

093/23

Question Booklet Alpha Code

A

Question Booklet Sl. No.

Total Number of Questions : 100

Time : 90 Minutes

Maximum Marks : 100

INSTRUCTIONS TO CANDIDATES

1. The Question Paper will be given in the form of a Question Booklet. There will be four versions of Question Booklets with Question Booklet Alpha Code viz. **A, B, C & D**.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the Question Booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a Question Booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator **IMMEDIATELY**.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same alpha code.
6. The Question Booklet will be sealed at the middle of the right margin. Candidate should not open the Question Booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him/her contains all the 100 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the Question Booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices **(A), (B), (C)** and **(D)** having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

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1. The muscle of the eyeball supplied by abducent nerve is
 - A) Medial Rectus
 - B) Lateral Rectus
 - C) Superior Rectus
 - D) Inferior Rectus
2. The Uveal tract consists of all of the following structures except
 - A) Choroid
 - B) Limbus
 - C) Iris
 - D) Ciliary body
3. The refractive apparatus of the eye consists of the following structures except
 - A) Cornea
 - B) Aqueous humour
 - C) Iris
 - D) Vitreous humour
4. What type of gland is Meibomian gland ?
 - A) Sweat gland
 - B) Salivary gland
 - C) Sebaceous gland
 - D) Ceruminous gland
5. Nasolacrimal duct opens into
 - A) Superior meatus
 - B) Conjunctival sac
 - C) Middle meatus
 - D) Inferior meatus
6. The floor of the bony orbit is formed by all of the following bones except
 - A) Body of maxilla
 - B) Zygomatic bone
 - C) Palatine bone
 - D) Sphenoid bone
7. Which of the following branches of ophthalmic artery is most important ?
 - A) Lacrimal artery
 - B) Central retinal artery
 - C) Supra orbital artery
 - D) Posterior ciliary artery
8. All of the statements regarding cornea are correct except
 - A) Its refractive power is less than that of lens
 - B) It is supplied by trigeminal nerve
 - C) It consists of 5 layers
 - D) It forms the anterior 1/6th of the outer coat of the eyeball
9. All of the following are actions of Superior Rectus muscle except
 - A) Elevation
 - B) Intorsion
 - C) Adduction
 - D) Abduction

10. Select the incorrect statement about the ciliary ganglion
- A) It lies between optic nerve and medial rectus muscle near the apex of the orbit
 - B) It is topographically connected to nasociliary nerve
 - C) It is functionally connected to oculomotor nerve
 - D) Short ciliary nerves arising from the ganglion supply ciliary muscle and sphincter papillae
11. Which parasite is associated with ocular infection in contact lens users ?
- A) *Acanthamoeba*
 - B) *Trypanosoma*
 - C) *Toxoplasma*
 - D) *Leishmania*
12. All the following statements regarding Cytomegalovirus retinitis are true except
- A) Most frequent ocular opportunistic infection in patients with AIDS
 - B) Occurs when CD4 T cell count is > 500 cells/mm³
 - C) Associated with decreased vision and floaters in one or both eyes
 - D) Complications include retinal detachment and optic nerve disease
13. Multiple pearly white wart like umbilicated lesions over eyelid are caused by
- A) *Adenovirus*
 - B) *Enterovirus*
 - C) *Herpes Simplex virus*
 - D) *Molluscum contagiosum virus*
14. Which of the following statement is true regarding *Chlamydia trachomatis* ?
- A) *C. trachomatis* serotypes A, B, Ba & C causes inclusion conjunctivitis affecting both adults and newborn
 - B) *C. trachomatis* serotypes D-K causes follicular conjunctivitis called trachoma
 - C) *C. trachomatis* is more common cause of ophthalmia neonatorum than gonococcus
 - D) Trachoma is commonly seen in adults
15. Mycotic keratitis is most commonly caused by
- A) *Aspergillus*
 - B) *Candida*
 - C) *Fusarium*
 - D) *Penicillium*
16. All the following are true regarding Chocolate agar except
- A) Enriched medium made by heating a mixture of sheep blood and nutrient agar
 - B) Contains X and V factors
 - C) Used to grow fastidious organisms
 - D) Can indicate the degree of hemolysis caused by hemolysin

17. Which organism classically causes epidemics of mucopurulent conjunctivitis especially in semitropical countries ?
- A) *Haemophilus aegypticus* B) *Staphylococcus aureus*
C) *Corynebacterium diphtheriae* D) *Moraxella lacunata*
18. Which of the following is an etiological agent of Chorioretinitis ?
- A) *Cytomegalovirus* B) *Toxoplasma gondii*
C) *Toxocara canis* D) All of the above
19. Which organism can readily invade intact corneal epithelium ?
- A) *Neisseria gonorrhoeae* B) *Corynebacterium diphtheriae*
C) *Staphylococcus aureus* D) Both A & B
20. Typical appearance of *Streptococcus pneumoniae* in Gram stain is
- A) Gram positive diplococci bearing flame shaped/lanceolate appearance
B) Gram positive cocci in clusters
C) Gram positive bacilli with drumstick appearance
D) Gram negative bacilli in scattered arrangement
21. What is the site of production of Aqueous humor ?
- A) Iris B) Ciliary body
C) Cornea D) Fovea
22. Normal Intra Ocular Pressure is
- A) 55-60 mm Hg B) 40-50 mm Hg
C) 30-35 mm Hg D) 10-20 mm Hg
23. Which of the following is False about Optic disk ?
- A) Contains no visual receptors
B) The site where optic nerve leaves the retina
C) The point where visual acuity is greatest
D) Corresponds to blind spot in visual field
24. Which of the following is not a response in Accommodation reflex ?
- A) Visual axes converge B) Pupil dilates
C) Curvature of the lens is increased D) Pupil constricts

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25. Which of the following about Visual Acuity is true
- A) Tested with Ishihara's chart
 - B) The degree to which the details and contours of the objects are perceived
 - C) Optic disk is the point where visual acuity is greatest
 - D) Normal visual acuity is 6/12
26. Misalignment of the eyes is known as
- A) Myopia
 - B) Strabismus
 - C) Amblyopia
 - D) Scotoma
27. Individuals with normal colour vision are called
- A) Trichromats
 - B) Dichromats
 - C) Monochromats
 - D) Achromatopsia
28. When the eye is turned nasally which muscle elevates it ?
- A) Superior Rectus
 - B) Inferior Oblique
 - C) Superior Oblique
 - D) Inferior Rectus
29. When the image on the retina fails to fall on the corresponding points _____ occurs.
- A) Myopia
 - B) Amblyopia
 - C) Diplopia
 - D) Hypermetropia
30. Name the condition in which Loss of Accommodation after the age of 40-45 years, resulting in difficulty in reading and close work.
- A) Hypermetropia
 - B) Presbyopia
 - C) Myopia
 - D) Astigmatism
31. Fluoroquinolone used in ocular infections
- A) Gentamicin
 - B) Ciprofloxacin
 - C) Bacitracin
 - D) Azithromycin
32. Which antiviral is not preferred in cytomegalovirus retinitis ?
- A) Acyclovir
 - B) Ganciclovir
 - C) Valganciclovir
 - D) Cidofovir

33. All drugs cause cycloplegia except
- A) Atropine
B) Cyclopentolate
C) Phenylephrine
D) Homatropine
34. Carbonic anhydrase inhibitor used for glaucoma treatment
- A) Betaxolol
B) Latanoprost
C) Pilocarpine
D) Acetazolamide
35. Which group of drugs increase uveoscleral pathway ?
- A) Osmotic diuretics
B) Prostaglandins
C) Miotics
D) Beta blockers
36. Choose the false statement
- A) Homatropine causes mydriasis and cycloplegia
B) Phenylephrine causes mydriasis
C) Physostigmine causes miosis
D) Timolol causes cycloplegia
37. Constituent of artificial tear is
- A) Fluorescein
B) Rose Bengal
C) Hydroxymethyl cellulose
D) Indocyanine green
38. Topical NSAIDs are all except
- A) Azelastine
B) Diclofenac
C) Ketorolac
D) Flurbiprofen
39. Amphotericin B is
- A) An antihistamine
B) An antifungal agent
C) A lubricating agent
D) A local anesthetic agent
40. Ocular side effects of corticosteroids are except
- A) Posterior subcapsular cataract
B) Glaucoma
C) Secondary infection
D) Macular edema

49. The prism produces displacement of the objects seen through it towards the
- A) Apex
 - B) Base
 - C) Sideways
 - D) None of the above
50. In retinoscopy, Skewing is done
- A) For neutralization
 - B) Break in alignment between the reflex
 - C) Refine the axis of small cylinder
 - D) Stradling
51. Strongest cycloplegic is
- A) Tropicamide
 - B) Homatropine 2%
 - C) Cyclopentolate 2%
 - D) Atropine 1%
52. Jackson's Cross cylinder
- A) Is a combination of 2 cylinders of equal strength with opposite signs
 - B) Can be used to refine Axis
 - C) Refinement of cylinder power
 - D) All the above
53. At birth, eye is usually
- A) Hypermetropic
 - B) Myopic
 - C) Emmetropic
 - D) Aniseikonia
54. An aphakia wearing aphakic glass will most commonly notice
- A) Pincushion distortion
 - B) Spherical aberration
 - C) Barrel distortion
 - D) Chromatic aberration
55. A difference in the size of two retinal images which can be well tolerated is
- A) 2%
 - B) 3%
 - C) 5%
 - D) 10%
56. During accommodation there occurs decrease in the radius of curvature of the
- A) Anterior surface of lens
 - B) Posterior surface of lens
 - C) Both surface of the lens
 - D) None of the above

57. While performing duo-chrome test if the patient reports that he sees red letter more clear than green, it indicates that he is slightly
- A) Myopic
 - B) Hypermetropic
 - C) Presbyopic
 - D) None of the above
58. Preferably, presbyopia should be
- A) Fully corrected
 - B) Under corrected
 - C) Over corrected
 - D) None of the above
59. Aniseikonia refers to
- A) Difference in corneal diameter
 - B) Difference in the image size in retina
 - C) Difference in the refractive error
 - D) Difference in the image colour
60. The refractive index of CR-39 lenses is
- A) 1.35
 - B) 1.49
 - C) 1.56
 - D) 1.73
61. Deep meniscus lens has a base curve of
- A) 1 D
 - B) 3 D
 - C) 6 D
 - D) 8 D
62. Dk value of contact lens refers to
- A) Light transmission
 - B) Anti-reflective coating
 - C) Gaseous transmission through polymeric material
 - D) Heat resistance
63. Three-point touch technique is used for
- A) Soft contact lens
 - B) RGP contact lens
 - C) Therapeutic contact lens
 - D) Toric contact lens
64. Biometry is
- A) Ant chamber depth measurement
 - B) Intra ocular lens power calculation
 - C) Refractive error calculation
 - D) Simple toric transposition

65. Abbe value refers to
- A) Spherical aberration B) Chromatic aberration
C) Prismatic effect of lens D) Coma
66. The Final Applanating area for Applanation tonometry is
- A) 3.00 mm² B) 3.06 mm²
C) 3.08 mm² D) 3.2 mm²
67. Example of static perimeter
- A) Lister perimeter B) Campimetry
C) Humphrey perimeter D) Confrontation test
68. Which of the following instrument is used for macular function test ?
- A) Autorefractometer B) Keratometer
C) Maddox rod test D) Placido's disc
69. The optical principle of Fundus camera is based on
- A) Gullstrand's ophthalmoscope B) Imbert ficks law
C) Snell's law D) Scheiner principle
70. Indirect ophthalmology gives
- A) Minified, virtual, erect image B) Magnified, virtual, erect image
C) Magnified, real, inverted image D) Magnified, virtual, inverted image
71. As per World Health Organization (WHO), blindness is defined as
- A) Visual acuity less than 3/60 (Snellen) or its equivalent
B) Visual acuity less than 6/18 (Snellen) or its equivalent
C) Visual acuity more than 3/60 (Snellen) or its equivalent
D) Visual acuity less than 6/24 (Snellen) or its equivalent
72. If i is the angle of incidence, r is the angle of refraction and n is the refractive index of the medium in which refracted ray lies, Snell's law of refraction states that
- A) $\sin r / \sin i = n$ B) $\sin i / \sin r = n$
C) $\sin i / \cos r = n$ D) $\cos i / \sin r = n$

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73. Which is not a field defect typical of Primary Open Angle Glaucoma ?
- A) Hemianopia
 - B) Seidel Scotoma
 - C) Arcuate scotoma
 - D) Roenne's nasal step
74. National Eye Donation fortnight is observed in India during
- A) July 25 to August 08
 - B) September 25 to October 09
 - C) August 05 to August 19
 - D) August 25 to September 08
75. All of the following are causes of leukocoria except
- A) Persistent hyperplastic primary vitreous
 - B) Retinoblastoma
 - C) Fungal keratitis
 - D) Congenital cataract
76. Which of the following statements is true regarding image formed by a prism ?
- A) Displaced towards base of prism
 - B) Is always inverted
 - C) Displaced towards apex of prism
 - D) Is always real
77. Essential infantile esotropia may be associated with all except
- A) Large angle of deviation
 - B) Absence of cross fixation
 - C) Dissociated vertical deviation
 - D) Asymmetry of optokinetic nystagmus
78. Christmas tree cataract is typically described in which of the following conditions ?
- A) Galactosemia
 - B) Blunt trauma
 - C) Wilson's disease
 - D) Myotonic dystrophy
79. Identify the incorrect statement
- A) Incident ray and refracted ray are always on the same side of the normal
 - B) Angle of incidence = Angle of reflection
 - C) Image formed by a plane mirror is virtual
 - D) None of the above

80. Which of the following statements is true ?
- A) Meridional amblyopia is usually associated with myopia
 - B) Occlusion therapy is not effective in amblyopia
 - C) Visual acuity in amblyopes is less when tested with Snellen's chart than when tested with single letter optotypes
 - D) Amblyopia treatment should be started only after the child reaches adolescence
81. The causative organism of dendritic ulcer is
- A) Aspergillus
 - B) Herpes simplex
 - C) Staphylococcus
 - D) Pneumococcus
82. Which is a dry heat sterilization method ?
- A) Autoclaving
 - B) Steaming
 - C) Boiling
 - D) Incineration
83. Applanation tonometry values are influenced by
- A) Corneal diameter
 - B) Anterior chamber depth
 - C) Lens thickness
 - D) Corneal thickness
84. Regarding anterior uveitis, all of the following statements are true except
- A) Pilocarpine is the drug of choice
 - B) It can cause glaucoma
 - C) It may be associated with arthritis
 - D) It may have a recurrent or chronic course
85. The hallmark of proliferative diabetic retinopathy is
- A) Microaneurysms
 - B) Dot and blot haemorrhages
 - C) Neovascularisation
 - D) Hard exudates
86. Which is not an example of kinetic perimetry ?
- A) Lister perimetry
 - B) Humphrey field analyser
 - C) Tangent screen
 - D) Confrontation test

87. Identify the true statement
- A) Chalcosis results due to retained iron foreign body in the eye
 - B) Sunflower cataract may be seen in chalcosis
 - C) Rosette cataract may be seen in siderosis bulbi
 - D) None of the above
88. Which is the correct statement regarding convex lens ?
- A) It is used in correction of myopia
 - B) It has a thin centre and thick periphery
 - C) It is a diverging lens
 - D) It magnifies an object held close to it
89. All of the following are antiglaucoma medications except
- A) Latanoprost
 - B) Netarsudil
 - C) Natamycin
 - D) Acetazolamide
90. All of the following parameters are used in SRK formula for intraocular lens power calculation except
- A) Keratometry
 - B) Axial length
 - C) Pachymetry
 - D) 'A' constant of lens
91. 4-diopter prism test is used in the diagnosis of
- A) Exophoria
 - B) Microtropia
 - C) Diplopia
 - D) Hypertropia
92. Vitamin A deficiency can cause all of the following except
- A) Tranta's spots
 - B) Corneal ulcer
 - C) Xerophthalmic fundus
 - D) Night blindness
93. Choose the most appropriate statement regarding glaucoma
- A) Glaucoma is a non-progressive disease
 - B) It mainly affects the optic nerve
 - C) It is seen only in adults
 - D) It is always associated with cataract

94. Eye donation is contraindicated in all of the following conditions in the donor except
- A) AIDS or HIV infection
 - B) Rabies
 - C) Active viral hepatitis
 - D) Donor age more than 60 years
95. Which optical principle is used in antireflective coating in glasses and lenses ?
- A) Coherence
 - B) Diffraction
 - C) Interference
 - D) Polarization
96. All of the following can be used as low vision aids except
- A) Monocular telescopes
 - B) Bagolini's striated glasses
 - C) Magnifying spectacles
 - D) Gottlieb field expanders
97. Regarding chemical injuries to the eye, which statement is least appropriate ?
- A) Acid burns are more dangerous than alkali burns
 - B) Chemical injury to eye is an ophthalmic emergency
 - C) Chemical injury can result in limbal stem cell deficiency
 - D) Amniotic membrane transplantation can be used in treating chemical injuries
98. What is the power of a convex lens with focal length of 25 centimetres ?
- A) 0.5 D
 - B) 1 D
 - C) 2 D
 - D) 4 D
99. All of the following are treatment modalities employed in glaucoma except
- A) Goniotomy
 - B) Trabeculectomy
 - C) Nd.YAG laser capsulotomy
 - D) Nd.YAG laser iridotomy
100. A patient has a red Maddox rod with cylinders oriented vertically in front of the right eye. What does the patient see when the patient looks at a distant white fixation light ?
- A) White light, red horizontal line
 - B) Red light, white horizontal line
 - C) White light, red vertical line
 - D) Red light, white vertical line
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Space for Rough Work

