CENTRAL BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, ESTABLISHED IN 1952 BY PLANNING COMMISSION, GOVT. OF INDIA

CENTRAL BOARD OF EXAMINATIONS

BSS NATIONAL VOCATIONAL EDUCATION MISSION

AHE062-BSS DIPLOMA IN OPTOMETRY

ONE YEAR EXAMINATION NOVEMBER-2025

AHE062-02 ANATOMY & PHYSIOLOGY OF EYE

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) There are _____ Pairs of Cranial Nerves in the body.

2) The part nearer to the front of body is called _____

3) The aqueous part of tear is produced by _____

4) The middle vascular layer of the eyeball is called _____

5) The part nearer to the front of body is called _____ (Anterior / Posterior)

6) Dioptric Power of cornea is _____ (20 D or 40 D)

7) Color vision depends upon _____ (rods / cones)

8) The Junction of the cornea & sclera is called _____ (Limbus / Vitreous / Ciliary body)

9) The average size of the adult eyeball is _____ (25 mm /30 mm /40 mm)

10) _____ is a sense organ used for hearing. (Ear / Tongue / Nose)

11) The opacity of the crystalline lens is called _____

12) The average value for anterior chamber depth in the human eye, is _____.

13) A narrow channel that runs from the optic disc to the back surface of the lens is known as _____ Canal

14) Retina after death becomes _____

15) Lens develops from _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Find odd one out - Brain, Spinal cord, Arteries, Nerves.
2) Find odd one out - Nostrils, Lungs, Bronchi, Ear
3) Write any two sense organs of the human body
4) Write two functions of the eyelid
5) Retina consists of how many layers?
6) Name the two retinal recetors.
7) Each eyeball is controlled by how many extra ocular muscles?
8) Write the uses of eyelids
9) Write any disorders of eyelids
10) Write the blood supply of retina
11) Write the primary action recti muscle
12) Define posterior uveitis
13) Functions of lens
14) Eye Ball
15) Fig of section of retina

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Eyelid
2) Coats of Eyeball
3) Iris
4) Extra ocular muscles
5) Tear
6) Write about the extra muscles of the eye
7) Write about cornea
8) Structure or conjunctiva

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Retina
2) Cataract
3) Uvea
4) Cross section of the eye with figure and name of the parts.
5) Write the cross sections of the eye with a diagram & functions of the parts of the eye

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AHE062-BSS DIPLOMA IN OPTOMETRY

ONE YEAR EXAMINATION NOVEMBER-2025

AHE062-03 BASIC MICROBIOLOGY, PHARMACOLOGY & CLINICAL PATHOLOGY

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Pharmacology means study of _____
2) Pherylephine is a weak _____
3) The drng which kills the bacteria is called _____
4) _____ is a local anaesthetic used in ophthlmogy
5) _____ stain is used to diagnose the corneal abrasion
6) Food like _____ contain plenty of vitamin A
7) Bacteria are composed of _____ cell / cells
8) The bacteria which donot require oxygen are called _____
9) Polyuria means _____
10) Adenoviruses are _____ viruses
11) Mycobacterium is _____ bacilli
12) _____ will produce their desired action if they are present at the site of action in sufficient quantities
13) _____ deals with absorption, distribution, transformation, & excretion of drugs
14) Toga viruses cause _____
15) Bacteria are _____ organisms.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Write two advantages of oral administration of drug
2) Write two instrnctions to be giren to patient before dilating the pupil.`
3) Write two uses of antibiotic drug in ophthalmology
4) Which is a antiviral drug used topically as well as systemically?
5) Write two side effects of long use of topical steroid drops.
6) Write name of one Gram Positive cocci and one Gram Negative cocci.
7) Name two chemicals used for sterilisation.
8) Define erthyomycin
9) Define microbiology
10) Write any two lubricating eyedrops
11) Define acute inflammation
12) Write about a sub-conjunctival injection
13) Write the most important members of Herpes group as eye is concerned.
14) Mannnitol
15) Urea

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Mention five factors upon which route of administration of drugs depends?
2) Virus.
3) Physical examination of urine.
4) Write the actions of drugs
5) Write advantages & disadvantages of drugs
6) Write about the activity of antimicrobial drugs
7) Diamox (Aatazolamide)
8) Timolol

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Sterilisation.
2) Gram staining and procedure.
3) Anti Glaucoma drugs.
4) Explain different routes of administration of drugs.
5) Explain anti-viral drugs

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AHE062-BSS DIPLOMA IN OPTOMETRY

ONE YEAR EXAMINATION NOVEMBER-2025

AHE062-04 PHYSIOLOGICAL OPTICS & PRINCIPLES OF REFRACTION

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Convex lenses are prescribed to correct _____

2) Light waves are _____ in nature

3) Prism diopter is the unit of _____

4) Diopter is the unit of _____

5) A negative beam of light has _____ Vergence

6) Light travels in a _____

7) Refractive index of air is _____

8) Light is form of _____

9) In optical state, two eyes with equal refraction powers is termed as _____

10) _____ is a bending of light caused by the edge of an aperture of the lens.

11) A smooth and well polished surface which reflects regularly most of the light falling on it is called a _____

12) In reflection of light he gle of incidence is _____ to the angle of refraction

13) The object is situated at infinity in a convex lens, the nature and size of the image will be _____

14) _____ is known as the condition of physiological insufficiency of accommodation

15) Astigmatism is a type of _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Spherical lenses
2) Optical center
3) Monochromatic light
4) Heterochromatic light
5) Diopter
6) Diffraction
7) Refractive index
8) Irregular reflection
9) What is monochromatic light?
10) Write the types of retinoscope
11) What is polarization?
12) Hygiene of eye
13) Etiology of Hypermetropia
14) Uses of Prism
15) Congenital etiology for colour blindness

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Mirror
2) Vergence
3) Eye as an optical instrument
4) Write about the treatment of myopia
5) Write the types of astigmatism
6) Explain any one theory of accommodation
7) Pathway of pupillary light reflex
8) Blind Spot

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Discus about prism with diagram
2) Write down the procedure of taking intra ocular tension by schiotz tonometry
3) Discus about different types of cover tests
4) Write the types of astigmatism
5) Spherical & cylindrical lens

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AHE062-BSS DIPLOMA IN OPTOMETRY

ONE YEAR EXAMINATION NOVEMBER-2025

AHE062-05 OPTOMETRIC INSTRUMENTS

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Snellen's chart is used for _____ testing

2) specualarmicroscope is used for _____ count

3) RAF ruler is used to check _____

4) YAG laser is used to check _____

5) Prism is used to measured. _____

6) _____ ritinoscope is self-illuminated

7) The no. of filters available in trial box are _____

8) Maddox rod is used to chek _____

9) Maddox rod is used for _____

10) Pinhole is used to find _____

11) IPD ruler is used for _____

12) Friend test is to find _____ for distant vision

13) _____ are used to correct phorias

14) Near vision is recorded at a distance of _____

15) Prism is used to measure _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Fundus camera
2) YAG laser
3) Trial frame
4) Spot retinoscope
5) Visual field
6) Schiotz tonometer
7) Ametropia
8) Aphakia
9) Write the two types of opthalmoscope
10) Write the two types of tonometers
11) Write the uses of synaptophore
12) Write about a spectacle
13) Write the uses torch.
14) Meddox Rod
15) Multiple Pinhole disc

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Biometry
2) Keratometry
3) Presbyopia
4) Trial Box
5) Squint
6) Write the advantages & disadvantages of spectacle lenses
7) Trial Frames
8) OCT

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Discuss about Hypermetropia and its correction.
2) Discuss about myopia and its correction
3) Explain the technique of ocular examinantion
4) Explan streak retinoscope & procedure
5) Explain Slit lamp