

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2013
OCULAR PHARMACOLOGY & PHARMACY
PAPER FIRST

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on:

- Q. 1. Aminoglycosides
- Q. 2. Treatment of open angle Glaucoma.
- Q. 3. Uses of Atropine in eye
- Q. 4. Drugs for refraction testing
- Q. 5. Harmful effects of long term use of Corticosteroids in eye.
- Q. 6. Adrenaline
- Q. 7. Mydriatics
- Q. 8. Uses of acyclovir in ocular practice
- Q. 9. Ocular antiseptics

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2013
OCULAR PHARMACOLOGY & PHARMACY
PAPER FIRST (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Anticholinergics can be used in eye for:
 - a. Refraction testing
 - b. Allergic conditions of eye
 - c. Retinopathies
 - d. Conjunctivitis
2. Atropine causes:
 - a. Mydriasis
 - b. Alternate contraction and relaxation of pupil
 - c. Miosis
 - d. No change in pupillary size
3. Drug of choice for the treatment of Glaucoma is:
 - a. Betablockers
 - b. Neostigmine
 - c. Carbachol
 - d. Acetylcholine
4. Dipivefrin is:
 - a. Cholinergic drug
 - b. Adrenergic Drug
 - c. Anti-Cholinergic drug
 - d. Adrenergic Prodrug
5. Longest acting mydriatic:
 - a. Tropicamide
 - b. Timolol
 - c. Sotalol
 - d. Atropine
6. Tropicamide is used for:
 - a. Refraction testing
 - b. Tumors of eye
 - c. Conjunctivitis
 - d. Black Eye
7. Which of the following is an antiseptic?
 - a. Betadine
 - b. Acyclovir
 - c. Timolol
 - d. Lignocaine
8. Vitamin A supplements are needed for:
 - a. Night blindness
 - b. Retinal tear
 - c. Corneal ulcers
 - d. Refraction testing
9. Mannitol is used to:
 - a. Break adhesions in eye
 - b. Lubricate eyes
 - c. To treat VitA Deficiency
 - d. Decrease intraocular tension
10. Mydriatic preferred in children for refraction testing is:
 - a. Tropicamide
 - b. Cyclopentolate
 - c. Atropine
 - d. Homatropine
11. For ocular penetration a drug should be:
 - a. Lipid soluble
 - b. Water soluble
 - c. Large molecular size
 - d. Ionized
12. Which of the following is ototoxic drug?
 - a. Ciprofloxacin
 - b. Amikacin
 - c. Penicillin
 - d. Tetracycline
13. Mechanism of action of ciprofloxacin is :
 - a. Cell wall synthesis inhibition
 - b. Protein synthesis inhibition
 - c. Leakage from cell membranes
 - d. DNA gyrase inhibition
14. Which of the following is an antifungal drug?
 - a. Penicillin
 - b. Acyclovir
 - c. Gentamicin
 - d. Ketoconazole

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2013
DISPENSING OPTICS & REFRACTION
PAPER TWO

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write Short Notes on:

- Q. 1.** Various types of frames & temples.
- Q. 2.** Why the frames for children are different from adult?
- Q. 3.** Aberrations.
- Q. 4.** Strum's conoid, with appropriate diagram.
- Q. 5.** Refractive components of the eye.
- Q. 6.** Differences between spherical, cylindrical and toric lenses.
- Q. 7.** Simple transposition with example.
- Q. 8.** Objective methods of refraction.
- Q. 9.** Advantages of bifocal over single vision reading lenses.

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2013
DISPENSING OPTICS & REFRACTION
PAPER TWO (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Prescription does not include:
 - a. Number
 - b. IPD
 - c. Both
 - d. None of the above
2. Principal of duochrome test is :
 - a. Snell law
 - b. Aberrations
 - c. Listing law
 - d. Chromatic aberration
3. In astigmatism, stigma means :
 - a. Multiple points
 - b. Pencil point
 - c. Sharp point
 - d. Diffuse points
4. Myopic patient accommodate and converge more in:
 - a. Spectacles
 - b. Contact lenses
 - c. Both
 - d. None of the above
5. The following prescription has against-the-rule astigmatism:
 - a. +1.00DS/-0.25DC@180
 - b. +1.00DS/+0.25DC@180
 - c. +1.00DS/-0.25DC@135
 - d. -1.00DS/+0.25DC@90
6. Which of the following prescription has oblique astigmatism?
 - a. -2.00DC@45
 - b. -1.00DS/-0.25DC@85
 - c. +1.25DS/+1.00DC@175
 - d. -0.50DS/+0.50DC@180
7. Irregular astigmatism:
 - a. Occurs when there are many radii in one meridian
 - b. Can be corrected with spectacle
 - c. Both
 - d. None
8. When point of Neutralization reaches:
 - a. No movement is seen
 - b. Against movement is seen
 - c. With movement is seen
 - d. All of the above
9. In WITH movement, red reflex is neutralized by:
 - a. Concave lenses
 - b. Cylindrical lenses
 - c. Convex lenses
 - d. Plano lenses
10. In AGAINST movement, red reflex is neutralized by:
 - a. Concave lenses
 - b. Cylindrical lenses
 - c. Convex lenses
 - d. Plano lenses
11. Cycloplegics drugs are used for:
 - a. Paralysis of accommodation
 - b. Constriction of pupil
 - c. Both
 - d. None
12. IPD means:
 - a. Inter pathway distance
 - b. Inter pupillary distance
 - c. Inter papillary deviation
 - d. All of the above
13. Advantage of Progressive lens over bifocal includes:
 - a. No image jump
 - b. Cheaper
 - c. Both
 - d. None
14. German silver is also known as:
 - a. Aluminium
 - b. Nickel
 - c. Stainless steel
 - d. None

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2013
OPTOMETRIC INVESTIGATION, OPHTHALMIC INSTRUMENTS & APPLIANCES
PAPER THIRD

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on:

- Q. 1.** Lacrimal Function tests
- Q. 2.** Automated perimetry strategies
- Q. 3.** Keratometry and its uses
- Q. 4.** Specular Microscopy and its uses
- Q. 5.** Synoptophore
- Q. 6.** Ultrasound in ophthalmology
- Q. 7.** OCT
- Q. 8.** Indirect ophthalmoscopy
- Q. 9.** VEP

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2013
OPTOMETRIC INVESTIGATION, OPHTHALMIC INSTRUMENTS & APPLIANCES
PAPER THIRD (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 28= 14)

Select the most appropriate answer and encircle the alphabet against it

1. Which statement is false about the image formed by an indirect ophthalmoscope:
 - a. Is upside down
 - b. Is real
 - c. Is not affected by the refractive state of the patient
 - d. Is formed between the observer and the condensing lens
2. When using a direct ophthalmoscope, the field of view:
 - a. Is about 60 degrees
 - b. Is larger than that through an indirect ophthalmoscope
 - c. Is larger in an eye dilated with mydriatic
 - d. Is larger in a myope compared with a hypermetrope
3. The following are true about the retinoscope:
 - a. Two mirror systems are used: the plane mirror and the convex mirror
 - b. Scissors shadows are usually seen in patient with small pupil
 - c. The speed of the reflex decreases as the neutralization point is near
 - d. A myope who accommodates excessively during retinoscopy will result in a more myopic refraction
4. The following are true about the keratometer:
 - a. In the Javal-Schiøtz instrument, the object size is fixed
 - b. In the Javal-Schiøtz instrument, each step of the mire is equivalent to 1/2 a dioptre
 - c. Wollaston prism is used in Javal-Schiøtz instrument
 - d. The power of the cornea is equal to 337.5 divided by the radius of curvature in diopters.
5. State true or false
 - a. In fluorescein angiography a fundus camera has optics similar to direct ophthalmoscope
 - b. In fluorescein angiography filter allows exciting light less than 510nm
 - c. Indocyanine green has a larger molecule than sodium fluorescein.
 - d. ICG is better at visualizing the choroidal vasculature than sodium fluorescein angiography because it has a higher protein binding and only partially absorbed by the retinal pigment epithelium
 - e. ICG should be avoided in patients with seafood allergy
 - f. The focimeter can measure back vertex power of the lens
 - g. 90D lens has a larger field of view than a 78D lens
 - h. The OCT (optical coherence tomography) uses reflection of infrared light to obtain retinal image
 - i. Schiener double-pinhole principle are used in all modern autorefractors
 - j. The optical pachymeter (pachometer) uses images I and II of Purkinje-Sanson's images to measure the corneal thickness

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2013
OPTOMETRIC MANAGEMENT AND LOW VISION AIDS
PAPER FOUR

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

- Q. 1. Ocular prosthesis
- Q. 2. Contraindications of contact lenses
- Q. 3. Decentring of Spherical lenses
- Q. 4. Telescopic lenses
- Q. 5. Selection of Optical frames
- Q. 6. Multifocal spectacles
- Q. 7. Types of contact lenses
- Q. 8. Visual rehabilitation
- Q. 9. Define and classify visual impairment

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2013
OPTOMETRIC MANAGEMENT AND LOW VISION AIDS
PAPER FOUR (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Lenses during the waking hours is called as:
 - a. Extended wear
 - b. Daily wear
 - c. Continuous wear
 - d. None of the above
2. MPS means:
 - a. Multi power solution
 - b. Multi purpose solution
 - c. Multi purpose solvent
 - d. None of the above
3. DK is :
 - a. Diffusion coefficient
 - b. Diffusion Permeability
 - c. Diffused oxygen
 - d. All of the above
4. Lenticular lenses, not included:
 - a. Front surface convex back in concave
 - b. Front and back surface is convex
 - c. Centre is aperture and periphery is carrier
 - d. Aspheric design
5. Contact lens material remains stable uptodegree:
 - a. 60
 - b. 70
 - c. 85
 - d. None of the above
6. Enzymatic Protein Removers are:
 - a. Papain
 - b. Pancreatin
 - c. Subtilisin A
 - d. All of the above
7. Wettability is high:
 - a. When wettability angle is high
 - b. When wettability angle is low
 - c. When wettability angle is zero
 - d. None of the above
8. Contact lens is used as an complimentary LVA devices:
 - a. Toric
 - b. Biotoric
 - c. X-chrome
 - d. None of the above
9. The disadvantages of using optical magnifying glasses for low visual aids include:
 - a. Reduced focus
 - b. Reduced visual field
 - c. Reduced contrast
 - d. Objects need to be placed far away

State true or false:

10. Convex cross cylinder can be used as low visual aid
11. The Galilean telescope is made up of two convex lenses
12. The Galilean telescope is usually lighter than the astronomical telescope
13. The astronomical telescope may be used as visual aid for patients with significant visual field loss due to advanced glaucoma:
14. In retinitis pigmentosa prism with the base towards the area of scotoma

Regn. No.....

Paper Code: BO- 201...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2015
PHARMACOLOGY, PATHOLOGY & MICROBIOLOGY
PAPER FIRST

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 8 = 56)

Pathology:

- Q. 1. Write differences between benign and malignant neoplasms.
- Q. 2. Write shortly and draw diagram of granuloma (chronic granulomatous inflammation).
- Q. 3. What are methods of hemoglobin estimation and interpretation of low hemoglobin?

Microbiology:

- Q. 4. Write short notes on:
 - a. Sterilization and disinfection
 - b. Culture media used for processing scalar specimens
- Q. 5. Write short notes on:
 - a. Viruses causing eye infections
 - b. TRIC agents or chlamydia trachomatis .

Pharmacology:

- Q. 6. Write short notes on:
 - a. Management of Organophosphate poisoning
 - b. Therapeutic uses of adrenaline
- Q. 7. Describe the pharmacotherapy of
 - a. Glaucoma
 - b. Pulmonary TB
- Q. 8. Explain therapeutic uses & side effects of Corticosteroids

Regn. No.....

Paper Code: BO- 201...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2015
PHARMACOLOGY, PATHOLOGY & MICROBIOLOGY
PAPER FIRST (MCQ)

Time allotted for MCQ- 15 minutes

(½ x 28= 14)

B : MCQs (Single response type):

Select the most appropriate answer and encircle the alphabet against it

Pathology:

1. Biopsy tissue is fixed in
 - a. Methanol
 - b. Distilled water
 - c. Formalin
 - d. Normal saline
2. Malignant tumors show
 - a. Metastasis
 - b. No mitosis
 - c. Mostly encapsulated
 - d. No vascular invasion
3. FNAC is usually done by
 - a. 21-24 gauge needle
 - b. Sahla's needle
 - c. Lumbar puncture needle
 - d. None of the above
4. AML is type of
 - a. Lymphoma
 - b. Anemia
 - c. Leukemia
 - d. Coagulation disease
5. Tuberculosis shows which type of necrosis
 - a. Coagulative
 - b. Caseous
 - c. Liquefactive
 - d. Gangrenous
6. Normal count of lymphocytes in adult blood is
 - a. 0-1%
 - b. 80-85%
 - c. 20-25%
 - d. 5%
7. Metaplasia may be normally seen in
 - a. Brain
 - b. Liver
 - c. Heart
 - d. Cervix
8. Serum contains clotting factors. **True / False**

Microbiology:

9. Gram stain is an example of:
 - a. Vital stain
 - b. Simple Stain
 - c. Differential Stain
 - d. Acid fast stain
10. Which of the following is a gram positive bacilli:
 - a. Staphylococcus
 - b. Escherichia coli
 - c. Mycobacterium
 - d. Pneumococcus
11. Type I hypersensitivity reactions is mediated by
 - a. IgE
 - b. IgA
 - c. IgG
 - d. IgM
12. Blood agar is an example of
 - a. Basal media
 - b. Selective media
 - c. Enriched media
 - d. Liquid media
13. Which Nagles reaction is helpful in laboratory diagnosis of?
 - a. Clostridium perfringens
 - b. Staphylococcus
 - c. Pseudomonas
 - d. C. tetani
14. Member of genus mycobacteria are:
 - a. Gram Negative
 - b. Motile
 - c. Acid fast
 - d. Capsulated
15. Causative agent of chicken pox is:
 - a. Cytomegalovirus
 - b. Variola virus
 - c. Herpes simplex virus
 - d. Varicella zoster virus
16. Causative agent of hydatid cyst is:
 - a. Taenia saginata
 - b. Taenia solium
 - c. Echinococcus
 - d. Ascaris lumbricoides

P.T.O..

17. Which of the following is caused by candida?
a. Oral thrush
b. Diaper rash.
c. Esophagitis
d. All of the above
18. HIV infection causes depletion of mainly which immune cell of the body?
a. CD 50
b. CD 8
c. CD 4
d. CD 3
19. Most commonly used medium for fungal culture is:
a. Cornmeal agar
b. Bird seed agar
c. McConkey
d. Sabouraud's dextrose
20. Causative agents of cysticercosis is:
a. Enchinococcus
b. E histolytica
c. Taenia solium
d. Ascaris lumbricoides.

Pharmacology:

21. Most common Local anaesthetic for topical use
a. Bupivacaine
b. Cocaine
c. Lignocaine
d. Tetracaine
22. Corticosteroids are contraindicated in
a. Allergic Conjunctivitis
b. Viral Conjunctivitis
c. Phlyctenular Conjunctivitis
d. Keratoconjunctivitis
23. Which of the following is an antifungal
a. Amphotericin B
b. Amantadine
c. Acyclovir
d. Ostelamvir

24. Which of the following is bacteriostatic drug?
a. Tetracycline
b. Penicillins
c. Aminoglycosides
d. Cephalosporin
25. A bactericidal drug is one which
a. Inhibits growth of microorganism
b. Inhibits differentiation
c. Kills the microorganism
d. None
26. Administration of Antimicrobial to prevent infection is known as
a. Superinfection
b. Chemoprophylaxis
c. Cross resistance
d. None
27. Which of the following is used for treatment of Migraine
a. Sumatriptan
b. Ranitidine
c. Cetrizine
d. Allopurinol
28. Antidote for Paracetamol poisoning
a. N-Acetylcysteine
b. Acetylsalicylic acid
c. Gamma aminobutyric Acid
d. Penicillamine

Regn. No.....

Paper Code: BO-202...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2015
CLINICAL REFRACTION & CONTACT LENS
PAPER TWO

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write Short Notes on:

- Q. 1. Keratoconus
- Q. 2. Aniseikonia
- Q. 3. Pseudophakia
- Q. 4. Manufacturing of soft Contact lens
- Q. 5. Optics of Contact lens
- Q. 6. Contact lens material and their Physical Properties
- Q. 7. Case and maintenance of Soft Contact lens
- Q. 8. Fitting of RGP Contact Lens
- Q. 9. Subjective methods of refraction

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2015
CLINICAL REFRACTION & CONTACT LENS
PAPER TWO (MCQ)

Time allotted for MCQ- 15 minutes

(½ x 14= 7)

B : MCQs (Single response type):

Select the most appropriate answer and encircle the alphabet against it

1. Cylindrical lens
 - a. Has no power along its axis
 - b. Form a focal line parallel to its axis
 - c. Causes meridional minification/magnification at 90 degree to its axis
 - d. All of the above
1. High Plus lens can cause
 - a. Pin cushion effect
 - b. Barrel effect
 - c. Meridional magnification
 - d. Image minification
2. Regarding refraction in children
 - a. Myopia is more common than hypermetropia
 - b. Correction of hypermetropia can reduce exophoria
 - c. Myopia tends to decrease as the child grows older
 - d. Increased accommodation is used by children to overcome uncorrected hypermetropia
3. 1mm shortening of the antero-posterior diameter of the eye results in _____ of hypermetropia
 - a. 3 D
 - b. 6 D
 - c. 4 D
 - d. 1 D
4. Amount of latent hypermetropia corrected by the inherent tone of ciliary muscle is
 - a. 1 D
 - b. 2 D
 - c. 3 D
 - d. 4 D
5. Pseudophakia is
 - a. Presence of IOL in place of normal lens
 - b. Presence of normal lens in the eye
 - c. Both
 - d. None
6. In retinoscopy, scissor reflex indicates
 - a. Myopia
 - b. Hypermetropia
 - c. Astigmatism
 - d. All of the above
8. Anisometropia means
 - a. Unequal retinal image size in two eyes
 - b. Unequal refractive error in two eyes
 - c. Unequal drooping of upper lids in two eyes
 - d. None of the above
9. Astigmatism occurs due to
 - a. Change in corneal curvature
 - b. Change in axial length of eye
 - c. Both
 - d. None
10. Soft contact lenses are
 - a. PMMA
 - b. HEMA
 - c. Both
 - d. None
11. Contact lens can lead to
 - a. Uveitis
 - b. Cataract
 - c. Keratitis
 - d. All of the above
12. 3 point touch is seen for fitting of
 - a. Soft contact lens
 - b. Rigid lens
 - c. Toric lens
 - d. None of the above
13. C3R is done for
 - a. Keratoconus
 - b. Presbyopia
 - c. Myopia
 - d. Aphakia
14. Hard contact lenses are made of
 - a. PMMA
 - b. HEMA
 - c. Acrylic
 - d. All of the above

Regn. No.....

Paper Code: BO- 203...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2015
OPTOMETRIC INVESTIGATIONS & LOW VISION AIDS
PAPER THIRD

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on:

- Q. 1. A Scan and its uses
- Q. 2. Lacrimal function test
- Q. 3. Corneal stains and uses
- Q. 4. Direct ophthalmoscope
- Q. 5. Gonioscopy
- Q. 6. Non-optical LVD
- Q. 7. Telescopes as low vision aids.
- Q. 8. Recent advances in low vision aids.
- Q. 9. Role of ultrasound in ophthalmology.

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2015
OPTOMETRIC INVESTIGATIONS & LOW VISION AIDS
PAPER THIRD (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 07)

Select the most appropriate answer and encircle the alphabet against it

1. Contrast sensitivity is measured by:
 - a. Pelli robson chart
 - b. Ishihara
 - c. Lea symbol
 - d. None of the above
2. Fluorescein pattern is seen with the aid of:
 - a. Cobalt blue filter
 - b. Wartman filter 41
 - c. Neutral density filter
 - d. None of the above
3. Pachymetry is used to measure :
 - a. Corneal curvature
 - b. Endothelial cell count
 - c. Corneal thickness
 - d. All of the above
4. Macula is best visualized with:
 - a. Retinoscopy
 - b. Slit lamp Indirect ophthalmoscopy
 - c. Direct ophthalmoscopy
 - d. Distant direct ophthalmoscopy
5. Snellen's chart is used to test:
 - a. Vision
 - b. Refraction
 - c. Presbyopia
 - d. Colour blindness
6. Keratometer is used for:
 - a. Measurement of corneal astigmatism
 - b. Measurement of lenticular astigmatism
 - c. Measurement of axial length
 - d. Measurement of IOL power
7. Color vision testing can be done by:
 - a. Ishihara test plates
 - b. Fransworth- Munsell hue 100 test
 - c. All of the above
 - d. None of the above
8. Rehabilitation of the visually Handicapped:
 - a. Medical Rehabilitation
 - b. Social Rehabilitation
 - c. Educational Rehabilitation
 - d. All of the above
9. LASER work in the following way:
 - a. Photodisruption
 - b. Denaturation of protein
 - c. Photocoagulation
 - d. All of the above
10. What is the definition of blindness as per world health organization standards?
 - a. Vision 20/200 or worse
 - b. Vision 20/400 or worse
 - c. Vision finger counting at 1 feet
 - d. None of the above
11. Which of the following are used as field expanders?
 - a. Periscope
 - b. Reverse telescope
 - c. Magnifying lenses
 - d. Electronic magnifiers
12. Which of the following are cause of low vision in old age?
 - a. Glaucoma
 - b. Presbyopia
 - c. Hypermetropia
 - d. Astigmatism
13. The astronomical telescope:
 - a. Gives an upright image
 - b. Can be used while driving
 - c. Has two convex lenses
 - d. None of the above
14. Which statement is false about the image formed by an indirect ophthalmoscope:
 - a. Is upside down
 - b. Is real
 - c. Is not affected by the refractive state of the patient
 - d. Is formed between the observer and the condensing lens

Regn. No.....

Paper Code: BO- 204...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2015
CLINICAL ORTHOPTICS
PAPER FOUR

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write Short note on:

- Q. 1. WFDT
- Q. 2. Light reflex tests
- Q. 3. Maddox rod test
- Q. 4. 3 step test
- Q. 5. Classification of amblyopia
- Q. 6. Heterophoria
- Q. 7. Commitant Esotropia
- Q. 8. A V phenomena
- Q. 9. Superior oblique muscle paralysis

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2015
CLINICAL ORTHOPTICS
PAPER FOUR (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. AC/A ratio in non refractive accommodative Esotropia is
 - a. High
 - b. Low
 - c. Equal
 - d. None of the above
2. Test to rule out Microtropia
 - a. WFDT
 - b. 4 prism base out test
 - c. After image
 - d. None of the above
3. Components of binocular single vision do not include
 - a. Fixation
 - b. Fusion
 - c. SMP
 - d. Streopsis
4. The same image falling on non corresponding point excites
 - a. Diplopia
 - b. Confusion
 - c. BSV
 - d. Streopsis
5. Uncrossed diplopia is seen in
 - a. Exotropia
 - b. Esotropia
 - c. Exophoria
 - d. Esophoria
6. Sensory adaptation does not include
 - a. Anomalous retinal correspondence
 - b. Head tilt
 - c. ARC
 - d. Amblyopia
7. Dissociation is not generated by
 - a. Vertical prism
 - b. Maddox wing
 - c. Pin hole
 - d. None of the above
8. In Maddox wing test, dissociation is generated by
 - a. Septum
 - b. Eye piece
 - c. Prism
 - d. None of the above
9. Limitation of cover test is
 - a. Microtropia
 - b. Exotropia
 - c. Esotropia
 - d. All of the above
10. PMT stands for
 - a. Post metric test
 - b. Post mydriasis test
 - c. Post mydriatic test
 - d. None of the above
11. Dextroversion is movement
 - a. Disjugate
 - b. Conjugate
 - c. Vergence
 - d. None of the above
12. Convergence insufficiency is associated with all of the following except:
 - a. Increase in accommodation
 - b. General debility
 - c. Refractive errors
 - d. Wide interpupillary distance
13.type of bifocals is given in accommodative Esotropia
 - a. Kryptok
 - b. Flat top
 - c. Executive
 - d. None of the above
14. Fusional divergence is also known as
 - a. Negative fusional convergence
 - b. Positive fusional convergence
 - c. Amplitude of fusional divergence
 - d. None of the above

Regn. No.....

Paper Code: BO- 201...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2016
PHARMACOLOGY, PATHOLOGY & MICROBIOLOGY
PAPER FIRST

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Pathology:

- Q. 1. Enumerate the following:
- a. Causes of proteinuria
 - b. Normal values of Hemoglobin, TLC, DLC
- Q. 2. Draw a labeled diagrams of Lymphocyte and Eosinophil
- Q. 3. Write the procedure of the following:
- a. Blood sample collection
 - b. Staining of blood film

Microbiology:

- Q. 4. Write definitions of:
- a. Antigen and Antibody
 - b. Sterilisation and Disinfection
- Q. 5. Write short notes on:
- a. TRIC agents
 - b. Echinococcus granulosus
- Q. 6. Write short notes on:
- a. Laboratory diagnosis of HIV infection
 - b. Fungal infections of the eye

Pharmacology:

- Q. 7. Write short notes on Mydriatics
- Q. 8. Write short notes on classification of NSAIDs. Discuss in brief the NSAIDs used in ophthalmology
- Q. 9. Write short notes on antiseptics in ophthalmic practice

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2016
PHARMACOLOGY, PATHOLOGY & MICROBIOLOGY
PAPER FIRST (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 07)

Select the most appropriate answer and encircle the alphabet against it

Pathology:

1. Normal percentage of Eosinophils in a blood sample is:
 - a. 40-75
 - b. 1-6
 - c. 7-10
 - d. 0-1
2. Increase in Red Blood Cell count is termed:
 - a. Anemia
 - b. Leucocytosis
 - c. Polycythemia
 - d. Thrombocytopenia
3. Urine protein estimation is done by which method:
 - a. Sahli's method
 - b. Mantoux test
 - c. Benedict's test
 - d. Heat coagulation method
4. Biopsy tissue is fixed in:
 - a. Normal saline
 - b. Distilled water
 - c. Formalin
 - d. Methanol
5. Which hormone is detected in the pregnancy test:
 - a. Beta HCG
 - b. Leutenising hormone
 - c. Estrogen
 - d. Progesterone
6. Blood in urine is termed:
 - a. Glucosuria
 - b. Chyluria
 - c. Hematuria
 - d. Proteinuria

Microbiology:

7. Who is called Father of microbiology?
 - a. Robert Koch
 - b. Louis Pasteur
 - c. Joseph Lister
 - d. Edward Jenner
8. Naegler reaction is helpful in laboratory diagnosis of:
 - a. *Corynebacterium diphtheriae*
 - b. *Clostridium perfringens*
 - c. *Clostridium tetani*
 - d. *Pseudomonas aeruginosa*

Pharmacology:

9. Which of the following is bactericidal drug?
 - a. Tetracycline
 - b. Aminoglycosides
 - c. Erythromycin
 - d. Sulphonamide
10. Which of the following is used topically in Herpes Simplex Keratitis
 - a. Amphoterecin B
 - b. Acyclovir
 - c. Amantadine
 - d. Ostelmavir
11. 3. Drug contraindicated in narrow angle glaucoma is:
 - a. Atropine
 - b. Timolol
 - c. Pilocarpine
 - d. Physostigmine
12. Maximum bioavailability is with :
 - a. Oral route
 - b. Subcutaneous route
 - c. Intravenous route
 - d. Intramuscular route
13. Local anesthetic agents act by inhibiting
 - a. Sodium channels
 - b. Potassium channels
 - c. Calcium channels
 - d. Chloride channels
14. Ototoxicity & nephrotoxicity are commonly seen with
 - a. Penicillins
 - b. Aminoglycosides
 - c. Fluoroquinolones
 - d. Cephalosporins

Regn No.....

Paper Code: BO 201...

B.Sc. OPTO. TWO YEAR EXAMINATION, JUNE/JULY 2016
OCULAR PHARMACOLOGY & PHARMACY
PAPER ONE

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on :

- Q. 1. Treatment of open angle Glaucoma.
- Q. 2. Drugs for refraction testing
- Q. 3. Adrenaline
- Q. 4. Uses of acyclovir in ocular practice
- Q. 5. Anti-adrenergic drugs in ophthalmics
- Q. 6. Uses of prostaglandin analogs
- Q. 7. Factors determining ocular penetration
- Q. 8. Uses of Quinolone antibiotics in ocular practice
- Q. 9. Uses of corticosteroids in ocular diseases

Regn No.....

Paper Code: BO 201...

B.Sc. OPTO. TWO YEAR EXAMINATION, JUNE/JULY 2016
OCULAR PHARMACOLOGY & PHARMACY
PAPER ONE (MCQ)

Time allotted for MCQ- 15 minutes

(½ x 14= 07)

B : MCQs (Single response type):

Select the most appropriate answer and encircle the alphabet against it

1. Shortest acting mydriatic is
 - a. Atropine
 - b. Timolol
 - c. Pilocarpine
 - d. Physostigmine
2. Local route of drug administration
 - a. Oral route
 - b. topical
 - c. i.v route
 - d. i.m route
3. Heart rate is decreased by
 - a. Atropine
 - b. homatroine
 - c. tropicamide
 - d. propranalol
4. Mydriatic preferred in children for refraction testing is
 - a. Tropicamide
 - b. Cyclopentolate
 - c. Atropine
 - d. Homatorpine
5. For ocular penetration a drug should be:
 - a. Lipid soluble
 - b. Water soluble
 - c. Large molecular size
 - d. Ionized
6. Which of the following is not ototoxic drug?
 - a. gentamicin
 - b. Amikacin
 - c. streptomycin
 - d. Tetracycline
7. Mechanism of action of aminoglycosides is :
 - a. Cell wall synthesis inhibition
 - b. Protein synthesis inhibition
 - c. Leakage from cell membranes
 - d. DNA gyrase inhibition
8. Which of the following is an antihelminthic drug :
 - a. Penicillin
 - b. albendazole
 - c. Gentamicin
 - d. Ketoconazole
9. Anticholinergis can be used in eye for
 - a. Refraction testing
 - b. Retinopathies
 - c. Allergic conditions of eye
 - d. Conjunctivitis
10. Atropine causes
 - a. Mydriasis
 - b. Miosis
 - c. Alternate contraction and relaxation of pupil
 - d. No change in pupillary size
11. Drug of choice for the treatment of **Glaucoma** is
 - a. Beta blockers
 - b. Neostigmine
 - c. Carbachol
 - d. Acetylcholine
12. Dipivefrine is
 - a. Cholinergic drug
 - b. Anti-Cholinergic drug
 - c. Adrenergic Drug
 - d. Adrenergic Prodrug
13. Longest acting mydriatic
 - a. Tropicamide
 - c. Timolol
 - b. Sotalol
 - d. Atropine
14. Tropicamide is used for
 - a. Refraction testing
 - b. Conjunctivitis
 - c. Tumors of eye
 - d. Black Eye

Regn. No.....

Paper Code: BO-202...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2016
CLINICAL REFRACTION & CONTACT LENS
PAPER TWO

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write Short Notes on:

- Q. 1. Myopia
- Q. 2. Aniseikonia
- Q. 3. Presbyopia
- Q. 4. Cornea and its pump mechanism
- Q. 5. Keratoconus
- Q. 6. Astigmatism
- Q. 7. Physical properties of contact lens materials
- Q. 8. Care and maintenance of contact lenses
- Q. 9. Designs of contact lenses

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2016
CLINICAL REFRACTION & CONTACT LENS
PAPER TWO (MCQ)

Time allotted for MCQ- 15 minutes

(½ x 14= 7)

B : MCQs (Single response type):

Select the most appropriate answer and encircle the alphabet against it

1. Diopters is:
 - a. Reciprocal of metre
 - b. Centimetres per metre
 - c. Cycles per degree
 - d. None of the above
2. Systemic disorder associated with Keratoconus:
 - a. Mitral valve prolapse
 - b. Down syndrome
 - c. Ehler danlos syndrome
 - d. All of the above
3. Ideal movement of soft contact lens after blink is:
 - a. 1mm
 - b. 2mm
 - c. 0.5 mm
 - d. 3 mm
4. Earliest indicator of keratoconus is :
 - a. Retinal topography
 - b. Choroidal topography
 - c. Corneal topography
 - d. None of the above
5. Jack in box phenomenon is seen in glasses used for:
 - a. Cataract
 - b. Aphakia
 - c. Myopia
 - d. None of the above
6. In C.L fitting if Vision clears immediately after a blink:
 - a. Too Steep Lens
 - b. Too flat lens
 - c. Ideal fit
 - d. None of the above
7. The angle between the visual axis and pupillary axis is:
 - a. Angle alpha
 - b. Angle kappa
 - c. Angle of anomaly
 - d. None of the above
8. Amount of latent hypermetropia corrected by the inherent tone of ciliary muscle is:
 - a. 1 D
 - b. 2 D
 - c. 3 D
 - d. 4 D
9. High Plus lens can cause:
 - a. Pin cushion effect
 - b. Barrel effect
 - c. Meridional magnification
 - d. Image minification
10. Which is not a type of ophthalmoscopy?
 - a. Direct
 - b. Indirect
 - c. Oblique
 - d. All of the above
11. Aphakia is:
 - a. Absence of lens
 - b. Opacity in the lens
 - c. Vascularization in the lens
 - d. None of the above
12. Irregular astigmatism:
 - a. Cannot be corrected by surgery
 - b. Occurs in corneal scarring
 - c. Can be corrected by spherical lenses
 - d. All of the above
13. PMMA stands for:
 - a. Poly metha methyl acrylate
 - b. Poly methyl methacrylate
 - c. Poly meta methyl acrylate
 - d. None of the above
14. Principal of lensometer is:
 - a. Scheiner disc
 - b. Badal
 - c. Geneva
 - d. Double pinhole

Regn. No.....

Paper Code: BO- 203...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2016
OPTOMETRIC INVESTIGATIONS & LOW VISION AIDS
PAPER THIRD

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on:

- Q. 1.** Ocular Prosthesis
- Q. 2.** Humphrey visual field Analyser
- Q. 3.** Indocyanine Green Angiography
- Q. 4.** Telescopic lens
- Q. 5.** A scan and its uses
- Q. 6.** Field Expanders
- Q. 7.** Direct Ophthalmoscopy
- Q. 8.** Visual rehabilitation
- Q. 9.** Classification of visual impairment

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2016
OPTOMETRIC INVESTIGATIONS & LOW VISION AIDS
PAPER THIRD (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 07)

Select the most appropriate answer and encircle the alphabet against it

1. Pediatric vision is tested by:
 - a. Pelli robson chart
 - b. Ishihara
 - c. Lea symbol
 - d. None of the above
2. Fluorescein pattern is seen with the aid of:
 - a. Cobalt blue filter
 - b. Wartman filter 41
 - c. Neutral density filter
 - d. None of the above
3. Specular microscope is used to measure :
 - a. Corneal curvature
 - b. Endothelial cell count
 - c. Corneal thickness
 - d. All of the above
4. Ora serrata is best visualized with:
 - a. Retinoscopy
 - b. Slit lamp Indirect ophthalmoscopy
 - c. Direct ophthalmoscopy
 - d. Indirect ophthalmoscopy
5. Snellen's chart is used to test:
 - a. Vision
 - b. Refraction
 - c. Presbyopia
 - d. Colour blindness
6. A scan is used for:
 - a. Measurement of corneal astigmatism
 - b. Measurement of lenticular astigmatism
 - c. Measurement of axial length
 - d. Measurement of IOL power
7. Color vision testing can be done by:
 - a. Ishihara test plates
 - b. Fransworth- Munsell hue 100 test
 - c. All of the above
 - d. None of the above
8. Rehabilitation of the visually Handicapped:
 - a. Medical Rehabilitation
 - b. Social Rehabilitation
 - c. Educational Rehabilitation
 - d. All of the above
9. LASER work in the following way:
 - a. Photodisruption
 - b. Denaturation of protein
 - c. Photocoagulation
 - d. All of the above
10. What is the definition of blindness as per world health organization standards?
 - a. Vision 20/200 or worse
 - b. Vision 20/400 or worse
 - c. Vision finger counting at 1 feet
 - d. None of the above
11. Which of the following Patient use field expanders?
 - a. Retinitis pigmentosa
 - b. Cataract
 - c. High myopia
 - d. None of the above
12. Which of the following cause low vision in old age?
 - a. ARMD
 - b. Presbyopia
 - c. Hypermetropia
 - d. Astigmatism
13. The Galilean telescope:
 - a. Gives an upright image
 - b. Can be used while driving
 - c. Has one convex and one concave lenses
 - d. None of the above
14. Which statement is false about the image formed by an direct ophthalmoscope:
 - a. Is upside down
 - b. Is virtual
 - c. Is affected by the refractive state of the patient
 - d. None of the above

Regn. No.....

Paper Code: BO- 204...

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2016
CLINICAL ORTHOPTICS
PAPER FOUR

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on:

- Q. 1. WFDT
- Q. 2. Maddox wing
- Q. 3. Synaptophore
- Q. 4. Amblyopia
- Q. 5. Heterophoria
- Q. 6. Intermittent divergent squint
- Q. 7. AV phenomena
- Q. 8. Esotropia
- Q. 9. Cover test

B. Sc. OPTO. SECOND YEAR EXAMINATION, JUNE/JULY - 2016
CLINICAL ORTHOPTICS
PAPER FOUR (MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. Hirschberg test is a type of
 - a. Cover test
 - b. Light reflex test
 - c. Dissimilar image test
 - d. None of the above
2. Uncrossed diplopia is seen in
 - a. Esodeviation
 - b. Exodeviation
 - c. Hyperdeviation
 - d. Hypodeviation
3. Test to rule out microtropia is
 - a. WFDT
 - b. After image
 - c. 4 prism base out test
 - d. Bagolini glass test
4. Assessment of angle of squint can be done by
 - a. FDT
 - b. Cycloplegic refraction
 - c. Krimsky test
 - d. None of the above
5. Hirschberg test is used to detect:
 - a. Squint
 - b. Field defects
 - c. Glaucoma
 - d. Optic atrophy
6. Latent squint is also known as
 - a. Heterotropia
 - b. Heterophoria
 - c. Both
 - d. None
7.type of specs given in accommodative Esotropia
 - a. Bifocals
 - b. Trifocals
 - c. Multifocals
 - d. None of the above
8. In WFDT, if the patient sees all four light with manifest squint, he has
 - a. ARC
 - b. Diplopia
 - c. Suppression
 - d. None of the above
9. Fusional divergence is also known as
 - a. Negative fusional convergence
 - b. Positive fusional convergence
 - c. Amplitude of fusional divergence
 - d. None of the above
10. Assessment of ocular alignment is done by
 - a. Cover test
 - b. Light reflex test
 - c. Both
 - d. None
11. Manifest squint is also known as
 - a. Heterotropia
 - b. Heterophoria
 - c. Exophoria
 - d. Esophoria
12. Monocular eye movements are all except
 - a. Adduction
 - b. Abduction
 - c. Infraduction
 - d. Dextroversion
13. In Maddox wing test dissociation is generated by
 - a. Septum
 - b. Eye piece
 - c. Prism
 - d. None of the above
14. Limitation of cove test is
 - a. Microtropia
 - b. Exotropia
 - c. Esotropia
 - d. All of the above

Regn. No.....

Paper Code: BOPT- 201...

B. OPTOM. SECOND YEAR EXAMINATION, JUNE/JULY - 2017
PHARMACOLOGY, PATHOLOGY & MICROBIOLOGY
PAPER FIRST

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagram wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Pathology:

- Q. 1. Draw labeled diagram of :
- a. Eosinophil
 - b. Lymphocyte
- Q. 2. Write briefly about differences between benign and malignant neoplasm.
- Q. 3. Write briefly about anticoagulants used in hematology lab.

Microbiology:

- Q. 4. Define sterilization and disinfection. Write a note on autoclave.
- Q. 5. Write short notes on:
- a. Pneumococcus
 - b. Importance of IgM and IgG in diagnosis of infection
- Q. 6. Enumerate: (3+3+1= 7)
- a. Species of aspergillus
 - b. Diseases caused by Epstein-Barr virus
 - c. One acid fast bacilli

Pharmacology:

- Q. 7. Therapeutic uses and contraindications of beta blockers.
- Q. 8. Adverse effects of corticosteroids.
- Q. 9. Write drugs used in the management of narrow angle glaucoma.

B. OPTOM. SECOND YEAR EXAMINATION, JUNE/JULY - 2017
PHARMACOLOGY, PATHOLOGY & MICROBIOLOGY
PAPER FIRST (MCQ)

Time allotted for MCQ - 15 minutes

B : MCQs (Single response type):

(½ x 14= 07)

Select the most appropriate answer and encircle the alphabet against it

Pathology

1. Presence of blasts in peripheral blood indicates:
 - a. Infection
 - b. Anemia
 - c. Diabetes
 - d. Leukemia
2. Which test is used to detect presence of glucose in urine?
 - a. Rothera's test
 - b. Heat coagulation
 - c. Hay's sulphur test
 - d. Benedict's test
3. Which method is best for hemoglobin estimation?
 - a. Sahli's method
 - b. Cyan-methemoglobin method
 - c. Hemo-cue method
 - d. Specific gravity method
4. Universal donor blood group is:
 - a. AB
 - b. A
 - c. O
 - d. B
5. Granuloma seen in which of the following? condition
 - a. Tuberculosis
 - b. Leprosy
 - c. Cat scratch disease
 - d. All of them
6. Which one is a benign lesion?
 - a. Lipoma
 - b. Fibrosarcoma
 - c. Multiple myeloma
 - d. Basal cell carcinoma

Microbiology

7. Trachoma is caused by which serovar of chlamydia:
 - a. A, B, Ba, C
 - b. D-K
 - c. L1-L3
 - d. All of the above

8. Oxidase positive bacteria is:
 - a. *Streptococcus pyogenes*
 - b. *Escherichia coli*
 - c. *Pseudomonas aeruginosa*
 - d. *Pneumococcus*

Pharmacology

9. Anticholinesterase drug is:
 - a. Timolol
 - b. Physostigmine
 - c. Atropine
 - d. Adrenaline
10. Which of following is a beta blocker?
 - a. Betadine
 - b. Acyclovir
 - c. Timolol
 - d. Lignocaine
11. Lignocaine acts by:
 - a. Beta receptor blockade
 - b. Cell wall synthesis inhibition
 - c. Sodium channel blockade
 - d. Inhibition of DNA synthesis
12. Steroids are contraindicated in:
 - a. Asthma
 - b. Peptic ulcer
 - c. Iritis
 - d. Rheumatoid arthritis
13. Shortest acting mydriatic is:
 - a. Tropicamide
 - b. Atropine
 - c. Homatropine
 - d. Cyclopentolate
14. In asthmatic patients drug that should be avoided is:
 - a. Atropine
 - b. Ipratropium bromide
 - c. Propranolol
 - d. Corticosteroids

Regn. No.....

Paper Code: BOPT-202...

B. OPTOM. SECOND YEAR EXAMINATION, JUNE/JULY - 2017
CLINICAL REFRACTION & CONTACT LENS

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on:

- Q. 1. Classification of astigmatism
- Q. 2. Optics of aphakia
- Q. 3. Manufacturing of rigid contact lens
- Q. 4. Differences between spherical, cylindrical and toric lenses
- Q. 5. Prescription of spectacles
- Q. 6. Retinoscopy
- Q. 7. Modification of contact lens
- Q. 8. Complications of contact lens use
- Q. 9. Physical properties of contact lens material

B. OPTOM. SECOND YEAR EXAMINATION, JUNE/JULY - 2017
CLINICAL REFRACTION & CONTACT LENS
(MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it

1. 1mm decrease of the corneal curvature of the eye results in _____ of hypermetropia:
 - a. 3 D
 - b. 6 D
 - c. 4 D
 - d. 1 D
2. Regarding refraction in neonates:
 - a. Myopia is more common than hypermetropia
 - b. Correction of hypermetropia is indicated in all cases
 - c. Myopia tends to decrease as the child grows older
 - d. Increased accommodation is used by children to overcome uncorrected hypermetropia
3. Prescription includes:
 - a. Number
 - b. Near correction
 - c. Both
 - d. None of the above
4. Principle of duochrome test is:
 - a. Snell law
 - b. Aberrations
 - c. Listing law
 - d. Chromatic aberration
5. In astigmatism, stigma means:
 - a. Multiple points
 - b. Pencil point
 - c. Sharp point
 - d. Diffuse points
6. Myopic patient accommodate and converge more in:
 - a. Spectacles
 - b. Contact lenses
 - c. Both
 - d. None of the above
7. The following prescription has with-the-rule astigmatism:
 - a. +1.00DS / -0.25DC@180
 - b. +1.00DS / +0.25DC@180
 - c. +1.00DS / -0.25DC@135
 - d. -1.00DS / -0.25DC@90
8. Which of the following prescription has mixed astigmatism?
 - a. -2.00DC@45
 - b. -1.00DS / -0.25DC@85
 - c. +1.25DS / +1.00DC@175
 - d. -0.50DS / +0.50DC@180
9. Irregular astigmatism:
 - a. Occurs when there are many radii in one meridian
 - b. Can be corrected with spectacle
 - c. Both
 - d. None
10. Contact lens can lead to
 - a. Uveitis
 - b. Cataract
 - c. Keratitis
 - d. All of the above
11. 3 point touch is seen for fitting of:
 - a. Soft contact lens
 - b. Rigid lens
 - c. Toric lens
 - d. None of the above
12. Amount of latent hypermetropia corrected by the inherent tone of ciliary muscle is
 - a. 1 D
 - b. 2 D
 - c. 3 D
 - d. 4 D
13. Anisokonia means:
 - a. Unequal retinal image size in two eyes
 - b. Unequal refractive error in two eyes
 - c. Unequal drooping of upper lids in two eyes
 - d. None of the above
14. Irregular astigmatism occurs due to:
 - a. Keratoconus
 - b. Cataract surgery
 - c. Pterygium
 - d. None

Regn. No.....

Paper Code: BOPT- 203...

B. OPTOM. SECOND YEAR EXAMINATION, JUNE/JULY - 2017
OPTOMETRIC INVESTIGATIONS & LOW VISION AIDS

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on:

- Q. 1. Syringing.
- Q. 2. Pachymetry.
- Q. 3. Difference between direct and indirect ophthalmoscopy.
- Q. 4. Tonometry.
- Q. 5. Schirmer's test.
- Q. 6. VEP
- Q. 7. Role of history taking in LVA patient.
- Q. 8. Role of contrast sensitivity in low vision and methods to enhance contrast acuity.
- Q. 9. Causes of central field losses. Explain two of them.

B. OPTOM. SECOND YEAR EXAMINATION, JUNE/JULY - 2017
OPTOMETRIC INVESTIGATIONS & LOW VISION AIDS
(MCQ)

Time allotted for MCQ - 15 minutes

(½ x 14= 07)

B : MCQs (Single response type):Select the most appropriate answer and encircle the alphabet against it

1. Fluroscein pattern is seen with the aid of :
 - a. Cobalt blue filter
 - b. Neutral density filter
 - c. Red free filter
 - d. None of the above
2.working distance is required to neutralize -2.00 Dsph myopia:
 - a. 50 cm
 - b. 25 cm
 - c. 10 cm
 - d. 60 cm
3. Tonometer is used to measure:
 - a. IOP
 - b. BP
 - c. Corneal thickness
 - d. None of the above
4. Topography is done for:
 - a. Lids
 - b. Conjunctiva
 - c. Cornea
 - d. Vitreous
5. Exophthalmometry is done for:
 - a. Ptosis
 - b. Entropion
 - c. Proptosis
 - d. All of the above
6. Accessory lacrimal glands are:
 - a. Zeiss & Moll
 - b. Krauss & Wolffring
 - c. Goblet cells
 - d. None of the above
7. Retinitis pigmentosa is best diagnosed by:
 - a. VEP
 - b. ERG
 - c. EOG
 - d. None of the above
8. Following may not be used as LVA:
 - a. Text scanner
 - b. Closed circuit television
 - c. High add bifocals
 - d. Convex cylinder lens
9. In HFA zero db is equal to:
 - a. 10,000 asb
 - b. 30,000 asb
 - c. 500 asb
 - d. None of the above
10. SWAP stands for:
 - a. Short wavelength auto-perimetry
 - b. Short wavelength automated perimetry
 - c. Shortage waves automatic perimetry
 - d. None of the above
11. All are used for measuring intraocular pressure except:
 - a. Schiotz
 - b. Goldmann
 - c. Tonopen
 - d. OCT
12. Specular microscopy can not be used for:
 - a. Assessment of endothelium in donor cornea
 - b. Assessment of corneal thickness
 - c. Measurement of axial length
 - d. None of the above
13. The optical pachymeter is used to measure:
 - a. Corneal thickness
 - b. IOL power
 - c. Axial length
 - d. Refractive power
14. DLA means:
 - a. Daily learning activity
 - b. Daily learn activity
 - c. Daily leaving activity
 - d. None of the above

Regn. No.....

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B. OPTOM. SECOND YEAR EXAMINATION, JUNE/JULY - 2017
CLINICAL ORTHOPTICS

[Time allotted: Three hours]

[Max Marks: 70]

Note: Attempt all questions

Draw suitable diagrams wherever necessary

A : Short answer questions:

(7 x 9 = 63)

Write short notes on:

- Q. 1. Cycloplegic refraction.
- Q. 2. Hess screening.
- Q. 3. Double Maddox rod test.
- Q. 4. Amblyopia.
- Q. 5. Congenital esotropia.
- Q. 6. Intermittent divergent squint.
- Q. 7. Krimsky test.
- Q. 8. AV phenomena.
- Q. 9. Abnormal head posture.

B. OPTOM. SECOND YEAR EXAMINATION, JUNE/JULY - 2017
CLINICAL ORTHOPTICS
(MCQ)

Time allotted for MCQ- 15 minutes

B : MCQs (Single response type):

(½ x 14= 7)

Select the most appropriate answer and encircle the alphabet against it:

1. AC/A ratio in non-refractive accommodative esotropia is:
 - a. High
 - b. Low
 - c. Normal
 - d. None of the above
2. Cycloplegic drugs are used for:
 - a. Paralysis of accommodation
 - b. Dilation of the pupil
 - c. Paralysis of accommodation and to dilate the pupil for accurate retinoscopy
 - d. None of the above
3. Nerve supplying superior oblique muscle:
 - a. Oculomotor
 - b. Trochlear
 - c. Abducent
 - d. Trigeminal
4. Components of binocular single vision do not include:
 - a. Fixation
 - b. Fusion
 - c. SMP
 - d. Streopsis
5. Amblyopia should be corrected by the age of:
 - a. < 8 years of age
 - b. 8-18 years
 - c. 18-28 years
 - d. Any age
6. Action of right superior oblique muscle is:
 - a. Dextro depression
 - b. Dextro elevation
 - c. Laevo depression
 - d. Laevo elevation
7. The same image falling on non-corresponding point excites:
 - a. Diplopia
 - b. Confusion
 - c. BSV
 - d. Streopsis
8. Microtropia is degree of deviation:
 - a. 1-5
 - b. 5-12
 - c. >12
 - d. 15
9. Titmus fly test is done for:
 - a. Amplyopia
 - b. Suppression
 - c. Stereopsis
 - d. Diplopia
10. Methods of estimating the visual acuity in infants are all except:
 - a. Optokinetic nystagmus
 - b. CSM method
 - c. VEP
 - d. Snellen test type
11. Esotropia will increase in upgaze and decrease in downgaze in:
 - a. A esotropia
 - b. V esotropia
 - c. A exotropia
 - d. V exotropia
12. Pseudostrabismus is also known as:
 - a. Latent squint
 - b. Apparent squint
 - c. Hypertelorim
 - d. Cyclodeviation
13. Dextroversion is movement:
 - a. Disjugate
 - b. Conjugate
 - c. Vergence
 - d. None of the above
14. Dextroversion is movement:
 - a. Disjugate
 - b. Conjugate
 - c. Vergence
 - d. None of the above