## **Government Medical College and Hospital Sector 32, Chandigarh**

#### Post: Senior Resident Ophthalmology

#### **QUESTION BOOKLET**

Time: 120 Minutes	Number of Question: 100	Maximum Marks: 100		
Name of Candida	te			

Roll Number: In figure

In Words

Signature of the Candidate:

### DO NOT OPEN THE SEAL ON THE BOOKLET UNTIL ASKED TO DO SO

#### INSTRUCTIONS:-

- 1. Write your Roll Number on the Question Booklet and also on the OMR Sheet in the space provided. You will be required to give your thumb impression on the OMR sheet in the space provided.
- 2. This question booklet contains 100 MCQ's. Once you are permitted to open the Question Booklet, please check for any missing question / misprint etc. and in case of any discrepancy, inform the Assistant Superintendent / Invigilator within 10 minutes of the start of the test.
- 3. Each question has four alternative answer (A, B, C, D) out of which only one is correct. For each question, darken only one bubble (A or B or C or D), whichever you think is the correct answer, on the OMR Answer sheet with Black or Blue Ball Pen only. Do not use any other Pen / Gel pen /Pencil etc. Do not Tick √ or × on the OMR Sheet. Darken the bubbles in the OMR Answer Sheet according to the Serial No. of the Questions given in the Question Booklet.
- 4. Each MCQ is of One (01) mark. There is no negative marking.
- 5. If you do not want to answer a question, leave all the bubbles corresponding to that question blank in the OMR Answer sheet.
- 6. The OMR Answer sheet is designed for computer evaluation. Therefore, if you do not follow the instructions given, it may make evaluation by the computer difficult. Any resultant loss to the candidates on the above account, i.e. not following instructions completely and properly, shall be the responsibility of the candidates only.
- 7. After the test, handover the Question Booklet and OMR sheet to the Invigilator on duty.
- 8. A Candidate who creates disturbance of any kind or changes his/her seat or is found in possession of any paper or the any assistance or found giving or receiving assistance or found using any other unfair means during the examination will be expelled from the examination by the Centre superintendent/Observer whose decision shall be final.
- **9.** Telecommunication equipment such as pager, cellular phone, wireless, scanner, smart watch/ watch etc. is not permitted inside the examination hall. Use of calculators is not allowed.
- **10.** Candidate should ensure accuracy of their personal details on the OMR Sheet i.e. Name and Roll No. as well as thumb impression. The personal details are to be filled in by the candidates with his/her own hand writing.

- 1. Which of the following IS NOT associated with uveitis?
  - A. HLA A 29
  - B. HLA B7
  - C. HLA B51
  - D. HLADR1
- 2. Universal procedure for ectropion and entropion is
  - A. Lateral tarsal strip
  - B. Weiss
  - C. Wheeler
  - D. Quickert
- 3. Maximum hyperemia is caused by
  - A. Bimatoprost
  - B. Latanoprost
  - C. Travoprost
  - D. Tafluprost
- 4. MMC is useful in
  - A. Failed DCR
  - B. Pediatric DCR
  - C. Lacrimal sac fistula
  - D. Primary DCR
- 5. All are true for keratoconus EXCEPT
  - A. Bowman layer transplant
  - B. Ferrarra ring
  - C. Kera ring
  - D. C3R 30 Mw/cm<sup>2</sup> for 10 minutes
- 6. DALK can be done in all EXCEPT
  - A. Lattice degeneration
  - B. Granular degeneration
  - C. PPMD
  - D. Macular degeneration
- All are used for keratoprosthesis EXCEPT
  - A. Bone
  - B. Teeth
  - C. Cartilage
  - D. PMMA
- 8. What is effective in plateau iris?
  - A. Laser iridoplasty
  - B. SLT
  - C. PI
  - C. 11
  - D. Endocyclophotocoagulation

- 9. Result of ABC and AVB study
  - Baerveldt implant has greater success
  - B. Baerveldt implant has greater risk of vision loss
  - C. Ahmed valve has lower IOP
  - D. Ahmed valve leads to more complication
- 10. True about ACCORD study:
  - A. Control of BP is essential
  - B. Intensive glycemic control
  - C. Fenofibrate is very effective in decreasing cholesterol
  - D. Fenofibrate is effective in patient with increased triglyceride
- Visual field showing a superior Seidel scotoma close to the fixation point is suggestive of
  - A. NTG
  - B. POAG
  - C. Macular BRVO
  - D. PACG
- 12. Non-glaucomatous cupping will be seen in all EXCEPT:
  - A. LHON
  - B. Methanol poisoning
  - C. Chiasmal lesion
  - D. Periventricular leukomalacia
- 13. In sympathetic ophthalmitis 90% of the cases present within
  - A. 3 months
  - B. 12 months
  - C. 36 months
  - D. 60 months
- 14. True about toxoplasmosis in HIV patients is?
  - A. Lesion occur around old lesions
  - B. All cases of ocular toxoplasmosis have CNS lesion
  - C. Ocular toxoplasmosis has no correlation with CNS lesion
  - D. More around perivascular area
- 15. Most effective treatment to reduce choroidal hyperpermeability is
  - A. Anti-VEGF
  - B. PDT
  - C. Laser
  - D. Lifestyle modification
- 1

- 16. CNVM in RAP is also known as
  - A. Type 1
  - B. Type 2
  - C. Type 3
  - D. Type 4
- 17. Manifest latent nystagmus all are true EXCEPT
  - Monocular vision is poor than binocular vision
  - B. Fast component is in the direction of the fixing eye
  - C. In right gaze it is right beating and in left gaze left beating
  - D. Minimum in adduction
- 18. Superior rectus act as a
  - A. Pure intorter at 67 degree adduction
  - B. Pure adductor at 23 degree abduction
  - C. Adductor in all 9 gazes
  - D. Abductor in 33 degree abduction
- **19.** Urgent indication for ptosis surgery in children is
  - A. Severe ptosis
  - B. Amblyopia
  - C. Chin up position
  - D. None of the above
- 20. True about HEDS is
  - A. Topical steroids decrease the duration of the disease
  - B. Topical steroids delay epithelization
  - C. Topical steroids increase the final vision
  - D. Topical steroids are contraindicated
- 21. To establish the etiological origin of a disease, the best study is
  - A. Case control study
  - B. Nested case control study
  - C. Ecological study
  - D. Cohort study
- 22. VISICAN gene in chondroitin sulphate is positive in
  - A. Iris
  - B. Ciliary body
  - C. Vitreous
  - D. Cornea

- 23. Mackey classification is for
  - A. Dry eye disease
  - B. Neurotrophic keratitis
  - C. Chemical injury
  - D. Amoebic keratitis
- 24. A patient presented with inability to adduct the right eye with abduction nystagmus in the other eye, no squint and no difficulty in convergence; the lesion is in?
  - A. Right MLF
  - B. Left MLF
  - C. Right PPRF
  - D. Left PPRF
- 25. What is false according to the newer nomenclature about the OCT interdigitation line?
  - A. Hyper-reflective band
  - B. Cones interdigitate with RPE
  - C. Cone inner segment with outer segment
  - D. Located in between ellipsoid zone and RPE-bruch complex
- 26. Treatment of choice for periocular capillary hemangioma is
  - A. Propranolol
  - B. Oral steroids
  - C. Pulse i/v steroids
  - D. Cryotherapy
- 27. CXL is most effective in
  - A. Bacterial keratitis
  - B. Viral keratitis
  - C. Fungal keratitis
  - D. Acanthamoeba keratitis
- 28. CXL increases the corneal rigidity by
  - A. 100%
  - B. 70%
  - C. 40%
  - D. 50%
- 29. Maximum chance of amblyopia with 3.5D refractive error and no squint in infants is in?
  - A. Astigmatism
  - B. Myopia
  - C. Hypermetropia
  - D. None of the above

- 30. VISA score is for
  - A. Thyroid ophthalmopathy
  - B. Orbital cellulitis
  - C. Orbital lymphoma
  - D. Retinoblastoma
- 31. Which of the following is not MIGS?
  - A. Trabectome
  - B. Xen stent
  - C. Express shunt
  - D. iStent
- **32.** All are true about Bardet-Biedel syndrome EXCEPT
  - A. Obesity
  - B. RP
  - C. Fundal coloboma
  - D. Hypogonadism
- **33.** All are true about pigment dispersion syndrome EXCEPT
  - A. UBM is essential for treatment
  - B. Iris insertion is posteriorly
  - C. Trabecular meshwork pigmentation
  - D. Lattice degeneration
- 34. All are true about Retcam EXCEPT:
  - A. OCT cannot be done
  - B. Field of view is 130 degree
  - C. FFA and ICG can be done
  - D. Telemedicine
- 35. All are true for IRVAN EXCEPT
  - A. Vasculitis
  - B. Capillary non-perfusion areas
  - C. CNVM
  - D. Aneurysms
- **36.** Two parallel test in glaucoma increases
  - A. Positive predictive value
  - B. Sensitivity
  - C. Specificity
  - D. Both sensitivity and specificity
- **37.** All are true about cataract surgical coverage EXCEPT
- A. It is a qualitative indicator
- B. Impact of interventional programme
- C. It is the ratio of number of surgeries done to the number of surgeries required and previously operated
- D. Can be assessed with RAVI

- **38.** Hydrogel expander is used for
  - A. Pediatric contracted socket
  - B. Post radiation contracted socket
  - C. Severely contracted socket
  - D. None of the above
- **39.** Which of the following is not done in bilateral ptosis with Marcus Gunn jaw winking phenomena?
  - A. Resection
  - B. B/l excision with sling
  - C. Only sling
  - D. U/l sling
- 40. Femtodelineation is done in
  - A. Posterior polar cataract
  - B. Diabetic cataract
  - C. Traumatic cataract
  - D. Hard cataract
- 41. CXL was FDA approved in
  - A. 2013
  - B. 2016
  - C. Not yet approved
  - D. 2004
- **42.** Which of the following muscle has shortest muscle belly
  - A. SO
  - B. SR
  - C. IR
  - D. IO
- 43. All are releasable sutures EXCEPT
  - A. Wilson
  - B. Shin
  - C. Cohen
  - D. Copenhagen
- 44. Which of the following is a side effect of travoprost?
  - A. Neonatal tachypnea
  - B. Bipolar disorder
  - C. Orbitopathy
  - D. Decreased trabecular outflow
- 45. What is the frequency used in zepto capsulotomy ?
  - A. 10<sup>-21</sup>
  - B. 10<sup>-15</sup>
  - C. 10<sup>-18</sup>
  - D. 10<sup>-24</sup>

- 46. FDA approved range of SMILE?
  - A. -1DS to -8DS and -0.5DC
  - B. +4DS to -10DS and -0.5DC
  - C. -1DS to -8DS and -3DC
  - D. +4DS to -10DS and -3DC
- 47. Suveges classification is used for
  - A. PMD
  - B. TMD
  - C. Keratoconus
  - D. Keratoglobus
- 48. Collagen cross linking IS NOT used for
  - A. Post lasik ectasia
  - B. Infectious keratitis
  - C. Keratoconus
  - D. Ocular surface disorder
- 49. All are true regarding Von Hippel internal ulcer EXCEPT
  - A. Also known as peter type III
  - B. Non-inflammatory
  - C. Focal defect in Descemet membrane
  - D. Iris strands at the margin
- 50. Arg555Trp mutation is seen in
  - A. Granular type I
  - B. Granular type II
  - C. Lattice
  - D. Reis Buckler
- 51. Management of negative dysphotopsia includes:

A. Miosis

- B. Horizontal placement of haptics
- C. Acrylic IOL
- D. Vertical placement of haptics
- 52. All are true for Horner's syndrome EXCEPT
  - A. Mydriasis
  - B. Anhydrosis
  - C. Ptosis
  - D. Enophthalmos
- **53.** All are true about GAPP syndrome EXCEPT:
  - A. Occurs in post procedure period
  - B. Bilateral
  - C. Normal vision
  - D. Dryness and iritis

- 54. All are true about cluster endophthalmitis EXCEPT:
  - A. Defect in cold chain
  - B. Procurement from spurious sources
  - C. Failure of sterilization
  - D. Less than 2 cases
- 55. STAR calculator is used for
  - A. Thyroid eye disease
  - B. Keratoconus
  - C. Diabetic retinopathy
  - D. Ocular hypertension
- **56.** Tonopen XL gives average of how many readings?
  - A. 4
  - B. 7
  - C. 10
  - D. Single
- 57. All are neural crest derived EXCEPT? A. Trabecular meshwork
  - B. Corneal endothelium
  - C. Ciliary epithelium

  - D. Iris stroma
- **58.** All are associated with glaucoma EXCEPT?
  - A. Juvenile xanthogranuloma
  - B. Bournville disease
  - C. Atopic dermatitis
  - D. Oculodermal melanocytosis
- In AGIS, no progression was noted on visual field when IOP was
  - A. Below 18 mm Hg on follow up
  - B. Below 16 mm Hg on follow up
  - C. Below 14 mm Hg on follow up
  - D. Below 12 mm Hg on follow up
- 60. Which of the following higher order aberration is associated with keratoconus?
  - A. Vertical coma
  - B. Horizontal coma
  - C. Vertical quadrifoil
  - D. Oblique quadrifoil

61. Muraine punch is used for

- A. Preparation of Bowman membrane graft
- B. DMEK
- C. Rotational keratoplasty
- D. DSAEK

- 62. Vision is least affected in
  - A. Granular dystrophy
  - B. Macular dystrophy
  - C. Central cloudy dystrophy
  - D. Lattice dystrophy
- 63. Preterm child with ROP zone 2, stage 2 disease; treatment of choice is?
  - A. Laser
  - B. Observe
  - C. Vitrectomy
  - D. Anti-Vegf
- 64. Pregnant women with open angles, IOP 26 and 34 mm Hg and CDR 0.6 and 0.8 in right and left eye respectively. Which of the following is done?
  - A. Abort the fetus
  - B. Surgical management
  - C. Laser trabeculoplasty
  - D. Laser PI
- 65. Patient with hypotonic maculopathy, which is the best modality to examine and quantify cyclodialysis cleft?
  - A. Anterior segment OCT
  - B. UBM
  - C. Pre-op gonioscopy
  - D. Intra-op gonioscopy

66. Number of anterior ciliary vessels

- Å. 4
- B. 5
- C. 6
- D. 7

67. All are risk factors for glaucoma EXCEPT

- A. Thin CCT
- B. Age
- C. Low hysteresis
- D. Caucasian race

68. One year old child with unilateral pulsating proptosis and mechanical ptosis since birth, most likely cause is?

- A. Capillary hemangioma
- B. Orbital neurofibromatosis
- C. Lymphangioma
- D. Teratoma

- 69. False about DMEK is?
  - A. DMEK uses 9-10 mm graft while DSAEK uses 8-9 mm
  - B. Endothelial cell loss is less in DMEK
  - C. Interface haze/ fluid is less in DMEK
  - D. Both need atleast 400 micron thickness of cornea
- **70.** At which site is congenital giant nevus most prone to convert to melanoma?
  - A. Basal epithelium
  - B. Basement membrane
  - C. Dermis
  - D. Epidermis
- 71. False about femto is?
  - A. Photodisruption
  - B. 1043 nm
  - C. pulse in nanosecond
  - D. infrared
- 72. Minimal IOP variation is seen in?
  - A. Slow phaco
  - B. Gravity assisted fluidics
  - C. Venturi system
  - D. Active fluidics
- 73. DALK is not done in?
  - A. Fuch's dystrophy
  - B. Macular dystrophy
  - C. Stromal dystrophy
  - D. Keratoconus
- DME patient with 6/18 vision and central thickness of 500 um; treatment
  - is? A. PST
  - B. IVTA
  - C. I/V Ranibizumab
  - D. Grid laser
  - D. One moe
- 75. Axial length should be repeated if the difference between two eyes is?
  - A. 0.1
  - B. 0.2
  - C. 0.3
  - D. 0.25
- 76. Lucid interval is not seen in?
  - A. Herpes keratitis
  - B. Staphylococcal keratitis
  - C. Pellucid marginal degeneration
  - D. Arcus senilis
- 5

77. Cryo temperature used for trichiasis is?

- A. -80°
- B. -20°
- C. -60°

D. -40°

- 78. Henle's layer is formed by?
  - A. Photoreceptors
  - B. Bipolar cells
  - C. Muller cells
  - D. Ganglion cells
- 79. All of the following are true for macular telangiectasia except?
  - A. Foveal thickening
  - B. Leakage on FFA
  - C. Secondary CNVM
  - D. Hyperpigmentation
- 80. In Best disease vision loss starts at the age of?
  - A. III
  - B. IV
  - C. II
  - D. V
- 81. Swept source OCT is useful for all except?
  - A. VKH
  - B. Idiopathic macular hole
  - C. Non-neovascular ARMD
  - D. CSCR
- 82. Thickness of bruchs membrane is?
  - A. 5 microns
  - B. 10 microns
  - C. 50 microns
  - D. 2 microns
- **83.** Which implant is recently approved for the treatment of DME?
  - A. Eyelea
  - B. Ozurdex
  - C. Iluvein
  - D. Retisert

- 84. All are true regarding tamelteon except?
  - A. Approved only for non 24 hour sleep wake disturbance in blind patients
  - B. Also useful in jet lag/shift
  - C. Agonist of melatonin receptor in suprachiasmatic nucleus
  - D. Resets circadian rhythm
- 85. Safe non-toxic dose of r-TPA for subretinal use?
  - A. 12.5 microgram/0.1 ml
  - B. 10 microgram/0.1 ml
  - C. 10 microgram/0.05 ml
  - D. 20 microgram/0.1 ml
- **86.** All of the following are indications for dacryocystectomy except?
  - A. Tubercular dacryocystitis
  - B. Rhinosporidiosis of lacrimal sac
  - C. Wegener's of lacrimal sac
  - D. Recurrent dacryocystitis
- 87. Tomographic notch sign is seen in?
  - A. Classic CNVM
  - B. Occult CNVM
  - C. RAP
  - D. PCV
- **88.** All of the following are signs of myasthenia eye disease except?
  - A. Sunset sign
  - B. Cogan twitch
  - C. Eyelash sign
  - D. Lid flutter
- 89. 12 year old boy with inability to elevate one eye in both adduction and abduction, bells phenomena is normal and passive duction is also normal. The patient has?
  - A. MED
  - B. IR entrapment
  - C. Thyroid eye disease
  - D. Myasthenia gravis
- **90.** Which is the least common finding seen in coats disease?
  - A. Retinal neovascularization
  - B. Intraretinal exudate
  - C. Subretinal exudate
  - D. Neovascular glaucoma

- 91. Rashtriya Bal Surakshna Yojna includes all ExCEPT
  - A. ROP
  - B. Congenital glaucoma
  - C. Vitamin A deficiency
  - D. Congenital cataract
- 92. All are true about aflibercept EXCEPT
  - A. It contains intracellular domain of **VEGF** receptor
  - B. It binds VEGF A, B and placental growth factor
  - C. It is a decoy receptor used in ARMD
  - D. It is FDA approved for colorectal cancer
- 93. Which of the following is not seen in PHPV?
  - A. RD
  - B. Microphthalmos
  - C. Cataract
  - D. Peripheral non-perfusion
- 94. Objective measurement of cyclotorsion is done using?
  - A. Iris photography
  - B. Maddox wing
  - C. Blind spot charting
  - D. Synaptophore
- 95. Anisocoria is not seen in?
  - A. Pontine hemorrhage
  - B. Marcus gun pupil
  - C. Adies tonic pupil
  - D. ARP
- 96. Smart phone is used in glaucoma for all EXCEPT
  - A. Visual field charting
  - B. Monitoring of IOP
  - C. Severity of grading
  - D. Anterior segment and fundus photography
- 97. Regier anomaly includes all except?
  - A. Mid peripheral iris adhesion
  - B. Posterior embryotoxon
  - C. Polycoria
  - D. Dental anomalies

- 98. Diffuse infiltrative RB all are true except?
  - A. Usually seen in younger children
  - B. May not have a definite mass
  - C. Simulate uveitis
  - D. May not show calcification
- 99. IOL glistening all are true except?
  - A. Affects visual acuity B. Affects to some extent all IOL including hydrophobic acrylic and **PMMA**
  - C. Fluid voids in IOL
  - D. Preferentially affects higher spatial frequency contrast sensitivity
- 100. In a case of blunt trauma acute sign which is predictor of chronic glaucoma is all except?
  - A. >180 degree angle recession
  - B. Lenticular subluxation
  - C. Angle heavy pigmentation
  - D. Choroidal rupture

# SUBJECT OPHTHALMOLOGY KEY

1	D		21	D		41	В
2	A	han 4 things	22	C		42	A
3	A		23	В		43	D
4	A		24	A		44	C
5	D		25	C		45	A
6	C		26	A		46	A
7	C		27	A		47	В
8	D		28	В		48	D
9	B		29	A		49	В
. 10	A		30	A		50	A
11	A		31	C		51	В
12	D		32	C		52	A
13	B		33	A		53	D
14	D		34	С		54	D
15	A		35	C		55	D
16	C		36	B		56	A
17	C		37	A		57	С
18	A		.38	A		58	C .
10	В		39	A		59	A
19							
20	A		40	A	計算調整法言	60	A
20	A		40			60	A .
20 61	A B		40 81	C		60	A
20 61 62	A B C		40 81 82	C D		60	A
20 61 62 63	A B C A		40 81 82 83	C D C		60	A
20 61 62 63 64	A B C A C		40 81 82 83 84	C D C D		60	A
20 61 62 63 64 65	A B C A C A		40 81 82 83 84 85	C D C D A		60	A
20 61 62 63 64 65 66	A B C A C A D		40 81 82 83 84 85 86	C D C D A B		60	A
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