



# BRAINWARE UNIVERSITY

**Term End Examination 2021 - 22**

**Programme – Bachelor of Optometry**

**Course Name – Geriatric & Pediatric Optometry**

**Course Code - BOPTO404**

**( Semester IV )**

**Time allotted : 1 Hrs.15 Min.**

**Full Marks : 60**

[The figure in the margin indicates full marks.]

## Group-A

(Multiple Choice Type Question)

1 x 60=60

*Choose the correct alternative from the following :*

- (1) Which Contrast sensitivity chart is used for children?
 

a) Regan low contrast chart	b) Peli Robson Chart
c) Hiding Heidi Chart	d) Sloan letter flip chart
- (2) Which is an indication of Contrast sensitivity measurement?
 

a) Assessment of quality of vision	b) Low vision examination
c) Screening for visual pathway disorder	d) All of these
- (3) Which is used to test contrast sensitivity at near?
 

a) VCTS 6500	b) VCTS 6000
c) All of these	d) None of these
- (4) Which is an example of Grating Acuity test?
 

a) HOTV Test	b) Preferential looking test
c) Glasgow acuity test	d) Broken wheel test
- (5) Which chart is used for LVA patient, designed for a working distance for 25 cm?
 

a) Near log MAR chart	b) Reduced Snellen chart
c) Jaeger's chart	d) The keeler a series test
- (6) ETDRS chart is calibrated for a test distance of
 

a) 3 meter	b) 4 meter
c) 3 feet	d) 4 feet
- (7) In Snellen's V/A notation, numerator represents
 

a) Distance at which letter subtended 5' of visual angle	b) Distance between chart and the patient
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- c) Distance at which letter subtended 1' of visual angle      d) None of these
- (8) \_\_\_\_\_ develop as invaginations on the inner surface of the anterior neural folds
- a) The optic sulci      b) Trabecular meshwork  
c) Ectoderm      d) Neural tube
- (9) An elderly patient present with unilateral blurred vision micropsia,metamorphopsia,relative scotoma.The features are suggestive of
- a) CSR      b) Epiretinal membrane  
c) Macular hole      d) White dot fovea
- (10) In aging retina
- a) Cone density reduces      b) RNFL thickness increases  
c) Rod density reduces      d) None of these
- (11) Regarding the aging changes that occur in vitreous,the following are true except
- a) Refractive index decreases      b) Liquefaction of the vitreous occurs  
c) Changes in the refractive index induces myopia      d) Floaters increases
- (12) For media opacities,the best way to perform retinoscopy is
- a) To use streak retinoscope      b) To use spot retinoscope  
c) To do off axis retinoscope      d) To use concave setting
- (13) Sensitivity to blur decreases in elderly patients due to all the following factors except
- a) Reduced retinal illumination      b) Miotic pupil  
c) Changes in refractive status      d) Media changes
- (14) In elderly the best way to perform retinoscope through miotic pupils is
- a) To do off axis retinoscope      b) To use a spot retinoscope  
c) Radical retinoscope      d) To use concave setting
- (15) In presence of media irregularities,the preferred method to determine astigmatic correction is
- a) CC      b) Clock dial  
c) Stenopic slit      d) Astigmatic T
- (16) The preferred method to check colour vision for an elderly subject is
- a) Ishihara Pseudoisochromatic colour plates      b) Fransworth D15  
c) Ishikawa Pseudoisochromatic colour plates      d) FM 100
- (17) An elderly patient complains of diplopia and ptosis.On examination there is a limitation of elevation,depression and adduction.The findings are suggestive of :
- a) Myasthenia gravis      b) Third nerve Palsy  
c) Thyroid Ophthalmopathy      d) Fourth nerve palsy
- (18) All of the following decreases with age except
- a) Flicker fusion sensitivity      b) Resistance of distraction  
c) PFV      d) NFV
- (19) The most common problem that complicates eye examination in older adults is
- a) Hearing Impairment      b) Cognitive Impairment  
c) Depression      d) Complex medical history
- (20) The cells of the primitive embryoblast differentiate into two layers, the epiblast and the

- a) Embryoblast  
c) Mesodermal germ layer
- b) Endoderm  
d) Hypoblast
- (21) The optic fissure is also known as the  
a) embryonic fissure  
c) All of these
- b) choroidal fissure  
d) None of these
- (22) Regarding the visual field changes in elderly all true except  
a) Superior visual field declines more rapidly  
c) Minimal decrease in the attentional visual field
- b) Minimal decrease in the standard visual field  
d) Increased variability in the attentional visual field
- (23) Sustained visual bleaching due to exposure to sunlight in elderly, can reduce the visual acuity and contrast sensitivity by  
a) 20  
c) 40
- b) 30  
d) 50
- (24) Spectacle design with no nasal contact that can be prescribed for elderly patients is called as  
a) Pince nez spectacle  
c) Usden spectacle
- b) Crutch Spectacle  
d) Astro spectacle
- (25) If an elderly low vision patient with advanced field loss, prefers reading for longer hours, the suitable aid for near vision will be  
a) Spectacle magnifier  
c) Hand held magnifier
- b) Stand magnifier  
d) CCTV
- (26) Best low vision aid for near vision for a patient with ARMD is  
a) Spectacle magnifier  
c) Hand held magnifier
- b) Stand magnifier  
d) CCTV
- (27) For an elderly patient with patchy media opacities, the best options for distance vision correction is  
a) Tints  
c) Binocular Telescope
- b) Multiple pinhole  
d) Yellow filter
- (28) Reduced access of low vision aids among elderly population is due to the following factors except:  
a) Non availability of suitable aids  
c) Lack of awareness
- b) Reduced personal income  
d) Community consequences
- (29) Low risk of preventive strategy for cataract, includes all except  
a) Reduced exposure to sunlight  
c) Intake of antioxidants
- b) Decrease or quit smoking  
d) Use of aspirin
- (30) At the end of the fourth month of gestation, the primary vitreous and hyaloid vasculature atrophies to a clear, narrow central zone  
a) Cloquet's canal  
c) persistent hyperplastic vitreous
- b) Hyaloid artery  
d) All of these
- (31) The fetal ophthalmic artery is a branch of the  
a) Internal carotid artery  
c) Bergmeister's papilla
- b) hyaloid artery  
d) Pigment epithelium

- (32) The optic stalk is the initially hollow structure connecting the \_\_\_\_\_ with the forebrain
- a) optic vesicle
  - b) optic fissure
  - c) Pons
  - d) Midbrain
- (33) \_\_\_\_\_ is a congenital failure of lid and eye separation and development
- a) Dermolipomas
  - b) Cryptophthalmos
  - c) Anterior Segment Dysgenesis
  - d) Cornea Plana
- (34) \_\_\_\_\_ is a failure of the cornea to steepen relative to the curvature of the globe and normally occurs between the third and fourth month of gestation
- a) Cornea plana
  - b) periorbital dermoid cysts
  - c) Dermolipomas
  - d) None of these
- (35) Age related ocular changes includes
- a) ARMD
  - b) Cataract
  - c) Glaucoma
  - d) All of these
- (36) Indications of Pre hypertensive stage
- a) SBP:120-139 mmHg, DBP: 80-89 mmHg
  - b) SBP: More or equal to 160 mmHg ,DBP: More or equal to 100 mmHg
  - c) SBP: 140-159 mmHg ,DBP: 90-99 mmHg
  - d) None of these
- (37) Ophthalmic complications of Hypertension includeS
- a) Diabetic Retinopathy
  - b) Cataract
  - c) Refractive error
  - d) None of these
- (38) Juvenile onset Diabetes is dependent on
- a) External Insulin
  - b) Internal Insulin
  - c) Total oral medication
  - d) All of these
- (39) Xanthelasma and decreased corneal sensations can be the sign of
- a) Hypertension
  - b) Diabetic Retinopathy
  - c) coronary heart disease
  - d) Cerebrovascular disease
- (40) For an elderly subject, 50% of total calories should be obtained from
- a) Proteins
  - b) Carbohydrates
  - c) Fibres
  - d) Fats
- (41) Presbycusis refers to
- a) Age related loss of hearing
  - b) Loss of accommdation
  - c) Impaired cardiac function attributed to aging
  - d) Loss of neuronal functions
- (42) The changes in the function of nerve cells and muscle cells with aging are due to
- a) Reduced Mitosis
  - b) Fixed post mitotic cell function
  - c) Increased Mitosis
  - d) Decreased post mitotic cell function
- (43) Motor behavior is impaired in elderly due to lack of
- a) Serotonin
  - b) Nor epinephrine
  - c) Hydrazine
  - d) Dopamine
- (44) Commonest cause of III nerve palsy in elderly is
- a) Idiopathic
  - b) Trauma
  - c) Vascular disorder
  - d) Aneurysms

- (45) Visual field in elderly population
- a) Sensitivity increases
  - b) Inferior field declines earlier
  - c) Nasal field declines earlier
  - d) Size of the field decreases
- (46) Regarding glare recovery in elderly population
- a) Recovery time increases due to increased lens fluorescence
  - b) Recovery time decreases due to increased lens fluorescence
  - c) Recovery time increases due to decreased lens fluorescence
  - d) Recovery time decreases due to decreased lens fluorescence
- (47) Which of the following statement is true?
- a) Disease effects are limited to the eye
  - b) Cataracts are inevitably progressive
  - c) It can result from a defect in galactokinase or galactose 1-P uridyl transferase
  - d) It can lead to accumulation of galactose in the lens, forming a snowflake cataract
- (48) Angle kappa is the angle formed at the intersection of the
- a) Optical axis and fixation axis
  - b) Visual axis and optical axis
  - c) Visual axis and pupillary axis
  - d) Angle between line of sight and pupillary axis
- (49) Pupillary light reflex falling nasal to the pupil is
- a) Positive angle kappa and exotropia
  - b) Negative angle kappa and esotropia
  - c) Positive angle alpha and exotropia
  - d) Positive angle gamma and esotropia
- (50) The initial mean value of axial length of the human eye at birth is about
- a) 15.5mm
  - b) 20.5 mm
  - c) 23 mm
  - d) 24.5 mm
- (51) Blink response to visual threat is present at
- a) 2-5 months
  - b) 6-8 weeks
  - c) Birth
  - d) 15-30 days
- (52) Fixation develops by
- a) 6 months
  - b) Birth
  - c) 2-3 months
  - d) 2-4 weeks
- (53) Which of the following is true about monocular smooth pursuit until 6 months of age?
- a) Nasal to temporal is better than temporal to nasal
  - b) Temporal to nasal is better than nasal to temporal
  - c) Both are developed well
  - d) Both are not well developed
- (54) Cross fixation is typically seen in
- a) Infantile esotropia
  - b) Congenital exotropia
  - c) Congenital nystagmus
  - d) Abducens nerve palsy
- (55) Adult level of stereoacuity using Titmus stereo test is achieved by
- a) 3 years
  - b) 4 years
  - c) 5 years
  - d) 7-9 years
- (56) Large disparities in images give rise to
- a) Stereopsis
  - b) Diplopia
  - c) Confusion
  - d) Illusion
- (57) Infants can start to make some colour discrimination by
- a) 1 month
  - b) 6 weeks
  - c) 4 weeks
  - d) 2 months of age

(58) Ecentric fixation can be detected by

- a) Visuoscope
- c) Panum's area

- b) Brock string
- d) Visual field

(59) Symptoms of patients in Congenital Glaucoma include

- a) Megalocornea
- c) Blepharospasm

- b) Photophobia
- d) All of the above

(60) Microtropia can be detected by

- a) 4 PD BO test
- c) Bagolini lenses

- b) W4DT
- d) All of the above