



BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Optomety-2021/B.Optomety-2022/B.Optomety-2023

Course Name – Ophthalmic Lens & Dispensing Optics-II

Course Code - BOPTOC401

(Semester IV)

Full Marks : 60

Time : 2:30 Hours

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

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Select the correct answer: Spherical equivalent -3.00/-0.50 @ 90
 - a) 2.75
 - b) 3.25
 - c) =C6
 - d) -3.25
- (ii) When measuring the monocular and Binocular PD's:
 - a) Limbal edge may be used as reference
 - b) Inner canthus of one eye to the outer canthus of the other eye used as reference
 - c) Pupil centers are always used as a reference
 - d) Both 'a' & 'b'
- (iii) Which of the following materials are used in polycarbonet lens
 - a) Silver halied crystal
 - b) Silica
 - c) Both
 - d) none
- (iv) Glass lens refree to a
 - a) Mineral lens
 - b) organic materials
 - c) Both
 - d) none
- (v) Bifocal height is
 - a) Distance between lower eyelid and edge of the frame
 - b) Distance between lower eyelid and edge of the lens
 - c) Distance between upper eyelid and edge of the lens
 - d) none
- (vi) Scratch registance coating can be apply:
 - a) Only front surface
 - b) only back surface
 - c) both front & back surface
 - d) None
- (vii) Polycarbonate lens absorb UV upto
 - a) 280 nm
 - b) 380 nm
 - c) 290 nm
 - d) 390 nm
- (viii) Abbe value of polycarbonate lens

- a) 30
c) 59
- b) 39
d) 49
- (ix) Which of the following attributes are comes under the AR coating?
a) Hydrophobic
c) reduce ghost image
b) Oleo-phobic
d) all
- (x) Tints done for:
a) Cosmetic purpose
c) Professional used
b) Protection from unwanted radiation
d) All of the these
- (xi) Polarized coating used in:
a) Water sports
c) LCD's
b) ATM
d) CCTV
- (xii) Which of the following design of PAL:
a) Mono design
c) Both a & b
b) Multi design
d) None
- (xiii) In case of Symmetry lens design:
a) Right and left design are separately.
c) The design changes according to the additional power
b) Right and left design are same.
d) None of the these
- (xiv) Polycarbonate lens was developed in the year of
a) 1970s
c) 1990s
b) 1980s
d) 2000s
- (xv) Types of barium crown glasses:
a) Light barium crown glass
c) Both 'a' & 'b'
b) Dense barium crown glass
d) None

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Discuss the facial wrap, frontal angle and splay along with their uses. (3)
3. Explain the frame selection criteria for the patients. (3)
4. Describe the different types of nose bridge in spectacles. (3)
5. Write the procedure of distance IPD measurement for dispensing the spectacles in children. (3)
6. A 30-year-old male patient came to the clinic with his new glasses and reported that when he looked through the glasses the objects were smaller in size, The prescription shows: RE: -4.00 Dsph, LE: -5.00 Dsph, how will you manage the patient? (3)

OR

A 50-year-old male patient came to the clinic with his bifocal spectacles and complained that unable to see clear distance vision, evetime he needed to tilt his head forward to get clear distance vision, how would you manage the patient? (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Draw the diagram of right eye PAL and explain all the marking of progressive additional lens. (5)
8. Explain, why we can't prefer the glass lens materials to the children. (5)
9. Draw the different types of temple with their functions. (5)
10. A 23-years-old girl came to the clinic with the complaint of a broken image whenever she tries to see through her new glasses, The prescription shows RE: -1.50/-1.00X90, and LE: -0.75/-1.25X85, what will be the possible causes and how will you correct it? (5)
11. A 55-years-old male patient came to the clinic with his new progressive additional glasses and complained that he could not read the book at his normal position, and needed to tilt (5)

his head too far back to get clear vision, what are the possible causes and how will you manage the patient?

12. A 47-year-old male patient came to the clinic with the complaint that he was unable to see (5)
distant objects like the TV, and road signal with his new progressive additional glass, what
are the possible causes and how will you manage the patient?

OR

A 20-year-old male patient came to the clinic with a complaint of double vision with his (5)
glasses, what would be the possible reason and how will you manage the patient?

LIBRARY
Brainware University
Sarasat, Kolkata -700125