



# BRAINWARE UNIVERSITY

**Term End Examination 2021 - 22**  
**Programme – Bachelor of Optometry**  
**Course Name – Ocular Physiology**  
**Course Code - BOPTO202**  
**( Semester II )**

**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) Choroid is the layer of eye
 

a) Present in between Retina and Cornea	b) Present in between Sclera and Retina
c) Present in between Cornea and Sclera	d) None of the above
- (2) Optic nerve is formed by
 

a) Axons of the bipolar cells	b) Axons of the Horizontal cells
c) Axons of ganglionic cells	d) None of the above.
- (3) The meaning of Emmetropia is
 

a) Optically Normal eye	b) A condition of refractive error in eye
c) Problem related to long farsightedness.	d) Problem related to shortsightedness.
- (4) Which is the nutritional source of crystalline lens?
 

a) Chemical exchange from aqueous humor	b) Chemical exchange from vitreous humor
c) It gets nutrient from Cornea	d) All of these
- (5) The peak absorbance wavelength of the 'blue', 'green' and 'red' sensitive cones lie
 

a) At about 440, 505 and 570 nm respectively	b) At about 440, 535 and 565 nm respectively
c) At about 535, 440 and 565 nm respectively	d) At about 535 and 565 and 440 nm respectively
- (6) Visual field is measured by
 

a) Periscope	b) Retinometer
c) Perimeter	d) Retinoscope
- (7) The dorsal 'where' visual pathway passes through the \_\_\_\_\_ and the ventral 'what' pathway passes through the \_\_\_\_\_
 

a) Parietal lobes, temporal lobes	b) Hippocampus, amygdala
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- c) Resolution acuity
- d) Detection acuity
- (20) During accommodation
- a) the distance between the lens and the ciliary body is decreased
- b) the tension in the suspensory ligament is increased
- c) the tension of the lens capsule is increased
- d) the refractive power of the lens is increased
- (21) Which of the followings is not a function of tear film?
- a) Forms an optical surface
- b) serves as lubricant
- c) keep surface of corneal and conjunctiva moist
- d) transfer NO<sub>2</sub> from air to cornea
- (22) The intraocular pressure:
- a) gives a falsely higher reading in patients with thick cornea
- b) shows a higher diurnal variation in glaucoma patients
- c) is highest in the morning
- d) is overestimated if measured with non-contact tonometer
- (23) Cone cells are responsible for
- a) Scotopic vision
- b) Photopic vision and colour vision
- c) Photopic vision
- d) None of these
- (24) Which is not related to Transparency of the cornea?
- a) the endothelium integrity
- b) integrity of epithelium
- c) absence of blood vessels
- d) absence of nerve fibres
- (25) Nerve supply of the iris:
- a) the iris receives only autonomic nerve supply
- b) the long ciliary nerves are branches fo the naso-ciliary nerve of the ophthalmic division of the trigeminal nerve
- c) the parasympathetic innervates the constrictor papillae
- d) the short ciliary nerve arises from the ciliary ganglion and contain pre-ganglionic parasympathetic nerve fibres
- (26) The lacrimal gland:
- a) is a mucous gland
- b) is supplied by parasympathetic fibres after rely in the pterygopalatine ganglion
- c) the palpebral part is the preferred site for biopsy
- d) is responsible for the most posterior layer of the tear film
- (27) Endothelial cells of cornea are
- a) cubical
- b) columnar
- c) hexagonal
- d) none of these
- (28) Corneal transparency depends on \_\_\_\_\_.
- a) Regular arrangement of fibres
- b) Hydration
- c) Metabolic activity
- d) All of them
- (29) Corneal transparency depends on \_\_\_\_\_
- a) Regular arrangement of fibres
- b) Hydration
- c) Metabolic activity
- d) All of them
- (30) \_\_\_\_\_ responsible for Scotopic vision.
- a) Rods
- b) Cones
- c) Rhodopsin
- d) None of them
- (31) \_\_\_\_\_ responsible for Photopic vision.

- a) Rods  
c) Rhodopsin
- (32) Corneal epithelium is developed from  
a) Neuro-ectoderm  
c) Mesoderm
- (33) Refractive index of aqueous humour is  
a) 1.336  
c) 1.116
- (34) Ciliary body is supplied by  
a) Long posterior ciliary artery  
c) Both a & b
- (35) Lateral rectus muscle helps in  
a) Depression  
c) Abduction
- (36) The diameter of fovea centralis, is  
a) 1.85 mm  
c) 3.00 mm
- (37) Clear vision depends on  
a) Macula  
c) Parafovea
- (38) Lacrimal gland receives nerve supply from  
a) Optic nerve  
c) Nasocilliary nerve
- (39) Sixth cranial nerve supplies  
a) Lateral Rectus Muscle  
c) Medical Rectus Muscle
- (40) The part of trabecular meshwork towards canal of Schlemm's is  
a) Uveal meshwork  
c) Juxtacanalicular meshwork
- (41) Color vision is the function of  
a) Cones  
c) Both a & b
- (42) Vergence is  
a) Binocular movement  
c) Both a & b
- (43) Optic nerve ends at  
a) Optic Chisma  
c) Visual Cortex
- (44) Manifest hypermetropia means  
a) Latent + manifest  
c) Absolute + Facultative
- (45) Outer layers of retina is supplied by
- b) Cones  
d) None of them
- b) Surface-ectoderm  
d) Pars Optica retinae
- b) 1.376  
d) 1.356
- b) Anterior ciliary artery  
d) None of them
- b) Movement of Orbit  
d) Adduction
- b) 5.5 mm  
d) 1.50 mm
- b) Foveola  
d) Perifovea
- b) Frontal nerve  
d) None of these
- b) Superior Rectus Muscles  
d) None of them
- b) Corneo-scleral meshwork  
d) None of them
- b) Rods  
d) None of them
- b) Uniocular movement  
d) None of them
- b) LGB  
d) None of these
- b) Latent + Absolute  
d) None of them

- a) Chorio-capillaries  
c) Ciliary artery
- b) Central retinal artery  
d) None of them
- (46) Function of Epithelium of Cornea includes  
a) Acts as major refractive surface of eye  
c) Prevent entrance of pathological organism into eye
- b) Major surface to respond to wound healing  
d) All of these
- (47) Refractive index of Cornea is  
a) 1.58  
c) 1.45
- b) 1.37  
d) None of these
- (48) Thickness of Central Cornea is about  
a) 0.52 mm  
c) 0.67 mm
- b) 0.45 mm  
d) 1 mm
- (49) Endothelial cells are best evaluated by  
a) Slitlamp Biomicroscopy  
c) Specular Microscopy
- b) Gonioscopy  
d) All of these
- (50) Nerve supply of Sclera includes  
a) Long Ciliary and Short Ciliary Nerves  
c) Abducent Nerve
- b) Ophthalmic division of Occipital Nerve  
d) No presence of Nerve Supply
- (51) A wedge shaped structure which lies deep into Schlemm's canal is  
a) Lamina Cribrosa  
c) Scleral Sulcus
- b) Scleral Spur  
d) None of these
- (52) Iridodialysis is referred as  
a) Tearing of iris from Ciliary body  
c) Radial Streaks of Ciliary zone
- b) Iris stromal abnormality  
d) All of these
- (53) Collarette can be found at  
a) Posterior surface of Descemet's membrane  
c) At Ciliary Process
- b) At Iris Stroma  
d) Anterior Surface of Iris
- (54) Nerve supply of Sphincter Pupillae Muscle is  
a) Parasympathetic fibres of Oculomotor Nerve  
c) Sympathetic fibres of Oculomotor Nerve
- b) Parasympathetic fibres of Trigeminal Nerve  
d) Sympathetic fibres of Trigeminal Nerve
- (55) The size of normal pupil is  
a) 2-4 mm  
c) 1-2 mm
- b) 5-8 mm  
d) none of these
- (56) Second order neuron in optic pathway are present in  
a) Retina  
c) Lateral geniculate body
- b) Medial geniculate body  
d) Superior colliculus
- (57) The 'blind spot' is situated at  
a) fovea centralis  
c) 3 mm temporal to optic disc
- b) optic disc  
d) 3 mm nasal to optic disc.
- (58) Constriction of pupil occurs due to contraction of  
a) Muller's muscle  
c) sphincter pupillae
- b) dilator pupillae  
d) lateral rectus

(59) The nerve supplying orbicularis oculi muscle is

- a) trochlear
- c) nasociliary

- b) oculomotor
- d) facial

(60) The far point of myopic eye is

- a) in front of the eye
- c) at the infinity

- b) behind the eye
- d) none of these