or

(b) Ketone bodies.

14. (a) Atherosderosis.

Or

(b) Triglyarides.

15. (a) Estimation of urine sugar.

Or

(b) Diabetic cataract.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Brief about glycolysis and its energetics.

Or

(b) Brief about the biochemical composition of aqueous humor.

17. (a) Write a detailed note on B-oxidation of fatty acids.

Or

(b) Explain in detail about the disease manifestations of water soluble vitamins.

18. (a) Write in detail about the mode and factors affecting enzyme activity.

Or

(b) Write a detailed note on estimation blood grouping and its importance.

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C–3219	Sub. Code 91414

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

GEOMETRIC OPTICS

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define prism diopter.
2. Define light.
3. What is barrel distortion?
4. Define refractive index.
5. What are conjugate points?
6. Calculate the power of three lenses +2D, +5D, –3D placed together.
7. Draw neat diagram showing parts of an optical fibre.
8. Define Snell's law.
9. What is plane wavefront?
10. What is magnification?

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Write note on vergence.

Or

(b) Write note on dual nature of light.

12. (a) Define lateral magnification and derive its equation.

Or

(b) Write about shapes of thin lens.

13. (a) Write in detail total internal reflection.

Or

(b) Write about uses of optical fibres.

14. (a) Discuss spherical aberration.

Or

(b) Write note on focal points.

15. (a) Explain refraction by plane glass slab.

Or

(b) Define speed, wavelength and frequency of light.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Explain Fermat's principle and derive law of reflection at a plane surface.

Or

(b) Discuss matrix theory in paraxial optics.

17. (a) Write note on thick lenses.

Or

(b) Write in detail about prism, its types, properties and uses.

18. (a) Write in detail about refraction through concave spherical surface.

Or

(b) Derive lens makers formula.

———————

C–3220	Sub. Code 91415

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

NUTRITION

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Satiety value.
2. Name few Amino acids.
3. Name two monosaccharide and two disaccharide.
4. Function of sodium.
5. Sources of phosphorus.
6. Pernicious anaemia.
7. Specific dynamic action.
8. Respiratory Quotient.
9. Sources of Vitamin E.
10. Functions of Riboflavin.

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Write about Vitamin C.

Or

(b) Explain Milk and Milk products.

12. (a) Write about MUFA and PUFA.

Or

(b) Write about Measles and ocular complications.

13. (a) Write in detail about zero birth weight.

Or

(b) Explain the Bomb calorimeter.

14. (a) Write about functional classification of food.

Or

(b) Write about Hyperlipidemia.

15. (a) Write about antioxidant property of nutrients.

Or

(b) Write about calcium mineral.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Write about protein in detail.

Or

(b) Explain Obesity and its complications.

17. (a) Write about assessment of nutritional status.

Or

(b) Explain Vitamin A and its deficiency in detail.

18. (a) Write about Diet Planning in pregnancy.

Or

(b) Write about Vitamin B complex.

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C–3221	Sub. Code 91416

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

COMPUTERS

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What are the components of computers?
2. Mention some input and output devices.
3. What is CPU?
4. Expand ASCII and EBCDIC.
5. Define operating system.
6. How will you create a new folder on desktop?
7. Write the shortcut key for cut and paste operations.
8. What is page orientation?
9. What is search engine?
10. Define virus.

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) List and explain the four parts of a complete computer system.

Or

(b) What are the main categories of memory? Explain.

12. (a) Give a brief on number system.

Or

(b) Illustrate 1's and 2's complement with example.

13. (a) Describe the working principle of windows OS.

Or

(b) Write a note on control panel.

14. (a) Explain any four functions available in MS-Excel.

Or

(b) Write the advantages of MS-Office package.

15. (a) Write about browsing and chating.

Or

(b) Discuss on virus and antivirus.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) List and explain the types of computers.

Or

(b) Perform the following :

(i) 162_{10} to binary

(ii) 11101_2 to decimal

(iii) 2's complement of 1101101_2

(iv) $111011_2 + 11110_2$

(v) $1010_2 - 1000_2$.

17. (a) Explain about the classification of software.

Or

(b) How can we create a chart using MS-Excel?

18. (a) Explain the steps for creating a power point presentation.

Or

(b) What are the types of viruses? Explain.

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C–3222	Sub. Code 91422

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

OCULAR ANATOMY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Henle's layer.
2. Plica semilunaris.
3. Blood supply of Extraocular muscles.
4. Goblet cells.
5. Dilator pupillae muscles.
6. Factors affecting corneal transparency.
7. Meimobian glands.
8. Dimensions of crystalline lens.
9. Nerve supply of lacrimal gland.
10. Lacus lacrimalis.

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write about microscopic structure of iris.

Or

(b) Explain anatomy of Optic nerve

12. (a) Write about Vl CN.

Or

(b) Write about anatomy of Oblique muscles.

13. (a) Write in detail about macula and fovea.

Or

(b) Explain Apex of the orbit.

14. (a) Write about surgical spaces of orbit.

Or

(b) Write about zonules and its arrangements.

15. (a) Write about Anterior chamber angle and structures visible through it.

Or

(b) Write about Orbital fascia.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Write about Oculomotor nerve.

Or

(b) Explain lacrimal passage in detail.

17. (a) Write about anatomy of crystalline lens.

Or

(b) Explain the structure of retina.

18. (a) Write about the parts of conjunctiva.

Or

(b) Explain nerve arrangement of visual pathway.

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C–3223	Sub. Code 91423

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

OCULAR PHYSIOLOGY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Near point.
2. Hippus.
3. List the layers of retina.
4. Tears are secreted by which glands?
5. What is the near triad?
6. What is presbyopia?
7. What is Purkinje Shift phenomenon?
8. What is Diurnal variation?
9. What is Maganocellular and Parvocellular?
10. Mention the theories of colour vision.

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) Write a note on Cataract.

Or

(b) Protective mechanism of eye.

12. (a) Describe Herings law and Sherington's law.

Or

(b) Write in detail the tests for colour vision.

13. (a) Write a note on secretion and drainage of tears.

Or

(b) Visual cycle.

14. (a) Grades of binocular vision.

Or

(b) VEP.

15. (a) Components of visual acuity.

Or

(b) Contrast sensitivity.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Draw a tabular column and write the extraocular muscles, their functions and nerve supply.

Or

(b) Write in detail about colour vision defects.

17. (a) Write down the ocular changes in accommodation and presbyopia.

Or

(b) With a neat diagram, explain about papillary light reflex and near reflex.

18. (a) Functions of cornea, uvea, aqueous and Vitreous.

Or

(b) Measurement of IOP.

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C–3224	Sub. Code 91424

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

PHYSICAL OPTICS

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is simple harmonic motion?
2. Define dual nature of light.
3. Define law of reflection based on hygens principle.
4. Define coherence.
5. What is the condition for constructive interference?
6. Define diffraction.
7. What is gratting?
8. Define polarization.
9. What is polarizor?
10. Write any two applications of holography.

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Write a brief note on law of refraction based on hygen's principle.

Or

(b) Write short note on wave velocity and group velocity.

12. (a) Explain the concept of Lloyd's mirror experiment.

Or

(b) Explain in detail young's double experiment.

13. (a) Explain diffraction due to double.

Or

(b) Write a short note on dispassive power of gratting.

14. (a) What is plane of polarization and plane of vibration explain?

Or

(b) How the Nicol Prism act as analyzer explain?

15. (a) Explain the concept of stimulated and spontaneous emission.

Or

(b) Write some important characteristics of laser.

Part C

(3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Derive a mathematical representation of superposition of simple harmonic waves.

Or

(b) How to determine velocity of light explain with any one method?

17. (a) Explain with a neat diagram the working Freshnel's biprism.

Or

(b) Describe in detail the construction and working of zone plate.

18. (a) Explain the production method of circular and elliptical polarization.

Or

(b) Explain with neat diagram construction and reconstruction of hologram.

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C–3225	Sub. Code 91425

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

MICROBIOLOGY AND PATHOLOGY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

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

Answer **all** questions.

1. Define autoimmunity.
2. Uses of gram stain.
3. Mention the various types of hypersensitivity.
4. List any two pathogenic haemophilus species.
5. Name any two enriched media.
6. Define phagocytosis.
7. What is hordiolum?
8. Define tumor.
9. What is disinfection?
10. Agglutination means.

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Brief about keratoconnus.

Or

(b) Microscopy.

12. (a) Write the methods of chy heat sterilization.

Or

(b) Write about healing and repair mechanism.

13. (a) Brief about ocular mycology.

Or

(b) Write a short note on orbital tumors.

14. (a) Write a short note on normal ocular flora.

Or

(b) Write about pathogenicity of leptospira species.

15. (a) Write about the ocular lesions of staphylococci.

Or

(b) Write the procedure of acid fast staining.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Write a detailed note on structure and function of immuno globulins.

Or

(b) Write about the clinical importance ocular lesions diagnosis and treatment of adenovirus.

17. (a) Write a detailed note on the role of vascular component and its function.

Or

(b) Brief about conjunctivitis and its types.

18. (a) Explain about any two types of hypersensitivity in detail.

Or

(b) Methods of ocular specimen collections.

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C–3226	Sub. Code 91432

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

VISUAL OPTICS

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is anterior corneal power and posterior corneal power and total corneal power?

2. What is dark adaptation?

3. Define amplitude of accommodation.

4. Find out mean amplitude of accommodation for 40 years old using Hofstetter formula.

5. Define depth of field.

6. Define depth of focus.

7. Define Foucalt's principle.

8. What is dispersion? Explain its application in refraction.

9. What is spherical aberration?

10. What is Newton prism?

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

Answer **all** questions choosing either (a) or (b).

11. (a) Draw and explain schematic eye and reduced eye.

Or

(b) Explain the optical structure of eye.

12. (a) Write short notes on schiners disc experiment.

Or

(b) What is range of accommodation? Explain the components of accommodation.

13. (a) What is Magnification? Explain the types of magnification.

Or

(b) What is Blur disc diameter? Explain with an example.

14. (a) What is astigmatism? Explain the astigmatic fan in detail.

Or

(b) What is bichrome test? Explain the procedure in detail with example.

15. (a) What is contrast sensitivity? Explain the assessment of it with pelli robson chart.

Or

(b) Explain colour vision.

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) What is myopia? Explain the sign, symptoms, and management of myopia.

Or

(b) What is astigmatism? Explain the management of astigmatism.

17. (a) What is presbyopia? Explain the management of presbyopia.

Or

(b) What is accommodation? Explain the type, mechanism, stimulus and optics of accommodation.

18. (a) What is aberration? Explain different type of aberration of eye and the mechanism which helps in overcoming it.

Or

(b) What is retinoscopy? Explain different types, procedure and methods of retinoscopy.

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C–3227	Sub. Code 91433

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

OCULAR DISEASES — I

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Chalazion.

2. Buphthalmos.

3. Epicanthic folds.

4. Viral Keratitis.

5. Shaffer's grading.

6. Use of antimetabolites in trabeculectomy.

7. Iris nodules.

8. Pyogenic granuloma.

9. Fluorescein dye disappearance test and its grading.

10. Brushfield spots.

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Entropion.

Or

(b) Episcleritis.

12. (a) Staphyloma.

Or

(b) Blepharitis.

13. (a) Fuchs endothelial dystrophy.

Or

(b) YAG PI.

14. (a) Vernal Kerato conjunctivitis.

Or

(b) Endophthalmitis.

15. (a) Vogt – Koyonagi Harada syndrome.

Or

(b) Degenerations of conjunctiva.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Explain congenital cataract in detail.

Or

(b) Explain bacterial keratitis in detail.

17. (a) Explain primary open angle glaucoma and its management.

Or

(b) Explain ptosis, its evaluation and management.

18. (a) Write in detail about dry eye, its causes, investigation and management.

Or

(b) Explain the steps of phacoemulsification.

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C–3228	Sub. Code
	91434

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

OPTOMETRIC INSTRUMENTS — I

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. State the importance of measuring IOP in clinic.

2. Draw neat diagram of construction of simple microscope.

3. Types of keratometre.

4. What is the principle of non-contact tonometer?

5. What is the need of prisms in trial box?

6. Describe any one near ratinoscope technique.

7. List the disadvantages of LogMar.

8. Define MTF.

9. Mention the different ways of measuring IPD.

10. Display charts.

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

Answer **all** questions choosing either (a) or (b).

11. (a) Write note on vision testing devices for illiterates.

Or

(b) Write note on corneal topography.

12. (a) Explain about Schiotz.

Or

(b) Write about compound microscope with Huygene eye piece.

13. (a) Write in detail about trial box.

Or

(b) Write note about abberometer.

14. (a) Discuss about PAM.

Or

(b) Write about phoropter.

15. (a) Describe any one color vision testing device in detail.

Or

(b) Explain about slit lamps its purpose, optics and parts.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Explain in detail about pachymetry, principle, parts and its clinical importance.

Or

(b) Discuss about autorefractor.

17. (a) Retinoscope.

Or

(b) Write about Spectrometer.

18. (a) Write in detail about B and L keratometer.

Or

(b) IDO.

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C–3229	Sub. Code 91435

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

GENERAL AND OCULAR PHARMACOLOGY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

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

Answer **all** questions.

1. What is MEC?
2. Define therapeutic index.
3. What is adverse drug reaction?
4. Write any two ocular topical anaesthetics.
5. Define first pass metabolism.
6. Disadvantages of corticosteroids.
7. Write the steps involved in pharmacokinetics.
8. What is a lethal dose?
9. Name nay two CNS stimulants.
10. Define bioavailability.

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Write short notes on drug toxicity.

Or

(b) Brief about the nature and source of drug.

12. (a) Write about ophthalmic antibiotics.

Or

(b) Write short notes on structure activity relationship.

13. (a) Brief about betablockers.

Or

(b) Write short notes on mechanism of drug action.

14. (a) What is an anticonvulsive drug?

Or

(b) Write short notes on ophthalmic diagnostic drugs.

15. (a) Write short notes on Dose response relationship.

Or

(b) Brief about sedatives and its pharmacological action.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Brief about the general route of drug administration.

Or

(b) Write a detailed note on ophthalmic corticosteroids.

17. (a) Explain about cholinergic drugs.

Or

(b) Brief about the stages of general anaesthetics.

18. (a) What is pharmacokinetics of a drug explain its parameters?

Or

(b) Write a detailed note on aliphatic alcohols.

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C–3230	Sub. Code
	91436

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

CLINICAL EXAMINATION OF VISUAL SYSTEM

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Use of Gonioscopy.
2. What is digital pressure?
3. What is HVID? What is the normal value?
4. Use of Radical retinoscopy.
5. List two advantages and disadvantages of AR.
6. What is the use of duochrome test?
7. Use of Van Herick test.
8. What is Hippus?
9. What is binocular refraction?
10. Uses of pinhole.

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write a note on cyclopledgic refraction.

Or

(b) Write a note on colour vision.

12. (a) Write in detail about case history.

Or

(b) Discuss in detail about Snellen and LogMar chart.

13. (a) Write in detail about Streak Retinoscopy.

Or

(b) Write in detail about Dynamic Retinoscopy.

14. (a) Explain about Amsler chart.

Or

(b) Confrontation test.

15. (a) Explain the tests to find and quantity strabismus.

Or

(b) Explain the various tests to asses tears.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Write in detail about presbyopia.

Or

(b) Explain about subjective refraction.

17. (a) Slitlamp.

Or

(b) Direct Ophthalmoscope.

18. (a) Explain the indication and procedure of cyclodamia and Borish delayed spherical end point.

Or

(b) Explain in detail about papillary evaluation.

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C–3231	Sub. Code
	91442

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

OPTOMETRIC OPTICS

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define reflection and absorption.

2. What are cylindrical lenses and sphero-cylinder lenses?

3. What will be the amount of decentration required to get 6Δ base out in-6.50 Dsph?

4. Convert –2.00Dsph / + 2.00Dcyl × 180 into optical cross.

5. Find out CVF for 1.6 index lens with surface power required –6.00Dsph.

6. Convert –2.00cyl × 90; –2.00 cyl × 180 into sph/cyl form.

7. What is abbe value of crown glass? Explain the role of abbe value in ophthalmic lenses.

8. What is MBS for a frame having ED of 32 mm?

9. What is gradient tint?

10. What is role of AR coating in photochromic lenses?

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) What are Fresnel lenses? Explain the use of Fresnel lenses in ophthalmic practice.

Or

(b) Compound 4Δ base out and 3Δ base up.

12. (a) Resolve 5Δ @ 39,

Or

(b) Calculate the surface power on back surface for lens having +6.00Dsph/+2.00Dcyl×90 with base of 6. What is base curve, corss curve and toric base cuve?

13. (a) What are bifocal lenses? Explain different type of round bifocal lenses.

Or

(b) What are occupational lenses? Explain different types of occupational lenses.

14. (a) Calculate effective power of lens to be fitted in spectacle frame having vertex distance of 14 mm and refraction carried out at a distance of 12 mm with a refractive error of –8.00Dsph/–3.00Dcy×90.

Or

(b) Transpose the following into optical cross, two cylinder and sphere equivalent.

(i) –3.00Dsph/–2.00Dcyl×90

(ii) +4.50/–2.00×90

(iii) +11.00Dsph/+1.00Dcyl×150

(iv) –3.00Dsph/+3.00Dycl×35

(v) +6.00Dsph/–7.50Dcyl×125

15. (a) Explain different types of trifocal lenses.

Or

(b) Explain curve variation factor in detail.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) What is AR coating? Explain difference between single layer and multi-layer AR coating. Explain Pros and Cons along with principle of AR coating.

Or

(b) Explain the types of bifocal lenses with its advantages and disadvantages of each type.

17. (a) What is surfacing? Explain the steps of surfacing in detail.

Or

(b) What is hard coating? Explain different types of hard coatings advantages and disadvantages of hard coating.

18. (a) Explain the characteristics features of ophthalmic lenses in detail.

Or

(b) Explain different form of lenses. What are split and cement type of bifocal?

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B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

OCULAR DISEASES — II

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. CNVM.
2. Causes for Vitreous haemorrhage.
3. Uses of ICG.
4. Edrophonium test.
5. Morning glory anomaly.
6. White without pressure.
7. Blepharospasm.
8. Cushing disease.
9. Pie in floor.
10. Word blindness.

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write about CARO.

Or

(b) Explain Optic Atrophy.

12. (a) Write about ROP.

Or

(b) Write about Craniopharyngioma.

13. (a) Write in detail about Horner's Syndrome.

Or

(b) Explain VI CN diseases.

14. (a) Write about Drug induced optic neuropathy.

Or

(b) Explain motor imbalance nystagmus.

15. (a) Write about Retinoblastoma.

Or

(b) Write about Amblyopia, its types and management.

Part C (3 × 10 = 30)

Answer **all** questions, by choosing either (a) or (b).

16. (a) Write about Diabetic Retinopathy.

Or

(b) Explain Supra nuclear pathway disorders.

17. (a) Write about ischemic optic neuropathy.

Or

(b) Explain RD, its types, pathogenesis and management.

18. (a) Write about vitrectomy.

Or

(b) Explain III CN diseases.

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C–3234	Sub. Code 91451

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

CONTACT LENS — I

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Find out effective power of cl with refraction of –6.00 dsph and vertex distance 12 mm.

2. Explain convergence in spectacle and contact lenses.

3. Explain difference between a monomer and a polymer.

4. What is rigidity? Explain the role of rigidity in contact lens.

5. Explain evaluation of lids and its uses.

6. What are chelating agents?

7. What is empirical fitting method?

8. What is median base curve?

9. Explain the process of ordering an RGP lenses.

10. What is base curve? Explain with diagram.

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

Answer **all** questions, by choosing either (a) or (b).

11. (a) Explain the evolution of soft contact lenses.

Or

(b) What is magnification? Explain the role of cl in magnification.

12. (a) Differentiate between empirical method and diagnostic method.

Or

(b) Explain fitting philosophies of soft contact lenses.

13. (a) Explain different types of toric RCP lenses and its indication.

Or

(b) What is spherical RGP lens? Explain the role of spherical RGP in astigmatism.

14. (a) Explain the role of movement in contact lens wear. What are adaptive symptoms?

Or

(b) Explain the role fluorescein in RCP fitting.

15. (a) What is topography? Explain keratometry in detail.

Or

(b) Explain FDA classification.

Part C (3 × 10 = 30)

Answer **all** questions, by choosing either (a) or (b).

16. (a) Explain different slit lamp technique and uses of slit lamp in contract lens fitting.

Or

(b) Explain properties of contact lenses.

17. (a) Explain pre fitting evaluation of soft contact lenses.

Or

(b) Explain fitting evaluation of RGP lenses.

18. (a) Explain fitting evaluation of SCL.

Or

(b) Explain care and maintenance of RGP lenses.

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C–3235	Sub. Code 91452

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

BINOCULAR VISION — I

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is retinomotor value?

2. What is fusion? What is sensory fusion and motor fusion?

3. Explain common subjective visual direction.

4. What is panum's area and panum's space?

5. What is horopter? Explain Vieth Muller circle.

6. What are the actions of LIR and RSO?

7. What are versions?

8. What is field of fixation?

9. What is proximal convergence?

10. What is tonic accommodation?

Part B (5 × 5 = 25)

Answer **all** questions, by choosing either (a) or (b).

11. (a) Explain the mechanism of stereopsis and advantages of stereopsis.

Or

(b) Draw and explain cyclopean eye and Vieth Muller circle.

12. (a) Explain law of ocular motility.

Or

(b) Explain different types of ocular movements.

13. (a) Explain test of stereopsis.

Or

(b) Explain test for fusion.

14. (a) Explain components of vergence.

Or

(b) Explain components of accommodation.

15. (a) What is ARC? Explain types of ARC.

Or

(b) What is suppression? What is types of suppression?

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) What are monoclar clues? Explain different types of monocular clues.

Or

(b) What is synoptophore? Explain the diagnostic and therapeutic uses of synoptophore.

17. (a) What is accommodation? Explain accommodative in facility management.

Or

(b) What is diplopia? Explain different types of diplopia. Explain the significance of physiological diplopia.

18. (a) What is amblyopia? Explain management of amblyopia with central fixation.

Or

(b) Explain the management of ARC.

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	91453

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

PEDIATRIC AND GERIATRIC OPTOMETRY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Non-optical low vision aids.
2. Congenital anomalies of cornea.
3. Worth four dot test.
4. Aniridia.
5. Opto kinetic nystagmus.
6. Macular hole.
7. Microtropia.
8. Atherosclerosis.
9. Cryptophthalmos.
10. Epiphora.

Part B (5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Grades of BSV.

Or

(b) Retinopathy of prematurity.

12. (a) Congenital anomalies of Eyelids.

Or

(b) Retinal arterial occlusions.

13. (a) Geriatric optometric examination.

Or

(b) Pediatric birth history.

14. (a) Congenital glaucoma.

Or

(b) Hypertensive retinopathy.

15. (a) Assessment of glaucoma.

Or

(b) Convergence insufficiency.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Management of myopia in children.

Or

(b) Contact lens dispensing in old people.

17. (a) Ocular structural changes in elderly people.

Or

(b) Spectacle dispensing in pediatric patients.

18. (a) Congenital esotropia.

Or

(b) Anomalous retinal correspondence types and investigation.

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	91444

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

OPTOMETRIC INSTRUMENTS — II

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Give the uses of anterior segment photography.
2. Give the formula for recording LogMAR acuity.
3. Principles of FM100 test.
4. Indicator for Bscan.
5. Mention few glaucomatous field defect.
6. What are the uses of concave mode in retinoscope?
7. Adaptometry.
8. Principle of gonioscopy.
9. Decibel.
10. Give the range of normal field of vision.

Part B (5 × 5 = 25)

Answer **all** questions, by choosing either (a) or (b).

11. (a) Write note on berman locator.

Or

(b) Write note on Ishihara.

12. (a) Explain about photorefraction.

Or

(b) Write about B and L Keteratometer.

13. (a) Write in detail about Schiotz tonometry.

Or

(b) ENG.

14. (a) Discuss about B scan.

Or

(b) Write on cryo technique.

15. (a) Write note on sources of error in application tonometry.

Or

(b) Write about gonioscopy.

Part C (3 × 10 = 30)

Answer **all** questions, by choosing either (a) or (b).

16. (a) ERG.

Or

(b) Write about FFA principle, procedure and interpretation.

17. (a) Write in detail about automated perimetry.

Or

(b) Write about Pachymetry.

18. (a) Write in detail about direct ophthalmoscope.

Or

(b) Lensometer.

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	91454

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

DISPENSING OPTICS

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is photochromatism? Name a photochromic agent which causes photochromic reaction in glass.

2. Transpose into two cyl format – 3.00/–2.00 × 180.

3. What is solid tinting method?

4. Mention a special purposes frame for ptosis? Can a normal frame be converted into ptosis frame?

5. What is splay angle?

6. What is Pantascopic tilt?

7. What is face form?

8. What is segment decentration?

9. What are inclusions in opththalmic lenses?

10. List advantages of titanium.

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) What are component of prescription? Tabulate a prescription for a patient having acceptance of –4.00/–2.00 × 180 6/6 with add of +2.50 N6 and 6Δ base out in RE.

Or

(b) Transpose the following into sph/cyl format, optical cross and two cyl format.

(i) –2.00/–2.00 × 180

(ii) +3.00/–3.00 × 65

12. (a) Draw and explain different parts of frames.

Or

(b) Draw and explain different types of temples.

13. (a) Differentiate between boxing system and datum system.

Or

(b) Explain how to measure IPD.

14. (a) What is hard coating? Explain procedure of hard coating.

Or

(b) Explain the process of marking fitting cross for progressive lenses dispensing.

15. (a) What are safety standard of welding glass?

Or

(b) What are the accessories to be given along with spectacle while dispensing a spectacle?

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) What is tinting? Explain different types of tinting methods and its advantages.

Or

(b) What are photochromic lenses? Explain properties, advantages and disadvantages of photochromic lenses.

17. (a) What are special purpose frames? Explain different types of special purpose frames.

Or

(b) What is neutralization? Explain the process of neutralization with hand and lensometer.

18. (a) What is Fresnel lenses and prism? Explain the uses, process of applying it and drawback of Fresnel lenses and prism.

Or

(b) What are polarized lenses? Explain the process of manufacturing of polarized lenses, advantages and disadvantages of polarized lenses.

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	91455

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

PUBLIC HEALTH AND COMMUNITY OPTOMETRY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define health.

2. Define infant mortality rate.

3. What is the goal of NPCB?

4. Define IEC material.

5. List some reasons for shortfall in health man power.

6. Give any four ways of health promotion in community.

7. Mention the global causes of blindness due to eye diseases.

8. Define primordial prevention.

9. What is mass screening?

10. What are the criteria for a good screening test?

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

Answer **all** questions choosing either (a) or (b).

11. (a) Write note on determinants of health.

Or

(b) Give differences between screening test and diagnostic test.

12. (a) Write short note on nutritional blindness.

Or

(b) Write short note on role of optometrist in public health.

13. (a) Write briefly on Tele-Optometry in public health.

Or

(b) Explain how IEC material can help in reducing the prevalence of diabetic retinopathy.

14. (a) Discuss the benefits of screening eye diseases in community.

Or

(b) Write note on different types of screening.

15. (a) Define prevention and explain different levels of prevention of diseases.

Or

(b) List the functions of Regional institute of Ophthalmology.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Explain in detail different levels of health care.

Or

(b) Explain the steps in planning school eye screening program.

17. (a) Explain any one community based rehabilitation program.

Or

(b) Write in detail about IEC material.

18. (a) Vision 2020.

Or

(b) Write note on evaluation and assessment of health program.

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B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

BIOSTATISTICS

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

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

Answer **all** questions.

1. Write any two uses of bio-statistics.

2. Write the formula for CDR and SDR.

3. Define sampling frame.

4. Definition of simple random sampling.

5. Write down the types of classification.

6. Define rank correlation.

7. Define binomial distribution.

8. Define normal distribution.

9. How to collect the hospital statistics?

10. Define bed occupancy rate.

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

Answer **all** questions by choosing either (a) or (b).

11. (a) Merits and demerits for crude death rate.

Or

(b) Explain age-specific death rate.

12. (a) Merits and demerits of stratified random sampling.

Or

(b) Explain non-sampling errors.

13. (a) Advantage and disadvantage of pre-test.

Or

(b) Merits and limitations of geometric mean.

14. (a) Properties of normal distribution.

Or

(b) Explain chi-square test.

15. (a) How to collect the hospital statistics?

Or

(b) How to calculate bed occupancy rate?

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Briefly discuss the standardized death rate.

Or

(b) Explain the infant mortality rate.

17. (a) Briefly discuss the stratified random sampling.

Or

(b) The number of rooms in the seven five stars hotel in Chennai city is, 71, 30, 61, 59, 31, 40 and 29. Find the median number of rooms

18. (a) A set of three similar coins are tossed 100 times with the following results.

No. of heads :	0	1	2	3
Frequency :	36	40	22	2

Or

(b) How to analysis of daily hospital services?

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C–3240	Sub. Code 91461

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

CONTACT LENSES — II

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is lonicity?
2. Explain water melon seed principle.
3. Explain TACO test.
4. What are surfactant?
5. What is irregular astigmatism?
6. CRADLE means.
7. What is collagen shields?
8. What are center opaque lenses?
9. What are jelly bumps?
10. What are reference markings?

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Compare the difference between soft Cl and rgp cl on the basis of physical properties.

Or

(b) Explain different type of stabilization techniques of soft cls.

12. (a) Explain the handling instruction to be given to patient while dispensing soft cls.

Or

(b) What are disposable lenses? Explain the fitting procedure and uses of disposable lenses.

13. (a) What are simultaneous vision bifocal contact lenses? Explain the difference between monovision and simultaneous vision.

Or

(b) What is astigmatism? Explain different type of contact lenses used in management of astigmatism.

14. (a) Explain the procedure of fitting contact lenses post refractive surgeries.

Or

(b) Explain types of prosthetic contact lenses.

15. (a) What are silicone hydrogel lenses? Explain the advantages of silicone hydrogel over conventional soft lenses.

Or

(b) Explain monovision.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Explain the pre-fitting evaluation of soft toric cls.

Or

(b) Explain fitting evaluation of soft toric cls.

17. (a) What is keratoconous? Explain the management of keratoconous with help of contact lenses.

Or

(b) What are scleral lenses? Explain the types, fitting procedure and advantages of scleral lenses.

18. (a) What is prebyopia? Explain the management of presbyopia with contact lenses.

Or

(b) What are therapeutic contact lenses? Explain different types of application of therapeutic contact lenses.

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C–3241	Sub. Code 91462

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

BINOCULAR VISION — II

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What are risley prisms?
2. What is the principle of Hess chart?
3. Explain Hirschberg test interpretation.
4. What are the components of abnormal head posture?
5. What is A-V phenomena?
6. What are relieving prism?
7. What is yoke prism?
8. Explain panoramic vision.
9. What is eccentric fixation amblyopia?
10. What is neat vision triad?

Part B (5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) What is step vergence? Explain methods to measure PFV and NFV.

Or

(b) What is krimsky tests? Explain the procedure and uses of modified krimsky test.

12. (a) What are Armstrong goggles? Explain the use of Armstrong goggles in orthoptics.

Or

(b) What is abnormal head posture? Explain head posture change in RSR palsy.

13. (a) Write short notes on essential infantile esotropia.

Or

(b) What is accommodative esotropia? Write short notes on signs, symptoms and etiology of refractive accommodative esotropia.

14. (a) Explain the role of prism in orthoptic practice.

Or

(b) Explain management of convergence insufficiency with VTPs.

15. (a) What is suppression? Explain the types and investigation of suppression.

Or

(b) What is ARC? Explain types and investigation of ARC.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) What is diplopia charting? Explain the procedure of diplopia charting with an example of LSO palsy.

Or

(b) Explain Bielschowskly head tilt test. Find out muscle paralyzed in terms right hypotropia with face and head tilt towards left side.

17. (a) Explain sign, symptom, etiology, clinical features, investigation and management of type – II accommodative esotropia.

Or

(b) Explain sign, symptom, etiology, clinical features, investigation and management of intermittent divergent squint.

18. (a) Explain the management of suppression.

Or

(b) Explain the management of amblyopia.

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C–3242	Sub. Code 91463

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

LOW VISION AIDS

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Lebenson formula.

2. Trade magnification.

3. Albinism in LV patient.

4. Few auditory non optical devices.

5. Approach magnification.

6. Any two contraindications of binocular correction in spectacle mounted magnifier.

7. Fried's formula.

8. Changing tube length in correcting hyperopia. Explain.

9. Causes for hemianopia.

10. Significance of exit pupil in telescope.

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

Answer **all** questions choosing either (a) or (b).

11. (a) Write about keplerian telescope.

Or

(b) Explain Non-Optical devices in low vision.

12. (a) Write about stand magnifiers.

Or

(b) Write about magnification and its types.

13. (a) Write in detail about mobility and orientation.

Or

(b) Explain the relationship between disorders, impairment, handicapped with examples.

14. (a) Write about Aniridia and its low vision management.

Or

(b) Write about CCTV in detail.

15. (a) Write about psychological factors influencing LV patient.

Or

(b) Write about spectacle magnifier.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Write about Diabetic retinopathy in low vision management.

Or

(b) Explain CL and IOL telescope.

17. (a) Write about assessment of LV patient.

Or

(b) Explain the compensation of ametropia with telescopes.

18. (a) Write about paediatric low vision care.

Or

(b) Explain the low vision management of peripheral field loss.

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C–3243	Sub. Code 91464

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

OCCUPATIONAL OPTOMETRY

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define luminance.

2. Define occupational health.

3. Mention any four systemic diseases related to effects of radiation.

4. Critical fusion frequency.

5. List the different class of laser.

6. List five advantages of binocular vision over monocular vision.

7. What is black eye?

8. Mention any two major complication of intraocular foreign body.

9. Mention any three national bodies related to occupational health.

10. What is the first aid to chemical injury to the eye?

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

Answer **all** questions choosing either (a) or (b).

11. (a) List the sources of light and discuss any one in detail.

Or

(b) Write note on factors that influence visibility of tasks.

12. (a) Define hazard and classify ocular hazards.

Or

(b) Write about effect of IR in eye.

13. (a) Write in detail about opponent color theory.

Or

(b) Write about properties of ideal eye protector.

14. (a) Discuss about luminous intensity.

Or

(b) Write note on goals of occupational optometry.

15. (a) Write note on task analysis.

Or

(b) Write about incandescent lamp its advantages and disadvantages.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Explain in detail about methods of vision screening.

Or

(b) Discuss about eye protection programme.

17. (a) Write note on vision standards for airlines.

Or

(b) Write in detail about non mechanical injuries of the eye.

18. (a) Write in detail about ILO.

Or

(b) CVS.

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C–3244	Sub. Code 91465

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

SYSTEMIC DISEASE AFFECTING THE EYE

(2016 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Write any two characteristics of malignant neoplasm.

2. What is an acute inflammation?

3. Write any two clinical features of Hansen's disease.

4. Define embolism.

5. What is syphilis?

6. What are the symptoms of papiloedema?

7. Write any two vitamin B deficiency.

8. Mention any two treatment methods of malaria.

9. Write any two clinical features of thyroid disease.

10. How do you measure arterial hypertension?

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

Answer **all** questions by choosing either (a) or (b).

11. (a) Write short notes on subacute bacterial endocarditis.

Or

(b) Write the pathophysiology and classification of diabetes mellitus.

12. (a) Differentiate between benign and malignant neoplasms.

Or

(b) Brief about eye neoplasms.

13. (a) Brief about goiter.

Or

(b) Write the clinical features of tuberculosis affecting the eye.

14. (a) Write about the types of syphilis.

Or

(b) Papiloedema.

15. (a) Write about the complications of tropical disease.

Or

(b) Brief about Visual pathway lesions.

Part C (3 × 10 = 30)

Answer **all** questions by choosing either (a) or (b).

16. (a) Define hypertension, explain its causes, classification, clinical manifestations, diagnosis and treatment.

Or

(b) Write a detailed note on connective tissue disease affecting the eye.

17. (a) Brief about the genetic disorders affecting the eye.

Or

(b) Write about the ocular disease caused by vitamin D deficiency and its management.

18. (a) Explain about rheumatic heart disease.

Or

(b) Write about multiple sclerosis.

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C–3246	Sub. Code 91412

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

GENERAL AND OCULAR BIOCHEMISTRY

(Up to 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write short notes on biological macromolecules.

2. Write short notes on transparency and refractive power of cornea.

3. Explain the importance of guaternory structure of protein with an example.

4. What is bleeding time explain.

5. Write short notes on the layers of the tear film.

6. Classify amino acids.

7. Write short notes on polysaccharides.

8. Explain the importance of Michaelis Menton equation.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Explain about the TCA cycle and its energetics.

10. Write a detail note on beta oxidation of fatty and biosynthesis.

11. Explain in detail about the Wald's visual cycle.

12. Classify enzymes and brief about the mode of action.

13. Write the biological function and disease manifestations of fat soluble vitamins.

14. Write the formation, regulation and biochemical composition of Agueous humor.

15. What is blood grouping explain its importance?

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C–3248	Sub. Code
	91414

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

ENGLISH

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write a short note on kinds of sentences.

2. What are the characteristic of good essay?

3. What are the basic constructive rules for writing an essay?

4. Mention the different salutatory notes in letter writing.

5. Write a note on the different types report.

6. Give a short note on the features of effective speech.

7. Define persuasiveness.

8. Write a note on factual topics with examples.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Write an essay on parts of speech with examples.

10. Prepare an essay on "Water conservation".

11. Write a letter to the manager for applying for the post of clerk.

12. Write a report to the editor about the poor quality of the road in your locality.

13. Explain the process for preparing a good presentation.

14. Explain the qualities of a good leader

15. Prepare a group discussion on the topic “Global Warning" for five participants.

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C–3249	Sub. Code 91415

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

First Semester

NUTRITION

(Up to 2015 Brach)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write a short note on modern history of nutrition.
2. Explain satiety value.
3. Give a short note on incomplete protein supplement.
4. Explain the role of essential fatty acid in maintaining human health.
5. Write a short note on macro minerals associated eye disorders.
6. Explain the deficiencies associated with iron during pregnancy.
7. Give a short note on antioxidants.
8. Write about measles.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Describe the methods of assessment of nutritional status.

10. Describe in detail about the energy imbalance and its associated health complication in human.

11. Describe marasmus with all clinical symptoms.

12. Describe the adverse effect of LDL deposition in human system.

13. Give a detailed note on Hyper vitaminosis A.

14. Explain in detail about extremely low birth weight.

15. Elaborate the clinical implications related to hyperlipidemia.

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C–3250	Sub. Code
	91421

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

ANATOMY OF THE EYE AND ORBIT

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions

1. Write a note on layers of cornea.
2. Write short note on optic nerve.
3. Write short note on extra ocular muscles.
4. Write in brief lacrimal drainage path way.
5. Write short note on optic vesicle.
6. Write about angle of anterior chamber
7. Explain about anatomy of lens with diagram.
8. Structure of Eyelid.

Part B (4 × 10 = 40)

Answer any **four** questions

9. Explain with diagram the layers of Retina.

10. Write in brief about bony orbit and explain about A pen of orbit.

11. Visual pathway.

12. Write in detail about clinical aspects of facial nerve and occulomotor nerve.

13. Write about anatomy of pupiuary and ciliary muscles.

14. Write about parts of conjunctiva.

15. Write in detail blood supply of ureal structures.

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C–3251	Sub. Code 91422

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

PHYSIOLOGY OF THE EYE

(Up to 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write a note on corneal transparency.

2. Write briefly about functions of aqueous humor.

3. Write a note on color vision.

4. Write short note on IRG.

5. Write about notes on optic atrophy.

6. Write note on tear drying and break up of tear film.

7. Explain pupuary light reflex.

8. Write note on functions of rods and cones.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Write in detail about vascular structure of eye and blood ocular barrier.

10. Describe visual pathway.

11. Write in detail about Binocular vision.

12. Write a note on accommodation and preobyoria.

13. Write note on intraocular pressure (IOP) and measurement of IOP.

14. Write note on monocular movements.

15. Write notes on lens transparency and cataract.

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C–3253	Sub. Code
	91424

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

COMPUTERS

(upto 2015 batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Draw and explain the block diagram of PC.

2. Explain in brief primary memory.

3. Perform binary addition :

   (a) 110101_2 and 101101_2

   (b) 1110110_2 and 11101_2.

4. What are the classification of software? Explain.

5. Write a short note on windows explorer and its uses.

6. List all edit menu options available in MS word and write any two options with its use.

7. Explain the concept of worksheet.

8. Define web browser. Explain any two web browsers.

Part B $(4 \times 10 = 40)$

Answer any **four** questions.

9. Explain input and output devices.

10. Discuss in detail the classification of computers.

11. Convert the following :
    (a) 456_{10} to binary
    (b) 1101101_2 to decimal
    (c) 2's complement of 111101_2
    (d) 352_8 to decimal
    (e) 111011101_2 to octal.

12. Write about windows and its components.

13. Describe the complete process of mail merge.

14. List and explain any five functions in excel.

15. Explain about Email functions.

C–3254	Sub. Code 91425

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Second Semester

MICROBIOLOGY AND PATHOLOGY

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write about grams staining.

2. Write about normal ocular flora.

3. Write short note on acanthamoeba

4. Write short notes on sterilization and disinfection.

5. Write about notes on inflammation.

6. Write a note on chalazion.

7. Briefly write about lens induced glaucoma.

8. Write a note on retinoblastoma.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Write in detail about classification of ocular mycology, clinical importance, KOH staining.

10. Write notes on collection of ocular specimens for microbiology assay.

11. Explain in detail about conjunctivitis.

12. Write in detail about M. Tuberculosis.

13. Write in detail about Keratoconus.

14. Write a detailed note on Hypersensitivity reactions.

15. Write in detail about pathology of cataract.

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C–3255	Sub. Code
	91431

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

VISUAL OPTICS

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Explain
   (a) Angle Gamma
   (b) Angle Alpha
   (c) Depth of focus.
2. Mechanism of accommodation.
3. Draw schematic eye diagram.
4. What is Aphakia? Explain the treatment options of Aphakia.
5. Mention any one method of checking contrast sensitivity of the eye.
6. Write a note optical defects of the eye.

7. Discuss in detail about the principle and uses of Jackson Cross Cylinder.

8. Spectacle magnification of reduced eye.

Part B $(4 \times 10 = 40)$

Answer any **four** questions.

9. Explain in detail about the principle uses of retinoscopy.

10. Write in detail about spectacle refraction and Ocular refraction.

11. What is accommodation? Explain the amplitude of accommodation.

12. Explain the principle of keratometry and describe the advantages and disadvantages of keratometry.

13. Describe the causes and treatment of myopia.

14. Write in detail aout strum's conoid.

15. Mention the components of accommodation.

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C–3256	Sub. Code 91432

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

CLINICAL REFRACTION - I

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write about sneuens chart.
2. Write short note on Jackson Cross cylinder.
3. Write about fogging.
4. Write about JPD measurement and its significance.
5. Write short notes on prism dissociation.
6. Write short notes on duochrome testing.
7. Explain about turville infinity balance.
8. Explain finalization of add for near and intermediate based on occupation.

Part B (4 × 10 = 40)

Answer any **four** questions

9. Write in detail about case history.

10. Explain in detail about streak retinoscopy.

11. Explain in detail about cyclo refraction.

12. Acceptance value for 50 years male is:

    Rt. Eye : +1.0 +0.5 @ 180

    Lt.Eye: +0.75 +0.75 @ 170

    Addition is + 2.0 sph.

    Write a prescription and include other essential details for prescription.

13. Explain in detail counselling a patient for grasses. Patient is 45 years old software professional.

14. Explain in detail regarding use of: Subjective auto refractor, Objective auto refractor.

15. Explain about Pinhole, Distometer

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C–3257	Sub. Code
	91433

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

OCULAR DISEASES - I

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write short note on subconjunctival Haemorrhage.
2. Write short note on Episcleritis.
3. Write a note on interior ureitic.
4. Write short notes on YAG PI.
5. Write about surgical procedures for removal of lens briefly.
6. Write a note on sympathetic ophthalmia.
7. Write a note on opacities of cornea.
8. Write about posterior capsular opacification.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Explain the procedure of phacoemulsification.

10. Write in detail about sympathetic ophthalmia.

11. Write about diseases of lacrimal passages and operations for chronic dacryocystitis.

12. Write about vitamin A deficiency in detail (Regarding eye diseases due to Vit. A deficiency)

13. Write in detail about primary open angle glaucoma, primary nervous angle glaucoma.

14. Write in detail about carneal dystrophy.

15. Write in detail about allergic conjunctivitis.

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C–3258	Sub. Code
	91434

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

OPHTHALMIC INSTRUMENTATION - I

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write about notes of trial case senses.

2. Write short notes on radiuscope.

3. Write short notes on binoculars.

4. Write short notes on lensometer.

5. Write short notes on streak relinoscopy.

6. Write short notes on direct ophthalmoscope.

7. Write short notes on spectrometer.

8. Write short notes on trial frame design.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Explain in detail : Autorefractometer.

10. Explain in detail about indirect ophthalmoscope.

11. Write in detail about slit lamp biomicroscope.

12. Write in detail about simple and compound microscope.

13. Write in detail about Keralometer.

14. Explain about telescope, its construction and use.

15. Write about different charts used for testing visual activity – Distant and near.

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C–3259	Sub. Code 91435

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Third Semester

GENERAL AND OCULAR PHARMACOLOGY

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **four** questions.

1. Explain pharmacokinetics and bioavailability.

2. Write in brief about adverse drug reactions.

3. Write short note on ophthalmic diagnostic drugs.

4. Explain the pharmalogical actions of beta blockers.

5. Write short notes on drug excretion and toxicity.

6. Name any five therapeutic drug used as topical medication along with its indication.

7. Write short notes on anti inflammatory drugs.

8. Write short notes on various routes of drug administration.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Explain in detail about antigrancoma medications.

10. Explain in detail about pupil dilating eye drops.

11. Write in detail about

    (a) Nature and sources of drugs

    (b) What is new drug delivery system?

12. Write in detail about topical anesthetics and brief about general anesthetics.

13. Explain in detail about Adrenergic drugs.

14. Write about the treatment of acute drug poisoning.

15. Classify steroidal anti inflammatory drugs. What are the action, indications and side effects of topical and systemic steroids?

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C–3260	Sub. Code
	91441

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

DISPENSING OPTICS

(upto 2015 batch)

Duration : 3 Hours Maximum : 70 Marks

Part A $(5 \times 6 = 30)$

Answer any **five** questions.

1. Explain Hand Neutralization.

2. What is ophthalmic prim? Explain properties of prisms?

3. Compare between executive bifocals and Kryptok bifocals.

4. Transpose the following :

   (a) $\pm$ / $-3.00 \times 45°$

   (b) -2.00 / $-3.25 \times 110°$

   (c) ± 1.50 / $+2.25 \times 70°$

   (d) $+3.75$ / $-2.75 \times 35°$

   (e) $\pm$ / $+5.25 \times 105°$.

5. What is progressive additional lenses? Write about the causes and correction of various troubleshooting in progressive lenses.

6. Describe the advantage and disadvantage of plastic and glass lens material.

7. Fresnel lenses.

8. Define scratch resistance coating. Explain the types of scratch resistance coating.

Part B $(4 \times 10 = 40)$

Answer any **four** questions.

9. What is ARC (Anti Reflection Coating) explain advantages and disadvantages of ARC.

10. What are photochromatic lenses? Write about the factors influencing photochromatic performance.

11. (a) Polaroid lenses

    (b) Lenticular lenses.

12. Mention the pros and cons of datum system and boxing system.

13. Write in detail about the issues involved in Frame selection.

14. Explain in detail about eye protection in various sports.

15. Write a note on lens selection when dispensing a pardiatric patient.

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C-3261	Sub. Code
	91442

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

OCULAR DISEASES - II

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions

1. Write short notes on posterior vitreous detachment.

2. Write short notes on optic merits.

3. Write short notes on saccadic movements.

4. Write briefly about optic chiasma and its appeared anatomy.

5. Write a note on Horners syndrome.

6. Write short notes on optic disc coloboma.

7. Write about hypertensive retinopathy.

8. Write notes on Nyctalopia.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Write about CRVO.

10. Classify retinal detachment. Explain clinical features and treatment.

11. Explain the methods of visual field assessment and various visual field defects.

12. Explain in detail about papillocdema.

13. Classify and explain in detail about Nystagmus.

14. Explain Myasthenia grows in detail.

15. Explain in detail about sixth nervepalsy.

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C–3262	Sub. Code
	91443

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

CLINICAL REFRACTION - II

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions

1. Write short note on refraction in aphakia.

2. Write short notes on sport vision.

3. Write short notes on subjective refraction.

4. Write short notes on corneal astigmatism.

5. Write short notes on refraction in coloboma iris.

6. Write short notes on assessment of strabismus in children.

7. Write short notes on Exotropia.

8. Write short notes on visual disorders in elderly.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Explain in detail low vision and low vision aid.

10. Explain in detail congentital cataract.

11. What is Anisometropia. Explain in detail regarding anisometropic refraction.

12. Evaluation diagnosis of refractive error for children with mental retardation.

13. Define amblyopia its evaluation – Diagnosis and management.

14. Neuro optometric rehabilitation.

15. What is nystagmus. Write in detail about refraction in nystagmus.

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C–3263	Sub. Code
	91444

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fourth Semester

OPHTHALMIC INSTRUMENTATION -II

(Up to 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write note on Ishihara.

2. Write note on B scan.

3. Write note on defects seen in FFA report.

4. List the indications to perform perimetry.

5. Explain any one CS test chart.

6. Write note on non contact tonometer.

7. Give brief note on ophthalmic applications of LASER.

8. What is perimetry and give its types with example?

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Explain principle and parts of Applanation tonometry.

10. Potential acuity meter.

11. Write note on principle and procedure for measuring corneal thickness.

12. Give the ophthalmic application of Argon Laser.

13. Write note on interpretation of normal Humphery perimetry report.

14. Write in detail about principle and procedure of FFA.

15. Write in detail about Ascan.

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C–3264	Sub. Code
	91451

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

CONTACT LENSES – I

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Differentiate between spin casting and lathe cut technique.
2. What is extended keratometry?
3. Calculate the effective power of Cl for spectacle prescription reading as – 5.00/2.50 × 90 vertex distance being 12mm.
4. Explain the process of selecting BC, TD and BOZD.
5. Explain the process of cast molding.
6. What are toric RGP? Explain different types of toric RGP lenses.
7. What is tear lens? Explain he role of tear lens in RGP lenses.
8. What are benefits of contact lens over spectacles?

Part B (4× 10 = 40)

Answer any **four** questions.

9. Write important milestone in evolution of contact lenses.

10. Explain the role of topography in contact lens fitting assessment.

11. What are monomers and polymers? Explain the advantage of different types of material RGP materials.

12. Explain dynamic and static fitting evaluation of RGP contact lenses.

13. What is slit lamp? Explain techniques of slit lamp and uses in contact lens fitting.

14. Explain the properties of contact lens material.

15. Explain care and maintenance of SCL.

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C–3265	Sub. Code 91452

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

BINOCULAR VISION - I

(Upto 2015 onwards)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Explain
   (a) line of direction
   (b) Retinal rivalry
   (c) Retinomotor value.

2. Explain
   (a) Vieth Muller circle
   (b) Panum's space.

3. What is aniseikonia? Explain sign, symptoms of aniseikonia.

4. What is suppression? Explain types of suppression.

5. What are component of vergence?

6. What is fusion? Explain test for fusion?

7. Explain kinematics of RIR and LSO.

8. What is diplopia? Explain the types and uses of physiological diplopia in VTPs.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. What is synoptophore? Explain the diagnostic and therapeutic uses of synoptophore.

10. Draw and tabulate the action, nerve supply, blood supply origin and course of insertion of EOM.

11. What is accommodative deviation? Explain type – II accommodative squint with management.

12. What is convergence? Explain convergence insufficiency and its management.

13. What is anisometropia? Explain sign, symptom and management of anisometropia.

14. Explain test for stereopsis.

15. Explain monocular clues.

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C–3266	Sub. Code
	91453

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

PEDIATRIC OPTOMETRY AND GERIATRIC OPTOMETRY

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 x 6 =30 marks)

Answer any **five** questions

1. Write short notes on Hyperopia.
2. Write short notes on Binocular single vision.
3. Write short notes on micro cornea.
4. Write short notes on prendophasic correction.
5. Write short notes on accommodative Esotropia.
6. Visual mile stones.
7. Congenical grancoma – clinical features.
8. Congenical nasolacrimal duct obstraction.

Part B (4 × 10 = 40)

Answer any **four** questions

9. Explain in detail TORCH infections and various perinalal factors affecting eye.

10. Write in detail about retino plastoma.

11. Explain in detail preslyoria and various treatment options. Enumerate on addition for 40-60 + years.

12. Explain various mascular disease affecting elderly population.

13. Write in detail history taxing and vision assessment for pediatric patient.

14. Classification of cataract and its management.

15. Diabetic Retinopathy.

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C–3268	Sub. Code
	91455

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Fifth Semester

HOSPITAL PROCEDURES

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Significance of medical recording.

2. Role of an eptometrist in eye hospital.

3. Method of sterilization in lab.

4. Importance of cleaning in hospitals.

5. Activities of human resource department.

6. Functions of microbiology lab.

7. Explain the procedure of eye storage in eye bank.

8. What are all the investigations to be done before cataract surgery?

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Write in detail about medical record department.

10. Describe the method of presentation after the eye donation.

11. Write a note on maintenance of any five ophthalmic instruments.

12. Explain the work of Bio engineer department.

13. Write in detail about reception services.

14. Specimen collection techniques in lab.

15. Importance of human resource department.

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C–3269	Sub. Code 91461

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

CONTACT LENSES - II

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. What is astigmatism? Explain the role of spherical RGP in correction of astigmatism.

2. Explain the advantage of CL in anisometropia.

3. What is DK? Explain the advantage of high DK lenses over low DK lenses.

4. Explain the classification of CLs on the basis of wearing modality and usage modality.

5. What are therapeutic CLs? Explain role of therapeutic lenses in LASIK and ptosis.

6. What multi focal contact lenses? Explain the pre fitting evaluation in multi focal lenses.

7. What are disposable lenses? Explain different types, advantage and disadvantage of disposable lenses.

8. What are adaptive symptoms? Explain the methods to overcome adaptive symptoms.

Part B $(4 \times 10 = 40)$

Answer any **four** questions.

9. What is presbyopia? Explain different types of contact lenses available to manage presbyopia.

10. What is monovision? Explain the procedure, advantage and disadvantage of monovision.

11. What is stabilization of toric lenses? Explain different stabilization techniques of toric lenses.

12. Explain the process of fitting CL in pediatric population.

13. Explain different types of prosthetic contact lenses.

14. What are deposits? Explain different types of deposits and their management.

15. What is CLARE? Explain the management, sign, symptoms and causes of CLARE.

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C–3270	Sub. Code 91462

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

BINOCULAR VISION - II

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write about red green goggles.
2. What are the motor signs in squint.
3. Explain Hirschberg test.
4. Write about cover and uncover test.
5. Uses of prism in vision therapy.
6. Explain worth four dot test.
7. Write about management of convergence insufficiency.
8. What is penalisation in amblyopia?

Part B (4 × 10 = 40)

Answer any **four** questions.

9. What are the types of squint and explain in detail about paralytic squint?

10. Write in detail about synoptophore.

11. Explain in detail about:

    (a) Prism bar test

    (b) Krimskey test.

12. Maddox wing and Maddox rod test.

13. What is diplopia and write about Hess charting?

14. Explain in detail about Binocular single vision.

15. Write about Duanes Retraction Syndrome.

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C–3271	Sub. Code 91463

B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

LOW VISION AIDS

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A (5 × 6 = 30)

Answer any **five** questions.

1. Write about spectacle magnifiers.
2. Write about the environmental modification in low vision rehabilitation.
3. Write the WHO definition of low vision and also explain the grades of low vision.
4. Explain the use of Amsler chart in low vision.
5. Write about Aniridia in low vision.
6. List out the contrast based non-optical Aids and explain them.
7. Write about Log MAR chart in low vision assessment.
8. Explain CCTV. Also list its advantages and disadvantages.

Part B (4 × 10 = 40)

Answer any **four** questions.

9. Explain magnification and its types with numerical examples.

10. Explain low vision assessment in detail.

11. Explain the types of telescopes, its optics, advantages and disadvantages.

12. Write about sensory substitution in low vision rehabilitation.

13. Explain about geriatric low vision care.

14. Explain eccentric viewing in detail.

15. Write about LMBB syndrome and low vision care for those patients.

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B.Sc. DEGREE EXAMINATION

OPTOMETRY

APRIL 2021 EXAMINATION

&

APRIL 2020 ARREAR EXAMINATION

Sixth Semester

SYSTEMIC DISEASES AFFECTING THE EYE

(Upto 2015 Batch)

Duration : 3 Hours Maximum : 70 Marks

Part A ($5 \times 6 = 30$)

Answer any **five** questions.

1. Write short on sub acute bacterial endocarditis.

2. Write the characteristics of malignant neoplasms.

3. Write short notes on leprosy.

4. Relate vitamin deficiency and eye.

5. Classify the thyroid disease.

6. Brief about papiloedema.

7. Write short notes on juvenile arthritis.

8. Write short notes on demyelinating diseases.

Part B (4 × 10 = 40)

Answer **any four** questions.

9. Write a detailed note on genetic disorders affecting the eye.

10. Brief about the patho physiology, classification diagnosis and management of Hypertension.

11. Write a detailed note on connective tissue disease.

12. Write a detailed note on pathology, clinical features and treatment of TB involving the eye.

13. Elaborate on malaria.

14. Explain about neurological disease.

15. Explain about diabetic retinopathy.

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