



## **BRAINWARE UNIVERSITY**

## Term End Examination 2023-2024 Programme – B.Optometry-2021/B.Optometry-2022 Course Name - Visual optics-II **Course Code - BOPTOC402** (Semester IV)

Full Marks : 60		Time: 2:30 Hours	
Full Ivial K3.00	the state of the same condidates are required to give their answers in their		

[The figure in the margin indicates full marks. Candidates are required to give their own words as far as practicable.]

**Group-A** 1 x 15=15 (Multiple Choice Type Question) Choose the correct alternative from the following: (i) Select in which case Foster Fuch's spot is seen b) Degenerative Myopia a) Developmental Myopia d) Bi oblique Astigmatism c) Congenital Myopia (ii) Identify the average image magnification reported by Spectacle correction b) 0.1 a) 0.05 c) 0.33d) 0.55 (iii) Identify the average image magnification reported by correction with contact lens b) 0.1 a) 0.05 c) 0.33 d) 0.55 (iv) Select the rough estimation of presbyopic add for 45 years old patient b) 1.50 D a) 1 Department and c) 2 D d) 2.50 D (v) Select in which condition duochrome test is not much useful a) Visual acuity worse than 6/9 b) Visual acuity worse than 6/6 c) Visual acuity better than 6/9 d) None of these (vi) Choose the color of pupil in case of aphakia a) Jet Black b) Black c) White d) Gray (vii) Select the type of astigmatism wherein the rays are focused on the retina in one meridian and behind of the retina in the other meridian a) Simple hypermetropic astigmatism b) Simple myopic astigmatism c) Compound myopic astigmatism d) Compound hypermetropic astigmatism (viii) Choose the amplitude of accommodation if the patient feels first sustain blur at 25cm with RAF ruler

b) 8 D

d) 25 D

a) 4D

c) 16D

(i:	x) Select the result of excessive accommodation	(in terms of refractive error)				
,	a) Hypermetropia	b) Муоріа				
	c) Preshvopia	d) Astigmatism				
()	Select the result of anterior placement of crystalline lens					
,	a) Hypermetropia	b) Myopia				
	A Durahamia	d) Astigmatism				
6	c) Presbyopia ii) Select the amplitude of accommodation if wo	king distance is 30 cm and patient feels				
(,	first sustain blur with -2 D lens					
	a) 5.3 D	b) 4.3 D				
	c) E E D	d) 7.5 D				
(x	(ii) Identify the correct statement for duochrome	test where we have to add more minus				
(,	power					
	a) Red Clearer	b) Green clearer				
	c) Red, Green equal	d) All of these				
(x	iiii) Choose the application of prism bar, to measu	ring				
	a) Amplitude of convergence	b) Accommodative facility				
	c) Amplitude of accommodation	d) Accommodative response				
(x	(iv) Choose in which case cornea can appear slight	•				
,	a) Hypermetropia	b) Myopia				
	c) Presbyopia	d) Astigmatism				
(:	xv) Choose the type of lens can produce pin-cush					
١.	a) High convex	b) High Concave				
	c) High Cylindrical	d) None of these				
	c, mgm c, manda	'a				
	Gro	up-B				
	(Short Answer	Type Questions)	3 x 5=15			
2. Explain various components of reflex convergence.			(3)			
	3. Write down 3 symptoms of myopia.		(3) (3)			
4. Describe the depth of field and depth of focus.						
	5. Explain about the optical management of myopi		(3)			
t	6. Suppose you have done refraction on one patient and the subjective refraction value is -5.00Dsph but your fellow optometrist get subjective refraction value of -5.50Dsph. What					
	next procedure you have to perform before givin					
		OR				
	One 6 months old patient came to your clinic wi	th her parents. Her parents want her eve	(3)			
	checkup as both parents are high myopic. Discus	s the procedure for assessing her refractive	e (5)			
	error.	•				
		oup-C				
	(Long Answer	Type Questions)	5 x 6=30			
	7. Describe the procedure of the duochrome test		(5)			
	8. Suppose one patient come to your clinic with c	omplaints of after wearing new spectacle	(5)			
	everything looks little bit far away. How you wi	ll investigate this case what will be your				
	possible findings.  One nationt come to your clinic and having come	onlainte at a s				
	<ol> <li>One patient come to your clinic and having cor feels every object looks little bit small in size. H</li> </ol>	ow you will investigate it is	(5)			
feels every object looks little bit small in size. How you will investigate this case. What will be the possible finding you will gate.						
	10. Explain different types of Astigmatism.		(5)			
	11. Explain the optics of retinoscopy.		(5) (5)			

12. One 10 years patient old patient come to your clinic with complaints of headache. On autorefractometer you are getting both eye +4.00Dsph but on retinoscopy you are getting variable reflex. As patient is having final exam on next day his parents are not ready for cycloplegic refraction. But they want spectacle prescription. How you will assess this case now.

OR

One 5 years old boy come to your clinic his parents complaints while reading he use to hold (5) book very much closer. On retinoscopy, you are getting variable reflex. Explain how you will assess this case. What will be your possible diagnosis?

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